

**Appendix A:
NOP/Initial Study**

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A.1 - Notice of Preparation

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CITY OF PETALUMA

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC SCOPING MEETING

PROJECT NAMES: Downtown Housing and Economic Opportunity Overlay and EKN Appellation Hotel

PROJECT ADDRESS: Various Addresses in Downtown Petaluma including 2 Petaluma Boulevard South, City of Petaluma, Sonoma County, CA

APPLICANT: Mike Jolly, mike@ekndevgroup.com,
EKN Petaluma LLC
220 Newport Center Drive, Suite 11-262
Newport Beach, CA 92660

CITY RECORD NUMBERS: PLGP-2023-0001, PLZA-2023-0002 & PLSR 2022-0017

PROJECT DESCRIPTION: The proposed Downtown Housing & Economic Opportunity Overlay (Overlay) and EKN Appellation Hotel project, is a two-part project comprised of the Overlay component and the Hotel component. See NOP and IS for project description.

NOTICE OF PREPARATION (NOP): This provides notice to public agencies and the general public that the City of Petaluma, as the Lead Agency, will prepare an Environmental Impact Report (EIR) for the Project in accordance with the California Environmental Quality Act (CEQA). The City is interested in the input and/or comments of public agencies and the general public as to the scope and content of the environmental information that is germane to the agencies' statutory responsibilities in connection with the proposed project, and public input. Public agencies will need to use the EIR prepared by the City when considering applicable permits, or other approvals for the proposed project. The NOP is available for review at the following link: <https://cityofpetaluma.org/economic-opportunity-overlay-ekn-appellation-projects/>.

The Notice of Preparation review period starts **Friday, April 12, 2024, and extends to Monday, May 13, 2024.**

SCOPING MEETING DATE & LOCATION: On **Wednesday, May 1, 2024, between 5:15 and 6:15 PM**, the City of Petaluma Planning Division will conduct a public scoping meeting to receive input and comments from public agencies and the general public on the scope of the Draft EIR to be prepared for the subject Project. The scoping meeting will be held in person at the following location:

**Petaluma Community Center, Conference Room #2
Lucchesi Park, 320 North McDowell Boulevard, Petaluma**

INITIAL STUDY: An Initial Study was prepared for this project to analyze the potential impacts pertaining to all of the resource areas identified in Appendix G of the CEQA Guidelines. The CEQA topics of Air Quality, Agricultural and Forestry Resources, Biological Resources, Greenhouse Gases, Energy, Geology, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Utilities and Service Systems, and Wildfire have been identified as less than significant in the Initial Study and will not require additional review in the EIR. The EIR will address Aesthetic Resources, Cultural Resources, and Tribal Cultural Resources, other required sections of CEQA, and alternatives. The Initial Study is available for review at the following link: <https://cityofpetaluma.org/economic-opportunity-overlay-ekn-appellation-projects/>.

FOR MORE INFORMATION: Please consider these options to learn more about the Project:

- **Project Manager:** Greg Powell, Principal Planner at gpowell@cityofpetaluma.org;
- **Online:** Review project information online at <https://cityofpetaluma.org/economic-opportunity-overlay-ekn-appellation-projects/>; or
- **In-person:** Review project information in person at the City Hall Planning Counter located at 11 English Street, Monday through Thursday between 10 AM and 3 PM.

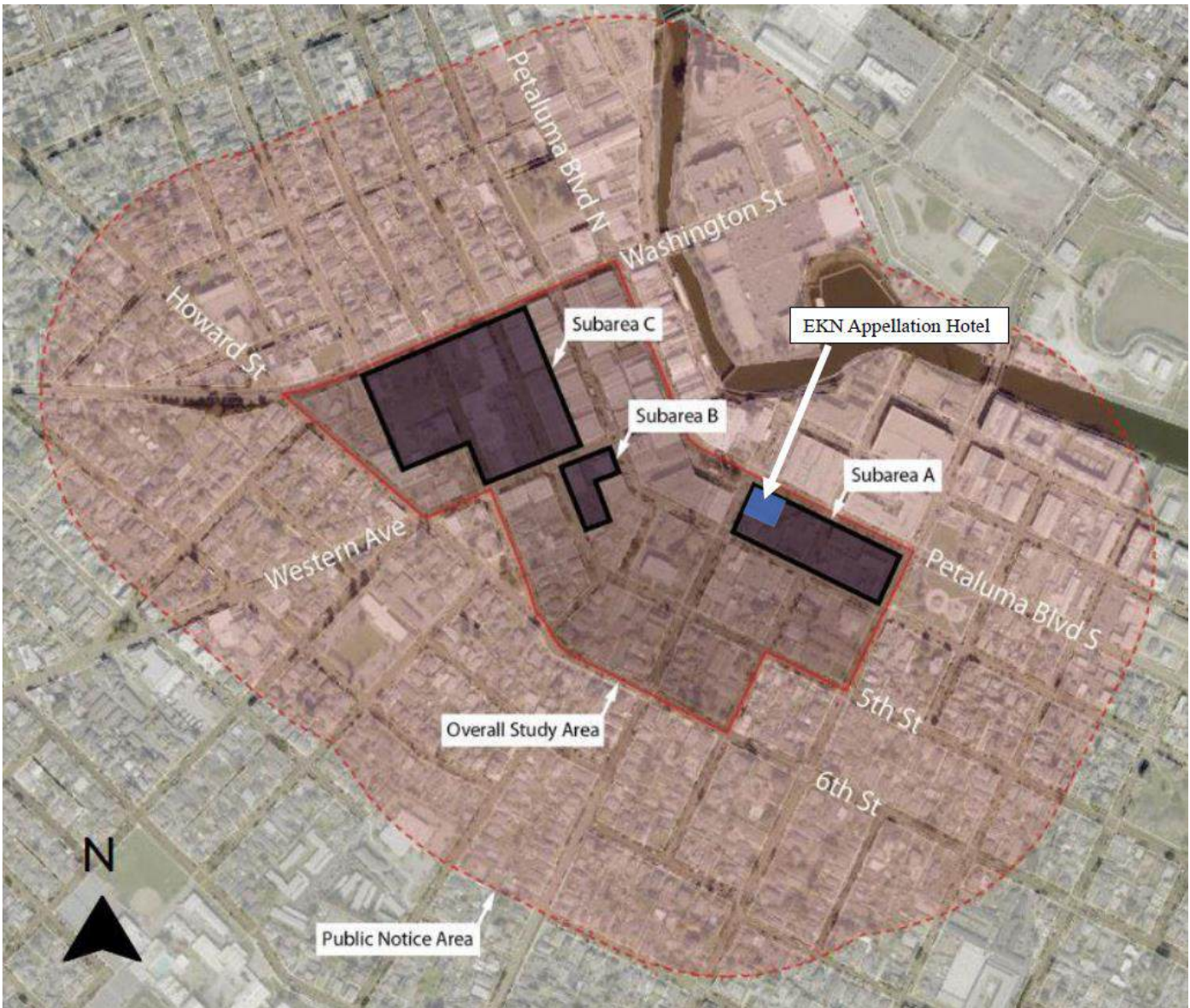
INSTRUCTIONS FOR PUBLIC COMMENT: Public comment may be provided at the scoping meeting on May 1, 2024, or as follows, by **5:00 PM on May 13, 2024**:

- **Comment via E-mail:** Please submit your comments to PetalumaPlanning@cityofpetaluma.org.
- **Comment via U.S. Mail:** Please mail your comments to the City of Petaluma, Planning Division, 11 English Street, Petaluma, CA 94952.



ACCESSIBILITY: Any member of the public who needs accommodations should email the Commission Clerk, Uriel Orozco, at uorozco@cityofpetaluma.org, or by calling 707-778-4319. The Commission Clerk will use their best efforts to provide reasonable accommodations to provide as much accessibility as possible while also maintaining public safety in accordance with the City procedure for resolving reasonable accommodation requests.

PROJECT LOCATION MAP & NOTIFICATION AREA:





City of Petaluma
Notice of Preparation – Environmental Impact Report
Downtown Housing and Economic Opportunity Overlay and
EKN Appellation Hotel Project

Date: April 12, 2024

To: California State Clearinghouse
Responsible and Trustee Agencies
Interested Parties and Organizations

Subject: **Notice of Preparation (NOP) of an Environmental Impact Report for the Proposed Downtown Housing and Economic Opportunity Overlay and EKN Appellation Hotel Project and Scheduling of Scoping Meeting**

Lead Agency: **City of Petaluma**

NOP Availability: A copy of the NOP and Initial Study is available for review at the Petaluma Community Development Department, and on the City of Petaluma website: [ECONOMIC OPPORTUNITY OVERLAY & EKN APPELLATION Projects - Petaluma \(cityofpetaluma.org\)](https://www.cityofpetaluma.org/projects/economic-opportunity-overlay-ekn-appellation-projects).

Comment Period: **April 12, 2024, through May 13, 2024**
Written comments should be submitted at the earliest possible date, but not later than 5:00 pm on May 13, 2024.

NOP Scoping Mtg: **May 1, 2024, 5:15 pm -6:15**
Petaluma Community Center
In addition to the opportunity to submit written comments, a scoping meeting will be held to inform interested parties about the project, and to provide agencies and the public with an opportunity to comment on the scope and content of the EIR. Information on the date and time of the scoping meeting is provided below.

EIR Scoping Meeting

May 1, 2024 | 5:15 PM – 6:15 PM

Petaluma Community Center, Conference Room #2

320 North McDowell Boulevard

Petaluma, CA 94954

To Provide Comments or Obtain More Information: If you wish to comment during the NOP comment period, the City is accepting written comments beginning **April 12, 2024**, until 5:00 p.m. on **May 13, 2024**. Please send all written comments to Greg Powell, Principal Planner at gpowell@cityofpetaluma.org or

Olivia Ervin, Principal Environmental Planner at oervin@cityofpetaluma.org with the subject “**DHEO + Hotel NOP Comment.**” Comments can also be mailed to the Community Development Department, Planning Division, City of Petaluma, 11 English Street, Petaluma, California 94952. For more information regarding the project, please direct questions to Greg Powell or Olivia Ervin.

Notice of Preparation

Notice is hereby given that the City of Petaluma (City), as the Lead Agency, is preparing an Environmental Impact Report (EIR) for the proposed Downtown Housing and Economic Overlay and ENK Appellation Hotel project (proposed project) pursuant to and in accordance with Title 14, Section 15060(d) of the California Code of Regulations, the California Environmental Quality Act (CEQA), and the State of California CEQA Guidelines.

The purpose of the Notice of Preparation (NOP) is to solicit input and feedback from the public and regulatory agencies on the project, including project alternatives, and environmental impacts. The intent of the NOP is to provide sufficient information in order to enable meaningful comments regarding the scope and content of the EIR. An Initial Study is included as Attachment A to this NOP.

The purpose of an EIR is to inform decision-makers and the public of the environmental effects of a project that an agency may implement or approve. The EIR process is intended to provide information sufficient to evaluate a project and its potential for significant impacts on the environment, to examine methods of reducing adverse impacts, and to consider alternatives to the project. In accordance with the requirements of CEQA, the EIR will include the following:

- Project summary;
- Project description;
- Description of the existing environmental setting and potential environmental impacts for each environmental topic, except for effects not found to be significant (CEQA Guidelines Section 15128);
- Mitigation measures proposed to minimize significant effects;
- Alternatives to the proposed project; and
- Environmental consequences, including any significant environmental effects which cannot be avoided if the project is implemented; significant irreversible and irretrievable commitments of resources; growth inducing impacts of the proposed project; and cumulative impacts.

Project Location: City of Petaluma, Sonoma County, California. The project site consists of multiple parcels within the Downtown Housing and Economic Overlay including the 3 parcels for the EKN Hotel as detailed in the following (see Figures in Initial Study):

Downtown Housing & Economic Opportunity Overlay, Downtown Petaluma.

Area A: Boundary: B St. (north); D St. (south); Petaluma Blvd. S (east); 4th St.(west)

APNs: 008-063-005; 008-063-006; 008-063-007; 008-063-008; 008-063-009; 008-063-011; 008-063-012; 008-064-002; 008-064-004; 008-064-005; 008-064-007; 008-064-008; 008-064-010

Area B: Boundary: South side of Western Ave. between Kentucky St. (east) and Keller St. (west)

APNs: 008-051-024; 008-051-025

Area C: Boundary: Washington St. (north); Western Ave. (south); Telephone Aly. (east); Liberty St./Court St. (west)

APNs: 006-361-028; 006-361-030; 006-361-033; 006-361-039; 006-361-040; 006-362-001; 006-362-002; 006-362-003; 006-362-009; 006-362-010; 006-362-012; 006-362-014; 006-362-015; 006-362-021; 006-362-022; 006-362-023; 006-362-024; 006-362-025; 006-363-001; 006-363-004; 006-363-005; 006-363-007; 006-363-023; 006-363-025; 006-363-026

EKN Appellation Hotel, Downtown Petaluma.

2 Petaluma Blvd South, City of Petaluma, Sonoma County, California

APNs: 008-063-008; -009; -011

Project Description: The proposed Downtown Housing & Economic Opportunity Overlay (Overlay) and EKN Appellation Hotel project, is a two-part project comprised of the Overlay component and the Hotel component.

The Overlay component of the project represents a programmatic change to the existing Implementing Zoning Ordinance and the EKN Appellation Hotel component of the project represents physical modifications to an existing property. Adoption of a Zoning Text Amendment to establish the Downtown Housing & Economic Opportunity Overlay component of the project is required to accommodate development of the EKN Appellation Hotel component of the project, as proposed. A range of development types and forms would be allowed under the proposed Overlay, as such, the proposed Hotel represents one type of development that may be allowed under the Downtown Housing & Economic Opportunity Overlay.

Implementation of the Overlay would require a General Plan Amendment (GPA) to increase the maximum allowable floor area ratio (FAR) from 2.5 to 6.0, a Zoning Text Amendment (ZTA) to increase the allowable building height from 45 feet to 75 feet with a Conditional Use Permit (CUP), increase lot coverage from 80% to 100% with a Conditional Use Permit (CUP), allow ground floor residential uses, and establish development and design controls for properties that would be subject to the proposed Overlay. The Overlay includes a Zoning Map Amendment (ZMA) to zone applicable parcels to the Downtown Housing & Economic Opportunity Overlay.

The EKN Appellation Hotel component of the project proposes the construction of a 6-story hotel over a below-grade parking garage, comprising 93 hotel rooms, an event space, and food service uses at 2 Petaluma Blvd. South. The below-grade parking garage will provide valet parking for up to 58 vehicles using mechanical parking lifts (no self-parking is proposed). A restaurant with indoor and outdoor seating for up to 150 guests is proposed on the ground floor. Floors 2 through 5 comprise 93 hotel rooms and a fitness room for hotel guests. Floor 6 includes a 1,444 square foot event space, and a 5,514 square foot exterior bar/event space with seating for 60 guests. The project proposes modifications to the public right-of-way including removal and replacement of three street trees, removal of two existing driveways along the Petaluma Boulevard South frontage, removal of one curb-parking space along B Street and reconfiguration of two curb-parking spaces along Petaluma Boulevard South. The project also includes installation of a bus stop and shelter along Petaluma Boulevard North adjacent to Center Park, which will result in the loss of three on-street parking spaces.

Potential Environmental Effects: The EIR will evaluate the project for potential impacts on the environment and analyze the potential environmental consequences of project implementation. The attached Initial Study prepared for the project identifies the following resource areas where potentially significant environmental impacts could occur and will be addressed in the EIR:

- Aesthetics
- Cultural and Tribal Cultural Resources

Based on the analysis contained in the attached Initial Study, the following environmental factors are expected to be less than significant and will not require additional evaluation in the EIR:

- Air Quality
- Agricultural and Forestry Resources
- Biological Resources
- Geology and Water Quality
- Greenhouse Gases
- Energy
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Transportation and Circulation

- Hazards/Hazardous Materials
- Hydrology and Water Quality
- Utilities and Service Systems
- Recreation
- Wildfire

The EIR will also include a discussion of cumulative impacts in and around the project area combined with those of the project. An evaluation of project alternatives that could reduce significant impacts will also be evaluated in the EIR, including identification of an environmentally superior alternative consistent with CEQA Guidelines Section 15126.6.

To ensure that the EIR for the project is thorough and adequate and to ensure that the issues of concern to the public and public agencies are addressed, the City is requesting comments and guidance on the scope and content of the EIR from interested public agencies, organizations, and individuals. Public comments on the scope of environmental issues to be evaluated in the EIR are encouraged and should be focused on environmental concerns rather than the merits of the project. With respect to the views of Responsible and Trustee Agencies as to significant environmental issues, the City is seeking information related to reasonable alternatives and mitigation measures that are relevant to each agency's statutory responsibilities in connection with the project.

Attachment

A: Downtown Housing and Economic Opportunity Overlay and EKN Appellation Hotel Initial Study and Appendices

<https://cityofpetaluma.org/ekn-appellation/>

A.2 - Initial Study and Appendices

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**DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY
AND EKN APPELLATION HOTEL**

INITIAL STUDY

PREPARED BY:

CITY OF PETALUMA
11 ENGLISH STREET
PETALUMA, CA 94952

APRIL 2024

**DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY AND EKN APPELLATION HOTEL
CEQA ENVIRONMENTAL CHECKLIST AND INITIAL STUDY**

Initial Study Checklist			
Project Title(s):	Downtown Housing & Economic Opportunity Overlay (Overlay) EKN Appellation Hotel (Hotel)		
Lead Agency:	City of Petaluma 11 English Street Petaluma, CA 94952		
Contact Person and phone number:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Greg Powell, Principal Planner gpowell@cityofpetaluma.org (707) 778-4340</td> <td style="width: 50%;">Olivia Ervin, Environmental Planner oervin@cityofpetaluma.org (707) 778-4556</td> </tr> </table>	Greg Powell, Principal Planner gpowell@cityofpetaluma.org (707) 778-4340	Olivia Ervin, Environmental Planner oervin@cityofpetaluma.org (707) 778-4556
Greg Powell, Principal Planner gpowell@cityofpetaluma.org (707) 778-4340	Olivia Ervin, Environmental Planner oervin@cityofpetaluma.org (707) 778-4556		
Project Location:	<p>DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY Downtown Petaluma, City of Petaluma, Sonoma County, CA</p> <p>Area A:</p> <ul style="list-style-type: none"> • Boundary: B St. (north); D St. (south); Petaluma Blvd. S (east); 4th St.(west) • APNs: 008-063-005; 008-063-006; 008-063-007; 008-063-008; 008-063-009; 008-063-011; 008-063-012; 008-064-002; 008-064-004; 008-064-005; 008-064-007; 008-064-008; 008-064-010 <p>Area B:</p> <ul style="list-style-type: none"> • Boundary: South side of Western Ave. between Kentucky St. (east) and Keller St. (west) • APNs: 008-051-024; 008-051-025 <p>Area C:</p> <ul style="list-style-type: none"> • Boundary: Washington St. (north); Western Ave. (south); Telephone Aly. (east); Liberty St./Court St. (west) • APNs: 006-361-028; 006-361-030; 006-361-033; 006-361-039; 006-361-040; 006-362-001; 006-362-002; 006-362-003; 006-362-009; 006-362-010; 006-362-012; 006-362-014; 006-362-015; 006-362-021; 006-362-022; 006-362-023; 006-362-024; 006-362-025; 006-363-001; 006-363-004; 006-363-005; 006-363-007; 006-363-023; 006-363-025; 006-363-026 <p>EKN APPELLATION HOTEL 2 Petaluma Blvd. S., Petaluma, Sonoma County, California Assessor's Parcel Numbers 008-063-008; -009; -011</p>		
Project Sponsor:	Mike Jolly, mike@ekndevgroup.com , (310) 776-0621 Tom Jacobson, tom@ekndevgroup.com , (480) 828-8959 EKN Development Group 220 Newport Center Drive, Suite 11-262 Newport Beach, CA 92660		

<p>Property Owners:</p>	<p>DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY PARCELS: Multiple property owners</p> <p>EKN APPELLATION HOTEL PARCEL: Ross Jones, ross@jonesarchitectureca.com, 707-971-9400</p> <p>2 Petaluma Boulevard South Petaluma, CA 94952</p>
<p>General Plan Designation(s):</p>	<p>Multiple (Overlay); Mixed Use (MU) (Hotel)</p>
<p>Existing / Proposed Zoning:</p>	<p>DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY:</p> <p>Area A: Base zoning: MU2 (all) Overlays: <ul style="list-style-type: none"> o Parking Assessment District (313 B St; 2 Petaluma Blvd. S) o Theater District (all); o Historic Commercial District (313 B St; 2 Petaluma Blvd. S) </p> <p>Area B: Base zoning: MU2 (all) Overlays: <ul style="list-style-type: none"> o Parking Assessment District (all) o Theater District (all); o Historic Commercial District (101 Western Ave.) </p> <p>Area C: Base zoning: MU2 and Civic Facilities (CF) Overlays: <ul style="list-style-type: none"> o Parking Assessment District (east of Liberty St.) o Theater District (all); </p> <p>EKN APPELLATION HOTEL: Base zoning: Mixed Use 2 (MU2) Overlays: <ul style="list-style-type: none"> o Parking Assessment District (2/3rds of site); o Theater District; o Historic Commercial District (2/3rds of site); </p>
<p>Description of project:</p>	<p>DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY Implementation of the Overlay would require a General Plan Amendment (GPA) to increase the maximum allowable floor area ratio (FAR) from 2.5 to 6.0, a Zoning Text Amendment (ZTA) to increase the allowable building height from 45 feet to 75 feet with a Conditional Use Permit (CUP), increase lot coverage from 80% to 100% with a Conditional Use Permit (CUP), allow ground floor residential uses, and establish development and design controls for properties that would be subject to the proposed Overlay. The Overlay component also includes a Zoning Map Amendment (ZMA) to zone applicable parcels to the Downtown Housing & Economic Opportunity Overlay.</p> <p>EKN APPELLATION HOTEL The project proposes construction of a 6-story hotel over a below-grade parking garage, comprising 93 hotel rooms, an event space, and food service uses at 2 Petaluma Blvd. South. The below-grade parking garage will provide valet parking for up to 58 vehicles using mechanical parking lifts (no self-parking is proposed). A restaurant with indoor and outdoor seating for up to 150 guests is proposed on the ground floor. Floors 2 through 5 comprise 93 hotel rooms and a fitness room for hotel guests. Floor 6 includes a 1,444 square foot event space, and a 5,514 square foot exterior bar/event space with seating for 60 guests. The project proposes modifications to the public right-of-way including removal and replacement of three street trees, removal of two existing</p>

	<p>driveways along the Petaluma Boulevard South frontage, removal of one curb-parking space along B Street and reconfiguration of two curb-parking spaces along Petaluma Boulevard South. The project also includes installation of a bus stop and shelter along Petaluma Blvd. North adjacent to Center Park, which will result in the loss of three on-street parking spaces.</p>
<p>Surrounding land uses and setting; briefly describe the project’s surroundings:</p>	<p>DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY The Downtown Housing & Economic Opportunity Overlay encompasses three areas in downtown Petaluma and are described as areas A, B, and C. Area A is bounded by B Street to the north, D Street to the south, Petaluma Blvd. S to the east, and 4th Street to the west. Uses in and surrounding this area include primarily commercial uses with residential uses in proximity on C Street. Area B is located along the south side of Western Avenue between Kentucky Street to the east and Keller Street to the west. Both parcels in this area are developed with banks. Area C is bounded by Washington Street to the north, Western Ave. to the south, Telephone Alley to the east, and Liberty Street and Court Street to the west. Uses include medical offices, commercial uses, and a grocery store. Residential uses are located across the street on the north side of Washington Street.</p> <p>EKN APPELLATION HOTEL The EKN Appellation Hotel component of the project is located at the southwest corner of the intersection of Petaluma Blvd. S and B Street and is partially within the Petaluma Historic Commercial District (2 of three parcels). The project site also falls within the Theater Combining District and is partially within the Parking Assessment District. Commercial and retail uses are also located across Petaluma Blvd. S within the Central Petaluma Specific Plan (CPSP) area. Uses immediately abutting the proposed Hotel include Rex Ace Hardware to the south and Bank of the West to the east.</p>
<p>Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements):</p>	<p>Regional Water Quality Control Board (NPDES)</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>Notice was provided to the Federated Indians of Graton Rancheria (FIGR) on April 20, 2023, pursuant to Public Resources Code Section 21080.3.1(d). The City of Petaluma received a response from FIGR requesting consultation. A consultation meeting was conducted on July 17, 2023. Through the consultation process, FIGR requested additional studies including a canine investigation and ground-penetrating radar (GPR) which were completed in consultation with FIGR and are summarized in the Cultural and Tribal Cultural Resources Section of this document.</p>

**DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY AND
EKN APPELLATION HOTEL PROJECT**

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- E. Preliminary Stormwater Control Plan, N Consulting Engineers, Inc., September 26, 2023
- F. Noise and Vibration Assessment, Illingworth & Rodkin, September 11, 2023
- G. Traffic Impact Study, W-Trans, September 26, 2023

1. INTRODUCTION

This section provides an overview of the purpose and intent of the Initial Study, summarizes the proposed Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel project, and discusses the relevant local regulatory context.

1.1. PURPOSE AND INTENT

This Environmental Checklist for the proposed Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel project (hereinafter referred to collectively as the “project”) has been prepared by the City of Petaluma (City) as the 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 and identified potentially significant impacts to aesthetics and historic resources. Therefore, as the lead agency, the City of Petaluma will prepare an Environmental Impact Report to further evaluate impacts of the project on these resource categories. Further, the Initial Study demonstrates that impacts related to all other resource categories are either less than significant or can be reduced to below a level of significance with implementation of the identified mitigation measures. Accordingly, this Initial Study will be incorporated, in full, into the EIR and will serve as the environmental evaluation for those topics. The Draft EIR Executive Summary will include the identified impacts and mitigation measures from this Initial Study, and they will be carried forward into the mitigation monitoring and reporting program.

1.2. PROJECT HISTORY

The City of Petaluma previously released a Draft Mitigated Negative Declaration for the subject project (SCH# 2023100359) for a public review and comment period starting on October 13, 2023, and extending to November 13, 2023. On November 14, 2023, a joint public hearing was held before the Historic and Cultural Preservation Committee and the Planning Commission. Although the Planning Commission found the environmental review adequate and recommended approval to the City Council, prior to being considered by Council for action, it was decided that an Environmental Impact Report would be prepared. As such, this Initial Study has been prepared to inform the scope of the EIR for the subject project.

1.3. CITY OF PETALUMA REGULATORY CONTEXT

The following includes a summary of the adopted plan and policy documents applicable to the proposed project as well as other relevant regulatory information, including, most notably, the forthcoming updates to the City's General Plan. Contextual information is provided to inform decision makers and the public of the overall context within which the project is being considered and is intended to facilitate a holistic understanding of the project's consistency with anticipated changes in land use policies.

ADOPTED PLAN AND POLICY DOCUMENTS

Petaluma General Plan 2025

The Petaluma General Plan 2025 was adopted by the City Council in 2008 and serves the purposes of reflecting 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).

Goals, policies, and programs identified in the General Plan are informed by 15 Guiding Principles which include the following:

1. Maintain a close-knit, neighborly, and family-friendly city.
2. Preserve and enhance Petaluma's historic character.
3. Preserve and enhance Petaluma's natural environment and distinct setting in the region—a community with a discrete edge surrounded by open space.
4. Enhance the Petaluma River corridor while providing recreational and entertainment opportunities, including through active implementation of the Petaluma River Access and Enhancement Plan.
5. Stimulate and increase public access and use of pathways as alternative transportation routes by providing a safe, efficient, and interconnected trail system.
6. Provide for a range of attractive and viable transportation alternatives, such as bicycle, pedestrian, rail, and transit.
7. Enhance Downtown by preserving its historic character, increasing accessibility and residential opportunities, and ensuring a broad range of businesses and activities.
8. Foster and promote economic diversity and opportunities.
9. Expand retail opportunities to meet residents' needs and promote the city's fiscal health, while ensuring that new development is in keeping with Petaluma's character.
10. Continue efforts to achieve a jobs/housing balance, emphasizing opportunities for residents to work locally.
11. Foster a sustainable community in which today's needs do not compromise the ability of the community to meet its future needs. Enhance the built environment, encourage innovation in planning and design, and minimize environmental impacts through implementation of green development standards.
12. Ensure infrastructure is strengthened and maintained.
13. Integrate and connect the east and west sides of town.
14. Encourage cultural, ethnic, and social diversity.

15. Recognize the role Petaluma holds within the region and beyond.

Petaluma General Plan 2025 EIR

The General Plan 2025 EIR (SCH. No. 2004-082-065) was certified by the City Council on April 7, 2008. The General Plan EIR reviewed potentially significant environmental effects resulting from plan implementation and developed measures and policies to mitigate impacts. Nonetheless, significant and unavoidable impacts were determined to occur as a result of General Plan implementation. Therefore, the City adopted a statement of overriding considerations, which balance the merits of approving the plan despite the significant environmental effects. The effects 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: (1) McDowell Boulevard North/Corona Road, (2) Lakeville Street/Caulfield Lane, (3) Lakeville Street/East D Street, (4) Petaluma Boulevard South/D Street, (5) Sonoma Mt. Parkway/Ely Boulevard South/East Washington Street, and (6) McDowell Boulevard North/Rainier Avenue.
- Traffic related noise at General Plan build-out, 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 build-out to population levels that could conflict with the Bay Area 2005 Ozone Strategy. (This regional air quality plan has since been replaced by the 2017 Clean Air Plan, which is further discussed the Air Quality and Greenhouse Gases sections of the document.)
- A possible cumulatively considerable incremental contribution to greenhouse gas emissions from development under the General Plan.

A copy of the City of Petaluma's General Plan and EIR are available at the Community Development Department, 11 English Street, Petaluma, California 94952, during normal business hours and online at <https://cityofpetaluma.org/planning-documents/>.

2023-2031 Housing Element

The 2023-2031 Housing Element (an Element of the City's General Plan) and Addendum to the 2015-2023 Housing Element Negative Declaration (SCH# 2014102018) was adopted by the City Council on March 20, 2023 (Resolution No. 2023-038) and subsequently certified by the California Department of Housing and Community Development (HCD) on May 18, 2023. The updated Housing Element identifies goals, policies, and programs to implement the Housing Element and meet the overall intent of facilitating housing development and increasing housing equity over the 8-year planning period. The overarching goals identified in the Housing Element include the following:

- **Goal 1: Housing Availability and Choices.** Provide opportunities for residential development to accommodate projected residential growth and diverse housing needs of all existing and future Petalumans.
- **Goal 2: Development Constraints.** Remove or mitigate constraints on housing development to expedite construction and lower development costs while avoiding impacts on environmentally sensitive areas.
- **Goal 3: Affordable Housing.** Promote the development, preservation, and improvement of housing affordable to lower and moderate income households, including extremely low income households.
- **Goal 4: Housing Preservation.** Improve the quality and diversity of residential neighborhoods, preserve the City's existing affordable housing, and ensure the long-term affordability of new below-market-rate units.
- **Goal 5: Special Needs Housing.** Promote housing opportunities for persons and households with special needs, including the elderly, disabled, large households, female-headed households, farmworkers, and persons experiencing homelessness.
- **Goal 6: Fair Housing.** Affirmatively further fair housing to promote equal access to housing opportunities for all existing and future residents.

Petaluma Historic Commercial District Design Guidelines

The Petaluma Historic Commercial District Design Guidelines (Guidelines) were adopted by the City Council on August 16, 1999 (Resolution No. 99-168-A N.C.S.) and are intended to provide direction to property owners prior to remodeling existing structures or building new structures within the Historic Commercial District. The Guidelines provide direction and encourage preservation, adaptive use, and enhancement of buildings and streetscapes. The Guidelines are applicable to rehabilitation, remodel, or any alteration affecting the exterior appearance of an existing building within the district, as well as new construction, signs, and street furniture. Particularly relevant to the Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel project is Section 7.0 (Guidelines for New Construction) of the Guidelines. As provided therein, construction of new buildings on vacant lots in the Downtown, with implementation of the recommendations in the Guidelines, is strongly encouraged.

City of Petaluma Implementing Zoning Ordinance

The City of Petaluma Implementing Zoning Ordinance (IZO) carries out the policies of the Petaluma General Plan by classifying and regulating land uses and structures within the city. The overall purpose of the IZO is to protect and promote the public health, safety, and general welfare of residents and businesses in the city. The following Chapters of the IZO are particularly relevant to the proposed Downtown Housing & Economic Opportunity Overlay:

- Chapter 2 (Zoning Map and Zones)
- Chapter 5 (Overlay Zones)
- Chapter 15 (Preservation of the Cultural and Historic Environment)
- Chapter 24 (Administrative Procedures)

OTHER REGULATORY CONTEXT

Central Petaluma Specific Plan

The Central Petaluma Specific Plan (CPSP) provides specific land use and development regulations for approximately 400 acres within the geographic heart of the city, adjacent to downtown. The CPSP is bounded by Lakeville Street to the north and east, Highway 101 to the south and Petaluma Boulevard to the west. The CPSP was adopted on June 2, 2003 (Resolution 2003-105 N.C.S) and directs new growth into this area. The Plan envisions Central Petaluma as a place where a wide range of new employment, housing, shopping, and entertainment activities develop in relative proximity to one another within a lively urban environment adjacent to the historic downtown and the Petaluma River.

Though the Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel will occur outside the boundaries of the CPSP, this policy document is nevertheless relevant based on proximity of the project to the CPSP boundary. The intent of the Downtown Housing & Economic Opportunity Overlay is to facilitate housing development and stimulate economic development in the city's downtown which is complimentary to the following planning concepts outlined in Section 1 of the CPSP:

- Redirect growth into Central Petaluma
- Reconnect the City to and along the River
- Encourage diversity in transportation modes
- Enhance physical structure and identity
- Promote sustainable development

Petaluma General Plan Update (In Process)

The City of Petaluma is currently in the process of updating the General Plan which is anticipated to be adopted in 2025. The process of updating the General Plan includes multiple phases and is currently in the 'Policy Development' phase. The preceding phase, known as 'Visioning,' resulted in three outputs including a Vision Statement to describe future conditions and characteristics of the city, Pillars to establish core community

values, and Guiding Principles and Supporting Concepts to provide broad policy direction toward achieving the community's vision for the future, with a specific focus on challenges and opportunities.

Though the updated General Plan has not yet been adopted, the process of updating this policy document is relevant to the proposed project as the Downtown Housing & Economic Opportunity Overlay and associated General Plan amendment to increase the floor area ratio in areas designated as Mixed Use will be carried forward to the new General Plan. As such, it is important to understand the project within the context of the ongoing General Plan Update. The Guiding Principles and Supporting Concepts set forth in the Final Visioning Products, as recommended by the General Plan Advisory Committee (GPAC) on February 17, 2022, that are particularly relevant to the proposed project include the following:

- Achieve carbon neutrality by 2030 and equitably foster a sustainable and resilient community in which today's needs do not compromise the ability of the community to meet its future needs.
 - Recognize that infill development helps to achieve sustainability outcomes.
- Promote more affordable housing and a diversity of housing options.
 - Look for opportunities to re-purpose existing vacant or under-utilized buildings of all types.
- Prioritize infill development in appropriate locations throughout the City.
 - Avoid locating new development in environmentally sensitive and high-hazard locations.
 - Revitalize commercial corridors with a diverse mix of uses.
 - Support a diverse mix of uses and intensification around the existing and proposed SMART rail stations.
 - Prioritize development that creates full-service neighborhoods that generate relatively fewer vehicle miles traveled per resident.
- Enhance Petaluma's historic downtown by preserving its historic character, expanding pedestrian and bicycle access and safety, providing public gathering spaces, and promoting a diverse mix of uses.
 - Reinforce Downtown's identity and role as the physical and symbolic center of the city.
 - Preserve Downtown's historic buildings and features while allowing for infill development that harmoniously coexists with the historic character and expands the diversity of uses.
 - Improve the pedestrian experience by making streets safer, cleaner, and more inviting for pedestrians. Consider making some Downtown streets pedestrian-only.
 - Increase and nurture the Downtown tree canopy.
 - Improve pedestrian and bicycle connections to and within the Downtown, especially along the river.
 - Improve the relationship between buildings, businesses, and the riverfront.
 - Address traffic congestion and parking issues particularly as they relate to adjacent neighborhoods.
 - Develop creative parking strategies to reduce the real-estate demand for parking.
 - Protect the continuity of retail street frontages.
 - Encourage and facilitate outdoor opportunities for dining, retail, and other uses by downtown business.
 - Add public community gathering spaces, including riverfront spaces.
 - Ensure all feel welcomed and culturally connected to the Downtown.
- Honor, celebrate, and preserve Petaluma's heritage and historic character and its place in the modern city.
 - Preserve, enhance, and celebrate Petaluma's historic assets and districts as they contribute to the city's distinct identity and character.
 - Require that the design of infill development complement, respect, and honor the historic context of the city and individual neighborhoods while not building false imitations.
 - In historic districts and adjacent to historic buildings, adapt and reuse historic buildings, add new, context-sensitive buildings, and allow for the evolution of the city.
- Prioritize cycling, walking, transit, and other transportation alternatives over automobiles.
 - Work to reduce the use of automobiles, particularly those that burn gasoline.
 - Support a range of safe, attractive, practical, equitable, and carbon-neutral transportation alternatives with integrated land use and mobility strategies.

- Support increased transit use by focusing development near existing and future transit facilities.
- Advance a forward-looking economic development strategy that focuses on diversity, opportunity, innovation, and resilience.
 - Recognize that economic development, self-sufficiency, and resilience are vital to the City’s overall prosperity and fiscal health – and critical for accomplishing other City goals and programs.
 - Support the creative reuse of vacant and underutilized spaces to build the local economy and support other city goals and initiatives.
 - Achieve a jobs-housing balance in the city by expanding job opportunities that match the skills of residents, providing living-wage jobs and affordable housing, and encouraging new work models such as working from home or coworking.

2. ENVIRONMENTAL SETTING AND PROJECT DESCRIPTION

This section includes a detailed description of the Downtown Housing & Economic Opportunity Overlay (Overlay) and EKN Appellation Hotel project, which is a two-part project comprised of the Overlay component and the Hotel component. As the Downtown Housing & Economic Opportunity Overlay component of the project represents a programmatic change to the existing Implementing Zoning Ordinance and the EKN Appellation Hotel component of the project represents physical modifications to an existing property, a description of the two components is provided separately, where appropriate. Adoption of a Zoning Text Amendment to establish the Downtown Housing & Economic Opportunity Overlay component of the project is required to accommodate development of the EKN Appellation Hotel component of the project, as proposed. A range of development types and forms would be allowed under the proposed Overlay, and as such, the proposed Hotel represents one type of development that may be allowed under the Downtown Housing & Economic Opportunity Overlay.

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. It is situated at the northernmost navigable end of the Petaluma River, a tidal estuary that drains to San Pablo Bay (**Figure 2: Regional Location**). 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 by 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 will 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 Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel project is located within the UGB.

VICINITY SETTING

Downtown Housing & Economic Opportunity Overlay

Project Site

The Downtown Housing & Economic Opportunity Overlay is located within the Downtown Planning Subarea of the General Plan and is within one-half mile of the Downtown Petaluma Sonoma Marin Area Rail Transit (SMART) station. The Overlay comprises three sub-areas, referred to as Areas A, B, and C (**Figure 3: Project Vicinity**). Area A is bounded by B Street to the north, D Street to the south, Petaluma Blvd. S to the east, and 4th Street to the west and comprises 13 parcels and approximately 2.70 acres. Area B is located on the south side of Western Avenue and is bounded by Kentucky Street to the east and Keller Street to the west. Area B comprises 2 parcels and approximately 0.90 acres. Area C is bounded by Washington Street to the north,

Western Avenue to the south, Telephone Alley to the east, Liberty Street and Court Street to the west. Area C comprises 25 parcels and approximately 6.40 acres.

Land Uses

Most parcels in Area A are developed with buildings and other site improvements, such as surface parking areas to support existing businesses. Three parcels located at the southeast corner of Petaluma Blvd. South/B Street (APNs 008-063-008; -009; -011) are currently vacant and are the proposed location of the Hotel component of the project, as further detailed below. Other uses in Area A include banks, professional offices, a hardware store, and commercial uses including a convenience store and vacant restaurant buildings. The two parcels in Area B are currently developed as banks, associated parking lots, and site improvements. Parcels in Area C are also primarily developed with buildings and other site improvements and include retail shops, auto shops, restaurants, offices, medical uses, and Petaluma Market. Notably, the Phoenix Theater is also located in Area C. There are two vacant sites in Area C including 131 Liberty Street and 136 Court Street, however, it should be noted that each of these sites has active entitlements to develop a mixed-used building with nine residential units, a work-live unit, and approximately 1,500 square feet of commercial area (131 Liberty Street), and a 3-unit live-work building (136 Court Street). All existing land uses are shown in Table 1.

Development Pattern

Existing buildings within Areas A, B, and C of the Downtown Housing & Economic Opportunity Overlay are primarily one-story, with a few two-story buildings present in each area. Floor area ratios in Area A range from 0.00 to 0.73, Area B from 0.20 to 0.30, and Area C from 0.00 to 0.98, representing a common development pattern of low-intensity, one-story buildings with surface parking lots.¹

Street and Circulation Pattern

The three areas of the proposed Overlay are within the city's downtown, which is generally bounded by Washington Street to the north, Petaluma Blvd. to the east, D Street to the south, and Howard Street/6th Street to the west. Washington Street, Petaluma Blvd., and D Street are classified in the General Plan as arterial streets which provide relatively high-speed and high-capacity access to regional transportation facilities. Western Avenue, located one block west of the proposed Overlay, is also designated in the General Plan as an arterial street. Howard Street/6th Street, located two blocks south of the Overlay area, provides access to the city's downtown, and is classified as a collector street, which provides medium-speed and medium-volume access within and between neighborhoods. Other streets within and around the proposed Overlay are classified as local streets which are low-speed and low-volume streets that provide direct access to adjacent land uses. Existing sidewalks, crosswalks, bicycle facilities, and transit stops are present in the downtown area as further described in the Transportation section of this document.

Historic Resources

The City of Petaluma has two locally designated historic districts (Oakhill-Brewster and "A" Street), and one Nationally Registered district, the Historic Commercial District. In addition, there are several individual properties located throughout the city that are considered potentially significant historical resources. Three parcels within Area A of the proposed Downtown Housing & Economic Opportunity Overlay are located within the Historic Commercial District including two of the three vacant parcels proposed as the Hotel component of the project (008-063-008; -009;), and one developed parcel (008-063-012) which is the location of the Rex Ace Hardware store adjacent to the proposed Hotel site. One parcel in Area B is also located within the Historic Commercial District and is developed as Chase Bank, which was constructed in 1970 and is identified as a non-contributing building to the District.² In addition to the aforementioned parcels located within the Historic Commercial District, the eastern boundary of Area C of the proposed Overlay abuts the western boundary of the Historic Commercial District. Along the adjoining boundaries, there are several historic buildings identified

¹ Data based on Sonoma County Assessor information obtained from maps.cityofpetaluma.net, accessed July 2023.

² National Register of Historic Places Continuation Sheet, Section Number 7, Petaluma Historic Commercial District, page 19

as contributing as well as one city and National Landmark (the Old Petaluma Opera House). Areas A and B of the proposed Overlay are also proximate (within one block) to the “A” Street Historic District.

General Plan Land Use Designations

The majority of parcels located within the Downtown Housing & Economic Opportunity Overlay are designated as Mixed Use (MU) in the Petaluma General Plan 2025. Four parcels, which comprise the Keller Street Parking Garage, are designated as Public/Semi-Public (PSP) (**Figure 4: General Plan Land Use**). The MU Land Use designation requires a combination of uses and orients development toward the pedestrian. The maximum allowable FAR is 2.5 and the maximum residential density is 30 dwelling units/acre (du/acre). Given that the established residential density of 30 units per acre will not change under the proposed project, there would be no increase in population, relative to what is currently allowed. The PSP land use designation includes public utility facilities, government offices, and community service uses. The General Plan does not identify a maximum FAR for the PSP land use designation.

The majority of the Overlay is located within the Downtown Subarea of the General Plan which is characterized by the historic buildings, Petaluma River, and pedestrian scale environment. The General Plan envisions preserving and enhancing the character of the downtown to create a vibrant mixed-use center with retail, restaurants, public uses, professional offices, and opportunities for residential uses. Portions of Area C of the proposed Overlay are located within the East Washington Corridor Subarea of the General Plan which is characterized by low-intensity, single-story, automobile-dependent uses. The General Plan envisions this subarea with a mix of high-intensity land uses and streetscape improvements that accommodate automobiles while orienting toward the pedestrian.

Zoning Designations

Zoning designations of parcels located within the proposed Overlay are Mixed Use 2 (MU2) and Civic Facilities (CF) (**Figure 5: Existing and Proposed Zoning**). The MU2 zone implements the MU General Plan land use and is applied to Downtown Petaluma and adjacent areas that are intended to evolve into the same physical form and character of development as that in the historic downtown area. Residential uses in a mixed-use building are permitted by-right in the MU2 zoning district, however, exclusively multi-family residential developments are not currently permitted. The maximum permitted lot coverage is 80 percent, and the maximum building height is currently 45 feet. The CF zoning district implements the PSP General Plan land use designation and is applied to sites for proposed public utility facilities, government offices, community service uses and lands, and sites owned and operated by the elementary, secondary, or community college districts, as well as private schools. Maximum lot coverage in the CF zoning district is the same as the abutting zoning district, which in the case of the subject parcels would be 80 percent as the adjacent parcels are zoned MU2. The maximum height in the CF zone is 25 feet.

In addition to the base zoning districts, as shown in Table 1 all parcels in the proposed Overlay are located within the Theater Combining District, four parcels are located within the Historic Commercial District, and 27 parcels are located within the Parking Assessment District. The Theater Combining District was adopted by the City Council in 2003 (Ordinance No. 2158 N.C.S.) with the intent of promoting development of a first-run movie theater within the designated district boundaries. As noted in Section 5.050(D) of the IZO, the ordinance which established the Theater Combining District expired on August 4, 2023. Section 11.035 of the IZO specifies that sites and structures within the Parking Assessment District are exempt from the requirement to provide off-street parking facilities.

The following table provides a list of APNs by Area (A, B, and C) that are proposed for inclusion within the Downtown Housing & Economic Opportunity Overlay. Additionally, the table below notes existing Overlay's applicable to each parcel as well as the existing uses onsite.

TABLE 1: EXISTING ZONING OVERLAYS AND USES

PROPOSED OVERLAY AREA	APN	EXISTING USE	THEATER DISTRICT	HISTORIC COMMERCIAL DISTRICT	PARKING ASSESSMENT DISTRICT
A	008-063-005	Surface parking for Bank of the West	X		
	008-063-006		X		
	008-063-007	Bank of the West	X		
	008-063-008	Vacant (proposed EKN Appellation Hotel)	X	X	X
	008-063-009		X	X	X
	008-063-011		X		
	008-063-012	Rex Ace Hardware	X	X	X
	008-064-002	Summit State Bank	X		
	008-064-004	Compass Real Estate	X		
	008-064-005	Walnut Park Grill (former)	X		
	008-064-007	Surface Parking for Compass Real Estate	X		
	008-064-008	Fourth & "Sea" (former) ³	X		
	008-064-010	7-Eleven	X		
B	008-051-024	Chase Bank	X	X	X
	008-051-025	Wells Fargo Bank	X		X
C	006-361-028	Zephyr Sportswear	X		
	006-361-030	Vacant (approved entitlement for Liberty St. Mixed-Use)	X		
	006-361-033	Vacant building	X		
	006-361-039	Dental offices	X		
	006-361-040	Vacant (approved entitlement for Foley/Omahony Live/Work)	X		
	006-362-001	Sonoma Autowerks	X		X
	006-362-002	Keller St Professional Building Parking Lot	X		X
	006-362-003	Office building	X		X
	006-362-009	Office building	X		X
	006-362-010	Multi-tenant commercial and retail building	X		X
	006-362-012	Phoenix Theater	X		X

³ Active tenant improvement building permit (BLTI-2023-0013) to establish new restaurant use.

PROPOSED OVERLAY AREA	APN	EXISTING USE	THEATER DISTRICT	HISTORIC COMMERCIAL DISTRICT	PARKING ASSESSMENT DISTRICT
C	006-362-014	Multi-tenant office building	X		X
	006-362-015	Hallie's Diner	X		X
	006-362-021	Right-of-way	X		X
	006-362-022	Sacks Hospice Thrift Shoppe	X		X
	006-362-023	Petaluma Market	X		X
	006-362-024	Office building	X		X
	006-362-025	ArtaLuma	X		X
	006-363-001	Multi-tenant commercial and office building	X		X
	006-363-004	Keller Street Parking Garage	X		X
	006-363-005		X		X
	006-363-007		X		X
	006-363-023		X		X
	006-363-025	Keller Street Cowork	X		X
006-363-026	Kapu Bar	X		X	

EKN Appellation Hotel

Project Site and Surrounding Uses

The EKN Appellation Hotel component of the project is located on an approximately 0.3-acre site comprised of three parcels (APNs 008-063-008; -009; -011) at the southeast corner of Petaluma Blvd. South and B Street (**Figure 3: Project Vicinity**). The site was previously developed as a gas station which was demolished sometime between 2008 and 2011, since which time it has laid vacant. Based on the prior use as a gas station, the site was listed as a Leaking Underground Storage Tank (LUST) Cleanup site by the Regional Water Quality Control Board (RWQCB). As described further in the Hazards and Hazardous Materials section of this document, the RWQCB issued a no further action letter, and the site case was listed as closed as of 2020. A chain link fence is located around the perimeter of the site and existing vegetation is comprised primarily of ruderal/weedy grasses which are regularly mowed.

Uses proximate to the site include banks, offices, restaurants, and retail shops. Rex Ace Hardware and Bank of the West immediately abut the site to the south and east. The Rex Ace Hardware site adjacent to the project site was previously developed with five one- and two-story wood-frame structures, originally constructed between 1870 and 1920, and noted as contributing buildings to the Historic Commercial District.⁴ However, the original building was destroyed in a fire in the early 2000s and subsequently rebuilt with the modern structure present onsite today, which is identified as a non-contributing building to the District. The proposed Hotel is located within Area A of the proposed Downtown Housing & Economic Opportunity Overlay, described in detail above.

General Plan and Zoning

The applicable General Plan land use designation for the Hotel site is Mixed Use, and the corresponding zoning designation is Mixed Use 2 (**Figure 4: General Plan Land Use** and **Figure 5: Existing and Proposed Zoning**). In addition, the site falls entirely within the Theater Combining District and is partially within the Historic Commercial District and Parking Assessment District. Surrounding land use designations include MU2 to the

⁴ National Register of Historic Places Continuation Sheet, Section Number 7, Petaluma Historic Commercial District, page 5
 City of Petaluma

south, east, and west, and Urban Core (T6) to the north, which is a designation applied to areas of the CPSP as set forth in the SmartCode.

2.2. PROJECT DESCRIPTION

DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY

General Plan Text Amendment

The proposed General Plan Amendment will increase the maximum FAR for the Mixed Use land use designation from 2.5 to 6.0 for areas located within the Downtown Housing & Economic Opportunity Overlay.

However, future development will be subject to existing density requirements (30 dwelling units/acre), such that the Overlay will not result in an increase in population beyond what is already projected as part of General Plan buildout and what was already evaluated and disclosed in the General Plan EIR. Accordingly, implementation of the Overlay would not result in a new increase in population or a substantial change in employment relative to what was anticipated by the General Plan and analyzed in the EIR.

Zoning Map Amendment

The proposed Zoning Map Amendment will establish the boundaries of the Downtown Housing & Economic Opportunity Overlay and any parcels located within the Overlay would be subject to the applicable development standards and regulations.

Zoning Text Amendment

The proposed Zoning Text Amendment will establish regulations and development standards for the Downtown Housing & Economic Opportunity Overlay. The Overlay will increase the allowable building height from 45 feet to 75 feet with a Conditional Use Permit (CUP), increase lot coverage from 80% to 100% with a Conditional Use Permit (CUP), allow ground floor residential uses, and establish development and design controls for properties that would be subject to the proposed Overlay. The Implementing Zoning Ordinance will be amended to apply new rules/development standards to properties within the overlay to:

- Allow for ground floor residential uses;
- Describe and define the areas subject to the Pedestrian/Façade Activation and Ground Floor Residential Zones;
- Establish a Conditional Use Permit process and required findings/review criteria to allow for an increase to the Building Height limit of 45 feet to a maximum of 75 feet;
- Establish a Conditional Use Permit process and required findings/review criteria to allow for an increase of the Lot Coverage limit from 80% to 100%;
- Increase the FAR limit from 2.5 to 6;
- Eliminate the setback standards; and
- Add new stepback standards.

EKN APPELLATION HOTEL

Site Plan

The project proposes construction of a 93-room, 6-story (approximately 68 foot 10 inch) hotel over a below-grade, 58-space parking garage. The gross building area is approximately 77,000 gross square feet inclusive of three outdoor spaces including a 901 square foot ground-floor seating area, an 898 square foot second-floor terrace, and a 5,585 square foot rooftop terrace (**Figure 6: EKN Appellation Floor Plan Diagram**).

Floor Plan and Architectural Design

The subterranean parking garage comprises 58 parking spaces, as further described below, bike room, storage area, and utility rooms. The ground floor comprises valet and baggage storage, front office, employee areas, laundry and housekeeping, utility rooms, kitchen, and the 3,209 square foot restaurant (2,308 s.f. interior space, 901 s.f. exterior space) for seating up to 150 guests. Floors 2-6 feature a “U” shaped floor plan which is intended to maximize the number of hotel bedrooms, retain sufficient guestroom space, and provide natural lighting in all 93 guestrooms. The second floor comprises 20 guestrooms, an outdoor courtyard, fitness room, and an administration office. The third and fourth floors each contain 27 guestrooms. The fifth floor exhibits a recessed building façade, and comprises one bridal suite with a private balcony, one deluxe suite, 4 executive suites, and 13 guestrooms. The sixth floor is limited to the 5,585 square foot rooftop terrace, 1,444 square foot enclosed event space, 900 square feet of pantry and support space, and mechanical equipment.

The proposed building features a modern design and is built to the property lines on all sides. The ground level restaurant opening, recessed entryway, recessed balconies at the second and fourth floors, and the small open terrace at the corner of Petaluma Blvd. South and B Street on the fifth floor seek to break up the overall massing of the building. The building will be clad in flush porcelain panels with contrasting cladding at the fifth level where the building face is set back. Laser cut metal panels in a decorative pattern are located at the sliding glass doors and windows on the main body of the building.

Windows and doors throughout the building have clear glass and dark bronze metal frames. The proportions of the storefront and upper story windows are informed by surrounding traditional storefronts and windows within the Commercial Historic District. Storefront windows at the ground floor of the building are narrow with one-over-one-lights, with upper light having the appearance of a transom. Curvilinear patterns are etched in the glass panels, repeating motifs found elsewhere on the building and creating visual interest at the pedestrian level. The proposed color palette for the hotel is shades of light to dark grey, and tones of ivory, tan, and light brown.

Proposed Uses

Proposed uses include the hotel, ground floor restaurant and bar, and rooftop bar and event space. The ground floor restaurant and bar will be a full-service restaurant, and the rooftop bar will be primarily bar service only, with food service available from the ground floor restaurant. Both the ground floor restaurant and bar as well as the rooftop bar and event space will be available for use by the public and hotel guests. The ground floor restaurant and bar will operate from 7 a.m. to 12 a.m., and the rooftop bar will operate from 8 a.m. to 12 a.m. The event space is assumed to be ancillary to the Hotel and will be available for use by hotel guests only.

Access, Circulation, and Parking

Patrons accessing the site by vehicle will utilize the proposed valet drop-off along Petaluma Blvd. South, approximately 130 feet from the intersection of Petaluma Blvd. South/B Street. Once vehicles are dropped off, valet staff will drive east on Petaluma Blvd. South, turn right onto C Street, right onto 4th Street, and right onto B Street where they will enter the subterranean parking garage via a new driveway and park vehicles in the proposed stackable parking system (**Figure 1**). Parking in the subterranean garage includes 58 spaces, inclusive of 54 stacked spaces and 4 standard spaces. Of the 58 parking spaces, 6 would be reserved for electric vehicles (EV). When patrons are ready to pick up their vehicles, valet staff will access the subterranean parking garage and drive the patron’s vehicle to the pickup location approximately 70 feet from the intersection of Petaluma Blvd. South/B Street. As proposed, valet services will be provided 24/7 with 3-4 valet staff members during peak hours. To accommodate the proposed drop-off and pick-up valet spaces, two existing driveways along the Petaluma Blvd. South frontage will be removed and replaced with curb, gutter, and sidewalk consistent with City of Petaluma Standards. In addition, an existing driveway on B Street will be removed and replaced with curb, gutter, and sidewalk.

FIGURE 1: VALET PARKING ROUTES



Pedestrian access to the site will be provided by existing sidewalks and crosswalks along Petaluma Blvd. South and B Street. The Hotel component of the project proposes to re-stripe the existing crosswalks located on B Street, south of the intersection with Petaluma Blvd. South and at the intersection of the one-way street that runs parallel to Petaluma Blvd. North, north of the site. Bicycles will access the site utilizing existing Class II and III facilities. Three bike racks accommodating up to 6 bikes are proposed along the B Street project frontage. In addition, the project includes a bicycle valet service, accommodating up to 7 bikes in a secure storage room in the subterranean garage. The site is located one-half mile from the Downtown Petaluma SMART station and Copeland Street Transit Mall, which provide local and regional access and are accessible via E. Washington Street and D Street/E D Street.

Landscaping, Lighting, and Signage

The project proposes to remove three street trees located along the Petaluma Blvd. South (one 6-inch red maple) and B Street project frontages (two 8-inch red maples) and will replace them with three new, 36-inch box street trees (Armstrong red maple). One existing 8-inch red maple along the Petaluma Blvd. South frontage will be retained. Other landscaped areas on the ground floor include various one-gallon, low water use shrub species which will be planted in two types of free-standing planter boxes. Landscaping on the second floor includes ten 15-gallon, very low water use trees (Western redbud), shrubs, and sedum mix. Landscaping on the sixth floor includes four 15-gallon, medium water use trees (Chilean myrtle), and various one- and five-gallon shrub species. Landscaped areas also include five styles of pre-cast concrete pavers, wood tile pavers, synthetic turf, and metal tree grates (ground floor only). The total landscaped area, including trees, shrubs, and green roof areas is 1,523 square feet.

Proposed lighting includes recessed canopy lights, sign lighting, wall-mounted egress lights at the garage entry, floor mounted exterior bollards, planter mounted exterior bollards, and decorative wall sconces. Preliminary signage details are provided on Sheet A20 of the project plans. As proposed, signage includes two wall mounted signs for the hotel, including one at the main entrance on Petaluma Blvd. South and one on the sixth-floor rooftop, two blade signs for the proposed restaurant, and one projecting sign at the southeast corner of the proposed building.

Utilities

The proposed Hotel component of the project will connect to existing utilities located within the B Street and Petaluma Blvd. South rights-of-way. The new building will install sanitary sewer and storm drain laterals to

connect to the existing 15-inch and 42-inch mains located within the B Street right-of way. A new water lateral will connect the new building to the 8-inch water main located within the Petaluma Blvd. South right-of-way.

Stormwater Management

As proposed, the project includes features intended to capture stormwater runoff. Features include modular bioretention features installed on the rooftop, and silva cells, installed within the tree wells along B Street and Petaluma Blvd. South.

Construction

Project construction is anticipated to occur over an approximately 19-month period (approximately 414 construction days) and will include site preparation and grading as well as excavation of approximately 7,140 cubic yards to accommodate the subterranean garage. Construction of the subterranean garage will require dewatering and lateral shoring and is anticipated to utilize traditional construction equipment such as medium-size dozers, excavators, and backhoes.⁵ Following completion of grading activities, infrastructure improvements and building foundations will be constructed. Foundations and basement retaining are proposed to be mat slab with a minimum thickness of 36 inches and will be waterproofed to resist hydrostatic pressures. Following construction of the foundation, utilities will be installed and building construction will commence. New driveways, sidewalks, curbs and gutters, striping, landscaping, and signage will also be installed.

Anticipated construction equipment includes tractors, loaders, backhoes, scrapers, rubber-tired dozers, forklifts, welders, pavers, rollers, generators, generator sets, paving equipment, and air compressors. All material and equipment will be staged on-site or, through issuance of an encroachment permit, at abutting rights-of-way.

Frontage and Offsite Improvements

Along the site's Petaluma Blvd. South frontage, within the public right-of-way, the project proposes to remove and replace one existing street tree, remove two driveways and construct curb, gutter, and sidewalk, and install pick-up and drop-off parking stalls in the valet areas. Along the B Street project frontage, the project proposes to remove and replace two existing street trees, remove an existing driveway and construct curb, gutter, and sidewalk, remove and replace two existing streetlights, remove one curb-parking space and replace with two curb-parking spaces, and install three bicycle racks. Other offsite improvements include restriping two existing crosswalks including one across B Street and one across the one-way access road running parallel with Petaluma Blvd. North. In addition, the project will upgrade the curb ramps at the two existing crosswalks to comply with ADA requirements and will install one streetlight.

In addition, as a condition of approval, the applicant will be required to fund and construct a new bus stop adjacent to the Center Park area located approximately 200 feet north of the site along Petaluma Blvd. North. Construction of the bus stop will include removal and restriping of three on-street parking spaces, installation of a bus shelter, bench, trash can, bike racks, and remounting the existing bench. The bus pad will be approximately 60 feet long (40-foot bus space, 10-foot front clearance, and 10-foot rear clearance) by 8-feet wide.

2.3. PUBLIC OUTREACH

STUDY SESSIONS

Throughout the planning and entitlement review process, the project has been reviewed at several study sessions which are intended to solicit input from the public and decision makers, allowing for opportunities to provide non-binding comments, and opportunities for modifications prior to formal review of requested entitlements. The following provides a list of the study session dates, the reviewing body (e.g. Historic and

⁵ Geotechnical Investigation, Miller Pacific Engineering Group, January 28, 2022, page 13.

Cultural Preservation Committee (HCPC) and Planning Commission), and which component of the project was reviewed at each session.

- January 10, 2023 – HCPC – Hotel
- June 13, 2023 – HCPC and Planning Commission – Overlay and Hotel
- August 8, 2023 – Planning Commission – Overlay
- October 3, 2023 – HCPC – Overlay

NEIGHBORHOOD MEETINGS

In addition to study sessions, additional neighborhood and community meetings have been held for the project including the following:

- July 27, 2022 – Know Before You Grow⁶ – Hotel (presented by the Hotel applicant team)
- July 12, 2023 – Know Before You Grow – Overlay (presented by City staff)
- August 3, 2023 – Petaluma Downtown Association – (discussion between association and City staff)

2.4. ENTITLEMENTS & APPROVALS

The following entitlements are required of the City of Petaluma in order to authorize the proposed project:

Downtown Housing & Economic Opportunity Overlay:

1. Zoning Map Amendment to establish a Downtown Housing & Economic Opportunity Overlay
2. Zoning Text Amendment to establish regulations for the Downtown Housing & Economic Opportunity Overlay
3. General Plan Amendment to increase the permitted floor area ratio for areas designated Mixed Use that are within the Downtown Housing & Economic Opportunity Overlay

EKN Appellation Hotel:

1. Historic Site Plan and Architectural Review (HSPAR)
2. Conditional Use Permit (CUP)
3. Tree Removal Permit

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

1. Sonoma County Department of Health Services – Approval for excavation of more than five (5) cubic yards of soil, groundwater extraction or discharge, soil or groundwater sampling, and soil reuse or disposal (see Section 4.9 Hazards and Hazardous Materials)
2. Sonoma Water - Approval of Stormwater Plan
3. Regional Water Quality Control Board – Individual NPDES Permit

⁶ A nonprofit organization with the stated mission “to educate the public on four key elements of city planning and to advocate for the best solutions to each.”

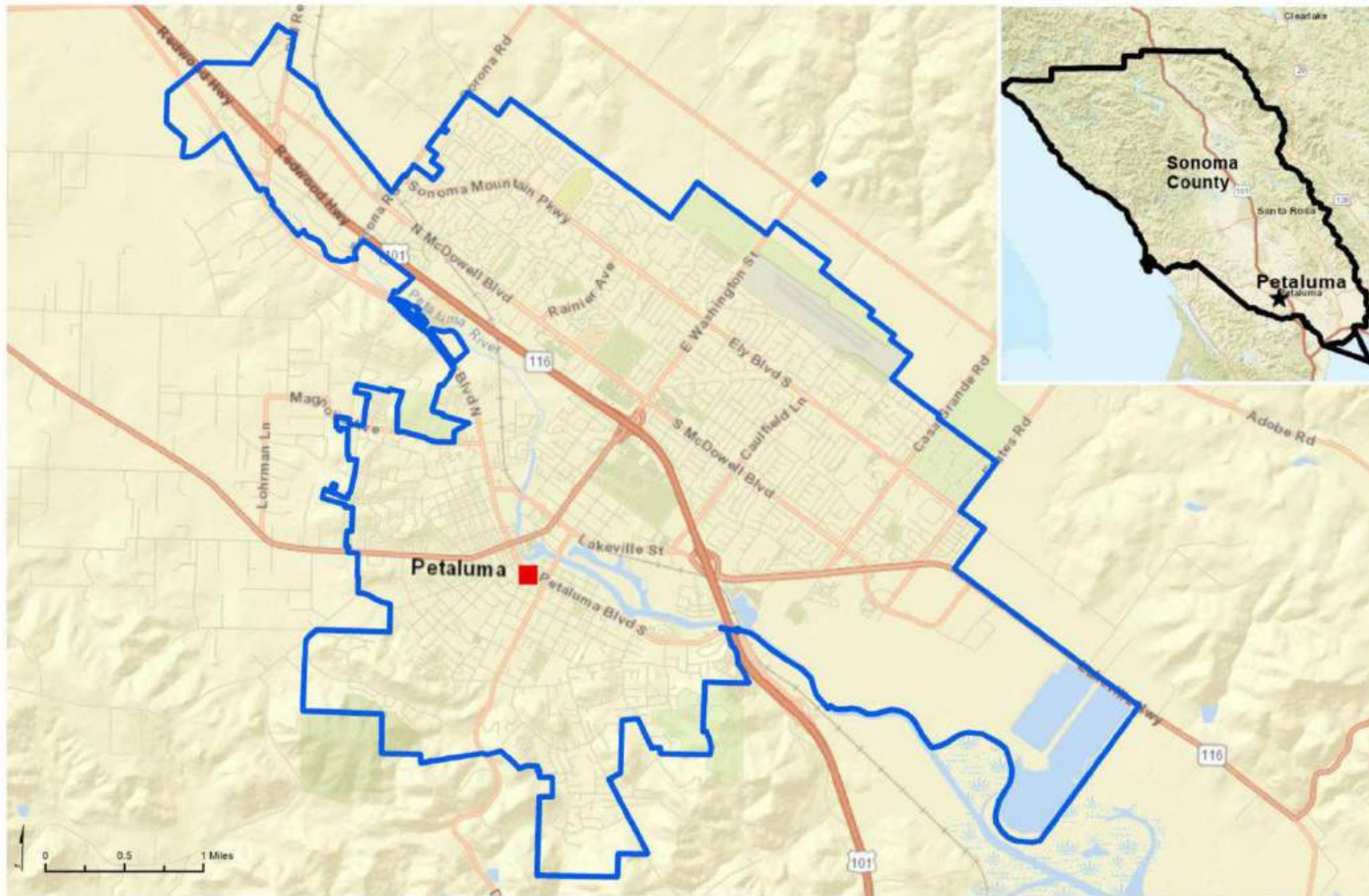





Figure 2 : Regional Location

 Project Area  Petaluma City Limits  Sonoma County

Data source: City of Petaluma; County of Sonoma; ESRI Basemap





Figure 3 : Project Vicinity



Data source: City of Petaluma; ESRI Basemap















Figure 4 : General Plan Land Use Designations

 Downtown Housing & Economic Opportunity Overlay
 EKN Appellation Hotel

Data source: City of Petaluma; ESRI Basemap

General Plan Land Use

- | | | |
|--|---|--|
|  Mixed Use |  Diverse Low Density Residential |  Industry |
|  River Dependant Industrial |  Education |  Low Density Residential |
|  Agriculture Support Industrial |  Floodway |  Medium Density Residential |
|  City Park |  High Density Residential |  Public/Semi-Public |

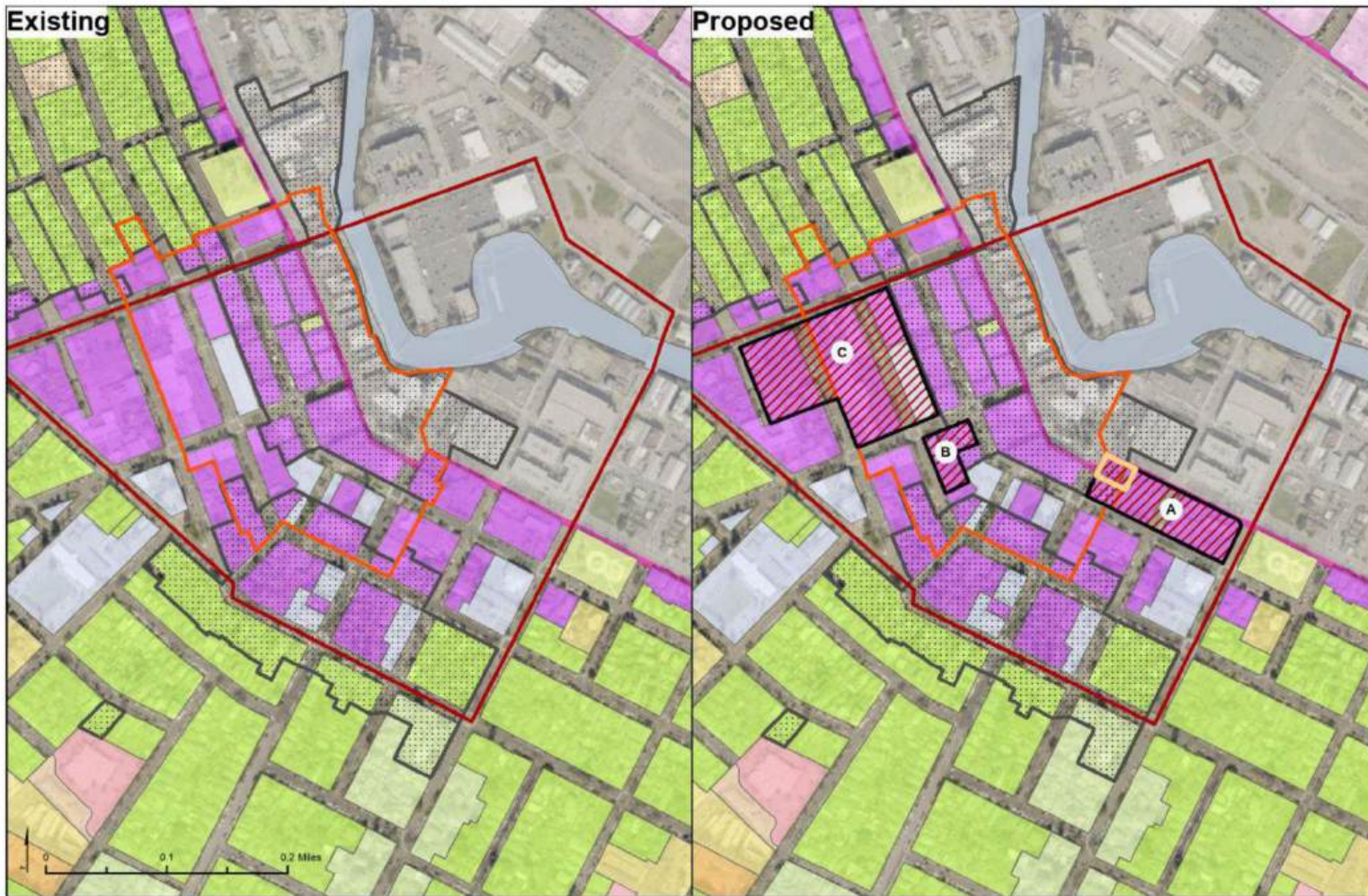
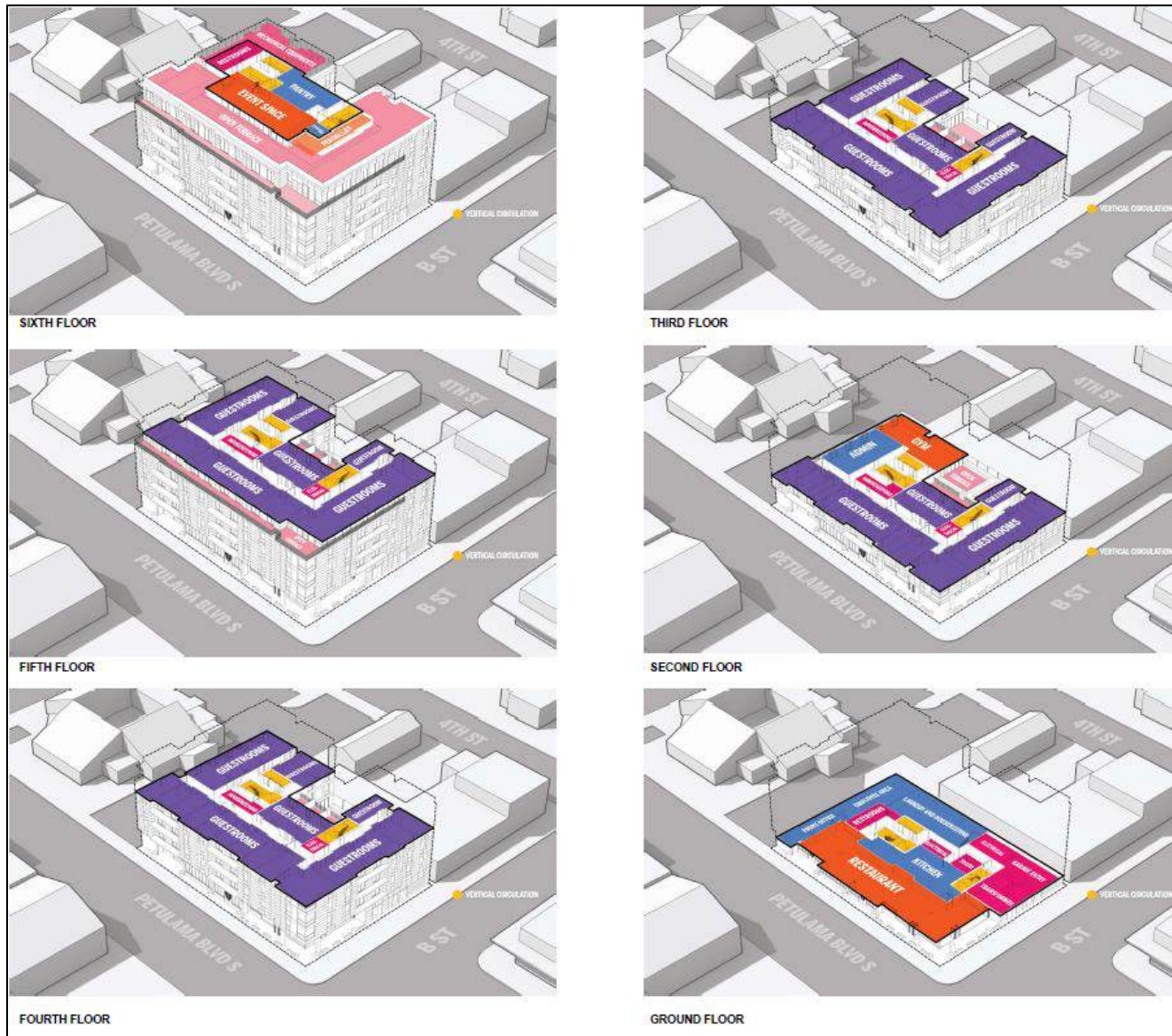


Figure 5 : Existing and Proposed Zoning

- Parking Assessment District
 - Downtown Housing & Economic Opportunity Overlay
 - Central Petaluma Specific Plan Area
 - Historic District
 - Theater District
 - EKN Appellation Hotel
- Data source: City of Petaluma; ESRI Basemap

- Zoning**
- Civic Facility
 - Floodway
 - Mixed Use 1A
 - Mixed Use 1C
 - Mixed Use 2
 - Open Space and Park
 - Planned Unit District
 - Residential 2
 - Residential 3
 - Residential 4
 - Residential 5

FIGURE 6: EKN APPELLATION FLOOR PLAN DIAGRAM⁷



⁷ EKN Appellation Hotel Project Plans, Page Southerland Page, Inc, June 9, 2022; September 8, 2023, Sheet 3.1

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 " 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 type="checkbox"/>	16. Recreation	<input type="checkbox"/>
3. Air Quality	<input type="checkbox"/>	10. Hydrology	<input type="checkbox"/>	17. Transportation	<input type="checkbox"/>
4. Biological Resources	<input type="checkbox"/>	11. Land Use / Planning	<input 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 type="checkbox"/>	20. Wildfire	<input type="checkbox"/>
7. Geology / Soils	<input type="checkbox"/>	14. Population / Housing	<input type="checkbox"/>	21. Mandatory Findings	<input 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.	
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	X
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

April 11, 2024
 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. The level of impact includes the following:

- Potentially Significant Impact (PSI)
- Less than Significant with Mitigation (LTS w/Mit)
- Less than Significant (LTS)
- No Impact (NI)

The Downtown Housing & Economic Opportunity Overlay component of the project represents a programmatic change to the existing Implementing Zoning Ordinance and the EKN Appellation Hotel component of the project represents physical modifications to an existing property. As such, the majority of the following impact analysis discusses the impacts of each component separately, however, in some instances where appropriate to consolidate the discussion, impacts of both components are discussed together (e.g. Agricultural and Forestry Resources, Mineral Resources, etc.).

4.1. AESTHETICS

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
a) Have a substantial adverse effect on a scenic vista?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sources: City of Petaluma General Plan 2025 and EIR; City of Petaluma Implementing Zoning Ordinance (IZO); California Scenic Highway Mapping System, Scenic Highway System Lists; EKN Appellation Hotel Project Plans, Page Southerland Page, Inc, June 9, 2022; September 8, 2023; Historic Preservation Compliance Review for the Hotel Weaver, Painter Preservation, June 7, 2022; Historic Cultural Resource Report for Downtown Housing and Economic Opportunity Overlay, Painter Preservation, July 31, 2023.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

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.

As discussed in the project description section of this document, the project site is located within the Downtown Subarea of the General Plan, which includes Petaluma’s Historic Commercial District and contains a large proportion of Petaluma’s historic buildings organized along a regular street grid and small blocks, the Petaluma River, and features a predominately pedestrian scale environment. Uses surrounding the Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel project site include commercial, retail, and office uses to the north, east, south, and west. Residential uses are located within one block of the project site on 5th Street. Aesthetic and visual resources present in the project area include historic structures north of the project site, such as the Masonic Building and other unique cast iron front buildings, the Petaluma River, and interrupted views of the Sonoma Mountains to the east and west. Petaluma’s new urbanist theater district, developed in the early 2000’s is also visible from the site.

The Overlay component of the project encompasses three sub areas throughout the city’s downtown, with most parcels developed with one-story buildings and large surface parking lots. The Hotel component of the project is located on a relatively square lot at the southwest corner of Petaluma Blvd. South/B Street at 2 Petaluma Boulevard South on what was formerly a gas station. Based on the Hotel site’s corner location, it is relatively prominent and readily visible from the surrounding public rights-of-way. Presently, the Hotel site is void of trees or other visual resources and is covered in ruderal/weedy vegetation which is regularly mowed. A temporary mural is present on the adjacent Rex Ace Hardware building and was installed with the intent of improving the general aesthetic in the area by utilizing the high visibility of the location to bring visual interest until such time as the site is developed.

AESTHETICS IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay

4.1 a) (Scenic Resource or Vista) Potentially Significant Impact: *Analysis of Impact AES-a will be included in the Aesthetics and Visual Resources chapter of the EIR.*

4.1 (b) (Scenic Resources from a Designated State Highway) Potentially Significant Impact: *Analysis of Impact AES-b will be included in the Aesthetics and Visual Resources chapter of the EIR.*

4.1 (c) (Degrade Visual Character or Conflict with Scenic Quality) Potentially Significant Impact: *Analysis of Impact AES-c will be included in the Aesthetics and Visual Resources chapter of the EIR.*

4.1 (d) (Light and Glare) Potentially Significant Impact: *Analysis of Impact AES-d will be included in the Aesthetics and Visual Resources chapter of the EIR.*

EKN Appellation Hotel

4.1(a) (Scenic Resource or Vista) Potentially Significant Impact: *Further analysis of Impact AES-a will be included in the Aesthetics and Visual Resources chapter of the EIR.*

4.1 (b) (Scenic Resources from a Designated State Highway) Potentially Significant Impact: *Analysis of Impact AES-b will be included in the Aesthetics and Visual Resources chapter of the EIR.*

4.1 (c) (Degrade Visual Character or Conflict with Scenic Quality) Potentially Significant Impact: *Analysis of Impact AES-c will be included in the Aesthetics and Visual Resources chapter of the EIR.*

4.1 (d) (Light and Glare) Potentially Significant Impact: *Analysis of Impact AES-d will be included in the Aesthetics and Visual Resources chapter of the EIR.*

4.2. AGRICULTURAL AND FORESTRY RESOURCES

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
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"/>	<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"/>	<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"/>	<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"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sources: 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.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

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 entirety of the Overlay, which includes the Hotel component of the project, is located on land designated as Urban and Built-up and is surrounded by land also designated as Urban and Built-up. Furthermore, no portion of the project site is designated as forestland or under a Williamson Act Contract.

AGRICULTURAL AND FORESTRY IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel

4.2 (a-e) (Farmland Conversion, Williamson Act, Forestland/Timberland Conflict) No Impact: No parcels located with the Overlay, including the proposed EKN Appellation Hotel are located on 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 Overlay component of the project establishes zoning controls to allow for infill development on already developed sites. The Hotel component of the project includes

development of a hotel on a vacant lot in the city's downtown within the MU2 district. The parcels located within the proposed Downtown Housing & Economic Opportunity Overlay and the EKN Appellation Hotel site are designated by the California Department of Conservation, FMMP as Urban and Built-up, have a General Plan Land Use designation of Mixed Use, and are surrounded by lands designated for mixed use development. The nearest land designated by the FMMP as agricultural land is located approximately one mile southwest. The project will not convert land designated by the FMMP as farmland, nor will it 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 not conflict with current agricultural zoning or lead to the loss of farmland and will therefore have **no impact**.

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. As the proposed Overlay and Hotel are within the UGB, there will be no 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:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
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"/>	<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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sources: City of Petaluma General Plan and EIR; BAAQMD 2017 Bay Area Clean Air Plan; BAAQMD 2022 CEQA Guidelines; Plan Bay Area 2050; Appellation Hotel Construction Health Risk & Greenhouse Gas Assessment, Illingworth & Rodkin, September 11, 2023; EKN Appellation Hotel Project Plans, Page Southerland Page, Inc., September 8, 2023.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

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 PM2.5 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 (PM2.5). In addition, the Basin is designated as non-attainment for the national 24-hour PM2.5 standard although the EPA recognized the Air District as achieving the attainment in 2013.⁸ The nearest BAAQMD air monitoring station to the project site is located in Sebastopol. As presented in the 2023 Annual Air Monitoring Network Plan, the annual level of PM2.5 at the Sebastopol monitoring site is 7.3 µg/m3, which is below the required AAM.⁹ 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 is working to regulate a TAC as a particulate matter emitted from diesel-fueled engines, called diesel particulate matter, that is responsible for 70 percent of TAC emissions in the Air District.

⁸ In January 2013, the US EPA issued a final determination recognizing the BAAQMD achieved the 24-hour PM2.5 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 PM2.5 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 PM2.5 standard until the Air District submits a “resignation request” and “maintenance plan” to EPA, and EPA approves the District’s resignation proposal.

⁹ 2023 Annual Air Monitoring Network Plan, BAAQMD, June 2023, page 18, Table 2.7.

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. On April 20, 2023, the BAAQMD published the 2022 CEQA Guidelines, which is an update to the 2017 CEQA Guidelines and provides guidance to lead agencies in evaluating air quality and climate impacts from proposed land use projects. The City of Petaluma recognizes that the BAAQMD thresholds represent the best available scientific data and has elected to rely on BAAQMD Guidelines in determining screening levels and significance. The BAAQMD air quality thresholds are presented in Table 2 below.

TABLE 2: 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 (exhaust)	82	15
PM2.5	54 (exhaust)	54	10
PM10 PM2.5 (fugitive dust)	BMPs**	Not Applicable	
CO	None	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
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 3-1, Page 3-4, BAAQMD 2022 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.			
** PM10/PM2.5 (fugitive dust) is recognized to impact local communities. The Air District strongly recommends implementing all feasible fugitive dust management practices especially when construction projects are located near sensitive communities, including schools, residential areas, or other sensitive land uses.			

The City’s General Plan sets forth policies and programs to maintain and enhance air quality, including policies that encourage incorporation of measures to reduce emissions during construction (policy 4-P-15).

Construction Health Risk & Greenhouse Gas Assessment

A Construction Health Risk & Greenhouse Gas Assessment was prepared by Illingworth & Rodkin, dated September 11, 2023 (**Appendix A**), and analyzes potential health risk and greenhouse gas impacts associated with construction and operation of the Hotel component of the project. Details of the Assessment are included in the impact analysis for the EKN Appellation Hotel in the following section.

AIR QUALITY IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay

4.3 (a) (Conflict with Air Quality Plan) Less Than Significant: Air Quality plans applicable to projects within the City of Petaluma, including the proposed project, include BAAQMD’s 2017 Clean Air Plan: Spare the Air, Cool the Climate, and Plan Bay Area 2050.

2017 Clean Air Plan: Spare the Air, Cool the Climate

The 2017 CAP was adopted on April 19, 2017, and includes a range of control measures designed to decrease emissions of air pollutants that are 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 control strategy for the 2017 CAP consists of 85 distinct measures targeting a variety of local, regional, and global pollutants. Control measures are identified for stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants.

To implement the 2017 CAP control measures, the Air District utilizes a variety of tools and resources, including but not limited to, regulatory permits, enforcement authorities, and through implementation of the CEQA Guidelines. The BAAQMD CEQA Guidelines set forth criteria for determining consistency with the CAP. A project is considered consistent if it supports the primary goals of the CAP (protecting public health and protecting the climate); includes all applicable control measures and; does not interfere with implementation of the CAP.¹⁰ The Downtown Housing & Economic Opportunity Overlay portion of the project consists of amendments to the City’s existing zoning ordinance to allow for increased density and development in urbanized areas. The Overlay component of the project supports the primary goals of the CAP as it prioritizes densifying development in the city’s downtown where future residential and commercial uses will be proximate to transit, thereby minimizing reliance on auto travel and in turn reducing air pollutants which protects public health and the climate. In addition, consistent with locally adopted policies, all new development will be required to be all-electric which also supports the primary goals of the CAP. The Table below demonstrates consistency with each relevant control measure in the CAP. Furthermore, future developments proposed within the Overlay will be subject to independent discretionary review, including CEQA analyses, at which point consistency with control measures of the 2017 CAP will be analyzed. As such, the Overlay portion does not conflict with the BAAQMD 2017 CAP and as such impacts will be less than significant.

TABLE 3: OVERLAY CONSISTENCY WITH APPLICABLE CLEAN AIR PLAN CONTROL MEASURES

Control Measure	Project Consistency
Buildings Control Measures	
BL1: Green Buildings	Consistent. Future development within the Overlay will be required to comply with CalGreen Building Tier 1 standards and Building & Energy Efficiency Standards which provide for increased energy efficiency.
BL4: Urban Heat Island Mitigation	Consistent. Pursuant to General Plan policy 4-P-15-D, future development within the Overlay must incorporate passive solar building design and landscaping conducive to passive solar energy use for both residential and commercial uses, i.e., building orientation in a south to southeast direction, encouragement of planting of deciduous trees on west sides of structures, landscaping with drought resistant species, and use of groundcovers rather than pavement to reduce heat reflection.
Energy Control Measures	
EN1: Decarbonize Electricity Generation	Consistent. The proposed Overlay would not conflict with implementation of this measure because the City adopted an all-electric code which prohibits the use of natural gas in new development.
EN2: Decrease Electricity Demand	Consistent. The proposed Overlay would require all future developments to comply with the latest energy efficiency standards and incorporate applicable energy efficiency features designed to reduce project energy consumption. In addition, the City’s General Plan requires the use of high efficiency appliances; compliance with or exceedance of Title 24 requirements; incorporation of passive solar building design; and encouragement of electric battery powered equipment.

¹⁰ BAAQMD 2022 CEQA Air Quality Guidelines, Page 5-2 & 5-3.

Natural and Working Lands Control Measures	
NW2: Urban Tree Planting	Consistent. The proposed Overlay would incorporate new street trees pursuant to General Plan policy 4-P-6.
Waste Management Control Measures	
WA3: Green Waste Diversion	Consistent: Future development within the overlay component of the project will be required to comply with applicable state laws related to waste diversion including AB 341, which requires commercial properties that generate 4 cubic yards or more of solid waste per week to enroll in recycling service, AB 1826, which requires commercial properties generating 2 cubic yards or more of solid waste per week to enroll in compost service, AB 827, which requires commercial properties subject to AB 341 and AB 1826 to make recycling and compost receptacles available to customers, and SB 1383, which requires all businesses to divert organic materials (food waste, yard waste and, soiled paper products) from the landfill. As stated previously, the City is in contract with Recology for solid waste disposal, recycling services, and composting services. Recology provides canisters for garbage, green (organic) materials, and recycling.
WA4: Recycling and Waste Reduction	Consistent. Future development within the Overlay component of the project will comply with AB 341, which requires commercial properties that generate 4 cubic yards or more of solid waste per week to enroll in recycling service, AB 1826, which requires commercial properties generating 2 cubic yards or more of solid waste per week to enroll in compost service, AB 827, which requires commercial properties subject to AB 341 and AB 1826 to make recycling and compost receptacles available to customers, and SB 1383, which requires all businesses to divert organic materials (food waste, yard waste and, soiled paper products) from the landfill.
Water Control Measures	
WR2: Support Water Conservation	Consistent. Future development within the Overlay component of the project will include water efficient landscaping, will comply with the maximum applied water allowance and the City’s water conservation regulations. Future development within the Overlay component of the project will also 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 Overlay component of the project.
Stationary Source Control Measures	
SS38: Fugitive Dust	Consistent. Future development within the of the proposed Overlay will be required to comply with the BAAQMD’s latest best management practices to control fugitive dust.
Transportation Control Measures	
TR3: Local and Regional Bus Service	Consistent. The Overlay component of the project is located in the downtown area and is well-connected to the City’s local and regional transit network.
TR9: Bicycle and Pedestrian Access and Facilities	Consistent. The proposed Overlay is located downtown and is well-connected to the downtown pedestrian network.
Source: Bay Area Air Quality Management District (BAAQMD). 2017. Final 2017 Clean Air Plan. April 19.	

Plan Bay Area 2050

As discussed in detail in the Greenhouse Gas Emissions section of this document, Plan Bay Area 2050 is the region’s Sustainable Communities Strategy (SCS) and prioritizes development within established Priority Development Areas (PDAs) to enhance mobility and economic growth by linking the location of housing and jobs with transit, resulting in a more efficient land use pattern around transit, reducing greenhouse gas emissions, and achieving a greater return on existing and planned transit investments. The City of Petaluma contains two PDAs. A portion of the Overlay component of the project is located within the Central Petaluma PDA which aims to revitalize parts of the historic downtown by directing development to underutilized land in the city’s historic downtown, allowing for a greater diversity and intensity of uses.¹¹ As stated above, the Overlay component of the project intends to increase density and development in the city’s downtown, proximate to existing transit, which is consistent with Plan Bay Area 2050. As such, the Overlay component of the project will not conflict with Plan Bay Area 2050 and impacts will be less than significant.

4.3 (b, c, d) (Violate Air Quality Emission Standard; Impact Sensitive Receptors; Other Emissions or Odor) Less Than Significant: The Overlay component of the project will not result in direct physical changes. However, the Overlay may result in reasonably foreseeable future development which has the potential to result in air quality impacts including emission of criteria pollutants during construction and operation, exposure of sensitive receptors to substantial pollutant concentrations, and odors. Future development occurring within the proposed Overlay will be subject to independent discretionary review, review in accordance with CEQA, and would be evaluated on a project-by-project basis to determine potential air quality impacts at the time a development application is received. A site- and development- specific air quality analysis would be required to analyze impacts associated with criteria pollutant emissions during construction and operation, exposure of sensitive receptors to substantial pollutant concentrations, and odors. The proposed Overlay in and of itself will not result in any physical development and will not generate any emissions until such time as future development is proposed. Future development in the Overlay will be required to comply with General Plan policies and will be subject to independent review in accordance with CEQA and will be evaluated on a project-by-project basis to determine potential air quality impacts at the time a development application is received. As such, air quality impacts of the Overlay component of the project will be less than significant.

EKN Appellation Hotel

4.3 (a) (Conflict with Air Quality Plan) Less Than Significant: The EKN Appellation Hotel represents the type of development that can occur under the proposed Downtown Housing & Economic Opportunity Overlay. As stated above, a project is considered consistent with the 2017 CAP if it supports the primary goals of the CAP (protecting public health and protecting the climate); includes all applicable control measures; and does not interfere with implementation of the CAP.

The Hotel component of the project supports the primary goals of the CAP as it is located in the city’s downtown and is proximate to transit, thereby minimizing reliance on auto travel and in turn reducing air pollutants which protects public health and the climate. Furthermore, the Hotel project will be constructed as all-electric, consistent with adopted City regulations, and will implement control measure TR3 (local and regional bus service) of the Plan through construction of a bus stop along the Petaluma Blvd. North frontage, adjacent to Center Park, approximately 200 feet north of the site and (as demonstrated in Table 4) will not interfere with implementation of other control measures identified in the CAP. The EKN Hotel project is also consistent with Plan Bay Area 2050 as it proposes a new employee-generating use in an urbanized area proximate to transit. As such, the Hotel will not conflict with the regional air quality plans and impacts will be **less than significant**.

TABLE 4: EKN HOTEL CONSISTENCY WITH APPLICABLE CLEAN AIR PLAN CONTROL MEASURES

Control Measure	Project Consistency
Buildings Control Measures	
BL1: Green Buildings	Consistent. The proposed Hotel would not conflict with the implementation of this measure. The proposed Hotel will comply with the CalGreen Building

¹¹ Existing Conditions Report, Land Use and Community Character, City of Petaluma General Plan Update, September 2022.

	Tier 1 standards and Building & Energy Efficiency Standards which provides for increased energy efficiency.
BL4: Urban Heat Island Mitigation	Consistent. The proposed Hotel would not conflict with implementation of this measure. Pursuant to the City’s General Plan, the proposed hotel would be required to incorporate passive solar building design and landscaping conducive to passive solar energy use for both residential and commercial uses, i.e., building orientation in a south to southeast direction, encourage planting of deciduous trees on west sides of structures, landscaping with drought resistant species, and use of groundcovers rather than pavement to reduce heat reflection.
Energy Control Measures	
EN1: Decarbonize Electricity Generation	Consistent. The proposed Hotel would not conflict with implementation of this measure because the City prohibits the use of natural gas in new development. The Hotel will also be provided the option to participate in the Sonoma Clean Power Program, which relies on renewable energy and minimized GHG emissions.
EN2: Decrease Electricity Demand	Consistent. The proposed Hotel would not conflict with the implementation of this measure. The proposed Hotel would comply with the latest energy efficiency standards and incorporate applicable energy efficiency features designed to reduce project energy consumption. In addition, the City’s General Plan requires the use of high efficiency appliances; compliance with or exceedance of Title 24 requirements; incorporation of passive solar building design; and encouragement of electric or battery powered equipment.
Natural and Working Lands Control Measures	
NW2: Urban Tree Planting	Consistent. The proposed project would incorporate new landscaping, including removing and replacing 3 street trees (with low water use species).
Waste Management Control Measures	
WA3: Green Waste Diversion	Consistent. As a commercial use, the Hotel component of the project will be required to comply with applicable state laws related to waste diversion including AB 341, which requires commercial properties that generate 4 cubic yards or more of solid waste per week to enroll in recycling service, AB 1826, which requires commercial properties generating 2 cubic yards or more of solid waste per week to enroll in compost service, AB 827, which requires commercial properties subject to AB 341 and AB 1826 to make recycling and compost receptacles available to customers, and SB 1383, which requires all businesses to divert organic materials (food waste, yard waste and, soiled paper products) from the landfill. As stated previously, the City is in contract with Recology for solid waste disposal, recycling services, and composting services. Recology provides canisters for garbage, green (organic) materials, and recycling.
WA4: Recycling and Waste Reduction	Consistent. The Hotel project will comply with AB 341, which requires commercial properties that generate 4 cubic yards or more of solid waste per week to enroll in recycling service, AB 1826, which requires commercial properties generating 2 cubic yards or more of solid waste per week to enroll in compost service, AB 827, which requires commercial properties subject to AB 341 and AB 1826 to make recycling and compost receptacles available to customers, and SB 1383, which requires all businesses to divert organic materials (food waste, yard waste and, soiled paper products) from the landfill.
Water Control Measures	

WR2: Support Water Conservation	Consistent. The Hotel project includes water efficient landscaping, complies with the maximum applied water allowance and the City's water conservation regulations. The Hotel 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 Hotel component of the project.
Stationary Source Control Measures	
SS38: Fugitive Dust	Consistent. Construction of the proposed Hotel will be required to comply with the BAAQMD's latest best management practices to control fugitive dust.
Transportation Control Measures	
TR3: Local and Regional Bus Service	Consistent. The proposed Hotel will be near the micro transit shuttle that drops off visitors downtown from either the SMART station or Fairgrounds property, and will provide a bus stop along Petaluma Blvd. North, approximately 200 feet north of the site, thereby increasing access to the site by alternative modes of transportation.
TR9: Bicycle and Pedestrian Access and Facilities	Consistent. The proposed Hotel is located downtown and is well-connected to the downtown pedestrian network. In addition, the proposed Hotel will provide onsite bicycle parking.
Source: Bay Area Air Quality Management District (BAAQMD). 2017. Final 2017 Clean Air Plan. April 19.	

4.3 (b) (Violate Air Quality Emission Standard) Less Than Significant with Mitigation: Air quality emissions associated with the proposed Hotel would result from short-term construction activities and ongoing operation.

Construction

Construction of the Hotel component of the project will include site preparation, excavation, grading, building construction, and installation of frontage improvements and associated infrastructure. Construction activities will generate air pollutant emissions associated with site preparation, ground disturbance, operation of heavy-duty construction equipment, workers traveling to and from the site, off-haul of excavated material, and delivery of materials. These activities will 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 (CalEEMod) Version 2022 was used to estimate emissions from construction related activities. Emission levels were compared to BAAQMD significance thresholds as identified in Table 2 to determine the project's potential to impact air quality. CalEEMod defaults based on land use size and type were used to determine construction related emissions. Annual emission estimates include both on- and off-site related activities where on-site includes operation of construction equipment, and off-site includes worker, hauling, and vendor vehicle trips. Based on the default construction activities and equipment usage, the total project construction workdays (excluding weekend days) were estimated to be 414. Average daily construction emissions (total construction emissions/construction workdays) of ROG, NOx, PM₁₀, and PM_{2.5} are shown in Table 5 below. As presented therein, construction emissions during project construction will not exceed BAAQMD significance thresholds. Though construction emissions do not exceed BAAQMD thresholds, the Air District strongly recommends implementing all feasible fugitive dust management practices during project construction, especially when construction activities occur near sensitive communities. To ensure best management practices are implemented throughout project construction, the project shall comply with **Mitigation Measure EKN AQ-1** during all stages of construction. As proposed and with implementation of BMPs identified in measure EKN AQ-1, impacts resulting from a cumulatively considerable net increase of criteria pollutants during construction will be **less than significant**.

TABLE 5: CONSTRUCTION PERIOD EMISSIONS				
	ROG	NOX	PM₁₀	PM_{2.5}
Construction Emissions (tons)				

2024-2025	0.15	1.21	0.03	0.03
2026	0.19	0.06	<0.01	<0.01
Average Daily Construction Emissions (lbs/day)				
2024-2025 (305 construction workdays)	0.95	7.93	0.21	0.20
2026 (109 construction workdays)	3.52	1.15	0.04	0.03
Net Annual Operational Emissions (lbs/day)				
<i>BAAQMD Thresholds (lbs/day)</i>	54	54	82	54
Exceeds Threshold?	No	No	No	No

Notes: 2024-2025 construction period emissions includes 2 months (November and December) from 2024

Source: BAAQMD's 2022 CEQA Air Quality Guidelines; Appellation Hotel Construction Health Risk & Greenhouse Gas Assessment, prepared by Illingworth & Rodkin, August 15, 2023.

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. Projects that meet the screening criteria are reasonably expected to result in less than significant impacts to air quality 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. The screening level criteria for a hotel and high turnover restaurant as set forth in Table 4-1 of the BAAQMD 2022 CEQA Air Quality Guidelines is as follows:

- Hotel – 230 rooms (construction) 767 rooms (operation)
- Restaurant: High Turnover (Sit-Down) – 452,000 square feet (construction) 75,000 square feet (operation)

The project proposes development of a 93-room hotel with approximately 8,723 square feet of restaurant/bar space (3,209 sf on the ground floor; 5,514 sf on the rooftop terrace), which is below the construction and operational screening sizes listed above for hotel and restaurant uses and it can therefore be assumed that operation of the proposed Hotel component of the project will result in air quality emissions that are below the established thresholds of significance identified in Table 2. In addition to the project meeting the screening criteria, Attachment 1 of the Construction Health Risk & Greenhouse Gas includes estimated operational emissions using CalEEMod. As shown in Table 6, the Hotel component of the project does not exceed BAAQMD established thresholds during project operation and as such, impacts resulting from a cumulatively considerable net increase of criteria pollutants during operation will be **less than significant**.

TABLE 6: ANNUAL OPERATIONAL EMISSIONS

	ROG	NOX	PM₁₀	PM_{2.5}
Net Annual Operational Emissions (tons/year)	0.86	0.51	0.74	0.19
<i>BAAQMD Thresholds (tons/year)</i>	10	10	15	10
Exceeds Threshold?	No	No	No	No
Net Annual Operational Emissions (lbs/day)	4.73	2.81	4.03	1.06
<i>BAAQMD Thresholds (lbs/day)</i>	54	54	82	54
Exceeds Threshold?	No	No	No	No

Source: BAAQMD's 2022 CEQA Air Quality Guidelines; Appellation Hotel Construction Health Risk & Greenhouse Gas Assessment, prepared by Illingworth & Rodkin, August 15, 2023, Attachment 1.

4.3 (c) (Impact Sensitive Receptors) Less Than Significant Impacts with Mitigation: 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 nearest sensitive receptor to the site, referred to in the health risk assessment as the maximally exposed individual (MEI), is a multi-family housing unit located along Petaluma Blvd. S. within the mixed-use building

located between C and D Streets. Other nearby sensitive receptors include other multi-family units within the same mixed-use building and single-family residences located west of the Hotel site.¹²

The Hotel project would result in a potentially significant impact on sensitive receptors if any of the following three following criteria are met:

Criterion 1: Construction of the Hotel would exceed the BAAQMD health risk significance thresholds.

Criterion 2: Operation of the Hotel would exceed the BAAQMD health risk significance thresholds.

Criterion 3: The Hotel would locate new sensitive receptors (residents) that could be subject to existing sources of TACs at the project site which exceed the BAAQMD cumulative health risk significance thresholds.

Criterion 1: Project Construction Toxic Air Pollutants

Construction activities will result in temporary emission of diesel particulate matter from vehicles and heavy-duty construction equipment as well as the generation of fugitive dust from grading and ground disturbing activities. As noted in the Construction Health Risk & Greenhouse Gas Assessment prepared for the project, the maximum cancer risks, annual PM2.5 concentration, and Hazard Index (HI) from unmitigated construction activities of the Hotel component of the project at the MEI location would not exceed the BAAQMD single-source thresholds. In addition to analyzing single-source impacts, the Assessment analyzes cumulative health risks which include substantial sources of toxic air contaminants within 1,000 feet of the project site in addition to project construction activities. One stationary source (City of Petaluma diesel generator) is located within 1,000 feet of the project site. As shown in Table 7, the project will not exceed the BAAQMD single- or cumulative source thresholds for cancer risks, annual PM2.5 concentration, or HI at the MEI location and as such. Based on the analysis prepared for the project as well as the requirement to comply with **Mitigation Measure EKN AQ-1** which requires implementation of standard BMPs throughout project construction, impacts to nearby sensitive receptors during project construction will be **less than significant**.

TABLE 7: IMPACTS FROM COMBINED SOURCES AT CONSTRUCTION MEI

Source	Cancer Risk (per million)	Annual PM2.5 (ug/m3)	Hazard Index
Project Impacts			
Project Construction	7.07 (infant)	0.20	0.01
<i>BAAQMD Single-source Threshold</i>	10	0.3	1.0
Exceeds Threshold?	No	No	No
Cumulative Impacts			
Cumulative Roadway	21.79	0.22	0.04
City of Petaluma (Facility #20509, Diesel Generator)	0.25	<0.01	<0.01
Total	29.11	<0.43	<0.06
<i>BAAQMD Thresholds (lbs/day)</i>	100	0.8	10.0
Exceeds Threshold?	No	No	No

Source: BAAQMD's 2022 CEQA Air Quality Guidelines; Appellation Hotel Construction Health Risk & Greenhouse Gas Assessment, prepared by Illingworth & Rodkin, August 15, 2023, Table 5.

¹² Appellation Hotel Construction Health Risk & Greenhouse Gas Assessment, Illingworth & Rodkin, August 15, 2023, Figure 1, Page 13

Criterion 2: Project-Specific Operational Toxic Air Pollutants.

At operation, the proposed Hotel will not generate air quality emissions that would affect nearby sensitive receptors. As a hotel with restaurant, operational activities will be similar to existing commercial uses in the immediate vicinity. Traffic generated by the project would consist of mostly light-duty gasoline-powered vehicles, which are not a significant source of TAC and air pollutant emissions. Thus, the proposed project would not generate a significant amount of DPM or other TAC emissions during operation and impacts to sensitive receptors during project operation will be **less than significant**.

Criterion 3: The Project as a Receptor

*The Hotel would not locate new sensitive receptors (residents, children, daycare, etc.) that could be subject to existing sources of TACs at the project site. Therefore, this impact will be **less than significant**.*

4.3 (d) (Other Emissions or Odor) Less Than Significant Impact: There may be occasional localized odors during construction of the Hotel associated with operation of heavy-duty equipment, paving, and application of architectural coatings. Any odors generated during construction would be temporary and not likely noticeable beyond the immediate construction zone. As a lodging use with associated commercial component (e.g. restaurant), 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

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

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. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
7. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
8. Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
9. Publicly visible signs shall be posted with the telephone number and name of the 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 General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

4.4. BIOLOGICAL RESOURCES

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sources: City of Petaluma General Plan 2025 and EIR; City of Petaluma Implementing Zoning Ordinance (IZO); EKN Appellation Hotel Project Plans, Page Southerland Page, Inc, September 8, 2023.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

BIOLOGICAL RESOURCES SETTING

Biological resources are protected by statute including the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), Clean Water Act (CWA), and the Migratory Bird Treaty Act (MBTA) which 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 special-status plant and animal species 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.

Within the Urban Growth Boundary, biological resources are largely limited to the Petaluma River and its tributaries, which contain aquatic and riparian resources as well as wetlands. The National Wetland inventory identifies fresh emergent wetlands in the southern portion of the Petaluma River and Northern coastal salt marsh wetland and brackish marsh wetland in the lower reaches of the Petaluma River. The Petaluma River Access and Enhancement Plan, prepared in 1996, contains policies and guidelines to protect these important biological resources.

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 protect special-status species and supporting habitats, General Plan policy 4-P-3 requires preparation of a site-specific biological resources assessment when development occurs in ecologically sensitive areas. All parcels located within the proposed Downtown Housing & Economic Opportunity Overlay are currently developed or were developed and are surrounded by urban development and, though they may contain individual trees with the potential to provide limited suitable nesting habitat for native birds, are otherwise not considered ecologically sensitive.

The Hotel component of the project is located on an infill site in the city's downtown that was previously developed as a gas station and presently comprises predominately ruderal/weedy vegetation that is regularly disturbed through mowing/maintenance activities. Four existing street trees are located along the Petaluma Blvd. South and B Street project frontage, of which three will be removed and replaced at a 1:1 ratio in compliance with Chapter 17 of the Petaluma Implementing Zoning Ordinance (Tree Preservation). It should be noted that trees proposed for removal are considered protected as they are located within the public right-of-way, however, the trees are not of a size or species that would otherwise classify them as protected (IZO Section 17.040). The anticipated use of public offsite parking is located at an existing parking garage at 149 C Street and no modifications to this existing structure will be needed. Based on the disturbed condition of the Hotel site, existing development at the offsite parking location, and overall lack of ecological sensitivity, a site-specific assessment of biological resources was not prepared. Existing street trees and ruderal/weedy vegetation may provide suitable nesting and foraging habitat for native birds protected pursuant to the MBTA; however, the removal and replacement of three street trees and associated loss of limited foraging habitat is not considered a significant impact to native birds or special status raptor species especially with the proposed Mitigation Measures. There are no seasonal wetlands on or adjacent to the project site and its location within the City's downtown core does not provide suitable habitat for special status plant or animal species.

BIOLOGICAL RESOURCES IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay

4.4 (a-e) (Special-Status Species, sensitive communities; Jurisdictional Waters; Wildlife Movement; Conflict with Local Policies or Ordinances) Less Than Significant: As shown in Table 3.8-1 of the General Plan EIR, certain protected bird and bat species have the potential to occur throughout the planning area, including in urbanized, built-up areas such as the proposed Downtown Housing & Economic Opportunity Overlay areas. The proposed Overlay component of the project will not result in direct physical development and future development would primarily consist of redevelopment as the majority of parcels within the Overlay are developed or previously developed sites. Moreover, the proposed Overlay zoning amendment will allow already developed or developable parcels to increase building intensity through additional heights, greater lot coverage, and greater FAR. Accordingly, the parcels in the Overlay were already zoned as developable properties and impacts to biological resources were already analyzed at these sites during the adoption of the General Plan EIR and Implementing Zoning Ordinance. As noted above, though parcels within the Overlay may contain individual trees that provide suitable habitat for special-status bird and bat species, given the urbanized context and developed condition of these parcels, they are not considered ecologically sensitive areas. Given

the lack of ecological sensitivity, it is not anticipated that site-specific biological resources analyses will be needed for future development proposals within the Overlay area. Additionally, subsequent development proposals will be required to demonstrate compliance with State, Federal and local laws and regulations, and the applicable policies contained in the General Plan regarding special-status species. However, subsequent development proposals will be subject to independent discretionary review, including review under CEQA which may result in a determination that site-specific analyses are required. Additionally, future development proposals may result in removal of protected trees which has the potential to conflict with the City's Tree Protection Ordinance, IZO Chapter 17. However, through the development review process, any protected trees proposed for removal will be subject to applicable regulations, including replacement of trees at a minimum of a 1:1 ratio. Additionally, future development subject to site plan and architectural review requires a finding that the environmental impacts, including biological resources are avoided or mitigated to be less than significant. (IZO Section 24.050(E)(5) Given that the Overlay is within an urbanized area of the city, and that future site-specific proposals will be subject to discretionary review, compliance with CEQA, and compliance with applicable local regulations, impacts to biological resources as a result of the Overlay component of the project will be **less than significant**.

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** will result due to a conflict with such plans.

EKN Appellation Hotel

4.4 (a) (Special-Status Species) Less Than Significant with Mitigation: The proposed EKN Appellation Hotel is located on a site that was previously developed as a gas station and is within an established urban area. Given the disturbed nature of the site, including ongoing maintenance/mowing, and surrounding urban context, and as described in Table 3.8-1 of the General Plan EIR, the site does not contain suitable habitat for invertebrate, amphibian, or reptile special status species. However, existing trees proposed for removal may provide suitable nesting or roosting habitat for special-status bird species, including migratory birds that are protected under the MBTA as well as special-status bat species. General Plan Policy 4-P-3 requires projects to protect special status species and supporting habitats within Petaluma, including species that are State or Federal listed as endangered, threatened, or rare. The proposed EKN Appellation Hotel would be required to adhere to the Migratory Bird Treaty Act (MBTA) and CDFW Sections 3503, 3503.5, and 3513, which include provisions for protection of native and migratory birds, by preventing direct harm to or the abandonment of active nests. CDFW Sections 2000 and 4150 state that it is unlawful to take or possess species, including bats, without a license or permit as required by Section 3007. Additionally, Title 14 of the California Code of Regulations states it is unlawful to harass a number of species, including protected birds and bats. To "harass" is defined as "an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding, or sheltering. Adherence to General Plan policies, MBTA, and CDFW regulations would provide for the protection of birds and bats, including their nests, roosts, eggs and young. Compliance with State, Federal and local laws, and regulations, which could require focused surveys and relocation of bats (if present) or obtaining required permits and agreements; and compliance with the applicable policies contained in the General Plan would reduce impacts to bat species to a less than significant level.

As proposed, the project will remove three street trees including one along Petaluma Blvd. South (6-inch red maple) and two along B Street (8-inch red maples), which could potentially impact special-status species protected under the MBTA. **Mitigation Measure EKN BIO-1** requires that preconstruction nesting bird surveys be conducted no more than 14 days prior to commencement of ground disturbing activities when construction is proposed to begin during the bird nesting season (February 15 - September 15). Should active nests be identified, a disturbance-free buffer shall be established as determined by a qualified biologist. Additionally, the three street trees that will be removed will be replaced with three new, 36-inch box street trees (Armstrong red maple) in compliance with the City's Tree Preservation Chapter. With implementation of measure EKN BIO-1, impacts to special-status and migratory birds will be **less than significant**.

4.4 (b-c) (Riparian Habitat, Sensitive Natural Community; Jurisdictional Waters) Less Than Significant Impact: Vegetation onsite consists of ruderal habitat that is regularly disturbed through maintenance/mowing. There are no wetlands, riparian habitat, sensitive natural communities, or jurisdictional wetlands identified

onsite. Given the sites location in an established urban area coupled with the lack of any natural community and that the site has previously been disturbed, development of the Hotel will not result in substantial impacts to riparian habitat, other natural communities, or jurisdictional waters, nor will it conflict with any policies or program protecting riparian resources. Therefore, the project will have a **less than significant impact** to riparian habitat, sensitive natural communities, and jurisdictional waters.

4.4 (d) (Wildlife Movement) Less than Significant Impact with Mitigation: Wildlife movement to and from the site is restricted by surrounding roadways to the north and east (B Street and Petaluma Blvd. South), existing development to the south and west, and by permitter fencing surrounding the site. In the absence of the site serving as a suitable wildlife movement corridor, the Hotel component of the project will not interfere with the movement of any native wildlife species to or from the site nor will it interfere with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. Given the surrounding urbanized context and provided that the height of the structure is similar to others within proximity to the site, impacts to bird migration are not anticipated. However, to ensure impacts associated with bird collisions of upper story windows, the Hotel component of the project shall implement **Mitigation Measures EKN BIO-2**, which requires incorporation of design elements that minimize the potential for bird collisions including but not limited to window screens and coverings, window glazing, and overhangs. With incorporation of EKN BIO-2, collision risks of migrating birds will be minimized and impacts and impacts of the project will be **less than significant**.

4.4 (e) (Conflict with Local Policies or Ordinances) Less Than Significant Impact: There are no identified state or federal plans that include the project site for biological priority for protection and/or stewardship. As described above, the Hotel component of the project includes removal of three street trees, consisting of one 6-inch and two 8-inch red maples. All trees proposed for removal are considered protected under the City's Tree Preservation Ordinance because the trees are located within the rights-of-way and as such are proposed to be replaced at a 1:1 ratio in compliance with the City's Tree Preservation Ordinance. As the project proposes replacement of the three protected trees to be removed, impacts due to a conflict with the City's Tree Preservation ordinance will be **less than significant**.

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** will result due to a conflict with such plans.

BIOLOGICAL RESOURCES MITIGATION MEASURES

EKN BIO-1: Should construction activities commence during the bird nesting season (February 15 to September 15), a preconstruction nesting bird survey shall be conducted by a qualified biologist no more than 14 days prior to the start of ground disturbing activities. Areas within 300 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. Should construction activities cease for 14 consecutive days or more within the nesting season, an additional nesting bird survey shall be required prior to resuming ground disturbing activities. Results of the nesting bird survey shall be submitted in writing to the City of Petaluma, Community Development Department.

EKN BIO-2: The project shall incorporate design features such as window screens and coverings, window glazing, and overhangs to minimize risks of collisions with migrating avian species.

4.5. CULTURAL AND TRIBAL CULTURAL RESOURCES

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) 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 of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sources: City of Petaluma General Plan 2025 and EIR; Historic Cultural Resources Report for the Downtown Housing & Economic Opportunity Overlay, Painter Preservation, September 22, 2023; Cultural Resources Study, Evans & De Shazo, June 16, 2023 (CONFIDENTIAL); Results of the Ground-Penetrating Radar (GPR) and Historical Human Remains Detection Canine (HHRDC) Survey, Evans & DeShazo, September 25, 2023 (CONFIDENTIAL); Historic Compliance Review for the EKN Appellation Hotel, Painter Preservation, September 22, 2023

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

CULTURAL AND TRIBAL CULTURAL RESOURCES SETTING

This topic will be studied in the Draft EIR

CULTURAL AND TRIBAL CULTURAL RESOURCES IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay

4.5 (a) (Historical) Potentially Significant Impact: The proposed Overlay has the potential to result in significant impacts to listed or eligible historic resources, the Historic Commercial District, and/or the A Street Historic District. Therefore, a **potentially significant** impact could occur. *Further analysis of Impact CUL-a will be included in the Cultural and Tribal Cultural Resources chapter of the EIR.*

4.5 (b-d) (Archaeological Resources; Human Remains; Tribal Cultural Resources) Potentially Significant Impact: The proposed Overlay has the potential to result in significant impacts archaeological resources, humans remains and Tribal Cultural Resources, if present. Therefore, a **potentially significant** impact could occur. *Further analysis of Impact CUL-b-d will be included in the Cultural and Tribal Cultural Resources chapter of the EIR.*

EKN Appellation Hotel

4.5 (a) (Historical) Potentially Significant Impact: The proposed Hotel has the potential to result in significant impacts to listed or eligible historic resources, the Historic Commercial District, and/or the A Street Historic District. Therefore, a **potentially significant** impact could occur. *Further analysis of Impact CUL-a will be included in the Cultural and Tribal Cultural Resources chapter of the EIR.*

4.5 (b; d) (Archaeological Resources; Human Remains; Tribal Cultural Resources) Potentially Significant Impact: The proposed Hotel has the potential to result in significant impacts to archaeological, human remains and/or tribal cultural resources, if present. Therefore, a **potentially significant** impact could occur. *Further analysis of Impact CUL-b-d will be included in the Cultural and Tribal Cultural Resources chapter of the EIR.*

4.6. ENERGY

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
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"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sources: General Plan 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; Appellation Hotel Construction Health Risk & Greenhouse Gas Assessment, Illingworth & Rodkin, August 15, 2023.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

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 such as oil, natural gas, and coal, resulting in the emission of pollutants.

To address energy efficiency at the State level, the California Energy Commission (CEC) adopted the 2019 Building Energy Efficiency Standards (Title 24, Part 6 of the CCR) in May 2018, which took effect on January 1, 2020. The new standards focus on four key areas: smart residential photovoltaic systems; updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); residential and nonresidential ventilation requirements; and nonresidential lighting requirements. The building standards require that solar photovoltaic systems be installed on single-family residences, multi-family buildings, hotels/motels, and non-residential buildings constructed in 2020 and beyond. On January 9, 2023, the City of Petaluma adopted the Tier 1 CalGreen Standards to meet higher levels of building energy efficiency through the adoption of Ordinance No. 2834 N.C.S. The latest Building Energy Efficiency Standards went into effect on January 1, 2023. It is estimated that over a 30-year period, the energy code will reduce greenhouse gas (GHG) emissions by 10 million metric tons.

California Energy Consumption

According to the CEC, total system electric generation for California in 2021 was 277,764 gigawatt-hours (GWh). California’s non-CO2 emitting electric generation categories (nuclear, large hydroelectric, and renewable generation) accounted for 49 percent of total in-state generation for 2021 as compared to 51 percent in 2020. It is noted that the decrease in non-CO2 emitting electric generation was attributable to the State’s ongoing drought. California’s in-state electric generation was 194,127 GWh with electricity imports accounting for approximately 30 percent of total system electric generation.¹³ In 2020, the CEC reported that Sonoma County had a total electricity consumption of 2,894 GWh.

According to the CEC, approximately 45 percent of the natural gas burned in California was used for electricity generation with the remainder consumed in the residential (21 percent), industrial (25 percent), and commercial (9 percent) sectors. Natural gas is used for many things including generating electricity for cooking and heating, as well as an alternative transportation fuel.¹⁴

¹³ California Energy Commission, 2021 Total System Electric Generation, <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation>, accessed July 2023.

¹⁴ California Energy Commission, Supply and Demand of Natural Gas in California, <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california#:~:text=Nearly%2045%20percent%20of%20the.90%20percent%20of%20its%20natural>, accessed July 2023.

According to the CEC, gasoline has remained the dominant fuel within the transportation sector, with diesel fuel and aviation fuels following. In 2015, California consumed approximately 15 billion gallons of gasoline and approximately 4.2 billion gallons of diesel fuel. An increasing amount of electricity is being used for transportation energy, which can be 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 through alternative generation processes while using existing infrastructure through PG&E for delivery. By using existing delivery 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.¹⁵ As of 2018 Sonoma Clean Power generated 39% less greenhouse gas emissions as compared to PG&E's energy portfolio.¹⁶ As of 2021, over 950 SCP customers switched to EverGreen, which provides 100%, local, renewable energy.¹⁷

City of Petaluma

The City of Petaluma contains energy resources that encompass a variety of fuels that provide lighting for residential and commercial uses, provide heating and cooling for indoor environments, and aid in the operation of transportation systems. 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 city's largest energy consumer is the transportation sector.

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.

The following General Plan policies related to energy resources are applicable to project:

- Policy 4-P-9: Require a percentage of parking spaces in large parking lots or garages to provide electrical vehicle charging stations.
- 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 passive solar building design and landscaping conducive to passive solar energy use for both residential and commercial uses, i.e., building orientation in a south to southeast direction, encourage planting of deciduous trees on west sides of structures, landscaping with drought resistant species, and use of groundcovers rather than pavement to reduce heat reflection.
- Policy 4-P-19D: Encourage use and development of renewable or nontraditional sources of energy. Consider the feasibility of requiring a percentage of new development to meet 50% of their energy needs from fossil fuel alternatives (e.g. solar panels, etc.).

The City of Petaluma has also taken steps to address GHG emissions within its city limits, which in turn assist in reducing energy consumption as further discussed in the Greenhouse Gas Emissions section.

¹⁵ Sonoma Clean Power 2016 Annual Report

¹⁶ Sonoma Clean Power 2018 Annual Report

¹⁷ Sonoma Clean Power 2021 Annual Report

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. On December 10, 2020, the City's Climate Action Commission approved the Climate Emergency Framework and forwarded a recommendation for its adoption to the City Council. On January 11, 2021, the City Council and the Climate Action Commission held a joint hearing which resulted in adoption of the Framework. The Framework is intended to guide the City's ongoing response to and discussion about the climate crisis and guides and informs subsequent policies and implementation strategies. The principles identified in the Framework establish Petaluma's shared vision of a healthy, sustainable, and equitable community and advances the City's objective of achieving carbon neutrality by 2030. Subsequently, on May 3, 2021, the City adopted Ordinance 2775 N.C.S to add an "All-Electric Construction in New Constructed Buildings" Chapter to the Petaluma Municipal Code (PMC), banning the use of natural gas in new construction.

ENERGY IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay

4.6 (a-b) (Wasteful, Inefficient, Unnecessary Consumption of Energy; Conflict with State or Local Plan) Less Than Significant Impact: The Overlay component of the project will not result in direct physical development and as such will not result in wasteful, inefficient, or unnecessary consumption of energy resources. Allowing for increased height, lot coverage, and FAR as well as allowing exclusively multi-family residential uses will facilitate concentration of development proximate to existing goods, services, and transit services which will in turn promote use of alternative modes of transportation, thereby reducing energy consumption associated with operation of automobiles. Additionally, any vacant parcel in the Overlay or parcel that increases its building square footage by more than 50% would be required to be all-electric in accordance with Petaluma Municipal Code Chapter 17.09. As such, impacts resulting from wasteful, inefficient, or unnecessary consumption of energy resources associated with the Overlay component of the project will be **less than significant**.

Plans addressing renewable energy and energy efficiency that are applicable to the Overlay component of the project include the BAAQMD 2017 Clean Air Plan, State Alternative Fuels Plan, Petaluma General Plan, and Climate Emergency Framework.

2017 Clean Air Plan (CAP)

As discussed in the Air Quality section of this document, the Overlay component of the project supports the primary goals of the CAP as it prioritizes densifying infill development in the city's downtown where future residential and commercial uses will be proximate to transit. Proximity to goods, services, and transit will minimize reliance on auto travel and in turn reduce energy consumption associated with driving. Moreover, the proposed Overlay is near the SMART station and the City is in the process of implementing a free micro transit bus program that shuttles passengers to and from the Fairgrounds site, SMART station, and downtown. These actions will also minimize and reduce energy consumption associated with driving. Therefore, the Overlay component of the project will not conflict with or obstruct implementation of the BAAQMD 2017 Clean Air Plan and impacts due to a conflict will be **less than significant**.

State Alternative Fuels 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. 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 assesses various alternative fuels and includes 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 Overlay component of the project will not result in physical development. Future development within the Overlay will be subject to independent discretionary review and at a minimum will be required to install energy

conservation features. Furthermore, the concentration of development proximate to existing transit does not conflict with the overall goals of the Plan as it will encourage alternative modes of transportation, thereby reducing consumption of fuels that emit criteria air pollutants, air toxics, greenhouse gases, water pollutants, and other substances that are known to damage human health. As such, the Overlay component of the project will not conflict with or obstruct implementation of the State Alternative Fuels Plan and impacts due to a conflict will be **less than significant**.

Petaluma General Plan

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 1 standards which reduce energy consumption and achieve energy efficiency approximately 30% beyond Title 24 as well as a construction waste reduction rate of 45%. Future development under the proposed Overlay will be subject to all applicable general plan policies and implementing regulations including Title 24 and CalGreen Tier 1. As such, impacts due to a conflict with renewable energy and energy efficiency General Plan policies and implementing regulations will be **less than significant**.

Climate Emergency Framework

As discussed above, the City Council adopted the Climate Emergency Framework on January 11, 2021. The Framework guides the City’s ongoing response to and discussion about the climate crisis and guides and informs subsequent policies and implementation strategies. The principles identified in the Framework establish Petaluma’s shared vision of a healthy, sustainable, and equitable community and advances the City’s objective of achieving carbon neutrality by 2030. As discussed in the Framework, in order to meet housing demand while reducing emissions, the city will need to embrace a new land-use and transportation paradigm that ultimately reduces reliance on automobile travel. The proposed Overlay will concentrate growth, including multi-family housing uses in the downtown, which is identified as the most walkable area of the city. Additionally, the proposed Overlay is near the SMART station and the City will be implementing a free micro transit bus program that shuttles passengers to and from the Fairgrounds site, SMART station, and downtown. These actions will also minimize and reduce energy consumption associated with driving. As such, the Overlay component of the project is consistent with the Climate Emergency Framework and as such impacts due to a conflict with the Framework will be **less than significant**.

EKN Appellation Hotel

4.6 (a) (Wasteful, Inefficient, Unnecessary Consumption of Energy) Less Than Significant with Mitigation: Development of the proposed Hotel will involve the use of energy during construction and at operation. Site preparation, grading, paving, and building construction will 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 will be temporary and cease upon completion of construction. Furthermore, the Hotel will be required to implement **Mitigation Measure EKN GHG-1**, which includes the most recently adopted BAAQMD best management practices that would minimize the inefficient, wasteful, and unnecessary consumption of energy during construction in a variety of ways including by limiting idling times, requiring that all construction equipment be maintained and properly tuned in accordance with manufacturer’s specifications, encouraging and providing carpools, shuttle vans, and transit passes for construction personnel, and developing a plan to efficiently use water for dust control to reduce the amount of energy expended for pumping water. With implementation of BMPs set forth in measure EKN GHG-1, construction-related energy impacts associated with the Hotel component of the project will be **less than significant**.

Long-term energy use will result from operation of the proposed hotel and associated uses including the ground floor restaurant, rooftop bar, and event space and will include electricity consumption typically associated with commercial uses such as lighting, 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 by vehicles associated with the project. As provided in **Appendix A**, the project’s electricity use

was estimated using CalEEMod and is expected to be 1,031,560 kWh/year (hotel, parking, and restaurant)¹⁸. Furthermore, natural gas is precluded by the City of Petaluma in new construction. Accordingly, the project will not consume natural gas during project operation. In addition to electricity consumption, operation of the Hotel component of the project will result in consumption of petroleum-fuel related to vehicular travel to and from the site, including operation of the proposed valet system.

The City of Petaluma requires that all new developments demonstrate compliance with CalGreen Tier 1 Building standards, which generally achieve energy efficiency approximately 30% beyond Title 24 as well as a construction waste reduction rate of 45%. CalGreen Tier 1 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 Hotel and associated site improvements will be required to demonstrate compliance with CalGreen Tier 1 standards or the most recent standards in effect at the time a building permit is issued.

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 very low water use trees, shrubs, and sedum mix, low water use shrubs and medium water use trees, and various one- and five-gallon shrub species.

While the long-term operation of the project will result in an increase in energy consumption compared to existing conditions, the project will incorporate design measures 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 will provide clean energy from renewable resources. The Hotel component of the project will be a new commercial use proximate to existing goods, services, and alternative transportation options, and in turn reducing energy consumption. As such, operation of the Hotel component of the project will not result in the wasteful, inefficient, and unnecessary consumption of energy and impacts will be **less than significant**.

4.6 (b) (Conflict with State or Local Plan) Less than Significant Impact: The Hotel component of the project represents one type of development that may be allowed under the Downtown Housing & Economic Opportunity Overlay. As described in the Energy Overlay discussion above, the location of the proposed Hotel proximate to goods, services, and transit will minimize reliance on auto travel and in turn reduce energy consumption associated with driving, which is consistent with the BAAQMD 2017 Clean Air Plan, State Alternative Fuels Plan, City of Petaluma General Plan, and City of Petaluma Climate Emergency Framework. Furthermore, as described above, construction of the Hotel component of the project will be required to achieve CalGreen Tier 1 standards which reduce energy consumption and achieve energy efficiency approximately 30% beyond Title 24 as well as a construction waste reduction rate of 45%. As such, impacts resulting from a conflict with a state or local plan for renewable energy or energy efficiency will be **less than significant**.

ENERGY MITIGATION MEASURES

Implementation of Mitigation Measure GHG-1.

¹⁸ Appellation Hotel Construction Health Risk & Greenhouse Gas Assessment, Illingworth & Rodkin, August 15, 2023, Attachment 1: CalEEMod Modeling Inputs and Outputs, page 63.

4.7. GEOLOGY AND SOILS

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
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"/>	<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"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<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"/>	<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"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sources: Petaluma 2025 General Plan and EIR; GP DEIR Fig. 3.7-4 Ground shaking Intensity California Department of Conservation, Earthquake Zones of Required Investigation; MTC/ABAG Hazard Viewer Map; and Geotechnical Investigation prepared by Miller Pacific Engineering Group, January 28, 2022.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

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 site 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 the ground shaking intensity and Figure 3.7-5 identifies geologic hazard areas. Areas A, B, and C of the Downtown Housing & Economic Opportunity Overlay are subject to very strong shaking (Mercalli Intensity VIII) in the event of an earthquake. Area A of the Overlay component of the project is located in an area with very high liquefaction potential. Areas B and C of the Overlay are located outside areas with geologic hazards. The EKN Appellation Hotel component of the project site is located within Area A of the proposed Overlay, and as such is subject to geologic hazards including very strong shaking in the event of an earthquake, as well as within an area with very high liquefaction potential.

Paleontological Resources

Geologic mapping indicates that the geologic units underlying the Downtown Housing & Economic Opportunity Overlay boundary are Holocene-age fan deposits (Qhf), late Pleistocene-age fan deposits (Qpf), and Miocene-age volcanic rocks (Tv). The geologic unit underlying the EKN Appellation Hotel boundary is mapped as Holocene-age fan deposits (Qhf) (Bezore et al., 2002). While not mapped at the surface at the project site, the Miocene-age Wilson Grove and Petaluma formations are mapped in the vicinity and are likely present in the subsurface at the project site; however, the depth to these units is unknown. The characteristics of these geologic units are described below.

Holocene-age fan deposits (Qhf) are described as alluvial fan sediments, deposited by streams emanating from the mountains as debris flows, mudflows, and braided stream flows. Sediments include sand, gravel, silt, and clay, that are moderately to poorly bedded. Pleistocene-age fan deposits have a similar composition, but the presence of slight dissection and/or the development of alfisols indicate that they are old, Pleistocene-age deposits. The Miocene-age volcanic rocks are described as basalt flows, andesite breccia, and rhyolite (Bezore et al., 2002).

The Miocene-age Wilson Grove Formation is described as a light gray to light yellow-brown marine sandstone. It is fine-grained, well-sorted, poorly bedded, and locally contains thin lenses of pebble conglomerate. The Miocene-age Petaluma Formation is described as a nonmarine conglomerate, which interfingers with the Wilson Grove Formation (Bezore et al., 2002).

A site-specific Geotechnical Investigation was prepared for the Hotel component of the project by Miller Pacific Engineering Group on January 28, 2022 (**Appendix B**). The investigation included drilling one test boring to a maximum depth of 71.5 feet below ground surface (bgs). The boring confirmed what the geologic map indicated and revealed that fill underlies the project site from 0 to 10 feet bgs. Alluvium was encountered from 10 feet bgs to approximately 43 feet bgs. Claystone bedrock was encountered from 43 feet bgs to approximately 71.5 feet bgs.

The Catalogue of Late Quaternary Vertebrates from California by George T. Jefferson (Jefferson) is a catalogue of late Pleistocene to early Holocene-age vertebrate fossil localities throughout California. Jefferson lists ten vertebrate fossil localities from Pleistocene-age deposits within Sonoma County. Of these localities, five are listed from Petaluma, California (Jefferson, 1991). These localities are from the University of California Museum of Paleontology (UCMP) records and are discussed below.

At least 77 taxa (vertebrate and invertebrate) are reported from the Wilson Grove Formation, which were recovered from a quarry just north of Bloomfield, California, approximately 12 miles northwest of the project site. The vertebrate fauna from this locality includes sharks, bony fish, rays, birds, and marine mammals. The invertebrate fauna is described as unusual and includes brachiopods, bivalves, gastropods, and arthropods (Powell et al., 2019). Likewise, the Petaluma Formation is documented as containing vertebrate fossils (Allen, 2005; Wagner et al., 2011). The localities included in the UCMP records are discussed below.

A search of the University of California Museum of Paleontology (UCMP) online fossil locality database indicates that there are ten vertebrate fossil localities recorded from Pleistocene-age deposits in Sonoma County—five

are associated with Petaluma, California (V80005, V6597, V36046, -3023, and V67075). Additionally, there are nine vertebrate fossil localities listed from the Petaluma Formation (-1036, V3647, V3825, V3826, V4202, V5230, V5231, V74088, V77062) and two listed from the Wilson Grove Formation (V81135 and V92001). The online records search database does not include the exact locations of these localities but does include locality names. Based on the listed locality names, none appear to be within the project site (UCMP, 2024).

In general, late Holocene-age deposits are considered to have a low potential to contain significant paleontological resources because these deposits are too young to have preserved fossils. However, early Holocene-age deposits are known to contain fossils.

Pleistocene-age deposits are generally considered to have a high potential to contain significant paleontological resources. Given the past vertebrate fossil discoveries from Pleistocene-age deposits in Petaluma and Sonoma County, these deposits are considered to have a high potential to contain significant paleontological resources.

Based on a review of the UCMP fossil locality database and published literature on the Wilson Grove and Petaluma formations there have been several significant fossil finds from these formations. As such, these formations are considered to have a high potential to contain significant paleontological resources.

Geotechnical Investigation

A site-specific Geotechnical Investigation was prepared for the Hotel component of the project by Miller Pacific Engineering Group on January 28, 2022 (**Appendix B**). The site-specific Geotechnical Investigation identifies geological hazards present onsite and provides recommendations for the proposed project. The site-specific investigation is informed by published geologic and geotechnical data and exploration of subsurface conditions onsite. The primary geologic hazards identified in the Report include strong seismic ground shaking, liquefaction, and post-liquefaction settlement. In addition, the Report identifies the importance of lateral shoring and dewatering to protect adjacent buildings and utilities during construction as the Hotel proposes excavation to accommodate the subterranean parking garage.

GEOLOGY AND SOILS IMPACT DISCUSSION

Downtown Housing & Economic Opportunity Overlay

4.7 (ai) (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. As shown on the California Department of Conservation's Earthquake Zones of Required Investigation¹⁹, no portion of the City of Petaluma overlaps with an Alquist-Priolo Earthquake Fault Zone nor are there identified active faults traversing the City, including the proposed Downtown Housing & Economic Opportunity Overlay area. As such, there is no expectation that future development under the proposed Overlay would be vulnerable to fault rupture. There is no risk of fault-related ground rupture during earthquakes within the limits of the Overlay due to a known Alquist-Priolo Earthquake Fault Zone. Therefore, there are **no impacts** due to a fault rupture.

4.7 (aii-iv - d.) (Faults; Ground-Shaking; Ground Failure, Including Liquefaction; Landslides; Erosion; Unstable Geologic Unit; Expansive Soils) Less than Significant Impact: As shown on Figures 3.7-4 and 3.7-5 of the City of Petaluma General Plan EIR, areas within the proposed Overlay are in a seismically active area. As shown on Figure 3.7-4, in the event of a magnitude 7.1 earthquake emanating from the Rodgers Creek – North Hayward fault, parcels within the Overlay would be subject to very strong ground shaking intensity, with other areas of the city experiencing moderate to very violent ground shaking. In addition to ground shaking, the MTC/ABAG Hazard Map Viewer indicates Areas A, B, and C of the proposed Overlay have a moderate liquefaction potential.²⁰ Though parcels within the proposed Overlay are relatively flat, portions of Area C are proximate to areas with the potential to experience landslides. All future development proposed within the Downtown Housing & Economic Opportunity Overlay will be required to be built in conformance with the standards set forth in the most recent California Building Code of Regulations, Title 24, Part 2 (the California

¹⁹ California Department of Conservation, Earthquake Zones of Required Investigation, accessed September 2023
<https://maps.conservation.ca.gov/cgs/eqzapp/app/>

²⁰ MTC/ABAG Hazard Viewer Map, Layer: Earthquake Liquefaction Susceptibility, accessed September 2023,
<https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8>

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) which address potential impacts from seismic shaking. Additionally, consistent with General Plan policy 10-P-1, site-specific geotechnical studies will be required to identify site-specific geologic conditions, identify if a future development project is geotechnically feasible, and provide design criteria and other site- and project-specific recommendations to address geotechnical hazards.

The proposed Overlay component of the project will increase the height, lot coverage, and FAR permitted in areas that have already been anticipated for development or are already developed. Through compliance with applicable building codes and General Plan policy 10-P-1 requiring site-specific geotechnical analysis, impacts of future development related to substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking, landslides, and liquefaction; location on a geologic unit or soil that is unstable, or that would become unstable as a result of development, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse; and location on a site with expansive soils that could create substantial direct or indirect risks to life or property will be **less than significant**.

Future development under the proposed Overlay also has the potential to result in soil erosion resulting from construction activities, however, as is required by all projects in the City of Petaluma, compliance with the Grading and Erosion Control Ordinance #1576 set forth in Title 17, Chapter 17.31 of the Petaluma Municipal Code will be required which will reduce impacts associated with soil erosion to **less than significant**.

4.7 (e) (Septic Tanks) No Impact: All areas of the proposed Overlay are located within an urbanized area of the city and are served by existing sewer systems that treat all wastewater effluent generated within the UGB. Future development under the Overlay would not use septic tanks or alternative wastewater disposal systems and therefore, there will be **no impact** resulting from the adequacy of soils to support septic tanks or other wastewater disposal system as a result of the proposed Overlay.

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. However, a review of the UCMP online fossil database and published scientific literature indicates that the geologic units underlying the UGB. The majority of sites within the proposed Overlay are developed and have experienced ground disturbance from previous development activities. All future development projects will be subject to standard conditions of approval that address accidental discovery of a paleontological resource, and as such impacts resulting from the destruction of a unique paleontological resource, site, or geologic feature will be **less than significant**.

EKN Appellation Hotel

4.7 (ai) (Faults) No Impact. As noted above, no portion of the City of Petaluma overlaps with an Alquist-Priolo Earthquake Fault Zone, nor are there identified active faults traversing the City. As such, there is no expectation that the proposed Hotel component of the project would be vulnerable to fault rupture and there is no risk of fault-related ground rupture during earthquakes within the limits of the Hotel site due to a known Alquist-Priolo Earthquake Fault Zone. Therefore, there are **no impacts** due to a fault rupture.

4.7 (a.ii) (Ground-Shaking) Less than Significant with Mitigation: The intensity of earthquake motion will depend on the characteristics of the generating fault, distance to the fault and rupture zone, earthquake magnitude, earthquake duration, and site-specific geologic conditions. Faults affecting the Hotel site include Rodgers Creek (5.4 miles), San Andreas (14.7 miles), West Napa (17.8 miles), Hayward (19 miles), and Maacama (21.1 miles). The Rodgers Creek Fault is the nearest to the site and presents the highest potential for ground shaking. Introduction of the Hotel component of the project has the potential to expose people and structures to potentially substantial adverse effects resulting from strong seismic ground shaking. The resultant vibrations could 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. Additionally, as set forth in **Mitigation Measure EKN GEO-1**, all recommendations outlined in the Geotechnical Investigation for the project shall be incorporated into construction-level drawings and subject to review and approval by the City Engineer. Through compliance with building code standards and incorporation of site-specific geotechnical recommendations, impacts resulting from substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking will be **less than significant**.

4.7 (a.iii) (Liquefaction) Less than Significant 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 the MTC/ABAG Hazard Viewer Map and as described in the Geotechnical Investigation, the potential for liquefaction at the project site is moderate. The project's Geotechnical Investigation evaluated the potential for liquefaction utilizing data from borings taken onsite. The analysis concluded that several localized soil layers may liquefy during a strong seismic event, translating to a low to moderate potential for liquefaction and post liquefaction settlement. To address potential liquefaction and post liquefaction settlement, the Geotechnical Investigation provides specific foundation design recommendations which shall be incorporated into construction-level drawings subject to review and approval by the City of Petaluma, consistent with **Mitigation Measure EKN GEO-1**. Incorporation of site and project-specific geotechnical recommendations as set forth in measure EKN GEO-1 will reduce impacts resulting from substantial adverse effects, including the risk of loss, injury, or death involving liquefaction to **less than significant**.

4.7 (a.iv) (Landslides) No Impact: Landslides are typically limited to relatively steep slopes or slopes underlain by geologic units that have demonstrated stability problems in the past (e.g. weak materials). The Hotel project site is generally flat and is not at risk of exposure to landslides. Therefore, there are **no impacts** associated with landslides.

4.7 (b) (Erosion) Less than Significant Impact with Mitigation: In general, sandy soils on moderate slopes and clayey soils on steep slopes are susceptible to erosion when exposed to concentrated water runoff. The Hotel site is relatively flat and as such, substantial erosion during operation of the Hotel component of the project is not likely. However, localized erosion due to concentrated surface water flows and loss of topsoil could occur during project construction. **Mitigation Measure EKN GEO-2** requires submittal of an erosion control plan identifying measures to be implemented during construction and establishing provisions for grading activity during the rainy season, consistent with the City's Grading and Erosion Control Ordinance. With implementation of measure EKN 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: The project site is generally flat, exhibiting minimal grade. Through compliance with standard building code requirements, impacts related to location on an unstable geologic unit during project operation will be less than significant. As discussed in the Geotechnical Investigation, excavation of the subterranean parking garage during project construction could result in settlement and lateral movement that could impact adjacent buildings, if not properly controlled. To address potential impacts, the project shall implement **Mitigation Measure EKN GEO-3** which requires the applicant/contractor to perform a damage assessment for all existing adjacent structures and improvements prior to commencing construction activities. In addition to the pre-construction assessment, measure GEO-3 requires installation and periodic measurement of vertical and lateral control points to determine if any vertical or lateral movement is occurring. With implementation of measure EKN GEO-3, impacts resulting from location on a geologic unit or soil that is unstable, or that would become unstable during project construction will be reduced to **less than significant**.

4.7 (d) (Expansive Soils) Less than Significant Impact with Mitigation: Expansive soils shrink and swell with variations in moisture content and are a concern as they are capable of exerting expansion pressure on buildings and improvements. As noted in the Geotechnical Investigation, soil borings taken from the Hotel site indicate the presence of medium plasticity clays and clayey sands, which have a low to moderate expansion potential. To ensure expansive soils do not result in significant impacts, recommendations set forth in the Geotechnical Investigation and as directed by the City Engineer shall be implemented in accordance with **Mitigation Measure EKN GEO-1**. Measures to correct expansive soils include but are not limited to moisture

conditioning soils onsite until imported aggregate base or surface flatwork is completed. With implementation of measure EKN 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 Hotel component of the project will be served by existing sewer systems that treat all wastewater effluent generated within the UGB and as such will not require the use of septic tanks or alternative wastewater disposal systems. Therefore, there will be **no impact** resulting from the adequacy of soils to support septic tanks or other wastewater disposal system as a result of the proposed Hotel.

4.7 (f) (Paleontological Resources) Less than Significant with Mitigation: As noted previously, the Petaluma General Plan does not identify the presence of any paleontological or unique geological resources within the boundaries of the UGB. However, a review of the UCMP fossil database and published scientific literature indicates that paleontological resources have been discovered in Petaluma and the geologic units underlying the project site are considered to have a high potential to contain significant paleontological resources.

As discussed above, Holocene-age alluvial deposits have a low to high potential to contain significant paleontological resources, depending on the depth of excavation. Pleistocene-age alluvial deposits, the Wilson Grove Formation, and Petaluma Formation all have a high potential to contain significant paleontological resources. Generally, any excavation into previously undisturbed sediments with a high potential to contain significant paleontological resources would be considered a potentially significant impact. However, due to soil contamination at the project site, there has been extensive ground disturbance and soil excavation.

The project site (Hotel) is the location of a former Chevron gas station and there have been several underground storage tanks (USTs) installed and removed from the project site. Due to the presence of the USTs, approximately 1,200 cubic yards of contaminated soil has been removed from the project. Additionally, bores taken at the project site indicates there is fill material underlying the project site from 0 to 10 feet bgs. Alluvial deposits were encountered from 10 to 43 feet bgs, and claystone bedrock was encountered from 43 to 71.5 feet bgs.

Due to the past remediation activities at the project site, the ground has been significantly disturbed. Fossils discovered in disturbed sediments have lost geologic context and are not considered significant under CEQA. However, if construction activities involve excavation into previously undisturbed sediments with high potential to contain fossils, and they are inadvertently destroyed, that would be a significant impact.

Therefore, there is limited expectation that paleontological resources are present within the first 10 feet bgs at the project site. However, potential remains for the discovery of buried paleontological resources beneath 10 feet bgs. To avoid impacts to significant paleontological resources, implementation of **Mitigation Measure EKN GEO-4** is required.

With implementation of measure EKN GEO-4, impacts to paleontological or unique geological resources will be **less than significant**.

GEOLOGY AND SOILS MITIGATION MEASURES

EKN GEO-1: All applicable recommendations set forth in the Design Level Geotechnical Investigation prepared by Miller Pacific Engineering Group on January 28, 2022, for the subject property, including, but not limited to recommendations related to seismic design, site preparation and grading, foundation designs, retaining wall designs, settlement monitoring (see also measure GEO-3), site and foundation drainage, interior concrete slabs-on-grade, exterior concrete slabs, underground utilities, and recommendations for wintertime construction shall be implemented. Final grading plan, construction plans, and building plans shall demonstrate that recommendations set forth in the geotechnical reports have been incorporated into the final design of the project and to the satisfaction of the City of Petaluma, Public Works & Utilities Department.

EKN 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. These 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 construction activity on the project site.

EKN GEO-3: Upon submittal of plans for project construction, a damage assessment of all existing adjacent structures and improvements shall be submitted to the City of Petaluma, Community Development Department. The damage assessment shall document existing conditions of adjacent improvements, including foundation cracking, un-level floors, out of plumb walls, out of square door/window openings, etc.

Upon excavation of the proposed basement, vertical and lateral control points shall be established. Throughout project construction, the control points shall be periodically measured and monitored by a licensed surveyor to determine if any vertical or lateral movement is occurring adjacent to the excavation. If any movement is observed/measured, steps shall be taken to strengthen the excavation shoring to control settlements and lateral movements. All measurements shall be provided to the City of Petaluma, Community Development Department.

EKN GEO-4: Prior to the start of construction activities, a Qualified Paleontologist that meets the standards of the SVP shall be retained to prepare and conduct pre-construction worker paleontological resources sensitivity training. The training shall include information on what types of paleontological resources could be encountered during excavations, what to do in case an unanticipated discovery is made by a worker (i.e., discoveries made within the first 10 feet below ground surface), and laws protecting paleontological resources. All construction personnel shall be informed of the possibility of encountering fossils and instructed to immediately inform the construction foreman or supervisor if any bones or other potential fossils are unexpectedly unearthed during construction.

The Qualified Paleontologist or Paleontological Monitor (under the supervision of the Qualified Paleontologist shall monitor mass grading and excavation activities below 10 feet below ground surface in areas within the project site identified as likely to contain paleontological resources. Unanticipated discovery procedures shall be included in the paleontological resources sensitivity training to address any potential discoveries in the first 10 feet below ground surface. Monitoring activities may be increased or decreased based on fossil finds (or the lack thereof), at the discretion of the Qualified Paleontologist.

If a paleontological resource is discovered during construction, the paleontological monitor shall be empowered to temporarily divert or redirect grading and excavation activities in the area of the exposed resource to facilitate evaluation of the discovery. An appropriate buffer area shall be established by the Qualified Paleontologist around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. All significant fossils shall be collected by the Paleontological Monitor and/or the Qualified Paleontologist. Collected fossils shall be prepared to the point of identification and catalogued before they are submitted to their final repository. Any fossils collected shall be curated at a public, non-profit institution with a research interest in the materials, such as the University of California Museum of Paleontology (UCMP).

A final report of findings and significance will be prepared by the Qualified Paleontologist, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s).

4.8. GREENHOUSE GAS EMISSIONS

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
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"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) 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"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sources: 2025 General Plan and EIR; Climate Action 2020 and Beyond Sonoma County Regional Climate Action Plan, July 2016; BAAQMD 2022 CEQA Guidelines; CalGreen Tier 2 Residential Measures Effective January 1, 2017.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

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.

State

To address GHG’s at the State level, the California legislature passed AB 32, also known as the California Global Warming Solutions Act in 2006, which required a reduction in statewide GHG emissions to 1990 levels by 2020. Subsequently in 2016, the Legislature passed SB 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation AB 197, which requires CARB to report its progress in implementing the state’s climate and air pollution-related policies. The 2017 Climate Change Scoping Plan identifies how the State will achieve the 2030 climate target to reduce GHG emissions by 40 percent from 1990 levels, as codified by SB 32. The 2017 Climate Change Scoping Plan also describes how the State can substantially advance toward the 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

Senate Bill 375, also known as the Sustainable Communities and Climate Protection Act, was adopted in 2008 and seeks to coordinate transportation, housing, and land use planning, thereby reducing GHG emissions by limiting urban sprawl and vehicle miles traveled. Under SB 375, each Metropolitan Planning Organization (MPO) in California must prepare a SCS that identifies land use, housing, and transportation strategies that would achieve CARB’s targets to reduce GHG emissions. The Metropolitan Transportation Commission (MTC) is the MPO for the nine-county San Francisco Bay Area, including the City of Petaluma. Plan Bay Area 2050 is the region’s SCS and was prepared as a joint effort between the MTC and the Association of Bay Area Governments (ABAG).²¹ The Plan identifies Priority Development Areas (PDAs) which are areas prioritized for investment, new homes, and job growth. 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 around transit, reducing greenhouse gas emissions, and realizing a greater return on existing and planned transit investments. The City of Petaluma contains two PDAs. A portion of the Overlay component of the project is located within

²¹ Final Plan Bay Area 2050 prepared by ABAG/MTC, adopted October 21, 2021.

the Central Petaluma PDA which aims to revitalize parts of the historic downtown by directing development to underutilized land in the city's historic downtown, allowing for a greater diversity and intensity of uses.²²

Regional

As discussed in the Air Quality section of this report, the City of Petaluma is located within the San Francisco Bay Area air basin, which is regulated by BAAQMD, who is responsible for planning, implementing, and enforcing air quality standards. In addition to publishing updated CEQA Air Quality Guidelines for criteria pollutants, BAAQMD also published updated GHG thresholds in April 2022 for land use projects. The new thresholds establish that a project is considered to have a less-than-significant impact due to GHG emissions if it is consistent with a local GHG Reduction Strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b), or meets the following design elements:

1. Buildings:
 - a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
 - b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
2. Transportation:
 - a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA
 - b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

Local

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), call for the City's participation in the Cities for Climate Project effort and establish GHG emission reduction targets.

A Climate Action Plan has been prepared in partnership with the County and other local jurisdictions (July 2016) which implements General Plan Policy 4-P-27, which calls for preparation of a Community Climate Action Plan to achieve GHG emission reduction goals set forth by Resolution 2005-118. General Plan Goal 5-G-8 calls for the expansion of the use of alternative modes of mobility serving regional needs, which has been implemented in part through the Sonoma Marin Area Rail Transit (SMART) Plan, which as of Fall 2017 provides light rail commuter service to Petaluma. As of 2020, SMART estimates that people utilizing the light rail system emit 33% fewer CO₂ per mile as compared to driving, with 50% walking or utilizing public transit and 14% biking to stations. Over the course of operation, SMART estimates that 8.1 million pounds of CO₂ emissions have been prevented.²³ General Plan policy 3- P-127 requires that projects prepare a Construction Phase Recycling Plan, which is also a standard requirement under the CalGreen Building Code and is implemented as part of the building permit process, and addresses recycling of major waste generated by demolition and construction activities.

In addition to General Plan goals and policies intended to reduce GHGs, the City of Petaluma requires that all new development demonstrate compliance with CalGreen Tier 1 Building standards, which generally achieve energy efficiency approximately 30% beyond Title 24 as well as a construction waste reduction rate of 45%. As such, new development is expected to be more energy efficient, use fewer resources, and emit fewer GHGs.

²² Existing Conditions Report, Land Use and Community Character, City of Petaluma General Plan Update, September 2022.

²³ Green Commute fact sheet, Sonoma Marin Area Rail Transit, January 2020

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. 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.

Under a business as usual approach (i.e., without state, regional or local GHG reduction measures), the City of Petaluma was projected to emit 542,970 MTCO_{2e} by 2020. With implementation of reduction measures, GHG emissions were projected to be reduced to 376,620 MTCO_{2e}, representing a 31% reduction of GHG emissions relative to the 1990 per capita emission levels.

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. On January 11, 2021, the City Council adopted the Climate Emergency Framework which directs the City to achieve carbon neutrality by 2030, guides the City's ongoing response to and discussion about the climate crisis, and guides and informs subsequent policies and implementation strategies. The Climate Emergency Framework provides policies and implementation strategies toward this goal in four sections: equity and climate justice, mitigation and sequestration, adaptation and social resilience, and community engagement. The principles identified in the Framework establish Petaluma's shared vision of a healthy, sustainable, and equitable community. By setting the shared intention of this framework and working from the framework in subsequent planning efforts to create policy and implementation, the City will actively work to avoid catastrophic climate change and adapt to its expected impacts. The Climate Emergency Framework sets broad goals, which serves to guide policy development for future planning efforts while providing guidance for City staff and decision makers.²⁴ In addition, on May 3, 2021, the City adopted Ordinance 2775 N.C.S to add an "All-Electric Construction in New Constructed Buildings" Chapter to the Petaluma Municipal Code (PMC), banning the use of natural gas in new construction.

GREENHOUSE GAS IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay

4.8 (a-b) (GHG Emissions; GHG Plan Conflict) Less than Significant Impact: The Overlay component of the project will not result in direct physical changes to the environment. Future development applications within the proposed Overlay will be subject to independent discretionary review, including an independent CEQA analysis and would be evaluated on a project-by-project basis to determine potential GHG impacts. Depending on the type of future proposed development, project specific GHG analysis would be required to analyze impacts associated with GHG emissions during construction and operation, and to identify any necessary mitigation measures to reduce impacts of GHGs. As there is no physical development proposed by the Overlay

²⁴ Climate Emergency Framework, prepared by the City of Petaluma, January 11, 2021.

component of the project and future projects facilitated by the Overlay will be subject to independent CEQA review, GHG impacts of the Overlay component of the project will be **less than significant**.

As discussed in the Air Quality and Energy sections of this document, the project supports existing state, regional, and local plans and policies adopted for the purpose of reducing the emissions of greenhouse gases. The Overlay component of the project will allow for greater intensity of use through increased building height, lot coverage, and FAR, which will allow for a higher concentration of infill growth in the city's downtown area, thereby reducing reliance on automobile travel, and in turn reducing GHG emissions. As such, the Overlay component of the project will not conflict with a plan, policy, or regulation adopted for the purpose of reducing greenhouse gas emissions and impacts will be **less than significant**.

EKN Appellation Hotel

4.8 (a) (Significant GHG Emissions) Less than Significant with Mitigation: Greenhouse gas emissions associated with the proposed project would result from short-term construction activities and ongoing operation.

Construction Emissions

Construction of the project will result in GHG emissions from heavy-duty construction equipment, worker trips, and material delivery and hauling. Construction GHG emissions are short-term and will cease once construction is complete. GHG emissions associated with construction were estimated as part of the Construction Health Risk and Greenhouse Gas Assessment (**Appendix A**) prepared for the subject project. GHG emissions are projected to be 481 MT of CO₂e over the estimated 19-month construction period. Though BAAQMD does not have established thresholds of significance for GHG emissions resulting from construction activities, the 2022 CEQA Guidelines state that best management practices to reduce GHG emissions during construction should be incorporated. Consistent with the BAAQMD 2022 CEQA Guidelines, the project shall implement **Mitigation Measure EKN GHG-1**, which requires incorporation of BMPs throughout construction to control for construction-related GHG emissions. With incorporation of measure EKN GHG-1, emissions generated during construction of the Hotel component of the project will be **less than significant**.

Operational Emissions

As discussed in the Construction Health Risk and Greenhouse Gas Assessment, the project is consistent with BAAQMD's thresholds for land use projects in that it will not include natural gas appliances or natural gas plumbing and will not result in wasteful use of energy as analyzed in the Energy section of this document. The project will be consistent with Title 24 building efficiency standards, will comply with the California Energy Commission's standards for lighting efficiency, and will comply with lighting standards. As discussed further in the Transportation section of this document, the project will not result in significant VMT impacts and as set forth in **Mitigation Measure EKN GHG-2**, will be required to comply with off-street electric vehicle (EV) requirements in the most recently adopted version of CALGreen Tier 2. In addition, the Assessment includes an estimate of the Hotel's annual GHG emissions for informational purposes only. As provided therein, annual GHG emissions are estimated to be 801 MT CO₂e, with the majority of emissions (93%) attributable to mobile (aka vehicular) sources. Based on the project's consistency with BAAQMD's most recently adopted thresholds for land use projects, as well as the project's requirement to comply with measure EKN GHG-2, impacts resulting from GHG emissions at project operation will be **less than significant**.

4.8 (b) (GHG Plan Conflict) Less than Significant with Mitigation: The City of Petaluma has adopted GHG emission reduction policies and programs as part of the General Plan 2025. These policies and programs address energy efficiency, transportation, conservation and provide educational programs. Additionally, the City adopted CalGreen Tier 1 standards, which include a detailed list of green building features that address energy efficiency, water efficiency, waste reduction, material conservation and indoor air quality.

The project is required to comply with the CalGreen Building Tier 1 standards and Building & Energy Efficiency Standards which provides for increased energy efficiency and an associated reduction in GHG emissions and is also subject to **Mitigation Measure EKN GHG-2**, which requires compliance with off-street EV requirements in the most recently adopted version of CALGreen Tier 2. As with all energy users in the City of Petaluma, the project will be provided with the option to participate in the Sonoma Clean Power Program, which relies on

renewable energy and minimizes GHG emissions from energy production. Additionally, the project includes water efficient landscaping, complies with the maximum applied water allowance and the City’s water conservation regulations, includes six EV charging spaces within the subterranean parking garage, exceeds the onsite bicycle parking requirement, will be near the free micro transit shuttle that drops off visitors downtown from either the SMART station or Fairgrounds property, and will provide a bus stop along Petaluma Blvd. North, approximately 200 feet north of the site, thereby increasing access to the site by alternative modes of transportation.

As proposed, and through compliance with CalGreen Tier 1 building standards and CalGreen Tier 2 requirements for off-street EV requirements, the project will be consistent with relevant General Plan policies and other City regulations including those intended to reduce GHG emissions. Furthermore, as discussed in the Air Quality and Energy sections of this document, the project is consistent with state and regional plans intended to reduce GHG emissions. Therefore, potential impacts due to a conflict with a plan, policy, or regulation adopted for the purpose of reducing greenhouse gas emissions will be **less than significant**.

GREENHOUSE GAS MITIGATION MEASURES

EKN GHG-1: The most current, at time of project approval, BAAQMD-recommended Best Management Practices (BMPs) to control for construction-related GHG emissions shall be incorporated into construction plans to require implementation throughout all construction activities.

1. Use zero-emission and hybrid-powered equipment to the greatest extent possible, particularly if emissions are occurring near sensitive receptors or located within a BAAQMD-designated Community Air Risk Evaluation (CARE) area or Assembly Bill 617 community.
2. Require all diesel-fueled off-road construction equipment be equipped with EPA Tier 4 Final compliant engines or better as a condition of contract.
3. Require all on-road heavy-duty trucks to be zero emissions or meet the most stringent emissions standard, such as model year (MY) 2024 to 2026, as a condition of contract.
4. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 2 minutes (A 5-minute limit is required by the state airborne toxics control measure [Title 13, Sections 2449(d)(3) and 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and develop an enforceable mechanism to monitor idling time to ensure compliance with this measure.
5. Prohibit off-road diesel-powered equipment from being in the “on” position for more than 10 hours per day.
6. Use California Air Resources Board–approved renewable diesel fuel in off-road construction equipment and on road trucks.
7. Use U.S. Environmental Protection Agency SmartWay certified trucks for deliveries and equipment transport.
8. Require all construction equipment to be maintained and properly tuned in accordance with manufacturer’s specifications. Equipment should be checked by a certified mechanic and determined to be running in proper condition prior to operation.
9. Where grid power is available, prohibit portable diesel engines and provide electrical hook ups for electric construction tools, such as saws, drills, and compressors, and using electric tools whenever feasible.
10. Where grid power is not available, use alternative fuels, such as propane or solar electrical power, for generators at construction sites.
11. Encourage and provide carpools, shuttle vans, transit passes, and/or secure bicycle parking to construction workers and offer meal options onsite or shuttles to nearby meal destinations for construction employees.
12. Reduce electricity use in the construction office by using LED bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones.

13. Minimize energy used during site preparation by deconstructing existing structures to the greatest extent feasible.
14. Recycle or salvage nonhazardous construction and demolition debris, with a goal of recycling at least 15% more by weight than the diversion requirement in Title 24.
15. Use locally sourced or recycled materials for construction materials (goal of at least 20% based on costs for building materials and based on volume for roadway, parking lot, sidewalk, and curb materials). Wood products used should be certified through a sustainable forestry program.
16. Use low-carbon concrete, minimize the amount of concrete used and produce concrete on-site if it is more efficient and lower emitting than transporting ready-mix.
17. Develop a plan to efficiently use water for adequate dust control since substantial amounts of energy can be consumed during the pumping of water.
18. Include all requirements in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant on- or off-road construction equipment for use prior to any ground-disturbing and construction activities.

EKN GHG-2: Prior to the issuance of a building permit, the proposed off-street parking located within the subterranean garage on the site of the proposed EKN Appellation Hotel shall be designed and verified for compliance with CalGreen Tier 2 standards.

4.9. HAZARDS/HAZARDOUS MATERIALS

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
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"/>	<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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>	<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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sources: Petaluma 2025 General Plan and EIR; Department of Toxic Substances Control, Envirostor; State Water Resources Control Board, Geotraker

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

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 government 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 (DTSC). Pursuant to the 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." The Unified program 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 under the auspices of 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.

Downtown Housing & Economic Opportunity Overlay Sites

Two properties within Area A and two properties within Area C are listed on the State Water Resources Control Board website, Geotracker, as Leaking Underground Storage Tank (LUST) cleanup sites. The properties include:

- 2 Petaluma Blvd. South (proposed EKN Appellation Hotel)
- 112 Petaluma Blvd. South (7-Eleven Convenience Store)
- 128 Liberty St (Sacks Hospice Thrift Shoppe of Providence)
- 215 Washington St. (Sonoma Autowerks)

All four sites have a case status of ‘Completed – Case Closed’ and are presumed not to require additional remediation/cleanup. Additionally, three of the four sites are developed and operational, and one site (2 Petaluma Blvd. South) is proposed for development as the EKN Appellation Hotel.

In addition, one site within Area C (214 Western Ave.) is listed in the Department of Toxic Substances Control's data management system, Envirostor, as a Voluntary Cleanup Site. The site is located within a multi-tenant commercial building and is identified for cleanup due to the former use as a dry cleaner. The main contaminant of concern, tetrachloroethylene (PCE), is located beneath the building and was identified in soil, soil gas, and groundwater. As noted in the case history information available on DTSCs website, the Removal Action Workplan calls for installation of a sub-slab depressurization system to prevent vapor intrusion to indoor air and a covenant to restrict land use to commercial use as well as restrict the use of shallow groundwater beneath the site.²⁵

EKN Appellation Hotel Site

According to information available from the State Water Resources Control Board and available historic aerial imagery, the site was operated as a gas station from approximately 1923 to 2009. The site was subject to remediation actions beginning in 1988 when it was listed as a Leaking Underground Storage Tank (LUST) cleanup site. In April 2019, it was determined that the site met the Low Threat Closure Policy for the Sonoma County Department of Health Services and the RWQCB and a Covenant and Environmental Restriction on Property was filed with the Sonoma County Clerk-Recorder (**Appendix C**). As provided in the Covenant, the property may be used for industrial, commercial, mixed-use, office, or related uses, but does not permit human habitation, hospitals, schools for persons under the age of 21, or day care centers on the ground floor of the property. Exhibit B of the Covenant includes a Risk Management Plan which regulates activities related to, among others, ground disturbance, groundwater extraction, construction dewatering, soil or groundwater sampling, and soil reuse or disposal. In February 2020 the case was closed and a letter confirming the completion of site investigation and remedial action for the underground storage tanks was issued to the property owner.

Due to the amount of excavation proposed by the hotel, early consultation with the RWQCB was conducted to confirm whether additional testing was needed. In July 2022, the RWQCB responded (**Appendix D**) stating that no additional testing was needed and provided recommendations related to groundwater sampling during construction and subslab and indoor air samples following completion of construction.

HAZARDS/HAZARDOUS MATERIALS IMPACT ANALYSIS:

²⁵ Department of Toxic Substances Control, Envirostor, Former Quality Dry Cleaning (60002205), Site History, accessed September 2023, https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60002205

Downtown Housing & Economic Opportunity Overlay

4.9 (a-b) (Routine Transport; Upset and Accident Involving Release) Less than Significant Impact:

Though the proposed Overlay will not result in direct physical development, it is reasonably foreseeable that future construction activities will result in 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 onsite. Although these potentially hazardous materials may be present on sites within the Overlay area during construction, compliance with all existing federal, state, and local safety regulations governing the transportation, use, handling, storage, and disposal of potentially hazardous materials will be required. Additionally, and as the Overlay just increases the site's FAR coverage and allowable height, development was already anticipated on the parcels within the Overlay and analyzed as part of the General Plan and Zoning Ordinance EIR's.

Future uses within the Overlay may include the routine transport, use, or disposal of hazardous materials. Such uses, which are subject to review and approval of a Conditional Use Permit (CUP), include artisan/craft product manufacturing, building and landscape materials sales, and utility facilities. All such uses, if proposed in the future, will be subject to discretionary review, will be required to disclose any activities involving the routine transport, use, or disposal of hazardous materials, and will be subject to compliance with all applicable federal, state, and local safety regulations. As part of the discretionary review process, a Phase I Environmental Site Assessment (ESA) may be required depending on site-specific development proposals and will consider present and former uses of the site. Typically, a Phase I ESA is requested for proposed demolition of existing structures or is on a site where former uses may have resulted in the release of hazardous materials (e.g. auto-care uses, dry cleaners, etc.). In the event that hazardous materials are present onsite, approved remediation actions will be identified and required to ensure that the release of hazardous materials into the environment does not occur. There is a potential that asbestos-containing materials (ACM) and lead-based paints (LBP) may be present in existing structures within the Overlay. If such materials are present and demolition activities are proposed in the future, demolition of such structures could release ACM and LBP, potentially impacting people, and the environment. However, consistent with federal regulations, an asbestos and lead-based paint survey would be required prior to demolition as well as compliance with Occupational Safety and Health Administration (OSHA) procedures for removal and disposal.

Through compliance with all existing federal, state, and local safety regulations potential impacts related to the transportation, use, handling, storage, and disposal of potentially hazardous materials and the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment will be **less than significant**.

4.9 (c) (Emit or Handle Hazardous Materials within ¼ Mile of School) Less than Significant Impact: The nearest schools to Areas A, B, and C of the proposed overlay include St. Vincent Elementary School (246 Howard St; 0.1 mile from Area C), Petaluma High School (201 Fair St; 0.6 mile from Areas A and B), Live Oak Charter School (100 Gness Concourse; 0.8 mile from Area A), and McNear Elementary School (605 Sunnyslope Ave; 1.0 mile from Area A). Though no physical development will occur as a result of the proposed Overlay, future development may involve the handling of hazardous materials during construction and operation, which could occur within one-quarter mile of a school. Any such handling of hazardous materials will be required to adhere to existing federal, state, and local regulations which will ensure that all potentially hazardous materials onsite are properly labeled, transported, and stored. Established policies and programs set forth by the EPA, DTSC, CAL/OSHA and other regulatory agencies provide that the presence of potentially hazardous materials occurs in the safest possible manner by reducing the risk of accidental release and ensuring that a response plan is in place. Furthermore, the Petaluma Fire Prevention Bureau regulates hazardous materials within the City of Petaluma. If construction activities associated with future development under the proposed Overlay involve the on-site storage of potentially hazardous materials, a declaration form filed with the Fire Marshal's office will be required to obtain a hazardous materials storage permit. Compliance with federal, state, and local regulations will ensure that the emission or handling of hazardous materials, substances, or waste within one-quarter mile of a school will be **less than significant**.

4.9 (d) (Government Code §65962.5 Site) Less Than Significant Impact: As described above, four sites (two within Area A and two within Area C) are identified as LUST cleanup sites by the State Water Board, and one site within Area C is identified as a Voluntary Cleanup Site by DTSC. The proposed Downtown Housing &

Economic Opportunity Overlay will not result in direct physical development; however, it is reasonable to assume that future development of sites within the Overlay will occur, however development of these areas is currently allowed under existing regulations which was analyzed during the General Plan EIR. All four LUST cleanup sites identified above have been remediated and have a closed case status, meaning that no additional remediation is needed for their current use. The property located at 214 Western Ave, within Area C, is limited to commercial development only and is subject to an existing workplan intended to remove contaminants identified onsite. Though some sites located within the proposed Overlay are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, redevelopment of these sites which could occur as a result of the proposed Overlay, will not create a significant hazard to the public or the environment as they are already remediated or have plans for remediation. Furthermore, all future projects occurring within the boundaries of the Overlay will be subject to independent discretionary review and will be required to demonstrate that there are no hazardous materials present onsite, or that any hazardous materials that may be present are within acceptable levels identified by the applicable regulatory authority (e.g. Regional Water Quality Control Board and/or DTSC). As such, sites within the proposed Overlay being included on a list of hazardous materials sites will not create a significant hazard to the public or the environment and impacts will be **less than significant**.

4.9 (e) (Public Airport Land Use Plan) No Impact: All portions of the proposed Overlay are outside the boundaries of an airport land use plan and are not located in close proximity to a private airstrip. The Petaluma Municipal Airport is the nearest public airport and is located approximately 3 miles northeast of the proposed Areas. Based on the distance of the proposed overlay to the nearest airport and location outside of an airport land use plan, **no impacts** resulting from a safety hazard or excessive noise for people residing or working in the area as a result of future development under the Overlay will occur.

4.9 (f) (Impair Emergency Response Plan) Less than Significant Impact: The proposed Overlay will not result in physical changes to the environment and will therefore not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Future development of sites within the boundaries of the Overlay will be subject to independent discretionary review and will be required to demonstrate, to the satisfaction of the City's Fire Department, that the project will not alter any emergency response or evacuation routes and that site-specific access adequately accommodates emergency vehicles and provides connectivity to the existing circulation and street system. Additionally, the sites within the proposed Overlay were already developable and impact on emergency response was previously analyzed under the General Plan EIR at buildout. As such, impacts to an emergency response plan or emergency evacuation plan as a result of the proposed Overlay will be **less than significant**.

4.9 (g) (Wildland Fires) Less than Significant Impact: Wildland fires are of concern particularly in expansive areas of brush, woodland, and grassland. The Overlay area is categorized as a Non-VHFHZ by CAL FIRE and surrounded by urban uses. Therefore, future development proposed under the Overlay will result in **less than significant** impacts related to the exposure of people or structures to a significant risk of loss, injury or death involving wildland fires.

EKN Appellation Hotel

4.9 (a) (Routine Transport) Less than Significant Impact: The Hotel component of the project will involve site preparation, construction activities, and material delivery and off-haul that may result in the temporary presence of potentially hazardous materials onsite including, but not limited to fuels and lubricants, paints, solvents, insulation, and electrical wiring onsite. Although these potentially hazardous materials may be present onsite during construction the applicant will be required to comply with all existing federal, state, and local safety regulations governing the transportation, use, handling, storage, and disposal of potentially hazardous materials. Additionally, throughout project construction, implementation of best management practices in accordance with the California State Water Resources Control Board requirements will be required which include measures to prevent spills and require onsite materials for cleanup. If construction activities involve onsite storage of potentially hazardous materials, a declaration form filed with the Fire Marshall's office will be required to obtain a hazardous materials storage permit.

Operational activities will be limited to the proposed hotel and associated uses (restaurant, rooftop bar/restaurant, and event space) which do not require the use of hazardous materials nor generate hazardous

waste beyond the use of common cleaners, solvents, and landscaping products. The use of such products does not present a significant hazard to people or the environment as such cleaning and landscaping products will be handled, transported, and stored in a manner that complies with all existing federal, state, and local regulations. Therefore, impacts due to the 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: As described above, the project site is listed as a LUST cleanup site by the State Water Resources Control Board and was issued a case closure letter confirming the completion of site investigation and remedial action in 2020. Though the case status is complete, due to the amount of excavation proposed by the Hotel component of the project, there remains a potential for contaminated soils to be encountered during construction activities. To protect people and the environment from exposure to contamination, the applicant shall comply with **Mitigation Measure EKN HAZ-1**, which requires preparation of a site- and project-specific health and safety plan (HASP) and soil management plan (SMP), subject to review and approval by the Sonoma County Department of Health Services and the RWQCB.²⁶ With implementation of measure EKN HAZ-1, potential impacts associated with the release of hazardous materials into the environment and exposure to people during project construction will be **less than significant**.

In addition to the HASP and SMP to ensure impacts during construction will be less than significant, the applicant shall also comply with **Mitigation Measure EKN HAZ-2**, which requires compliance with all requirements of the Draft Residual Risk Management Plan, unless determined to be inapplicable by the appropriate regulatory authority (e.g. Sonoma County Department of Public Health; RWQCB, etc.). As set forth therein, the owner/operator is required to notify the Sonoma County Department of Public Health and RWQCB if disturbance to any vapor barrier occurs and are also required to provide annual reporting of the type, cause, location, and date of all of the previous year's disturbance, if any. As discussed previously, the use of hazardous materials at project operation will be limited to commercially available cleaners, solvents, and landscaping products. The handling and use of such products is typical of commercial, and hotel uses, and the owner/operator will be required to comply with all federal, state, and local requirements for handling such products. With implementation of **Mitigation Measure EKN HAZ-2** and through compliance with federal, state, and local regulations, impacts associated with the release of hazardous materials into the environment and exposure to people during project operation will be **less than significant**.

4.9 (c) (Emit or Handle Hazardous Materials within ¼ Mile of School) No Impact: The project site is not located within one-quarter mile of any existing or proposed schools. The closest school, Petaluma High School is located approximately 0.6 mile from the Hotel site. As such, the project will have **no impacts** related to the emission of hazardous materials or waste within one-quarter mile of a school.

4.9 (d) (Government Code §65962.5 Site) Less Than Significant Impact with Mitigation: As described in the setting discussion of this section, the site was operated as a gas station from approximately 1923 to 2009 and was subject to remediation actions beginning in 1988 when it was listed as a LUST cleanup site. In April 2019, the site was determined to meet the Low Threat Closure Policy and a Covenant and Environmental Restriction was filed against the property with the Sonoma County Clerk-Recorder limiting use of the property to industrial, commercial, mixed-use, office, or related uses, and prohibiting human habitation, hospitals, schools for persons under the age of 21, and day care centers *on the ground floor of the property*. The proposed EKN hotel does not include any hotel rooms on the first floor. The Covenant also sets forth regulations for activities related to ground disturbance, groundwater extraction, construction dewatering, soil or groundwater sampling, and soil reuse or disposal. As of February 2020, the LUST cleanup case was closed and a letter confirming the completion of site investigation and remedial action for the underground storage tanks was issued to the property owner.

In July 2022, the RWQCB reviewed the project plans submitted for the Hotel and confirmed that no additional soil or groundwater testing was needed. In addition to ensure compliance with the requirements set forth in the Covenant and Environmental Restriction document, the RWQCB also recommended collection of soil confirmation samples following excavation of the proposed 7,140 cubic yards of soil, grab-groundwater samples from the resulting excavation pit, and paired subslab and indoor air samples following completion of project

²⁶ Required pursuant to Exhibit B, Draft Residual Risk Management Plan of the Covenant and Environmental Restriction on Property, filed with the Sonoma County Clerk-Recorder 2/13/2019.

development and prior to occupation to ensure effectiveness of the required vapor barriers and venting systems.²⁷ To ensure recommendations provided by the RWQCB as well as requirements set forth in the Covenant and Environmental Restriction Document, including the Draft Residual Risk Management Plan are incorporated, the project shall comply with **Mitigation Measure EKN HAZ-2**, which requires preparation, recordation, and compliance with a Final Residual Risk Management Plan which will ensure compliance and implementation of all applicable requirements set forth in the Draft Residual Risk Management Plan. With implementation of **Mitigation Measure EKN HAZ-2**, impacts resulting from the sites listing on a hazardous materials site compiled pursuant to Government Code Section 65962.5 will not create a significant hazard to the public or the environment and impacts will be less than significant.

4.9 (e) (Public Airport Land Use Plan) No Impact: The Hotel project site is outside the boundaries of an airport land use plan and is not located proximate to a private airstrip. The Petaluma Municipal Airport is the nearest public airport and is located approximately 3 miles northeast of the site. Based on the distance of the site to the nearest airport and location outside of an airport land use plan, **no impacts** resulting from a safety hazard or excessive noise for people residing or working in the area as a result of the proposed Hotel will occur.

4.9 (f) (Impair Emergency Response Plan) Less than Significant Impact: The project will 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 a **less than significant impact** on the emergency response plan or emergency evacuation plan.

4.9 (g) (Wildland Fires) Less than Significant Impact: The Hotel project site is categorized as a Non-VHFHZ by CAL FIRE and surrounded by urban uses. Therefore, the Hotel component of the project will result in **less than significant impacts** related to the exposure of people or structures to a significant risk of loss, injury or death involving wildland fires.

HAZARDS/HAZARDOUS MATERIALS MITIGATION MEASURES

EKN HAZ-1: Prior to approval of ground-disturbing activities, the applicant shall submit a site- and project-specific health and safety plan (HASP) and a soil management plan (SMP) to the Sonoma County Department of Health Services and the City of Petaluma, Community Development Department. The HASP shall be developed in accordance with Title 29 of the Code of Federal Regulations. In addition to compliance with federal regulations, the HASP shall address potential exposure due to dermal contact and inhalation of residual total petroleum hydrocarbons (TPH) and benzene, shall specify an air monitoring program for volatile organic compounds (VOCs) when performing subsurface earthwork, and shall specify appropriate personal protective equipment (PPE) to be used. The SMP shall include, at a minimum, dust control and monitoring measures, management of stockpiles, and procedures to follow for disposal of soil offsite, including required testing from total petroleum hydrocarbons (TPH) and benzene.

EKN HAZ-2: Upon submittal of building permit plans, the project applicant shall demonstrate compliance (e.g. include directly in project plans, provide written documentation, etc.) with all requirements of the Risk Management Plan included as 'Exhibit B' to the Covenant and Environmental Restriction recorded against the property, as summarized below. In addition, the applicant shall comply with project-specific recommendations provided by the RWQCB in July 2022. This measure shall not be construed to preclude requirements of the Risk Management Plan that are not explicitly listed here.

1. The first floor of the Hotel shall be restricted to retail, commercial, and/or office space only; no Hotel rooms or day care shall be permitted.
2. Concurrent with submittal of building permit plans, provide a copy of written approval to the City of Petaluma, Community Development Department from the Sonoma County Department

²⁷ Regional Water Quality Control Board, staff email correspondence, July 2022.

of Health Services for the project as it involves disturbance of more than five (5) cubic yards of soil (RMP, Section 2.0).

3. Prior to groundwater extraction or discharge, including construction dewatering, soil or groundwater sampling, or soil reuse or disposal, written approval from the Sonoma County Department of Health Services shall be obtained and a copy shall be provided to the City of Petaluma, Community Development Department (RMP, Section 2.0(d, e, f)).
4. At least three working days prior to commencement of ground-disturbing activities, groundwater extraction or construction dewatering, soil or groundwater sampling, or soil reuse or disposal, provide written notification to the Sonoma County Department of Health Services and the Regional Water Quality Control Board. Proof of notification shall be provided to the City of Petaluma, Community Development Department (RMP, Section 3.0(B)).
5. Following excavation of the proposed 7,140 cubic yards of soil, collect soil confirmation samples and grab-groundwater samples from the resulting excavation pit.
6. Upon submittal of plans for building permit, demonstrate incorporation of a Liquid Boot® membrane/liner or equivalent and a LiquidBoot® Geo Vent system or equivalent beneath the slabs of all proposed building (RMP mitigation measures 3, 4).
7. Throughout project construction, any equipment used in subsurface activities shall be decontaminated using visual inspection to verify that all residual soils or groundwater have been removed prior to leaving the property (RMP, Section 6.0(D)).
8. Following completion of project development and prior to issuance of a certificate of occupancy, collect paired subslab and indoor air samples to ensure effectiveness of the required vapor barriers and venting systems.
9. Throughout project operation, if disturbance to hardscape, building slabs, or the vapor barrier system occurs, a written plan must be prepared for any such work, and must include the method and timing for reinstatement. (RMP, Section 5.0(A)).
10. Throughout project operation, the owner and/or operator shall be responsible for submitting an annual summary report to the Sonoma County Department of Health Services and the Regional Water Quality Control Board that describes in detail the type, cause, location and date of all of the previous year's disturbance, if any, to any hardscape or mitigation measure, any remedial measures taken or remedial equipment installed, and any groundwater monitoring system installed on the Property pursuant to the requirements of the Sonoma County, which could affect the ability of such mitigation measures, remedial measures and/or equipment, or monitoring system to perform their respective functions and the type and date of repair of such disturbance (RMP, Section 7.0).

4.10. HYDROLOGY AND WATER QUALITY

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
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"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>	<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:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<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"/>	<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"/>	<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"/>	<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"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sources: City of Petaluma General Plan 2025 and EIR; Federal Emergency Management Agency’s Flood Insurance Rate Map, Map No. 06097C0982G; Sonoma Water, Groundwater Sustainability Plan Petaluma Valley Groundwater Basin, December 2021.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

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

The Federal Emergency Management Agency’s flood hazard mapping program provides guidance for the City in planning for flooding events and regulating development within identified flood hazard areas. FEMA’s National Flood Insurance Program is intended to encourage State and local governments to adopt responsible

floodplain management programs and flood measures. As part of the program, FEMA defines Floodway (Zone AE), 100-year floodplain (Zone AE, A99), and 500-year floodplain (Zone X) boundaries that are shown on the Flood Insurance Rate Maps (FIRMs). As shown on the FIRM community panel map number 06097C0982G, portions of the proposed Overlay, which also includes portions of the EKN Appellation Hotel site are within the non-regulated 500-year floodplain, identified as an area of minimal flood hazard (0.2% chance flood in a given year; Zone X) (**Figure 7, Figure 8**). Apart from portions of Area A of the proposed Overlay, all portions of Areas B and C of the proposed Overlay are outside areas designated by FEMA as a special flood hazard area or minimal flood hazard area. All Areas (A, B, and C) are located outside of the regulated 100-year floodplain and the floodway.

FIGURE 7: DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY FEMA FIRM MAP

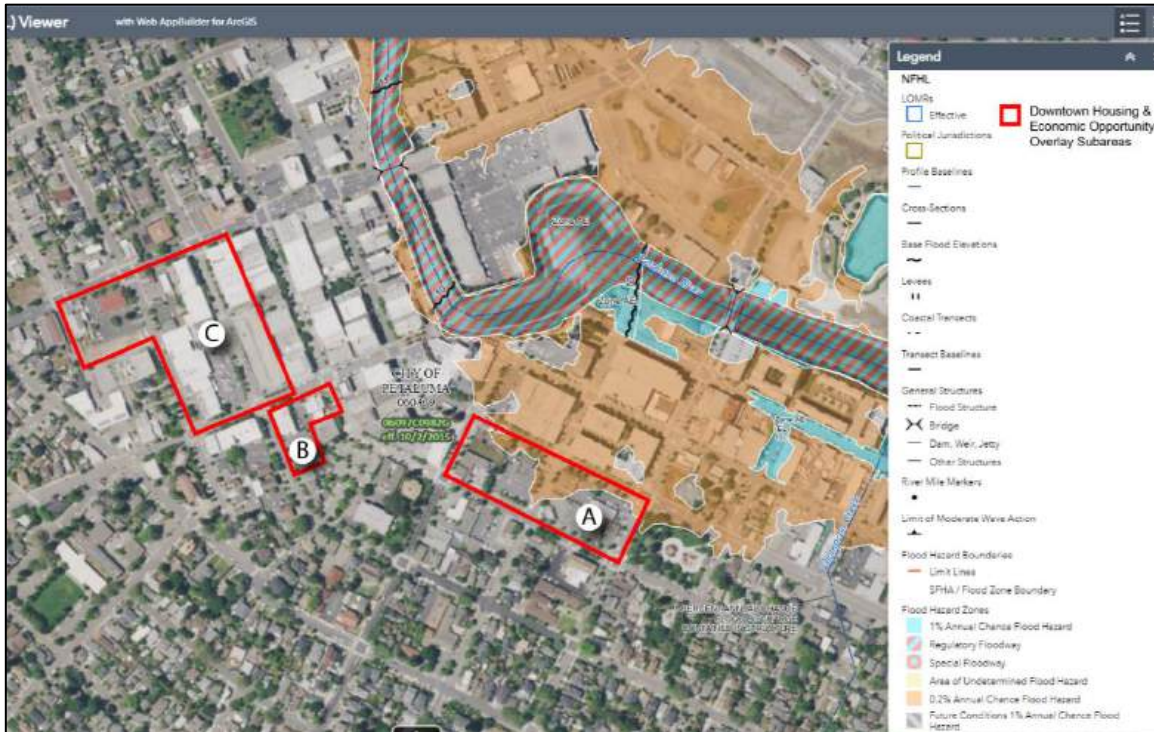
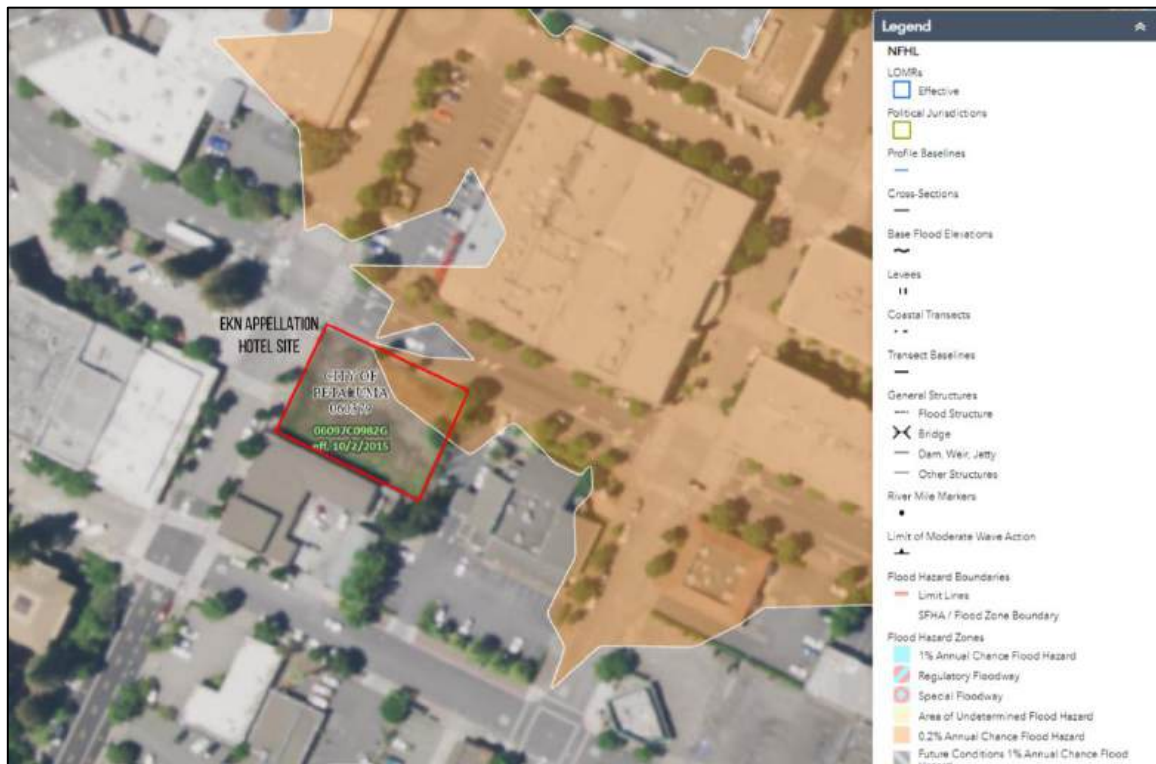


FIGURE 8: EKN APPELLATION HOTEL FEMA FIRM MAP



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 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.

Groundwater

The City of Petaluma’s central and eastern lands, including the Overlay and Hotel components of the project 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 which 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 GSP was submitted to the California Department of Water Resources (DWR) and approved on January 26, 2023.

The GSP establishes a standard for sustainability of groundwater management and use and determines how the basin will achieve this standard by 2024. The Plan identifies six sustainable management criteria, undesirable results, minimum thresholds, measurable objectives, and interim milestones for the sustainability indicators. The six sustainable management criteria include chronic lowering of groundwater levels, reduction in groundwater storage, sea water intrusion, degraded groundwater quality, land surface subsidence, and surface water depletion. Section 6 of the GSP identifies projects and management actions that can help to achieve groundwater sustainability. Project and management actions identified in the Plan include water-use efficiency and alternate water source projects, recycled water expansion, aquifer storage and recovery, and stormwater capture and recharge.

HYDROLOGY AND WATER QUALITY IMPACT ANALYSIS:

Downtown Housing & Economic Opportunity Overlay

4.10 (a-c) (Water Quality Standards; Groundwater Supply and Recharge; Drainage Pattern, Runoff and Storm Drain Capacity) Less than Significant Impact: All future construction activities facilitated by the Overlay component of the project will be subject to the Construction General Permit (2009-0009-DWQ), site-specific Storm Water Pollution Prevention Plans (SWPPP) if disturbing one acre or more of land, and standard erosion and sediment control requirements set forth in Chapter 17.31(Grading and Erosion Control) of the Petaluma Municipal Code. In addition, operation of future development will be required to comply with regional and local requirements such as implementation of a Stormwater Control Plan and inclusion of LID features into site-specific development proposals to ensure projects mimic pre-development conditions, and do not result in off-site flooding or runoff. Compliance with all applicable regulations will be confirmed for individual projects through the discretionary review process. As such impacts of future development resulting from a violation of water quality or waste discharge standards or through alteration of existing drainage patterns, including through the addition of impervious surfaces will be **less than significant**.

The majority of sites within the proposed Overlay are currently developed with impervious hardscapes such as existing buildings and surface parking lots, thereby precluding groundwater infiltration. Additionally, as noted in the GSP, groundwater recharge to aquifers in the Basin primarily occurs through streambed recharge along portions of the Petaluma River and its tributaries, as well as through direct infiltration of precipitation along the margins of the valley areas. The Overlay component of the project is located within an urbanized area of Petaluma, which is outside areas identified in the GSP as areas with primary recharge capabilities for the basin. Furthermore, all future developments under the proposed Overlay will rely on municipal water to meet water demands and will be subject to current regulations which require management of stormwater onsite. As such, impacts to groundwater supply and recharge as a result of the proposed Overlay component of the project will be **less than significant**.

4.10 (d) (Flood Hazards, Seiche, Tsunami, Mudflow) Less than Significant Impact: No portion of the proposed Overlay is located within a 100-year flood hazard area nor located within any other special flood hazard area. Portions of Area A are designated by FEMA as Areas of Minimal Flood Hazard, Zone X, as delineated on map 06097C0982G. Areas with this designation are subject to 500-year flooding and have a 0.2 percent chance of being flooded in a given year. The proposed Overlay will not result in direct physical development and any future development under the proposed Overlay will not site structures within a 100-year flood hazard area. As such, reasonably foreseeable development as a result of the Overlay component of the project will not result in risk of loss, injury, or death as a result of location within a flood hazard area and impacts will be less than significant. Furthermore, as described in the Local Hazard Mitigation Plan (LHMP), there are two dams located upstream of the city (La Crema Winery and Pinheiro dams) with hazard ratings of significant and high. However, based on the relatively low storage capacity of these dams, dam inundation is identified as unlikely.²⁸ The proposed Overlay does not alter potential risks associated with inundation from dam failure. As

²⁸ City of Petaluma, Local Hazard Mitigation Plan, June 2020, page 4-26.

such, impacts associated with risk of the release of pollutants due to flooding or inundation from a seiche, tsunami, or mudflow will be **less than significant**.

4.10 (e) (Conflict with Water Quality Control or Sustainable Groundwater Management Plans) Less than Significant Impact: As described above, future development under the proposed Overlay will be required to comply with the City's erosion control requirements, which ensures development does not result in erosion and sediment runoff during all stages of construction. Additionally, future development will be required to incorporate LID features to minimize runoff, reduce sedimentation, and protect water quality. Compliance with applicable regulations provides for protection of water quality during construction and at operation. As such, future development under the proposed Overlay will not result in a conflict with water quality control, nor will it conflict with the GSP, adopted January 2023 or the 2020 UWMP and impacts will be **less than significant**.

EKN Appellation Hotel

4.10 (a) (Water Quality Standards) Less than Significant with Mitigation: 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 Hotel project will result in disturbance of less than one acre of land, a Storm Water Pollution Prevention Plan (SWPPP) is not required, however, standard erosion and sediment control requirements set forth in Chapter 17.31 (Grading and Erosion Control) of the Petaluma Municipal Code will be implemented during all stages of construction. Typical Best Management Practices (BMP) 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. Through compliance with the City's grading and erosion control ordinance water quality standards and waste discharge requirements will be met. Additionally, as required by **Mitigation Measure EKN HAZ-2**, prior to groundwater extraction or discharge, including construction dewatering, written approval from the Sonoma County Department of Health Services and notification to the RWQCB and City of Petaluma is required. Through compliance with the City's municipal code as well as **Mitigation Measure EKN HAZ-2**, impacts to water quality during construction of the proposed Hotel will be **less than significant**.

At operation, runoff from the proposed development will increase relative to existing conditions which could result in water quality impacts if not properly controlled. As detailed in the Preliminary Stormwater Control Plan prepared for the project (**Appendix E**), the project includes modular bioretention features on the rooftop and silva cells within the tree wells along the B Street and Petaluma Blvd. South frontages which will minimize pollutant loads by pretreating runoff from impervious surfaces introduced by the project. As a standard condition of project approval, a Final Stormwater Control Plan which includes details of ongoing maintenance will be required upon submittal of a building permit and will be subject to review and approval by the City of Petaluma. As proposed and conditioned, the project's potential to violate water quality or waste discharge standards throughout operation of the proposed Hotel will be **less than significant**.

4.10 (b) (Groundwater Supply and Recharge) Less than Significant Impact: The City has adequate water supply to accommodate development of the proposed Hotel without depleting, degrading, or altering groundwater supplies or interfering substantially with groundwater recharge. The Geotechnical Investigation prepared for the project encountered groundwater at 5 feet below ground surface, but given that groundwater fluctuates seasonally, the investigation noted that groundwater should be assumed to be at the ground surface. Though groundwater is present onsite, as noted in the GSP, groundwater recharge to aquifers in the Basin primarily occurs through streambed recharge along portions of the Petaluma River and its tributaries, as well as through direct infiltration of precipitation along the margins of the valley areas. As such, even though the proposed development will decrease pervious surfaces onsite, it will not substantially change the nature of surface water percolation into the Petaluma Valley Groundwater Basin. Furthermore, the Hotel component of the project will rely exclusively on potable water delivered by the City of Petaluma and will not involve groundwater extraction. 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 and no groundwater wells or extraction are proposed as part of the project. As such, potential impacts to groundwater supply and recharge as a result of the proposed Hotel will be **less than significant**.

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; however, the project will result in an increase in impervious surfaces as compared to existing conditions. The entire site is currently pervious, and development of the proposed Hotel will result in an increase in impervious surface as compared to existing conditions. The building will be constructed to the property lines on all sides, resulting in 14,264 square feet of impervious surface. The project site is relatively flat, and runoff currently flows northeast on B Street and southeast on Petaluma Boulevard, draining to the City's storm drain system, and ultimately to the Petaluma River. The project will not alter the existing drainage pattern, and as proposed, complies with the applicable stormwater control requirements set forth by the Bay Area Stormwater Management Agencies Association (BASMAA) which requires the project's stormwater control plan to detain and treat runoff produced by a rainfall intensity equal to 0.2 inches per hour. Therefore, impacts resulting from alteration of the existing drainage pattern on the site, including through the addition of impervious surfaces will be **less than significant**.

4.10 (d). (Flood Hazards, Seiche, Tsunami, Mudflow) Less than Significant Impact: The project site is not located within a 100-year flood hazard area nor is it located within any other special flood hazard area. The project site is in an area designated by FEMA as an Area of Minimal Flood Hazard, Zone X, as delineated on map 06097C0982G. According to this designation, a portion of the Hotel site is subject to 500-year flooding and identified as an area that has a 0.2 percent chance of being flooded in a given year. The project will not site structures within a 100-year flood hazard area. As such, the Hotel component of the project will not result in risk of loss, injury, or death as a result of location within and flood hazard area and impacts will be less than significant. Additionally, as noted above, based on the relatively low capacity of the two dams located upstream of the city (La Crema Winery and Pinheiro dams), dam inundation within Petaluma is unlikely and the project does not introduce new impacts associated with risks due to flooding or inundation from a seiche, tsunami, or mudflow. Therefore, the Hotel will have **less than significant** impacts.

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, 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 LID features that will minimize runoff, reduce sedimentation, and protect water quality. Compliance with applicable regulations, 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**.

As proposed, the project is consistent with the GSP as it includes LID features and will comply with current building codes, which require use of water-efficient appliances. As conditioned, the project will be required to incorporate a connection for recycled water for landscape irrigation use and implement it once recycled water becomes available. As such the project will not conflict with implementation of the Groundwater Sustainability Plan for the Petaluma Valley Groundwater Basin, adopted January 2023 nor will it conflict with the 2020 UWMP and impacts of the Hotel component of the project will be **less than significant**.

HYDROLOGY AND WATER QUALITY MITIGATION MEASURES

Implement **Mitigation Measure EKN HAZ-2**.

4.11. LAND USE AND PLANNING

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sources: City of Petaluma General Plan and EIR; 2023-2031 Housing Element; Petaluma Bicycle and Pedestrian Plan: An Appendix to the General Plan 2025, May 2008; Petaluma Municipal Code; Petaluma Implementing Zoning Ordinance;

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

LAND USE SETTING

Land uses within the proposed Downtown Housing & Economic Opportunity Overlay consist of banks, professional offices, commercial uses, retail, and auto shops. Vacant sites across the proposed Overlay are limited to the EKN Appellation Hotel site, which is within Area A, and sites located at 131 Liberty Street and 136 Court Street within Area C, both of which have active entitlements. As described in detail in the Project Description section of this document, existing buildings within the proposed Overlay are mostly one-story and on sites exhibiting a low-intensity development pattern, within the context of downtown Petaluma, which exhibits a variety of building story and structures heights and a range of intensity.

Land use regulations applicable to the Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel components of the project are found in the following documents:

- Petaluma General Plan 2025
- Commercial Historic District Design Guidelines
- Petaluma Municipal Code
 - Title 15 (Water and Sewage)
 - Title 17 (Building and Construction)
 - Title 19 (Development Related Fees)
 - Title 21 (Petaluma Implementing Zoning Ordinance)

LAND USE IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay

4.11 (a) (Divide an Established Community) No Impact: 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. Division 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 Overlay component of the project will not result in direct physical development but is intended to facilitate development of underutilized properties in the city’s downtown area. All portions of the Overlay are accessible via existing roadways, sidewalks, bicycle, and transit facilities. Depending on site-specific future development proposals under the Overlay access may be enhanced (e.g. through ADA upgrades) but is not expected to substantially alter the established circulation network within downtown Petaluma. Furthermore, all future development proposals under the Overlay will be subject to independent discretionary review at which point, proposed improvements will be reviewed. The Overlay will not introduce a physical barrier or otherwise divide an established community and as such the Overlay component will have **no impact** due to the division of an established community.

4.11 (b) (Land Use Plan, Policy, Regulation Conflict) Less than Significant Impact: Land use policies and regulations adopted for the purpose of avoiding or mitigating and environmental effect that are applicable to the Overlay component of the project include the following:

Petaluma General Plan 2025. The General Plan seeks to maintain a balanced land use program that meets the long-term needs of the community by providing opportunities for all types of uses including residential, employment, retail, institutional, recreational, and open space (Goal 1-G-1). The proposed Overlay component of the project is consistent with several policies intended to achieve this goal. The Overlay allows for increased lot coverage, FAR, and height which promotes the efficient use of land through infill development at equal or higher density and intensity as surrounding uses (policy 1-P-2), encourages mixed-use development in the downtown area, thereby increasing access to existing transit (policy 1-P-6), and encourages redevelopment of underutilized sites thereby providing flexibility in building form and allowing for the ability to change over time (policy 1-P-7). The Overlay component of the project will also contribute to advancing downtown as a focus of activity, will retain pedestrian orientation, and will continue to preserve and enhance buildings of historic and architectural importance (Goal 2-G-3). The proposed Overlay allows for increased intensity of building form, thereby promoting development and intensification of downtown as a visitor destination and neighborhood retail center (policy 2-P-14). Goals and policies that seek to intensify development in the downtown are also consistent with policy 4-P-7 of the Petaluma General Plan which aims to reduce motor vehicle air pollution as well as state and regional plans and policies, such as Plan Bay Area 2050, which intends to reduce GHG emissions through transit-oriented development.

Goal 3-G-1 of the General Plan seeks to maintain the historic character and identity of the community, through implementation of associated policies (3-P-1, 3-P-5, 3-P-6) which aim to protect historic and archaeological resources, ensure their protection is a key consideration during the development review process, and ensure that new development adjacent to historic and cultural resources is compatible. As proposed the Overlay includes controls to ensure that new development facilitated by the Overlay will not negatively impact historic resources, including requiring development- and site-specific documentation that the proposed development complies with the Petaluma Historic Commercial District Design Guidelines, meets the Secretary of Interior's Standards, and evaluates the potential impact of views of historic resources from new development facilitated by the Overlay.

As described throughout this document, future development facilitated by the Overlay will be subject to independent discretionary review, including an independent CEQA analysis which will ensure consistency with General Plan policies that seek to avoid or mitigate environmental effects related to air quality and greenhouse gas emissions (policies 4-P-16 and 4-P-24), geological hazards (policy 10-P-1), noise (policy 10-P-3), and hazardous materials (policy 10-P-4). For instance, all future developments will be subject to the Site Plan and Architectural Review process per IZO Section 24.050. IZO Section 24.050(E)(5) requires a specific finding that the application is exempt from CEQA or the impacts of the site plan are less than significant and Section 24.050(E)(6) requires a finding that the application is in conformance with applicable plans including the City's General Plan.

Commercial Historic District Design Guidelines. Though the majority of the Overlay is located outside the official boundaries of the historic district, the adjacency of new development has the potential to result in impacts to existing historic resources, including those within the Commercial Historic District. As stated above, all future development proposed within the Historic District will be required to demonstrate consistency with the Historic District Design Guidelines which were adopted with the intent of protecting historic resources and will be subject to independent discretionary review. Furthermore, through the condition use permit process the following findings are required to be made about future development projects:

- The additional height would not cause an adverse change in the significance or integrity of a historical resource that is onsite or adjacent to the site;
- The additional height makes a positive contribution to the overall character of the area and that the building will be compatible with its surroundings; and
- Respects and/or preserves cultural, historical, or archaeological resources that exist or occur onsite or within the Overlay.

Therefore, potential impacts due to a conflict with the Historic District Guidelines from implementation of the proposed Overlay will be less than significant.

Petaluma Municipal Code. Future development proposed under the Overlay will be subject to regulations set forth in the Petaluma Municipal Code, including but not limited to Title 15 (Water and Sewage), Title 17 (Building and Construction), Title 19 (Development Related Fees), and the Petaluma Implementing Zoning Ordinance. All development applications proposed within the city, including future development that may be proposed as a result of the Overlay are subject to regulations adopted for purposes of avoiding or mitigating an environmental effect. Compliance with regulations set forth in the Petaluma Municipal Code will ensure that impacts resulting from a conflict is less than significant.

Conclusion. As described above, the Overlay component of the project is consistent with applicable goals and policies of the General Plan 2025, including those adopted for purposes of avoiding or mitigating an environmental effect. Furthermore, the General Plan Update, currently in process, seeks to realize infill development and intensity within the City's urban core on underutilized site, which is consistent with the proposed Overlay. As such, impacts associated with a conflict with such policies will be **less than significant**.

EKN Appellation Hotel

4.11 (a) (Divide an Established Community) Less than Significant Impact: As discussed above, division of an established community would occur through introduction of a physical feature that physically transects an area or through the removal of an existing road or pathway. The Hotel component of the project is located on an infill site at the edge of the city's downtown area and is accessible via Petaluma Blvd. South and B Street as well as via existing sidewalks, transit, and bicycle facilities. As proposed, the project will remove the existing crosswalk on B Street, west of its intersection with Petaluma Blvd. South to improve pedestrian safety. Removal of this crosswalk will not preclude access as there are two other existing crosswalks located less than 150 feet from the crosswalk to be removed. Both crosswalks are controlled (one signal controlled at Petaluma Blvd. South and one stop controlled at 4th Street) and therefore provide increased safety for pedestrians, relative to the crosswalk proposed for removal (which is not signal or stop sign controlled). In addition to removal of the crosswalk, the project will remove two existing driveway curb cuts and construct curb, gutter, and sidewalk, and install pick-up and drop-off parking stalls in the valet areas along Petaluma Blvd. South and will remove an existing driveway curb cut and construct curb, gutter, and sidewalk, and replace one curb-parking space with two curb-parking spaces along B Street. Proposed improvements to the site and adjacent frontage areas will not result in division of an established community nor will it remove existing access, and as such, impacts associated with division of an established community as a result of the Hotel component of the project will be **less than significant**.

4.11 (b) (Land Use Plan, Policy, Regulation Conflict) Less than Significant Impact: As the proposed Hotel component of the project represents the type of development that may be allowed under the Downtown Housing & Economic Opportunity Overlay, the discussion of consistency with goals and policies of the General Plan provided in the analysis above are applicable. In addition, the Hotel component of the project will install a bus stop along Petaluma Blvd. North, adjacent to Center Park, approximately 200 feet north of the site which is consistent with General Plan policy S-P-42 which seeks to expand the bus transit system to provide convenient, frequent, regular service along major corridors.

As described in detail in the Cultural Resources section of this document, the Hotel component of the project demonstrates consistency with the Historic District Design Guidelines. Additionally, as discussed throughout this document, the project as proposed and conditioned is consistent with all applicable regulations set forth in the Petaluma Municipal Code. As such, impacts resulting from a conflict with regulations adopted for purposes of avoiding or mitigating an environmental effect will be **less than significant**.

LAND USE MITIGATION MEASURES

None required.

4.12. MINERAL RESOURCES

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
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"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sources: Petaluma 2025 General Plan and EIR.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

MINERAL RESOURCES IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel

4.12 (a-b). (Mineral Resources or Resource Plans) No Impact: There are no known mineral resources within the UGB. No portions of the proposed Overlay nor the Hotel site have 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 Overlay and Hotel component of the project will have **no impact** to mineral resources.

MINERAL RESOURCES MITIGATION MEASURES

None required.

4.13. NOISE

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
a) Result in 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sources: 2025 General Plan and EIR; IZO 21.040; and US EPA Legal Compilation; Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018; Noise and Vibration Assessment, Illingworth & Rodkin, September 11, 2023.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

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 (Leq). 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 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 shows the Land Use Compatibility Standards for various land uses and provides the relative acceptability level.

Downtown Housing & Economic Opportunity Overlay

As shown in Figure 10-1, Noise Contours of the General Plan, noise levels of the proposed Overlay and Hotel components of the project are projected to be at or below 65 dBA at General Plan build out. Major sources of noise in the City of Petaluma include vehicles traveling along roadways, railroads, and the Petaluma Municipal Airport.

EKN Appellation Hotel

A Noise and Vibration Assessment was prepared by Illingworth & Rodkin on September 11, 2023 (**Appendix F**) to evaluate the potential for the Hotel component of the project to result in significant noise impacts during construction and at operation. The Assessment provides an overview of noise fundamentals, summarizes the applicable regulatory framework, discusses the results of noise monitoring completed onsite, and identifies potential impacts of the project. The Assessment includes two long-term and four short-term noise measurements, locations of which are shown in

Figure 9. Daytime and evening hourly equivalent noise levels at LT-1 (southeast corner of site) ranged from 62 to 69 dBA Leq and at LT-2 (northwest corner of site) from 57 to 68 dBA. Nighttime levels at LT-1 ranged from 50 to 67 dBA and at LT-2 from 45 to 62 dBA Leq. The calculated community noise level equivalent at LT-1 was 70 dBA CNEL and at LT-2 was 66 dBA CNEL. At the four short-term noise locations, including two onsite at the northeast and southwest corners of the site as well as offsite along B and C Streets, the equivalent noise levels ranged from 54 dBA Leq (offsite along C Street) to 71 dBA Leq (northeast corner of site).

FIGURE 9: NOISE MEASUREMENT LOCATIONS²⁹



NOISE IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay

4.13 (a-b) (Noise Standards; Groundborne Vibration and Noise) Less than Significant: Adoption of the Downtown Housing & Economic Opportunity Overlay will not result in physical development but will facilitate a greater intensity of building form as compared to what is currently allowed. Construction and operation of uses at sites within the proposed Overlay could result in increases in the ambient noise environment during construction and at operation as well as result in groundborne vibration and noise during construction.

Construction

²⁹ Noise and Vibration Assessment, Illingworth & Rodkin, September 11, 2023, Figure 1, page 13.

Construction noise and vibration associated with future development of sites within the proposed Overlay may be perceptible to established uses in the immediate vicinity. Future development of sites within the proposed Overlay will result in temporary and intermittent noise increases in the vicinity during construction. Noise associated with construction activities could include the use of heavy equipment, truck traffic for material delivery, and off-haul of materials. Additionally, depending on site-specific developments, operation of heavy construction equipment, such as impact devices (e.g. pavement breakers) or demolition equipment, that create seismic waves and result in ground vibration may result in temporary, perceptible groundborne vibration and noise. Vibration from operation of construction equipment can result in effects ranging from annoyance of people to damage of structures. Varying geology and distance will result in different vibration levels containing different frequencies and displacements. In all cases, vibration amplitudes decrease with increasing distance.

Noise impacts resulting from construction depend on the noise levels generated by construction equipment, timing and duration of noise generating activities, and the distance between construction noise sources and noise sensitive receptors. Construction noise impacts primarily occur when construction activities take place during noise-sensitive times of day (early morning, evening, or nighttime hours), occur in areas immediately adjoining noise sensitive land uses, or when construction durations last over extended periods of time. The highest noise levels typically associated with construction activities are generated during excavation, grading, and foundation construction. Once construction occurs in the interior portion of buildings, noise is less perceptible at off-site locations.

Perceptible groundborne vibration and noise is generally limited to areas within a few hundred feet of construction activities. As seismic waves travel outward from a vibration source, they excite the particles of rock and soil through which they pass and cause them to oscillate. The rate or velocity (in inches per second) at which these particles move is the commonly accepted descriptor of the vibration amplitude, referred to as the peak particle velocity (PPV). Groundborne vibration and noise impacts occur when vibration levels exceed established CalTrans thresholds which are 0.5 in/sec PPV for structurally sound buildings, 0.3 in/sec PPV for conventional buildings, and 0.25 in/sec PPV for historic buildings. Since no physical construction will occur as a result of the proposed Overlay, construction activities, including the type of equipment used for site-specific development is not known at this time. In addition, the City's Zoning Ordinance Section 21.040,B, Vibration, regulates vibration impacts within the City, and all construction and operational groundborne vibration sources must comply with these restrictions which would ensure vibration impacts would be reduced to less than significant.

Construction-related noise impacts, including groundborne vibration and noise are temporary in nature and will cease once construction of individual sites is complete. All future construction activities will be subject to performance standards set forth in the City's Implementing Zoning Ordinance, in particular Sections 21.303 and 21.040 which establishes hours of operation and maximum exterior noise exposure standards for construction and other noise generating activities. Therefore, temporary construction noise impacts, including impacts associated with groundborne vibration and noise as a result of future development under the proposed Overlay component of the project will be **less than significant**.

Operation

At operation, sites within the proposed Overlay will generate noise levels typical of residential and commercial uses and are expected to be compatible with the existing mix of uses in the surrounding areas. As stated previously, noise within the Overlay area is anticipated to be 65 dBA or less at General Plan buildout. At operation there are no activities associated with commercial and residential uses that are expected to generate perceptible groundborne vibration or noise. Moreover, any proposed development above the already allowable 45 feet will require a conditional use permit, that will only be granted by the Planning Commission with a finding, that the additional height will not be detrimental to the public health, safety, or welfare (Section 5.070(F)(4) of the proposed Ordinance). In addition, as described previously in this document, future development facilitated by the Overlay will be subject to independent discretionary review, including an independent CEQA analysis which will ensure consistency with General Plan policies that seek to avoid or mitigate environmental effects related to noise (Policy 10-P-3), Accordingly, this finding would address concerns about noise at operation. As such, noise impacts as a result of operation of future site-specific developments under the proposed Overlay will be **less than significant**.

4.13 (c) (Airport Noise) No Impact: As described in the Hazards/Hazardous Materials section of this document, all portions of the proposed Overlay are outside the boundaries of an airport land use plan and are not located in close proximity to a private airstrip. As such, there will be no impacts resulting from exposure of future residents or employees in areas to excessive noise levels.

EKN Appellation Hotel

4.13 (a) (Noise Standards) Less than Significant Impact with Mitigation: Construction of the Hotel component of the project will result in temporary and intermittent noise that could result in short term noise impacts. Construction is anticipated to occur over an approximately 19-month period and will include grading and excavation, trenching, building construction, and paving. During each stage of construction, there will be a different mix of equipment operating, and noise levels will vary based on the amount and location of equipment in operation. Though the City of Petaluma does not quantitatively regulate noise levels resulting from construction activities, the Federal Transit Administration (FTA) provides general criteria for analyzing construction noise impacts. As detailed in the Noise Assessment prepared for the Hotel, the FTA eight-hour Leq assessment criteria for residential use is 80 dBA during the day and 70 dBA at night, for commercial uses, 85 dBA during the day and night, and for industrial uses 90 dBA during the day and night. At a distance of 50 feet, noise levels during each phase of construction are expected to range from 77 to 81 dBA Leq. The center of the project site is approximately 300 feet from the nearest residence along Petaluma Blvd. S., 450 feet from residences along C Street, and 50 feet from the adjacent commercial building. Based on the anticipated construction equipment, noise levels at the nearest residential use along Petaluma Blvd. S. will range from 58 to 65 dBA Leq and at the nearest commercial use will range from 74 to 81 dBA Leq.

Although nearby residential and commercial land uses will be exposed to elevated noise levels from construction, exposure is intermittent and temporary and will cease once construction is complete. Additionally, anticipated construction noise levels fall below the FTA criteria for residential and commercial uses and the project is subject to the performance standards set forth in Section 21.040 of the Implementing Zoning Ordinance. To ensure temporary construction noise does not result in a significant impact, the Hotel shall comply with the best management practices set forth in **Mitigation Measure EKN NOI-1**. With implementation of **Mitigation Measure EKN NOI-1**, construction noise levels will be minimized and impacts resulting from construction of the Hotel component of the project will be reduced to **less than significant**.

Operation

At operation, the proposed project will contribute to the ambient noise environment. As detailed in the Noise and Vibration Assessment, operational noise will result primarily from mechanical equipment. Based on details provided in the project plans, rooftop mechanical equipment will produce noise levels ranging from 46 to 75 dBA at three feet, and on average from 56 to 58 dBA. The Assessment analyzes the worst-case scenario, assuming all rooftop mechanical equipment will produce the maximum noise level of 75 dBA at three feet. Combining all mechanical equipment, noise levels will be approximately 54 dBA at 50 feet, unshielded. Mechanical equipment located on the rooftop will be approximately 56 feet above the ground level and shielded by a parapet, resulting in noise attenuation. As such, noise levels associated with mechanical equipment at the nearest sensitive receptor will be less than 60 dBA Leq. Though not currently proposed by the project, the Assessment analyzed the most noise intensive uses that could occur within the approximately 1,400 square foot event space which would be events with amplified music. At 50 feet, amplified music would generate a noise level of 72 dBA. Based on the height of the Hotel building, and attenuation provided by the parapet of the Hotel building and the building itself, noise levels at the nearest sensitive receptor will be approximately 56 dBA which is within the noise limits established by the City. As noted in the Assessment, a significant noise impact will occur if the project generates enough traffic to increase noise levels by 4 dBA. Existing traffic volumes on nearby roadways would have to double to result in an increase in 3 dBA. Based on the projected traffic volumes for the Hotel component of the project, the Assessment concludes that the project will result in less than 1 dBA CNEL increase because of project generated traffic. Based on the project's anticipated operational noise, impacts resulting from a permanent noise increase in excess of established standards will be **less than significant**.

4.13 (b) (Groundborne Vibration and Noise) Less than Significant with Mitigation: Construction of the project will result in temporarily perceptible vibration when heavy equipment and impact tools are used near the

project site boundaries. Though the City of Petaluma does not have established thresholds for vibration impacts, Caltrans establishes thresholds for structurally sound buildings (0.5 in/sec PPV), conventional buildings (0.3 in/sec PPV), and historic buildings (0.25 in/sec PPV). At a distance of 5 feet, vibration levels are anticipated to reach 1.2 in/sec PPV, which exceeds Caltrans thresholds for conventional and structurally sound buildings. Other conventional buildings within 20 feet of the project site will not be exposed to vibration levels beyond the 0.3 in/sec PPV threshold for conventional buildings. The nearest historic building is located at 20 4th Street, approximately 220 feet from the site. At this distance, the 0.25 in/sec PPV threshold will not be exceeded. To ensure project-generated vibration does not damage adjacent buildings, compliance with **Mitigation Measure EKN NOI-2** shall be required which establishes protective measures when vibration-generating activities occur with 20 feet of adjacent buildings. With implementation of **Mitigation Measure EKN NOI-2**, impacts associated with groundborne vibration and noise as a result of construction of the Hotel component of the project will be reduced to **less than significant**.

At operation the project will not generate groundborne vibration that will be perceptible nor will operation generate vibration that could result in structural damage. Therefore, the project at operation will not expose people or structures to excessive groundborne vibration or noise and impacts will be **less than significant**.

4.13 (c) (Airport Noise) No Impact: As described in the Hazards/Hazardous Materials section of this document, the Hotel component of the project is outside the boundaries of an airport land use plan and is not located in close proximity to a private airstrip. As such, there will be **no impacts** resulting from exposure of future hotel guests or employees in areas to excessive noise levels.

NOISE MITIGATION MEASURES

EKN 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. Pursuant to the Implementing Zoning Ordinance, restrict noise-generating activities at the construction site or in areas adjacent to the construction site to the hours between 7:00 a.m. and 10:00 p.m., Monday through Friday and 9:00 a.m. to 10:00 p.m. on Saturday, Sunday, and State, Federal or Local Holidays;
2. Utilize 'quiet' models of air compressors and other stationary noise sources where technology exists;
3. Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment;
4. Locate all stationary noise-generating equipment, such as air compressors and portable power generators, as far away as possible from adjacent receptors;
5. Acoustically shield stationary equipment located near adjacent receptors with temporary noise barriers;
6. Locate staging areas and construction material areas as far away as possible from adjacent receptors;
7. Prohibit all unnecessary idling of internal combustion engines;
8. Route all construction traffic to and from the project site via designated truck routes and prohibit construction related heavy truck traffic in residential areas where feasible;
9. Notify all adjacent receptors of the construction schedule in writing;
10. Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented; and
11. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction.

EKN NOI-2: The following measures shall be implemented when construction activities occur within 20 feet of adjacent buildings:

1. Prohibit the use of heavy vibration-generating construction equipment within 20 feet of adjacent buildings.
2. Use a smaller vibratory roller, such as the Caterpillar model CP433E vibratory compactor, when compacting materials within 20 feet of adjacent buildings. Only use the static compaction mode when within 10 feet of the adjacent buildings.
3. Avoid dropping heavy equipment and use alternative methods for breaking up existing pavement, such as a pavement grinder, instead of dropping heavy objects, within 20 feet of adjacent buildings.
4. Designate a person responsible for registering and investigating claims of excessive vibration. The contact information of the designated person shall be clearly posted on the construction site.

4.14. POPULATION AND HOUSING

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sources: City of Petaluma General Plan 2025 and EIR; City of Petaluma Implementing Zoning Ordinance; and Petaluma Housing Element 2023 - 2031. United States Census Bureau, QuickFacts.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

POPULATION AND HOUSING SETTING

According to the U.S. Census Bureau, as of July 2022 the City of Petaluma had an estimated population of approximately 58,652 people.³⁰ The 2025 General Plan contemplates development of approximately 6,000 additional residential units and a buildout population of approximately 72,700, representing an annual growth rate of 1.2% per year. The Overlay component of the project will not result in direct physical development; however, it should be noted that residential uses are currently permitted within the Mixed Use 2 zoning district and two sites, located within Area C of the proposed Overlay are identified as opportunity sites in the City’s 6th Cycle Housing Element. The Hotel component of the project does not propose residential development.

POPULATION AND HOUSING IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay

4.14 (a) (Substantial Unplanned Growth) Less than Significant: The Overlay component of the project is located within the UGB, includes two sites identified for housing opportunity in the City’s Housing Element, and is proposed on sites where housing development is currently allowed in a mixed-use building. Additionally, the City’s Density Bonus ordinance provides incentives for the production of affordable housing by allowing increase in the number of units allowed on a site above typical density standards, reduction in onsite parking requirements, and/or flexibility from development standards for applicable housing projects meeting specified income thresholds. The purpose of the City’s Density Bonus Ordinance is to comply with the requirements of California State Density Bonus Law. The Overlay component of the project will not result in direct physical development but will allow future development proposals to increase lot coverage, FAR, and height relative to what is currently allowed by the General Plan and Implementing Zoning Ordinance and will also allow development of exclusively residential uses.

The proposed Overlay will allow intensification in building form and will permit exclusively residential uses (e.g. not in a mixed-use building). However, future development will continue to be subject to existing density requirements (as the project does not propose any changes to the allowed density of 30 units to the acre). Additionally, future projects proposed under the Overlay will continue to be considered for eligibility under the City’s Density Bonus Ordinance and State Density Bonus Law. As such, the Overlay will not result in an increase in population beyond what is already projected as part of General Plan buildout and what was already evaluated and disclosed in the General Plan FEIR, and as allowed by the City’s Density Bonus Ordinance and State Density Bonus Law. Introduction of new employment opportunities and residential developments under the Overlay may increase the workforce population, however, this has already been analyzed in the General Plan EIR and impacts found to be less than significant. As such, impacts related to substantial unplanned growth from the proposed Overlay will be **less than significant**.

³⁰ United States Census Bureau, Quick Facts, accessed April 2023, <https://www.census.gov/quickfacts/petalumacitycalifornia>

4.14 (b) (Housing or Persons Displacement) No Impact: The Overlay will not result in direct physical development and any redevelopment of sites located within the Overlay in the future will not result in displacement of a large number of people, necessitating the construction of replacement housing elsewhere as all sites within the Overlay are currently developed with commercial uses. As such, future development as a result of the Overlay component of the project will not displace existing residents or housing units, necessitating construction of replacement housing and as such will result in **no impacts**.

EKN Appellation Hotel

4.14 (a) (Substantial Unplanned Growth) Less than Significant: The Hotel component of the project does not propose new housing units that would induce residential population growth. However, the proposed hotel and restaurant will result in new employment opportunities for existing Petaluma residents; individuals living outside of the city that would commute; and individuals living outside of the city that may choose to take up residence in Petaluma once employment is secured. Given the scope and scale of the proposed development, and provided that commercial uses are anticipated on the site of the proposed hotel by the General Plan, the project will not directly induce substantial population growth in the area beyond what has already been considered by the General Plan EIR. Additionally, utility extensions are limited to providing services to the subject property and will be sized accordingly and as such will not indirectly induce substantial population growth. As such, impacts related to substantial unplanned growth as a result of the Hotel component of the project will be **less than significant**.

4.14 (b) (Housing or Persons Displacement) No Impact: The Hotel project site is currently vacant and as such will have **no impact** resulting from displacement of existing people or housing.

POPULATION AND HOUSING MITIGATION MEASURES

None required.

4.15. PUBLIC SERVICES

	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
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"/>	<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"/>	<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"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sources: City of Petaluma General Plan 2025 and EIR.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

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 the City planned public facilities and service improvements identified to accommodate buildout of the General Plan.

PUBLIC SERVICES IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay

4.15 (a-e) (Fire Protection, Police Protection, Schools, Parks, Other Public Facilities) Less Than Significant Impact: The proposed Overlay component of the project will allow future development applications to increase lot coverage, FAR, and building height as well as permit exclusively multi-family developments within the MU2 zoning district, where currently multi-family housing is only permitted in a mixed-use building. As proposed, the Overlay will not increase residential density beyond what is anticipated by the General Plan and though building intensity may be greater, all uses that are currently allowed on sites within the proposed Overlay will continue to be allowed including commercial, retail, residential and lodging uses. Future development will be subject to existing density requirements, such that the Overlay will not result in an increase in population beyond what is already projected as part of General Plan buildout and what was already evaluated and disclosed in the General Plan FEIR, and as provided by the City's Density Bonus Ordinance and the State Density Bonus Law.

Future development under the proposed Overlay will not adversely impact service ratios, response times or other performance objectives for fire and police protection, schools, and parks as future development will occur incrementally and will be subject to all General Plan policies and actions including development impact fees, which offset costs associated with the expansion of public services. Additionally, such development has already been analyzed in the General Plan EIR and impacts have been found to be less than significant. As such, physical impacts associated with the provision of new or physically altered public facilities, the construction of which could cause significant environmental impacts as a result of the Overlay component of the project will be **less than significant**.

EKN Appellation Hotel

4.15 (a-b) (Fire & Police Protection) Less than Significant Impact: The Hotel project site is located in downtown Petaluma which is well served by existing public services. Implementation of the project may result in an increase in demand for police and fire services. However, the incremental increase on fire and police services are anticipated by 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 0.4 miles from Fire Station 1, located at 198 East D Street and approximately 2 miles from Fire Station 3, at 831 S McDowell Boulevard. The project is within the response radii of Fire Stations 1 and 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.

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 applicable development impact fees, including a facilities fee. These funds are sufficient to offset the cumulative increase in demands for fire and police protection services that may result from the new development, therefore impacts on the City's emergency services will be **less than significant**.

4.15 (c-e) (Schools; Parks; Other Public Facilities) Less than Significant Impact: As a transient lodging use the project may result in a temporary influx of people into the immediate vicinity, but is not expected to increase demand for school, park, and other public facilities beyond current capacities. Moreover, as a new development, the applicant will be required to pay all applicable development impact fees prior to the issuance of a building permit. The payment of those impact fees will offset impacts the project may have on public facilities and impacts of the project will be **less than significant**.

PUBLIC SERVICES MITIGATION MEASURES

None required.

4.16. RECREATION

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
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"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sources: 2025 General Plan and EIR; Bicycle and Pedestrian Master Plan; Existing Conditions Report, Parks, Recreation, and Public Facilities, City of Petaluma General Plan Update; United States Census Bureau, QuickFacts.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

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 such as Petaluma Adobe State Historic Park, located east of the city limits and operated by the California State Parks Department, and Helen Putnam Regional Park, located in the southwestern edge of the city, and 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 maintain most of Petaluma’s creeks and channels, with several waterways designed to include a multi-use trail alongside its banks. These creekfront and riverfront trails contribute to outdoor recreational opportunities.

General Plan policy 6-P-1 and programs set forth therein provide guidance to retain and expand recreational resources for the health and welfare of the city’s inhabitants including policy 6-P-6 which requires the City to maintain a park standard of 5 acres per 1,000 residents, or approximately 0.005 acres of park space per resident. Park land development and open space acquisition impact fees are required for new development to help offset any potential impacts on recreation resources generated by development projects. Parks within close proximity to the proposed project include Walnut Park, Wickersham Park, Petaluma River Park, Penry Park, Putnam Plaza Park, and Liberty Park.

In addition to public parks, 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 bicycle facilities in the vicinity of the project include Class II, on-street bicycle lanes on B Street and D Street, and Class III, on-street signs on Petaluma Blvd. South.

RECREATION IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay

4.16 (a) (Park Deterioration) Less Than Significant Impact: Though the Overlay component of the project will not result in direct physical development, future development under the proposed Overlay will result in increases in the use of nearby parks and multi-use trail systems. Increased park use as a result of future development under the proposed Overlay will not result in substantial physical deterioration of facilities nor will deterioration be accelerated as projects will occur incrementally overtime and all projects will be subject to applicable park and open space-related development impact fees to address increased use of parks. Furthermore, development of areas within the proposed Overlay have already been considered in the General Plan, and though the Overlay will allow for increased building intensity through increased lot coverage, FAR,

and building height, any future development project that proposes new residential uses will be subject to existing density requirements. As described in the General Plan Update Parks, Recreation, and Public Facilities Existing Conditions Report, existing community, neighborhood, and pocket parks within the City of Petaluma comprise approximately 549 acres.³¹ With a current population of 58,652 residents,³² the parkland ratio is 9.3 acres per 1,000 residents which exceeds the City's park standard of 5 acres per 1,000 residents. Additionally, to develop above 60 feet in the proposed Overlay requires a conditional use permit that will only be issued if the development provides publicly accessible private open space, that is open to the public at least 8 hours per day and/or at least 120 days per year. This requirement will minimize any impacts to park deterioration as it will provide new recreation areas for the public to utilize. Therefore, impacts related to increased use of existing neighborhood and regional parks and other recreational facilities such that substantial physical deterioration of such facilities would occur or be accelerated will be **less than significant**.

4.16 (b) (Construction or Expansion of Recreation Facilities) Less Than Significant Impact: Future development under the proposed Overlay may include onsite recreational amenities for residential tenants or employees/patrons of commercial uses. Construction of any such facilities will be considered as part of future projects, which will be subject to independent discretionary review, including review pursuant to CEQA. Furthermore, as stated above, development under the proposed Overlay has been considered by the General Plan and incremental development overtime will not necessitate expansion of existing recreational facilities as all such future projects will be subject to payment of applicable development impact fees related to parks and open space, and as the current parkland ratio of 5 acres per 1,000 residents is exceeded, and the open space requirement to build above 60 feet within the proposed Overlay. As such, impacts associated with construction or expansion of recreational facilities resulting in an adverse physical effect on the environment as a result of the Overlay component of the project will be **less than significant**.

EKN Appellation Hotel

4.16 (a-b) (Park Deterioration and Recreation Facilities) Less Than Significant Impact: As a transient lodging use the project may result in temporary increased use of nearby park and recreational facilities by overnight guests, employees, and patrons of the proposed hotel and associated restaurant. Though guests, employees, and patrons may utilize nearby facilities, the volume of individuals accessing such facilities will not be to a degree that will result in physical deterioration. Furthermore, commercial development at the site has been anticipated by the General Plan and as stated above, the existing parkland ratio in the city is 9.3 acres per 1,000 residents, which exceeds the city's standard of 5 acres per 1,000 residents. The Hotel component of the project will also be subject to applicable development impacts fees related to parks and open space and as such, impacts related to the physical deterioration of parks and other recreational areas as a result of the proposed Hotel will be **less than significant**.

4.16 (b) (Construction or Expansion of Recreation Facilities) Less Than Significant Impact: The Hotel component of the project does not include construction or expansion of recreational facilities that will have an adverse physical effect on the environment and as such impacts will be **less than significant**.

RECREATION MITIGATION MEASURES

None Required.

³¹ Existing Conditions Report, Parks, Recreation, and Public Facilities, City of Petaluma General Plan Update, August 19, 2022, Table 1, pages 3-9.

³² United States Census Bureau, Quick Facts, accessed April 2023, <https://www.census.gov/quickfacts/petalumacitycalifornia>

4.17. TRANSPORTATION

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>	<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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sources: City of Petaluma General Plan 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, W-Trans, September 26, 2023

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

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. 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 mile 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 July 2021, the City adopted VMT Implementation Guidelines that provide thresholds of significance, screening criteria, and mitigation options.

The General Plan EIR determined that implementation of the General Plan would result in less than significant impacts from an increased demand for transit service and safe bicycle parking. General Plan policies 5-P-40 through 5-P-45 support the expansion of the bus transit system and the location of transit-oriented development along transit corridors. General Plan policy 5-P-31 requires future development to provide bicycle support facilities.

Downtown Housing & Economic Opportunity Overlay

The proposed Overlay component of the project is located within the boundaries of the city’s downtown area, which is characterized by its walkable pedestrian scale environment. Many streets within and proximate to the proposed Overlay contain dedicated bicycle lanes, on-street bicycle routes, or are minor in nature, allowing for shared use with vehicles. The Overlay area is also well served by public transit, with bus stops located along Petaluma Blvd., Keller Street, and 4th Street. Additionally, the Petaluma Downtown SMART Station and Copeland Street Transit Mall are located less than one mile from the furthest point of the proposed Overlay

boundaries. This City is also commencing in the summer of 2024, a free micro transit shuttle that will provide bus transit from the Petaluma Fairgrounds and SMART station to downtown.

EKN Appellation Hotel

A Traffic Impact Study was prepared by W-Trans on September 26, 2023 (**Appendix G**) and analyzes impacts associated with implementation of the Hotel component of the project. The Study includes a discussion of the characteristics and current evening peak operation³³ of four study intersections near the project site including Petaluma Blvd. North/East Washington Street, Petaluma Blvd. North/Western Ave, Petaluma Blvd. South/B Steet, and Petaluma Blvd. South/D Street. As described above, though LOS is no longer used to determine environmental impacts of a project, General Plan policy 5-P-10 establishes LOS D (35 to 55 second delay) as an acceptable intersection level of service. As detailed in the Study, all study intersections currently operate at LOS D or better. In addition to vehicular operations, the Study discusses pedestrian, bicycle, and transit facilities in vicinity of the project site. As detailed therein, the site is well served by these facilities. The impact analysis below relies in part on information contained in the Traffic Impact Study prepared for the Hotel component of the project.

TRANSPORTATION IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay

4.17 (a) (Conflicts with Plans, Policies, Ordinances) Less Than Significant Impact: The proposed Downtown Housing & Economic Opportunity Overlay is consistent with plans, policies, and ordinances related to the City's transportation system. Specifically, the proposed Overlay component of the project is consistent with General Plan policy 5-P-43 which calls for supporting efforts for transit-oriented development around transit corridors, including along Washington Street and Petaluma Blvd. The Overlay will allow for greater building intensity in the city's downtown, including along Washington Street, Western Avenue, and Petaluma Blvd. South, thereby encouraging redevelopment of underutilizes sites, which will densify the city's downtown, encourage transit-oriented development, and consequently, increase use of alternative transportation such as walking, biking, and public transit. All future development proposed within the Overlay will be subject to independent discretionary review and pay development fees for traffic impacts. Through the review process, individual projects will be required to demonstrate consistency with applicable General Plan policies such as those that call for construction of off-site improvements to connect new development with existing neighborhoods and land uses (policy 5-P-4); ensure safety improvements are undertaken in response to the changing travel environment (policy 5-P-9); require pedestrian site access for all new development (policy 5-P-23); and provide support facilities to make walking and biking more desirable (policy 5-P-31). In addition, all future development proposed under the Overlay will be required to demonstrate consistency with the City's Bicycle and Pedestrian Master Plan, applicable ordinances related to the transportation system, and will be required to pay development impact fees related to the transportation system. Based on the proposed Overlay's overall consistency with the General Plan, as well as the requirement for future development to undergo discretionary review and pay applicable traffic impact and other development fees, impacts related to a conflict with plans, policies, and ordinances addressing the transportation system will be **less than significant**.

4.17 (b-d) (Conflict with 15064.3(b) VMT; Geometric Design Feature Hazard; Emergency Access) Less Than Significant Impact: Based on the location of the proposed Overlay within the City's downtown, the majority of which is located within one-half mile of the Copeland Street Transit Mall and the Downtown Petaluma SMART Station, it is anticipated that future development will meet the VMT screening criteria set forth in the City of Petaluma VMT Implementation Guidelines. Though it is anticipated that projects may meet one or more of the screening criteria set forth therein, the City maintains discretion to request a project-specific VMT analysis. Additionally, through the discretionary review process, all future projects under the proposed Overlay will be required to demonstrate consistency with City regulations to ensure new development will not introduce a design feature hazard or impair emergency access to sites within the Overlay. As all future development within the proposed Overlay will be subject to independent discretionary review, impacts resulting from a conflict

³³ The p.m. peak hour occurs between 4:00 and 6:00 p.m. and reflects the highest level of daily congestion.

with CEQA Guidelines section 15064.3(b), through introduction of a design feature hazard, or through inadequate emergency access will be **less than significant**.

EKN Appellation Hotel

4.17 (a) (Conflicts with Plans, Policies, Ordinances) Less Than Significant Impact: As stated above, General Plan policy 5-P-10 establishes LOS D (35 to 55 second delay) as an acceptable intersection level of service throughout the city. As detailed in the Traffic Impact Study prepared for the Hotel component of the project, the four study intersections (Petaluma Blvd. North/East Washington Street, Petaluma Blvd. North/Western Ave, Petaluma Blvd. South/B Steet, and Petaluma Blvd. South/D Street) currently operate at LOS D or better. In addition to analyzing existing LOS, the Study also provides LOS under the following scenarios:

- **Existing Plus Project** – Adds project-generated trips to existing volumes
- **Future** – based on the 2040 horizon year from data maintained by the Sonoma County Transportation Authority (SCTA) and translated to the weekday p.m. peak hour.
- **Future Plus Project** – Adds project-generated trips to anticipated future volumes

TABLE 8: PM PEAK HOUR INTERSECTION LOS SCENARIOS³⁴

Study Intersection	Existing		Existing + Project		Future		Future + Project	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Petaluma Blvd./E Washington St	44.3	D	46.1	D	48.4	D	48.9	D
Petaluma Blvd./Western Ave	31.7	C	34.5	C	36.2	D	38.2	D
Petaluma Blvd./B St	28.9	C	31.1	C	36.8	D	38.5	D
Petaluma Blvd./D St	53.8	D	53.4	D	56.9	E	56.8	E

As shown in Table 8, the four study intersections will continue to operate at LOS D or better with the addition of project generated traffic. As shown in the table above, with the addition of project-generated traffic the Petaluma Blvd./D Street intersection will operate 0.4 second quicker when compared to existing conditions. As detailed in the Study, the reason for the decrease in overall delay is attributed to the addition of trips to movements that are currently underutilized. At this intersection, the project will add trips to the through lane on Petaluma Blvd. S, which currently has a lower average delay as compared to the intersection as a whole. While the project will not necessarily improve intersection operation, it can be concluded that trips added by the project will make use of excess capacity, resulting in minimal change in the intersections overall operation. As shown above, under future and future plus project scenarios, the Petaluma Blvd./D Street intersection will degrade to LOS E. Though the intersection will degrade to LOS E, as discussed in Section 1.3 of this document, the General Plan EIR identified that increased motor vehicle traffic would result in unacceptable level of service at six intersections covered in the General Plan, including Petaluma Boulevard/D Street and adopted a statement of overriding considerations for significant and unavoidable impacts. Furthermore, this intersection will operate unacceptably regardless of the project. Since the project will not further degrade the intersection to LOS F, there would be no conflict with General Plan policy 5-P-10.

Pedestrian, bicycle, and transit facilities in the project vicinity will not be substantially impacted by the proposed development nor will the project conflict with plans, ordinances, or policies addressing the circulation system. The site is located within the city’s downtown area and is proximate to goods and services. Based on the site’s location within downtown, it is assumed that some hotel patrons will walk, bicycle, and/or use transit for trips from the site to surrounding areas. Sidewalks exist throughout downtown as well as along B Street and Petaluma Blvd. near the project site and as part of the project, a new bus stop and shelter will be constructed adjacent to Center Park, approximately 200 feet north of the site. The project will eliminate an existing driveway and curb cut along Petaluma Blvd. S and replace it with a level sidewalk. Additionally, to avoid potential conflicts between pedestrians and vehicles and to ensure consistency with the Manual on Uniform Traffic Control Devices (MUTCD), the midblock crosswalk that crosses B Street, west of Petaluma Blvd. S will be removed. The project also includes installation of a bus stop along Petaluma Blvd., north of the site, which is consistent with General Plan policy 5-P-43 to enhance transit priority along Petaluma Blvd. As proposed, the project will

³⁴ W-Trans, Traffic Impact Study, September 26, 2023, Table 8 and Table 9, page 18.

not conflict with policies addressing pedestrian, bicycle, or transit facilities and impacts will be **less than significant**.

4.17 (b) (Conflict with 15064.3(b) VMT) Less Than Significant Impact: The City of Petaluma VMT Implementation Guidelines provide screening criteria, and projects which meet those criteria can be assumed to be below the significance threshold, therefore resulting in less than significant impacts due to a conflict with CEQA Guidelines Section 15064.3(b). Projects within one-half mile of a major transit stop, may be presumed to have a less than significant VMT impact provided that the floor area ratio is not less than 0.75, does not include more parking than required by the City, is consistent with Plan Bay Area, and does not replace affordable residential units.

The proposed hotel is located approximately 0.4 miles from the Downtown Petaluma SMART station and will be accessible via walking, bicycling, or transit. The site's FAR will exceed 0.75 and as described throughout this document, is consistent with Plan Bay Area. The site is vacant and therefore will not replace affordable residential units. Based on the site's location within the Parking Assessment District, the project will provide fewer parking spaces than would be required if the site were located outside of the Parking Assessment District. The provision of the City's VMT screening guidelines related to parking is intended to ensure that a project does not provide excess parking that would incentivize or encourage automobile travel. As proposed, the Hotel component of the project will rely on a limited supply of onsite valet parking as well as publicly available offsite parking. As such, the project meets the VMT screening criteria for sites within one-half mile of transit and as such impacts resulting from a conflict with CEQA Guidelines Section 15063.4(b) will be **less than significant**.

4.17 (c) (Geometric Design Feature Hazard) Less Than Significant with Mitigation: Hotel patrons will be required to utilize the valet service drop off and pick up area along Petaluma Blvd. S. At drop off, valet employees will drive vehicles to the subterranean garage accessible from B Street, approximately 100 feet from its intersection with Petaluma Blvd. S and at pick up will drive vehicles from the garage to the valet area on Petaluma Blvd. South. Vehicles entering and exiting the garage will need to yield to pedestrians and vehicles along B Street. As noted in the Traffic Impact Study, there is adequate sight distance in all directions to allow safe ingress/egress of vehicles. Additionally, left hand turns from the garage onto B Street (e.g. towards 4th Street) will be limited as all valet pickups will occur along Petaluma Blvd. South. As such, the project will not introduce a design feature that will substantially increase hazards and as such impacts will be **less than significant**.

The Traffic Impact Study includes a queuing analysis for the valet area along Petaluma Blvd. South. The analysis assumes that four valet employees at peak operation will have a service rate of 32 vehicles per hour for both incoming and outgoing vehicles. Based on the project's trip generation, which includes 20 inbound vehicles utilizing the valet service during the pm peak period, the probability that there will be three vehicles is less than 10% and the probability of more than three vehicles is less than 6%. As such, it is unlikely that vehicles within the valet service area will exceed capacity. However, to ensure valet service operations do not exceed the available on street space, **Mitigation Measure EKN TRA-1** shall be implemented which requires preparation and ongoing implementation of a valet service plan. With implementation of **Mitigation Measure EKN TRA-1**, impacts resulting from vehicles queuing on Petaluma Blvd. South which could create a design hazard will be **less than significant**.

Construction of the proposed bus stop will be subject to applicable City standards which will ensure that introduction of a design feature hazard does not occur. As such, construction of the bus stop adjacent to Center Park along Petaluma Blvd., north of the site will result in less than significant impacts associated with a design feature hazard.

4.17 (d) (Emergency Access) Less than Significant Impact: The project's emergency access has been reviewed by the Petaluma Public Works and Fire Departments and has been determined to be adequate. The increase of construction vehicles traveling to and from the project site on a temporary basis will not result in inadequate emergency access. Petaluma Blvd. and B Street will remain open to travel during construction of all phases of the proposed project. To construct the project, road closure is not anticipated, although temporary encroachment may occur during frontage improvements to Petaluma Blvd. South and B Street. As such, ongoing and temporary impacts to emergency access as a result of the Hotel component of the project will be

less than significant. At operation, there are no identified conflicts with emergency access and impact would be **less than significant**.

TRANSPORTATION MITIGATION MEASURES

EKN TRA-1: Upon submittal of plans for building permit, the applicant shall submit a Valet Service Plan prepared by a licensed traffic engineer. The Plan shall, at a minimum, address steps to be taken to ensure the three-vehicle capacity is not exceeded. The Plan shall be subject to review and approval by the City of Petaluma.

4.18. UTILITIES AND SERVICE SYSTEMS

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
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"/>	<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"/>	<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"/>	<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"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sources: City of Petaluma General Plan 2025 and EIR; Recology Sonoma Marin <https://www.recology.com/recology-sonoma-marin/petaluma/commercial/>, accessed September 2023.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

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. Future development under the proposed Overlay as well as the proposed Hotel component of the project will be subject to all applicable development fees.

Water Supplies

In 2021, the City updated the Urban Water Management Plan (UWMP), to include a baseline and target demand analysis, a water service reliability and drought risk assessment, projected urban water use to 2045, and a description of programs to achieve the target demand reductions in the UWMP. Instream flow requirements have also been established to protect fish and wildlife species and recreation. Based on regional water supply

availability and use, the UWMP expects to be able to increase annual water deliveries to Petaluma from approximately 9,487 acre-feet (AF) in 2020 to 12,117 AF by 2045. In 2020, the City's average per capita water usage rate was 102 gallons per capita per day (GPCD). As presented in the City's UWMP the SB X7-7 GPCD target for the City of Petaluma was 141 GPCD for the year 2020. The results of that comparison find that potable water demand is well within the available Sonoma Water supply, for cumulative demand through 2045 as set forth in the 2021 UWMP. 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). The UWMP was submitted to the Department of Water Resources (DWR) who determined the plan adequate and in compliance with the California Water Code (CWC).

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.

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. Additionally, the City's Stormwater Management and Pollution Control Ordinance, set forth in Chapter 15.80 of the City's Municipal Code, establishes requirements and controls on the storm drain system and all existing and proposed development is subject to the requirements set forth therein.

UTILITIES AND SERVICE SYSTEMS IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay

4.19 (a-c) (Relocation/Expansion of Utilities; Sufficient Water Supplies; Sufficient Wastewater Treatment Capacity) Less Than Significant Impact: The proposed Overlay component of the project will not result in direct physical development however, future development of sites within the Overlay may result in increased connections to the City's utility system. The proposed Overlay is located within the city's downtown area in a highly urbanized area that is well served by existing utilities. All future development will be subject to discretionary review, will be required to demonstrate where and how proposed uses will connect to utility systems, and will be required to demonstrate consistency with applicable regulations for managing stormwater. Buildout of the General Plan considers development within the Overlay and although the Overlay will allow for greater building intensity, the increase in lot coverage, FAR, and height will not necessitate substantial relocation or expansion of utilities. Furthermore, the permitted residential density will not increase as a result of the proposed Overlay and as such, a substantial increase in population beyond what has already been considered in the General Plan and associated General Plan EIR is not anticipated. Future development within the Overlay will occur incrementally overtime, will be subject independent discretionary review, including an independent CEQA analysis and determination, and subject to payment of applicable development impact fees including water and wastewater capacity fees which requires developers to pay their fair share of the cost of needed water and wastewater improvements to serve new customers. It should also be noted that new buildings will be required to comply with current building codes, which include measures to increase water efficiency. As such, the proposed Overlay will not require or result in the relocation or construction of new or expanded utilities, the construction or relocation of which could cause significant environmental effects and impacts will be **less than significant**.

The UWMP establishes Demand Management Measures and a Water Shortage Contingency Plan, which provides a means for water conservation and planning for periods of drought. 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. As noted above, although the proposed Overlay may result in greater building intensity as compared to existing regulations, the City's routine monitoring of water supplies against actual use and evaluation new development projects through the development review process will ensure that water and wastewater demand does not exceed capacity. Furthermore, as noted above, all new development will be subject to payment of water and wastewater capacity fees. There will be sufficient water supplies available to serve reasonably foreseeable future development under the proposed Overlay component of the project including during normal, dry, and multiple dry years, and there will be adequate capacity to serve wastewater treatment demands of future projects and as such impacts will be **less than significant**.

4.19 (d, e) (Solid Waste Generation/Compliance with Solid Waste Management) Less Than Significant

Impact: The proposed Overlay component of the project will not result in physical development; however, it is anticipated that future development within the Overlay may consist of demolition of existing site improvements. Demolition during future construction as well as operation of future uses will contribute to the generation of solid waste. Through the Overlay will allow for increased building intensity through increased lot coverage, FAR, and height, the amount of solid waste generated is anticipated to be consistent with the service needs anticipated by the Petaluma General Plan and evaluated in the General Plan EIR. Additionally, solid waste diversion will be achieved through compliance with General Plan policy 4-P-21 which requires waste reduction in compliance with the Countywide Integrated Waste Management Plan (CoIWMP), as well as General Plan Policy 2-P-122 and the California Green Building Standards Code, which require development of a construction waste management plan.

The City is in 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. Future development within the proposed Overlay will be supplied with the same solid waste and recycling opportunities through the County's existing waste management system via the city's solid waste service provider. Although future development within the Overlay will 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 Overlay component of the project will have a **less than significant** impact due to the generation and disposal of solid waste.

EKN Appellation Hotel

4.19 (a) (Relocation/Expansion of Utilities) Less Than Significant Impact: The project will not require or result in the relocation or expansion of offsite utilities. Existing water, wastewater, electric power, and telecommunications facilities already extend to the project site, will provide opportunities for connection from B Street and Petaluma Blvd. South, and have sufficient capacity to serve the proposed development. The project will not result in significant environmental impacts due to the expansion of utilities or construction of new utilities as improvements are limited to activities onsite and along the site frontages. Though the Hotel component of the project will increase the amount of impervious surface as compared to existing conditions, the Preliminary Stormwater Control Plan prepared for the project demonstrates incorporation of LID features that will detain and treat runoff produced by a rainfall intensity equal to 0.2 inches per hour, consistent with regional standards and will therefore not require relocation or expansion of existing stormwater utilities. As relocation and expansion of utilities is not proposed beyond connection from the site to existing utilities within the public right-of-way, and the project is subject to development fees, impacts of the Hotel component of the project will be **less than significant**.

6.19 (b) (Sufficient Water Supplies) Less Than Significant Impact: As described previously, as of 2020, the city's average per capita water use rate was within the target identified in the UWMP and existing water supplies

are sufficient to meet demand projected by the General Plan, including the Hotel component of the project as well as existing and planned demands through 2035. 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 Hotel component of the project. Therefore, existing water supplies, facilities, and infrastructure are sufficient to meet water demands of the project during normal, single, and multiple dry year events and as such impacts of the project to water supplies will be **less than significant**.

6.19 (c) (Sufficient Wastewater Treatment Capacity) Less Than Significant Impact: Wastewater generated by the project is within the expected conveyance and treatment capacity anticipated by the General Plan and will not require expansion of treatment facilities. Applicable wastewater capacity fees will be collected from the applicant to fund the project's fair share for use of existing 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 treat additional flows generated by the proposed project. No new construction or expansion of wastewater facilities are needed to accommodate the proposed project. Effluent generated by the Hotel component of the project will be conveyed to the existing sewer main within B Street which collects and conveys wastewater offsite through the municipal sanitary sewer system where it is ultimately conveyed to and treated at the Ellis Creek Water Recycling Facility.

The Hotel component of 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 Hotel component of the project falls within the capacity of the existing sanitary sewer lines and the City's wastewater treatment plant. The project will not include activities that generate wastewater requiring special treatment nor will it contain constituents exceeding applicable standards. The project will not exceed wastewater treatment requirements, adequate treatment capacity is available to accommodate wastewater generated by the project and impacts of the project will be **less than significant**.

6.19 (d, e) (Solid Waste Generation/Compliance with Solid Waste Management) Less Than Significant Impact: Construction of the Hotel component of the project will result in off haul of soil and some vegetation associated with removal of existing street trees. Based on the prior use of the site, removal of soil will be subject to approval by the Sonoma County Department of Health Services and the Regional Water Quality Control Board and will require proper handling and disposal in compliance with federal, state, and local statutes and regulations (see Section 4.9). Additionally, the project will be required to comply with General Plan policy 4-P-21, policy 2-P-122, and the California Green Building Standards Code which requires waste reduction in compliance with the ColWMP, and preparation of a construction waste management plan. Through compliance with applicable policies and regulations, impacts associated with construction waste will be **less than significant**.

As a commercial use, the Hotel component of the project will be required to comply with applicable state laws related to waste diversion including AB 341, which requires commercial properties that generate 4 cubic yards or more of solid waste per week to enroll in recycling service, AB 1826, which requires commercial properties generating 2 cubic yards or more of solid waste per week to enroll in compost service, AB 827, which requires commercial properties subject to AB 341 and AB 1826 to make recycling and compost receptacles available to customers, and SB 1383, which requires all businesses to divert organic materials (food waste, yard waste and, soiled paper products) from the landfill. As stated previously, the City is in contract with Recology for solid waste disposal, recycling services, and composting services. Recology provides canisters for garbage, green (organic) materials, and recycling. Generation rates and storage varies for commercial uses by business type. Although the project will generate additional solid waste relative to existing conditions, 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. Prior to issuance of occupancy the project will finalize a waste management plan with Recology. 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.

4.19. WILDFIRE

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
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"/>	<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"/>	<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"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

WILDFIRE SETTING

Petaluma is susceptible to wildland fires due to the steep topography, abundant fuel load as trees, bushes and grassland surrounding the city, and climatic conditions. Areas most susceptible to fire hazards are located near the city margins 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 Kincadee Fire burned approximately 77,758 acres 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.

As shown on the City of Petaluma Fire Hazard Severity Zone Map and the MTC/ABAG Hazard viewer, the entirety of the Overlay and Hotel components of the project are located outside of areas designated as fire hazard severity zones. Sites within the proposed Overlay, including the Hotel site, are generally flat, have historically been used for commercial purposes, and are primarily developed and surrounded by existing development.

Additionally, there is no history of wildfires occurring on or in the vicinity of sites located within the Overlay, including the site of the proposed Hotel.³⁵

WILDFIRE IMPACT ANALYSIS

Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel

4.20 (a-d) (Impair Emergency Plan; Wildfire Risk Exacerbation; Infrastructure Contributing to Wildfire Risk; Exposure to Wildfire-Related Risks) Less than Significant Impact: As stated above, the Overlay and Hotel components of the project are categorized as Non-VHFHZ by CAL FIRE and the City of Petaluma and are surrounded by urban uses. No portion of the proposed Overlay, including the site of the proposed Hotel component of the project are located in or adjacent to state responsibility areas of lands classified as very high fire hazard severity zones and as such impacts associated with impairment of an adopted emergency response plan or emergency evacuation plan, 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 will be **less than significant**.

WILDFIRE MITIGATION MEASURES

None required.

³⁵ MTC/ABAG Hazard Viewer Map, Layer: Historic Wildfire Perimeters, accessed September 2023, <https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8>

4.20. 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:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
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"/>	<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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

MANDATORY FINDINGS DISCUSSION

Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel

4.21 (a) (Degrade the Environment) Less Than Significant Impact with Mitigation Incorporated: As presented throughout this analysis future development under the Overlay component of the project as well as the Hotel component of the have the potential to result in temporary and permanent impacts to environmental resources. However, through the development review process for future development as well as implementation on standard conditions of approval, compliance with applicable federal, state, and local regulations, as well as implementation of mitigation measure identified herein, potentially significant impacts will be reduced to less than significant levels. As described in the Biological Resources discussion, based on the overall disturbed nature of sites within the Overlay, including the site of the proposed Hotel, impacts to special-status plant and wildlife species, as well as sensitive habitats will not occur, or will be avoided through compliance with mitigation measures. Additionally, the Cultural Resources discussion identifies potentially significant impacts to historical resources and identifies measures to ensure that potential impacts to buried cultural and tribal cultural resources are avoided. The Hydrology and Water Quality discussion and the Geology discussion identify measures to avoid and minimize potential environmental impacts associated with water quality, flooding, and soil stability. As described above, all future projects within the Overlay will be required to comply with applicable stormwater regulations, and as proposed the Hotel component of the project proposes onsite stormwater improvements that will capture runoff and provide for pretreatment prior to discharging to the city’s storm drain system. 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 Overlay and Hotel components of the project will have less than significant impacts due to degradation of the environment.

Further analysis of impacts related to historical resources will be included in the Cultural and Tribal Cultural Resources chapter of the EIR.

4.21 (b) (Cumulatively Affect the Environment) Potentially Significant Impact: Future development within the proposed Overlay as well as the proposed Hotel component of the project will contribute to cumulative impacts identified in the City's General Plan EIR. Incremental development within the Overlay will contribute to incremental growth in the city, thereby resulting in increased demands for public services and utilities, additional trips on local and regional roadways, and contributions to air quality and GHG emissions. The Overlay component of the project will encourage development within the city's downtown which will reduce GHG emissions associated with driving as goods, services, and residents will be located in a walkable and bikeable area proximate to transit. As discussed in detail in Sections 4.3, 4.6, and 4.8 of this document, the Hotel component of the project will be all-electric and will comply with applicable building and energy codes which will reduce the project's overall energy consumption and associated air quality and GHG emissions. Additionally, the Hotel component of the project will be required to implement air quality and GHG best management practices to reduce fugitive dust and GHG emissions during project construction.

However, the Project has the potential to result in significant cumulative impacts to scenic resources, the visual quality of the historic downtown, and/or listed or eligible historic resources. Therefore, a **potentially significant** impact could occur. *Further analysis of Cumulative Impacts will be included in the EIR.*

4.21 (c) (Substantial Adverse Effect on Humans) Less Than Significant with Mitigation: All future development proposed within the Overlay will be subject to independent discretionary review, which will ensure potential substantial adverse effects on humans are addressed on a site- and development-specific basis. The Hotel component of the project has the potential to result in adverse impacts to humans related to air quality, geology and soils, hazards, hydrology and water quality, noise, and transportation. However, through compliance with mitigation measures set forth herein, environmental effects with the potential directly or indirectly impact humans will be less than significant. As such, the Overlay and Hotel components of the project will have **less than significant** impacts due to substantial adverse effects on human beings.

MITIGATION MEASURES

Impacts identified above are addressed through incorporation of mitigation measures identified throughout this document and include those listed below. A full description of mitigation measures is included in the individual resource discussions contained in Sections 4.1 through 4.19 of this document.

- EKN AQ-1
- EKN BIO-1, EKN BIO-2
- EKN GEO-1, EKN GEO-2, EKN GEO-3, EKN GEO-4
- EKN GHG-1, EKN GHG-2
- EKN HAZ-1, EKN HAZ-2
- EKN NOI-1, EKN NOI-2
- EKN TRA-1

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APPELLATION HOTEL CONSTRUCTION HEALTH RISK & GREENHOUSE GAS ASSESSMENT

Petaluma, California

September 11, 2023

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I&R Project#: 23-111

Introduction

The purpose of this report is to address the potential health risk and greenhouse gas (GHG) impacts associated with the construction and operation of a proposed hotel development located at 2 Petaluma Boulevard South in Petaluma, California. Air quality and GHG impacts would be associated with demolition of existing uses and construction and operation of the hotel. Air pollutant emissions associated with the construction of the project were estimated using appropriate computer models. In addition, the potential health risk impacts from existing toxic air contaminant (TAC) sources affecting the nearby receptors were evaluated. The analysis was conducted following guidance provided by the Bay Area Air Quality Management District (BAAQMD).¹

Project Description

The existing 0.33-acre project site is currently vacant. The project proposes to construct a six-story, 93-room boutique hotel. The building would include a 3,209 square-foot (sf) ground floor seating area within a full-service restaurant, an attached 1,372-sf event space, a 5,514-sf seating area within a rooftop/open air bar, and 58 parking spaces in the below-grade parking garage.

Setting

The project is located in Sonoma County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}).

Air Pollutants of Concern

High ozone concentrations in the air basin are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO_x). These precursor pollutants react under certain meteorological conditions to form ozone concentrations. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ambient ozone concentrations. The highest ozone concentrations in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone concentrations aggravate respiratory and cardiovascular diseases, reduced lung function, and increase coughing and chest discomfort.

Particulate matter is another problematic air pollutant in the air basin. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM₁₀) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM_{2.5}). Elevated concentrations of PM₁₀ and PM_{2.5} are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter concentrations aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

¹ Bay Area Air Quality Management District, *2022 CEQA Guidelines*, April 2023.

Toxic Air Contaminants

TACs are a broad class of compounds known to cause morbidity or mortality, often because they cause cancer. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure of TACs can result in adverse health effects, they are regulated at the regional, State, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects from diesel exhaust exposure a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the Federal Hazardous Air Pollutants programs. Health risks from TACs are estimated using the Office of Environmental Health Hazard Assessment (OEHHA) risk assessment guidelines, which were published in February of 2015 and incorporated in BAAQMD's current CEQA guidance.²

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, people over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools. For cancer risk assessments, infants and small children are the most sensitive receptors, since they are more susceptible to cancer causing TACs. Residential locations are assumed to include infants and small children. The closest sensitive receptors to the project site are the residents in multi-family housing to the east. There are also additional receptors at further distances to the south of the site. This project would not introduce new sensitive receptors (i.e., residents) to the area.

Bay Area Air Quality Management District (BAAQMD)

BAAQMD has jurisdiction over an approximately 5,600-square mile area, commonly referred to as the San Francisco Bay Area (Bay Area). The District's boundary encompasses the nine San Francisco Bay Area counties, including Alameda County, Contra Costa County, Marin County, San Francisco County, San Mateo County, Santa Clara County, Napa County, southwestern Solano County, and southern Sonoma County.

BAAQMD is the lead agency in developing plans to address attainment and maintenance of the National Ambient Air Quality Standards and California Ambient Air Quality Standards. The

² OEHHA, *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, February 2015.

District also has permit authority over most types of stationary equipment utilized for the proposed project. The BAAQMD is responsible for permitting and inspection of stationary sources; enforcement of regulations, including setting fees, levying fines, and enforcement actions; and ensuring that public nuisances are minimized.

BAAQMD's Community Air Risk Evaluation (CARE) program was initiated in 2004 to evaluate and reduce health risks associated with exposures to outdoor TACs in the Bay Area.³ The program examines TAC emissions from point sources, area sources, and on-road and off-road mobile sources with an emphasis on diesel exhaust, which is a major contributor to airborne health risk in California. The CARE program is an on-going program that encourages community involvement and input. The technical analysis portion of the CARE program has been implemented in three phases that includes an assessment of the sources of TAC emissions, modeling and measurement programs to estimate concentrations of TAC, and an assessment of exposures and health risks. Throughout the program, information derived from the technical analyses has been used to develop emission reduction activities in areas with high TAC exposures and high density of sensitive populations. Risk reduction activities associated with the CARE program are focused on the most at-risk communities in the Bay Area. Seven areas have been identified by BAAQMD as impacted communities. They include Eastern San Francisco, Richmond/San Pablo, Western Alameda, San José, Vallejo, Concord, and Pittsburgh/Antioch. The project site is not within any of the BAAQMD CARE areas.

Overburdened communities are areas located (i) within a census tract identified by the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0 implemented by OEHHA, as having an overall score at or above the 70th percentile, or (ii) within 1,000 feet of any such census tract.⁴ The BAAQMD has identified several overburdened areas within its boundaries. However, the project site is not within an overburdened area as the Project site is scored at the 60th percentile on CalEnviroScreen.⁵

BAAQMD CEQA Air Quality Guidelines

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA. In 2023, the BAAQMD revised the *California Environmental Quality Act (CEQA) Air Quality Guidelines* that include significance thresholds to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The current BAAQMD guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process consistent with CEQA requirements including thresholds of significance, mitigation measures, and background air quality information. They include assessment methodologies for air toxics, odors, and GHG emissions. The current BAAQMD guidelines and thresholds were used in this analysis and are summarized in Table 1.⁶ Air quality impacts and health risks are considered potentially significant if they exceed these thresholds.

³ See BAAQMD: <https://www.baaqmd.gov/community-health/community-health-protection-program/community-air-risk-evaluation-care-program>.

⁴ See BAAQMD: https://www.baaqmd.gov/~/_media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20210722_01_appendixd_mapsofverburdenedcommunities-pdf.pdf?la=en.

⁵ OEHHA, CalEnviroScreen 4.0 Maps https://experience.arcgis.com/experience/11d2f52282a54cee6184203/page/CalEnviroScreen-4_0/

⁶ Bay Area Air Quality Management District, 2022 *CEQA Guidelines*, April 2023.

Table 1. BAAQMD CEQA Significance Thresholds

Criteria Air Pollutant	Construction Thresholds			
	Average Daily Emissions (lbs./day)			
ROG	54			
NO _x	54			
PM ₁₀	82 (Exhaust)			
PM _{2.5}	54 (Exhaust)			
CO	Not Applicable			
Fugitive Dust (PM ₁₀ /PM _{2.5})	Best Management Practices (BMPs)*			
Health Risks and Hazards	Single Sources/ Individual Project		Combined Sources (Cumulative from all sources within 1000-foot zone of influence)	
Excess Cancer Risk	>10 in a million	OR Compliance with Qualified Community Risk Reduction Plan	>100 in a million	OR Compliance with Qualified Community Risk Reduction Plan
Hazard Index	>1.0		>10.0	
Incremental annual PM _{2.5}	>0.3 µg/m ³		>0.8 µg/m ³	
Greenhouse Gas Emissions				
Land Use Projects – (Must Include A or B)	<p>A. Projects must include, at a minimum, the following project design elements:</p> <ol style="list-style-type: none"> 1. Buildings <ol style="list-style-type: none"> a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development). b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines. 2. Transportation <ol style="list-style-type: none"> a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor’s Office of Planning and Research’s Technical Advisory on Evaluating Transportation Impacts in CEQA: <ol style="list-style-type: none"> i. Residential projects: 15 percent below the existing VMT per capita ii. Office projects: 15 percent below the existing VMT per employee iii. Retail projects: no net increase in existing VMT a. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2. <p>B. Be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).</p>			
<p>Note: ROG = reactive organic gases, NO_x = nitrogen oxides, PM₁₀ = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, PM_{2.5} = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less. GHG = greenhouse gases.</p> <p>* BAAQMD strongly recommends implementing all feasible fugitive dust management practices especially when construction projects are located near sensitive communities, including schools, residential areas, or other sensitive land uses.</p>				

Source: Bay Area Air Quality Management District, 2022

The BAAQMD recommends all projects include a “basic” set of best management practices (BMPs) to manage fugitive dust and consider impacts from dust (i.e., fugitive PM₁₀ and PM_{2.5}) to be less than significant if BMPs are implemented. The project would be required to implement the following BMPs recommended by BAAQMD, which have been adopted by the City of Petaluma as Standard Permit Conditions, during all phases of construction to reduce dust and other particulate matter emissions.

Basic Best Management Practices / Standard Permit Conditions: Include measures to control dust and exhaust during construction.

During any construction period ground disturbance, the applicant shall ensure that the project contractor implement measures to control dust and exhaust. Implementation of the measures recommended by BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less-than-significant level. The contractor shall implement the following BMPs that are required of all projects:

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 off-site 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 miles per hour (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. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
7. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
8. Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
9. Publicly visible signs shall be posted with the telephone number and name of the 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 General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

BAAQMD strongly encourages enhanced BMPs for construction sites near schools, residential areas, or other sensitive land uses. Enhanced measures include:

- Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities.
- Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimize the amount of excavated material or waste materials stored at the site.
- Hydroseed or apply non-toxic soil stabilizers to construction areas, including previously graded areas, that are inactive for at least 10 calendar days.

City of Petaluma General Plan 2025

The City of Petaluma General Plan 2025⁷ includes policies and programs to reduce exposure of the City's sensitive population to exposure of air pollution and TACs. The following policies and programs are applicable to the proposed project:

4-P-15 Improve air quality by reducing emissions from stationary point sources of air pollution (e.g., equipment at commercial and industrial facilities) and stationary area sources (e.g., wood-burning fireplaces & gas powered lawn mowers) which cumulatively emit large quantities of emissions.

- A. Continue to work with the Bay Area Air Quality Management District to achieve emissions reductions for non-attainment pollutants; including carbon monoxide, ozone, and PM10, by implementation of air pollution control measures as required by State and federal statutes. The BAAQMD's CEQA Guidelines should be used as the foundation for the City's review of air quality impacts under CEQA.
- B. Continue to use Petaluma's development review process and the CEQA regulations to evaluate and mitigate the local and cumulative effects of new development on air quality.
- C. Continue to require development projects to abide by the standard construction dust abatement measures included in BAAQMD's CEQA Guidelines. These measures would reduce exhaust and particulate emissions from construction and grading activities.
- D. Reduce emissions from residential and commercial uses by requiring the following:

⁷ City of Petaluma, City of *Petaluma: General Plan 2025*, May 2008. Web: <https://cityofpetaluma.org/documents/general-plan/>

- 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;
- Incorporation of passive solar building design and landscaping conducive to passive solar energy use for both residential and commercial uses, i.e., building orientation in a south to southeast direction, encourage planting of deciduous trees on west sides of structures, landscaping with drought resistant species, and use of groundcovers rather than pavement to reduce heat reflection;
- Encourage the use of battery-powered, electric, or other similar equipment that does not impact local air quality for nonresidential maintenance activities;
- Provide natural gas hookups to fireplaces or require residential use of EPA-certified wood stoves, pellet stoves, or fireplace inserts. Current building code standards generally ban the installation of open-hearth, wood burning fireplaces and wood stoves in new construction. It does, however, allow for the use of low-polluting wood stoves and inserts in fireplaces approved by the federal Environmental Protection Agency, as well as fireplaces fueled by natural gas.

4-P-16 To reduce combustion emissions during construction and demolition phases, the contractor of future individual projects shall encourage the inclusion in construction contracts of the following requirements or measures shown to be equally effective:

- Maintain construction equipment engines in good condition and in proper tune per manufacturer's specification for the duration of construction;
- Minimize idling time of construction related equipment, including heavy-duty equipment, motor vehicles, and portable equipment;
- Use alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline);
- Use add-on control devices such as diesel oxidation catalysts or particulate filters;
- Use diesel equipment that meets the ARB's 2000 or newer certification standard for off-road heavy-duty diesel engines;
- Phase construction of the project;
- Limit the hours of operation of heavy-duty equipment.

It is noted the City is in the process of updating its general plan. It began the process in 2020. Plan Vision materials were adopted by the City Council in mid-2022, the City's Housing Element was adopted in March 2023, and other plan elements will continue to be developed through 2023.⁸

⁸ City of Petaluma, *General Plan Update*. Web: <https://www.planpetaluma.org/documents>

Construction Period Emissions

The California Emissions Estimator Model (CalEEMod) Version 2022 was used to estimate emissions from on-site construction activity, construction vehicle trips, and evaporative emissions. The project land use types and size were input to CalEEMod. The CalEEMod model output along with construction inputs are included in *Attachment 1*.

CalEEMod Modeling

Land Use Inputs

The proposed project land uses were entered into CalEEMod as described in Table 2.

Table 2. Summary of Project Land Use Inputs⁹

Project Land Uses	Size	Units	Square Feet (sf)	Acreage
Hotel	93	Room	41,708	0.33
Quality Restaurant	4.39	1,000-sf	4,394	
Enclosed Parking with Elevator	58	Spaces	12,500	

Construction Inputs

CalEEMod computes annual emissions for construction that are based on the project type, size, and acreage. The model provides emission estimates for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. The construction build-out scenario, including equipment quantities, average hours per day, total number of workdays, and schedule, were provided by the project applicant (included in *Attachment 1*). The construction schedule assumed that the earliest possible start date would be November 2024 and would be completed over a period of approximately 19 months, or 414 construction workdays. The earliest year of full operation was assumed to be 2027.

Construction Truck Traffic Emissions

Construction would produce traffic in the form of worker trips and truck traffic. The traffic-related emissions are based on worker and vendor trip estimates produced by CalEEMod and haul trips that were computed based on the soil imported and/or exported to the site and the estimate of concrete truck trips to and from the site. CalEEMod provides daily estimates of worker and vendor trips for each applicable phase. Daily haul trips for grading were developed by CalEEMod using the provided soil import/export volumes. The number of total concrete round haul trips were estimated for the project and converted to daily one-way trips, assuming

⁹ The CalEEMod model is limited in regard to land use inputs. Therefore, the rooftop bar land use is included as part of the hotel land use. Restaurant square-footage is consistent with the project's traffic analysis, which is slightly less than the total of the proposed restaurant and event space square-footage. However, the difference in square footage is small (i.e., less than 1,000 sf) and would have a negligible increase in construction emissions. Therefore, it would not change the analysis findings.

two trips per delivery. These values are shown in the project construction equipment worksheet included in *Attachment 1*.

Summary of Computed Construction Period Emissions

Average daily emissions were annualized for each year of construction by dividing the annual construction emissions and dividing those emissions by the number of active workdays during that year. Table 3 shows the annualized average daily construction emissions of ROG, NO_x, PM₁₀ exhaust, and PM_{2.5} exhaust during construction of the project. As indicated in Table 3, predicted annualized project construction emissions would not exceed the BAAQMD significance thresholds during any year of construction.

Table 3. Construction Period Emissions

Year	ROG	NO _x	PM ₁₀ Exhaust	PM _{2.5} Exhaust
<i>Construction Emissions (Tons)</i>				
2024-2025*	0.15	1.21	0.03	0.03
2026	0.19	0.06	<0.01	<0.01
<i>Average Daily Construction Emissions (pounds/day)</i>				
2024-2025* (305 construction workdays)	0.95	7.93	0.21	0.20
2026 (109 construction workdays)	3.52	1.15	0.04	0.03
<i>BAAQMD Thresholds (pounds per day)</i>	54 lbs./day	54 lbs./day	82 lbs./day	54 lbs./day
Exceed Threshold?	No	No	No	No

* Includes 2 months from 2024.

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5}. Sources of fugitive dust include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site deposit mud on local streets, which is an additional source of airborne dust after it dries. The BAAQMD recommends all projects include a “basic” set of best management practices (BMPs) to manage fugitive dust and consider impacts from dust (i.e., fugitive PM₁₀ and PM_{2.5}) to be less than significant if BMPs are implemented. Petaluma General Policy 4-P-15 Part C and Policy 4-P-16 specifies that projects are to abide by the standard construction dust abatement measures included in BAAQMD’s CEQA Guidelines to reduce exhaust, combustion, and particulate emissions from construction, demolition, and grading activities. Therefore, the project would be required to implement the following BAAQMD BMPs, which have been adopted by the City as Standard Permit Conditions, during all phases of construction.

Standard Permit Conditions / Basic BMPs: Include measures to control dust and exhaust during construction.

During any construction period ground disturbance, the applicant shall ensure that the project contractor implement measures to control dust and exhaust. Implementation of the measures listed below would reduce the air quality impacts associated with grading and new construction to a less-than-significant level. The contractor shall implement the following BMPs that are required of all projects:

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 off-site 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 miles per hour (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. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
7. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
8. Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
9. Publicly visible signs shall be posted with the telephone number and name of the 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 General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

Effectiveness of Mitigation Measure AQ-1

The measures above are consistent with BAAQMD-recommended basic BMPs for reducing fugitive dust contained in the BAAQMD CEQA Air Quality Guidelines. For this analysis, only the basic set of BMPs are required as the unmitigated fugitive dust emissions from construction are below the BAAQMD single-source threshold.

Operational Emissions Screening

Chapter 4 of the BAAQMD CEQA Guidelines includes screening levels for criteria air pollutants. These screening levels provide a conservative indication of whether implementing a proposed project of a certain size could result in potentially significant criteria air pollutants impacts. In accordance with BAAQMD CEQA Guidelines, the *Mixed Land Use Screening Tool for Criteria Pollutants* was used. After inputting the project's land uses as described in Table 1,

it was estimated the project would not exceed the operational criteria pollutant thresholds and further pollutant analysis was not required. The results of the *Mixed Land Use Screening Tool* are included in *Attachment 1*.

Construction Health Risk Impacts

Project health risk impacts can occur either by generating emissions of TACs and fine particulate matter (PM_{2.5}) or by introducing a new sensitive receptor in proximity to an existing source of TACs/PM_{2.5}. Construction activity would temporarily generate emissions of DPM from equipment and trucks and dust (PM_{2.5}) that could affect nearby sensitive receptors. A construction health risk assessment was conducted to address impacts on the surrounding off-site sensitive receptors.

There may be sources of existing TACs and localized air pollutants in the vicinity of the project. The cumulative impact of the existing sources of TACs upon the existing sensitive receptors, including the project's contribution was assessed.

Health risk impacts are addressed by predicting increased lifetime cancer risk, the increase in annual PM_{2.5} concentrations, and computing the Hazard Index (HI) for non-cancer health risks. Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. These exhaust emissions pose health risks for sensitive receptors such as surrounding residents. The primary health risk impact issues associated with construction emissions are cancer risk and exposure to PM_{2.5}. A health risk assessment of the project construction activities was conducted that evaluated potential health effects to nearby sensitive receptors from construction emissions of DPM and PM_{2.5}.¹⁰ This assessment included dispersion modeling to predict the offsite concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated.

Construction Period Emissions

The CalEEMod model provided total annual PM₁₀ exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles. Total uncontrolled DPM emissions were estimated to be 0.03 tons (62 pounds) and fugitive dust emissions (PM_{2.5}) to be 0.12 tons (231 pounds) from all construction stages. The on-road emissions are a result of haul truck travel during grading activities, worker travel, and vendor deliveries during construction. A trip length of half a mile was used to represent vehicle travel while at or near the construction site. It was assumed that the emissions from on-road vehicles traveling at or near the site would occur at the construction site.

Dispersion Modeling

The U.S. EPA AERMOD dispersion model was used to predict DPM and PM_{2.5} concentrations at sensitive receptors (i.e., residences) in the vicinity of the project construction area. The AERMOD dispersion model is a BAAQMD-recommended model for use in modeling analysis

¹⁰DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.

of these types of emission activities for CEQA projects.¹¹ Emission sources for the construction site were grouped into two categories: exhaust emissions of DPM and fugitive PM_{2.5} dust emissions.

Construction Sources

To represent the construction equipment exhaust emissions, an area source was used with an emission release height of 20 feet (6 meters).¹² The release height incorporates both the physical release height from the construction equipment (i.e., the height of the exhaust pipe) and plume rise after it leaves the exhaust pipe. Plume rise is due to both the high temperature of the exhaust and the high velocity of the exhaust gas. It should be noted that when modeling an area source, plume rise is not calculated by the AERMOD dispersion model as it would do for a point source (exhaust stack). Therefore, the release height from an area source used to represent emissions from sources with plume rise, such as construction equipment, was based on the height the exhaust plume is expected to achieve, not just the height of the top of the exhaust pipe.

For modeling fugitive PM_{2.5} emissions, an area source with a near-ground level release height of 7 feet (2 meters) was used. Fugitive dust emissions at construction sites come from a variety of sources, including truck and equipment travel, grading activities, truck loading (with loaders) and unloading (rear or bottom dumping), loaders and excavators moving and transferring soil and other materials, etc. All of these activities result in fugitive dust emissions at various heights at the point(s) of generation. Once generated, the dust plume will tend to rise as it moves downwind across the site and exit the site at a higher elevation than when it was generated. For all these reasons, a 7-foot release height was used as the average release height across the construction site. Figure 1 shows the project construction site and receptors.

AERMOD Inputs and Meteorological Data

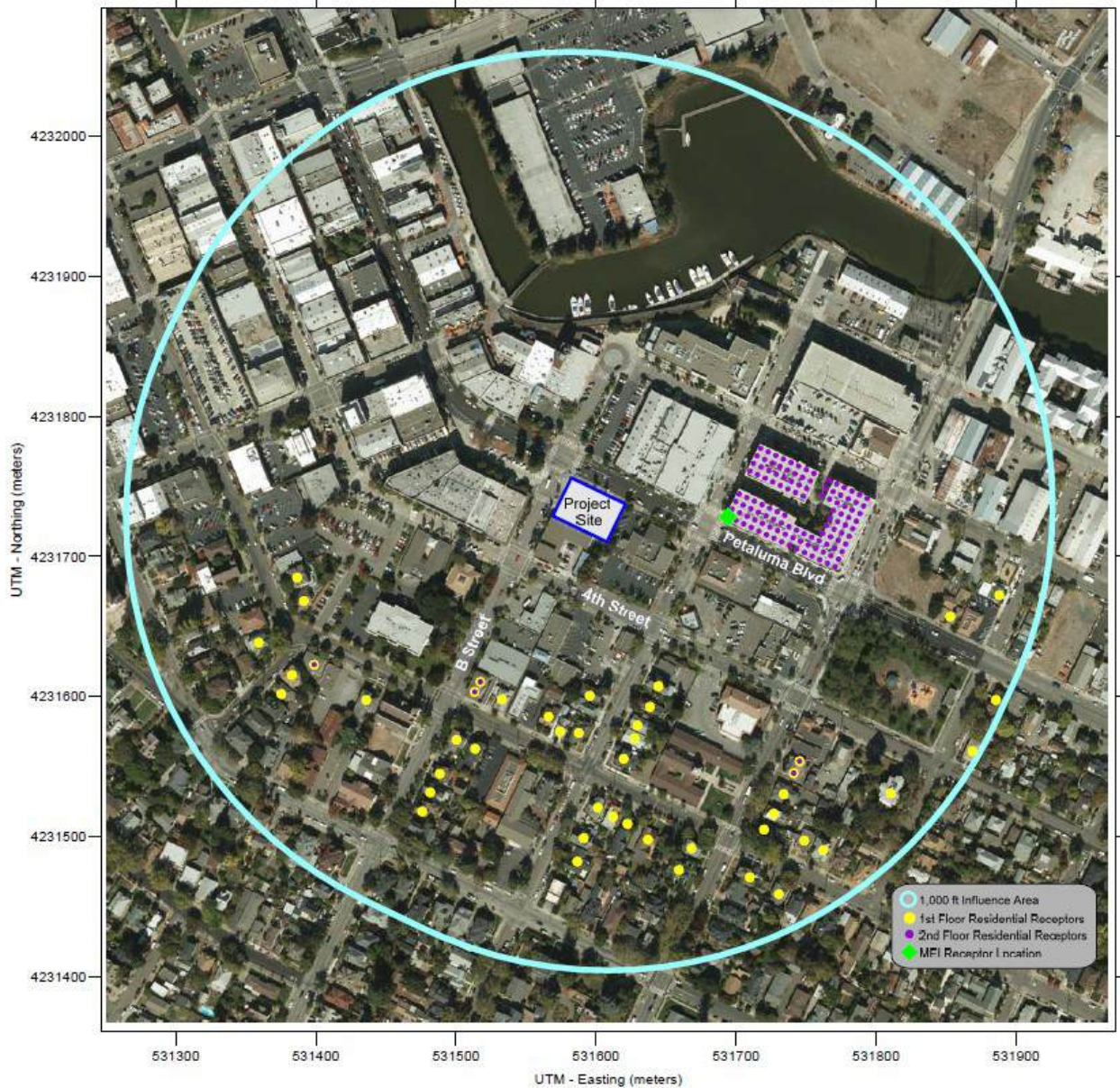
The modeling used a five-year data set (2013 - 2017) of hourly meteorological data prepared by Lakes Environmental for modeling in the City of Petaluma for use with AERMOD. Construction emissions were modeled as occurring daily between 7:00 a.m. 4:00 p.m., per the provided construction schedule. Annual DPM and PM_{2.5} concentrations from construction activities during the 2024-2026 period were calculated at nearby sensitive receptors using the model. Receptor heights of 5 feet (1.5 meters), 20 feet (6.1 meters), and 28 feet (8.7 meters) were used to represent the breathing height on the first through third floors of nearby single- and multi-family residences.¹³

¹¹ BAAQMD, 2023, *Appendix E of the 2022 BAAQMD CEQA Guidelines*. April.

¹² California Air Resource Board, 2007. *Proposed Regulation for In-Use Off-Road Diesel Vehicles, Appendix D: Health Risk Methodology*. April. Web: <https://ww3.arb.ca.gov/regact/2007/ordiesl07/ordiesl07.htm>

¹³ Bay Area Air Quality Management District, 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0*. May. Web: <https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en>

Figure 1. Locations of Project Construction Site, Off-Site Sensitive Receptors, and Maximum TAC Impacts (MEI)



Summary of Construction Health Risk Impacts at the Off-Site MEI

The maximum increased cancer risks were calculated using the modeled TAC concentrations combined with the BAAQMD CEQA guidance for age sensitivity factors and exposure parameters. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. Infant, child, and adult exposures were assumed to occur at all residences during the entire construction period.

Non-cancer health hazards and maximum PM_{2.5} concentrations were also calculated. The maximum modeled annual PM_{2.5} concentration was calculated based on combined exhaust and

fugitive concentrations. The maximum computed HI value was based on the ratio of the maximum DPM concentration modeled and the chronic inhalation reference exposure level of 5 µg/m³.

The modeled maximum annual DPM and PM_{2.5} concentrations were identified at nearby sensitive receptors (as shown in Figure 1) to find the maximally exposed individuals (MEI). Results of this assessment indicated that the construction MEI was located at a unit on the second floor (20 feet above ground) of the multi-family building east of the project site. Table 4 summarizes the maximum cancer risks, PM_{2.5} concentrations, and HI for project related construction activities affecting the construction MEI. *Attachment 2* to this report includes the emission calculations used for the construction modeling and the cancer risk calculations.

As shown in Table 4, the maximum cancer risks, annual PM_{2.5} concentration, and Hazard Index from uncontrolled (i.e., unmitigated) construction activities at the MEI location would not exceed the BAAQMD single-source significance threshold.

Table 4. Construction Risk Impacts at the Off-Site MEI

Source	Cancer Risk (per million)	Annual PM _{2.5} (µg/m ³)	Hazard Index
Project Construction Unmitigated	7.07 (infant)	0.20*	0.01
BAAQMD Single-Source Threshold	10	0.3	1.0
Exceed Threshold? Unmitigated	<i>No</i>	<i>No</i>	<i>No</i>

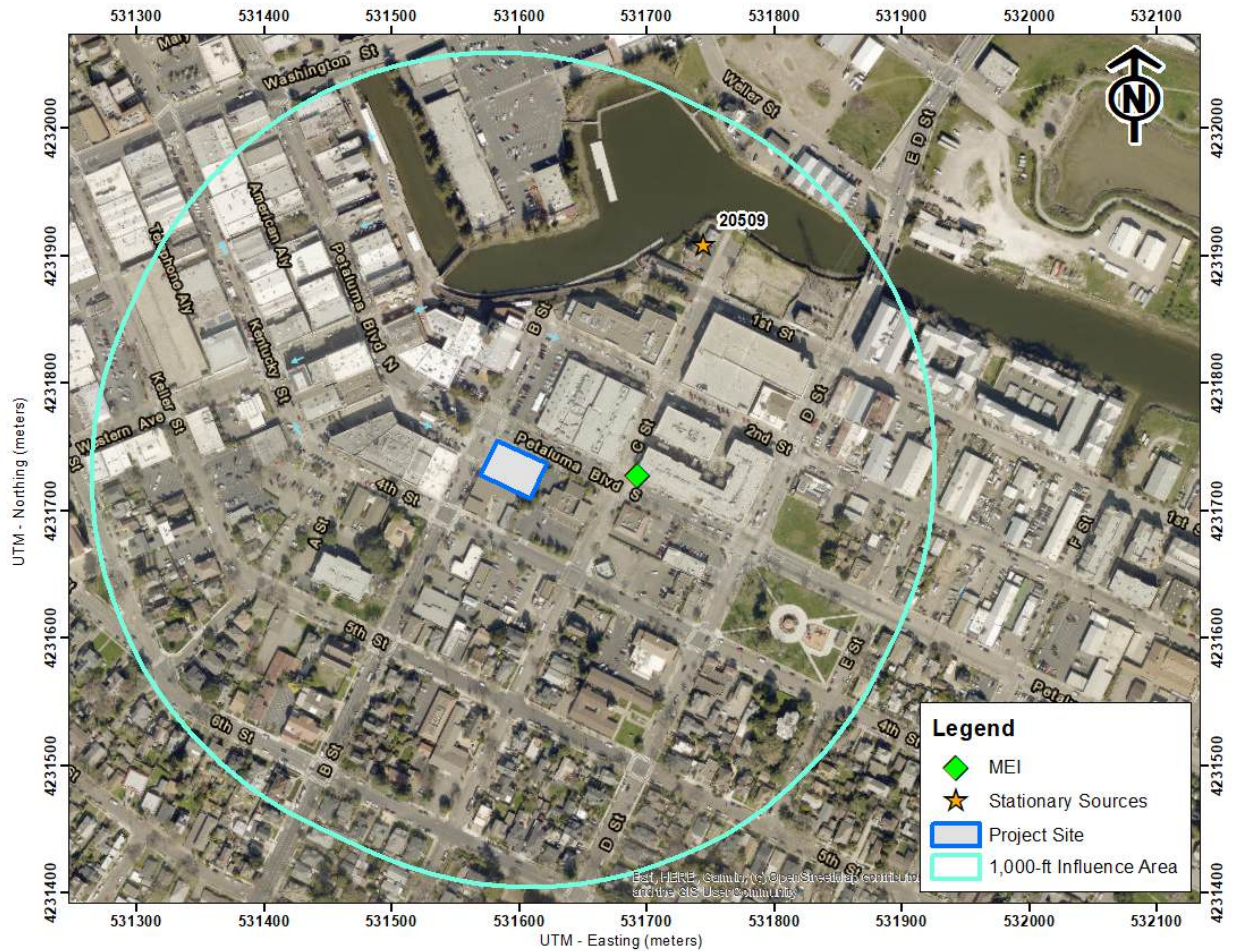
* Annual PM_{2.5} concentration does not include BMPs in the impact.

Cumulative Health Risks of all TAC Sources at the Off-Site Project MEI

Cumulative health risk assessments look at all substantial sources of TACs located within 1,000 feet of a project site (i.e., influence area) that can affect sensitive receptors. These sources include rail lines, highways, busy surface streets, and stationary sources identified by BAAQMD.

A review of BAAQMD’s geographic information systems (GIS) screening maps identified the existing health risks from various sources at the MEI. One stationary source with the potential to affect the MEI was located within 1,000 feet of the project site. In addition, screening-level impacts from nearby roadways were estimated. There are no rail lines located within 1,000 feet of the project site, so the screening-level impacts from rail lines were not evaluated. Figure 2 shows the project area included within the influence area and the location of the MEI. Details of the cumulative screening and health risk calculations are included in *Attachment 3*.

Figure 2. Project Site, Project MEI, and Nearby TAC Sources



Local Roadways

The project site is located in the downtown Petaluma area with arterial roadways nearby (see Figure 2). Screening-level cancer risks, PM_{2.5} concentrations, and HI associated with traffic on the local roadways were estimated using BAAQMD’s GIS data files (i.e., raster files). BAAQMD raster files were produced using AERMOD and 20x20-meter emissions grid, EMFAC2021 data for vehicle emissions and fleet mix, and includes Appendix E of the Air District’s CEQA Air Quality Guidance for risk assessment assumptions. Note that BAAQMD’s screening values are not adjusted for age sensitivity or exposure duration and are considered higher than values that would be obtained with refined modeling methods. The local cumulative roadway screening-level cancer risk, PM_{2.5} concentration, and HI impacts at the project MEI are listed in Table 5.

BAAQMD Permitted Stationary Sources

Permitted stationary sources of air pollution near the project site were identified using BAAQMD’s *Permitted Stationary Sources 2021* GIS map website.¹⁴ This mapping tool identifies the location of nearby stationary sources and their estimated risk and hazard impacts, including emissions and adjustments to account for OEHHA guidance. One source was identified within 1,000 feet of the project site using this tool, a diesel generator. The BAAQMD GIS website provided screening risks and hazards for this source. Therefore, a stationary source information request was not required to be submitted to BAAQMD.

The screening level risks and hazards provided by BAAQMD for the stationary source was adjusted for distance using BAAQMD’s *Distance Adjustment Multiplier Tool for Diesel Internal Combustion Engines*. Health risk impacts from the stationary source upon the MEI are reported in Table 5.

Summary of Cumulative Risks at the Project MEI

Table 5 reports both the project and cumulative health risk impacts at the sensitive receptors most affected by construction (i.e., the MEI). As shown, the project would not exceed the single-source or cumulative-source thresholds for cancer risk, annual PM_{2.5} concentration, and HI.

Table 5. Impacts from Combined Sources at Construction MEI

Source	Cancer Risk (per million)	Annual PM _{2.5} (µg/m ³)	Hazard Index
Project Impacts			
Project Construction Unmitigated	7.07 (infant)	0.20	0.01
BAAQMD Single-Source Threshold			
	10	0.3	1.0
Exceed Threshold? Unmitigated	<i>No</i>	<i>No</i>	<i>No</i>
Cumulative Impacts			
Cumulative Roadways - BAAQMD Screening Raster Data	21.79	0.22	0.04
City of Petaluma (Facility #20509, Generator), MEI at 600 feet	0.25	<0.01	<0.01
Cumulative Total Unmitigated	29.11	<0.43	<0.06
BAAQMD Cumulative Source Threshold			
	100	0.8	10.0
Exceed Threshold? Unmitigated	<i>No</i>	<i>No</i>	<i>No</i>

¹⁴ BAAQMD, Web: <https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3>

GREENHOUSE GAS EMISSIONS

Setting

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. The most common GHGs are carbon dioxide (CO₂) and water vapor but there are also several others, most importantly methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO₂, CH₄, and N₂O are byproducts of fossil fuel combustion.
- N₂O is associated with agricultural operations such as fertilization of crops.
- CH₄ is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and sulfur hexafluoride emissions are commonly created by industries such as aluminum production and semi-conductor manufacturing.

Each GHG has its own potency and effect upon the earth's energy balance. This is expressed in terms of a global warming potential (GWP), with CO₂ being assigned a value of 1 and sulfur hexafluoride being several orders of magnitude stronger. In GHG emission inventories, the weight of each gas is multiplied by its GWP and is measured in units of CO₂ equivalents (CO₂e).

An expanding body of scientific research supports the theory that global climate change is currently affecting changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

Federal and Statewide GHG Emissions

The U.S. EPA reported that in 2022, total gross nationwide GHG emissions were 5,215.6 million metric tons (MMT) carbon dioxide equivalent (CO₂e).¹⁵ These emissions were lower than peak

¹⁵ United States Environmental Protection Agency, 2022. *Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2020*. February. Web: <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>

levels of 7,416 MMT that were emitted in 2007. CARB updates the statewide GHG emission inventory on an annual basis where the latest inventory includes 2000 through 2020 emissions.¹⁶ In 2020, GHG emissions from statewide emitting activities were 369.2 MMT CO₂e. The 2020 emissions have decreased by 25 percent since peak levels in 2004 and are 35.3 MMT CO₂e lower than 2019 emissions level and almost 62 MMT CO₂e below the State's 2020 GHG limit of 431 MMT CO₂e. Per capita GHG emissions in California have dropped from a 2001 peak of 13.8 MT CO₂e per person to 9.3 MT CO₂e per person in 2020.

Recent Regulatory Actions for GHG Emissions

Executive Order S-3-05 – California GHG Reduction Targets

Executive Order (EO) S-3-05 was signed by Governor Arnold Schwarzenegger in 2005 to set GHG emission reduction targets for California. The three targets established by this EO are as follows: (1) reduce California's GHG emissions to 2000 levels by 2010, (2) reduce California's GHG emissions to 1990 levels by 2020, and (3) reduce California's GHG emissions by 80 percent below 1990 levels by 2050.

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

Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006, codified the State's GHG emissions target by directing CARB to reduce the State's global warming emissions to 1990 levels by 2020. AB 32 was signed and passed into law by Governor Schwarzenegger on September 27, 2006. Since that time, the CARB, CEC, California Public Utilities Commission (CPUC), and Building Standards Commission have all been developing regulations that will help meet the goals of AB 32 and Executive Order S-3-05, which has a target of reducing GHG emissions 80 percent below 1990 levels.

The first Scoping Plan for AB 32 was adopted by CARB in December 2008. Its most recent update was completed in December of 2022¹⁷. It contains the State's main strategies to achieve carbon neutrality by 2045. This plan extends and expands upon the earlier versions with a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. It also takes the step of adding carbon neutrality as a science-based guide and touchstone for California's climate work. Measures to achieve carbon neutrality include rapidly moving to zero emission vehicles (ZEV), removing natural gas as an option for space conditioning, increasing the number of solar arrays and wind turbines, and scaling up renewable hydrogen for hard-to-electrify end uses.

Senate Bill 375 – California's Regional Transportation and Land Use Planning Efforts (2008)

California enacted legislation (SB 375) to expand the efforts of AB 32 by controlling indirect GHG emissions caused by urban sprawl. SB 375 provides incentives for local governments and applicants to implement new conscientiously planned growth patterns. This includes incentives

¹⁶ CARB. 2022. *California Greenhouse Gas Emission for 2000 to 2020*. Web: https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000-2020_ghg_inventory_trends.pdf

¹⁷ CARB. 2022. Final 2022 Scoping Plan Update and Appendices. Web: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>

for creating attractive, walkable, and sustainable communities and revitalizing existing communities. The legislation also allows applicants to bypass certain environmental reviews under CEQA if they build projects consistent with the new sustainable community strategies. Development of more alternative transportation options that would reduce vehicle trips and miles traveled, along with traffic congestion, would be encouraged. SB 375 enhances CARB's ability to reach the AB 32 goals by directing the agency in developing regional GHG emission reduction targets to be achieved from the transportation sector for 2020 and 2035. CARB works with the metropolitan planning organizations (e.g., ABAG and MTC) to align their regional transportation, housing, and land use plans to reduce VMT and demonstrate the region's ability to attain its GHG reduction targets. A similar process is used to reduce transportation emissions of ozone precursor pollutants in the Bay Area.

Senate Bill 350 - Renewable Portfolio Standards

In September 2015, the California Legislature passed SB 350, which increases the states Renewables Portfolio Standard (RPS) for content of electrical generation from the 33 percent target for 2020 to a 50 percent renewables target by 2030.

Executive Order B-30-15 & Senate Bill 32 GHG Reduction Targets – 2030 GHG Reduction Target

In April 2015, Governor Brown signed EO B-30-15, which extended the goals of AB 32, setting a GHG emissions target at 40 percent of 1990 levels by 2030. On September 8, 2016, Governor Brown signed Senate Bill (SB) 32, which legislatively established the GHG reduction target of 40 percent of 1990 levels by 2030. In November 2017, CARB issued *California's 2017 Climate Change Scoping Plan*.¹⁸ While the State is on track to exceed the AB 32 scoping plan 2020 targets, this plan is an update to reflect the enacted SB 32 reduction target.

SB 32 was passed in 2016, which codified a 2030 GHG emissions reduction target of 40 percent below 1990 levels. CARB has drafted a 2022 Scoping Plan Update to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32. The 2022 draft plan:

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

¹⁸ California Air Resource Board, 2017. *California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Targets*. November. Web: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf

- Relies on the most up to date science, including the need to deploy all viable tools, including carbon capture and sequestration as well as direct air capture.
- Evaluates multiple options for achieving our GHG and carbon neutrality targets, as well as the public health benefits and economic impacts associated with each.

The Scoping Plan was updated in 2022 and lays out how the state can get to carbon neutrality by 2045 or earlier. It is the first Scoping Plan that adds carbon neutrality as a science-based guide and touchstone beyond statutorily established emission reduction targets.¹⁹

The mid-term 2030 target is considered critical by CARB on the path to obtaining an even deeper GHG emissions target of 80 percent below 1990 levels by 2050, as directed in Executive Order S-3-05. The 2022 Scoping Plan outlines the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure, providing a blueprint to continue driving down GHG emissions and to not only obtain the statewide goals, but cost-effectively achieve carbon-neutrality by 2045 or earlier. In the 2022 Scoping Plan, CARB recommends:

- VMT per capita reduced 12% below 2019 levels by 2030 and 22% below 2019 levels by 2045.
- 100% of Light-duty vehicle sales are zero emissions vehicles (ZEV) by 2035.
- 100% of medium duty/heavy duty vehicle sales are ZEV by 2040.
- 100% of passenger and other locomotive sales are ZEV by 2030.
- 100% of line haul locomotive sales are ZEV by 2035.
- All electric appliances in new residential and commercial building beginning 2026 (residential) and 2029 (commercial).
- 80% of residential appliance sales are electric by 2030 and 100% of residential appliance sales are electric by 2035.
- 80% of commercial appliance sales are electric by 2030 and 100% of commercial appliance sales are electric by 2045.

SB 743 Transportation Impacts

Senate Bill 743 required lead agencies to abandon the old “level of service” metric for evaluating a project’s transportation impacts, which was based solely on the amount of delay experienced by motor vehicles. In response, the Governor’s Office of Planning and Research (OPR) developed a VMT metric that considered other factors such as reducing GHG emissions and developing multimodal transportation²⁰. A VMT-per-capita metric was adopted into the CEQA Guidelines Section 15064.3 in November 2017. Given current baseline per-capita VMT levels computed by CARB in the 2030 Scoping Plan of 22.24 miles per day for light-duty vehicles and 24.61 miles per day for all vehicle types, the reductions needed to achieve the 2050 climate goal are 16.8 percent for light-duty vehicles and 14.3 percent for all vehicle types combined. Based on

¹⁹ <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>

²⁰ Governor’s Office of Planning and Research. 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December.

this analysis (as well as other factors), OPR recommended using a 15-percent reduction in per capita VMT as an appropriate threshold of significance for evaluating transportation impacts.

Executive Order B-55-18 – Carbon Neutrality

In 2018, a new statewide goal was established to achieve carbon neutrality as soon as possible, but no later than 2045, and to maintain net negative emissions thereafter. CARB and other relevant state agencies are tasked with establishing sequestration targets and create policies/programs that would meet this goal.

Senate Bill 100 – Current Renewable Portfolio Standards

In September 2018, SB 100 was signed by Governor Brown to revise California’s RPS program goals, furthering California’s focus on using renewable energy and carbon-free power sources for its energy needs. The bill would require all California utilities to supply a specific percentage of their retail sales from renewable resources by certain target years. By December 31, 2024, 44 percent of the retail sales would need to be from renewable energy sources, by December 31, 2026 the target would be 40 percent, by December 31, 2027 the target would be 52 percent, and by December 31, 2030 the target would be 60 percent. By December 31, 2045, all California utilities would be required to supply retail electricity that is 100 percent carbon-free and sourced from eligible renewable energy resource to all California end-use customers.

California Building Standards Code – Title 24 Part 11 & Part 6

The California Green Building Standards Code (CALGreen Code) is part of the California Building Standards Code under Title 24, Part 11.²¹ The CALGreen Code encourages sustainable construction standards that involve planning/design, energy efficiency, water efficiency resource efficiency, and environmental quality. These green building standard codes are mandatory statewide and are applicable to residential and non-residential developments. The most recent CALGreen Code (2022 California Building Standard Code) was effective as of January 1, 2023.

The California Building Energy Efficiency Standards (California Energy Code) is under Title 24, Part 6 and is overseen by the California Energy Commission (CEC). This code includes design requirements to conserve energy in new residential and non-residential developments, while being cost effective for homeowners. This Energy Code is enforced and verified by cities during the planning and building permit process. The current energy efficiency standards (2022 Energy Code) replaced the 2019 Energy Code as of January 1, 2023. Under the 2019 standards, single-family homes are predicted to be 53 percent more efficient than homes built under the 2016 standard due more stringent energy-efficiency standards and mandatory installation of solar photovoltaic systems. For nonresidential developments, it is predicted that these buildings will use 30 percent less energy due to lightening upgrades.²²

²¹ See: <https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen#:~:text=CALGreen%20is%20the%20first%2Din,to%201990%20levels%20by%202020.>

²² See: https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf

Requirements for electric vehicle (EV) charging infrastructure are set forth in Title 24 of the California Code of Regulations. The CALGreen standards consist of a set of mandatory standards required for new development, as well as two more voluntary standards known as Tier 1 and Tier 2. The CalGreen 2022 standards require deployment of additional EV chargers in various building types, including multifamily residential and nonresidential land uses. They include requirements for both EV capable parking spaces and the installation of Level 2 EV supply equipment for multifamily residential and nonresidential buildings. The 2022 CALGreen standards include requirements for both EV readiness, installation of EV chargers, and include both mandatory requirements and more aggressive voluntary Tier 1 and Tier 2 provisions. Providing EV charging infrastructure that meets current CALGreen requirements will not be sufficient to power the anticipated more extensive level of EV penetration in the future that is needed to meet SB 30 climate goals.

CEC studies have identified the most aggressive electrification scenario as putting the building sector on track to reach the carbon neutrality goal by 2045.²³ Installing new natural gas infrastructure in new buildings will interfere with this goal. To meet the State’s goal, communities have been adopting “Reach” codes that prohibit natural gas connections in new and remodeled buildings.

Advanced Clean Cars

The Advanced Clean Cars Program, originally adopted by CARB in 2012, was designed to bring together CARB’s traditional passenger vehicle requirements to meet federal air quality standards and also support California’s AB 32 goals to develop and implement programs to reduce GHG emissions back down to 1990 levels by 2020, a goal achieved in 2016 as a result of numerous emissions reduction programs.

Advanced Clean Cars II (ACC II) is phase two of the original rule. ACC II establishes a year-by-year process, starting in 2026, so all new cars and light trucks sold in California will be zero-emission vehicles by 2035, including plug-in hybrid electric vehicles. The regulation codifies the light-duty vehicle goals set out in Governor Newsom’s Executive Order N-79-20. Currently, 16 percent of new light-duty vehicles sold in California are zero emissions or plug-in hybrids. By 2030, 68 percent of new vehicles sold in California would be zero emissions and 100 percent by 2035.

City of Petaluma General Plan 2025

The City of Petaluma General Plan 2025 includes policies and programs to reduce exposure of the City’s sensitive population to exposure of air pollution, TACs, and GHG emissions. The following policies and programs are applicable to the proposed project:

4-P-15 Improve air quality by reducing emissions from stationary point sources of air pollution (e.g., equipment at commercial and industrial facilities) and stationary area sources (e.g.,

²³ California Energy Commission. 2021. *Final Commission Report: California Building Decarbonization Assessment*. Publication Number CEC-400-2021-006-CMF. August

wood-burning fireplaces & gas powered lawn mowers) which cumulatively emit large quantities of emissions.

- A. Continue to work with the Bay Area Air Quality Management District to achieve emissions reductions for non-attainment pollutants; including carbon monoxide, ozone, and PM10, by implementation of air pollution control measures as required by State and federal statutes. The BAAQMD's CEQA Guidelines should be used as the foundation for the City's review of air quality impacts under CEQA.
- B. Continue to use Petaluma's development review process and the CEQA regulations to evaluate and mitigate the local and cumulative effects of new development on air quality.
- C. Continue to require development projects to abide by the standard construction dust abatement measures included in BAAQMD's CEQA Guidelines. These measures would reduce exhaust and particulate emissions from construction and grading activities.
- D. 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;
 - Incorporation of passive solar building design and landscaping conducive to passive solar energy use for both residential and commercial uses, i.e., building orientation in a south to southeast direction, encourage planting of deciduous trees on west sides of structures, landscaping with drought resistant species, and use of groundcovers rather than pavement to reduce heat reflection;
 - Encourage the use of battery-powered, electric, or other similar equipment that does not impact local air quality for nonresidential maintenance activities;
 - Provide natural gas hookups to fireplaces or require residential use of EPA-certified wood stoves, pellet stoves, or fireplace inserts. Current building code standards generally ban the installation of open-hearth, wood burning fireplaces and wood stoves in new construction. It does, however, allow for the use of low-polluting wood stoves and inserts in fireplaces approved by the federal Environmental Protection Agency, as well as fireplaces fueled by natural gas.

4-P-24 Comply with AB 32 and its governing regulations to the full extent of the City's jurisdictional authority.

4-P-25 To the full extent of the City's jurisdictional authority, implement any additional adopted State legislative or regulatory standards, policies and practices designed to reduce greenhouse gas emissions, as those measures are developed.

4-P-26 Implement all measures identified in the municipal Climate Action Plan to meet the municipal target set in Resolution 2005-118 (20% below 2000 levels by 2010).

4-P-30 Continue to monitor new technology and innovative sustainable design practices for applicability to ensure future development minimizes or eliminates the use of fossil fuel and GHG-emitting energy consumption.

Petaluma Climate Emergency Framework

The Climate Emergency Framework²⁴ is the result of collaboration of the Petaluma Climate Action Commission. Its purpose is to outline principles to guide the City's ongoing response to and discussion about the climate crisis and to guide and inform subsequent policies and implementation strategies. The City Council adopted the Climate Emergency Framework at its January 11, 2021 special meeting, directing staff to incorporate the Framework's goals into future planning, policy, and action to help Petaluma be carbon neutral by 2030. Based on four sections, the framework will guide the City as it works to avoid catastrophic climate change and adapt to its expected impacts.

The following goals and action items from the City of Petaluma's Climate Emergency Framework are applicable to this project:

Mitigation and Sequestration Goals

- Develop a Climate Action Plan outlining the actions the City will take to achieve its climate goals.
- Eliminate emissions from the building sector through zero-emissions new construction (emissions embedded in materials and those emitted during construction and operation), building retrofits, appliance replacements, and use of renewable generated clean electricity.
- Reduce consumption emissions to the level necessary to meet our overall climate goals.

Mitigation and Sequestration Action Items

- Mandate all-electric new construction to eliminate fossil fuel use in new buildings.
- Require all new construction, additions, and major rehab projects to use low-embodied carbon materials, starting with concrete.

BAAQMD GHG Significance Thresholds

On April 20, 2022, BAAQMD adopted new thresholds of significance for operational GHG emissions from land use projects for projects beginning the CEQA process.²⁵ The current thresholds of significance are:

²⁴ City of Petaluma, *Climate Emergency Framework*, January 11, 2021. Web:

https://storage.googleapis.com/proudcity/petalumaca/uploads/2021/02/Climate-Action-Framework_Final.pdf

²⁵ Justification Report: BAAQMD CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Project and Plans. Web: https://www.baaqmd.gov/~/_media/files/planning-and-research/ceqa/ceqa-thresholds-2022/justification-report-pdf.pdf?la=en

- A. Projects must include, at a minimum, the following project design elements:
 - a. Buildings
 - i. The project will not include natural gas appliances or natural gas plumbing (in both residential and non-residential development).
 - ii. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
 - b. Transportation
 - i. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor’s Office of Planning and Research’s Technical Advisory on Evaluating Transportation Impacts in CEQA:
 - 1. Residential Projects: 15 percent (16.8 percent in Petaluma) below the existing VMT per capita
 - 2. Office Projects: 15 percent (16.8 percent in Petaluma) below the existing VMT per employee
 - 3. Retail Projects: no net increase in existing VMT
 - ii. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

- B. Be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

New land use projects are required to meet either section A or B from the above list, not both, to be considered less than significant.

Impact GHG-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

GHG emissions associated with development of the proposed project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic within the project vicinity, energy and water usage, and solid waste disposal. Emissions for the proposed project are discussed below.

CalEEMod Modeling

CalEEMod was used to predict GHG emissions from operation of the site assuming full build-out of the project. The project land use types and size and other project-specific information were input to the model, as described below. CalEEMod output is included in *Attachment 1*.

Land Uses

All project land uses were subject to CalEEMod as described above in the construction criteria pollutant section.

Model Year

Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CalEEMod. The earliest full year of operation would be 2027 if construction begins in late 2024. Emissions associated with build-out later than 2027 would be lower.

Traffic Information

CalEEMod allows the user to enter specific vehicle trip generation rates. Therefore, the project-specific daily trip generation rate provided by the traffic consultant was entered into the model.²⁶ The project would produce approximately 1,071 daily trips when including the *25 Percent Valet Increase*. When considering the *12 Percent Internal Capture Reduction* adjustments applied in the traffic analysis, the project would then produce 966 net daily trips. The daily trip generation was calculated using ITE trip generation rates, the size of the project land uses, and the adjusted total automobile trips. The Saturday and Sunday trip rates were derived by multiplying the ratio of the CalEEMod default rates for Saturday and Sunday trips to the default weekday rate with the project-specific daily weekday trip rate. The default trip lengths and trip types specified by CalEEMod were used.

Energy

CalEEMod defaults for energy use were used, which include the 2019 Title 24 Building Standards. GHG emissions modeling includes those indirect emissions from electricity consumption. The CalEEMod default emission factor of 39.46 pounds of CO₂ per megawatt of electricity produced by Sonoma Clean Power was used.

The City of Petaluma adopted a municipal code in May 2021 that prohibits the use of natural gas infrastructure in all new construction projects.²⁷ Therefore, for this project, natural gas was set to zero and the energy use associated with natural gas was reassigned to electricity use in CalEEMod.

Other Inputs

Default model assumptions for emissions associated with solid waste generation were used. Wastewater treatment was changed to 100-percent aerobic conditions to represent the use of town services (i.e., the project would not send wastewater to septic tanks or facultative lagoons).

²⁶ W-Trans, *Traffic Impact Study for the Petaluma Appellation Hotel Project*, July 20, 2023.

²⁷ City of Petaluma, All-Electric Code, Web: <https://cityofpetaluma.org/allelectric/>

Construction GHG Emissions

GHG emissions associated with construction were computed at 481 MT of CO₂e for the total construction period. These are the emissions from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. Neither the City nor BAAQMD have an adopted threshold of significance for construction related GHG emissions, though the California Office of Planning and Research (OPR) recommends quantifying emissions and disclosing that GHG emissions would occur during construction, even in cases where BAAQMD does not. BAAQMD encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable.

Operational GHG Emissions

The CalEEMod model was used to estimate daily emissions associated with the operation of the proposed project. As shown in Table 6 for informational purposes, annual GHG emissions resulting from the operation of the proposed project are predicted to be 801 MT of CO₂e in 2027.

Table 6. Annual Project GHG Emissions (CO₂e) in Metric Tons

Source Category	Proposed Project in 2027
Mobile	749
Area	1
Energy Consumption	19
Water Usage	3
Solid Waste Generation	17
Refrigerants	12
Total (MT CO ₂ e/year)	801

For this impact to be considered less than significant, it must be consistent with a local GHG reduction strategy (Threshold B) or meet the minimum project design elements recommended by BAAQMD (Threshold A). The City of Petaluma has not adopted a GHG reduction strategy that meets the CEQA Guidelines. Therefore, the project must comply with Threshold A to be considered a less-than-significant impact. Threshold A requires the project:

1. Avoid construction of new natural gas connections,
 - Project Conforms – the Project would comply with the City Municipal Code prohibiting natural gas and only allowing all electric infrastructure in new buildings.
2. Avoid wasteful or inefficient use of electricity,
 - Project Conforms – the Project would meet CALGreen Building Standards Code requirements that are considered to be energy efficient.
3. Include electric vehicle (EV) charging infrastructure that meets current Building Code CALGreen Tier 2 compliance, and
 - Project Conforms – the Project would include electric vehicle charging infrastructure that meets or exceeds current Building Code CALGreen Tier 2 compliance.

4. Reduce VMT per service population by 16.8 percent over regional average.
 - Project Conforms – The City of Petaluma has a VMT analysis methodology and threshold that meets SB 743 targets. The traffic analysis provided by the applicant included a conforming VMT analysis.²⁸ The site’s proximity to the Downtown Petaluma SMART station qualified the project for VMT screening. Beyond VMT screening, proximity to two bus transit hubs, anticipated shifts in hotel guest VMT, and the site’s presence in a zone with low employee VMT support a less-than-significant VMT finding. Therefore, the Project meets the VMT threshold.

The project is anticipated to comply with four of the four requirements of Threshold A. This would lead to a less-than-significant impact for the project’s GHG emissions.

Impact GHG-2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The City of Petaluma enforces its building codes, which aim to reduce GHG emissions. Therefore, if individual projects conform to City building Codes, they will not conflict with local plans, policies, or regulations applicable to GHG emissions. The project is anticipated to be constructed in conformance with at minimum the 2022 CalGreen and the Title 24 Building Codes, which requires high-efficiency water fixtures, water-efficient irrigation systems, and compliance with current energy efficiency standards. Compliance with these standards ensures compliance with State and federal plans, policies, and regulations applicable to GHG emissions.

²⁸ W-Trans, *Traffic Impact Study for the Petaluma Appellation Hotel Project*, July 20, 2023.

Supporting Documentation

Attachment 1 includes the CalEEMod output for project construction and operation emissions, as well as any modeling assumptions. The Mixed Land Use Screening Tool is also included.

Attachment 2 is the health risk assessment. This includes the summary of the dispersion modeling and the cancer risk calculations for construction. The AERMOD dispersion modeling files for this assessment, which are quite voluminous, are available upon request and would be provided in digital format.

Attachment 3 includes the cumulative health risk calculations from existing sources affecting the construction MEI.

**Attachment 1: CalEEMod Modeling Inputs and Outputs and BAAQMD
Mixed Land Use Screening Tool**

Construction Criteria Air Pollutants							
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	PM2.5 Fugitive	CO2e	
Year	Tons					MT	
Construction Equipment							
2024-2025	0.15	1.21	0.03	0.03	0.14	468.87	
2026	0.19	0.06	0.002	0.002	0.001	11.87	
Total Construction Emissions							
Tons	0.34	1.27	0.03	0.03		480.74	
Average Daily Emissions							
Pounds/Workdays	Average Daily Emissions					Workdays	
2024-2025	0.95	7.93	0.21	0.20		305	
2026	3.52	1.15	0.04	0.03		109	
Threshold - lbs/day	54.0	54.0	82.0	54.0			
Total Construction Emissions							
Pounds	4.47	9.09	0.25	0.23		0.00	
Average	1.63	6.15	0.17	0.16		0.00 414	
Threshold - lbs/day	54.0	54.0	82.0	54.0			

Operational Criteria Air Pollutants				
Unmitigated	ROG	NOX	Total PM10	Total PM2.5
Year	Tons			
Total	0.86	0.51	0.74	0.19
Existing Use Emissions				
Total				
Net Annual Operational Emissions				
Tons/year	0.86	0.51	0.74	0.19
Threshold - Tons/year	10.0	10.0	15.0	10.0
Average Daily Emissions				
Pounds Per Day	4.73	2.81	4.03	1.06
Threshold - lbs/day	54.0	54.0	82.0	54.0
CO2e				
Category	Project	Existing	Project 2030	Existing
Mobile	749.22			
Area	0.86			
Energy	19.41			
Water	2.58			
Waste	17.15			
Refrig.	11.93			
TOTAL	801.14	0.00	0.00	0.00
Net GHG Emissions		801.14		0.00

Number of Days Per Year				
2024-2025	11/1/24	12/31/25	426	305
2026	1/1/26	6/1/26	152	109
			578	414 Total Workdays

Phase	Start Date	End Date	Days/Week	Workdays
Site Preparation	11/1/2024	11/10/2024	5	6
Grading	11/10/2024	2/12/2025	5	68
Trenching	2/12/2025	6/18/2025	5	91

Air Quality/Noise Construction Information Data Request

Project Name: Petaluma Appellation Hotel	Complete ALL Portions in Yellow																							
See Equipment Type TAB for type, horsepower and load factor																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Project Size</td> <td>93 Dwelling Units (Rooms) 0.33 total project acres disturbed</td> </tr> <tr> <td></td> <td>41,708 s.f. residential</td> </tr> <tr> <td></td> <td>4,394 s.f. Restaurant Bar</td> </tr> <tr> <td></td> <td>s.f. office/commercial</td> </tr> <tr> <td></td> <td>s.f. other, specify:</td> </tr> <tr> <td></td> <td>12,500 s.f. parking garage 58 spaces</td> </tr> <tr> <td></td> <td>s.f. parking lot spaces</td> </tr> <tr> <td>Construction Days (i.e., M-F)</td> <td>M-Saturday to 18 Months</td> </tr> <tr> <td>Construction Hours</td> <td>7AM am to 4PM pm</td> </tr> </table>	Project Size	93 Dwelling Units (Rooms) 0.33 total project acres disturbed		41,708 s.f. residential		4,394 s.f. Restaurant Bar		s.f. office/commercial		s.f. other, specify:		12,500 s.f. parking garage 58 spaces		s.f. parking lot spaces	Construction Days (i.e., M-F)	M-Saturday to 18 Months	Construction Hours	7AM am to 4PM pm	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Pile Driving? Y/N? Yes</td> </tr> <tr> <td>Project include on-site GENERATOR OR FIRE PUMP during project (not construction)? Y/N? ___No_ IF YES (if BOTH separate values) --></td> </tr> <tr> <td>Kilowatts/Horsepower: _____</td> </tr> <tr> <td>Fuel Type: _____</td> </tr> <tr> <td>Location in project (Plans Desired if Available):</td> </tr> </table>	Pile Driving? Y/N? Yes	Project include on-site GENERATOR OR FIRE PUMP during project (not construction)? Y/N? ___No_ IF YES (if BOTH separate values) -->	Kilowatts/Horsepower: _____	Fuel Type: _____	Location in project (Plans Desired if Available):
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Location in project (Plans Desired if Available):																								

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	HP Annual Hours	Comments
	Demolition							Overall Import/Export Volumes
								Demolition Volume
		81	0.73			#DIV/0!	0	Square footage of buildings to be demolished
		158	0.38			#DIV/0!	0	(or total tons to be hauled)
		247	0.4			#DIV/0!	0	0 square feet of
		97	0.37			#DIV/0!	0	Any pavement demolished and hauled? <u>0</u> cubic yards
	<i>Other Equipment?</i>							
	Site Preparation							
		187	0.41		11/1/2024		0	
		247	0.4		11/10/2024		0	
1	Tractors/Loaders/Backhoes	97	0.37	7	6	7	1507	
1	<i>Other Equipment? Scrapers</i>	423	0.48	8	6	8	9748	
	Grading / Excavation							Soil Hauling Volume
								Export volume = <u>15,000</u> cubic yards?
		158	0.38		11/10/2024		0	Import volume = <u>9</u> cubic yards?
		187	0.41				0	
1	Rubber Tired Dozers	247	0.4	8	68	8	53747	
		81	0.73				0	
1	Tractors/Loaders/Backhoes	97	0.37	7	68	7	17084	
	<i>Other Equipment?</i>							
	Trenching/Foundation							
		97	0.37				0	
1	Concrete Truck/ Pump	158	0.38	8	91	8	43709	
	<i>Other Equipment?</i>							
	Building - Exterior							Cement Trucks? <u>YES</u> Total Round-Trips or 50,000 cubic yards
								Trucks Electric? (Y/N) <u>N</u> Otherwise assumed diesel
		231	0.29				0	
2	Forklifts	89	0.2	7	110	7	27412	
1	Generator Sets	84	0.74	8	110	8	54701	Or temporary line power? (Y/N) <u>Y</u>
1	Tractors/Loaders/Backhoes	97	0.37	6	110	6	23687	
1	Welders	46	0.45	8	110	8	18216	
	<i>Other Equipment?</i>							
	Building - Interior/Architectural Coating							
		78	0.48	6	130	6	29203	
		62	0.31				0	
	<i>Other Equipment?</i>							
	Paving							
		9	0.56				0	
1	Pavers	130	0.42	8	11	8	4805	Asphalt? <u>0</u> cubic yards or <u>0</u> round trips?
1	Paving Equipment	132	0.36	8	11	8	4182	
1	Rollers	80	0.38	8	11	8	2675	
	<i>Other Equipment?</i>						0	
	Additional Phases							
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs
 It is assumed that water trucks would be used during grading
 Add or subtract phases and equipment, as appropriate
 Modify horsepower or load factor, as appropriate

Complete one sheet for each project component

Traffic Consultant Trip Gen					CalEEMod Default			
Land Use	Size	Daily Trips	New Trips	Weekday Trip Gen	Weekday	Sat	Sun	
Hotel	Room	93	511	546	5.87	8.36	5.95	
<i>Internal Capture Reduction</i>	-12%		-61			5.75	4.18	
<i>Valet Additon</i>	12.50%		96					
Quality Restaurant	ksf	4.39	368	420	95.67	83.84	71.97	
<i>Internal Capture Reduction</i>	-12%		-44			102.75	82.13	
<i>Valet Additon</i>	12.50%		96					
Total			966					

Table 6 – Trip Generation Summary

Land Use	Units	Daily		PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out
Base Project Trips							
Hotel	93 rooms	5.49	511	0.40	37	18	19
<i>Internal Capture</i>		-12%	-61	-12%	-4	-2	-2
Quality Restaurant	4.39 ksf	83.84	368	7.80	34	23	11
<i>Internal Capture**</i>			-44		-4	-2	-2
Base Project Trips Sub-Total			774	63	37	26	
Valet Trips							
Valet Percentage*		25%	192	25%	16	9	7
Total			966	79	46	33	

Note: ksf = 1,000 square feet; *Valet Percentage of Base Project Trips Sub-Total; ** Opposite end of internally captured trips generated by the restaurant.

23-111 Appellation Hotel Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	23-111 Appellation Hotel
Construction Start Date	11/1/2024
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.60
Precipitation (days)	3.80
Location	2 Petaluma Blvd S, Petaluma, CA 94952, USA
County	Sonoma-San Francisco
City	Petaluma
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	987
EDFZ	2
Electric Utility	Sonoma Clean Power
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.14

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
------------------	------	------	-------------	-----------------------	------------------------	--------------------------------	------------	-------------

Hotel	93.0	Room	0.33	41,708	0.00	0.00	—	—
Enclosed Parking with Elevator	58.0	Space	0.00	12,500	0.00	0.00	—	—
Quality Restaurant	4.39	1000sqft	0.00	4,394	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	4.25	12.5	0.26	1.53	1.79	0.25	0.42	0.66	6,856
Mit.	3.98	12.6	0.18	1.53	1.70	0.17	0.42	0.59	6,856
% Reduced	6%	-1%	32%	—	5%	31%	—	12%	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	4.54	23.9	0.90	8.21	9.11	0.83	3.64	4.47	6,901
Mit.	4.25	13.3	0.18	3.56	3.65	0.17	1.52	1.61	6,901
% Reduced	6%	44%	80%	57%	60%	79%	58%	64%	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.05	4.99	0.12	1.06	1.18	0.11	0.42	0.53	2,396

Mit.	1.04	4.57	0.06	0.72	0.78	0.06	0.25	0.31	2,396
% Reduced	1%	9%	50%	32%	34%	49%	41%	43%	—
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.91	0.02	0.19	0.22	0.02	0.08	0.10	397
Mit.	0.19	0.83	0.01	0.13	0.14	0.01	0.05	0.06	397
% Reduced	1%	9%	50%	32%	34%	49%	41%	43%	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2025	0.79	12.5	0.26	1.53	1.79	0.25	0.42	0.66	6,856
2026	4.25	4.45	0.18	0.10	0.29	0.17	0.02	0.19	1,000
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2024	2.16	23.9	0.90	8.21	9.11	0.83	3.64	4.47	6,121
2025	4.54	13.7	0.49	7.13	7.62	0.45	3.52	3.97	6,901
2026	3.84	0.87	0.02	0.04	0.06	0.02	0.01	0.03	174
Average Daily	—	—	—	—	—	—	—	—	—
2024	0.14	1.64	0.06	0.74	0.80	0.06	0.36	0.42	436
2025	0.66	4.99	0.12	1.06	1.18	0.11	0.42	0.53	2,396
2026	1.05	0.34	0.01	0.01	0.02	0.01	< 0.005	0.01	71.7
Annual	—	—	—	—	—	—	—	—	—
2024	0.03	0.30	0.01	0.14	0.15	0.01	0.07	0.08	72.1
2025	0.12	0.91	0.02	0.19	0.22	0.02	0.08	0.10	397
2026	0.19	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	11.9

2.3. Construction Emissions by Year, Mitigated

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

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2025	0.50	12.6	0.18	1.53	1.70	0.17	0.42	0.59	6,856
2026	3.98	4.49	0.07	0.10	0.17	0.06	0.02	0.09	1,000
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2024	0.53	13.2	0.10	3.56	3.65	0.10	1.52	1.61	6,121
2025	4.25	13.3	0.18	3.12	3.20	0.17	1.47	1.55	6,901
2026	3.84	0.87	0.02	0.04	0.06	0.02	0.01	0.03	174
Average Daily	—	—	—	—	—	—	—	—	—
2024	0.03	0.86	0.01	0.32	0.33	0.01	0.15	0.16	436
2025	0.50	4.57	0.06	0.72	0.78	0.06	0.25	0.31	2,396
2026	1.04	0.35	0.01	0.01	0.02	0.01	< 0.005	0.01	71.7
Annual	—	—	—	—	—	—	—	—	—
2024	0.01	0.16	< 0.005	0.06	0.06	< 0.005	0.03	0.03	72.1
2025	0.09	0.83	0.01	0.13	0.14	0.01	0.05	0.06	397
2026	0.19	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	11.9

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	5.54	3.21	0.06	5.26	5.31	0.05	1.34	1.39	6,504
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Unmit.	4.94	3.67	0.05	5.26	5.31	0.05	1.34	1.39	6,188
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	4.73	2.81	0.04	3.99	4.03	0.04	1.02	1.06	4,839
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	0.86	0.51	0.01	0.73	0.74	0.01	0.19	0.19	801

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Mobile	4.01	3.19	0.05	5.26	5.31	0.05	1.34	1.39	6,185
Area	1.54	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.5
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	117
Water	—	—	—	—	—	—	—	—	15.6
Waste	—	—	—	—	—	—	—	—	104
Refrig.	—	—	—	—	—	—	—	—	72.1
Total	5.54	3.21	0.06	5.26	5.31	0.05	1.34	1.39	6,504
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Mobile	3.82	3.67	0.05	5.26	5.31	0.05	1.34	1.39	5,880
Area	1.12	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	117
Water	—	—	—	—	—	—	—	—	15.6
Waste	—	—	—	—	—	—	—	—	104
Refrig.	—	—	—	—	—	—	—	—	72.1
Total	4.94	3.67	0.05	5.26	5.31	0.05	1.34	1.39	6,188
Average Daily	—	—	—	—	—	—	—	—	—

Mobile	3.40	2.80	0.04	3.99	4.03	0.04	1.02	1.05	4,525
Area	1.32	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.19
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	117
Water	—	—	—	—	—	—	—	—	15.6
Waste	—	—	—	—	—	—	—	—	104
Refrig.	—	—	—	—	—	—	—	—	72.1
Total	4.73	2.81	0.04	3.99	4.03	0.04	1.02	1.06	4,839
Annual	—	—	—	—	—	—	—	—	—
Mobile	0.62	0.51	0.01	0.73	0.74	0.01	0.19	0.19	749
Area	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.86
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	19.4
Water	—	—	—	—	—	—	—	—	2.58
Waste	—	—	—	—	—	—	—	—	17.1
Refrig.	—	—	—	—	—	—	—	—	11.9
Total	0.86	0.51	0.01	0.73	0.74	0.01	0.19	0.19	801

2.6. Operations Emissions by Sector, Mitigated

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

Sector	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Mobile	4.01	3.19	0.05	5.26	5.31	0.05	1.34	1.39	6,185
Area	1.54	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.5
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	117
Water	—	—	—	—	—	—	—	—	15.6
Waste	—	—	—	—	—	—	—	—	104
Refrig.	—	—	—	—	—	—	—	—	72.1

Total	5.54	3.21	0.06	5.26	5.31	0.05	1.34	1.39	6,504
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Mobile	3.82	3.67	0.05	5.26	5.31	0.05	1.34	1.39	5,880
Area	1.12	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	117
Water	—	—	—	—	—	—	—	—	15.6
Waste	—	—	—	—	—	—	—	—	104
Refrig.	—	—	—	—	—	—	—	—	72.1
Total	4.94	3.67	0.05	5.26	5.31	0.05	1.34	1.39	6,188
Average Daily	—	—	—	—	—	—	—	—	—
Mobile	3.40	2.80	0.04	3.99	4.03	0.04	1.02	1.05	4,525
Area	1.32	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.19
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	117
Water	—	—	—	—	—	—	—	—	15.6
Waste	—	—	—	—	—	—	—	—	104
Refrig.	—	—	—	—	—	—	—	—	72.1
Total	4.73	2.81	0.04	3.99	4.03	0.04	1.02	1.06	4,839
Annual	—	—	—	—	—	—	—	—	—
Mobile	0.62	0.51	0.01	0.73	0.74	0.01	0.19	0.19	749
Area	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.86
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	19.4
Water	—	—	—	—	—	—	—	—	2.58
Waste	—	—	—	—	—	—	—	—	17.1
Refrig.	—	—	—	—	—	—	—	—	11.9
Total	0.86	0.51	0.01	0.73	0.74	0.01	0.19	0.19	801

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	9.26	0.36	—	0.36	0.33	—	0.33	2,156
Dust From Material Movement	—	—	—	1.06	1.06	—	0.11	0.11	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.01	—	0.01	0.01	—	0.01	35.4
Dust From Material Movement	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.87
Dust From Material Movement	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.04	0.04	0.00	0.01	0.01	42.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.70
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2024) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	5.65	0.04	—	0.04	0.04	—	0.04	2,156
Dust From Material Movement	—	—	—	0.41	0.41	—	0.04	0.04	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.09	< 0.005	—	< 0.005	< 0.005	—	< 0.005	35.4
Dust From Material Movement	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.87
Dust From Material Movement	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.04	0.04	0.00	0.01	0.01	42.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.70
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2024) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.16	11.4	0.51	—	0.51	0.47	—	0.47	1,638
Dust From Material Movement	—	—	—	6.57	6.57	—	3.37	3.37	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.16	0.05	—	0.05	0.05	—	0.05	167
Dust From Material Movement	—	—	—	0.67	0.67	—	0.34	0.34	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.21	0.01	—	0.01	0.01	—	0.01	27.6
Dust From Material Movement	—	—	—	0.12	0.12	—	0.06	0.06	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.04	0.04	0.00	0.01	0.01	42.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	3.17	0.02	0.50	0.52	0.02	0.14	0.16	2,244
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.32	< 0.005	0.05	0.05	< 0.005	0.01	0.02	228
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.71

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.06	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	37.8

3.4. Grading (2024) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	4.37	0.03	—	0.03	0.03	—	0.03	1,638
Dust From Material Movement	—	—	—	2.56	2.56	—	1.31	1.31	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.44	< 0.005	—	< 0.005	< 0.005	—	< 0.005	167
Dust From Material Movement	—	—	—	0.26	0.26	—	0.13	0.13	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.08	< 0.005	—	< 0.005	< 0.005	—	< 0.005	27.6
Dust From Material Movement	—	—	—	0.05	0.05	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.04	0.04	0.00	0.01	0.01	42.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	3.17	0.02	0.50	0.52	0.02	0.14	0.16	2,244
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.32	< 0.005	0.05	0.05	< 0.005	0.01	0.02	228
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.71
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.06	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	37.8

3.5. Grading (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	10.0	0.44	—	0.44	0.40	—	0.40	1,638
Dust From Material Movement	—	—	—	6.57	6.57	—	3.37	3.37	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.85	0.04	—	0.04	0.03	—	0.03	138

Dust From Material Movement	—	—	—	0.55	0.55	—	0.28	0.28	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.01	—	0.01	0.01	—	0.01	22.8
Dust From Material Movement	—	—	—	0.10	0.10	—	0.05	0.05	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.04	0.04	0.00	0.01	0.01	41.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	3.05	0.02	0.50	0.52	0.02	0.14	0.16	2,203
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.50
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.25	< 0.005	0.04	0.04	< 0.005	0.01	0.01	185
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.05	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	30.7

3.6. Grading (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	4.37	0.03	—	0.03	0.03	—	0.03	1,638
Dust From Material Movement	—	—	—	2.56	2.56	—	1.31	1.31	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.37	< 0.005	—	< 0.005	< 0.005	—	< 0.005	138
Dust From Material Movement	—	—	—	0.22	0.22	—	0.11	0.11	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	< 0.005	—	< 0.005	< 0.005	—	< 0.005	22.8
Dust From Material Movement	—	—	—	0.04	0.04	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.04	0.04	0.00	0.01	0.01	41.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	3.05	0.02	0.50	0.52	0.02	0.14	0.16	2,203
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.50
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	0.25	< 0.005	0.04	0.04	< 0.005	0.01	0.01	185
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.05	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	30.7

3.7. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	4.25	0.17	—	0.17	0.16	—	0.16	799
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	4.25	0.17	—	0.17	0.16	—	0.16	799
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.28	0.05	—	0.05	0.05	—	0.05	241
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.23	0.01	—	0.01	0.01	—	0.01	39.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.00	0.20	0.20	0.00	0.05	0.05	218
Vendor	0.01	0.36	< 0.005	0.07	0.07	< 0.005	0.02	0.02	279
Hauling	0.10	7.14	0.06	1.23	1.29	0.06	0.35	0.41	5,456
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.00	0.20	0.20	0.00	0.05	0.05	203
Vendor	0.01	0.37	< 0.005	0.07	0.07	< 0.005	0.02	0.02	278
Hauling	0.09	7.54	0.06	1.23	1.29	0.06	0.35	0.41	5,447
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.00	0.06	0.06	0.00	0.01	0.01	61.7
Vendor	< 0.005	0.11	< 0.005	0.02	0.02	< 0.005	0.01	0.01	83.9
Hauling	0.03	2.24	0.02	0.37	0.39	0.02	0.10	0.12	1,643
Annual	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.2
Vendor	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	13.9
Hauling	0.01	0.41	< 0.005	0.07	0.07	< 0.005	0.02	0.02	272

3.8. Building Construction (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	4.43	0.09	—	0.09	0.08	—	0.08	799
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.21	4.43	0.09	—	0.09	0.08	—	0.08	799
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	1.33	0.03	—	0.03	0.02	—	0.02	241
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.24	< 0.005	—	< 0.005	< 0.005	—	< 0.005	39.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.00	0.20	0.20	0.00	0.05	0.05	218
Vendor	0.01	0.36	< 0.005	0.07	0.07	< 0.005	0.02	0.02	279
Hauling	0.10	7.14	0.06	1.23	1.29	0.06	0.35	0.41	5,456
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.00	0.20	0.20	0.00	0.05	0.05	203
Vendor	0.01	0.37	< 0.005	0.07	0.07	< 0.005	0.02	0.02	278
Hauling	0.09	7.54	0.06	1.23	1.29	0.06	0.35	0.41	5,447
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.00	0.06	0.06	0.00	0.01	0.01	61.7
Vendor	< 0.005	0.11	< 0.005	0.02	0.02	< 0.005	0.01	0.01	83.9
Hauling	0.03	2.24	0.02	0.37	0.39	0.02	0.10	0.12	1,643
Annual	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.2
Vendor	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	13.9
Hauling	0.01	0.41	< 0.005	0.07	0.07	< 0.005	0.02	0.02	272

3.9. Paving (2026) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	3.56	0.16	—	0.16	0.15	—	0.15	758
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.11	< 0.005	—	< 0.005	< 0.005	—	< 0.005	22.8
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.78
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.00	0.06	0.06	0.00	0.01	0.01	65.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2026) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	3.60	0.04	—	0.04	0.04	—	0.04	758
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.11	< 0.005	—	< 0.005	< 0.005	—	< 0.005	22.8
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.78
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.00	0.06	0.06	0.00	0.01	0.01	65.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	3.70	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.08	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.5
Architectural Coatings	0.32	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.91
Architectural Coatings	0.06	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.04	0.04	0.00	0.01	0.01	40.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	3.70	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.5
Architectural Coatings	0.32	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.91
Architectural Coatings	0.06	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.04	0.04	0.00	0.01	0.01	40.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2026) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	0.02	—	0.02	0.02	—	0.02	134
Architectural Coatings	3.70	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	0.02	—	0.02	0.02	—	0.02	134
Architectural Coatings	3.70	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.23	0.01	—	0.01	0.01	—	0.01	36.2
Architectural Coatings	1.00	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.99
Architectural Coatings	0.18	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	0.04	0.04	0.00	0.01	0.01	42.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.04	0.04	0.00	0.01	0.01	39.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Architectural Coating (2026) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	0.02	—	0.02	0.02	—	0.02	134
Architectural Coatings	3.70	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	0.02	—	0.02	0.02	—	0.02	134
Architectural Coatings	3.70	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.23	0.01	—	0.01	0.01	—	0.01	36.2
Architectural Coatings	1.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.99
Architectural Coatings	0.18	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	0.04	0.04	0.00	0.01	0.01	42.8

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.04	0.04	0.00	0.01	0.01	39.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Trenching (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.62	0.03	—	0.03	0.02	—	0.02	81.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.62	0.03	—	0.03	0.02	—	0.02	81.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.01	—	0.01	0.01	—	0.01	20.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.38
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.02	0.02	0.00	< 0.005	< 0.005	22.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.02	0.02	0.00	< 0.005	< 0.005	20.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.86
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Trenching (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.62	0.03	—	0.03	0.02	—	0.02	81.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.62	0.03	—	0.03	0.02	—	0.02	81.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.01	—	0.01	0.01	—	0.01	20.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.38
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.02	0.02	0.00	< 0.005	< 0.005	22.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.02	0.02	0.00	< 0.005	< 0.005	20.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.86
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hotel	2.19	1.75	0.03	2.88	2.91	0.03	0.73	0.76	3,385
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quality Restaurant	1.81	1.45	0.02	2.38	2.40	0.02	0.61	0.63	2,800
Total	4.01	3.19	0.05	5.26	5.31	0.05	1.34	1.39	6,185
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hotel	2.09	2.01	0.03	2.88	2.91	0.03	0.73	0.76	3,218
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quality Restaurant	1.73	1.66	0.02	2.38	2.40	0.02	0.61	0.63	2,662
Total	3.82	3.67	0.05	5.26	5.31	0.05	1.34	1.39	5,880

Annual	—	—	—	—	—	—	—	—	—
Hotel	0.36	0.33	0.01	0.50	0.51	< 0.005	0.13	0.13	512
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quality Restaurant	0.26	0.18	< 0.005	0.23	0.23	< 0.005	0.06	0.06	237
Total	0.62	0.51	0.01	0.73	0.74	0.01	0.19	0.19	749

4.1.2. Mitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hotel	2.19	1.75	0.03	2.88	2.91	0.03	0.73	0.76	3,385
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quality Restaurant	1.81	1.45	0.02	2.38	2.40	0.02	0.61	0.63	2,800
Total	4.01	3.19	0.05	5.26	5.31	0.05	1.34	1.39	6,185
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hotel	2.09	2.01	0.03	2.88	2.91	0.03	0.73	0.76	3,218
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quality Restaurant	1.73	1.66	0.02	2.38	2.40	0.02	0.61	0.63	2,662
Total	3.82	3.67	0.05	5.26	5.31	0.05	1.34	1.39	5,880
Annual	—	—	—	—	—	—	—	—	—
Hotel	0.36	0.33	0.01	0.50	0.51	< 0.005	0.13	0.13	512
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quality Restaurant	0.26	0.18	< 0.005	0.23	0.23	< 0.005	0.06	0.06	237
Total	0.62	0.51	0.01	0.73	0.74	0.01	0.19	0.19	749

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	70.6
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	5.24
Quality Restaurant	—	—	—	—	—	—	—	—	41.3
Total	—	—	—	—	—	—	—	—	117
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	70.6
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	5.24
Quality Restaurant	—	—	—	—	—	—	—	—	41.3
Total	—	—	—	—	—	—	—	—	117
Annual	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	11.7
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.87
Quality Restaurant	—	—	—	—	—	—	—	—	6.85
Total	—	—	—	—	—	—	—	—	19.4

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	70.6
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	5.24
Quality Restaurant	—	—	—	—	—	—	—	—	41.3
Total	—	—	—	—	—	—	—	—	117
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	70.6
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	5.24
Quality Restaurant	—	—	—	—	—	—	—	—	41.3
Total	—	—	—	—	—	—	—	—	117
Annual	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	11.7
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.87
Quality Restaurant	—	—	—	—	—	—	—	—	6.85
Total	—	—	—	—	—	—	—	—	19.4

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hotel	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Quality Restaurant	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hotel	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Quality Restaurant	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Hotel	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Quality Restaurant	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hotel	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Quality Restaurant	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hotel	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Quality Restaurant	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Hotel	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Quality Restaurant	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Consumer Products	0.99	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	—	—	—	—	—	—	—	—
Landscape Equipment	0.42	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.5
Total	1.54	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Consumer Products	0.99	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	—	—	—	—	—	—	—	—
Total	1.12	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—

Consumer Products	0.18	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—
Landscape Equipment	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.86
Total	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.86

4.3.1. Mitigated

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

Source	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Consumer Products	0.99	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	—	—	—	—	—	—	—	—
Landscape Equipment	0.42	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.5
Total	1.54	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Consumer Products	0.99	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	—	—	—	—	—	—	—	—
Total	1.12	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Consumer Products	0.18	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—

Landscape Equipment	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.86
Total	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.86

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	9.95
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	5.63
Total	—	—	—	—	—	—	—	—	15.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	9.95
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	5.63
Total	—	—	—	—	—	—	—	—	15.6
Annual	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	1.65
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	0.93
Total	—	—	—	—	—	—	—	—	2.58

4.4.1. Mitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	9.95
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	5.63
Total	—	—	—	—	—	—	—	—	15.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	9.95
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	5.63
Total	—	—	—	—	—	—	—	—	15.6
Annual	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	1.65
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	0.93
Total	—	—	—	—	—	—	—	—	2.58

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
----------	-----	-----	-------	-------	-------	--------	--------	--------	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	96.0
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	7.56
Total	—	—	—	—	—	—	—	—	104
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	96.0
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	7.56
Total	—	—	—	—	—	—	—	—	104
Annual	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	15.9
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	1.25
Total	—	—	—	—	—	—	—	—	17.1

4.5.1. Mitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	96.0
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	7.56

Total	—	—	—	—	—	—	—	—	104
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	96.0
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	7.56
Total	—	—	—	—	—	—	—	—	104
Annual	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	15.9
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Quality Restaurant	—	—	—	—	—	—	—	—	1.25
Total	—	—	—	—	—	—	—	—	17.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	65.2
Quality Restaurant	—	—	—	—	—	—	—	—	6.87
Total	—	—	—	—	—	—	—	—	72.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	65.2
Quality Restaurant	—	—	—	—	—	—	—	—	6.87
Total	—	—	—	—	—	—	—	—	72.1
Annual	—	—	—	—	—	—	—	—	—

Hotel	—	—	—	—	—	—	—	—	10.8
Quality Restaurant	—	—	—	—	—	—	—	—	1.14
Total	—	—	—	—	—	—	—	—	11.9

4.6.2. Mitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	65.2
Quality Restaurant	—	—	—	—	—	—	—	—	6.87
Total	—	—	—	—	—	—	—	—	72.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	65.2
Quality Restaurant	—	—	—	—	—	—	—	—	6.87
Total	—	—	—	—	—	—	—	—	72.1
Annual	—	—	—	—	—	—	—	—	—
Hotel	—	—	—	—	—	—	—	—	10.8
Quality Restaurant	—	—	—	—	—	—	—	—	1.14
Total	—	—	—	—	—	—	—	—	11.9

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

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

4.7.2. Mitigated

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

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—
-------	---	---	---	---	---	---	---	---	---

4.8.2. Mitigated

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

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

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

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

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

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—

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5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	11/1/2024	11/10/2024	5.00	6.00	—
Grading	Grading	11/10/2024	2/12/2025	5.00	68.0	—
Building Construction	Building Construction	6/18/2025	11/18/2025	5.00	110	—
Paving	Paving	5/18/2026	6/1/2026	5.00	11.0	—
Architectural Coating	Architectural Coating	11/18/2025	5/18/2026	5.00	130	—
Trenching	Trenching	2/12/2025	6/18/2025	5.00	91.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45

Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Pumps	Diesel	Average	1.00	8.00	11.0	0.74

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	7.00	84.0	0.37
Site Preparation	Scrapers	Diesel	Tier 4 Interim	1.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	7.00	84.0	0.37
Building Construction	Forklifts	Diesel	Tier 4 Interim	2.00	7.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	6.00	84.0	0.37
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Tier 4 Interim	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Interim	1.00	8.00	81.0	0.42
Paving	Rollers	Diesel	Tier 4 Interim	1.00	8.00	36.0	0.38
Paving	Paving Equipment	Diesel	Tier 4 Interim	1.00	8.00	89.0	0.36
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Pumps	Diesel	Average	1.00	8.00	11.0	0.74

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	5.00	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	27.6	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	24.6	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	9.60	8.40	HHDT,MHDT
Building Construction	Hauling	68.2	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	7.50	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	4.92	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—

Trenching	Worker	2.50	11.7	LDA,LDT1,LDT2
Trenching	Vendor	—	8.40	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	5.00	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	27.6	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	24.6	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	9.60	8.40	HHDT,MHDT
Building Construction	Hauling	68.2	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	7.50	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	4.92	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	2.50	11.7	LDA,LDT1,LDT2
Trenching	Vendor	—	8.40	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	69,153	23,051	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	6.00	0.00	—
Grading	—	15,000	34.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Hotel	0.00	0%
Enclosed Parking with Elevator	0.00	100%
Quality Restaurant	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	39.5	0.03	< 0.005
2025	0.00	39.5	0.03	< 0.005
2026	0.00	39.5	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Hotel	546	535	389	190,480	4,033	3,951	2,872	1,407,312
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quality Restaurant	420	451	361	151,956	1,231	3,336	2,666	633,871

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
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Hotel	546	535	389	190,480	4,033	3,951	2,872	1,407,312
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quality Restaurant	420	451	361	151,956	1,231	3,336	2,666	633,871

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	69,153	23,051	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Hotel	621,549	39.5	0.0330	0.0040	0.00
Enclosed Parking with Elevator	46,143	39.5	0.0330	0.0040	0.00
Quality Restaurant	363,868	39.5	0.0330	0.0040	0.00

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Hotel	621,549	39.5	0.0330	0.0040	0.00
Enclosed Parking with Elevator	46,143	39.5	0.0330	0.0040	0.00
Quality Restaurant	363,868	39.5	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Hotel	2,359,110	0.00
Enclosed Parking with Elevator	0.00	0.00
Quality Restaurant	1,333,727	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
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Hotel	2,359,110	0.00
Enclosed Parking with Elevator	0.00	0.00
Quality Restaurant	1,333,727	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	50.9	—
Enclosed Parking with Elevator	0.00	—
Quality Restaurant	4.01	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Hotel	50.9	—
Enclosed Parking with Elevator	0.00	—
Quality Restaurant	4.01	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

Quality Restaurant	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Quality Restaurant	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Quality Restaurant	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Quality Restaurant	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Quality Restaurant	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Quality Restaurant	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

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

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

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

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.21	annual days of extreme heat
Extreme Precipitation	11.8	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	13.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

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

Air Quality Degradation	N/A	N/A	N/A	N/A
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The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	10.6
AQ-PM	14.4
AQ-DPM	75.4
Drinking Water	17.9
Lead Risk Housing	59.5
Pesticides	43.0
Toxic Releases	23.4
Traffic	79.0
Effect Indicators	—
CleanUp Sites	77.3
Groundwater	93.1
Haz Waste Facilities/Generators	75.5
Impaired Water Bodies	51.2
Solid Waste	60.8

Sensitive Population	—
Asthma	49.5
Cardio-vascular	64.1
Low Birth Weights	50.7
Socioeconomic Factor Indicators	—
Education	57.5
Housing	53.1
Linguistic	20.6
Poverty	52.7
Unemployment	18.3

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	62.22250738
Employed	80.73912486
Median HI	61.27293725
Education	—
Bachelor's or higher	69.9987168
High school enrollment	9.739509817
Preschool enrollment	9.097908379
Transportation	—
Auto Access	34.87745413
Active commuting	75.43949698
Social	—
2-parent households	26.7419479

Voting	94.53355576
Neighborhood	—
Alcohol availability	11.61298601
Park access	81.35506224
Retail density	76.92801232
Supermarket access	57.39766457
Tree canopy	75.46516104
Housing	—
Homeownership	34.21018863
Housing habitability	67.15000642
Low-inc homeowner severe housing cost burden	47.9917875
Low-inc renter severe housing cost burden	83.69049147
Uncrowded housing	74.48992686
Health Outcomes	—
Insured adults	53.31707943
Arthritis	0.0
Asthma ER Admissions	45.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	37.7
Cognitively Disabled	46.5
Physically Disabled	68.4
Heart Attack ER Admissions	50.0

Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	92.4
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	31.8
Children	36.4
Elderly	39.0
English Speaking	87.1
Foreign-born	47.8
Outdoor Workers	49.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	30.7
Traffic Density	68.7
Traffic Access	54.6
Other Indices	—
Hardship	34.9
Other Decision Support	—
2016 Voting	98.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	60.0
Healthy Places Index Score for Project Location (b)	59.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Petaluma clean energy provider = sonoma clean energy
Land Use	Applicant provided land uses, traffic provided restaurant land use
Construction: Construction Phases	Applicant provided construction schedule
Construction: Off-Road Equipment	Applicant provided construction equipment and hours usage
Construction: Trips and VMT	Building construction = 50,000-cy concrete (68 trips/day)
Operations: Vehicle Data	Traffic provided trip gen including reductions
Operations: Energy Use	Petaluma Reach Code - all-electric, no natural gas
Operations: Water and Waste Water	Wastewater treatment 100% aerobic. No septic tanks or lagoons.

23-111 Appellation Hotel HRA Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	23-111 Appellation Hotel HRA
Construction Start Date	11/1/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.60
Precipitation (days)	3.80
Location	2 Petaluma Blvd S, Petaluma, CA 94952, USA
County	Sonoma-San Francisco
City	Petaluma
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	987
EDFZ	2
Electric Utility	Sonoma Clean Power
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.16

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Hotel	93.0	Room	0.33	41,708	0.00	0.00	—	—

Enclosed Parking with Elevator	58.0	Space	0.00	12,500	0.00	0.00	—	—
Quality Restaurant	4.39	1000sqft	0.00	4,394	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	4.24	6.66	0.21	0.04	0.25	0.19	0.01	0.21	1,266
Mit.	3.98	7.15	0.13	0.04	0.18	0.12	0.01	0.13	1,266
% Reduced	6%	-7%	37%	—	31%	37%	—	35%	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	4.55	21.2	0.87	7.65	8.52	0.80	3.49	4.29	3,898
Mit.	4.11	10.5	0.13	2.99	3.06	0.12	1.36	1.44	3,898
% Reduced	10%	50%	85%	61%	64%	85%	61%	67%	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.05	2.94	0.10	0.69	0.75	0.09	0.35	0.40	535
Mit.	1.04	2.61	0.04	0.27	0.27	0.04	0.13	0.16	535

% Reduced	1%	11%	57%	61%	63%	57%	61%	61%	—
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.54	0.02	0.13	0.14	0.02	0.06	0.07	88.6
Mit.	0.19	0.48	0.01	0.05	0.05	0.01	0.02	0.03	88.6
% Reduced	1%	11%	57%	61%	63%	57%	61%	61%	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2025	0.80	6.66	0.21	0.04	0.25	0.19	0.01	0.21	1,266
2026	4.24	4.43	0.18	< 0.005	0.19	0.17	< 0.005	0.17	899
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2024	2.13	21.2	0.87	7.65	8.52	0.80	3.49	4.29	3,898
2025	4.55	11.1	0.46	6.59	7.05	0.43	3.37	3.80	1,821
2026	3.84	0.86	0.02	< 0.005	0.02	0.02	< 0.005	0.02	137
Average Daily	—	—	—	—	—	—	—	—	—
2024	0.14	1.36	0.06	0.69	0.75	0.05	0.35	0.40	212
2025	0.66	2.94	0.10	0.57	0.67	0.09	0.29	0.38	535
2026	1.05	0.34	0.01	< 0.005	0.01	0.01	< 0.005	0.01	59.9
Annual	—	—	—	—	—	—	—	—	—
2024	0.02	0.25	0.01	0.13	0.14	0.01	0.06	0.07	35.2
2025	0.12	0.54	0.02	0.10	0.12	0.02	0.05	0.07	88.6
2026	0.19	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	9.91

2.3. Construction Emissions by Year, Mitigated

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

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2025	0.36	7.15	0.13	0.04	0.18	0.12	0.01	0.13	1,266
2026	3.98	4.47	0.07	< 0.005	0.07	0.06	< 0.005	0.06	899
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2024	0.50	10.5	0.07	2.99	3.06	0.07	1.36	1.44	3,898
2025	4.11	7.47	0.13	2.58	2.64	0.12	1.32	1.37	1,821
2026	3.84	0.86	0.02	< 0.005	0.02	0.02	< 0.005	0.02	137
Average Daily	—	—	—	—	—	—	—	—	—
2024	0.03	0.59	< 0.005	0.27	0.27	< 0.005	0.13	0.14	212
2025	0.45	2.61	0.04	0.23	0.27	0.04	0.11	0.16	535
2026	1.04	0.34	0.01	< 0.005	0.01	0.01	< 0.005	0.01	59.9
Annual	—	—	—	—	—	—	—	—	—
2024	0.01	0.11	< 0.005	0.05	0.05	< 0.005	0.02	0.03	35.2
2025	0.08	0.48	0.01	0.04	0.05	0.01	0.02	0.03	88.6
2026	0.19	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	9.91

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	9.26	0.36	—	0.36	0.33	—	0.33	2,156
Dust From Material Movement	—	—	—	1.06	1.06	—	0.11	0.11	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.01	—	0.01	0.01	—	0.01	35.4
Dust From Material Movement	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.87
Dust From Material Movement	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—

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

3.2. Site Preparation (2024) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	5.65	0.04	—	0.04	0.04	—	0.04	2,156
Dust From Material Movement	—	—	—	0.41	0.41	—	0.04	0.04	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.09	< 0.005	—	< 0.005	< 0.005	—	< 0.005	35.4
Dust From Material Movement	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.87
Dust From Material Movement	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—

Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—

3.3. Grading (2024) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.16	11.4	0.51	—	0.51	0.47	—	0.47	1,638
Dust From Material Movement	—	—	—	6.57	6.57	—	3.37	3.37	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.12	1.16	0.05	—	0.05	0.05	—	0.05	167
Dust From Material Movement	—	—	—	0.67	0.67	—	0.34	0.34	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.21	0.01	—	0.01	0.01	—	0.01	27.6
Dust From Material Movement	—	—	—	0.12	0.12	—	0.06	0.06	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.01	0.47	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—

3.4. Grading (2024) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	4.37	0.03	—	0.03	0.03	—	0.03	1,638
Dust From Material Movement	—	—	—	2.56	2.56	—	1.31	1.31	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.44	< 0.005	—	< 0.005	< 0.005	—	< 0.005	167
Dust From Material Movement	—	—	—	0.26	0.26	—	0.13	0.13	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.08	< 0.005	—	< 0.005	< 0.005	—	< 0.005	27.6
Dust From Material Movement	—	—	—	0.05	0.05	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.01	0.47	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—
Average Daily	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—

3.5. Grading (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	10.0	0.44	—	0.44	0.40	—	0.40	1,638
Dust From Material Movement	—	—	—	6.57	6.57	—	3.37	3.37	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.85	0.04	—	0.04	0.03	—	0.03	138
Dust From Material Movement	—	—	—	0.55	0.55	—	0.28	0.28	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.01	—	0.01	0.01	—	0.01	22.8

Dust From Material Movement	—	—	—	0.10	0.10	—	0.05	0.05	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.01	0.46	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—

3.6. Grading (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	4.37	0.03	—	0.03	0.03	—	0.03	1,638

Dust From Material Movement	—	—	—	2.56	2.56	—	1.31	1.31	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.37	< 0.005	—	< 0.005	< 0.005	—	< 0.005	138
Dust From Material Movement	—	—	—	0.22	0.22	—	0.11	0.11	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	< 0.005	—	< 0.005	< 0.005	—	< 0.005	22.8
Dust From Material Movement	—	—	—	0.04	0.04	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.01	0.46	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—

3.7. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	4.80	0.18	—	0.18	0.17	—	0.17	903
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	4.80	0.18	—	0.18	0.17	—	0.17	903
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	1.45	0.05	—	0.05	0.05	—	0.05	272
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.26	0.01	—	0.01	0.01	—	0.01	45.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.09	0.02	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—
Vendor	< 0.005	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—
Hauling	0.04	1.11	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.08	0.03	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—

Vendor	< 0.005	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—
Hauling	0.03	1.15	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	< 0.005	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—
Hauling	0.01	0.34	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—
Hauling	< 0.005	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—

3.8. Building Construction (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	5.29	0.10	—	0.10	0.10	—	0.10	903
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	5.29	0.10	—	0.10	0.10	—	0.10	903
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.60	0.03	—	0.03	0.03	—	0.03	272
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.29	0.01	—	0.01	0.01	—	0.01	45.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.09	0.02	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—
Vendor	< 0.005	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—
Hauling	0.04	1.11	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.08	0.03	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—
Vendor	< 0.005	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—
Hauling	0.03	1.15	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	< 0.005	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—
Hauling	0.01	0.34	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—
Hauling	< 0.005	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—

3.9. Paving (2026) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.38	3.56	0.16	—	0.16	0.15	—	0.15	758
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.11	< 0.005	—	< 0.005	< 0.005	—	< 0.005	22.8
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.78
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
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3.10. Paving (2026) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	3.60	0.04	—	0.04	0.04	—	0.04	758
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.11	< 0.005	—	< 0.005	< 0.005	—	< 0.005	22.8
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.78
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—

3.11. Architectural Coating (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	3.70	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.5
Architectural Coatings	0.32	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.91
Architectural Coatings	0.06	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—

3.12. Architectural Coating (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.13	0.88	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	3.70	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.5
Architectural Coatings	0.32	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.91
Architectural Coatings	0.06	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—

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

3.13. Architectural Coating (2026) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	0.02	—	0.02	0.02	—	0.02	134
Architectural Coatings	3.70	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	0.02	—	0.02	0.02	—	0.02	134
Architectural Coatings	3.70	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.23	0.01	—	0.01	0.01	—	0.01	36.2
Architectural Coatings	1.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.99

Architectural Coatings	0.18	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—

3.14. Architectural Coating (2026) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.12	0.86	0.02	—	0.02	0.02	—	0.02	134
Architectural Coatings	3.70	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	0.02	—	0.02	0.02	—	0.02	134
Architectural Coatings	3.70	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.23	0.01	—	0.01	0.01	—	0.01	36.2
Architectural Coatings	1.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.99
Architectural Coatings	0.18	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—

3.15. Trenching (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.62	0.03	—	0.03	0.02	—	0.02	81.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.62	0.03	—	0.03	0.02	—	0.02	81.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.01	—	0.01	0.01	—	0.01	20.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.03	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.38
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—

3.16. Trenching (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.08	0.62	0.03	—	0.03	0.02	—	0.02	81.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.62	0.03	—	0.03	0.02	—	0.02	81.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.01	—	0.01	0.01	—	0.01	20.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.38
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—

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

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

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

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

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

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	11/1/2024	11/10/2024	5.00	6.00	—
Grading	Grading	11/10/2024	2/12/2025	5.00	68.0	—
Building Construction	Building Construction	6/18/2025	11/18/2025	5.00	110	—
Paving	Paving	5/18/2026	6/1/2026	5.00	11.0	—
Architectural Coating	Architectural Coating	11/18/2025	5/18/2026	5.00	130	—
Trenching	Trenching	2/12/2025	6/18/2025	5.00	91.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38

Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Pumps	Diesel	Average	1.00	8.00	11.0	0.74

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	7.00	84.0	0.37
Site Preparation	Scrapers	Diesel	Tier 4 Interim	1.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	7.00	84.0	0.37
Building Construction	Forklifts	Diesel	Tier 4 Interim	2.00	7.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Interim	1.00	8.00	46.0	0.45
Building Construction	Welders	Diesel	Tier 4 Interim	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Interim	1.00	8.00	81.0	0.42
Paving	Rollers	Diesel	Tier 4 Interim	1.00	8.00	36.0	0.38
Paving	Paving Equipment	Diesel	Tier 4 Interim	1.00	8.00	89.0	0.36
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Pumps	Diesel	Average	1.00	8.00	11.0	0.74

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—

Site Preparation	Worker	5.00	0.50	LDA,LDT1,LDT2
Site Preparation	Vendor	—	0.50	HHDT,MHDT
Site Preparation	Hauling	0.00	0.50	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	5.00	0.50	LDA,LDT1,LDT2
Grading	Vendor	—	0.50	HHDT,MHDT
Grading	Hauling	27.6	0.50	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	24.6	0.50	LDA,LDT1,LDT2
Building Construction	Vendor	9.60	0.50	HHDT,MHDT
Building Construction	Hauling	68.2	0.50	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	7.50	0.50	LDA,LDT1,LDT2
Paving	Vendor	—	0.50	HHDT,MHDT
Paving	Hauling	0.00	0.50	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	4.92	0.50	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	0.50	HHDT,MHDT
Architectural Coating	Hauling	0.00	0.50	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	2.50	0.50	LDA,LDT1,LDT2
Trenching	Vendor	—	0.50	HHDT,MHDT

Trenching	Hauling	0.00	0.50	HHDT
Trenching	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	0.50	LDA,LDT1,LDT2
Site Preparation	Vendor	—	0.50	HHDT,MHDT
Site Preparation	Hauling	0.00	0.50	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	5.00	0.50	LDA,LDT1,LDT2
Grading	Vendor	—	0.50	HHDT,MHDT
Grading	Hauling	27.6	0.50	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	24.6	0.50	LDA,LDT1,LDT2
Building Construction	Vendor	9.60	0.50	HHDT,MHDT
Building Construction	Hauling	68.2	0.50	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	7.50	0.50	LDA,LDT1,LDT2
Paving	Vendor	—	0.50	HHDT,MHDT
Paving	Hauling	0.00	0.50	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	4.92	0.50	LDA,LDT1,LDT2

Architectural Coating	Vendor	—	0.50	HHDT,MHDT
Architectural Coating	Hauling	0.00	0.50	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	2.50	0.50	LDA,LDT1,LDT2
Trenching	Vendor	—	0.50	HHDT,MHDT
Trenching	Hauling	0.00	0.50	HHDT
Trenching	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	69,153	23,051	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	6.00	0.00	—
Grading	—	15,000	34.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Hotel	0.00	0%
Enclosed Parking with Elevator	0.00	100%
Quality Restaurant	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	39.5	0.03	< 0.005
2025	0.00	39.5	0.03	< 0.005
2026	0.00	39.5	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

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

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.21	annual days of extreme heat
Extreme Precipitation	11.8	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	13.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	10.6
AQ-PM	14.4
AQ-DPM	75.4
Drinking Water	17.9
Lead Risk Housing	59.5
Pesticides	43.0
Toxic Releases	23.4
Traffic	79.0
Effect Indicators	—
CleanUp Sites	77.3
Groundwater	93.1
Haz Waste Facilities/Generators	75.5

Impaired Water Bodies	51.2
Solid Waste	60.8
Sensitive Population	—
Asthma	49.5
Cardio-vascular	64.1
Low Birth Weights	50.7
Socioeconomic Factor Indicators	—
Education	57.5
Housing	53.1
Linguistic	20.6
Poverty	52.7
Unemployment	18.3

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	62.22250738
Employed	80.73912486
Median HI	61.27293725
Education	—
Bachelor's or higher	69.9987168
High school enrollment	9.739509817
Preschool enrollment	9.097908379
Transportation	—
Auto Access	34.87745413
Active commuting	75.43949698

Social	—
2-parent households	26.7419479
Voting	94.53355576
Neighborhood	—
Alcohol availability	11.61298601
Park access	81.35506224
Retail density	76.92801232
Supermarket access	57.39766457
Tree canopy	75.46516104
Housing	—
Homeownership	34.21018863
Housing habitability	67.15000642
Low-inc homeowner severe housing cost burden	47.9917875
Low-inc renter severe housing cost burden	83.69049147
Uncrowded housing	74.48992686
Health Outcomes	—
Insured adults	53.31707943
Arthritis	0.0
Asthma ER Admissions	45.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	37.7
Cognitively Disabled	46.5

Physically Disabled	68.4
Heart Attack ER Admissions	50.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	92.4
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	31.8
Children	36.4
Elderly	39.0
English Speaking	87.1
Foreign-born	47.8
Outdoor Workers	49.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	30.7
Traffic Density	68.7
Traffic Access	54.6
Other Indices	—
Hardship	34.9
Other Decision Support	—

2016 Voting	98.7
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7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	60.0
Healthy Places Index Score for Project Location (b)	59.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Petaluma clean energy provider = sonoma clean energy
Land Use	Applicant provided land uses, traffic provided restaurant land use
Construction: Construction Phases	Applicant provided construction schedule
Construction: Off-Road Equipment	Applicant provided construction equipment and hours usage
Construction: Trips and VMT	Building construction = 50,000-cy concrete (68 trips/day). HRA 0.5 miles for localized emissions.
Operations: Vehicle Data	Traffic provided trip gen including reductions

Operations: Energy Use	Petaluma Reach Code - all-electric, no natural gas
Operations: Water and Waste Water	Wastewater treatment 100% aerobic. No septic tanks or lagoons.

Attachment 2: Project Construction Emissions and Health Risk Calculations

Petaluma Appelltion Hotel - Petaluma, CA
DPM and PM2.5 Emissions for HRA Modeling

Unmitigated Construction Criteria Air Pollutants		
Unmitigated	PM10 Exhaust	PM2.5 Fugitive
Year		
Construction Equipment		
2024-2025	0.0290	0.1155
2026	0.0020	0.00002
Tons	0.03	0.12

Petaluma Appelltion Hotel - Petaluma, CA

DPM Emissions and Modeling Emission Rates - Uncontrolled

Emissions Model	Activity	DPM (ton/year)	Area Source	DPM Emissions			Modeled Area (m ²)	DPM Emission Rate (g/s/m ²)
				(lb/yr)	(lb/hr)	(g/s)		
2025*	Construction	0.0290	23_DPM	58.0	0.01765	2.22E-03	1,278	1.74E-06
2026	Construction	0.0020	24_DPM	4.0	0.00123	1.55E-04	1,278	1.21E-07
Total		0.0310		62.0	0.0189	0.0024		

* Includes 2 months of emissions from 2024

Modeled Construction Hours

hr/day = 9 (7am - 4pm)
 days/yr = 365
 hours/year = 3285

PM2.5 Fugitive Dust Emissions for Modeling - Uncontrolled

Construction	Activity	Area Source	Area (ton/year)	PM2.5 Emissions			Modeled Area (m ²)	PM2.5 Emission Rate (g/s/m ²)
				(lb/yr)	(lb/hr)	(g/s)		
2025*	Construction	23_FUG	0.11549	231.0	0.07031	8.86E-03	1,278	6.94E-06
2026	Construction	24_FUG	0.00002	0.0	0.00001	1.80E-06	1,278	1.41E-09
Total			0.1155	231.0	0.0703	0.0089		

* Includes 2 months of emissions from 2024

Modeled Construction Hours

hr/day = 9 (7am - 4pm)
 days/yr = 365
 hours/year = 3285

**Petaluma Appelltion Hotel - Petaluma, CA
Construction Health Impacts Summary**

Maximum Impacts at Construction MEI Location - Uncontrolled

Emissions Year	Maximum Concentrations		Cancer Risk (per million)		Hazard Index (-)	Maximum Annual PM2.5 Concentration ($\mu\text{g}/\text{m}^3$)
	Exhaust PM10/DPM ($\mu\text{g}/\text{m}^3$)	Fugitive PM2.5 ($\mu\text{g}/\text{m}^3$)	Child	Adult		
2025	0.0374	0.1613	6.64	0.11	0.007	0.199
2026	0.0026	0.0000	0.43	0.01	0.001	0.003
Total	-	-	7.1	0.1	-	-
Maximum	0.0374	0.1613	-	-	0.007	0.20

* Includes 2 months of emissions from 2024

Petaluma Appelltion Hotel - Petaluma, CA - Uncontrolled Emissions
Maximum DPM Cancer Risk Calculations From Construction
Impacts at Off-Site Receptors-1st Floor (1.5 meter receptor heights)

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

- Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
 ASF = Age sensitivity factor for specified age group
 ED = Exposure duration (years)
 AT = Averaging time for lifetime cancer risk (years)
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

- Where: C_{air} = concentration in air (µg/m³)
 DBR = daily breathing rate (L/kg body weight-day)
 A = Inhalation absorption factor
 EF = Exposure frequency (days/year)
 10⁻⁶ = Conversion factor

Values

Age --> Parameter	Infant/Child				Adult
	3rd Trimester	0 - 2	2 - 9	2 - 16	16 - 30
ASF =	10	10	3	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	631	572	261
A =	1	1	1	1	1
EF =	350	350	350	350	350
AT =	70	70	70	70	70
FAH =	1.00	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			at MEI		
			DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled		Age Sensitivity Factor	Adult Cancer Risk (per million)	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual				
0	0.25	-0.25 - 0*	2025	0.0050	10	0.07	-	-	-	-	-	
1	1	0 - 1	2025	0.0050	10	0.82	2025	0.0050	1	0.01	0.0213	
2	1	1 - 2	2026	0.0004	10	0.06	2026	0.0004	1	0.00	0.0000	
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00		
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00		
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00		
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00		
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00		
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00		
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00		
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00		
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00		
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00		
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00		
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00		
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00		
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00		
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00		
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00		
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00		
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00		
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00		
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00		
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00		
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00		
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00		
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00		
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00		
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00		
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00		
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00		
Total Increased Cancer Risk						0.95				0.02		

* Third trimester of pregnancy

Petaluma Appelltion Hotel - Petaluma, CA - Uncontrolled Emissions
Maximum DPM Cancer Risk Calculations From Construction
Impacts at Off-Site Receptors-2nd Floor (1.5 & 6.1 meter receptor heights)

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

- Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
 ASF = Age sensitivity factor for specified age group
 ED = Exposure duration (years)
 AT = Averaging time for lifetime cancer risk (years)
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

- Where: C_{air} = concentration in air (µg/m³)
 DBR = daily breathing rate (L/kg body weight-day)
 A = Inhalation absorption factor
 EF = Exposure frequency (days/year)
 10⁻⁶ = Conversion factor

Values

Age --> Parameter	Infant/Child				Adult
	3rd Trimester	0 - 2	2 - 9	2 - 16	16 - 30
ASF =	10	10	3	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	631	572	261
A =	1	1	1	1	1
EF =	350	350	350	350	350
AT =	70	70	70	70	70
FAH =	1.00	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	at MEI	
			DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled		Age Sensitivity Factor		Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual				
0	0.25	-0.25 - 0*	2025	0.0374	10	0.51	-	-	-	-	-	-
1	1	0 - 1	2025	0.0374	10	6.14	2025	0.0374	1	0.11	0.1613	0.1987
2	1	1 - 2	2026	0.0026	10	0.43	2026	0.0026	1	0.01	0.00003	0.0026
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00		
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00		
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00		
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00		
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00		
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00		
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00		
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00		
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00		
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00		
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00		
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00		
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00		
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00		
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00		
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00		
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00		
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00		
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00		
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00		
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00		
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00		
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00		
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00		
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00		
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00		
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00		
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00		
Total Increased Cancer Risk						7.07				0.11		

* Third trimester of pregnancy

Petaluma Appelltion Hotel - Petaluma, CA - Uncontrolled Emissions
Maximum DPM Cancer Risk Calculations From Construction
Impacts at Off-Site Receptors - 3rd Floor (8.7 meter receptor heights)

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

- Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
 ASF = Age sensitivity factor for specified age group
 ED = Exposure duration (years)
 AT = Averaging time for lifetime cancer risk (years)
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

- Where: C_{air} = concentration in air (µg/m³)
 DBR = daily breathing rate (L/kg body weight-day)
 A = Inhalation absorption factor
 EF = Exposure frequency (days/year)
 10⁻⁶ = Conversion factor

Values

Age --> Parameter	Infant/Child				Adult
	3rd Trimester	0 - 2	2 - 9	2 - 16	16 - 30
ASF =	10	10	3	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	631	572	261
A =	1	1	1	1	1
EF =	350	350	350	350	350
AT =	70	70	70	70	70
FAH =	1.00	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

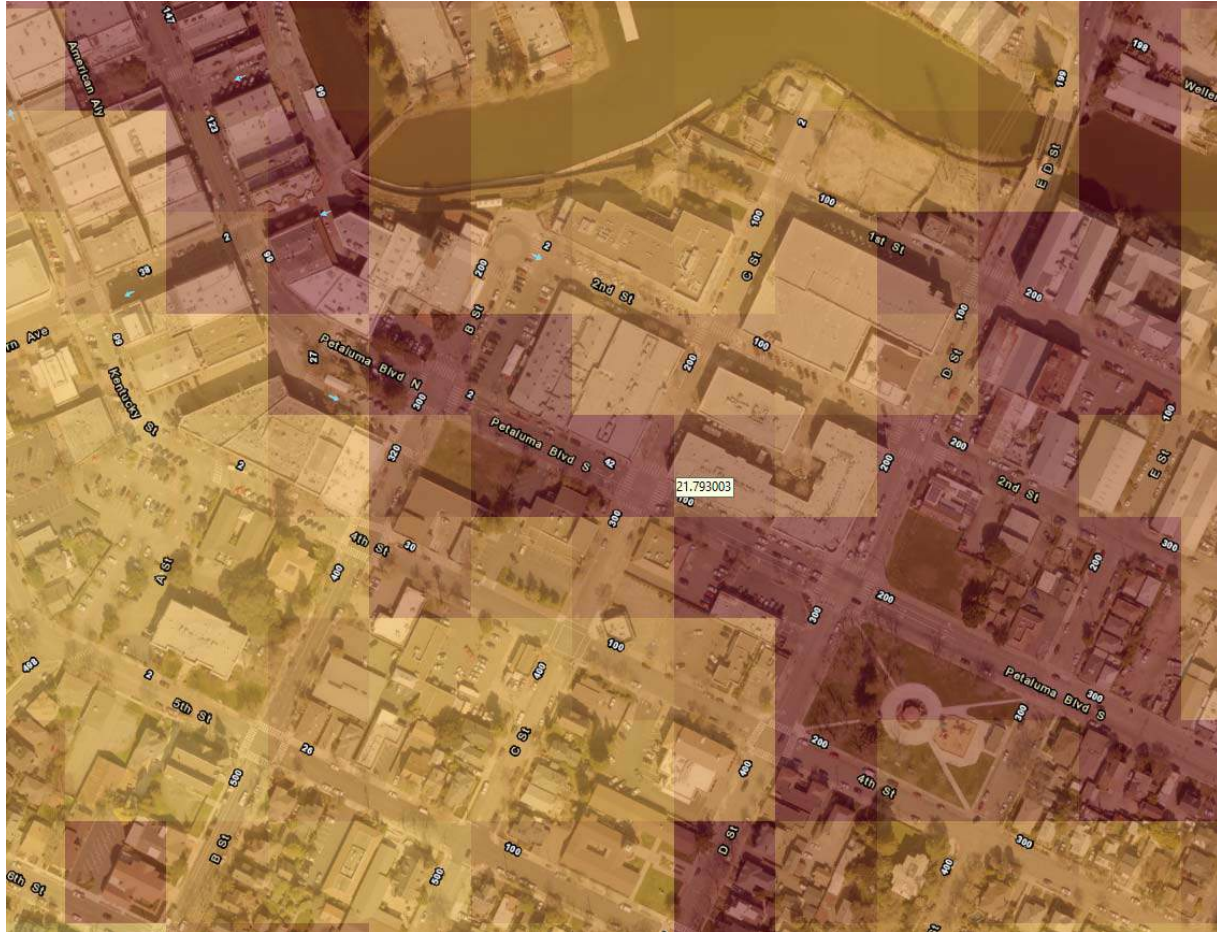
Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			at MEI		
			DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled		Age Sensitivity Factor	Adult Cancer Risk (per million)	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual				
0	0.25	-0.25 - 0*	2025	0.0355	10	0.48	-	-	-	-	-	
1	1	0 - 1	2025	0.0355	10	5.82	2025	0.0355	1	0.10	0.1552	
2	1	1 - 2	2026	0.0025	10	0.41	2026	0.0025	1	0.01	0.00003	
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00		
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00		
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00		
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00		
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00		
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00		
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00		
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00		
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00		
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00		
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00		
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00		
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00		
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00		
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00		
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00		
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00		
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00		
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00		
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00		
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00		
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00		
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00		
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00		
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00		
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00		
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00		
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00		
Total Increased Cancer Risk						6.71				0.11		

* Third trimester of pregnancy

Attachment 3: Health Risk Screening Information and Calculations

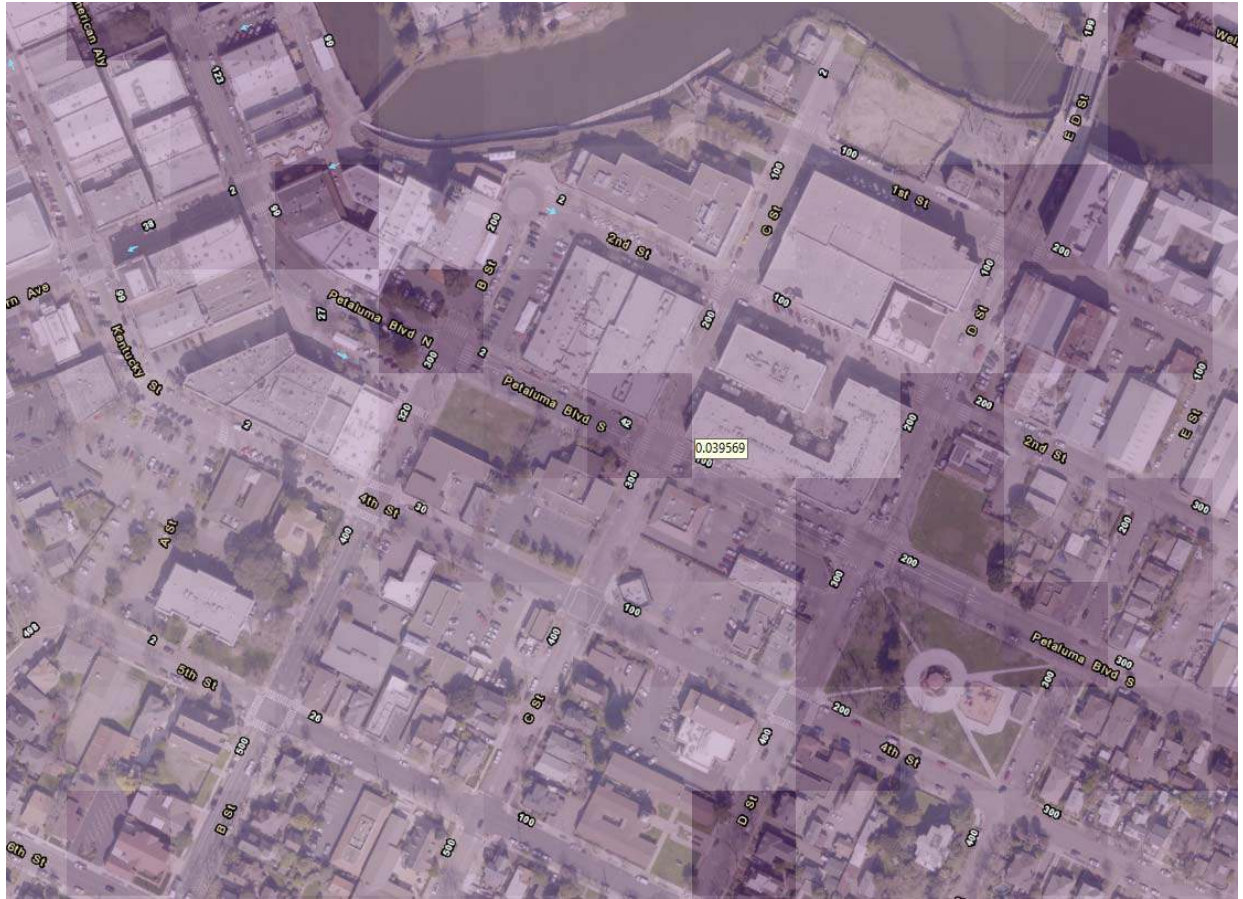
BAAQMD RASTER Screening Data – Roadway Cancer Risk Impacts at the MEI



BAAQMD RASTER Screening Data – Roadway PM_{2.5} Concentration Impacts at the MEI



BAAQMD RASTER Screening Data – Roadway Hazard Index Impacts at the MEI





BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Risk & Hazard Stationary Source Inquiry Form

This form is required when users request stationary source data from BAAQMD

This form is to be used with the BAAQMD's Google Earth stationary source screening tables.

[Click here for guidance on conducting risk & hazard screening, including roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.](#)

[Click here for District's Recommended Methods for Screening and Modeling Local Risks and Hazards document.](#)

Table A: Requester Contact Information

Date of Request	7/12/2023
Contact Name	Jordyn Bauer
Affiliation	Illingworth & Rodkin, Inc.
Phone	707-794-0400 x103
Email	jbauer@illingworthrodkin.com
Project Name	Appellation Hotel
Address	2 Petaluma Blvd S
City	Petaluma
County	Sonoma
Type (residential, commercial, mixed use, industrial, etc.)	Hotel
Project Size (# of units or building square feet)	93 rooms
Comments:	

For Air District assistance, the following steps must be completed:

1. Complete all the contact and project information requested in **Table A**. Incomplete forms will not be processed. Please include a project site map.
2. Download and install the free program Google Earth, <http://www.google.com/earth/download/ge/>, and then download the county specific Google Earth stationary source application files from the District's website, <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>. The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's Information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration.
3. Find the project site in Google Earth by inputting the site's address in the Google Earth search box.
4. Identify stationary sources within at least a 1000ft radius of project site. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm the source's address location. Please report any mapping errors to the District.
5. List the stationary source information in **Table B** section only.
6. Note that a small percentage of the stationary sources have Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name (Map B on right). If HRSA values are presented, these values have already been modeled and cannot be adjusted further.
7. Email this completed form to District staff. District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three weeks.

Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request.

Submit forms, maps, and questions to Matthew Hanson at 415-749-8733, or mhanson@baaqmd.gov

Table B: Google Earth data

Project Site

Distance from Receptor (feet) or MEI ¹	Plant No.	Facility Name	Address	Cancer Risk ²	Hazard Risk ²	PM _{2.5} ²	Source No. ³	Type of Source ⁴	Fuel Code ⁵	Status/Comments	Distance Adjustment Multiplier	Adjusted Cancer Risk Estimate	Adjusted Hazard Risk	Adjusted PM2.5
600	20509	City of Petaluma	6 C Street	2.774	0.001	0.004		Generator		2021 Dataset	0.09	0.25	0.0001	0.0004

Footnotes:

1. Maximally exposed individual
2. These Cancer Risk, Hazard Index, and PM2.5 columns represent the values in the Google Earth Plant Information Table.
3. Each plant may have multiple permits and sources.
4. Permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc.
5. Fuel codes: 98 = diesel, 189 = Natural Gas.
6. If a Health Risk Screening Assessment (HRSA) was completed for the source, the application number will be listed here.
8. Engineer who completed the HRSA. For District purposes only.
9. All HRSA completed before 1/5/2010 need to be multiplied by an age sensitivity factor of 1.7.
10. The HRSA "Chronic Health" number represents the Hazard Index.
11. Further information about common sources:
 - a. Sources that only include diesel internal combustion engines can be adjusted using the BAAQMD's Diesel Multiplier worksheet.
 - b. The risk from natural gas boilers used for space heating when <25 MM BTU/hr would have an estimated cancer risk of one in a million or less, and a chronic hazard index of 0.003 or less.
 - c. BAAQMD Reg 11 Rule 16 required that all co-residential (sharing a wall, floor, ceiling or is in the same building as a residential unit) dry cleaners cease use of perc on July 1, 2010. Therefore, there is no cancer risk, hazard or PM2.5 concentrations from co-residential dry cleaning businesses in the BAAQMD.
 - d. Non co-residential dry cleaners must phase out use of perc by Jan. 1, 2023. Therefore, the risk from these dry cleaners does not need to be factored in over a 70-year period, but instead should reflect the risk from 2023 onwards.
 - e. Gas stations can be adjusted using BAAQMD's Gas Station Distance Multiplier worksheet.
 - f. Unless otherwise noted, exempt sources are considered insignificant. See BAAQMD Reg 2 Rule 1 for a list of exempt sources.
 - g. This spray booth is considered to be insignificant.

Date last updated:
03/13/2018

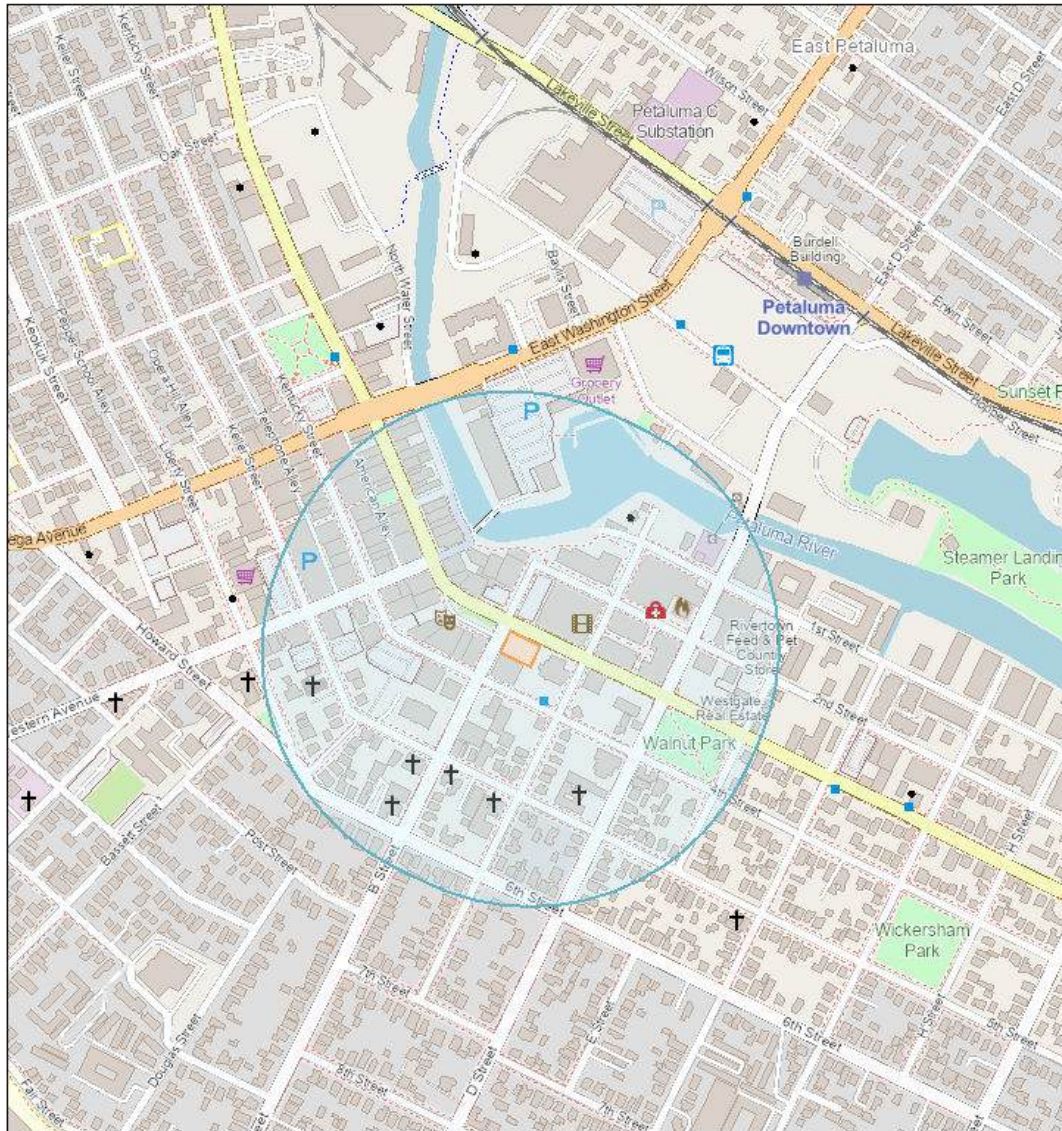


Screening Report

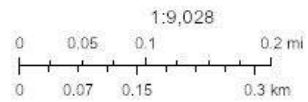
Area of Interest (AOI) Information

Area : 3,624,202.92 ft²

Jul 12 2023 11:23:20 Pacific Daylight Time



- Permitted Stationary Sources



Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri

Summary

Name	Count	Area(ft ²)	Length(ft)
Permitted Stationary Sources	1	N/A	N/A

Permitted Stationary Sources

#	Facility_I	Facility_N	Address	City	State
1	20509	City of Petaluma	6 C Street	Petaluma	CA

#	Zip	County	Latitude	Longitude	Details
1	94952	Sonoma	38.234543	-122.637393	Generator

#	NAICS	NAICS_Sect	NAICS_Subs	NAICS_Indu	Cancer_Ris
1	237110	Construction	Heavy and Civil Engineering Construction	Water and Sewer Line and Related Structures Construction	2.774000

#	Chronic_Ha	PM25	Count
1	0.001000	0.004000	1

NOTE: A larger buffer than 1000 feet may be warranted depending on proximity to significant sources.

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**GEOTECHNICAL INVESTIGATION
THE PETALUMAN HOTEL
2 PETALUMA BOULEVARD SOUTH
PETALUMA, CALIFORNIA**

January 28, 2022

Project 1927.01

Prepared for:
EKN Development Group
220 Newport Center Drive, Suite 11-262
Newport Beach, California 92660

Attention: Mike Jolly

CERTIFICATION

This document is an instrument of service, prepared by or under the direction of the undersigned professionals, in accordance with the current ordinary standard of care. The service specifically excludes the investigation of radon, asbestos, toxic mold and other biological pollutants, and other hazardous materials. The document is for the sole use of the client and consultants on this project. Use by third parties or others is expressly prohibited without written permission. If the project changes, or more than two years have passed since issuance of this report, the findings and recommendations must be reviewed by the undersigned.

MILLER PACIFIC ENGINEERING GROUP
(a California corporation)

REVIEWED BY:

DRAFT

Daniel S. Caldwell
Geotechnical Engineer No. 2006
(Expires 9/30/23)

Nathan G. Klemm
Geotechnical Engineer No. 3168
(Expires 3/31/23)

**GEOTECHNICAL INVESTIGATION
THE PETALUMAN HOTEL
2 PETALUMA BOULEVARD SOUTH
PETALUMA, CALIFORNIA
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APPENDIX A – SUBSURFACE EXPLORATION AND LABORATORY TESTING

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Rock Classification Chart	A-2
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APPENDIX B – SUBSURFACE EXPLORATION (CPTS)

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**GEOTECHNICAL INVESTIGATION
THE PETALUMAN HOTEL
2 PETALUMA BOULEVARD SOUTH
PETALUMA, CALIFORNIA**

1.0 INTRODUCTION

This report summarizes Miller Pacific Engineering Group's (MPEG) Geotechnical Investigation for the planned Petaluman Hotel, located at 2 Petaluma Boulevard South in Petaluma, California. A Site Location Map is shown on Figure 1. The purpose of our Geotechnical Investigation is to explore the subsurface soil and groundwater conditions, evaluate geotechnical hazards that may affect the planned development, and provide geotechnical recommendations and design criteria for the project. In accordance with our proposal dated February 24, 2021, we are providing our geotechnical engineering services in three phases: 1) Geotechnical Investigation for the proposed improvements, 2) supplemental consultation and geotechnical design review, and 3) construction observation and testing. This report completes our Phase 1 services and includes the following:

- Review of readily available published geologic and geotechnical reference data;
- Exploration of subsurface conditions with one exploratory boring and four cone penetration tests (CPTs);
- Evaluation of geologic hazards and development of conceptual mitigation measures;
- Development of geotechnical recommendations and design criteria (i.e., site grading, seismic, foundation, etc.) for the project; and,
- Preparation of this report summarizing our findings.

2.0 PROJECT DESCRIPTION

As shown on the Site Plan, Figure 2, the project consists of developing the property with a five-story hotel with basement parking. We anticipate that the new building will be cast in place concrete at the basement and first floor level. The floors above the first-floor level will be post tensioned concrete slabs. The top of the basement floor will be approximately 15 feet below street level, and the top of the parking elevator pit slab will be approximately 21 feet below street level. Ancillary improvements are expected to include exterior hardscape/flatwork, new underground utilities, new site drainage, and other improvements "typical" of such developments. No detailed structural information is available at this time. However, preliminary estimates indicate the total building weight (dead load), including basement walls but not including basement mat slab floor, will be approximately 13,500 to 16,500 kips. The estimated total live load is 6,000 kips.

The project site is an approximately 0.3-acre parcel located in an area of nearly level terrain. The site has historically been used as a fuel/service station. We understand that environmental studies have been conducted at the property, and a clean-up of known areas of environmentally contaminated surface soil has been recently completed.

3.0 SITE CONDITIONS

3.1 Regional Geology

The project site lies within the Coast Ranges geomorphic province of California. Regional topography within the Coast Ranges province is characterized by northwest-southeast trending

mountain ridges and intervening valleys that parallel the major geologic structures, including the San Andreas Fault System. The province is also generally characterized by abundant landsliding and erosion, owing in part to its typically high levels of precipitation and seismic activity.

The oldest rocks in the region are the sedimentary, igneous, and metamorphic rocks of the Mesozoic-age (225- to 65-million years old) Franciscan Assemblage. Within Sonoma County, Franciscan rocks are in fault contact with marine sedimentary rocks of the Great Valley Sequence which are of similar age. Locally, a variety of younger sedimentary and volcanic rocks of Tertiary (1.8- to 65-million years old) and Quaternary (less than 1.8-million years old) age overlie the basement rocks of the Franciscan Assemblage and Great Valley Sequence. Within Sonoma County, Late Miocene to Pliocene-age (approximately 2.6- to 11.6-million years old) Sonoma Volcanics comprise the majority of these rocks.

Tectonic deformation and erosion during late Tertiary and Quaternary time (the last several million years) formed the prominent coastal ridges and intervening valleys typical of the Coast Ranges province. The youngest geologic units in the region are Quaternary-age (last 1.8 million years) sedimentary deposits, including alluvial deposits which partially fill most of the valleys and colluvial deposits which typically blanket the lower portions of surrounding slopes.

Regional geologic mapping (Bezore et al, 2002) indicates the site is underlain by Holocene fan deposits (map symbol Qhf), as shown on the Regional Geologic Map, Figure 3. These deposits typically consist of interbedded layers of unconsolidated gravel, sand, silt, and clay.

3.2 Surface Conditions

The project site is located on a rectangular 0.3-acre parcel in downtown Petaluma. The ground surface at the site is nearly level to slightly sloping. The site has been used as a fuel/service station. Properties east and south of the site are developed with commercial buildings. The existing Rex Ace Hardware Store south of the site is located very close to the property line of the subject site. The existing Bank of the West building east of the site is located about twenty feet or more from the property line. The site is bordered on the north by Petaluma Boulevard South and is bordered on the west by B Street.

3.3 Field Exploration

We explored subsurface conditions in the general vicinity of the planned improvements on August 25th, 2021, with four Cone Penetration Tests (CPTs) pushed to maximum depths between 13.7 and 27.7-feet below the ground surface. We also excavated one exploratory soil boring utilizing truck-mounted drilling equipment to 71.5-feet below the ground surface on October 29th, 2021. The approximate CPT and boring locations are shown on the Site Plan, Figure 2. Our Geologist logged the boring in the field and collected soil samples at select intervals for laboratory testing.

Brief descriptions of the terms and methodology used in classifying earth materials are provided on the Soil and Rock Classification Charts, Figures A-1 and A-2, and the exploratory Boring Log is shown on Figures A-3 through A-6. A description of the CPT instrument and exploratory CPT logs are presented on Figures B-1 through B-5. Our subsurface exploration program is discussed in more detail in Appendices A and B.

Laboratory testing of select soil samples recovered from our soil boring included determination of moisture content, dry density, unconfined compressive strength, and particle size distribution, in general accordance with ASTM, EPA, and/or other applicable standards. The results of the moisture

content, dry density, and unconfined compressive strength are presented on the Boring Log. The results of the particle size distribution tests are presented on Figures A-7 and A-8. The laboratory testing program is also discussed in further detail in Appendix A.

3.4 Subsurface Conditions

The subsurface exploration generally confirms the regionally mapped geologic conditions at the site. The project site is underlain by interbedded alluvial deposits variously composed of low to high plasticity, medium stiff to very stiff, silty to sandy clay and loose to dense silty and clayey sands and gravels of Holocene and likely Pleistocene age. Claystone bedrock was encountered approximately 43-feet below the ground surface.

Groundwater was encountered in Boring 1 at 6.9-feet below the ground surface. However, since the boring was not left open for an extended period, a stabilized depth to groundwater may not have been observed. Groundwater was encountered in the CPTs at a depth of between 5.0 and 11.0 feet below the ground surface. Typically, groundwater levels fluctuate seasonally, with higher levels expected during the wet winter months. For planning and design purposes, the groundwater should be assumed to be at the ground surface.

3.5 Seismicity

The project site is located within a seismically active region that includes the Central and Northern Coast Mountain Ranges. As shown on the Fault Map, Figure 4, several active faults are present in the area including Rodgers Creek, San Andreas, Hayward, Maacama, and West Napa Faults, among others. An “active” fault is defined as one that shows displacement within the last 11,000 years and, therefore, is considered more likely to generate a future earthquake than a fault that shows no evidence of recent rupture. The California Geologic Survey has mapped various active and inactive faults in the region (CDMG, 1972 and 2000). These faults are shown in relation to the project site on the attached Active Fault Map, Figure 4. The Rodgers Creek Fault is the nearest known active fault and is located approximately 8.7 kilometers (5.4-miles) east of the site (Google Earth, 2021).

3.5.1 Historic Fault Activity

Numerous earthquakes have occurred in the region within historic times. Earthquakes (magnitude 2.0 and greater) that have occurred in the San Francisco Bay Area since 1985 have been plotted on a map shown on Figure 5. Two significant earthquakes have struck the Petaluma area in recent history that have caused significant damage.

The first earthquake that caused significant damage was the 1906 San Francisco Earthquake (M7.9); which reportedly resulted in a Modified Mercalli Scale of IX (Lawson, 1908). The Modified Mercalli Intensity scale is based on observed damage and the public response during a seismic event. A Modified Mercalli Intensity of IX typically results in general public panic, damage to masonry buildings ranging from collapse to serious damage unless modern design, racked wood-framed structures, structures shifted off foundations; if not bolted to the foundation and broken underground utilities.” Reported damage included multiple structural collapses and structures sliding off foundations. Additionally, 60 to 65-lives were lost as a result of the earthquake.

The second earthquake that caused significant structural damage was the 1969 (M5.6) Santa Rosa Earthquake. This earthquake reportedly resulted in a Modified Mercalli Intensity of VIII (Cloud et. al., 1970). A Modified Mercalli Intensity of VIII typically results

in affected steering of cars, extensive damage to unreinforced masonry buildings, including partial collapse, fall of some masonry walls, twisting and falling of chimneys and monuments, structures shifted off foundations; if not bolted to the foundation; loose partition walls thrown out of plumb and broken tree branches. Reported damage included approximately 99-structures heavily damaged with many requiring abandonment. No deaths were associated with this earthquake.

3.5.2 Probability of Future Earthquakes

The site will likely experience moderate to strong ground shaking from future earthquakes originating on any of several active faults in the San Francisco Bay region. The historical records do not directly indicate either the maximum credible earthquake or the probability of such a future event. To evaluate earthquake probabilities in California, the USGS has assembled a group of researchers into the “Working Group on California Earthquake Probabilities” (USGS 2003, 2008; Field, et al 2015) to estimate the probabilities of earthquakes on active faults. These studies have been published cooperatively by the USGS, CGS, and Southern California Earthquake Center (SCEC) as the Uniform California Earthquake Rupture Forecast, Versions 1, 2, and 3.

In these studies, potential seismic sources were analyzed considering fault geometry, geologic slip rates, geodetic strain rates, historic activity, micro-seismicity, and other factors to arrive at estimates of earthquakes of various magnitudes on a variety of faults in California. The 2008 study specifically analyzed fault sources and earthquake probabilities for the seven major regional fault systems in the Bay Area region, and the entire state of California and updated some of the analytical methods and models. The most recent 2015 study (UCERF3) further expanded the database of faults considered and allowed for consideration of multi-fault ruptures, among other improvements.

Conclusions from the most recent UCERF3 and USGS’ 2016 Fact Sheet (Aagard et al, 2016) indicate there is a 72% chance of an M>6.7 earthquake in the San Francisco Bay Region between 2014 and 2043. The highest probability of an M>6.7 earthquake on any of the active faults in the San Francisco Bay region by 2043 is assigned to the Hayward/Rodgers Creek Fault system, located approximately 8.7-kilometers east of the site, at 33%. Additional studies by the USGS regarding the probability of large earthquakes in the Bay Area are ongoing. These current evaluations include data from additional active faults and updated geological data.

4.0 GEOLOGIC HAZARDS EVALUATION

4.1 General

The principal geologic hazards which could potentially affect the project site are strong seismic shaking from future earthquakes in the San Francisco Bay Region, liquefaction, and post-liquefaction settlement. Other hazards, such as fault rupture, tsunami inundation, slope instability, and others, are not considered significant at the site. More detailed discussion of each geologic hazard considered, their anticipated impacts, and recommended mitigation measures are discussed below.

4.2 Fault Surface Rupture

Under the Alquist-Priolo Earthquake Fault Zoning Act, the California Geological Survey (CDMG)/California Geologic Survey (CGS) (1972, 2000) produced 1:24,000 scale maps showing

all known active faults and defining zones within which special fault studies are required. Based on currently available published geologic information, the project site is not located within an Alquist-Priolo Earthquake Fault Zone (CGS, 2018) nor is within the City’s General Plan Fault Rupture Hazard Zone. The potential for fault surface rupture at the site is therefore considered to be low.

Evaluation: No significant impact.

Recommendation: No special engineering measures are required.

4.3 Seismic Shaking

The site will likely experience seismic ground shaking from future earthquakes in the San Francisco Bay Area. Earthquakes along several active faults in the region, as shown on Figure 4, could cause moderate to strong ground shaking at the site.

4.3.1 Deterministic Seismic Hazard Analysis

Deterministic Seismic Hazard Analysis (DSHA) predicts the intensity of earthquake ground motions by analyzing the characteristics of nearby faults, distance to the faults and rupture zones, earthquake magnitudes, earthquake durations, and site-specific geologic conditions. Empirical relations (Abrahamson, Silva & Kamai, Boore, Stewart, Seyhan & Atkinson, Campbell & Borzognia, and Chiou & Youngs, (2014)) for the stiff soil subsurface conditions were utilized to provide approximate estimates of median peak site accelerations. A summary of the principal active faults affecting the site, their closest distance, moment magnitude of characteristic earthquake, probable median accelerations and plus one standard deviation (+1σ), peak ground accelerations (PGA) for earthquakes on faults near the site are shown in Table A.

TABLE A
DETERMINISTIC PEAK GROUND ACCELERATION
The Petaluman Hotel
2 Petaluma Boulevard South
Petaluma, California

<u>Fault</u>	<u>Fault Distance</u> ¹	<u>Moment Magnitude</u> ¹	<u>Median PGA</u> ^{2,3}	<u>+1σ PGA</u> ^{2,3}
Rodgers Creek	8.7 km	7.58	0.37 g	0.62 g
San Andreas	23.7 km	8.04	0.26 g	0.44 g
Hayward	30.7 km	7.58	0.19 g	0.32 g
Maacama	34.1 km	7.55	0.17 g	0.30 g
West Napa	28.7 km	6.97	0.15 g	0.26 g

Reference:

1. Values estimated using Google Earth KML Files showing Quaternary Faults & Folds in the US obtained from USGS website January 24, 2022.
2. Values determined using Pacific Earthquake Engineering Research Center (PEER) NGA-West2 Excel Spreadsheet, <http://peer.berkeley.edu/ngawest2/databases/>
3. Values determined using $V_s^{30} = 260$ m/s for Site Class “D”. See Section 5.2 of this report for additional discussion regarding site classification.

4.3.2 Probabilistic Seismic Hazard Analysis

Probabilistic Seismic Hazard Analysis (PSHA) analyzes all possible earthquake scenarios while incorporating the probability of each individual event to occur. The probability is determined in the form of the recurrence interval, which is the average time for a specific earthquake acceleration to be exceeded. The design earthquake is not solely dependent on the fault with the closest distance to the site and/or the largest magnitude, but rather the probability of given seismic events occurring on both known and unknown faults.

We calculated the PGA for two separate probabilistic conditions, the 2% chance of exceedance in 50 years (2,475-year statistical return period) and the 10% chance of exceedance in 50 years (475-year statistical return period), utilizing the 2008 Interactive Deaggregation (USGS, 2008). The results of the probabilistic analyses are presented below in Table B.

TABLE B
PROBABILISTIC SEISMIC HAZARD ANALYSES
The Petaluman Hotel
2 Petaluma Boulevard South
Petaluma, California

	<u>Statistical Return Period</u>	<u>Magnitude</u>	<u>PGA</u>
2% in 50 years	2,475 years	7.2	0.79 g
10% in 50 years	475 years	7.1	0.48 g

Reference: USGS Unified Hazard Tool, accessed January 24, 2022.

The potential for strong seismic shaking at the project site is high. Due to its close proximity, the Rodgers Creek Fault (approximately 8.7 kilometers east) presents the highest potential for strong ground shaking. The most significant adverse impact associated with strong seismic shaking is potential damage to structures and improvements.

Evaluation: Less than significant with mitigation.
Recommendation: Minimum mitigation measures should include designing the structures and foundations in accordance with the most recent version of the California Building Code. Recommended seismic coefficients are provided in Section 5.2 of this report.

4.4 Liquefaction Potential and Related Impacts

Liquefaction refers to the sudden, temporary loss of soil shear strength during strong ground shaking. Liquefaction-related phenomena include liquefaction-induced settlement, flow failure, and lateral spreading. These phenomena can occur where there are saturated, loose, granular deposits. Recent advances in liquefaction studies indicate that liquefaction can occur in granular materials with a high, 35 to 50%, fines content (soil particles that pass the #200 sieve), provided the fines exhibit a plasticity less than 7. Saturated granular layers were observed during our subsurface exploration. Additionally, regional mapping indicates the site lies in a zone of “moderate liquefaction susceptibility”, as shown on Figure 6.

4.4.1 Liquefaction Evaluation

To evaluate soil liquefaction, the seismic energy from an earthquake is compared with the ability of the soil to resist pore pressure generation, known as the Cyclic Resistance Ratio (CRR). The earthquake energy is termed the cyclic stress ratio (CSR) and is a function of the maximum considered earthquake peak ground acceleration (PGA) and depth. Soil resistance to liquefaction is based on its relative density, and the amount and plasticity of the fines (silts and clays). The relative density of cohesionless soil is correlated with the Standard Penetration Test (SPT) blow count data measured in the field and corrected for hammer efficiency, overburden and percent fines to determine the $(N_1)_{60,CS}$ value. Cone Penetration Test data, corrected for overburden, can also be utilized to determine the relative density of a soils and subsequently its resistance to liquefaction.

We analyzed the potential for liquefaction utilizing the data from our borings and the procedures outlined by Idriss and Boulanger (2008 & 2010), considering a magnitude 7.58 earthquake producing a PGA of 0.72-g, which corresponds to the PGA_M value as defined in ASCE 7-10 Section 11.8.3. The liquefaction analysis software Cliq, developed by Geologismiki (2006), uses CPT data to evaluate liquefaction potential. The results of our liquefaction analyses, are presented on Figures 7 through 10 and indicate several localized soil layers, ranging from a few inches to a few feet thick, may liquefy under a strong seismic event.

4.4.2 Post Liquefaction Settlement

We predicted the amount of post liquefaction settlement utilizing the procedures outlined by Idriss and Boulanger (2008, 2010 & 2014), which indicate post liquefaction settlement can occur in soils that exhibit a factor of safety against liquefaction of 2.0 or less. Based on our analyses, we predict up to about 0.5-inch of total settlement and 0.25-inch of differential settlement may occur beneath the basement slab level (about 20 feet below street elevation), over a horizontal distance of 100-feet, during the design seismic event.

Additionally, we utilized the procedures outlined by Ozocak and Sert (2010) to calculate the Liquefaction Potential Index (LPI), which is a gauge to determine if liquefiable layers will impact the ground surface. LPI is a function of the thickness, depth, and factor of safety against liquefaction in the individual layers within a soil column. The resulting LPI value corresponds to a relative potential for surface deformation impacting the ground surface. Typically, an LPI value of zero indicates the liquefiable layer will not impact the ground surface; while a value less than 5 has a low probability, value between 5 and 15 have a moderate probability and an LPI value greater than 15 have a high probability of surface impact. The results of our liquefaction analyses indicate LPI values up to 4.3, suggesting a low probability of liquefaction effects at the ground surface.

Based on our calculations, as described above, it is our opinion that isolated layers within the sand/gravel deposits may liquefy during a strong seismic event. Therefore, liquefaction and related liquefaction induced settlement of the ground surface presents a low to moderate risk of damage to the planned improvements.

Evaluation: Less than significant with mitigation.

Recommendation: Foundation systems should be designed to withstand up to 0.5-inch of total and 0.25-inch of differential settlement, over 100-feet. Foundation design criteria to mitigate the effects of liquefaction are provided in Section 5.4 should be followed.

4.5 Seismically Induced Ground Settlement

Seismic ground shaking can induce settlement of unsaturated, loose, granular soils. Settlement occurs as the loose soil particles rearrange into a denser configuration when subjected to seismic ground shaking. Varying degrees of settlement can occur throughout a deposit, resulting in differential settlement of structures founded on such deposits. The proposed structure will be supported below the groundwater level. Therefore, in our opinion the risk of damage due to seismically induced ground settlement is low.

Evaluation: No significant impact.

Recommendation: No special engineering measures are required.

4.6 Lurching and Ground Cracking

Lurching and associated ground cracking can occur during strong ground shaking. The ground cracking generally occurs along the tops of slopes where stiff soils are underlain by soft deposits or along steep slopes or channel banks. These conditions do not exist at the site, therefore the risk of lurching and ground cracking at the project site is low.

Evaluation: No significant impact.

Recommendation: No special engineering measures are required.

4.7 Erosion

Sandy soils on moderate slopes or clayey soils on steep slopes are susceptible to erosion when exposed to concentrated water runoff. These conditions do not exist at the site. However, there is always some potential for localized erosion due to concentrated surface water flows.

Evaluation: Less than significant with mitigation.

Recommendation: Mitigation measures include designing a site drainage system to collect surface water and discharging it into an established storm drainage system. The project Civil Engineer of Architect is responsible for designing the site drainage system and, an erosion control plan could be developed prior to construction per the current guidelines of the California Stormwater Quality Association's Best Management Practice Handbook.

4.8 Seiche and Tsunami

Seiche and tsunamis are short duration, earthquake-generated water waves in large, enclosed bodies of water and the open ocean, respectively. The extent and severity of a seiche or tsunami

would be dependent upon ground motions and fault offset from nearby active faults. The project site is at an increased elevation and not located near a large body of water. Therefore, seiche and tsunami events are not considered significant geologic hazards at the site.

Evaluation: No significant impact.

Recommendation: No special engineering measures are required.

4.9 Flooding

The project site is mapped on the border of a FEMA 500-year flood zone (ABAG, 2021) as shown on Figure 11; therefore, large scale flooding does not present a significant hazard to the project. Localized flooding can occur during a strong rainfall due to adverse site grades and/or inadequate storm drainage system.

Evaluation: Less than significant with mitigation.

Recommendation: The project Civil Engineer should evaluate the risk localized flooding and provide appropriate finished floor elevations, site grading, and storm drain design.

4.10 Dam Failure Inundation

Based on the Sonoma County Hazard Mitigation Plan Map (County of Sonoma, 2011) the site is not mapped in a Dam Failure Inundation zone. Therefore, the threat of inundation of the site from dam failure is judged low.

Evaluation: No significant impact.

Recommendation: No special engineering measures are required.

4.11 Expansive Soil

Expansive soils will shrink and swell with fluctuations in moisture content and are capable of exerting significant expansion pressures on building foundations, interior floor slabs, and exterior flatwork. Distress from expansive soil movement can include cracking of brittle wall coverings (stucco, plaster, drywall, etc.), racked door and/or window frames, and uneven floors and cracked slabs. Flatwork, pavements, and concrete slabs-on-grade are particularly vulnerable to distress due to their low bearing pressures.

The near-surface soils in the borings are generally characterized as medium plasticity clays and clayey sands suggesting low to moderate expansion potential. Therefore, the risk of expansive soil affecting the proposed improvements is considered low.

Evaluation: Less than significant with mitigation.

Mitigation: Soils should be moisture conditioned to above the optimum moisture content during site grading and maintained at this moisture content until imported aggregate base and/or surface flatwork is completed to “seal” in the higher moisture content and therefore reduce future expansive potential.

4.12 Settlement/Subsidence

Significant settlement can occur when new loads are placed at sites due to consolidation of soft compressible clays (i.e., Bay Mud) or compression of loose granular soils. Significant deposits of soft compressible materials were not observed during our subsurface exploration. Therefore, the

risk of long-term static settlement to the proposed structures at the project site is low.

Evaluation: No significant impact.

Recommendation: No special engineering measures are required.

4.13 Slope Instability/Landsliding

Slope instability generally occurs on relatively steep slopes and/or on slopes underlain by weak materials. The site lies on nearly level terrain, therefore, slope instability/landsliding is not considered a geologic hazard at the project site.

Evaluation: No significant impact.

Recommendation: No special engineering measures are required.

4.14 Radon-222 Gas

Radon-222 is a product of the radioactive decay of uranium-238 and radium-226, which occur naturally in a variety of rock types, mainly phosphatic shales, but also in other igneous, metamorphic, and sedimentary rocks. While low levels of radon gas are common, very high levels, which are typically caused by a combination of poor ventilation and high concentrations of uranium and radium in the underlying geologic materials, can be hazardous to human health.

The project site is located in Sonoma County, California, which is mapped in radon gas Zone 3 by the United States Environmental Protection Agency (USEPA, 2019). Zone 3 is classified by the EPA as exhibiting a “low” potential for Radon-222 gas with average predicted indoor screening levels less than 2 pCi/L. Therefore, the potential for hazardous levels of radon at the project site is low.

Evaluation: No significant impact.

Recommendation: No special engineering measures are required.

4.15 Volcanic Eruption

Several active volcanoes with the potential for future eruptions exist within northern California, including Mount Shasta, Lassen Peak, and Medicine Lake in extreme northern California, the Mono Lake-Long Valley Caldera complex in east-central California, and the Clear Lake Volcanic Field, located in Lake County approximately 51 miles north of the project site. The most recent volcanic eruption in northern California was at Lassen Peak in 1917, while the most recent eruption at the nearest volcanic center to the project site, the Clear Lake Volcanic Field, was about 10,000 years ago. All of northern California’s volcanic centers are currently listed under “normal” volcanic alert levels by the USGS California Volcano Observatory (USGS, 2019a). While the aforementioned volcanic centers are considered “active” by the USGS, the likelihood of damage to the proposed improvements due to volcanic eruption is generally low.

Evaluation: No significant impact.

Recommendation: No special engineering measures are required.

4.16 Naturally Occurring Asbestos (NOA)

Naturally occurring asbestos is commonly found in association with serpentinite and associated ultramafic rock types. These rocks are a major constituent of the Franciscan Complex, which underlies vast portions of the greater San Francisco Bay Area. The site is underlain by relatively

thick native alluvial soils, and while it lies in a region dominated in part by Franciscan Complex bedrock, no evidence suggesting the presence of serpentinite or related rock types was observed during our exploration. Therefore, the likelihood that significant deposits of naturally occurring asbestos will be encountered at the site is low.

Evaluation: No significant impact.

Recommendation: No special engineering measures are required.

4.17 Hazardous Materials

Hazardous materials were not physically observed during our subsurface exploration. While environmental testing for hazardous materials was beyond the scope of our services, the site was previously used as a fuel/service station. We understand that environmental testing and clean-up of the site has already been completed. Therefore, we judge the potential for hazardous materials being present on the project site is low.

Evaluation: No significant impact.

Recommendation: No special engineering measures are required.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 General

Based on our experience with similar projects in the Petaluma area, we conclude that, from a geotechnical standpoint, the site is feasible for the planned improvements. The primary geotechnical issues to address in design of the project are providing adequate seismic design, lateral shoring and dewatering during construction to protect adjacent buildings and utilities, designing foundations to resist the effects of liquefaction-induced and static differential settlements and hydrostatic uplift and lateral forces, and providing moisture control measures for the basement. Specific recommendations and criteria to address these and other geotechnical project facets are presented in the following sections.

5.2 Seismic Design

The project site is located in a seismically active area. Therefore, structures should be designed in conformance to the seismic provisions of the California Building Code (CBC). However, since the goal of the building code is protection of life safety, some structural damage may still occur during strong ground shaking.

Due to the presence of sandy soil layers beneath the building site that are prone to liquefaction, we judge the site should be classified as “Site Class F” per the 2019 California Building Code. However, per section 20.3.1 of the ASCE 7-16, an equivalent linear site-specific response analysis (i.e., SHAKE, DeepSoil, etc.) is not required if the proposed structure has a fundamental period less than 0.5 seconds. We anticipate the proposed structure will have a fundamental period less than 0.5-seconds; therefore, based on the harmonic mean of the blow counts, we recommend classifying the site as a “Site Class D”.

Per ASCE 7-16 Section.11.4.8, a Site-Specific Ground Motion Hazard Analysis shall be performed in accordance with ASCE 7-16 Section 21.2 on sites classified as a “Site Class D” if the S_1 value is greater than or equal to 0.2 g. The S_1 value for the site conditions and location is 0.60 g; therefore, we performed a Site-Specific Ground Motion Hazard Analysis as presented in Appendix C, and the results are presented below on Table C.

TABLE C
ASCE 7-16 SEISMIC PARAMETERS
The Petaluman Hotel
2 Petaluma Boulevard South
Petaluma, California

<u>Factor Name</u>	<u>Coefficient</u>	ASCE 7-16 <u>Site Specific Value</u>
Site Class ¹	S _{A,B,C,D,E, or F}	S _D
Spectral Acc. (short)	S _S	1.50 g
Spectral Acc. (1-sec)	S ₁	0.60 g
Spectral Response (short)	SM _S	1.56 g
Spectral Response (1-sec)	SM ₁	1.61 g
Design Spectral Response (short)	SD _S	1.04 g
Design Spectral Response (1-sec)	SD ₁	1.07 g
MCE _G ² PGA adjusted for Site Class	PGA _M	0.72 g

Notes:

1. Site Class D Description: Stiff soil profile with shear wave velocities between 600 and 1,200 ft/sec, standard blow counts between 15 and 50 blows per foot, and undrained shear strength between 1,000 and 2,000 psf.
2. Maximum Considered Earthquake Geometric Mean

5.3 Site Preparation and Grading

Site grading and earthwork should be performed in accordance with the recommendations and criteria outlined in the following sections.

5.3.1 Site Preparation

Clear pavements, old foundations, over-sized debris, and organic material from areas to be graded. Debris, rocks larger than four inches, and vegetation are not suitable for structural fill and should be removed from the site. Existing foundations and utilities which are to be abandoned as part of the work should be removed from structural areas.

Where fills or other structural improvements are planned, any standing water or soft, saturated soils should be removed. The subgrade surface should then be scarified to a depth of eight inches, moisture conditioned to above the optimum moisture content, and compacted to at least 90 percent relative compaction. Relative compaction refers to the in-place dry density of soil expressed as a percentage of the maximum dry density, as determined by ASTM D1557. The subgrade should also be firm and unyielding when proof-rolled with heavy, rubber-tired construction equipment. If soft, wet, or otherwise unsuitable materials prevent compaction as described above, we will provide supplemental recommendations to address the specific condition.

5.3.2 Excavations

Site excavations for the new foundations and basement, utilities, and other improvements will generally encounter medium stiff to stiff clayey soils and medium dense clayey sand soils. Based on our subsurface exploration, we judge the majority of site excavations can be

reasonably performed with “traditional” grading equipment, such as medium-size dozers, excavators, and backhoes. Temporary (steeper) cut slopes may be required during construction and, for planning purposes, these cut slopes may be designed for an OSHA Type “C” soil profile. The Contractor is responsible for site safety during construction, including design of temporary cuts and shoring.

All excavations in excess of 5-feet deep will need to be sloped or braced in accordance with Cal/OSHA regulations. The onsite soils are considered “Type C” soil pursuant with OSHA classifications. Temporary support during new foundation construction or excavation for the new basement should be carefully considered and the shoring system should be monitored so if settlement or rotation occurs during the work, supplemental support can be added.

5.3.3 Fill Materials, Placement and Compaction

Fill materials should consist of non-expansive materials that are free of organic matter, have a Liquid Limit of less than 40 (ASTM D 4318), a Plasticity Index of less than 15 (ASTM D 4318), and a minimum R-value of 20 (California Test 301). The fill material should contain no more than 70 percent of particles passing a No. 200 sieve and should be well-graded with a maximum particle size of four inches. Onsite soils should be suitable for use as fill provided they meet the criteria generally specified above and are free of organic materials. Any imported fill material needs to be tested to determine its suitability.

Fill materials should be uniformly moisture conditioned to above the optimum moisture content prior to compaction. Properly moisture conditioned fill materials should subsequently be placed in loose, horizontal lifts of eight-inches-thick or less and uniformly compacted to at least 90 percent relative compaction. For fills thicker than four feet, the entire height of fill should be compacted to at least 92% to reduce the potential for settlement. In pavement areas subjected to vehicle loads, the upper 12 inches of fill or natural soil should be compacted to at least 95 percent relative compaction. The maximum dry density and optimum moisture content of fill materials should be determined in accordance with ASTM D1557.

5.4 Foundation Design

Based on discussions with the project Architect, the basement will be designed to resist full hydrostatic pressures. This would generally include using a combination of structure dead weight, a thickened concrete foundation slab, structural hold-downs such as helical piles, a structural “heel” around the perimeter of the building, or other measures to resist buoyancy and uplift forces. Since a waterproofing membrane will be used, we recommend that any skin friction on the vertical basement walls be neglected in calculating uplift resistance. We recommend a minimum factor of safety against buoyancy of 1.20. If structural hold-downs such as helical piles are used, we can coordinate with the design team to provide supplemental criteria for their design.

We recommend that the basement mat slab foundation should have a minimum thickness of 36 inches.

Waterproofing of the mat slab foundation and basement retaining walls will be critical because significant hydrostatic pressures are anticipated, and these pressures will occur over extended periods of time. A waterproofing consultant or the project Architect should determine an appropriate waterproofing system.

TABLE D
FOUNDATION DESIGN CRITERIA
The Petaluman Hotel
2 Petaluma Boulevard South
Petaluma, California

Mat Slab Foundation (Basement) – See Figure 12

Allowable bearing pressure (dead plus live loads) ¹ :	2,500 psf
Base friction coefficient:	0.30
Lateral passive resistance ^{2,3} :	300 pcf
Modulus of Subgrade Reaction, k:	150 psi per inch

Buoyancy Resisting Hold Downs

Minimum diameter:	6 inches
Minimum depth:	18 feet
Skin Friction (dead plus live loads) ^{4,5} :	500 psf
Hydrostatic Uplift:	62.4 x Hw psf

Notes:

1. May increase design values by 1/3 for total design loads including wind and seismic.
2. Equivalent Fluid Pressure, not to exceed 3,000 psf.
3. Ignore uppermost 12-inches unless concrete or asphalt surfacing exists adjacent to foundation.
4. Uniform pressure distribution.
5. Uplift resistance is equal to 80% of the vertical skin resistance.

5.5 Retaining Wall Design

New retaining walls, temporary and permanent, will be required to support cuts for the basement. Soil nails or tiebacks and shotcrete facing may be considered to provide temporary support of a vertical excavation for basement construction. Closely spaced “stitch” piers or a “secant” wall could also be considered. Retaining walls should be designed in accordance with the criteria presented on Figure 12.

Below grade structures that are designed for hydrostatic pressures and buoyancy will not need to be subdrained.

5.6 Existing Conditions Assessment and Settlement Monitoring During Construction

We recommend that a careful damage assessment should be conducted for all existing adjacent structures and improvements prior to the commencement of construction of the project. The damage assessment should document existing conditions of adjacent improvements, including foundation cracking, un-level floors, out of plumb walls and out of square door/window openings, etc.

We recommend that vertical and lateral control points should be established on all sides of the proposed basement excavation. The control points should be periodically measured and

monitored by a licensed surveyor to determine if any vertical or lateral movement is occurring adjacent to the excavation during construction. If any movement is observed/measured, steps can be taken to strengthen the excavation shoring to control settlements and lateral movements.

5.7 Site and Foundation Drainage

Careful consideration should be given to design of finished grades at the site. We recommend that the adjoining landscaped areas be sloped downward at least 0.25 feet for 5 feet (5 percent) from the perimeter of building foundations. Where hard surfaces, such as concrete or asphalt adjoin foundations, slope these surfaces at least 0.10 feet in the first 5 feet (2 percent). Roof gutter downspouts may discharge onto the pavements but should not discharge onto any landscaped areas. Provide area drains for landscape planters adjacent to buildings and parking areas and collect downspout discharges into a tight pipe collection system.

5.8 Interior Concrete Slabs-On-Grade

To reduce (i.e., improve) interior moisture conditions, a six-inch layer of clean, free draining, ¾-inch angular gravel or crushed rock should be placed beneath (at grade) interior concrete slabs to form a capillary moisture break. The rock must be placed on a properly moisture conditioned and compacted subgrade that has been approved by the Geotechnical Engineer. A plastic membrane vapor barrier, 15 mils or thicker (e.g., 15-mil Stego Wrap Vapor Barrier), should be placed over the free draining gravel directly beneath the new slabs. The vapor barrier shall meet the ASTM E 1745 Class A requirements and be installed per ASTM 1643. Eliminating the capillary moisture break and/or plastic vapor barrier may result in excess moisture intrusion through the floor slabs resulting in poor performance of floor coverings, mold growth or other adverse conditions. The basement slab will be waterproofed, and the details of this system should be prepared by the project Architect or a waterproofing consultant.

5.9 Exterior Concrete Slabs

Exterior concrete walkway slabs and other concrete slabs that are not subjected to vehicle loads should be a minimum of five-inches-thick and underlain with four inches or more of Class 2 Aggregate Base. The aggregate base should be moisture conditioned to near optimum and compacted to at least 95 percent relative compaction. The upper eight inches of subgrade on which aggregate base is placed should be prepared as previously discussed under Section 5.2.

Where improved performance is desired (i.e., reduced risks of cracking or small movements), exterior slabs can be thickened to six inches and reinforced with steel reinforcing bars (not welded wire mesh). Driveways and slabs subject to vehicle loads should be a minimum of five-inches-thick with six inches of aggregate base and designed to resist traffic loading. We recommend crack control joints no farther than six feet apart in both directions and that the reinforcing bars extend through the control joints. Some movement or offset at sidewalk joints should be expected as the underlying soils expand and shrink from seasonal moisture changes.

5.10 Underground Utilities

Excavations for utilities will generally encounter stiff clayey soils and medium dense sandy soils. Groundwater may be encountered at shallow depths. Trench excavations having a depth of five feet or more must be excavated and shored in accordance with OSHA regulations, as discussed in Section 5.2.2.

Unless otherwise recommended by the pipe manufacturer, pipe bedding and embedment materials should consist of well-graded sand with 90 to 100 percent of particles passing the No. 4 sieve and no more than 5 percent finer than the No. 200 sieve. Crushed rock or pea gravel may also be considered for pipe bedding. Provide the minimum bedding thickness beneath the pipe in accordance with the manufacturer's recommendations (typically 3 to 6 inches). Trench backfill may consist of on-site soils, provided that the soils meet the fill criteria outlined in Section 5.2.3. Trench backfill should be moisture conditioned and placed in thin lifts and compacted to at least 90 percent. Use equipment and methods that are suitable for work in confined areas without damaging utility conduits.

5.11 Wintertime Construction

Wintertime/wet weather site work is feasible during the construction phase of this project, provided that weather conditions do not adversely impact the planned grading and proper erosion control measures are implemented to prevent excessive silt and mud from entering the storm drain system. High soil moisture contents and muddy site conditions may impact placing fills, compacting subgrades, and excavating foundation trenches. Several alternatives may be considered to improve the site conditions to allow site work to proceed in rainy conditions:

- Prior to the onset of winter rains, maintain a drier site by covering the work area and any stockpiled materials with plastic membrane sheeting or other impermeable membrane. Where asphalt pavements, other hardscape or drainage improvements currently exist in work areas, consider leaving these improvements in place until the last possible moment to maintain a drier subgrade condition.
- Lime treat the subgrade soils when site work commences to "weatherproof" the site. The disadvantage to this alternative is that future landscaping will likely require excavation and replacement of the treated soils for acceptable plant growth.
- Finally, imported, drier fill materials could be used to stabilize the site. Soft or wet on-site materials could be excavated to firm materials and drier (preferably granular) soils with good drainage characteristics would be imported to restore site grades. This alternative might also require future excavation and replacement of landscaping soils.

If construction occurs relatively early in the winter, we judge the first option (covering the site prior to winter rains) could be an effective method of maintaining a workable site. When the construction schedule and weather conditions are known, we can meet with the project team to further discuss alternatives to continuation of wintertime construction.

6.0 SUPPLEMENTAL GEOTECHNICAL SERVICES

We must review the plans and specifications for the project when they are nearing completion to confirm that the intent of our geotechnical recommendations has been incorporated and provide supplemental recommendations, if needed. During construction, we must observe and test site grading, and observe foundation excavations for the structures and associated improvements to confirm that the soil conditions encountered during construction are consistent with the design criteria presented in this report.

7.0 LIMITATIONS

This report has been prepared in accordance with generally accepted geotechnical engineering practices in the San Francisco Bay Area at the time the report was prepared. This report has been prepared for the exclusive use of EKN Development Group and/or its assignees specifically for this project. No other warranty, expressed or implied, is made. Our evaluations and recommendations are based on the data obtained during our subsurface exploration program and our experience with soil conditions in this geographic area.

Our approved scope of work did not include an environmental assessment of the site. Consequently, this report does not contain information regarding the presence or absence of toxic or hazardous wastes in the soil and groundwater at the site.

The evaluations and recommendations do not reflect variations in subsurface conditions that may exist between boring locations or in unexplored portions of the site. Should such variations become apparent during construction, the general recommendations contained within this report will not be considered valid unless MPEG is given the opportunity to review such variations and revise or modify our recommendations accordingly. No changes may be made to the general recommendations contained herein without the written consent of MPEG.

We recommend that this report, in its entirety, be made available to project team members, contractors, and subcontractors for informational purposes and discussion. We intend that the information presented within this report be interpreted only within the context of the report as a whole. No portion of this report should be separated from the rest of the information presented herein. No single portion of this report shall be considered valid unless it is presented with and as an integral part of the entire report.

8.0 LIST OF REFERENCES

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SITE COORDINATES

LAT. 38.2331°
LON. -122.6391°

SITE LOCATION

N.T.S.



REFERENCE: Google Earth, 2021



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SITE LOCATION MAP

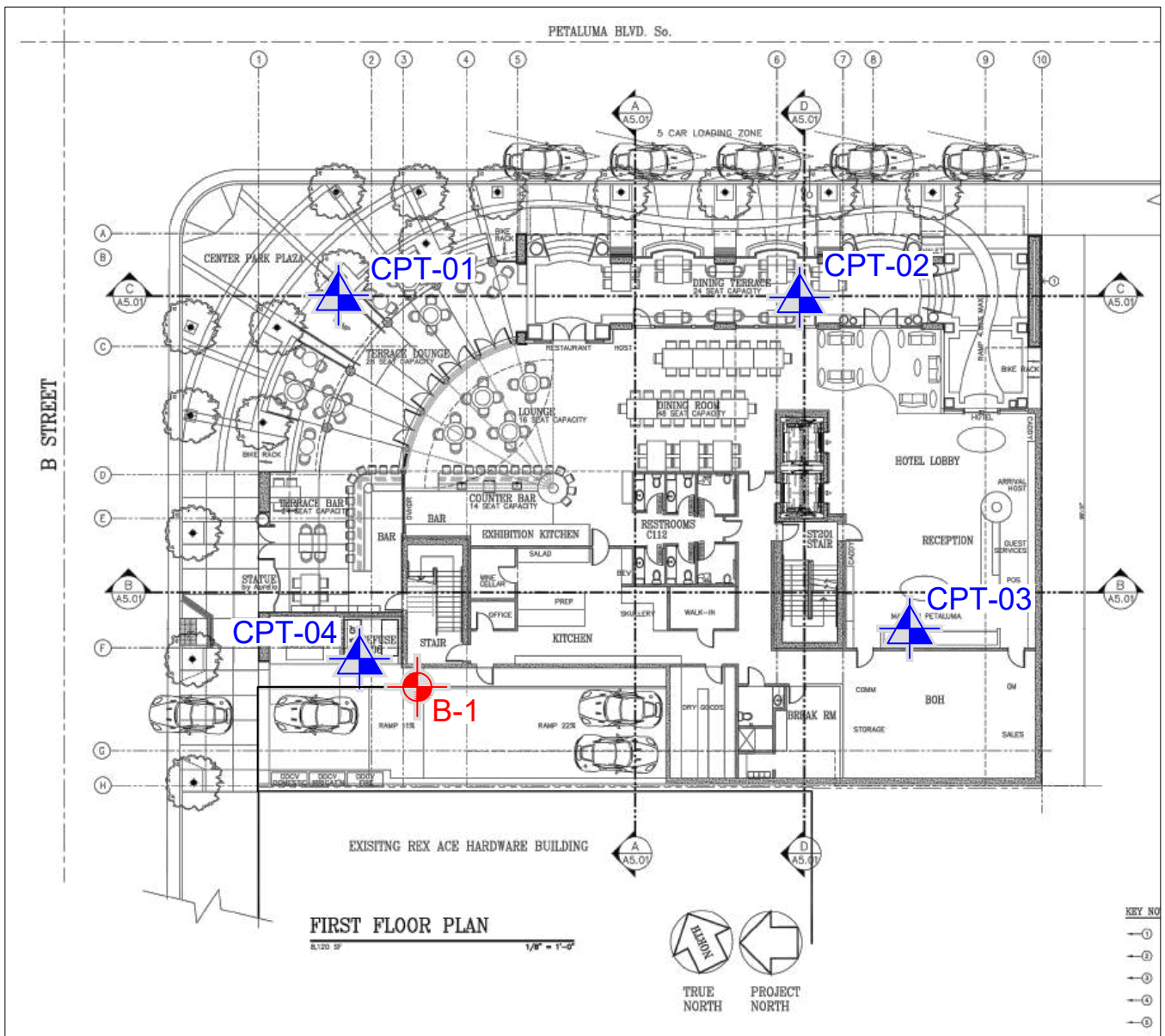
The Petaluman Hotel
2 Petaluma Boulevard South
Petaluma, California

Drawn _____
Checked MMT

1
FIGURE

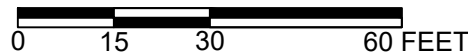
Project No. 1927.01

Date: 1/24/2022



SITE PLAN

SCALE



- Approximate location of boring completed by MPEG, 2021
- Approximate location of CPT completed by MPEG, 2021

REFERENCE: Jones Architecture & Development, "The Petaluman, First Floor Plan" March 16, 2020.

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SITE PLAN

The Petaluman Hotel
2 Petaluma Boulevard South
Petaluma, California

Project No. 1927.01 Date: 1/24/2022

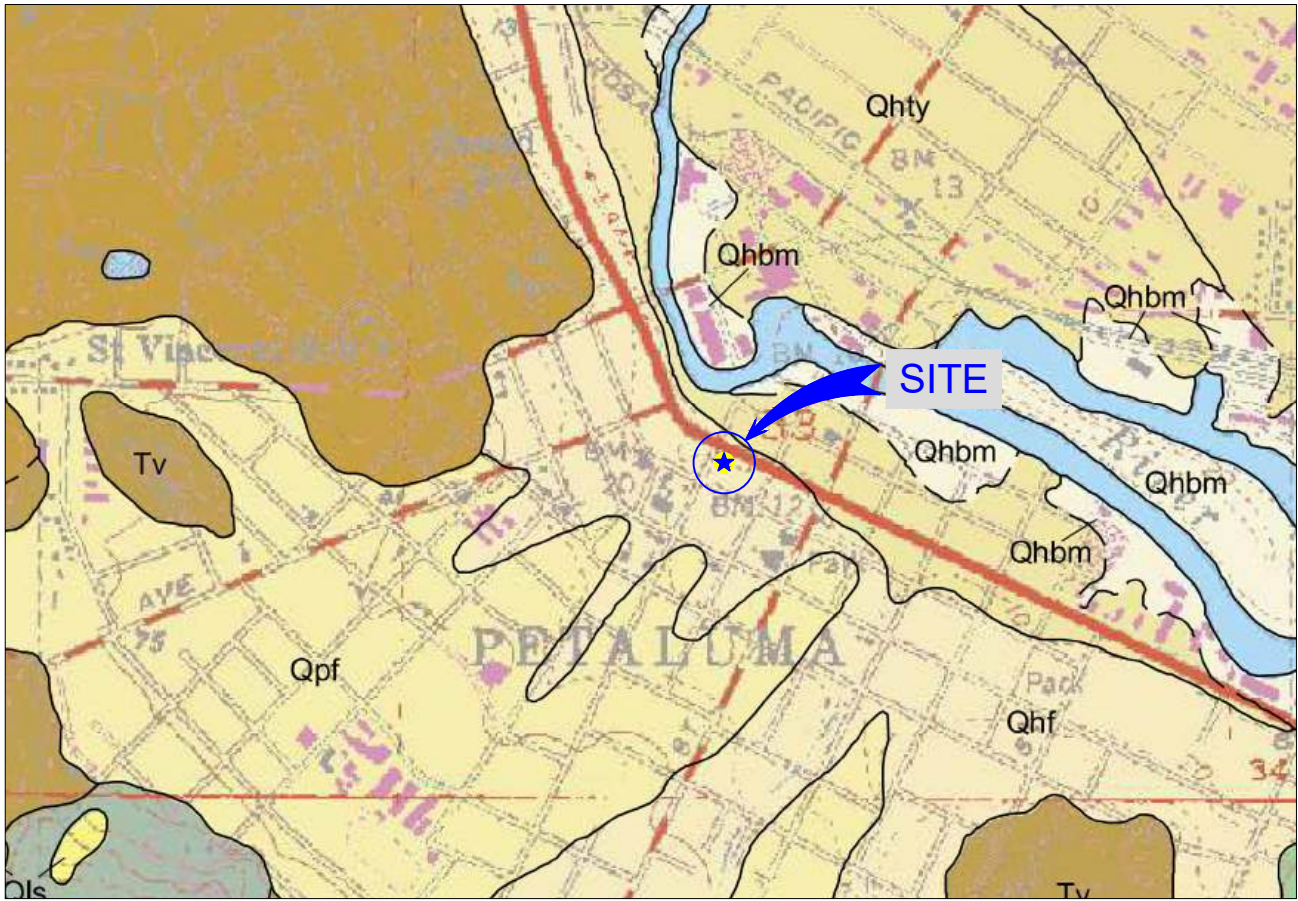
Drawn _____

MMT

Checked _____

2

FIGURE



REGIONAL GEOLOGIC MAP



LEGEND:

- Qhbm Holocene estuarine deposits. Sediments are silts, fine sands, peat, and clays.
- Qhf Holocene fan deposits. Sediments include sand, gravel, silt, and clay.
- Qhty Latest Holocene terrace deposits. Sediments include sand, gravel, silt, with minor clay.
- Qpf Pleistocene fan deposits.
- Tv Tertiary volcanic rocks.

REFERENCE: Bezore, S., Randolph-Loar, C.E. and Witter, R.C. (2002), "Geologic Map of the Petaluma 7.5' Quadrangle Sonoma and Marin Counties, California: A Digital Database, Version 1.0", California Department of Conservation, California Geological Survey, Map Scale 1:24,000



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REGIONAL GEOLOGIC MAP

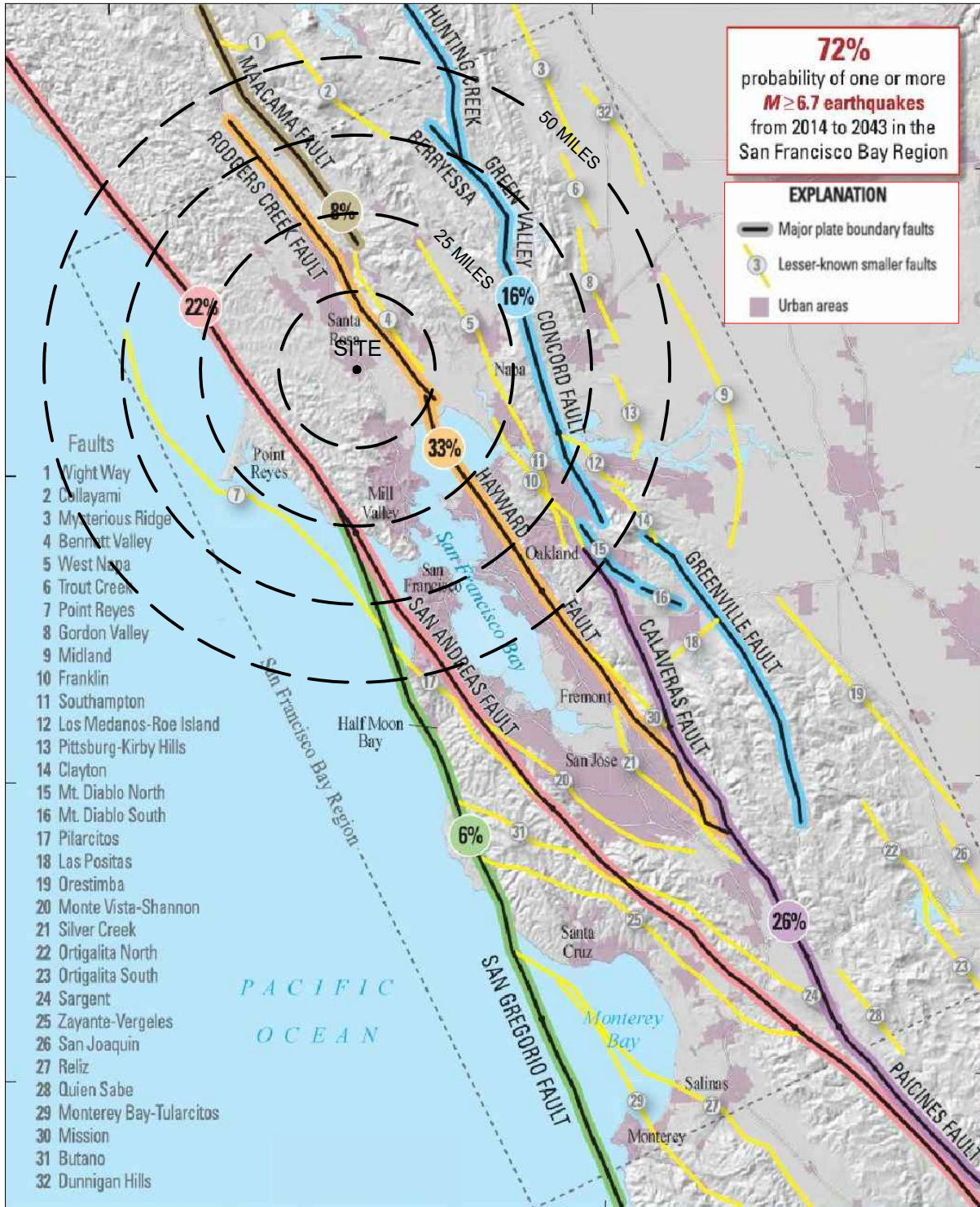
The Petaluman Hotel
 2 Petaluma Boulevard South
 Petaluma, California

Drawn _____
 MMT
 Checked _____

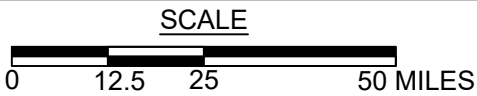
3

FIGURE

Project No. 1927.01 Date: 1/24/2022



SITE COORDINATES
LAT. 38.2331°
LON. -122.6391°



DATA SOURCE:

1) U.S. Geological Survey, U.S. Department of the Interior, "Earthquake Outlook for the San Francisco Bay Region 2014-2043", Map of Known Active Faults in the San Francisco Bay Region, Fact Sheet 2016-3020, Revised August 2016 (ver. 1.1).



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ACTIVE FAULT MAP

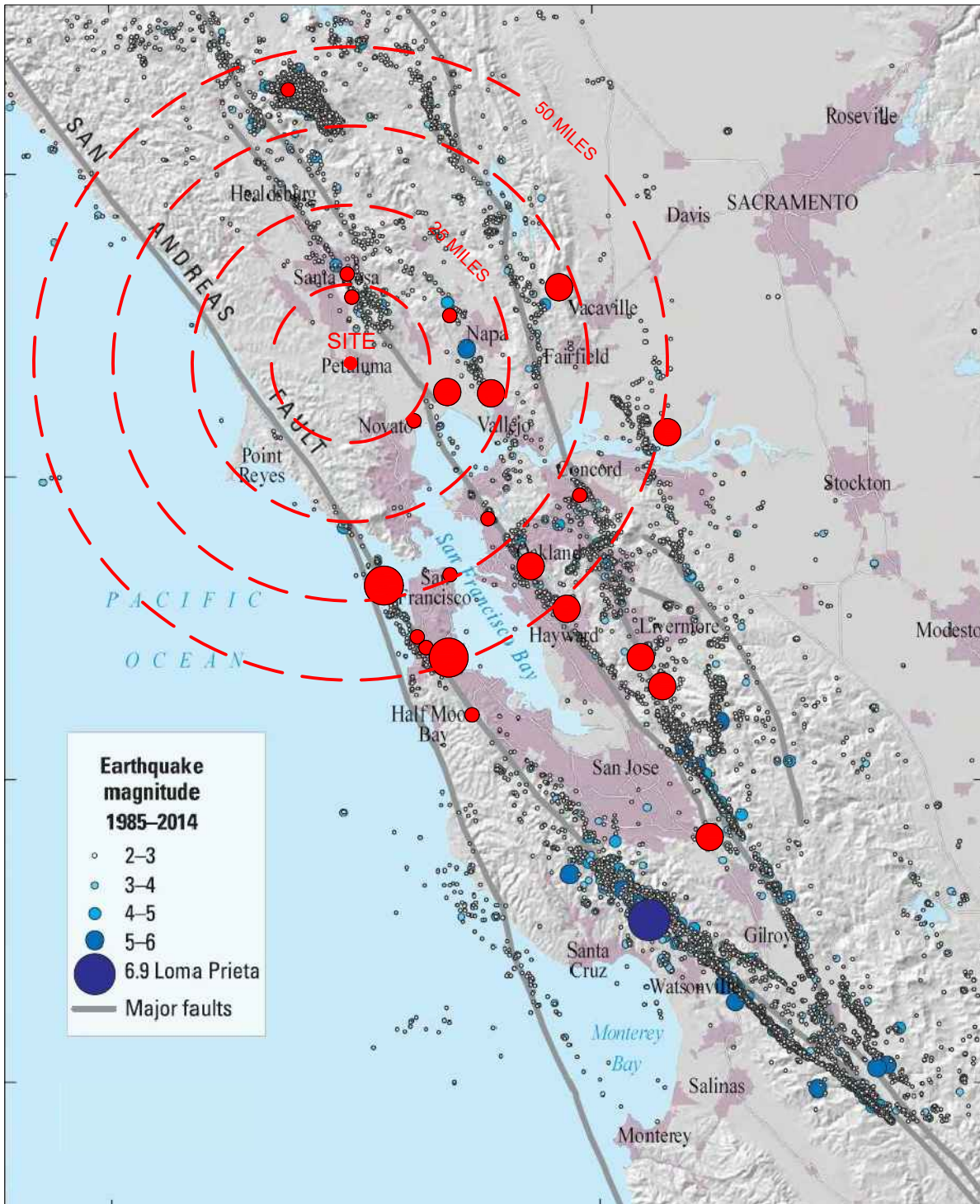
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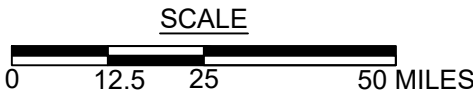
Date: 1/24/2022

Drawn _____
Checked _____
MMT

4
FIGURE



SITE COORDINATES
 LAT. 38.2331°
 LON. -122.6391°



LEGEND & DATA SOURCE:

See legend above. U.S. Geological Survey, U.S. Department of the Interior, "Earthquake Outlook for the San Francisco Bay Region 2014-2043", Map of Known Active Faults in the San Francisco Bay Region, Fact Sheet 2016-3020, Revised August 2016 (ver. 1.1).
 Large circles indicate earthquakes $M > 7.0$, medium circles indicate $6.0 < M < 7.0$ and small circles indicate $5.0 < M < 6.0$. U.S. Geological Survey, Earthquake Catalog Search, <https://earthquake.usgs.gov/earthquakes/search/>. Earthquakes between 1830 and 2021.



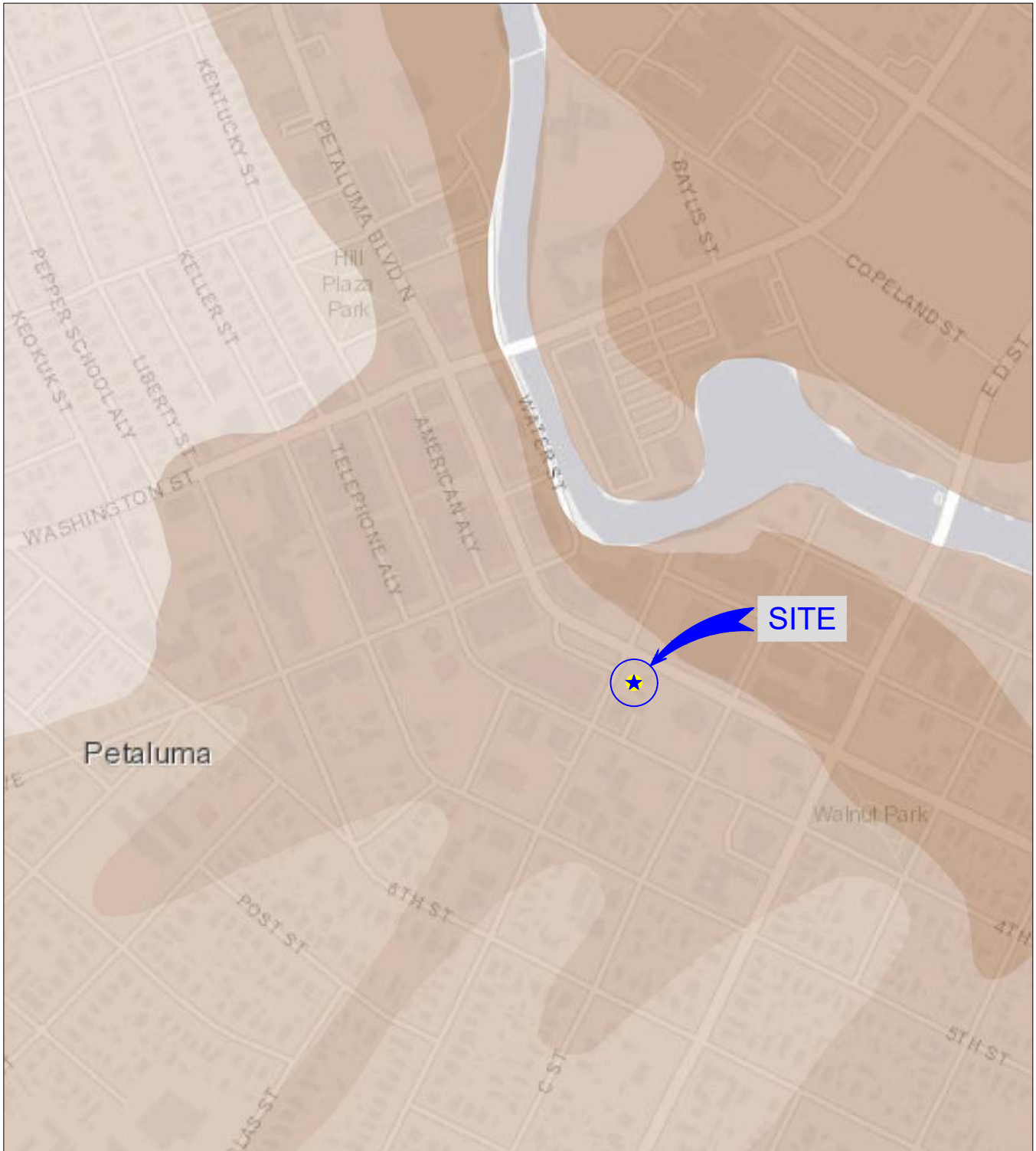
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HISTORIC EARTHQUAKE MAP

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5
 FIGURE



Susceptibility Level:

	Very High		Moderate		Very Low
	High		Low		

No Scale



Reference: ABAG Hazard Map Viewer.



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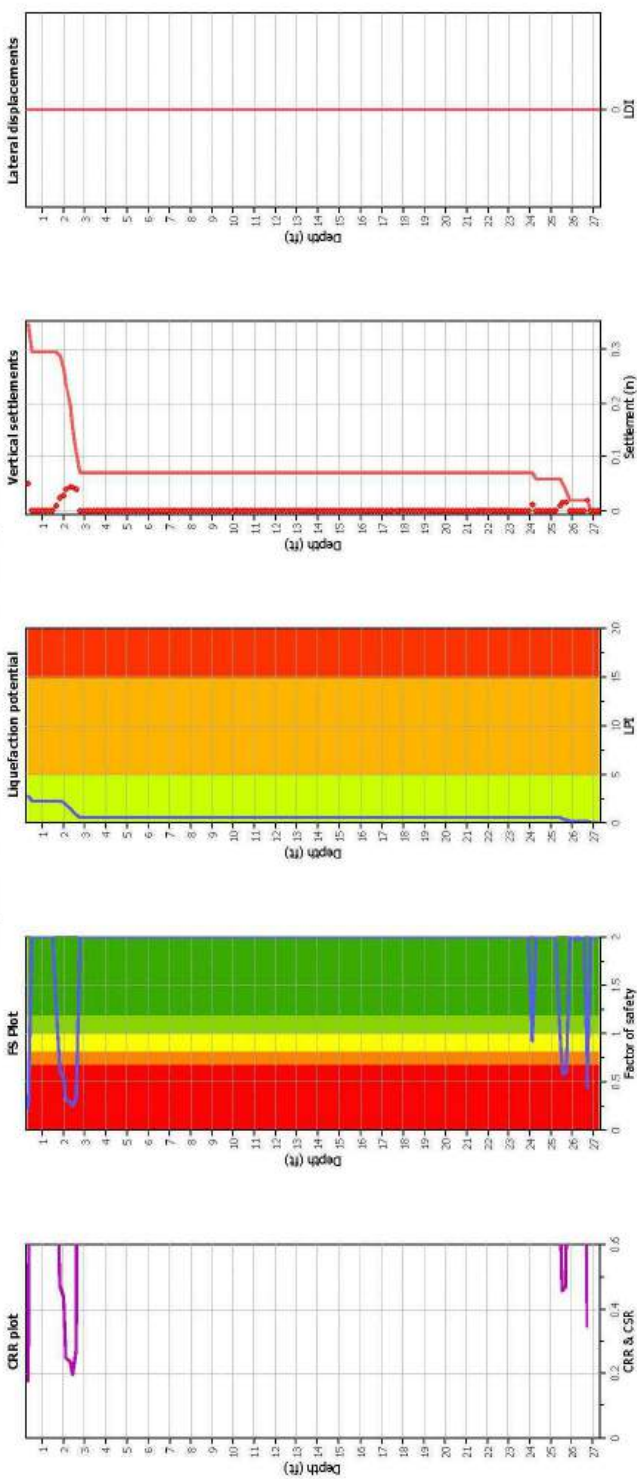
LIQUEFACTION SUSCEPTIBILITY MAP

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 Petaluma, California

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 MMT
 Checked _____

6
 FIGURE

Liquefaction analysis overall plots



Input parameters and analysis data
 Analysis method: B&J (2014)
 Finest correction method: B&J (2014)
 Points to test: Based on ic value
 Earthquake magnitude M_w : 7.30
 Peak ground acceleration: 0.72
 Depth to water table (in situ): 5.00 ft

Depth to GW/T (entire): 0.00 ft
 Average results interval: 3
 Ic cut-off value: 2.50
 Unit weight calculation: Based on SBT
 Use fill: No
 Fill height: N/A

Fill weight: N/A
 Transition defect applied: Yes
 K_c applied: Yes
 Clay live behavior applied: Sands only
 Limit depth applied: No
 Limit depth: N/A

F.S. color scheme
 Red: Almost contain it will liquefy
 Orange: Very likely to liquefy
 Yellow: Liquefaction and no liq. are equally likely
 Green: Unlike to liquefy
 Dark Green: Almost contain it will not liquefy

LPI color scheme
 Red: Very high risk
 Orange: High risk
 Yellow: Low risk

Cluq v.2.3.1.15 - CPT Liquefaction Assessment Software - Report created on: 9/16/2021, 11:03:36 AM
 Project file: H:\Jobs\1900-1999\1927.01 Hotel Petaluma\Analysis\1927.01 Lq Analysis.clg

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CPT-01 LIQUEFACTION ANALYSIS RESULTS

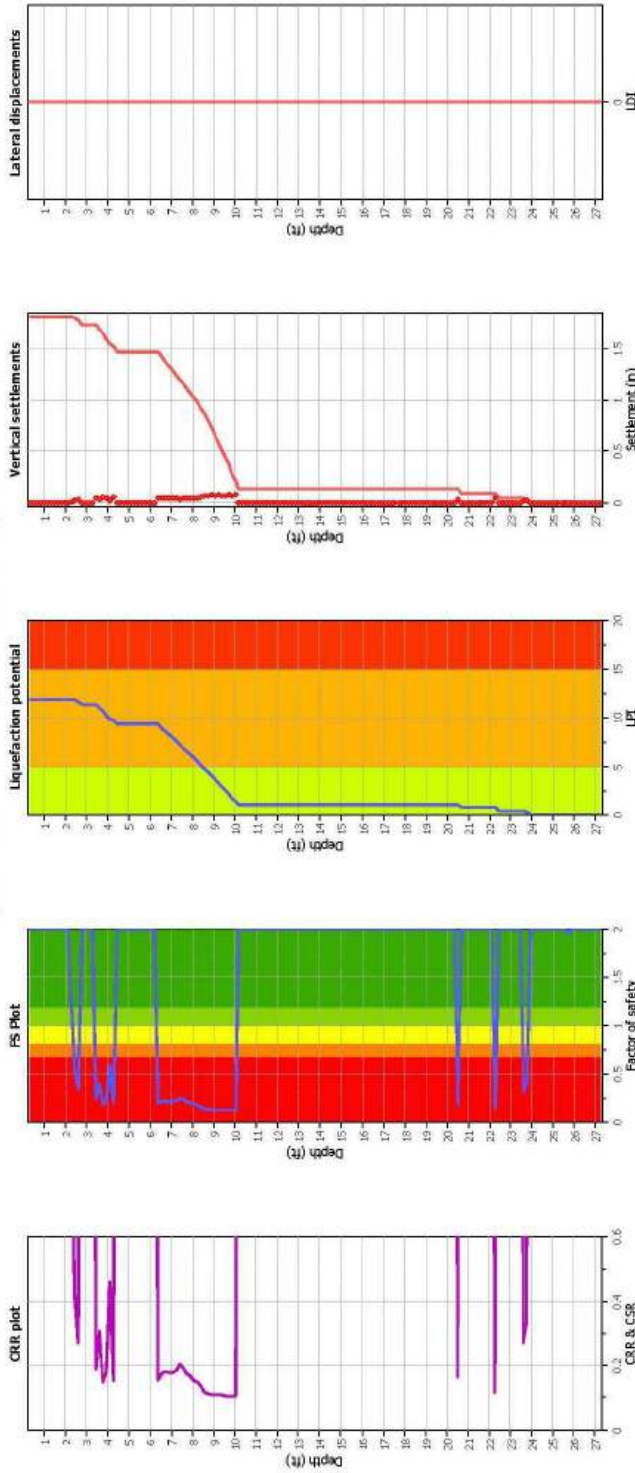
The Petaluman Hotel
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 Petaluma, California

Project No. 1927.01 Date: 1/24/2022

Drawn: MMT
 Checked:

7
 FIGURE

Liquefaction analysis overall plots



Input parameters and analysis data
 Analysis method: B&I (2014)
 Pines correction method: B&I (2014)
 Points to test: Based on I_c value
 Earthquake magnitude M_w : 7.30
 Peak ground acceleration: 0.72
 Depth to water table (in situ): 5.00 ft

F.S. color scheme
 Almost certain it will liquefy
 Very likely to liquefy
 Liquefaction and no liq. are equally likely
 Unlike to liquefy
 Almost certain it will not liquefy

LPI color scheme
 Very high risk
 High risk
 Low risk

Cluq v.2.3.1.15 - CPT Liquefaction Assessment Software - Report created on: 9/16/2021, 11:03:37 AM
 Project file: H:\Jobs\1900-1999\1927.01 Hotel Petaluma (Analysis\1927.01 Liquefaction.cluq)



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CPT-02 LIQUEFACTION ANALYSIS RESULTS

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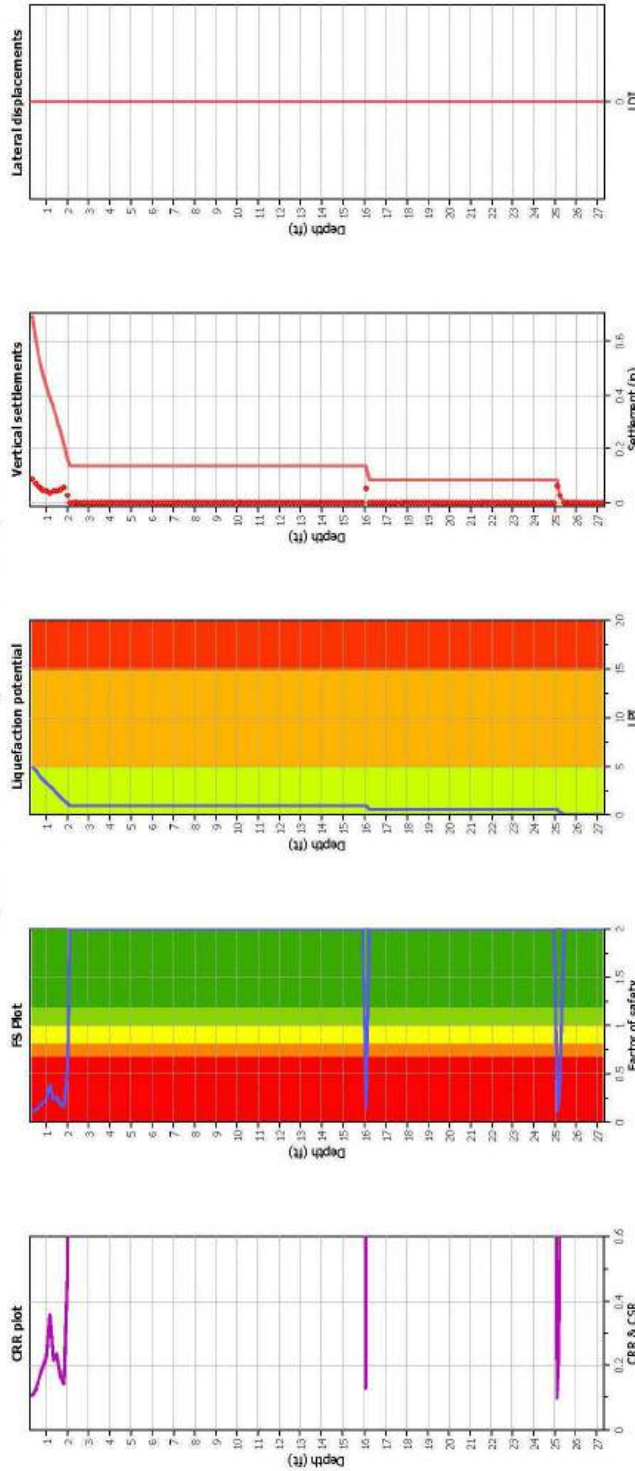
Project No. 1927.01

Date: 1/24/2022

Drawn: MMT
 Checked:

8
 FIGURE

Liquefaction analysis overall plots



Input parameters and analysis data
 Analysis method: B&J (2014)
 Finis correction method: B&J (2014)
 Points to test: Based on i_c value
 Earthquake magnitude M_w : 7.30
 Peak ground acceleration: 0.72
 Depth to water table (mslb): 11.00 ft

Depth to GW/T (ertiq.): 0.00 ft
 Average results interval: 3
 i_c cut-off value: 2.50
 Unit weight calculation: Based on SBT
 Use fill: No
 Fill height: N/A

Fill weight: N/A
 Transition defect applied: Yes
 K_c applied: Yes
 Clay like behavior applied: Sands only
 Limit depth applied: No
 Limit depth: N/A

F.S. color scheme
 Almost certain it will liquefy
 Very likely to liquefy
 Liquefaction and no liq. are equally likely
 Unlikely to liquefy
 Almost certain it will not liquefy

LPI color scheme
 Very high risk
 High risk
 Low risk



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CPT-03 LIQUEFACTION ANALYSIS RESULTS

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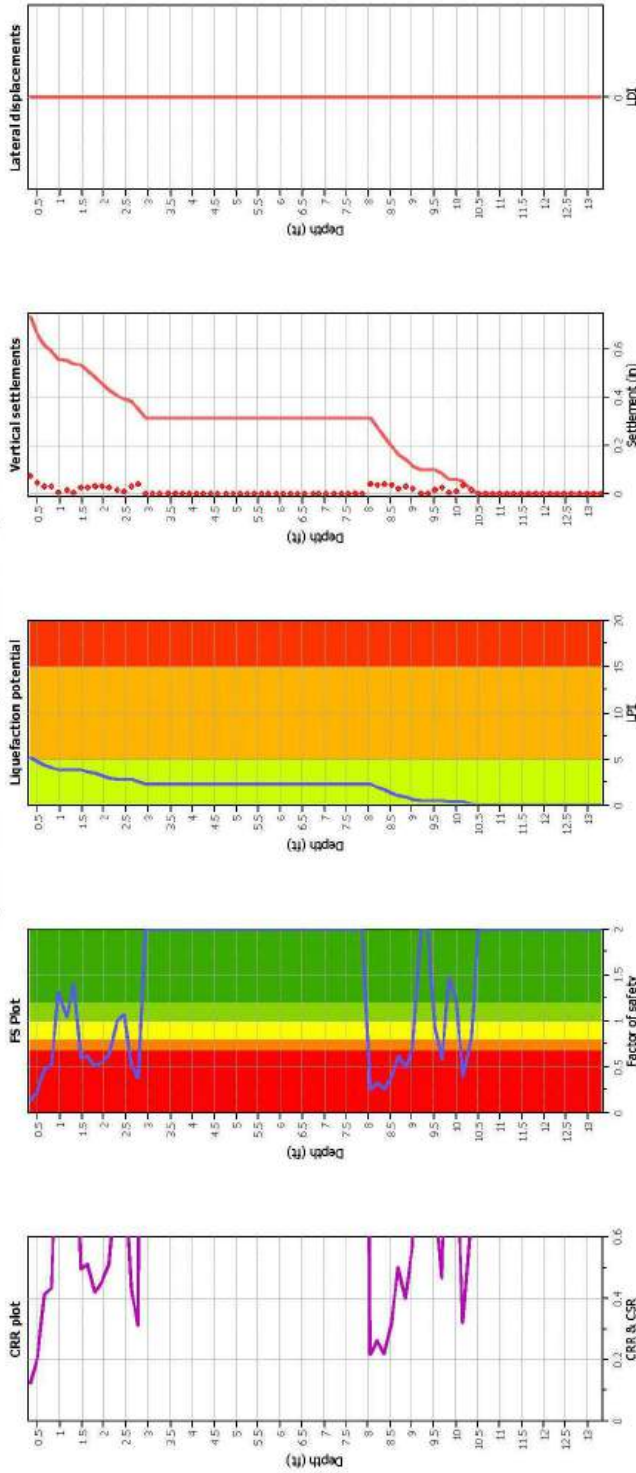
Project No. 1927.01

Date: 1/24/2022

Drawn: MMT
 Checked:

9
 FIGURE

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method: B&J (2014)
 Fines correction method: B&J (2014)
 Points to test: Based on I_c value
 Earthquake magnitude M_w : 7.30
 Peak ground acceleration: 0.72
 Depth to water table (in situ): 8.00 ft

Depth to GW (earth.): 0.00 ft
 Average results interval: 3
 I_c cut-off value: 2.50
 Unit weight calculation: Based on SBT
 Use fill: No
 Fill height: N/A

Fill weight: N/A
 Transition detect. applied: Yes
 K_c applied: Yes
 Clay like behavior applied: Sands only
 Limit depth applied: N/A

F.S. color scheme

Almost certain it will liquefy
 Very likely to liquefy
 Liquefaction and no liq. are equally likely
 Unlikely to liquefy
 Almost certain it will not liquefy

LPI color scheme

Very high risk
 High risk
 Low risk



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CPT-04 LIQUEFACTION ANALYSIS RESULTS

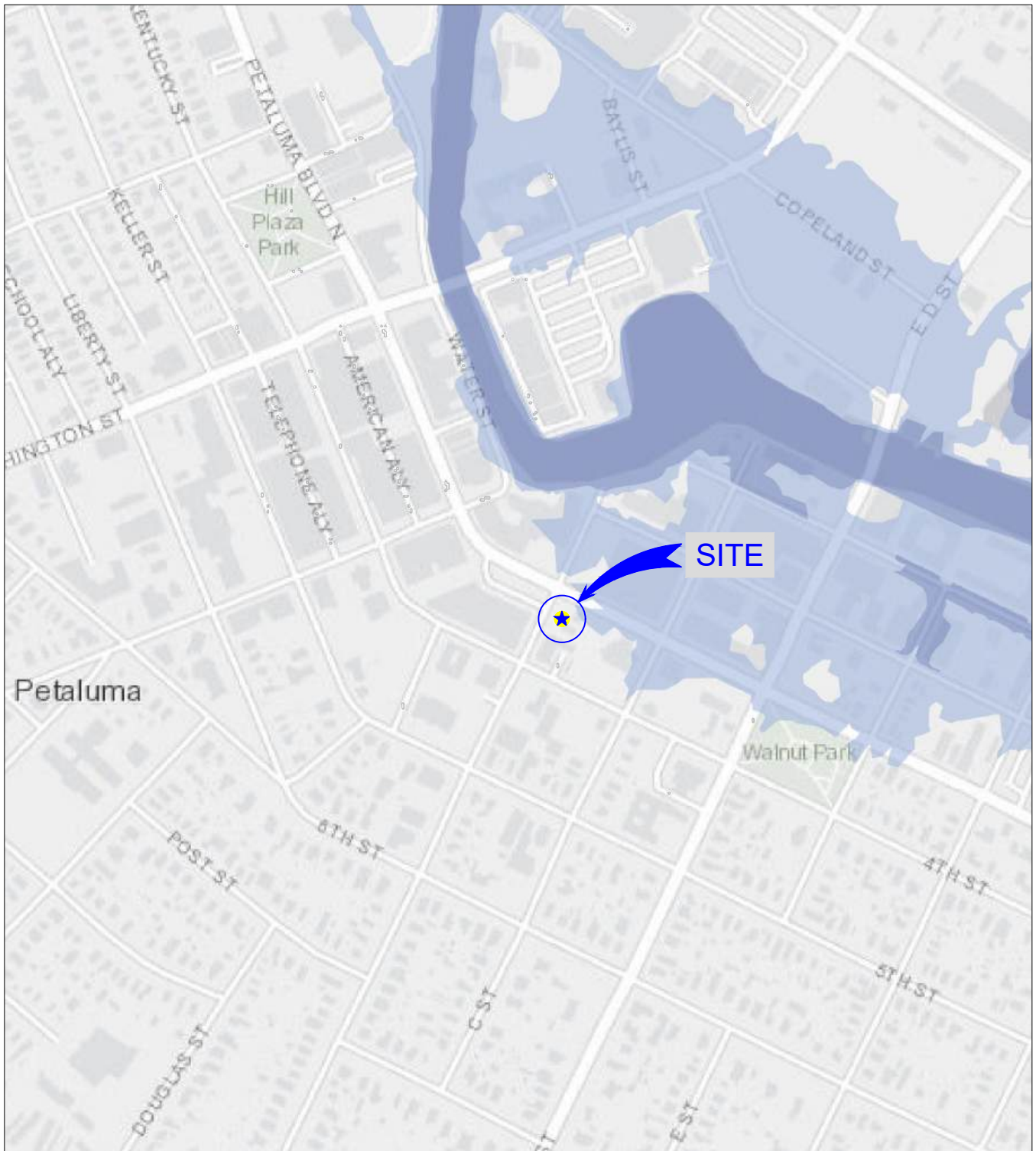
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Project No. 1927.01

Date: 1/24/2022

Drawn: MMT
 Checked:

10
 FIGURE



FEMA Flood Hazard:

- 100-Year
- 500-Year

No Scale



Reference: ABAG Hazard Map Viewer.



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FEMA FLOOD MAP

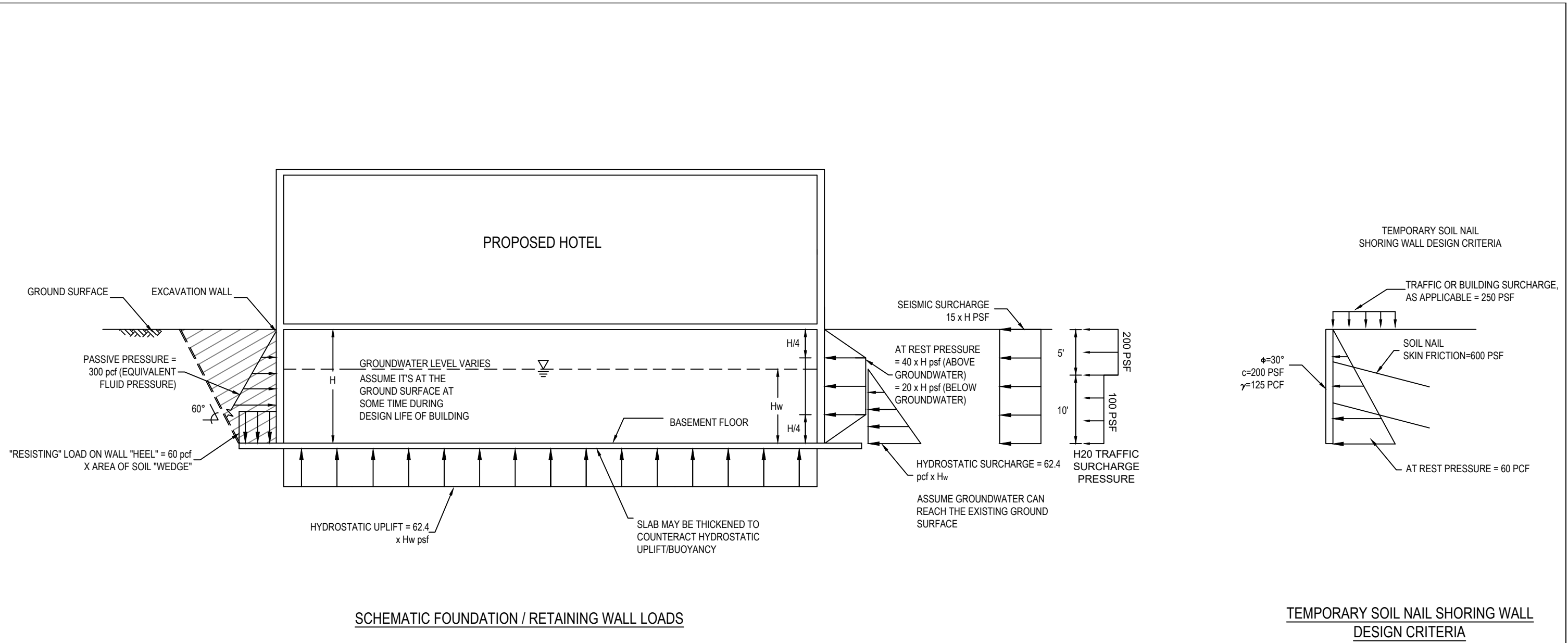
The Petaluman Hotel
 2 Petaluma Boulevard South
 Petaluma, California

Drawn _____
 MMT
 Checked _____

11
 FIGURE

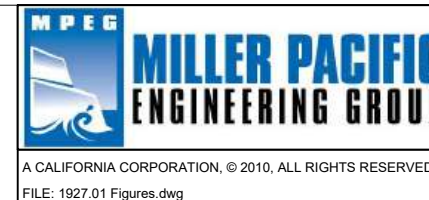
Project No. 1927.01

Date: 1/24/2022



NOTES:

1. Assume groundwater is at the ground surface for design of permanent structures.
2. Surcharge pressures shown are based on H2O Traffic Loads. Other surcharge loads (e.g. due to construction traffic, soil stockpiles, structural loads, etc) may occur and should be applied by the designer as appropriate.



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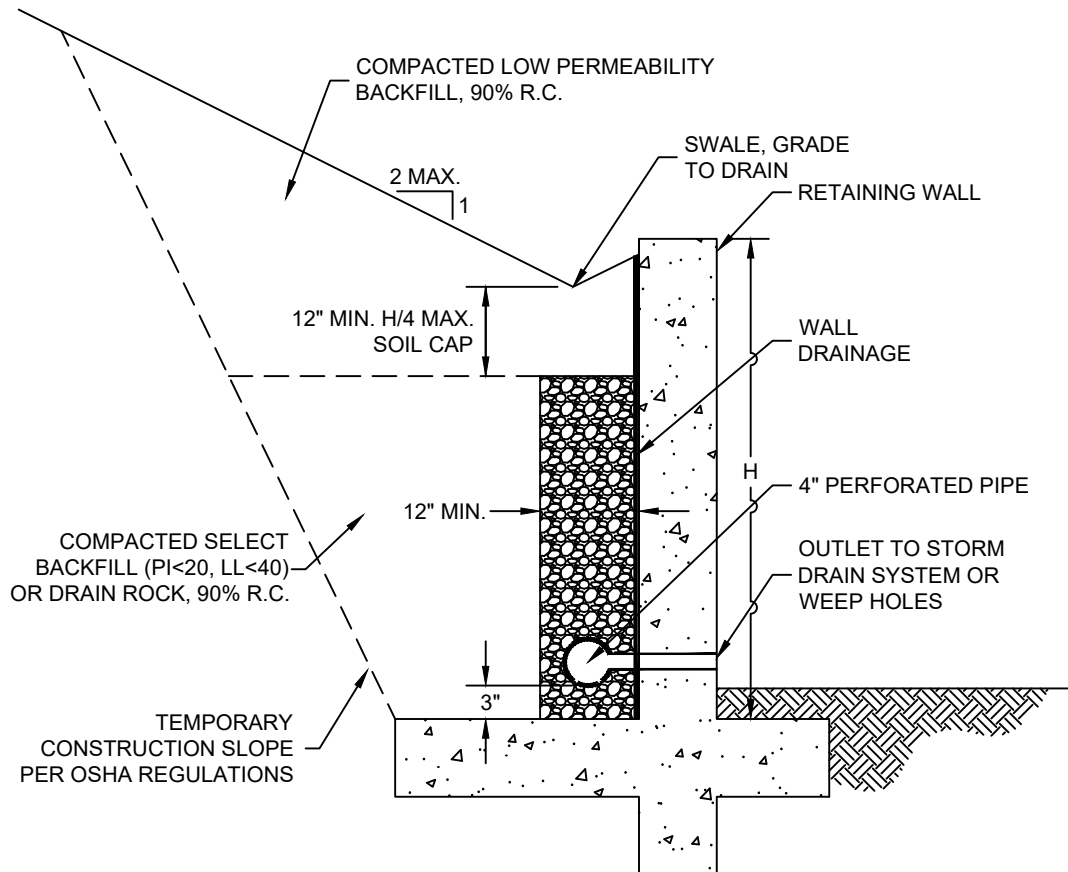
FOUNDATION AND RETAINING WALL LOADS

The Petaluman Hotel
2 Petaluma Boulevard South
Petaluma, California

Drawn MMT
Checked

Project No. 1927.01 Date: 1/24/2022

12
FIGURE



NOTES:

1. Wall drainage should consist of clean, free draining 3/4 inch crushed rock (Class 1B Permeable Material) wrapped in filter fabric (Mirafi 140N or equivalent) or Class 2 Permeable Material. Alternatively, pre-fabricated drainage panels (Miradrain G100N or equivalent), installed per the manufacturers recommendations, may be used in lieu of drain rock and fabric.
2. All retaining walls adjacent to interior living spaces shall be water/vapor proofed as specified by the project architect or structural engineer.
3. Perforated pipe shall be SCH 40 or SDR 35 for depths less than 20 feet. Use SCH 80 or SDR 23.5 perforated pipe for depths greater than 20 feet. Place pipe perforations down and slope at 1% to a gravity outlet. Alternatively, drainage can be outlet through 3" diameter weep holes spaced approximately 20' apart.
4. Clean outs should be installed at the upslope end and at significant direction changes of the perforated pipe. Additionally, all angled connectors shall be long bend sweep connections.
5. During compaction, the contractor should use appropriate methods (such as temporary bracing and/or light compaction equipment) to avoid over-stressing the walls. Walls shall be completely backfilled prior to construction in front of or above the retaining wall.
6. Refer to the geotechnical report for lateral soil pressures.
7. All work and materials shall conform with Section 68, of the latest edition of the Caltrans Standard Specifications.



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TYPICAL RETAINING WALL BACKDRAIN

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Project No. 1927.01

Date: 1/24/2022

Drawn _____
 MMT
 Checked _____

13
 FIGURE

APPENDIX A

SUBSURFACE EXPLORATION AND LABORATORY TESTING (BORINGS)

1.0 Subsurface Exploration

We explored subsurface conditions at the site by drilling one test boring utilizing truck mounted drilling equipment with 7-inch hollow stem augers on October 29th, 2021. The approximate boring location is shown on Figure 2. The boring was drilled to a maximum depth of 71.5-feet below the ground surface.

The soil conditions encountered were logged and identified in the field in general accordance with ASTM Standard D 2487, "Field Identification and Description of Soils (Visual-Manual Procedure)." These standards are briefly explained on Figures A-1 and A-2, Soil and Rock Classification Charts. The boring log is presented on Figures A-3 through A-6.

We obtained "undisturbed" samples using a 3-inch diameter, split-barrel modified California sampler with 2.5 by 6-inch brass tube liners or with a 2-inch diameter, split-barrel Standard Penetration Test (SPT) sampler. The sampler was driven with a 140-pound hammer falling 30 inches. The number of blows required to drive the samplers 18 inches was recorded and is reported on the boring logs as blows per foot for the last 12 inches of driving. The samples obtained were examined in the field, sealed to prevent moisture loss, and transported to our laboratory.

2.0 Laboratory Testing

We conducted laboratory tests on selected intact samples to verify field identifications and to evaluate engineering properties. The following laboratory tests were conducted in accordance with the ASTM standard test method cited:

- Laboratory Determination of Water (Moisture Content) of Soil, Rock, and Soil-Aggregate Mixtures, ASTM D 2216;
- Density of Soil in Place by the Drive-Cylinder Method, ASTM D 2937;
- Unconfined Compressive Strength of Cohesive Soil, ASTM D 2166; and
- Particle Size Distribution of Soils using Sieve Analysis, ASTM D6914.

The moisture content, dry density, and unconfined compressive strength results are shown on the exploratory Boring Log and the results of our particle size distribution tests are presented on Figures A-7 and A-8. The exploratory boring logs, description of soils encountered, and the laboratory test data reflect conditions only at the location of the boring at the time they were excavated or retrieved. Conditions may differ at other locations and may change with the passage of time due to a variety of causes including natural weathering, climate, and changes in surface and subsurface drainage.

MAJOR DIVISIONS		SYMBOL	DESCRIPTION
COARSE GRAINED SOILS over 50% sand and gravel	CLEAN GRAVEL	GW	Well-graded gravels or gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels or gravel-sand mixtures, little or no fines
	GRAVEL with fines	GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	CLEAN SAND	SW	Well-graded sands or gravelly sands, little or no fines
		SP	Poorly-graded sands or gravelly sands, little or no fines
	SAND with fines	SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
FINE GRAINED SOILS over 50% silt and clay	SILT AND CLAY liquid limit <50%	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silt-clays of low plasticity
	SILT AND CLAY liquid limit >50%	MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity
HIGHLY ORGANIC SOILS	PT	Peat, muck, and other highly organic soils	
ROCK		Undifferentiated as to type or composition	

KEY TO BORING AND TEST PIT SYMBOLS

CLASSIFICATION TESTS

PI	PLASTICITY INDEX
LL	LIQUID LIMIT
SA	SIEVE ANALYSIS
HYD	HYDROMETER ANALYSIS
P200	PERCENT PASSING NO. 200 SIEVE
P4	PERCENT PASSING NO. 4 SIEVE

STRENGTH TESTS

UC	LABORATORY UNCONFINED COMPRESSION
TXCU	CONSOLIDATED UNDRAINED TRIAXIAL
TXUU	UNCONSOLIDATED UNDRAINED TRIAXIAL
	UC, CU, UU = 1/2 Deviator Stress
DS (2.0)	DRAINED DIRECT SHEAR (NORMAL PRESSURE, ksf)

SAMPLER TYPE

	MODIFIED CALIFORNIA		HAND SAMPLER
	STANDARD PENETRATION TEST		ROCK CORE
	THIN-WALLED / FIXED PISTON		DISTURBED OR BULK SAMPLE

SAMPLER DRIVING RESISTANCE

Modified California and Standard Penetration Test samplers are driven 18 inches with a 140-pound hammer falling 30 inches per blow. Blows for the initial 6-inch drive seat the sampler. Blows for the final 12-inch drive are recorded onto the logs. Sampler refusal is defined as 50 blows during a 6-inch drive. Examples of blow records are as follows:

25 sampler driven 12 inches with 25 blows after initial 6-inch drive

85/7" sampler driven 7 inches with 85 blows after initial 6-inch drive

50/3" sampler driven 3 inches with 50 blows during initial 6-inch drive or beginning of final 12-inch drive

NOTE: Test boring and test pit logs are an interpretation of conditions encountered at the excavation location during the time of exploration. Subsurface rock, soil or water conditions may vary in different locations within the project site and with the passage of time. Boundaries between differing soil or rock descriptions are approximate and may indicate a gradual transition.



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SOIL CLASSIFICATION CHART

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2 Petaluma Boulevard South
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Project No. 1927.010

Date: 1/24/2022

Drawn _____
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A-1
FIGURE

FRACTURING AND BEDDING

Fracture Classification

Crushed
Intensely fractured
Closely fractured
Moderately fractured
Widely fractured
Very widely fractured

Spacing

less than 3/4 inch
3/4 to 2-1/2 inches
2-1/2 to 8 inches
8 to 24 inches
2 to 6 feet
greater than 6 feet

Bedding Classification

Laminated
Very thinly bedded
Thinly bedded
Medium bedded
Thickly bedded
Very thickly bedded

HARDNESS

Low
Moderate
Hard
Very hard

Carved or gouged with a knife
Easily scratched with a knife, friable
Difficult to scratch, knife scratch leaves dust trace
Rock scratches metal

STRENGTH

Friable
Weak
Moderate
Strong
Very strong

Crumbles by rubbing with fingers
Crumbles under light hammer blows
Indentations <1/8 inch with moderate blow with pick end of rock hammer
Withstands few heavy hammer blows, yields large fragments
Withstands many heavy hammer blows, yields dust, small fragments

WEATHERING

Complete	Minerals decomposed to soil, but fabric and structure preserved
High	Rock decomposition, thorough discoloration, all fractures are extensively coated with clay, oxides or carbonates
Moderate	Fracture surfaces coated with weathering minerals, moderate or localized discoloration
Slight	A few stained fractures, slight discoloration, no mineral decomposition, no affect on cementation
Fresh	Rock unaffected by weathering, no change with depth, rings under hammer impact

NOTE: Test boring and test pit logs are an interpretation of conditions encountered at the location and time of exploration. Subsurface rock, soil and water conditions may differ in other locations and with the passage of time.



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ROCK CLASSIFICATION CHART

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A-2
FIGURE

DEPTH		BORING 1		BLOWS / FOOT (1)	DRY UNIT WEIGHT pcf (2)	MOISTURE CONTENT (%)	SHEAR STRENGTH psf (3)	OTHER TEST DATA	OTHER TEST DATA
meters	feet	SAMPLE	SYMBOL (4)						
0	0								
1				25	106	18.2	UC 850		
5									
2				19					
3	10			45	98	27.6	UC 750	P200 57.5%	SA
4									
15				50/4"					
5									
6	20								

 Water level encountered during drilling
 Water level measured after drilling

NOTES: (1) UNCORRECTED FIELD BLOW COUNTS
 (2) METRIC EQUIVALENT DRY UNIT WEIGHT $\text{kN/m}^3 = 0.1571 \times \text{DRY UNIT WEIGHT (pcf)}$
 (3) METRIC EQUIVALENT STRENGTH $(\text{kPa}) = 0.0479 \times \text{STRENGTH (psf)}$
 (4) GRAPHIC SYMBOLS ARE ILLUSTRATIVE ONLY



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BORING LOG

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 Petaluma, California



Project No. 1927.010 Date: 1/24/2022

Drawn _____
 EIC
 Checked _____

A-3

FIGURE

DEPTH		BORING 1 (CONTINUED)		BLOWS / FOOT (1)	DRY UNIT WEIGHT pcf (2)	MOISTURE CONTENT (%)	SHEAR STRENGTH psf (3)	OTHER TEST DATA	OTHER TEST DATA
meters	feet	SAMPLE	SYMBOL (4)						
20									
7									
25									
8									
9									
30									
10									
35									
11									
40									
12									

 Water level encountered during drilling
 Water level measured after drilling

NOTES: (1) UNCORRECTED FIELD BLOW COUNTS
 (2) METRIC EQUIVALENT DRY UNIT WEIGHT $\text{KN/m}^3 = 0.1571 \times \text{DRY UNIT WEIGHT (pcf)}$
 (3) METRIC EQUIVALENT STRENGTH (kPa) = 0.0479 x STRENGTH (psf)
 (4) GRAPHIC SYMBOLS ARE ILLUSTRATIVE ONLY



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BORING LOG

The Petaluman Hotel
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 Petaluma, California



Project No. 1927.010

Date: 1/24/2022

Drawn _____
 EIC
 Checked _____

A-4
 FIGURE

DEPTH		SAMPLE	SYMBOL (4)	BORING 1 (CONTINUED)		BLOWS / FOOT (1)	DRY UNIT WEIGHT pcf (2)	MOISTURE CONTENT (%)	SHEAR STRENGTH psf (3)	OTHER TEST DATA	OTHER TEST DATA
meters	feet										
40		☒		Sandy SILT (ML) Medium gray, moist, very stiff, low plasticity, 40-45% very fine to fine sand, trace gravel. [Alluvium]	50/3"						
13				Claystone Medium gray, low hardness, friable, completely weathered, some secondary veining present, blocky texture. [Bedrock]							
14		☒			36		35.1				
15	50	☒			39		35.1				
16											
17		☒			44		31.1				
18	60	☒									

 Water level encountered during drilling
 Water level measured after drilling

NOTES: (1) UNCORRECTED FIELD BLOW COUNTS
 (2) METRIC EQUIVALENT DRY UNIT WEIGHT $\text{KN/m}^3 = 0.1571 \times \text{DRY UNIT WEIGHT (pcf)}$
 (3) METRIC EQUIVALENT STRENGTH $(\text{kPa}) = 0.0479 \times \text{STRENGTH (psf)}$
 (4) GRAPHIC SYMBOLS ARE ILLUSTRATIVE ONLY



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BORING LOG

The Petaluman Hotel
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Project No. 1927.010

Date: 1/24/2022

Drawn _____
 EIC
 Checked _____

A-5
 FIGURE

DEPTH		BORING 1 (CONTINUED)		BLOWS / FOOT (1)	DRY UNIT WEIGHT pcf (2)	MOISTURE CONTENT (%)	SHEAR STRENGTH psf (3)	OTHER TEST DATA	OTHER TEST DATA
meters	feet	SAMPLE	SYMBOL (4)						
60		[Hatched Pattern]	Claystone Medium gray, low hardness, friable, completely weathered, some secondary veining present, blocky texture. [Bedrock]	38		29.3			
13									
65		[Hatched Pattern]	Boring terminated at 71-feet 6-inches. Groundwater measured at 6-feet 9-inches upon completion.	40		33.6			
14									
15									
70									
16									
75									
17									
18									
80									

 Water level encountered during drilling
 Water level measured after drilling

NOTES: (1) UNCORRECTED FIELD BLOW COUNTS
 (2) METRIC EQUIVALENT DRY UNIT WEIGHT $\text{KN/m}^3 = 0.1571 \times \text{DRY UNIT WEIGHT (pcf)}$
 (3) METRIC EQUIVALENT STRENGTH $(\text{kPa}) = 0.0479 \times \text{STRENGTH (psf)}$
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BORING LOG

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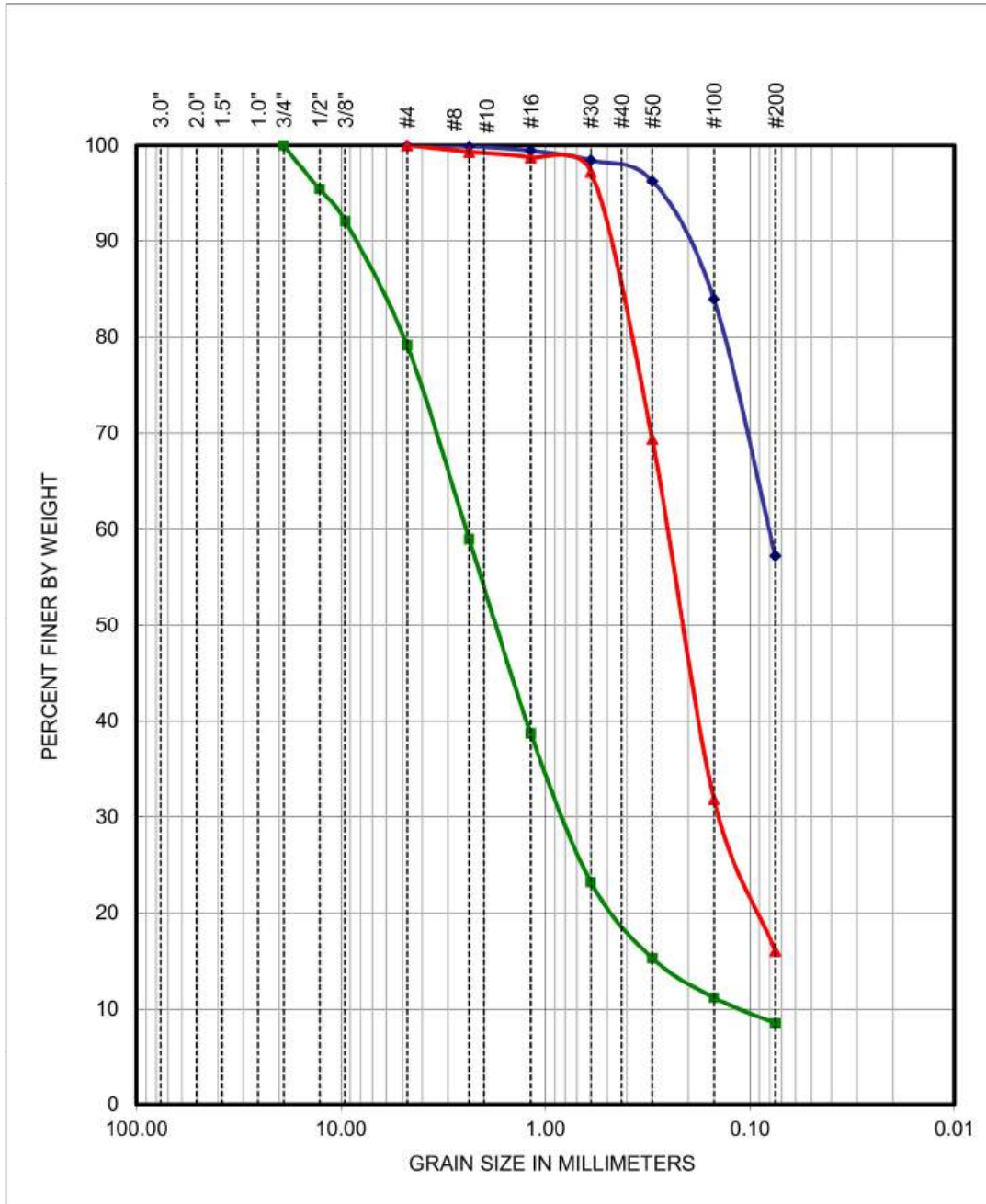
Project No. 1927.010

Date: 1/24/2022

Drawn _____
 EIC
 Checked _____

A-6
 FIGURE

MILLER PACIFIC ENGINEERING GROUP
 PARTICLE SIZE ANALYSIS - ASTM D 6913 & ASTM D 1140



SYMBOL	SAMPLE SOURCE	CLASSIFICATION
	B1 @ 11.0'	Sandy SILT (ML)
	B1 @ 21.0'	SAND with Silt (SP-SM)
	B1 @ 25.5'	Silty SAND (SM)



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SIEVE ANALYSIS TEST RESULTS

The Petaluman Hotel
 2 Petaluma Boulevard South
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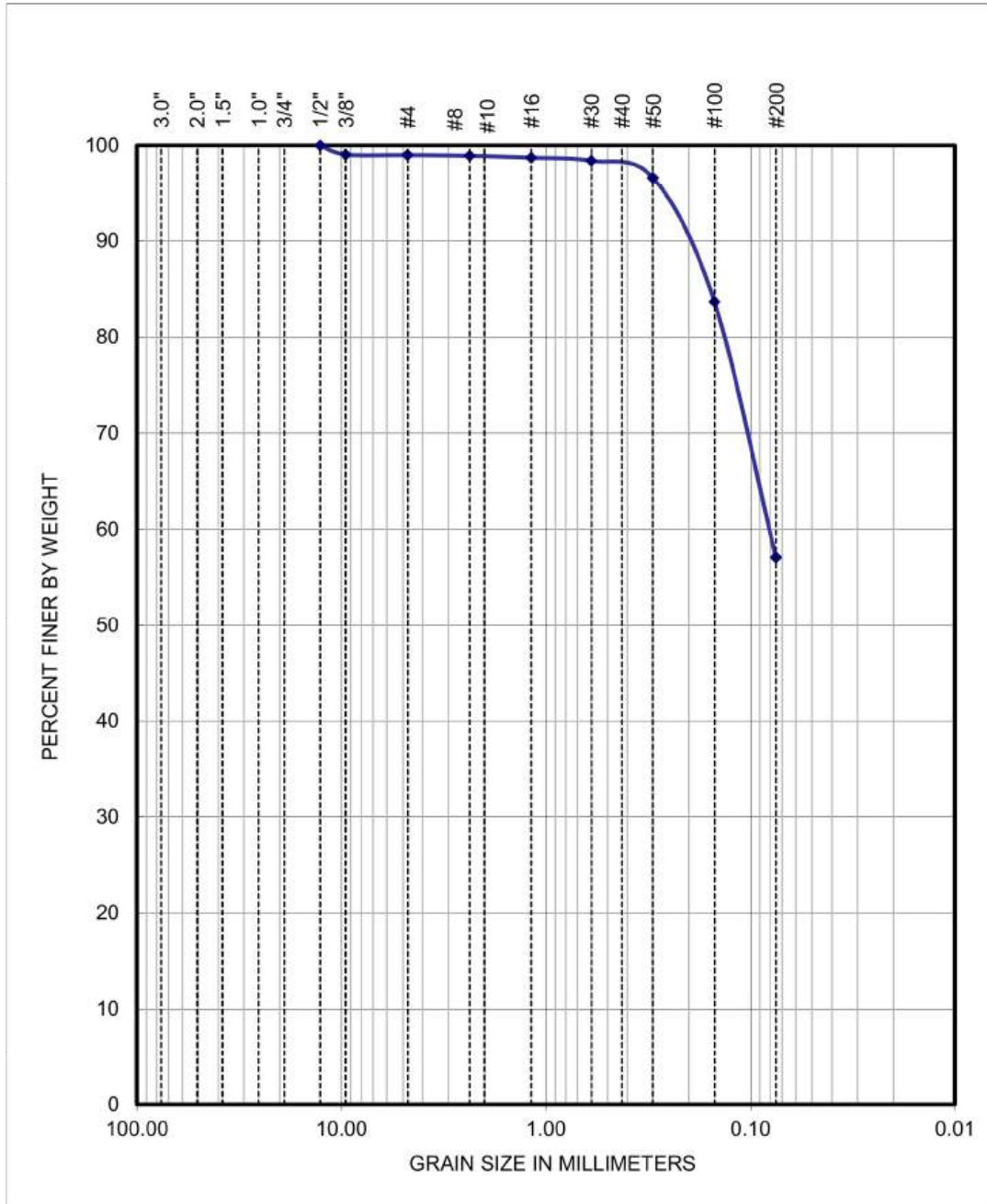
Project No. 1927.010

Date: 1/24/2022

Drawn _____
 Checked EIC

A-7
 FIGURE

MILLER PACIFIC ENGINEERING GROUP
 PARTICLE SIZE ANALYSIS - ASTM D 6913 & ASTM D 1140



SYMBOL	SAMPLE SOURCE	CLASSIFICATION
	B1 @ 30.0'	Sandy SILT (ML)



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SIEVE ANALYSIS TEST RESULTS

The Petaluman Hotel
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Project No. 1927.010

Date: 1/24/2022

Drawn _____
 Checked EIC _____

A-8
 FIGURE

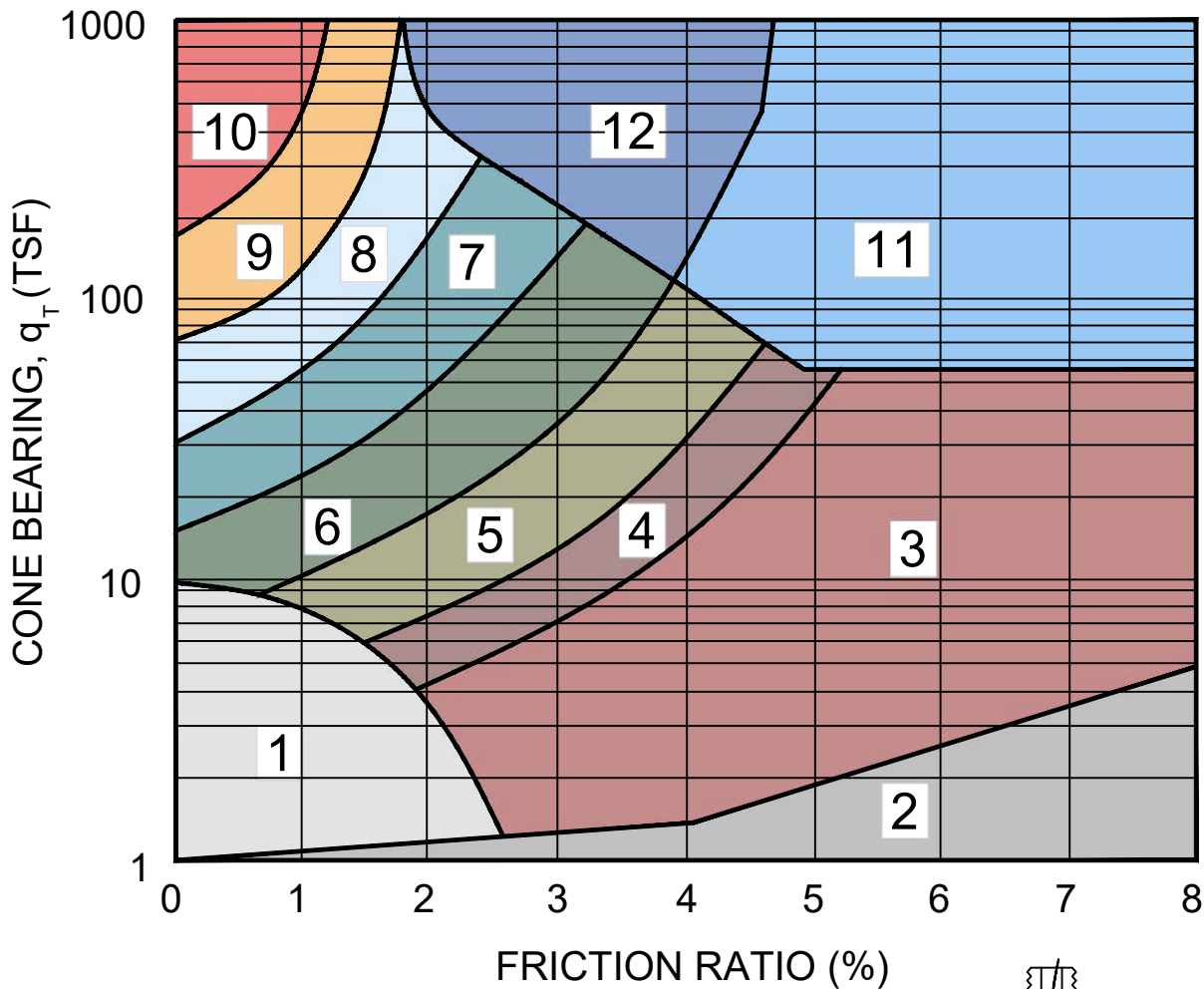
**APPENDIX B
SUBSURFACE EXPLORATION AND LABORATORY TESTING (CPT)****1.0 Cone Penetration Testing**

We performed four Cone Penetration Tests (CPT) on August 25th, 2021, at the approximate locations shown on the Site Plan, Figure 2. The CPT is a special exploration technique that provides a continuous profile of data throughout the depth of exploration. It is particularly useful in defining stratigraphy, relative soil strength and in assessing liquefaction potential.

The CPT is a cylindrical probe, 35 mm in diameter, which is pushed into the ground at a constant rate of 2 cm/sec. The device is illustrated on Figure B-1. It is instrumented to obtain continuous measurements of cone bearing (tip resistance), sleeve friction and pore water pressure. The data is sensed by strain gages and load cells inside the instrument. Electronic signals from the instrument are continuously recorded by an on-board computer at the surface, which permits an initial evaluation of subsurface conditions during the exploration.

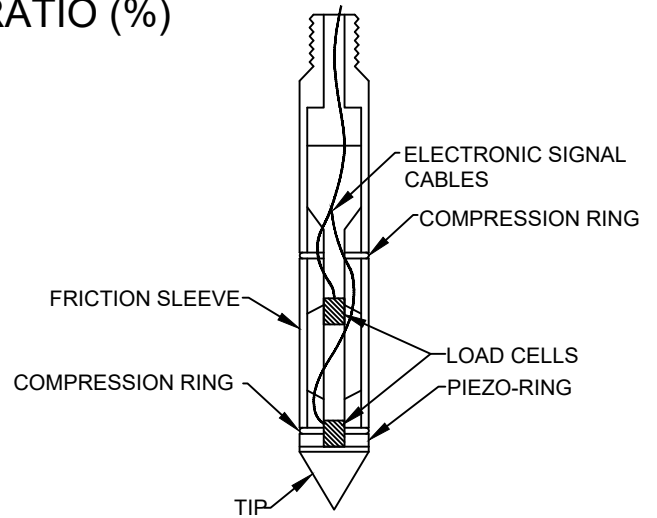
The recorded data is transferred to an in-office computer for reduction and analysis. The analysis of cone bearing and sleeve friction (i.e., friction ratio) indicates the soil type, the cone bearing alone indicates soil density or strength, and the pore pressure indicates the presence of clay. Variations in the data profile indicate changes in stratigraphy. This test method has been standardized and is described in detail by the ASTM Standard Test Method D3441 "Deep, Quasi-Static Cone and Friction Cone Penetration Tests of Soil." The interpretation of CPT data is illustrated on Figure B-1, and the CPT data logs are presented on Figures B-2 through B-5.

The exploratory CPT logs, description of soils encountered, and the laboratory test data reflect conditions only at the location of the CPT at the time they were excavated or retrieved. Conditions may differ at other locations and may change with the passage of time due to a variety of causes including natural weathering, climate, and changes in surface and subsurface drainage.



Zone:	Qc/N	Soil Behavior Type:
1)	2	Sensitive Fine Grained
2)	1	Organic Material
3)	1	Clay
4)	1.5	Silty Clay to Clay
5)	2	Clayey Silt to Silty Clay
6)	2.5	Sandy Silt to Clayey Silt
7)	3	Silty Sand to Sandy Silt
8)	4	Sand to Silty Sand
9)	5	Sand
10)	6	Gravelly Sand to Sand
11)	1	Very Stiff Fine Grained (*)
12)	2	Sand to Clayey Sand (*)

(*) Overconsolidated or Cemented



CONE PENETROMETER

(NO SCALE)

Reference: Robertson, P.K. (1986), "In-Situ Testing and Its Application to Geotechnical Engineering," Canadian Geotechnical Journal, Vol. 23; No. 23; No. 4, pp. 573-594

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CPT SOIL INTERPRETATION CHART

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Project No. 1927.01 Date: 1/24/2022

Drawn _____
 Checked MMT

B-1
 FIGURE

Miller Pacific Engineering



Project
Job Number
Hole Number
EST GW Depth During Test

Petaluma Hotel
1927.01
CPT-01

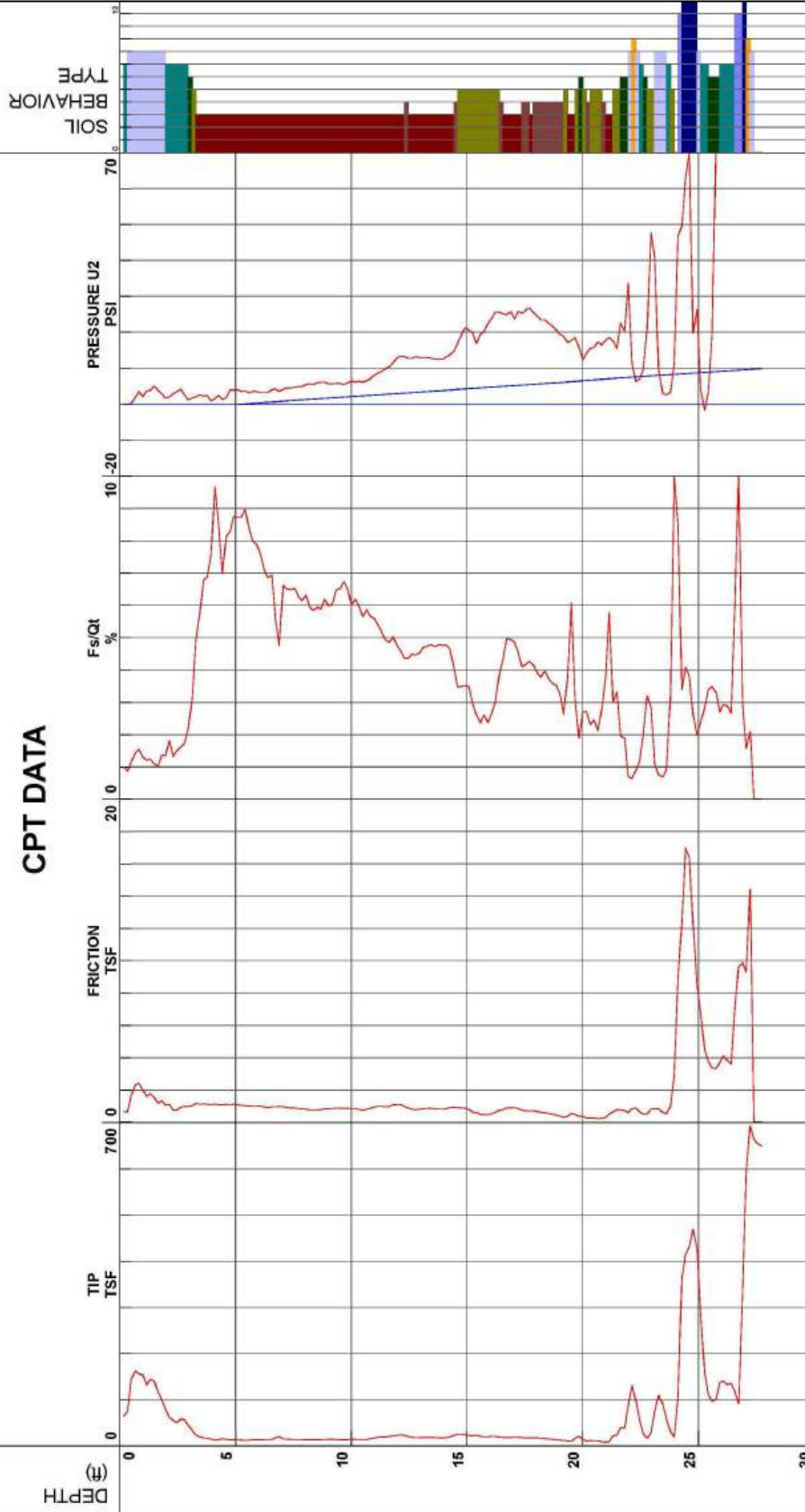
Operator
Cone Number
Date and Time
5.00 ft

AI-OO
DDG1696
8/25/2021 7:39:57 AM

Filename
GPS
Maximum Depth

SDF(872).cpt
27.72 ft

Net Area Ratio .8



* Soil behavior type and SPT based on data from UBC-1993

Cone Size 15cm squared



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CPT-01 DATA

The Petaluman Hotel
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Petaluma, California

Project No. 1927.01

Date: 1/24/2022

Drawn
Checked

MMT

B-2
FIGURE

Miller Pacific Engineering



Project
Job Number
Hole Number
EST GW Depth During Test

Petaluma Hotel
1927.01
CPT-02

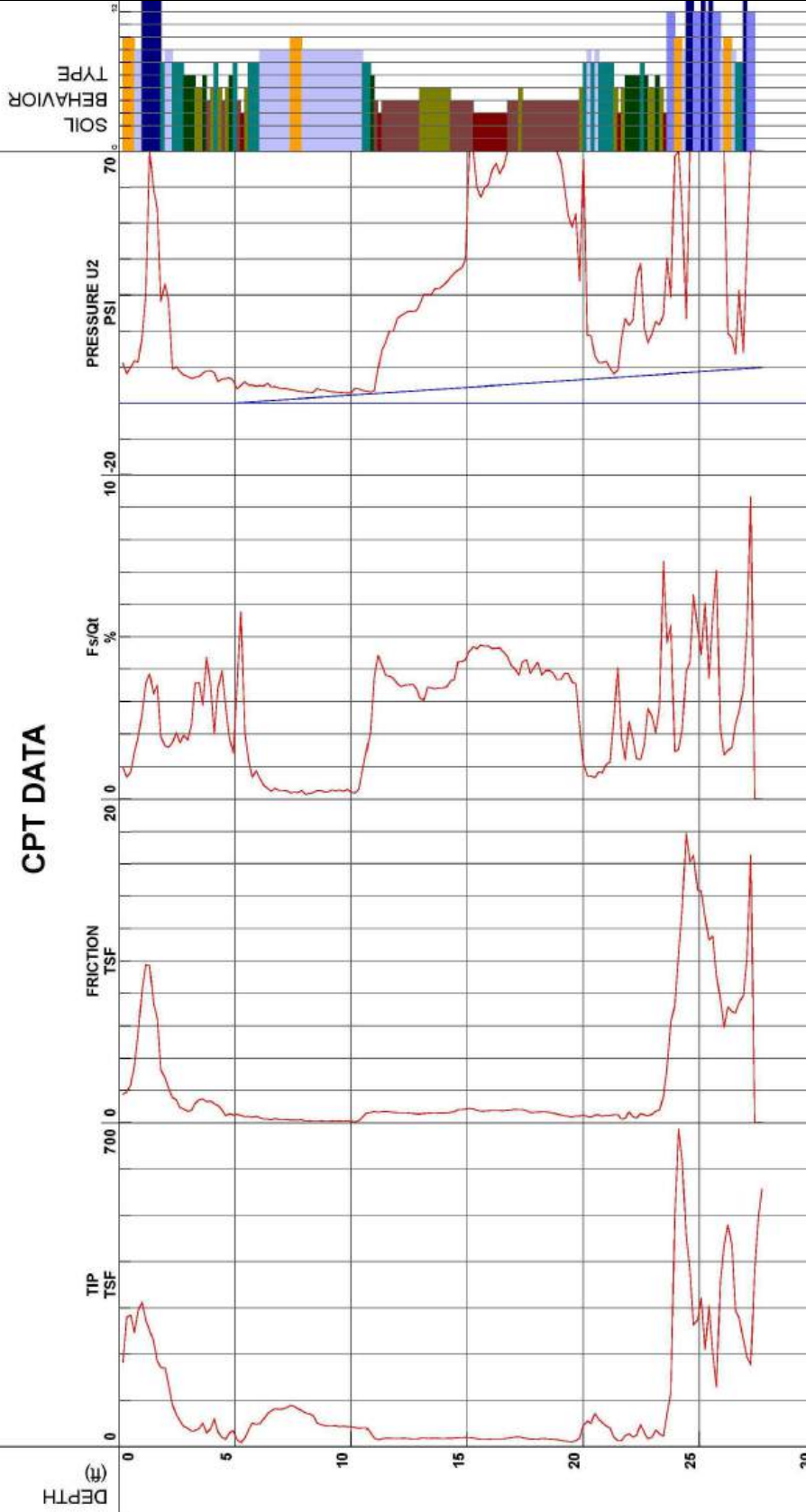
Operator
Cone Number
Date and Time
5.00 ft

AJ-00
DDG1596
8/25/2021 8:14:49 AM

Filename
GPS
Maximum Depth

SDF(873).cpt
27.72 ft

Net Area Ratio: .8



- 1 - sensitive fine grained
- 2 - organic material
- 3 - clay
- 4 - silty clay to clay
- 5 - clayey silt to silty clay
- 6 - sandy silt to clayey silt
- 7 - silty sand to sandy silt
- 8 - sand to silty sand
- 9 - sand
- 10 - gravelly sand to sand
- 11 - very stiff fine grained (*)
- 12 - sand to clayey sand (*)

Cone Size 15cm squared

S*Soil behavior type and SPT based on data from UBC-1993



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CPT-02 DATA

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Project No. 1927.01 Date: 1/24/2022

Drawn _____
Checked MMT

B-3

FIGURE

Miller Pacific Engineering



Project
Job Number
Hole Number
EST GW Depth During Test

Petaluma Hotel
1927.01
CPT-03

Operator
Cone Number
Date and Time

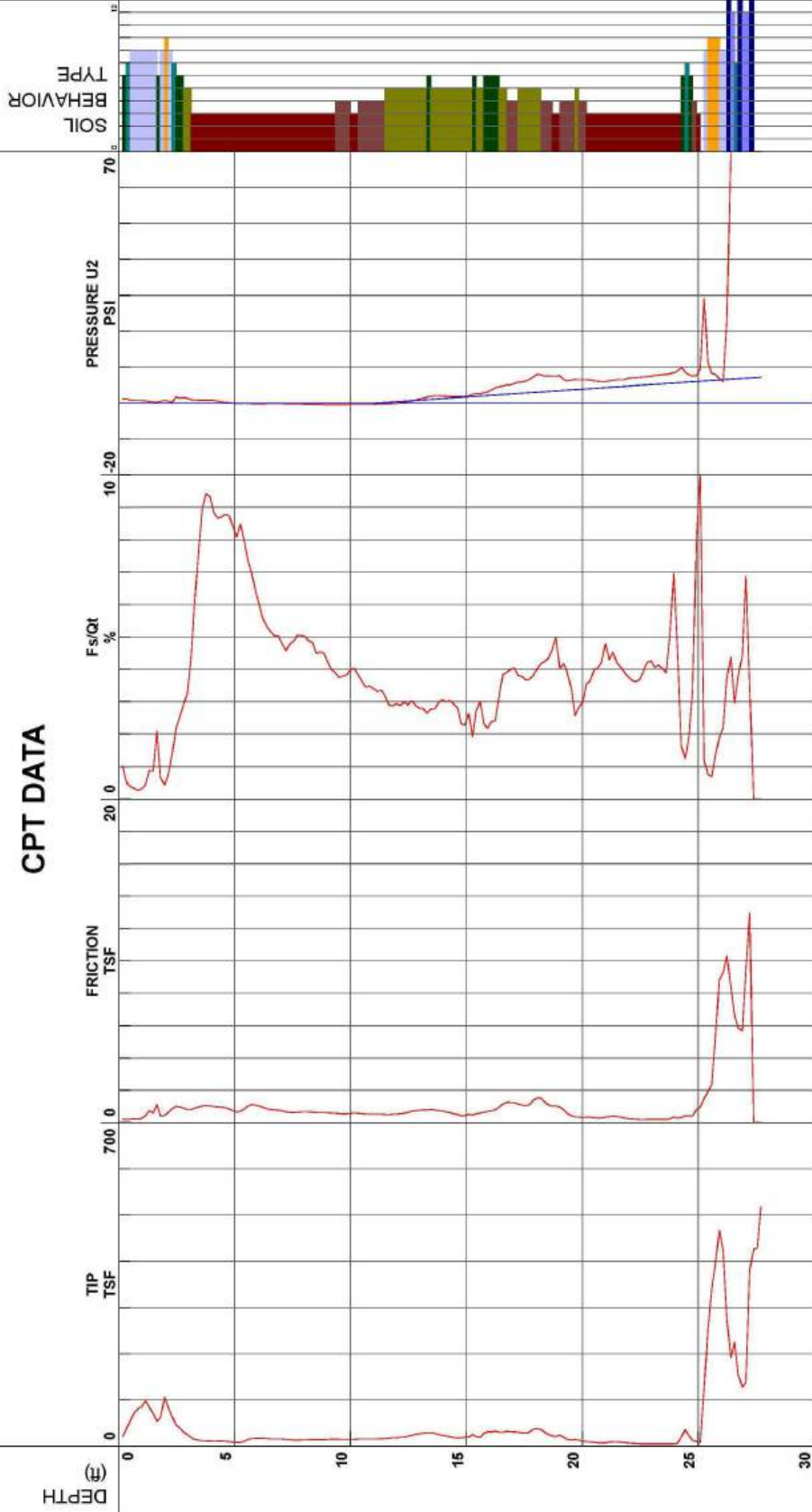
AJ-OO
DGI1696
8/26/2021 9:03:58 AM

Filename
GPS
Maximum Depth

SDF(874).cpt
27.72 ft

Net Area Ratio .8

CPT DATA



*Soil behavior type and SPT based on data from UBC-1983

Cone Size 15cm squared



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CPT-03 DATA

The Petaluman Hotel
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Petaluma, California

Project No. 1927.01

Date: 1/24/2022

Drawn
Checked

MMT

B-4

FIGURE

Miller Pacific Engineering



Project
Job Number 1927.01
Hole Number CPT-04
EST GW Depth During Test

Petaluma Hotel
1927.01
CPT-04

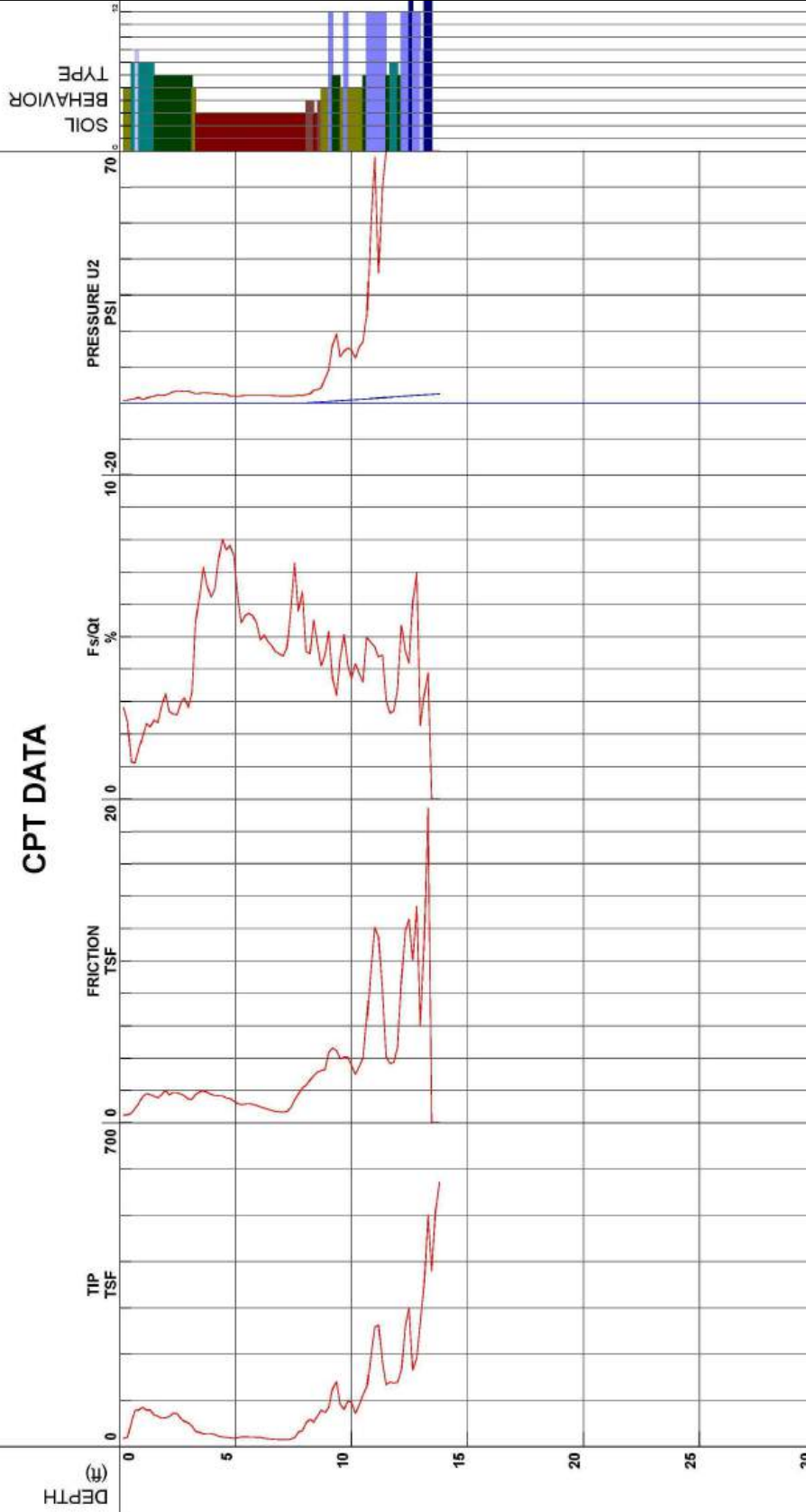
Operator
Cone Number
Date and Time
8.00 ft

AI-00
DDG1596
8/25/2021 9:31:22 AM

Filename
GPS
Maximum Depth
13.78 ft

SDF(875).cpt

Net Area Ratio .8



- 1 - sensitive fine grained
- 2 - organic material
- 3 - clay
- 4 - silty clay to clay
- 5 - clayey silt to silty clay
- 6 - sandy silt to clayey silt
- 7 - silty sand to sandy silt
- 8 - sand to silty sand
- 9 - sand
- 10 - gravelly sand to sand
- 11 - very stiff fine grained (*)
- 12 - sand to clayey sand (*)

Cone Size 15cm squared

S*Soil behavior type and SPT based on data from UBC-1993



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CPT-04 DATA

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Project No. 1927.01

Date: 1/24/2022

Drawn
Checked

MMT

B-5

FIGURE

**APPENDIX C
RISK TARGETED MAXIMUM CONSIDERED
EARTHQUAKE (MCE_R) GROUND MOTION HAZARD ANALYSIS**

Due to the presence of sandy soil layers beneath the building site that are prone to liquefaction, we judge the site should be classified as “Site Class F” per the 2019 California Building Code. However, per section 20.3.1 of the ASCE 7-16, an equivalent linear site-specific response analysis (i.e., SHAKE, DeepSoil, etc.) is not required if the proposed structure has a fundamental period of less than 0.5 seconds. We anticipate the proposed structures will have fundamental periods less than 0.5-seconds; therefore, based on the harmonic mean of the blow counts we recommend classifying the site as a “Site Class D”.

The ASCE 7-16 mapped spectral acceleration parameters at a period of 0.2-second, S_s , and 1.0-second, S_1 , at the project site are 1.50 g and 0.60 g, respectively. Per ASCE 7-16 Table 11.4-1 a Site-Specific Ground Motion shall be developed per Section 11.4.8 for S_s values greater than 1.0 g for Site Class E sites and all cases for Site Class F sites. Additionally, a Site-Specific Ground Motion Hazard Analysis shall be performed per ASCE 7-16 Section 11.4.8 if the S_1 value is greater than 0.2 g for Site Class D, greater than 1.0 g for Site Class E, and all cases for Site Class F. Therefore, per ASCE 7-16 Section 11.4.8, we performed a Site-Specific Ground Motion Hazard Analysis per ASCE 7-16 Section 21.2, as described in the sections below.

Probabilistic (MCE_R) Ground Motions: Method 1

A probabilistic acceleration response spectrum, corresponding to a 2% chance of exceedance in 50-years (2,475 return period) was generated utilizing the United States Geologic Survey (USGS) online Unified Hazard Tool (<https://earthquake.usgs.gov/hazards/interactive/>, accessed 2022) for a Site Class D soil profile ($V_{S30} = 260$ m/s) and the Dynamic: Conterminous U.S. 2014 (v4.2.0) model. The accelerations given were modified by the risk coefficients C_{RS} and C_{R1} , 0.915 and 0.906, respectively. The accelerations were further converted to the probabilistic spectral response acceleration in the maximum horizontal response utilizing the procedures outlined by Shahi and Baker, 2013. These modifications to the probabilistic spectra correspond to a response with a risk targeted level of 1% probability of collapse within a 50-year period. The resulting probabilistic MCE_R values and spectra are presented on Figures C-1 and C-2, respectively.

Deterministic (MCE_R) Ground Motions

A deterministic acceleration response spectrum was generated utilizing the NGA attenuation models outlined by Abrahamson, Silva & Kamai (2014); Boore, Stewart, Seyhan & Atkinson (2014); Campbell & Borzognia (2014); and Chiou & Youngs (2014) NGA2 West models for a Site Class D ($V_{S30} = 270$ m/s). The geometric average of the 84th percentile spectral accelerations from the aforementioned attenuation relationships were modified for the probabilistic spectral response acceleration in the maximum horizontal direction, utilizing the procedures outlined by Shahi and Baker, 2013. The resulting deterministic MCE_R values and spectra are shown on Figures C-1 and C-2, respectively. The deterministic MCE_R spectra shall not be less than the Lower Limit Deterministic MCE_R Response Spectrum, as described in ASCE 7-16 Figure 21.2-1 which is tabulated and plotted on Figures C-1 and C-2, respectively.

Site Specific MCE_R

The site specific MCE_R spectral response acceleration at any period shall be taken as the lesser of the response accelerations from the probabilistic ground motions and the deterministic ground motions and is presented on Figure C-3. Additionally, per ASCE 7-16 Section 21.3, the design spectral response acceleration at any period is equal to 2/3rds the MCE_R Response Spectrum, as shown on Figure C-3.

Per ASCE 7-16 Section 21.4, the MCE_R spectral response acceleration parameters shall be taken from the Site-Specific Spectrum defined as follows and are presented on Figure C-3:

- S_{DS} – The S_{DS} parameter shall be taken as 90% of the maximum spectral acceleration, S_a, obtained from the site-specific spectrum, at any period between 0.2 and 5.0-seconds. However, the values obtained shall not be less than 80% of the values determined in accordance with ASCE 7-16 Section 11.4.5.
- S_{D1} – The S_{D1} parameter shall be taken as the maximum value of the product, TS_a, for periods between 1.0 and 2.0-seconds for Site Class C and B sites; and periods between 1.0 and 5.0-seconds for Site Class D, E & F sites. However, the values obtained shall not be less than 80% of the values determined in accordance with ASCE 7-16 Section 11.4.5.
- S_{MS} – The S_{MS} parameter is equal to 1.5 times the S_{DS} value, but not less than 80% of the values determined in accordance with ASCE 7-16 Section 11.4.4.
- S_{M1} – The S_{M1} parameter is equal to 1.5 times the S_{D1} value, but not less than 80% of the values determined in accordance with ASCE 7-16 Section 11.4.4.

**ASCE 7-16
SITE SPECIFIC RISK-TARGETED
MAXIMUM CONSIDERED EARTHQUAKE (MCE_R)**

Project Name: Petaluman Hotel
Project Numb: 1927.01

Latitude: 38.2331
Longitude: -122.6391

General Seismic Parameters
ASCE 7-16 Section 11.4

Site Class: D
S_S (g): 1.50
S₁ (g): 0.60
F_w: 1.20
F_v: N/A
T_r (sec): 12.0
C_{RS}: 0.92
C_{RI}: 0.91

Minimum Design Spectra Parameters
ASCE 7-16 Section 21.3

Site Class: D
S_S (g): 1.50
S₁ (g): 0.60
F_w: 1.00
F_v: 2.50
S_{MS} (g): 1.50
S_{M1} (g): 1.50
S_{M2} (g): 1.00
S_{D1} (g): 1.00
T₀ (sec): 0.20
T_S (sec): 1.00

Deterministic MCE Screening
ASCE 7-16 (Sup #1) 21.2.3

F_a: 1.00
1.2 x F_a (g): 1.20
Max PSHA (g): 2.16
DSHA Rqd.: **YES**

Min. Deterministic MCE
ASCE 7-16 (Sup #1) 21.2.2

F_a: 1.00
1.5 x F_a (g): 1.50
Max DSHA (g): 1.73
Min MCE Rqd.: **NO**

Probabilistic MCE
ASCE 7-16 Section 21.2.1 - Method 1

Period (sec)	S _{MS} (g)				C _R	S _a (g)
	S _{MS(0.05)}	S _{MS(0.10)}	S _{MS(0.20)}	S _{MS(0.50)}		
0.01	0.79	1.10	0.87	0.915	0.80	
0.10	1.33	1.10	1.46	0.915	1.34	
0.20	1.78	1.10	1.96	0.915	1.80	
0.30	2.05	1.13	2.30	0.914	2.10	
0.50	2.02	1.18	2.37	0.912	2.16	
0.75	1.66	1.24	2.05	0.909	1.66	
1.00	1.40	1.30	1.82	0.906	1.65	
2.00	0.78	1.35	1.05	0.906	0.95	
3.00	0.52	1.40	0.73	0.906	0.66	
4.00	0.38	1.45	0.55	0.906	0.50	
5.00	0.29	1.50	0.44	0.906	0.40	

Deterministic MCE
NGA West2 2014 - 84th Percentile

Period (sec)	S _{MS} (g)		
	S _{MS(0.05)}	S _{MS(0.10)}	S _{MS(0.20)}
0.01	0.59	1.10	0.65
0.02	0.59	1.10	0.65
0.03	0.60	1.10	0.66
0.05	0.66	1.10	0.72
0.08	0.78	1.10	0.86
0.10	0.91	1.10	1.00
0.15	1.12	1.10	1.23
0.20	1.26	1.10	1.39
0.25	1.37	1.11	1.53
0.30	1.46	1.13	1.64
0.40	1.50	1.15	1.73
0.50	1.46	1.18	1.72
0.75	1.22	1.24	1.51
1.00	1.04	1.30	1.35
1.50	0.76	1.33	1.00
2.00	0.58	1.35	0.78
3.00	0.38	1.40	0.54
4.00	0.27	1.45	0.39
5.00	0.19	1.50	0.29
7.50	0.09	1.50	0.14
10.00	0.05	1.50	0.08

Scaled Deterministic MCE
ASCE 7-16 (Sup #1) 21.2.2

Period (sec)	S _a (g)
0.01	0.57
0.02	0.57
0.03	0.57
0.05	0.63
0.08	0.75
0.10	0.87
0.15	1.07
0.20	1.21
0.25	1.33
0.30	1.42
0.40	1.50
0.50	1.49
0.75	1.31
1.00	1.17
1.50	0.87
2.00	0.68
3.00	0.47
4.00	0.33
5.00	0.25
7.50	0.12
10.00	0.07

Site Specific MCE_R
ASCE 7-16 Section 21.2.3

Period (sec)	S _a (g)
0.01	0.65
0.02	0.65
0.03	0.66
0.05	0.72
0.08	0.86
0.10	1.00
0.15	1.23
0.20	1.39
0.25	1.53
0.30	1.64
0.40	1.73
0.50	1.72
0.75	1.51
1.00	1.35
1.50	1.00
2.00	0.78
3.00	0.54
4.00	0.39
5.00	0.29
7.50	0.14
10.00	0.08

Site-Specific Design Spectrum
ASCE 7-16 Section 21.3

Period (sec)	S _a (g)
0.01	0.43
0.02	0.43
0.03	0.44
0.05	0.48
0.08	0.57
0.10	0.67
0.15	0.82
0.20	0.93
0.25	1.02
0.30	1.09
0.40	1.15
0.50	1.15
0.75	1.01
1.00	0.90
1.50	0.67
2.00	0.52
3.00	0.36
4.00	0.26
5.00	0.19
7.50	0.09
10.00	0.05

80% General Response Spectrum
ASCE 7-16 Section 21.3

Period (sec)	S _a (g)	80% S _a (g)
0.01	0.43	0.34
0.02	0.43	0.42
0.03	0.44	0.50
0.05	0.48	0.57
0.08	0.57	0.65
0.10	0.67	0.72
0.15	0.82	0.80
0.20	0.93	0.80
0.25	1.02	0.76
0.30	1.09	0.62
0.40	1.15	0.42
0.50	1.15	0.36
0.75	1.01	0.32
1.00	0.90	0.28
1.50	0.67	0.25
2.00	0.52	0.23
3.00	0.36	0.21
4.00	0.26	0.20
5.00	0.19	0.18
7.50	0.09	0.17
10.00	0.05	0.16

T₀ = 0.20
T_S = 1.00



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FILE: 1927.01 Site Specific.dwg

504 Redwood Blvd.
Suite 220
Novato, CA 94947
T 415 / 382-3444
F 415 / 382-3450
www.millerpac.com

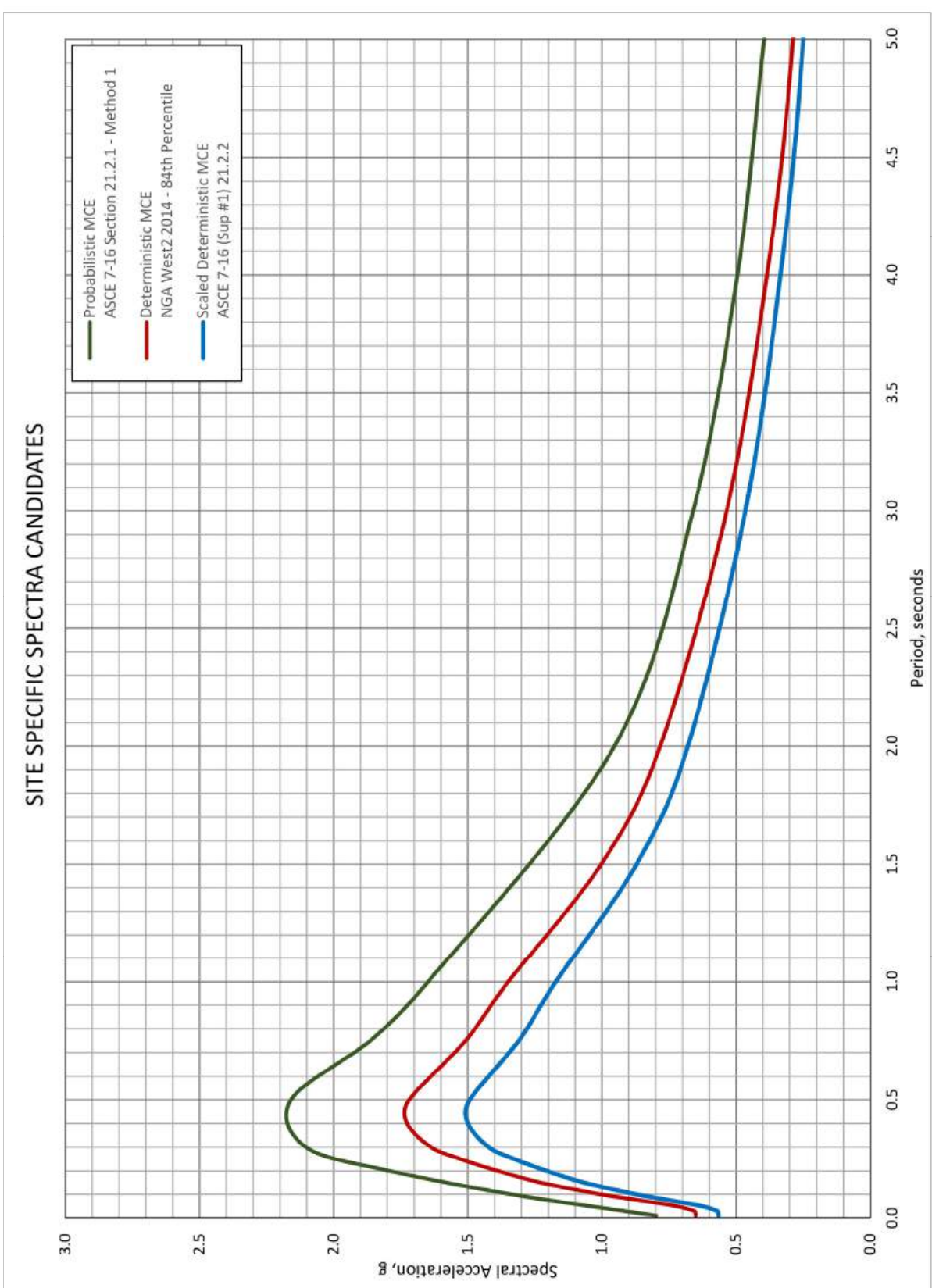
ASCE 7-16 MCE_R CALCULATIONS

The Petaluman Hotel
2 Petaluma Boulevard South
Petaluma, California

Project No. 1927.01 Date: 1/24/2022

Drawn _____
Checked MMT

C-1
FIGURE



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ASCE 7-16 MCEr CANDIDATE SPECTRA

The Petaluman Hotel
 2 Petaluma Boulevard South
 Petaluma, California

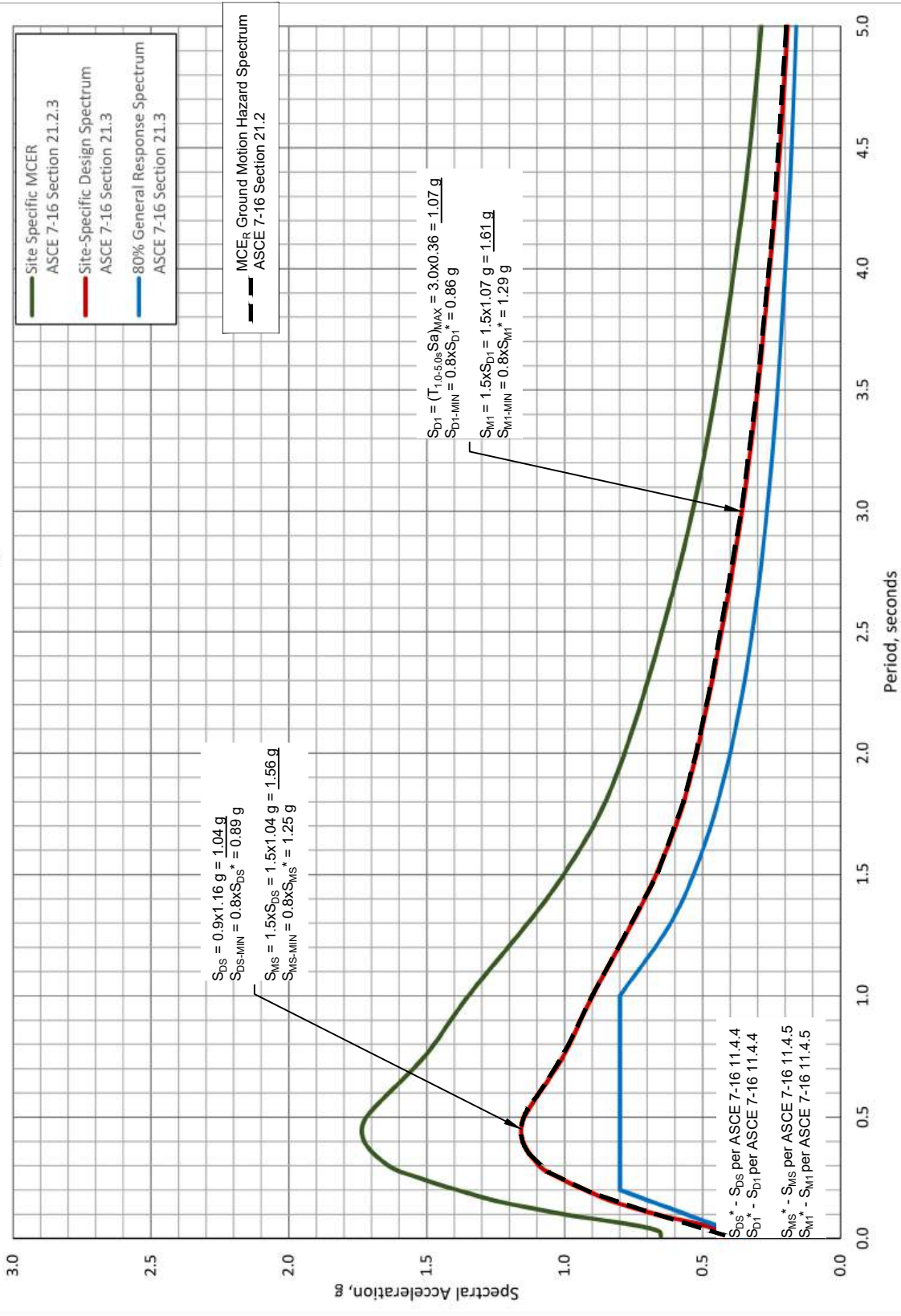
Project No. 1927.01 Date: 1/24/2022

Drawn MMT
 Checked

C-2

FIGURE

SITE SPECIFIC MCE_R



MPEG
MILLER PACIFIC
ENGINEERING GROUP

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 FILE: 1927.01 Site Specific.dwg

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ASCE 7-16 MCE_R DESIGN SPECTRUM

The Petaluman Hotel
 2 Petaluma Boulevard South
 Petaluma, California

Project No. 1927.01 Date: 1/24/2022

Drawn: MMT
 Checked:

C-3
 FIGURE

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MAR 25 2019

ENVIRONMENTAL
HEALTH & SAFETY

Recording Requested By:

Ross Jones

When Recorded, Mail To:

Christine Sosko, Director of Environmental Health
625 5th Street
Santa Rosa, CA 95404

Bruce H. Wolfe, Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612



2019011682

Official Records Of Sonoma County
Deva Marie Proto
02/13/2019 12:44 PM
GENERAL PUBLIC

DCLRE 17 Pgs

Fee: \$137.00



PAID

COVENANT AND ENVIRONMENTAL RESTRICTION
ON PROPERTY

This Covenant and Environmental Restriction on Property (this "Covenant") is made as of the 13th day of FEBRUARY, 2019 by Ross Jones ("Covenantor") who is the Owner of record of that certain property situated at B Street and Petaluma Boulevard South, in the City of Petaluma, County of Sonoma, State of California, which is more particularly described in Exhibit A attached hereto and incorporated herein by this reference (such portion hereinafter referred to as the "Property"), for the benefit of the Sonoma County, Department of Health Services, Local Oversight Program (the "LOP") and the California Regional Water Quality Control Board for the San Francisco Bay Region (the "Board"), with reference to the following facts:

A. Approval of the LOP to Address the Existence of Hazardous Materials. Portions of the Property and groundwater underlying these portions of the property contain hazardous materials. In order to address this condition, the LOP will approve a low threat closure of the Property (LOP Approval) which requires the development and maintenance of the Property in accordance with this Covenant.

B. Contamination of the Burdened Property. Soil at the Property is believed to have been contaminated by the historic use of the property for operation of gasoline service stations conducted by previous owners and/or tenants at the Property. Soil and groundwater are impacted with organic and inorganic chemicals including total petroleum hydrocarbons (TPH) as gasoline and volatile organic compounds (VOCs), principally benzene, which constitute hazardous materials as that term is defined in Health & Safety Code Section 25260. Soil vapor at the Property has also been impacted by TPH and benzene. The Property has been the subject of extensive soil, groundwater and soil vapor investigations in recent years. The underground storage tanks (USTs) and contaminated soil accessible around the gasoline station portion of the Property have been excavated and removed. A waste oil UST was removed from the portion of

the Property, and a small volume of associated contaminated soil was found and removed. In order to control impacts associated with residual contaminants in soil, groundwater, and soil vapor, the redevelopment of the Property will cover the entire surface of the Burdened Property with buildings and associated hardscape in strict compliance with LOP Approval. A Liquid Boot® membrane/liner or equivalent will be installed beneath the slabs of all buildings constructed at the Property. There are separate HVAC (heating, ventilation, and air conditioning) systems for the first floor and the upper floors. A Risk Management Plan (RMP) will be recorded and implemented at the Property. In accordance with LOP Approval, the purpose of the RMP is to identify activities where residual contaminants may be encountered, provide a notification procedure for those activities, develop procedures to ensure the integrity of the remedial controls, and to develop health and safety procedures to ensure safe and proper handling of the impacted soil and groundwater.

C. Exposure Pathways. The contaminants addressed in this Covenant are present in soil, groundwater, and soil vapor at the Property. Without the mitigation measures which have been performed on the Property, exposure to these contaminants could take place via direct contact with soils and inhalation of vapors which could potentially migrate to indoor air from the subsurface. Pursuant to LOP Approval, the risk of public exposure to the contaminants has been substantially lessened by the remediation and controls described herein.

D. Adjacent Land Uses and Population Potentially Affected. The Property is zoned mixed use and is adjacent to commercial and mixed use land uses.

E. Disclosure. Full and voluntary disclosure to the LOP and Board of the presence of hazardous materials on the Property has been made and extensive sampling of the Property has been conducted which has resulted in LOP Approval for the restrictions identified in this Covenant.

F. Intent. Covenantor desires and intends that in order to benefit the Board and LOP, and to protect the present and future public health and safety, the Property shall be used in such a manner as to avoid potential harm to persons or property that may result from hazardous materials that may have been deposited on portions of the Property.

G. Management of Residual Pollution. As part of the LOP Approval, and in order to assure continued protection of human health and the environment, a RMP has been prepared and is attached hereto and incorporated herein by this reference as "Exhibit B". A copy of this document must be maintained by the Property Owner and shall be consulted prior to and complied with during any activities highlighted in the RMP.

ARTICLE I GENERAL PROVISIONS

1.1 Provisions to Run with the Land. This Covenant sets forth protective provisions, covenants, conditions and restrictions (collectively referred to as "Restrictions") upon and subject to which the Property and every portion thereof shall be improved, held, used, occupied, leased, sold, hypothecated, encumbered, and/or conveyed. The restrictions set forth in Article III

are reasonably necessary to protect present and future human health and safety or the environment as a result of the presence on the land of hazardous materials. Each and all of the Restrictions shall run with the land, and pass with each and every portion of the Property, and shall apply to, inure to the benefit of, and bind the respective successors in interest thereof, for the benefit of the LOP, Board and all Owners and Occupants. Each and all of the Restrictions are imposed upon the entire Property unless expressly stated as applicable to a specific portion of the Property. Each and all of the Restrictions run with the land pursuant to section 1471 of the Civil Code. Each and all of the Restrictions are enforceable by the Board or LOP.

1.2 Concurrence of Owners and Lessees Presumed. All purchasers, lessees, or possessors of any portion of the Property shall be deemed by their purchase, leasing, or possession of such Property, to be in accord with the foregoing and to agree for and among themselves, their heirs, successors, and assignees, and the agents, employees, and lessees of such owners, heirs, successors, and assignees, that the Restrictions as herein established must be adhered to for the benefit of the Board and the Owners and Occupants of the Property and that the interest of the Owners and Occupants of the Property shall be subject to the Restrictions contained herein.

1.3 Incorporation into Leases. Covenantor desires and covenants that the Restrictions set out herein shall be incorporated in and attached to each and all leases of any portion of the Property. Recordation of this Covenant shall be deemed binding on all successors, assigns, and lessees, regardless of whether a copy of this Covenant and Agreement has been attached to or incorporated into any given deed or lease.

1.4 Purpose. It is the purpose of this instrument to comply with the Board or LOP Approval and to convey to the Board and LOP real property rights which will run with the land, to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to residual hazardous materials.

ARTICLE II DEFINITIONS

2.1 Board. "Board" shall mean the California Regional Water Quality Control Board for the San Francisco Bay Region and shall include its successor agencies, if any.

2.2 Local Oversight Program. "Local Oversight Program" shall mean a certified local agency which the State Water Resources Control Board (State Water Board) has certified as qualified to implement a program for the abatement of, and oversight of the abatement of, unauthorized releases of hazardous substances from underground storage tanks (UST).

2.3 Improvements. "Improvements" shall mean all buildings, roads, driveways, regradings, and paved parking areas, constructed or placed upon any portion of the Burdened Property.

2.4 Occupants. "Occupants" shall mean Owners and those persons entitled by ownership, leasehold, or other legal relationship to the exclusive right to use and/or occupy all or any portion of the Burdened Property.

2.5 Owner or Owners. "Owner" or "Owners" shall mean the Covenantor and/or its successors in interest, who hold title to all or any portion of the Burdened Property.

ARTICLE III
DEVELOPMENT, USE AND CONVEYANCE OF THE BURDENED PROPERTY

3.1 Permitted Uses. The Property may be used for all industrial, commercial, mixed use or office related uses.

3.2 Restrictions on Development and Use. Covenantor promises to restrict the use of the Property as follows:

a. No residence for human habitation, hospitals, schools for persons under the age of 21, or day care centers shall be permitted on the ground floor of the Property.

b. No Owners or Occupants of the Property or any portion thereof shall conduct any excavation work on the Property, without prior notification to the Board and LOP as outlined in the RMP.

c. All uses and development of the Property shall be consistent with the Board or LOP Approval (based on the approved lead agency at the time) or RMP, each of which is hereby incorporated by reference including future amendments thereto. All uses and development shall preserve the integrity of any vapor barrier, any remedial measures taken or remedial equipment installed, and any groundwater monitoring system installed on the Property pursuant to the requirements of the lead agency (Board or LOP), unless otherwise expressly permitted in writing by such agency.

d. No Owners or Occupants of the Property or any portion thereof shall drill, bore, otherwise construct, or use a well for the purpose of extracting water for any use, including but not limited to, domestic, potable, or industrial uses, unless expressly permitted in writing by the Board.

e. The Owner shall notify the LOP and Board of each of the following: (1) The type, cause, location and date of any disturbance to any vapor barrier, any remedial measures taken or remedial equipment installed, and of the groundwater monitoring system installed on the Property pursuant to the LOP or Board Approval, which could affect the ability of such barrier or remedial measures, remedial equipment, or monitoring system to perform their respective functions and (2) the type and date of repair of such disturbance. Notification to the LOP and Board shall be made by registered mail within ten (10) working days of both the discovery of such disturbance and the completion of repairs.

f. The Owner shall submit an annual summary report to the Board and LOP that describes in detail the type, cause, location and date of all of the previous year's disturbance, if

any, to any vapor barrier , any remedial measures taken or remedial equipment installed, and of the groundwater monitoring system installed on the Property pursuant to the Board Approval, which could affect the ability of such barrier or remedial measures, remedial equipment, or monitoring system to perform their respective functions and the type and date of repair of such disturbance.

g. The Covenantor agrees that the LOP or Board, and/or any persons acting pursuant to their orders, shall have reasonable access to the Property for the purposes of inspection, surveillance, maintenance, or monitoring, as provided for in Division 7 of the Water Code.

h. No Owner or Occupant of the Property shall act in any manner that will aggravate or contribute to the existing environmental conditions of the Property. All use and development of the Property shall preserve the integrity of any measures installed pursuant to the lead agency (Board or LOP) Approval.

3.3 Enforcement. Failure of an Owner or Occupant to comply with any of the restrictions set forth in paragraph 3.2 shall be grounds for the LOP or Board, by reason of this Covenant, to have the authority to require that the Owner modify or remove any Improvements constructed in violation of that paragraph. Violation of the Covenant shall be grounds for the Board or LOP to file civil action against the Owner as provided by law.

3.3 Notice in Agreements. After the date of recordation hereof, all Owners shall execute a written instrument which shall accompany all purchase agreements relating to the property. Any such instrument shall contain the following statement:

The land described herein contains hazardous materials in soils and in the ground water under the property, and is subject to a Covenant and Environmental Restriction On Property dated as of _____, 2018, and recorded on _____, 2018, in the Official Records of Sonoma County, California, as Document No. _____, which Covenant and Restriction imposes certain covenants, conditions, and restrictions on usage of the property described herein. This statement is not a declaration that a hazard exists.

ARTICLE IV VARIANCE AND TERMINATION

4.1 Variance. Any Owner or, with the Owner's consent, any Occupant of the Property or any portion thereof may apply to the lead agency (LOP or Board) for a written variance from the provisions of this Covenant.

4.2 Termination. Any Owner or, with the Owner's consent, any Occupant of the Property or a portion thereof may apply to the LOP and Board for a termination of the Restrictions as they apply to all or any portion of the Property. Upon approval of the lead agency (LOP or Board) for a Termination of the Restrictions, the lead agency shall execute a Quit Claim Deed removing this Covenant from the public record.

4.3 Term. Unless terminated in accordance with paragraph 4.2 above, by law or otherwise, this Covenant shall continue in effect in perpetuity.

ARTICLE V
MISCELLANEOUS

5.1 No Dedication Intended. Nothing set forth herein shall be construed to be a gift or dedication, or offer of a gift or dedication, of the Property or any portion thereof to the general public.

5.2 Notices. Whenever any person gives or serves any notice, demand, or other communication with respect to this Covenant, each such notice, demand, or other communication shall be in writing and shall be deemed effective (1) when delivered, if personally delivered to the person being served or official of a government agency being served, or (2) three (3) business days after deposit in the mail if mailed by United States mail, postage paid certified, return receipt requested:

If To: "Covenantor"

ROSE A. JONES, TRUSTEE
260 C Petaluma Blvd N
Petaluma, CA 94952

If To: "LOP"

Sonoma County Department of Health Services
Local Oversight Program
625 5th Street
Santa Rosa, CA 95404

If To: "Board"

Regional Water Quality Control Board
San Francisco Bay Region
Attention: Executive Officer
1515 Clay Street, Suite 1400
Oakland, California 94612

5.3 Partial Invalidity. If any portion of the Restrictions or terms set forth herein is determined to be invalid for any reason, the remaining portion shall remain in full force and effect as if such invalidated portion had not been included herein.

5.4 Article Headings. Headings at the beginning of each numbered article of this Covenant are solely for the convenience of the parties and are not a part of the Covenant.

5.5 Recordation. This instrument shall be executed by the Covenantor and by the Executive Officer of the Board. This instrument shall be recorded by the Covenantor in the County of Sonoma within ten (10) days of the date of execution.

5.6 References. All references to Code sections include successor provisions.

EXHIBIT A [PROPERTY DESCRIPTION]

Legal Description of Property

Real property in the City of Petaluma, County of Sonoma, State of California, described as follows:

BEGINNING AT THE SOUTHEASTERLY CORNER OF THIRD AND B STREETS AND RUNNING IN A SOUTHEASTERLY DIRECTION PARALLEL TO THIRD STREET, A DISTANCE OF SEVENTY (70) FEET; THENCE IN A SOUTHERLY DIRECTION PARALLEL TO B STREET, A DISTANCE OF SEVENTY (70) FEET; THENCE IN A NORTHWESTERLY DIRECTION PARALLEL TO THIRD STREET, A DISTANCE OF SEVENTY (70) FEET; THENCE IN A NORTHEASTERLY DIRECTION PARALLEL TO B STREET A DISTANCE OF SEVENTY (70) FEET TO THE POINT OF BEGINNING.

APN: 008-063-009-000

Parcel One:

Being a portion of Lot 146 as said lot is shown upon Stratton's Official Map of the City of Petaluma and more particularly described as follows:

Beginning at the most northerly corner of said Lot 146 and running thence along the Northwesterly line thereof, South 25° 56' West, 100.25 feet; thence South 64° 02' East, 100 feet, more or less, to the southeasterly line of said Lot 146; thence along said line North 25° 32' East, 100.25 feet to the most easterly corner of said Lot 146; thence North 64° 02' West, 99.7 feet to the point of beginning.

Excepting therefrom that portion conveyed to Harry Berman and Mildred Alice Berman, his wife, by Deed recorded August 18, 1959 in Book 1691 Official Records, page 449, under Recorder's Serial No. F-83898, Sonoma County Records.

Parcel Two:

Being all of Lot 147 as the same is numbered and designated on the Official Map of said City of Petaluma, as made by Jas. T. Stratton, Esq., Surveyor, and fronting 42.4 feet on the Southerly side line of Third Street, between "B" and "C" Streets, in said City, and extending back equal width 100.5 feet.

EXHIBIT B
RISK MANAGEMENT PLAN

Exhibit B

Draft Residual Risk Management Plan

Section 1.0 Background

The Property situated at B Street and Petaluma Boulevard South, in the City of Petaluma, County of Sonoma, State of California, which is more particularly described in Exhibit A (the "Property"). The Property is located within an area comprising commercial, mixed use, residential, and light industrial uses in Petaluma, Sonoma County.

Soil at the Property is believed to have been contaminated by the historic use of the property for the operation of a gasoline service station conducted by previous owners and/or tenants at the Property. Soil and groundwater are impacted with organic and inorganic chemicals including total petroleum hydrocarbons (TPH) as gasoline and volatile organic compounds (VOCs), principally benzene, which constitute hazardous materials as that term is defined in Health & Safety Code Section 25260. Soil vapor at the Property has also been impacted by TPH and benzene.

The Property has been the subject of extensive soil, groundwater and soil vapor investigations in recent years. The underground storage tanks (USTs) and contaminated soil accessible around the gasoline station portion of the Property have been excavated and removed. A waste oil UST was also removed from the Property, and a small volume of associated contaminated soil was found and removed.

In order to control potential impacts associated with residual contaminants in soil, groundwater, and soil vapor, the redevelopment of the Property will incorporate the following mitigation measures:

1. The entire surface of the Property will be covered with buildings and associated hardscape.
2. The first floor of the Property will be restricted to industrial, commercial, and/or office space use only.
3. A Liquid Boot® membrane/liner or equivalent will be installed beneath the slabs of all buildings constructed at the Property.
4. A LiquidBoot® GeoVent system or equivalent will be incorporated beneath the slabs of all buildings constructed at the Property.
5. A deed covenant and this Risk Management Plan (RMP) have been recorded and implemented at the Property. The purpose of the RMP is to identify activities where residual contaminants may be encountered, provide a notification procedure for those activities, develop procedures to ensure the integrity of the remedial controls, and to develop health and safety procedures to ensure safe and proper handling of the impacted soil and groundwater.

Based upon the above mitigation measures, it is anticipated that Sonoma County Local Oversight Program (“Sonoma County”) will issue a no further action letter for the Property.

Section 2.0 Activities Covered by the RMP

The following activities are restricted at the Property, and will require notification and written permission as outlined in Section 3.0.

- a. Disturbing (excavating, removal, drilling or otherwise compromising the integrity of) the hardscape surface of the Property.
- b. Disturbing the building slabs and LiquidBoot® membrane / liner or equivalent.
- c. Subsurface activities in the area of the LiquidBoot® GeoVent system or equivalent.
- d. Groundwater extraction and/or construction dewatering.
- e. Soil or groundwater sampling.
- f. Soil reuse or disposal.

In addition, groundwater extraction and any project/activity whose primary purpose is environmentally related or any project that involves disturbing more than five cubic yards of soil shall not be implemented within the Property boundary, without prior written approval from Sonoma County or a succeeding agency.

Section 3.0 Responsibilities and Notification Requirements

The current property owner will be responsible for complying with the land use covenant and procedures outlined within the RMP. It is the owner’s responsibility to ensure that all lessees and contractors that may perform intrusive and subsurface work at the Property are aware of all potential risks and requirements outlined in the land use covenant and RMP.

The following notification must be provided if any of the activities listed in Section 2.0 are performed at the Property.

- A. Internal – Prior to the commencement of any intrusive or subsurface activities identified in Section 2.0, the Owner’s Representative, listed below, must be notified in writing, and written approval must be obtained from the Owner’s Representative. Notification shall consist of a written plan describing in detail the proposed restricted activity and showing the locations of all subsurface activities. Any excavation will be restricted to the designated area and depth as outlined within the plan unless additional written approval is granted by the Owner’s Representative. A site-specific and project-specific health and safety plan (“HASp”) must also be developed in accordance with 29 Code of Federal Regulations (29 CFR) and approved by the Owner’s Representative.
- B. External - At least three working days prior to the commencement of any intrusive or subsurface activities identified in Section 2.0, the Owner must notify Sonoma County or a succeeding agency, at this time Regional Water Quality Control Board in writing. The written notification shall describe in detail the type, cause, location and date of the intrusive or subsurface activities. Written approval from the County will be required for any project/activity whose primary

purpose is environmentally related or for any project that involves disturbing more than five cubic yards of soil. The Sonoma County representative currently charged with the project site is listed below. In addition, the Regional Water Quality Control Board Representative is listed.

- C. External - The Owner shall notify Sonoma County of each of the following: (1) The type, cause, location and date of any disturbance to any cap, any remedial measures taken or remedial equipment installed, and of the groundwater monitoring system installed on the Property pursuant to the requirements of Sonoma County, which could affect the ability of such cap or remedial measures, remedial equipment, or monitoring system to perform their respective functions and (2) the type and date of repair of such disturbance. Notification to Sonoma County shall be made by registered mail within ten (10) working days of both the discovery of such disturbance and the completion of repairs.

	Phone Number	Email
Owner's Representative		
Ross Jones	(707) 971-9400	rossjones@hotmail.com
Sonoma County Representative		
Glenn Morelli	(707) 565-6573	glenn.morelli@sonoma-county.org
Water Board Representative		
John Jang	(510) 622-2366	jjang@waterboards.ca.gov

The current Property owner will be responsible for maintaining a current contact list. The contact information must be updated annually or as needed.

Section 4.0 Health and Safety Plan Requirements

Due to the potential exposure to residual TPH, and benzene that remains at the Property, a site-specific and project-specific HASP must be developed if any of the activities identified in Section 2.0 are performed at the Property. The HASP must be developed in accordance with 29 CFR and must address at a minimum potential exposure due to dermal contact and inhalation of residual TPH and benzene. The HASP must also specify an air monitoring program for VOCs when performing subsurface earth work and appropriate personal protective equipment ("PPE") to be used.

Section 5.0 Requirements for Disturbances to Hardscape, Building Slabs and GeoVent System

A. Hardscape

As indicated in Section 3.0, a written plan must be prepared for any work in which the hardscape will be disturbed. The plan must include a description of the method by which the hardscape will be reinstated, and the schedule for the reinstatement of the hardscape. The plan must be approved by the Owner's Representative. The reinstatement of the hardscape must be completed to the satisfaction of the Owner's Representative, and must prevent contact with subsurface soils and infiltration of surface water. The Owner's

Representative must document the reinstatement of the hardscape.

B. LiquidBoot® Membrane and GeoVent System

Disturbance to the LiquidBoot® membrane under the building slab and / or GeoVent system should be avoided. If disturbance is unavoidable, a written plan must be prepared and must include a description of the method by which the membrane and / or GeoVent system will be reinstated. The plan must be approved by the Owner's Representative. The repair of the membrane and / or GeoVent system must be completed to the satisfaction of the Owner's Representative. The Owner's Representative must retain documentation on the reinstatement of the membrane and / or GeoVent system and must make the documentation available to the Sonoma County on request.

Section 6.0 Soil and Groundwater Management Requirements

A. Soil Management

A site-specific soil management plan (SMP) must be developed prior to the implementation of restricted activities listed in Section 2.0. At a minimum, the SMP should include dust control and monitoring measures, and management of soil stockpiles, etc.

All soil at the Property must be handled in accordance with applicable local, state and federal regulations, the site- and project-specific HASP, and the site-specific SMP. If any soil is to be disposed off-site, the soil must be tested for the applicable landfill acceptance criteria. At a minimum these are to include TPH, and benzene.

B. Groundwater Management

No groundwater shall be extracted and / or discharged from the Property without prior approval from Sonoma County or successor agency. Prior approval from other agencies may also be required. If dewatering activities will be conducted within the Property, then a groundwater sampling and handling plan must be developed and approved by the Owner's Representative and Sonoma County.

C. Decontamination

All equipment used in subsurface activities will be decontaminated before leaving the Property using visual inspection to verify that residual soils or groundwater have been removed. In addition, all operations that have the potential to generate or release hazardous materials will be conducted in a controlled area using appropriate engineering controls. Specific decontamination techniques will be established based on conditions at the Property, and the activities to be performed. Decontamination procedures will be reviewed with all personnel on-site.

Section 7.0 Annual Summary Report

The Owner's representative shall submit an annual summary report to Sonoma County or succeeding agency that describes in detail the type, cause, location and date of all of the previous year's disturbance to any hardscape or mitigation measure, any remedial

measures taken or remedial equipment installed, and any groundwater monitoring system installed on the Property pursuant to the requirements of the Sonoma County, which could affect the ability of such mitigation measures, remedial measures and/or equipment, or monitoring system to perform their respective functions and the type and date of repair of such disturbance.

5.7 Construction. Any general rule of construction to the contrary notwithstanding, this instrument shall be liberally construed in favor of the Covenant to effect the purpose of this instrument and the policy and purpose of the Water Code. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid.

IN WITNESS WHEREOF, the parties execute this Covenant as of the date set forth above.

Covenantor: 

By: ROSS A. JONES, TRUSTEE

Title: OWNER

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of SONOMA)

On 02/13/2019 before me, Maureen McGuigan, Notary Public
(insert name and title of the officer)

personally appeared Ross A. Jones,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Maureen E. McGuigan (Seal)



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Rizzi, Krystle

From: Jang, John@Waterboards <John.Jang@waterboards.ca.gov>
Sent: Saturday, July 16, 2022 10:57 PM
To: Rizzi, Krystle
Cc: Powell, Greg
Subject: RE: 2 Petaluma Blvd S. Proposed Hotel - CHEVRON #9-0152 (FORMER) (T0609700800)

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---
Additional testing is not necessary at this time. I recommend soil confirmation samples after the proposed 7,140 cy excavation and grab groundwater samples from the excavation pit. I recommend paired subslab and indoor air samples after development is completed to ensure that the required vapor mitigation measures are effective [vapor barrier(s) and venting system(s)].

From: Rizzi, Krystle <krizzi@cityofpetaluma.org>
Sent: Wednesday, June 22, 2022 9:23 AM
To: Jang, John@Waterboards <John.Jang@waterboards.ca.gov>
Cc: Powell, Greg <GPOWELL@cityofpetaluma.org>
Subject: RE: 2 Petaluma Blvd S. Proposed Hotel - CHEVRON #9-0152 (FORMER) (T0609700800)

EXTERNAL:

Hi John,

That works for us. The project is going through revisions in response to the City's incompleteness letter, so we have some time.

Thanks!

KRYSTLE RIZZI

Senior Planner
City of Petaluma | Community Development
office. 707-778-4592 | krizzi@cityofpetaluma.org



Petaluma is in a drought. There are many programs and incentives to help you conserve water! Learn more [HERE](#).

From: Jang, John@Waterboards <John.Jang@waterboards.ca.gov>
Sent: Monday, June 20, 2022 3:09 PM
To: Rizzi, Krystle <krizzi@cityofpetaluma.org>
Cc: Powell, Greg <GPOWELL@cityofpetaluma.org>
Subject: RE: 2 Petaluma Blvd S. Proposed Hotel - CHEVRON #9-0152 (FORMER) (T0609700800)

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---
I am currently working on end of the State fiscal year commitments. I will get to this in early July. Is this okay or will this be too late?

From: Rizzi, Krystle <krizzi@cityofpetaluma.org>
Sent: Tuesday, June 7, 2022 3:23 PM
To: Jang, John@Waterboards <John.Jang@waterboards.ca.gov>
Cc: Powell, Greg <GPOWELL@cityofpetaluma.org>
Subject: RE: 2 Petaluma Blvd S. Proposed Hotel - CHEVRON #9-0152 (FORMER) (T0609700800)

EXTERNAL:

Hi John,

Here is a link to the case file on the Water Board website:
https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609700800

The site was historically used as a gas station and there is a lot of history regarding testing and remediation. We are wondering if the amount and depth of excavation may warrant additional testing. I have attached the Covenant and Environmental Restriction document referenced in my original email. Based on the requirements contained in this document, we have requested that the applicant provide, at a minimum a Health and Safety Plan and a Soil Management Plan.

Please let us know if you recommend additional testing based on the project proposal.

Thanks!

KRYSTLE RIZZI

Senior Planner
City of Petaluma | Community Development
office. 707-778-4592 | krizzi@cityofpetaluma.org



Petaluma is in a drought. There are many programs and incentives to help you conserve water! Learn more [HERE](#).

From: Jang, John@Waterboards <John.Jang@waterboards.ca.gov>
Sent: Monday, June 6, 2022 10:24 PM
To: Rizzi, Krystle <krizzi@cityofpetaluma.org>
Cc: Powell, Greg <GPOWELL@cityofpetaluma.org>
Subject: RE: 2 Petaluma Blvd S. Proposed Hotel - CHEVRON #9-0152 (FORMER) (T0609700800)

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---
Geotracker does not list any case with that address. The closest case appears to be at 15 Petaluma Blvd South. Is there a Phase I or II for the subject site? What is the historical uses of this and nearby sites?

From: Rizzi, Krystle <krizzi@cityofpetaluma.org>
Sent: Monday, May 9, 2022 2:57 PM
To: Jang, John@Waterboards <John.Jang@waterboards.ca.gov>
Cc: Powell, Greg <GPOWELL@cityofpetaluma.org>
Subject: 2 Petaluma Blvd S. Proposed Hotel - CHEVRON #9-0152 (FORMER) (T0609700800)

EXTERNAL:

Hello John,

My name is Krystle and my colleague, Greg Powell forwarded your contact information to me. I'm doing the environmental review for a proposed hotel at 2 Petaluma Blvd S. in Petaluma. I see on GeoTracker that this site is closed as of February 2020, but I wanted to check in with you regarding the specific proposal. The project includes a substantial amount of excavation (7,140 cy), and so I wanted to check in to see if there is any additional testing needed at this time. If so, we can request from the applicant and would reference in the environmental document that we will be preparing pursuant to CEQA. I reviewed the Covenant and Environmental Restriction document and note that there are several approvals needed prior to site disturbance. Is there anything else you can think of that would be needed at this time?

Please feel free to call me at 707-540-0723 x208 if you'd like to discuss further. Thank you!

KRYSTLE RIZZI

Senior Planner
City of Petaluma | Community Development
office. 707-778-4592 | krizzi@cityofpetaluma.org



Petaluma is in a drought. There are many programs and incentives to help you conserve water! Learn more [HERE](#).

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Stormwater Control Plan
For a Regulated Project
EKN Petaluma Hotel

September 26, 2023

Owner's Representative
Mike Jolly / EKN Development
Email: Mike@EKNDevGroup.com
Phone: 310-776-0621

prepared by:
N Consulting Engineers, Inc.
17780 Fitch, Suite 100
Irvine, CA 92614
Phone: 949-396-1161

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This Stormwater Control Plan was prepared using the template dated July 11, 2014.

I. Project Data

Table 1. Project Data Form

Project Name/Number	EKN Petaluma Hotel
Application Submittal Date	2023-09-26
Project Location	2 Petaluma Blvd S, Petaluma, CA 94952
Project Phase No.	N/A
Project Type and Description	This project proposes a new 5-story building of 93 hotel rooms and 6,625sf of restaurant seating with a subterranean parking garage providing 58 parking spaces.
Total Project Site Area (acres)	0.33 acres
Total New and Replaced Impervious Surface Area	14,264 sf (0.33 ac)
Total Pre-Project Impervious Surface Area	0 sf (0 ac)
Total Post-Project Impervious Surface Area	14,264 sf (0.33 ac)

II. Setting

II.A. Project Location and Description

The project site is approximately 0.33 acres, located at 2 Petaluma Boulevard South, Petaluma, California. The proposed building consists of a one-story, ground-floor level housing retail/commercial and hotel support uses supporting four stories of hotel rooms and the rooftop terrace.

The proposed EKN Petaluma Hotel is a five-story building with a subterranean parking garage housing 58 parking spots and an occupiable rooftop which includes a garden, restaurant, bar, and event space. Six stories above grade and one down. 93 hotel rooms and 6,625 feet of restaurant seating. It is located at the southwest corner of Petaluma Blvd. South and B Street on a site that, until 2009, held a gas station. About three-quarters of the project area (all but the parcel directly adjacent to Bank of the West, to the south) is within the Petaluma Downtown Commercial District, a local district, and the National Register Commercial District.

II.B. Existing Site Features and Conditions

The project site is approximately 0.33 acres with elevation change across the site of roughly ± 2 ft to ± 3 ft, generally sloping from westerly to easterly direction. The existing site consists of undeveloped, pervious area. The property is surrounded by B Street to the northwesterly boundary, Petaluma Boulevard to the northeasterly boundary, hardware store to the southwesterly boundary, and a bank's parking lot to the southeasterly boundary. There is currently no existing storm drain system on the site. The existing stormwater runoff from the project area generally flows northeasterly on B Street and southeasterly on Petaluma Boulevard draining to a combination catch basin on Petaluma Boulevard at the southwesterly corner of intersection Petaluma Boulevard and C Street. Ultimately, the storm drain discharges to Petaluma River.

II.C. Opportunities and Constraints for Stormwater Control

The project site presents the following opportunities for stormwater controls:

1. Proprietary bioretention facilities (Modular Wetlands) will be incorporated on the roof of the development.
 - a. Designed to accept stormwater runoff from a minimum storm intensity of 0.2 in/hr per BASMAA requirements.
 - b. Stormwater runoff exceeding the 2-year event storm intensity of 0.5 in/hr will bypass the bioretention facility by overflowing and routed to the proposed off-site private detention facility.
2. Proprietary modular pavement support system (Silva Cells) designed as a detention facility will be incorporated underground along the frontage of the project site in public right-of-way.

The project site presents the following site constraints for stormwater controls:

1. Native soils encounter high groundwater and as a result infiltration is anticipated to be infeasible.
2. The proposed development is designed to occupy the property from lot line to lot line.

III. Low Impact Development Design Strategies

III.A. Optimization of Site Layout

All grading will match the adjoining street grades as close as possible, so slopes are minimized.

III.A.1. Limitation of development envelope

III.A.2. Preservation of natural drainage features

No natural drainage features are within the project area.

III.A.3. Setbacks from creeks, wetlands, and riparian habitats

No creeks, wetlands, or riparian habitats are within the project area.

III.A.4. Minimization of imperviousness

III.A.5. Use of drainage as a design element

III.B. Use of Permeable Pavements

Permeable pavements are not proposed for this project.

III.C. Dispersal of Runoff to Pervious Areas

III.D. Stormwater Control Measures

IV. Documentation of Drainage Design

IV.A. Descriptions of Each Drainage Management Area

IV.A.1. Table of Drainage Management Areas

DMA Name	Surface Type	Area (square feet)
1A	Roof	7,132
2A	Roof	6,074
3A	Patio	1,058
Total		14,264

IV.A.2. Drainage Management Area Descriptions

DMA 1A, totaling 7,132 square feet, drains northwesterly toward proprietary bioretention facility.

DMA 2A, totaling 6,074 square feet, drains northwesterly toward proprietary bioretention facility.

DMA 3A, totaling 1,058 square feet, drains northwesterly toward proprietary bioretention facility.

IV.B. Tabulation and Sizing Calculations

IV.B.1. Information Summary for Bioretention Facility Design

Total Project Area	14,264 sf
DMA 1A	7,132 sf
DMA 2A	6,074 sf
DMA 3A	1,058 sf

IV.B.2. Self-Treating Areas

N/A

IV.B.3. Self-Retaining Areas

N/A

IV.B.4. Areas Draining to Self-Retaining Areas

N/A

IV.B.5. Areas Draining to Bioretention Facilities

DMA Name	DMA Area (square feet)	Post-project surface type	DMA Runoff factor	DMA Area × runoff factor	Facility Name		
1A	7,132	Roof	1.0	7,132.0	Sizing factor	Minimum Facility Size	Proposed Facility Size
Total				7,132.0	0.04	286 sf	8x24*

* Proprietary Bioretention Facility is sized by the treatment flow

DMA Name	DMA Area (square feet)	Post-project surface type	DMA Runoff factor	DMA Area × runoff factor	Facility Name		
2A	6,074	Roof	1.0	6,074.0	Sizing factor	Minimum Facility Size	Proposed Facility Size
Total				6,074.0	0.04	243 sf	8x24*

* Proprietary Bioretention Facility is sized by the treatment flow

DMA Name	DMA Area (square feet)	Post-project surface type	DMA Runoff factor	DMA Area × runoff factor	Facility Name		
3A	1,058	Patio	1.0	1,058.0	Sizing factor	Minimum Facility Size	Proposed Facility Size
Total				1,058.0	0.04	43 sf	4x4*

* Proprietary Bioretention Facility is sized by the treatment flow

V. Source Control Measures

V.A. Site activities and potential sources of pollutants

Source Control Table below identifies and describes potential pollutant sources that will likely be present as part of this project. The table also includes the permanent source control BMP and operational source control BMP (that shall be implemented) to control the potential polluted surface runoff. These controls shall be implemented as long as the identified activities (sources) continue at the site.

During all phases of the development (mass grading and construction of the new hotel/restaurant and subterranean parking garage), sediment laden stormwater runoff shall not be permitted to leave the site.

V.B. Source Control Table

Potential source of runoff pollutants	Permanent source control BMPs	Operational source control BMPs
Roof	Proprietary Bioretention Facilities (Modular Wetland)	Encourage maintenance of bioretention following Maintenance Summary Sweep regularly to prevent accumulation of litter
Patio	Proprietary Bioretention Facility (Modular Wetland)	Encourage maintenance of bioretention following Maintenance Summary Sweep regularly to prevent accumulation of litter

V.C. Features, Materials, and Methods of Construction of Source Control BMPs

Appendix A. Stormwater Pollutant Sources/Source Controls Checklist

How to use this worksheet (also see instructions on page 3–6 of the *BASMAA Post-Construction Manual*):

1. Review Column 1 and identify which of these potential sources of stormwater pollutants apply to your site. Check each box that applies.
2. Review Column 2 and incorporate all of the corresponding applicable Structural Source Control BMPs in your Stormwater Control Plan drawings.
3. Review Columns 3 and 4 and incorporate all of the corresponding applicable Structural Source Control BMPs and Operational Source Control BMPs in a table in your Stormwater Control Plan. Use the format shown in Table 3-1 on page 3-6 of the *BASMAA Post-Construction Manual*. Describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternative BMPs.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Structural Source Controls—Show on Stormwater Control Plan Drawings	3 Structural Source Controls—List in SCP Table and Narrative	4 Operational Source Control BMPs—Include in SCP Table and Narrative
<input checked="" type="checkbox"/> A. On-site storm drain inlets (unauthorized non-stormwater discharges and accidental spills or leaks)	<input checked="" type="checkbox"/> Locations of inlets.	<input checked="" type="checkbox"/> Mark all inlets with the words “No Dumping! Flows to Bay” or similar.	<input checked="" type="checkbox"/> Maintain and periodically repaint or replace inlet markings. <input checked="" type="checkbox"/> Provide stormwater pollution prevention information to new site owners, lessees, or operators. <input checked="" type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-44, “Drainage System Maintenance,” in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks <input checked="" type="checkbox"/> Include the following in lease agreements: “Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains.”

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Structural Source Controls—Show on Stormwater Control Plan Drawings	3 Structural Source Controls—List in SCP Table and Narrative	4 Operational Source Control BMPs—Include in SCP Table and Narrative
<input type="checkbox"/> B. Interior floor drains and elevator shaft sump pumps	Show drains and pump locations	<input type="checkbox"/> State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	<input type="checkbox"/> Inspect and maintain drains to prevent blockages and overflow.
<input checked="" type="checkbox"/> C. Interior parking garages	Show drain locations	<input checked="" type="checkbox"/> State that parking garage floor drains will be plumbed to the sanitary sewer.	<input checked="" type="checkbox"/> Inspect and maintain drains to prevent blockages and overflow.
<input type="checkbox"/> D1. Need for future indoor & structural pest control		<input type="checkbox"/> Note building design features that discourage entry of pests.	<input type="checkbox"/> Provide Integrated Pest Management information to owners, lessees, and operators.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Structural Source Controls—Show on Stormwater Control Plan Drawings	3 Structural Source Controls—List in SCP Table and Narrative	4 Operational Source Control BMPs—Include in SCP Table and Narrative
<input checked="" type="checkbox"/> D2. Landscape/ Outdoor Pesticide Use/Building and Grounds Maintenance	<input type="checkbox"/> Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. <input type="checkbox"/> Show self-retaining landscape areas, if any. <input checked="" type="checkbox"/> Show bioretention facilities. (See instructions in Chapter 4.)	<p>State that final landscape plans will accomplish all of the following.</p> <input type="checkbox"/> Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. <input checked="" type="checkbox"/> Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. <input checked="" type="checkbox"/> Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. <input checked="" type="checkbox"/> Consider using pest-resistant plants, especially adjacent to hardscape. <input checked="" type="checkbox"/> To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	<input checked="" type="checkbox"/> Maintain landscaping using minimum or no pesticides. <input checked="" type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-41, “Building and Grounds Maintenance,” in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks <input checked="" type="checkbox"/> Provide IPM information to new owners, lessees and operators.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Structural Source Controls—Show on Stormwater Control Plan Drawings	3 Structural Source Controls—List in SCP Table and Narrative	4 Operational Source Control BMPs—Include in SCP Table and Narrative
<input type="checkbox"/> E. Pools, spas, ponds, decorative fountains, and other water features.	<input type="checkbox"/> Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet.	<input type="checkbox"/> If the local municipality requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements.	<input type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-72, “Fountain and Pool Maintenance,” in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks The sanitary sewer operator must be notified and a clean out identified when pools are to be drained to the sanitary sewer.
<input checked="" type="checkbox"/> F. Food service	<input checked="" type="checkbox"/> For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment. <input checked="" type="checkbox"/> On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.	<input checked="" type="checkbox"/> Describe the location and features of the designated cleaning area. <input checked="" type="checkbox"/> Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.	State maintenance schedule for grease interceptor

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Structural Source Controls—Show on Stormwater Control Plan Drawings	3 Structural Source Controls—List in SCP Table and Narrative	4 Operational Source Control BMPs—Include in SCP Table and Narrative
<input checked="" type="checkbox"/> G. Refuse areas	<input checked="" type="checkbox"/> Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. <input checked="" type="checkbox"/> If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area. <input checked="" type="checkbox"/> Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.	<input checked="" type="checkbox"/> State how site refuse will be handled and provide supporting detail to what is shown on plans. <input checked="" type="checkbox"/> State that signs will be posted on or near dumpsters with the words “Do not dump hazardous materials here” or similar.	<input checked="" type="checkbox"/> State how the following will be implemented: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post “no hazardous materials” signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, “Waste Handling and Disposal” in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks
<input type="checkbox"/> H. Industrial processes.	<input type="checkbox"/> Show process area.	<input type="checkbox"/> If industrial processes are to be located on site, state: “All process activities to be performed indoors. No processes to drain to exterior or to storm drain system.”	<input type="checkbox"/> See Fact Sheet SC-10, “Non-Stormwater Discharges” in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Structural Source Controls—Show on Stormwater Control Plan Drawings	3 Structural Source Controls—List in SCP Table and Narrative	4 Operational Source Control BMPs—Include in SCP Table and Narrative
<input type="checkbox"/> I. Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)	<input type="checkbox"/> Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area. <input type="checkbox"/> Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults. <input type="checkbox"/> Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.	<input type="checkbox"/> Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains. <input type="checkbox"/> Where appropriate, reference documentation of compliance with the requirements of programs for: <ul style="list-style-type: none"> ▪ Hazardous Waste Generation ▪ Hazardous Materials Release Response and Inventory ▪ California Accidental Release (CalARP) ▪ Aboveground Storage Tank ▪ Uniform Fire Code Article 80 Section 103(b) & (c) 1991 ▪ Underground Storage Tank 	<input type="checkbox"/> See the Fact Sheets SC-31, “Outdoor Liquid Container Storage” and SC-33, “Outdoor Storage of Raw Materials ” in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Structural Source Controls—Show on Stormwater Control Plan Drawings	3 Structural Source Controls—List in SCP Table and Narrative	4 Operational Source Control BMPs—Include in SCP Table and Narrative
<input type="checkbox"/> J. Vehicle and Equipment Cleaning	<input type="checkbox"/> Show on drawings as appropriate: (1) Commercial/industrial facilities having vehicle/ equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses. (2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use). (3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer. (4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.	<input type="checkbox"/> If a car wash area is not provided, describe measures taken to discourage on-site car washing and explain how these will be enforced.	Describe operational measures to implement the following (if applicable): <input type="checkbox"/> Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system. <input type="checkbox"/> Car dealerships and similar may rinse cars with water only. See Fact Sheet SC-21, “Vehicle and Equipment Cleaning,” in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Structural Source Controls—Show on Stormwater Control Plan Drawings	3 Structural Source Controls—List in SCP Table and Narrative	4 Operational Source Control BMPs—Include in SCP Table and Narrative
<input type="checkbox"/> K. Vehicle/Equipment Repair and Maintenance	<input type="checkbox"/> Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of stormwater. <input type="checkbox"/> Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas. <input type="checkbox"/> Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.	<input type="checkbox"/> State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area. <input type="checkbox"/> State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements. <input type="checkbox"/> State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.	<p>In the Stormwater Control Plan, note that all of the following restrictions apply to use the site:</p> <input type="checkbox"/> No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains. <input type="checkbox"/> No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately. <input type="checkbox"/> No person shall leave unattended parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Structural Source Controls—Show on Stormwater Control Plan Drawings	3 Structural Source Controls—List in SCP Table and Narrative	4 Operational Source Control BMPs—Include in SCP Table and Narrative
<input type="checkbox"/> L. Fuel Dispensing Areas	<input type="checkbox"/> Fueling areas shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable. <input type="checkbox"/> Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover’s minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area ¹ .] The canopy [or cover] shall not drain onto the fueling area.		<input type="checkbox"/> The property owner shall dry sweep the fueling area routinely. <input type="checkbox"/> See the Business Guide Sheet, “Automotive Service—Service Stations” in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Structural Source Controls—Show on Stormwater Control Plan Drawings	3 Structural Source Controls—List in SCP Table and Narrative	4 Operational Source Control BMPs—Include in SCP Table and Narrative
<input type="checkbox"/> M. Loading Docks	<input type="checkbox"/> Show the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas shall be drained to the sanitary sewer, or diverted and collected for ultimate discharge to the sanitary sewer. <input type="checkbox"/> Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation. <input type="checkbox"/> Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer.		<input type="checkbox"/> Move loaded and unloaded items indoors as soon as possible. <input type="checkbox"/> See Fact Sheet SC-30, “Outdoor Loading and Unloading,” in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks
<input type="checkbox"/> N. Fire Sprinkler Test Water		<input type="checkbox"/> Provide a means to drain fire sprinkler test water to the sanitary sewer.	<input type="checkbox"/> See the note in Fact Sheet SC-41, “Building and Grounds Maintenance,” in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Structural Source Controls—Show on Stormwater Control Plan Drawings	3 Structural Source Controls—List in SCP Table and Narrative	4 Operational Source Control BMPs—Include in SCP Table and Narrative
<p>O. Miscellaneous Drain or Wash Water or Other Sources</p> <ul style="list-style-type: none"> <input type="checkbox"/> Boiler drain lines <input type="checkbox"/> Condensate drain lines <input type="checkbox"/> Rooftop equipment <input type="checkbox"/> Drainage sumps <input checked="" type="checkbox"/> Roofing, gutters, and trim. <input type="checkbox"/> Other sources 	<p>Show drain lines and drainage sumps</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. <input type="checkbox"/> Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. <input type="checkbox"/> Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment. <input type="checkbox"/> Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water. <input type="checkbox"/> Include controls for other sources as specified by local reviewer. 	<p>If architectural copper is used, implement the following BMPs for management of rinsewater during installation:</p> <ul style="list-style-type: none"> <input type="checkbox"/> If possible, purchase copper materials that have been pre-patinated at the factory. <input type="checkbox"/> If patination is done on-site, prevent rinse water from entering storm drains by discharging to landscaping or by collecting in a tank and hauling off-site. <input type="checkbox"/> Consider coating the copper materials with an impervious coating that prevents further corrosion and runoff. <p>Implement the following BMPs during routine maintenance:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Prevent rinse water from entering storm drains by discharging to landscaping or by collecting in a tank and hauling off-site.
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> P. Plazas, sidewalks, and parking lots. 	<p>Show extent of permeable paving materials</p>		<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.

VI. Stormwater Facility Maintenance

VI.A. Ownership and Responsibility for Maintenance in Perpetuity

[Include (1) a commitment to execute any necessary agreements, and (2) a statement such as the following: “The applicant accepts responsibility for interim operation and maintenance of stormwater treatment and flow-control facilities until such time as this responsibility is formally transferred to a subsequent owner.”

VI.B. Summary of Maintenance Requirements for Each Stormwater Facility

Proprietary Bioretention Facility Maintenance Summary – Contech Modular Wetlands

Maintenance of Modular Wetlands devices include 5 simple steps with the use of a vacuum truck or can be cleaned by hand.

1. Remove Trash from the screening device.
2. Remove the sediment from the separation chamber.
3. Periodically replace the pretreatment cartridge filter media.
4. Replace the drain-down media.
5. Trim vegetation (if needed).

Proprietary Modular Pavement Support System Maintenance Summary – Silva Cells

Silva cell units require little to no maintenance. This summary will include the maintenance guidelines for the Silva Cell Frame and Tree opening provided within the Silva Cell Operations and Maintenance Manual.

For the frames (or base, posts, and deck) there is not any recommended frequency of inspection or routine maintenance. The only scenario when maintenance would be triggered would be if the facility shows signs of any damage from an external source whether that may be excessive loading from the surface, nearby construction, or similar activities. Each frame stack is independent of its adjacent frame stacks. Therefore, the compromise of one frame stack will not compromise the system of frame stacks. Any frame stack or part of the frame stack that is compromised are to be replaced with a new frame stack and/or part.

Tree openings are to be inspected in the spring, fall and after major storms. Inspections include checking for clogging, standing water, accumulation of sediment, debris, or trash. It is recommended to remove these items on an as needed basis.

Appendix B. Bioretention Facility Construction Inspection Checklist

Layout (to be confirmed prior to beginning excavation)

- Square footage of the facility meets or exceeds minimum shown in Stormwater Control Plan
- Site grading and grade breaks are consistent with the boundaries of the tributary Drainage Management Area(s) (DMAs) shown in the Stormwater Control Plan
- Inlet elevation of the facility is low enough to receive drainage from the entire tributary DMA
- Locations and elevations of overland flow or piping, including roof leaders, from impervious areas to the facility have been laid out and any conflicts resolved
- Rim elevation of the facility is laid out to be level all the way around, or elevations are consistent with a detailed cross-section showing location and height of interior dams
- Locations for vaults, utility boxes, and light standards have been identified so that they will not conflict with the facility
- Facility is protected as needed from construction-phase runoff and sediment

Excavation (to be confirmed prior to backfilling or pipe installation)

- Excavation conducted with materials and techniques to minimize compaction of soils within the facility area
- Excavation is to accurate area and depth
- Slopes or side walls protect from sloughing of native soils into the facility
- Moisture barrier, if specified, has been added to protect adjacent pavement or structures.
- Native soils at bottom of excavation are ripped or loosened to promote infiltration

Overflow or Surface Connection to Storm Drainage

(to be confirmed prior to backfilling with any materials)

- Overflow is at specified elevation
- No knockouts or side inlets are in overflow riser
- Overflow location selected to minimize surface flow velocity (near, but offset from, inlet recommended)
- Grating excludes mulch and litter (beehive or atrium-style grates with ¼" openings recommended)
- Overflow is connected to storm drain via appropriately sized piping

Underground connection to storm drain/outlet orifice

(to be confirmed prior to backfilling with any materials)

- Perforated pipe underdrain (PVC SDR 35 or approved equivalent) is installed with holes facing down
- Perforated pipe is connected to storm drain at specified elevation (typ. bottom of soil elevation)
- Cleanouts are in accessible locations and connected via sweep bends

Drain Rock/Subdrain (to be confirmed prior to installation of soil mix)

- Rock is installed as specified, 12" min. depth. Class 2 permeable, Caltrans specification 68-2.02F(3) recommended
- Rock is smoothed to a consistent top elevation. Depth and top elevation are as shown in plans
- Slopes or side walls protect from sloughing of native soils into the facility
- No filter fabric is placed between the subdrain and soil mix layers

Soil Mix

- Soil mix is as specified.
- Mix installed in lifts not exceeding 12"
- Mix is not compacted during installation but may be thoroughly wetted to encourage consolidation
- Mix is smoothed to a consistent top elevation. Depth of mix (18" min.) and top elevation are as shown in plans, accounting for depth of mulch to follow and required reservoir depth

Irrigation

- Irrigation system is installed so it can be controlled separately from other landscaped areas. Smart irrigation controllers and drip emitters are recommended and may be required by local code or ordinance.
- Spray heads, if any, are positioned to avoid direct spray into outlet structures

Planting

- Plants are installed consistent with approved planting plan, consistent with site water allowance
- Any trees and large shrubs are staked securely
- No fertilizer is added; compost tea may be used
- No native soil or clayey material are imported into the facility with plantings
- 1"-2" mulch may be applied following planting; mulch selected to avoid floating
- Final elevation of soil mix maintained following planting
- Curb openings are free of obstructions

Final Engineering Inspection

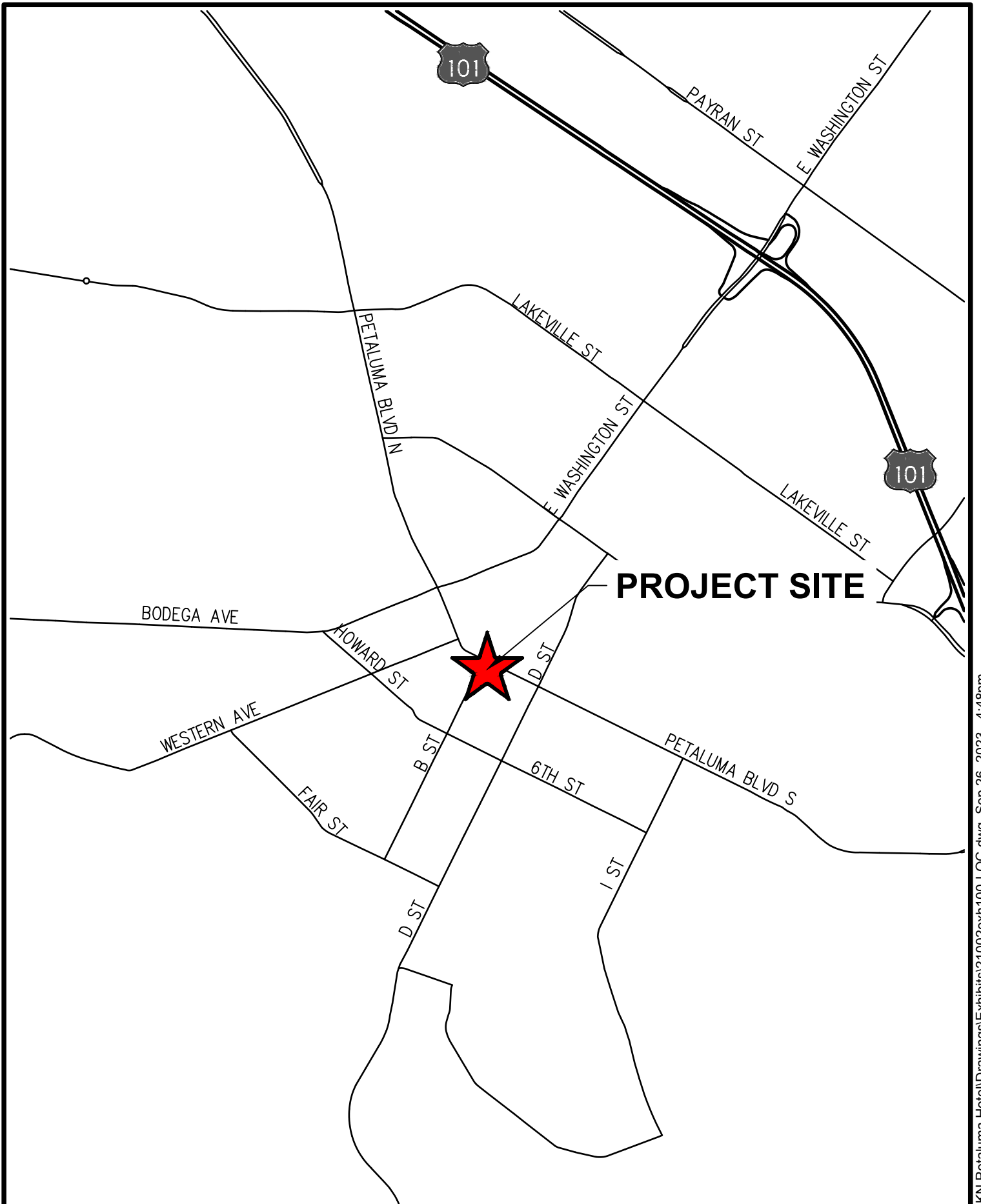
- Drainage Management Area(s) are free of construction sediment and landscaped areas are stabilized
- Inlets are installed to provide smooth entry of runoff from adjoining pavement, have sufficient reveal (drop from the adjoining pavement to the top of the mulch or soil mix, and are not blocked)
- Inflows from roof leaders and pipes are connected and operable
- Temporary flow diversions are removed
- Rock or other energy dissipation at piped or surface inlets is adequate
- Overflow outlets are configured to allow the facility to flood and fill to near rim before overflow
- Plantings are healthy and becoming established
- Irrigation is operable
- Facility drains rapidly; no surface ponding is evident
- Any accumulated construction debris, trash, or sediment is removed from facility
- Permanent signage is installed and is visible to site users and maintenance personnel

VII. Construction Checklist

Stormwater Control Plan Page #	Source Control or Treatment Control Measure	See Plan Sheet #s
	Proprietary Bioretention Facilities (Modular Wetland)	SWCP Plan
	Proprietary Modular Pavement Support System (Silva Cell)	SWCP Plan

VIII. Certifications

The preliminary design of stormwater treatment facilities and other stormwater pollution control measures in this plan are in accordance with the current edition of the BASMAA *Post-Construction Manual*.



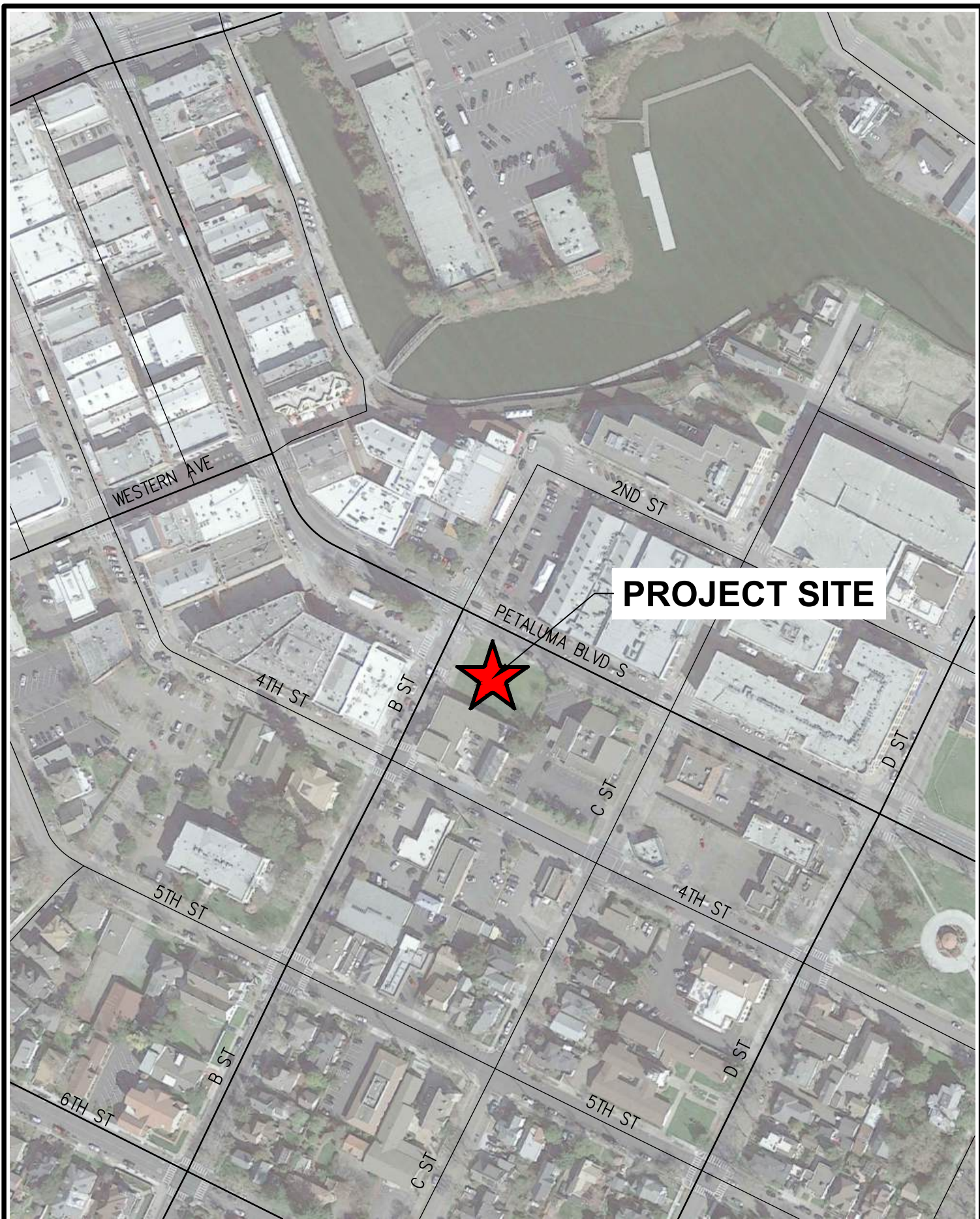
PROJECT SITE



17780 FITCH
IRVINE, CA 92614
PHONE: 949.396.1161

LOCATION MAP

SCALE: 1" = 1500'
0 1500'




PROJECT SITE

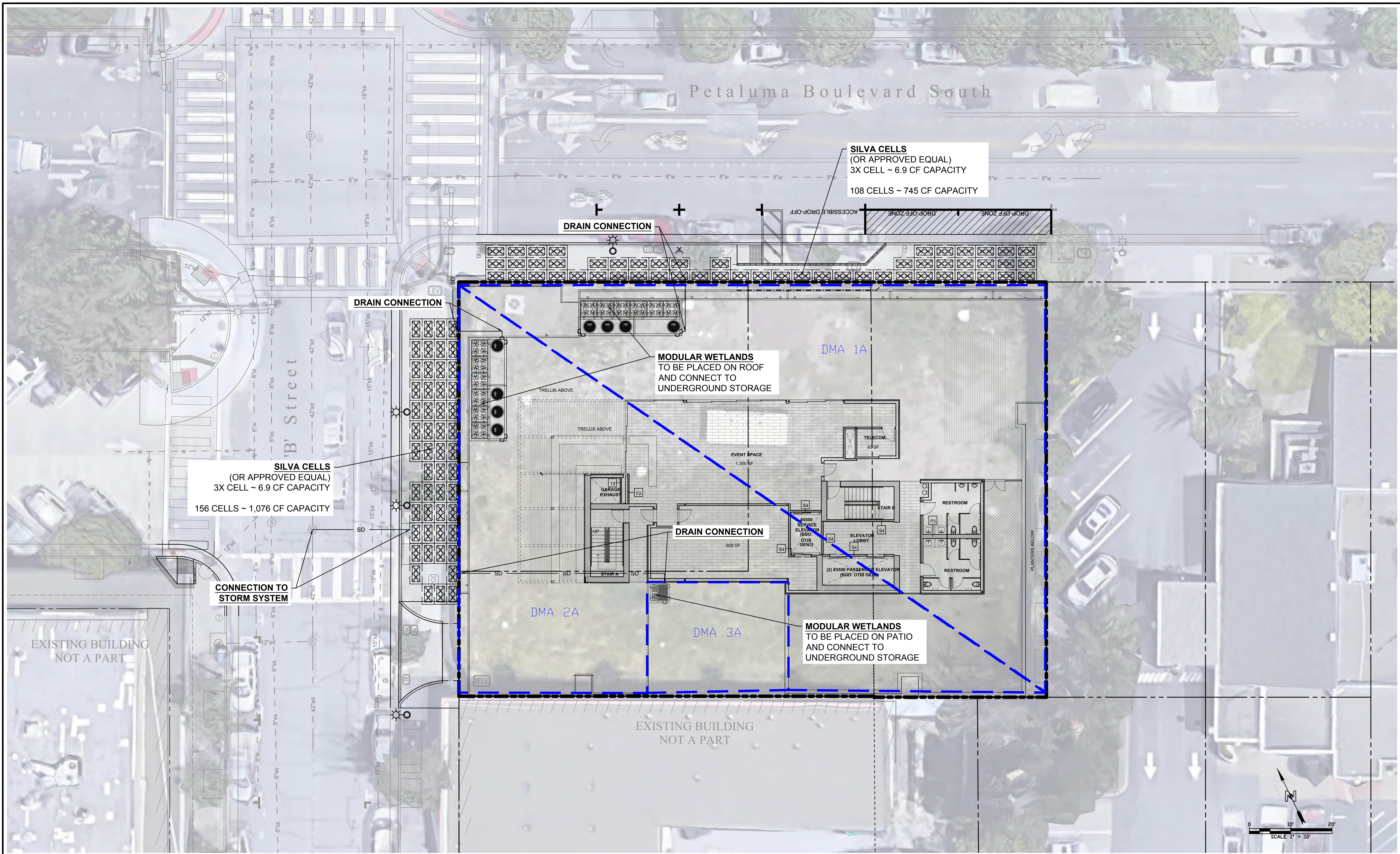


17780 FITCH
IRVINE, CA 92614
PHONE: 949.396.1161

VICINITY MAP

SCALE: 1" = 200'
0  200'

NOT FOR CONSTRUCTION



NO.	DATE	REVISION DESCRIPTION	BY	DATE

DIGALERT

 DIAL TOLL FREE
811
 AT LEAST TWO DAYS BEFORE YOU DIG
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

NOTICE TO CONTRACTOR:

- THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- N CONSULTING ASSUMES NO RESPONSIBILITY FOR DAMAGES, LIABILITY OR COSTS RESULTING FROM CHANGES OR ALTERATIONS MADE TO THIS PLAN WITHOUT THE EXPRESSED WRITTEN CONSENT OF N CONSULTING.

SURVEYOR'S BENCHMARK:
 FOUND 3" BRASS DISK SET IN THE TOP OF A SANDSTONE WALL AT THE FOURTH STREET POST OFFICE, 0.3' ABOVE THE GROUND, STAMPED "12.045 JJ 107 1932", ELEVATION=15.20', NAVD88 DATUM (PER NGS DATASHEET). A CONVERSION FACTOR OF -2.795 SHOULD BE USED TO CONVERT NAVD88 ELEVATIONS TO NGVD29 ELEVATION.

BASIS OF BEARINGS:
 192 MAPS 26, SCR.

N CONSULTING ENGINEERS

 17780 Fitch
 Irvine, CA 92614
 PHONE: 949.396.1161
 www.nconsulteng.com

PROJECT ADDRESS:
 2 PETALUMA BLVD
 PETALUMA, CA 94952

CLIENT:
 EKN DEVELOPMENT GROUP
 220 NEWPORT CENTER DRIVE, SUITE 11-262
 NEWPORT BEACH, CA 92660

SITE:
 EKN PETALUMA

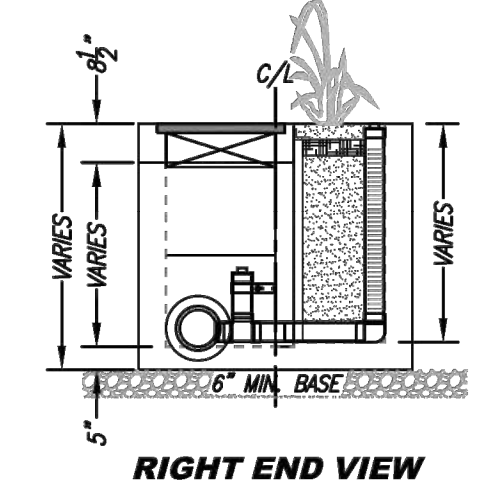
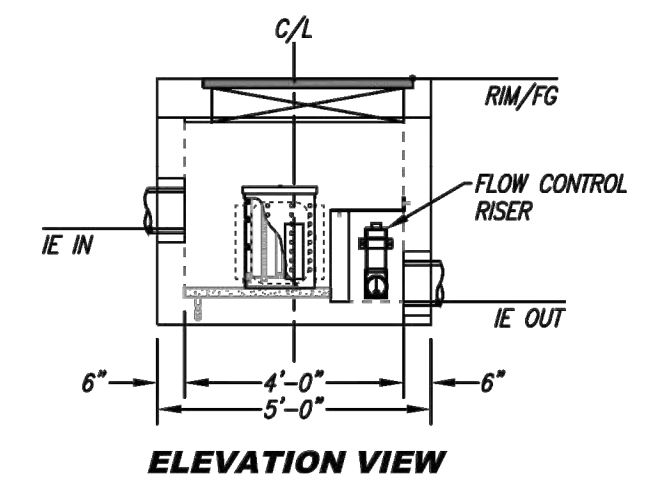
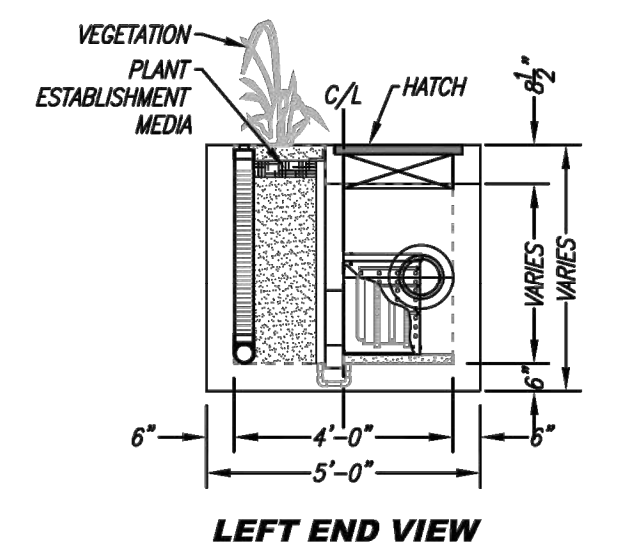
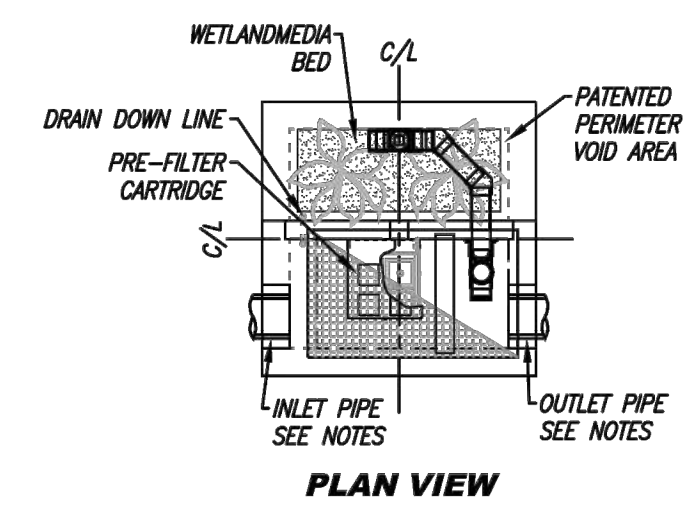
TITLE:
 STORMWATER CONTROL PLAN

DRAWN: S.S.	SCALE AT D: 1" = 10'	DATE: 9/26/2023	PROJECT NO.: 21-002
CHECKED: D.H.K.	REV. COUNT: 1 OF 2 SHEETS	SHEET: EXH110	

C:\Users\Steven\Documents\localtemp\AcPublish_2508421002exh110-BMPs.dwg Sep 26, 2023 - 5:38pm

NOT FOR CONSTRUCTION

SITE SPECIFIC DATA			
PROJECT NUMBER			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID			
TREATMENT REQUIRED			
FLOW BASED (CFS)			
0.052			
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE		OFFLINE	
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2	N/A	N/A	N/A
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD	PEDESTRIAN		
NOTES:			
* PRELIMINARY NOT FOR CONSTRUCTION			



TREATMENT FLOW (CFS)	0.052
OPERATING HEAD (FT)	3.4
PRETREATMENT LOADING RATE (GPM/SF)	1.8
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

MWS-L-4-4-V
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL

INSTALLATION NOTES

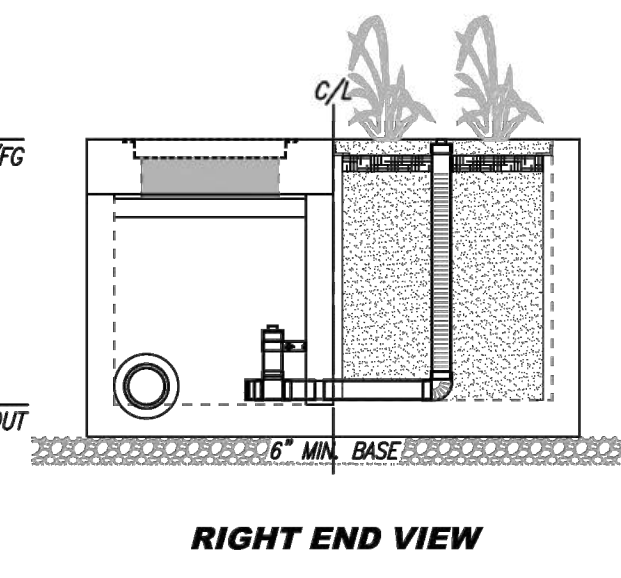
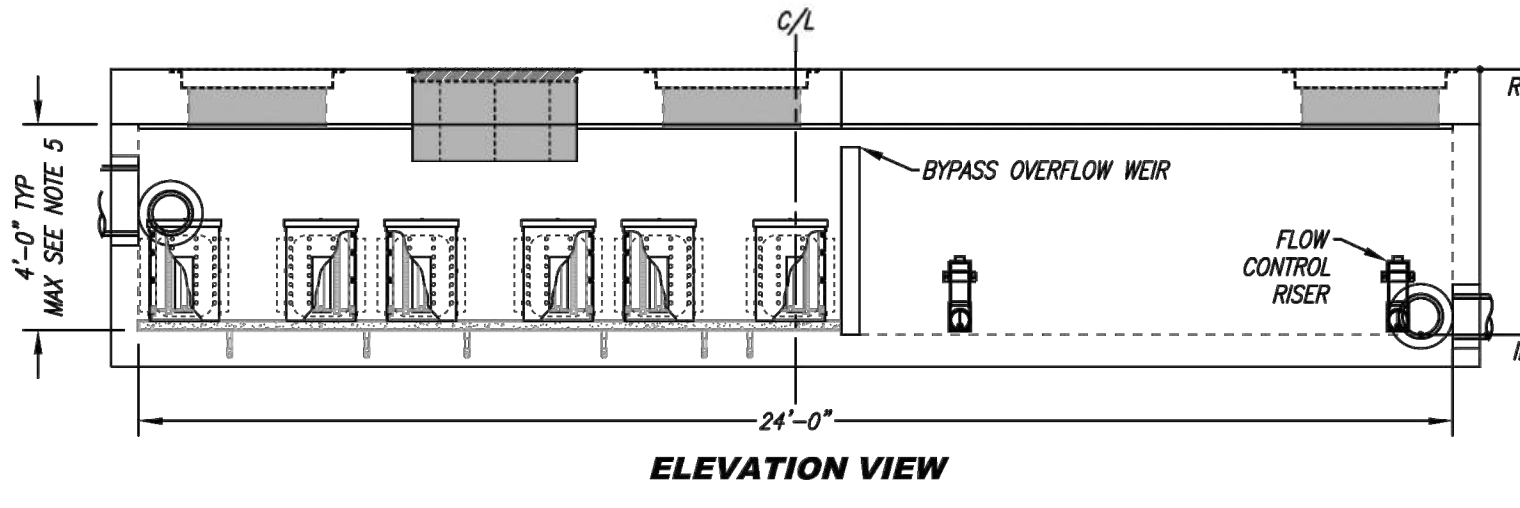
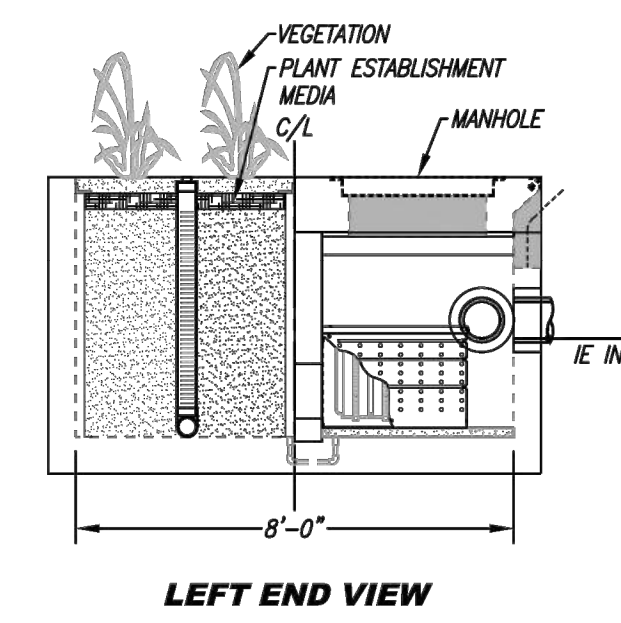
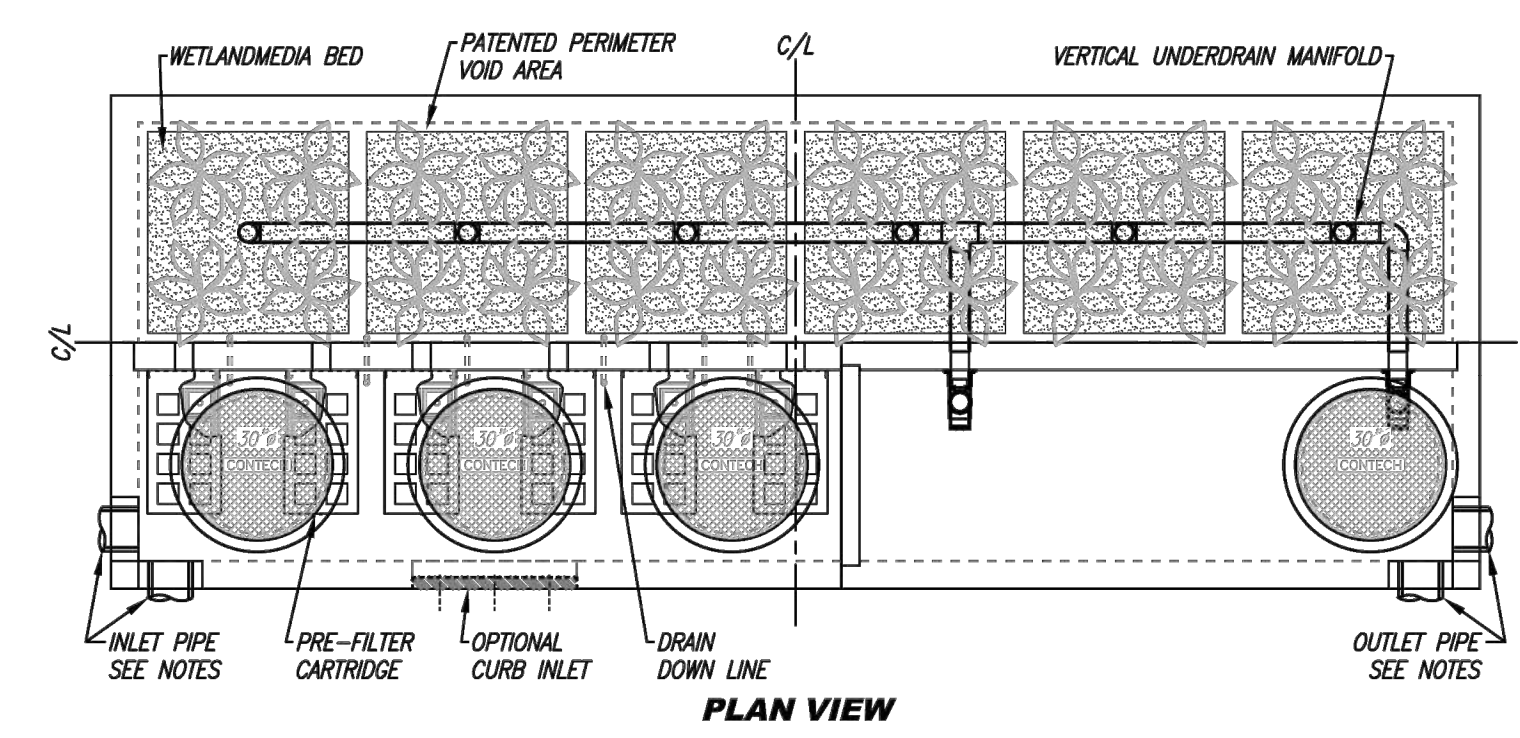
- CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURER'S SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
- UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS.
- CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATER-TIGHT PER MANUFACTURER'S STANDARD CONNECTION DETAIL.
- CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL PIPES, RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO USE GROUT AND/OR BRICKS TO MATCH COVERS WITH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
- VEGETATION SUPPLIED AND INSTALLED BY OTHERS. ALL UNITS WITH VEGETATION MUST HAVE DRIP OR SPRAY IRRIGATION SUPPLIED AND INSTALLED BY OTHERS.
- CONTRACTOR RESPONSIBLE FOR CONTACTING CONTECH FOR ACTIVATION OF UNIT. MANUFACTURER'S WARRANTY IS VOID WITHOUT PROPER ACTIVATION BY A CONTECH REPRESENTATIVE.

GENERAL NOTES

- MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT CONTECH.

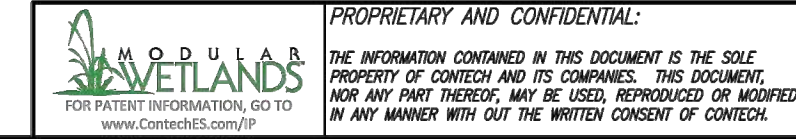


SITE SPECIFIC DATA			
PROJECT NUMBER			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID			
TREATMENT REQUIRED			
FLOW BASED (CFS)			
0.052			
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE		OFFLINE	
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD	PEDESTRIAN		
NOTES:			



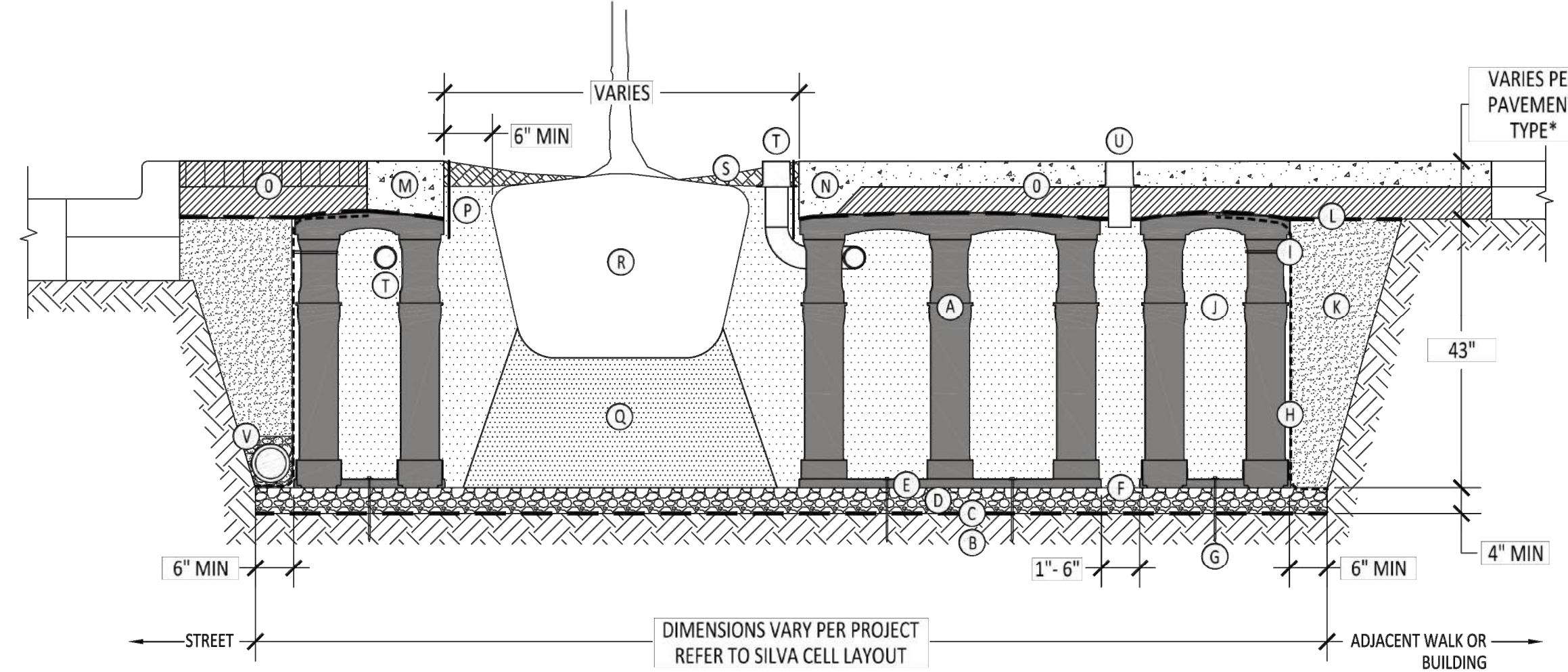
INSTALLATION NOTES

- CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURER'S SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
- UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS.
- CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATER-TIGHT PER MANUFACTURER'S STANDARD CONNECTION DETAIL.
- CONTRACTOR RESPONSIBLE FOR CONTACTING CONTECH FOR ACTIVATION OF UNIT. MANUFACTURER'S WARRANTY IS VOID WITHOUT PROPER ACTIVATION BY A CONTECH REPRESENTATIVE.
- VERTICAL HEIGHT VARIES BASED ON SITE SPECIFIC REQUIREMENTS.



MWS-L-8-24-V
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL

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SILVA CELL SYSTEM 3X
NOT TO SCALE

- KEY PLAN**
- (A) SILVA CELL SYSTEM (DECK, BASE, AND POSTS)
 - (B) SUBGRADE, COMPACTED
 - (C) GEOTEXTILE FABRIC, PLACED ABOVE SUBGRADE
 - (D) 4" MIN AGGREGATE SUB BASE, COMPACTED TO 95% PROCTOR
 - (E) SILVA CELL BASE SLOPE, 10% MAX
 - (F) 1" TO 6" SPACING BETWEEN SILVA CELLS AT BASE
 - (G) ANCHORING SPIKES, CONTACT DEEPROOT FOR ALTERNATIVE
 - (H) GEOGRID, WRAPPED AROUND PERIMETER OF SYSTEM, WITH 6" TOE (OUTWARD FROM BASE) AND 12" EXCESS (OVER TOP OF DECK)
 - (I) CABLE TIE, ATTACHING GEOGRID TO SILVA CELL AT BASE OF UPPER LEG FLARE, AS NEEDED
 - (J) PLANTING SOIL, PER PROJECT SPECIFICATIONS, PLACED IN LIFTS AND WALK-IN COMPACTED TO 75-85% PROCTOR
 - (K) COMPACTED BACKFILL, PER PROJECT SPECIFICATIONS
 - (L) GEOTEXTILE FABRIC TO EDGE OF EXCAVATION
 - (M) RIBBON CURB AT TREE OPENING (TO BE USED WITH PAVERS OR ASPHALT)
 - (N) THICKENED EDGE AT TREE OPENING (TO BE USED WITH CONCRETE)
 - (O) PAVEMENT AND AGGREGATE BASE PER PROJECT *
 - (P) DEEPROOT ROOT BARRIER, 12" OR 18", DEPTH DETERMINED BY THICKNESS OF PAVEMENT SECTION, INSTALL DIRECTLY ADJACENT TO CONCRETE EDGE RESTRAINT
 - (Q) PLANTING SOIL BELOW ROOT BALL, COMPACTED WELL TO PREVENT SETTLING
 - (R) ROOT BALL
 - (S) TREE OPENING TREATMENT, PER PROJECT SPECIFICATIONS
 - (T) DEEPROOT WATER AND AIR VENT, ROOTBALL, WHEN REQUIRED
 - (U) DEEPROOT WATER AND AIR VENT, WHEN REQUIRED
 - (V) UNDERDRAIN SYSTEM, WHEN REQUIRED (LOCATION AND DETAILS BY OTHERS)
- NOTES**
- EXCAVATION SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE HEALTH AND SAFETY REGULATIONS
 - INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS
 - PROVIDE SUPPLEMENTAL IRRIGATION
 - DO NOT SCALE DRAWINGS
- *MINIMUM PAVEMENT PROFILE OPTIONS TO MEET H-20 LOADING**
- | | |
|---------------|-------------------------|
| PAVEMENT | + AGGREGATE BASE COURSE |
| 4" CONCRETE | + 4" AGGREGATE |
| 3" PAVEMENT | + 12" AGGREGATE |
| 4" ASPHALT | + 12" AGGREGATE |
| 2.6" PAVEMENT | + 5" CONCRETE |



DeepRoot Green Infrastructure
www.deeroot.com
T 415 781 9700
F 415 781 0191

SILVA CELL SYSTEM 3X

NOT TO SCALE FEET

NO.	DATE	REVISION DESCRIPTION	BY	DATE

DIGALERT
DIAL TOLL FREE
811
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

NOTICE TO CONTRACTOR:

- THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- N CONSULTING ASSUMES NO RESPONSIBILITY FOR DAMAGES, LIABILITY OR COSTS RESULTING FROM CHANGES OR ALTERATIONS MADE TO THIS PLAN WITHOUT THE EXPRESSED WRITTEN CONSENT OF N CONSULTING.

SURVEYOR'S BENCHMARK:
FOUND 3" BRASS DISK SET IN THE TOP OF A SANDSTONE WALL AT THE FOURTH STREET POST OFFICE, 0.3' ABOVE THE GROUND, STAMPED "12.045 JJ 107 1932". ELEVATION=15.20', NAVD88 DATUM (PER NGS DATASHEET). A CONVERSION FACTOR OF -2.795 SHOULD BE USED TO CONVERT NAVD88 ELEVATIONS TO NGVD29 ELEVATION.

BASIS OF BEARINGS:
192 MAPS 26, SCR.

N CONSULTING ENGINEERS
17780 Filch
Irvine, CA 92614
PHONE: 949.396.1161
www.nconsulting.com

ISSUE: ---

PROJECT ADDRESS:
2 PETALUMA BLVD
PETALUMA, CA 94952

CLIENT:
EKN DEVELOPMENT GROUP
220 NEWPORT CENTER DRIVE, SUITE 11-262
NEWPORT BEACH, CA 92660

SITE: EKN PETALUMA			
TITLE: BMP DETAILS			
DRAWN: S.S.	SCALE AT D: N.T.S.	DATE: 9/26/2023	PROJECT NO: 21-002
CHECKED: D.H.K.	REV: ---	COUNT: 2 OF 2 SHEETS	SHEET: EXH10

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APPELLATION HOTEL NOISE AND VIBRATION ASSESSMENT

Petaluma, California

September 11, 2023

Prepared for:

**Mike Jolly
SVP of Construction
EKN Development
220 Newport Center Drive, STE 11-262
Newport Beach, CA 92660**

Prepared by:

**Micah Black
Michael S. Thill**

ILLINGWORTH & RODKIN, INC.
|||| Acoustics • Air Quality ||||

**429 E. Cotati Avenue
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(707) 794-0400**

I&R Project: 23-111

INTRODUCTION

The proposed Appellation Hotel at 2 Petaluma Boulevard South, in Petaluma, California, is planned to be a six-story-tall, 72,300 square-foot building, utilizing the maximum amount of space available on the 0.33-acre lot. The site is located on the south corner of Petaluma Boulevard South and B Street, and is currently undeveloped. Floors two through six will contain hotel rooms, while the first floor will have a lobby, and the basement level will include parking. An outdoor terrace is planned for the southwest side of the second floor of the building and will be mostly shielded from local traffic noise by the building itself. A sixth-floor exterior roof top patio is also planned. A ground floor restaurant is proposed to have outdoor seating along Petaluma Boulevard South and B Street.

This report evaluates the project's potential to result in significant environmental noise impacts with respect to applicable California Environmental Quality Act (CEQA) guidelines. The report is divided into three sections: 1) the Setting Section provides a brief description of the fundamentals of environmental noise and vibration, summarizes applicable regulatory criteria, and discusses the results of the ambient noise monitoring survey completed to document existing conditions; 2) the General Plan Consistency section discusses land use compatibility utilizing noise policies in the City's General Plan; and, 3) the Impacts and Mitigation Measures Section describes the significance criteria used to evaluate project impacts, provides a discussion of each project impact, and presents measures, where necessary, to mitigate the impacts to a less-than-significant level.

SETTING

Fundamentals of Environmental Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its *pitch* or its *loudness*. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (*frequency*) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is the intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A *decibel (dB)* is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level (dBA)*. This scale gives greater weight to the frequencies of sound to which

the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This *energy-equivalent sound/noise descriptor* is called L_{eq} . The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level (CNEL)* is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The *Day/Night Average Sound Level (DNL or L_{dn})* is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

Effects of Noise

Sleep and Speech Interference

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for multi-family dwellings are set by the State of California at 45 dBA L_{dn} . Typically, the highest steady traffic noise level during the daytime is about equal to the L_{dn} and nighttime levels are 10 dBA lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses. Typical structural attenuation is 12-17 dBA with open windows. With closed windows in good condition, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer dwelling. Sleep and speech interference is therefore possible when exterior noise levels are about 57-62 dBA L_{dn} with open windows and 65-70 dBA L_{dn} if the windows are closed. Levels of 55-60 dBA are common along collector streets and secondary arterials, while 65-70 dBA is a typical value for a primary/major arterial. Levels of 75-80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need to be able to have their windows closed, those facing major roadways and freeways typically need special glass windows.

Annoyance

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that the causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The L_{dn} as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. When measuring the percentage of the population highly annoyed, the threshold for ground vehicle noise is about 50 dBA L_{dn} . At a L_{dn} of about 60 dBA, approximately 12 percent of the population is highly annoyed. When the L_{dn} increases to 70 dBA, the percentage of the population highly annoyed increases to about 25-30 percent of the population. There is, therefore, an increase of about 2 percent per dBA between a L_{dn} of 60-70 dBA. Between a L_{dn} of 70-80 dBA, each additional decibel increases the percentage of the population highly annoyed by about 3 percent. People appear to respond more adversely to aircraft noise. When the L_{dn} is 60 dBA, approximately 30-35 percent of the population is believed to be highly annoyed. Each decibel increase to 70 dBA adds about 3 percentage points to the number of people highly annoyed. Above 70 dBA, each decibel increase results in about a 4 percent increase in the percentage of the population highly annoyed.

TABLE 1 Definition of Acoustical Terms Used in this Report

Term	Definition
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e. g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period.
L_{max} , L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01} , L_{10} , L_{50} , L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, Harris, 1998.

TABLE 2 Typical Noise Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110 dBA	Rock band
Jet fly-over at 1,000 feet		
	100 dBA	
Gas lawn mower at 3 feet		
	90 dBA	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80 dBA	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70 dBA	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60 dBA	
		Large business office
Quiet urban daytime	50 dBA	Dishwasher in next room
Quiet urban nighttime	40 dBA	Theater, large conference room
Quiet suburban nighttime		
	30 dBA	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20 dBA	
	10 dBA	Broadcast/recording studio
	0 dBA	

Source: Technical Noise Supplement (TeNS), California Department of Transportation, September 2013.

Fundamentals of Groundborne Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One method is the Peak Particle Velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. In this report, a PPV descriptor with units of mm/sec or in/sec is used to evaluate construction generated vibration for building damage and human complaints. Table 3 displays the reactions of people and the effects on buildings that continuous or frequent intermittent vibration levels produce. The guidelines in Table 3 represent syntheses of vibration criteria for human response and potential damage to buildings resulting from construction vibration.

Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to cause damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life, are evaluated against different vibration limits. Human perception of vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Structural damage can be classified as cosmetic only, such as paint flaking or minimal extension of cracks in building surfaces; minor, including limited surface cracking; or major, that may threaten the structural integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher. The damage criteria presented in Table 3 include several categories for ancient, fragile, and historic structures, the types of structures most at risk of damage. Most buildings are included within the categories ranging from “Historic and some old buildings” to “Modern industrial/commercial buildings”. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is in a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

The annoyance levels shown in Table 3 should be interpreted with care since vibration may be found to be annoying at lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

Railroad and light-rail operations are potential sources of substantial ground vibration depending on distance, the type and the speed of trains, and the type of railroad track. People’s response to ground vibration from rail vehicles has been correlated best with the average, root mean square

(RMS) velocity of the ground. The velocity of the ground is expressed on the decibel scale. The reference velocity is 1×10^{-6} in/sec RMS, which equals 0 VdB, and 1 in/sec equals 120 VdB. Although not a universally accepted notation, the abbreviation “VDdB” is used in this document for vibration decibels to reduce the potential for confusion with sound decibels.

Typical background vibration levels in residential areas are usually 50 VdB or lower, well below the threshold of perception for most humans. Perceptible vibration levels inside residences are attributed to the operation of heating and air conditioning systems, door slams and foot traffic. Construction activities, train operations, and street traffic are some of the most common external sources of vibration that can be perceptible inside residences. Table 4 illustrates some common sources of vibration and the association to human perception or the potential for structural damage.

TABLE 3 Reaction of People and Damage to Buildings from Continuous or Frequent Intermittent Vibration Levels

Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.1	Strongly perceptible	Threshold at which there is a risk of damage to fragile buildings with no risk of damage to most buildings
0.25	Strongly perceptible to severe	Threshold at which there is a risk of damage to historic and some old buildings.
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential structures
0.5	Severe - Vibrations considered unpleasant	Threshold at which there is a risk of damage to new residential and modern commercial/industrial structures

Source: Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020.

TABLE 4 Typical Levels of Groundborne Vibration

Human/Structural Response	Velocity Level, VdB	Typical Events (50-foot setback)
Threshold, minor cosmetic damage	100	Blasting, pile driving, vibratory compaction equipment Heavy tracked vehicles (Bulldozers, cranes, drill rigs)
Difficulty with tasks such as reading a video or computer screen	90	Commuter rail, upper range
Residential annoyance, infrequent events	80	Rapid transit, upper range
Residential annoyance, occasional events		Commuter rail, typical Bus or truck over bump or on rough roads
Residential annoyance, frequent events	70	Rapid transit, typical
Approximate human threshold of perception to vibration		Buses, trucks and heavy street traffic
	60	
		Background vibration in residential settings in the absence of activity
Lower limit for equipment ultra-sensitive to vibration	50	

Source: Transit Noise and Vibration Impact Assessment, US Department of Transportation Federal Transit Administration, September 2018.

Regulatory Background

The project would be subject to noise-related regulations, plans and policies established by the State of California and the City of Petaluma. Applicable planning documents include Appendix G of the CEQA Guidelines, and the California Building Code, the Health and Safety Element of the Petaluma 2025 General Plan, and the City of Petaluma Noise Ordinance. Regulations, plans, and policies presented within these documents form the basis of the significance criteria used to assess project impacts.

State CEQA Guidelines. CEQA contains guidelines to evaluate the significance of effects of environmental noise attributable to a proposed project. Under CEQA, noise impacts would be considered significant if the project would result in:

- (a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- (b) Generation of excessive groundborne vibration or groundborne noise levels;

- (c) For a project located within the vicinity of a private airstrip or an airport land use plan or where such a plan has not been adopted within two miles of a public airport or public use airport, if the project would expose people residing or working in the project area to excessive noise levels.

2022 California Building Code, Title 24, Part 2. The current version of the California Building Code (CBC) requires interior noise levels attributable to exterior environmental noise sources to be limited to a level not exceeding 45 dBA L_{dn}/CNEL in any habitable room.

City of Petaluma General Plan 2025. Section 10.2 of the City of Petaluma’s Health and Safety Element includes objectives and policies applicable to the proposed hotel project. The City’s objective is to, “Protect public health and welfare by eliminating or minimizing the effects of existing noise problems, and by minimizing the increase of noise levels in the future.” Hotels are considered “normally acceptable” in noise environments up to 65 dBA L_{dn} or CNEL, “conditionally acceptable” up to 70 dBA L_{dn} or CNEL, “normally unacceptable” between 70 and 80 dBA L_{dn} or CNEL, and “clearly unacceptable” above 80 dBA L_{dn} or CNEL. These thresholds are normally applied in common outdoor activity areas in hotel developments.

The following General Plan policies are applicable to the proposed hotel project:

- Policy A: Continue efforts to incorporate noise considerations into land use planning decisions and guide the locations and design of transportation facilities to minimize the effects of noise on adjacent land uses.
- Policy B: Discourage location of new noise-sensitive uses, primarily homes, in areas with projected noise levels greater than 65 dBA CNEL. Where such uses are permitted, require incorporation of mitigation measures to ensure that interior noise levels do not exceed 45 dB CNEL.
- Policy C: Ensure that the City’s Noise Ordinance and other regulations:
- Require that applicants for new noise-sensitive development in areas subject to noise levels greater than 65 dB CNEL obtain the services of a professional acoustical engineer to provide a technical analysis and design of mitigation measures.
 - Require placement of fixed equipment, such as air conditioning units and condensers, inside or in the walls of new buildings or on roof-tops of central units in order to reduce noise impacts on any nearby sensitive receptors.
- Policy D: Continue to require control of noise or mitigation measures for any noise-emitting construction equipment or activity. The City’s Noise Ordinance establishes controls on construction-related noise.
- Policy E: As part of development review, use Figure 10-2: Land Use Compatibility Standards to determine acceptable uses and installation requirements in noise-impacted areas.
- Policy F: Discourage the use of sound walls anywhere except along Highway 101 and/or along the NWPRRA corridor without findings that such walls will not be detrimental to

community character. When sound walls are deemed necessary, integrate them into the streetscape.

Policy G: In making a determination of impact under the California Environmental Quality Act (CEQA) consider an increase of four or more dBA to be “significant” if the resulting noise level would exceed that described as normally acceptable for the affected use in Figure 10-3: Land Use Compatibility for Community Noise Environments.

City of Petaluma Implementing Zoning Ordinance. Section 21.040 A of the City of Petaluma Implementing Zoning Ordinance contains the following regulations which are generally applicable to operational (non-traffic) related noise in the City:

3. Noise Regulations Generally.

- a. The following specific acts, subject to the exemptions provided in Section 21.040(A)(5), are declared to be public nuisances and are prohibited:
 - 1) The operation or use of any of the following before 7:00 a.m. or after 10:00 p.m. daily (except Saturday, Sunday and State, Federal or Local Holidays, when the prohibited time shall be before 9:00 a.m. and after 10:00 p.m.):
 - 2) A hammer or any other device or implement used to repeatedly pound or strike an object.
 - 3) An impact wrench, or other tool or equipment powered by compressed air.
 - 4) Any tool or piece of equipment powered by an internal-combustion engine such as, but not limited to, chain saw, backpack blower, and lawn mower. Except as specifically included in this Ordinance, motor vehicles, powered by an internal combustion engine and subject to the State of California vehicle code, are excluded from this prohibition.
 - 5) Any electrically or battery powered tool or piece of equipment used for cutting, drilling, or shaping wood, plastic, metal, or other materials or objects, such as but not limited to a saw, drill, lathe or router.
 - 6) Any of the following: the operation and/or loading or unloading of heavy equipment (such as but not limited to bulldozer, road grader, back hoe), ground drilling and boring equipment, hydraulic crane and boom equipment, portable power generator or pump, pavement equipment (such as but not limited to pneumatic hammer, pavement breaker, tamper, compacting equipment), pile-driving equipment, vibrating roller, sand blaster, gunite machine, trencher, concrete truck, and hot kettle pump and the like.
 - 7) Construction, demolition, excavation, erection, alteration or repair activity.
 - 8) Operating or permitting the operation of powered model vehicles including but not limited to cars, aircraft and boats.
 - 9) Using or operating for any purpose any loudspeaker, loudspeaker system or similar device in such a manner as to create a noise disturbance. Any permit issued pursuant to PMC Section 13.28.050 (amplified sound permit within a public park) is exempt from this section.

- 10) The use of truck/tractor trailer “Jake Brakes” on any public street under the jurisdiction of the City of Petaluma Police Department.
- b. In the case of urgent necessity and in the interest of public health and safety, the Noise Control Officer may issue a permit for exemption from the requirements with subsection 21.040(A)(3). Such period shall not exceed ten (10) working days in length but may be renewed for successive periods of thirty (30) days or less, not to exceed a total of 90 days while the emergency continues. Requests for exemptions beyond 90 days shall require public hearing approval. The Noise Control Officer may limit such permit as to time of use and/or permitted action, depending upon the nature of the emergency and the type of action requested.
 - c. The operation of any licensed motor vehicle in violation of the State Vehicle Code or the operation of stereo, public address or other such amplified equipment on or within a motor vehicle in violation of the State Vehicle Code.
 - d. Continued or repeated operation of a Public Address System between the hours of 10:00 a.m. and 7:00 p.m. daily shall not exceed a decibel level of 5 dBA above the measured ambient of the area in which this activity is occurring. Unless specifically approved by the City of Petaluma (i.e. Use Permit, Parks Director, Exception or Exemption from this Code Sec.) no Public Address System shall be permitted during the hours of 7:00 p.m. to 10:00 a.m.
4. **Noise Measurement:** Utilizing the “A” weighting scale of a sound level meter and the “slow” meter response (use “fast” response for impulsive type sounds), the ambient noise level shall first be measured at a position or positions at any point on the receptor’s property which can include private and public property. In general, the microphone shall be located four to five feet above the ground; ten feet or more from the nearest reflective surface where possible. If possible, the ambient noise shall be measured with the alleged offending noise source inoperative. If for any reason the alleged offending noise source cannot be shut down, the ambient noise must be estimated by performing a measurement in the same general area of the source but at a sufficient distance such that the noise from the source is at least 10dB below the ambient in order that only the ambient level will be measured.
- a. If the measured ambient level is greater than 60dB, the Maximum Noise Exposure standard shall be adjusted in 5dB increments for each time period as appropriate to encompass or reflect the measured ambient noise level. In no case shall the maximum allowed threshold exceed 75dB after adjustments are made.
 - b. In the event the measured ambient noise level is 70dB or greater, the maximum allowable noise level shall be increased to reflect the maximum ambient noise level. In this case, adjustments for loudness and time as contained in Table 21.1 shall not be permitted.
 - c. No person shall cause or allow to cause, any source of sound at any location within the incorporated City or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which when measured on the property where the noise disturbance is being experienced within public or private open/outdoor spaces, exceeds the noise level of Table 21.1.

Category Description	Noise Metric¹	Nighttime Hours (10:00 pm to 7:00 am M-F, 10:00 pm to 8:00 am S, S and Holidays)	Daytime Hours (7:00 am to 10:00 pm M-F, 8:00 am to 10:00 pm S, S and Holidays)
General Plan Ambient	L _{eq}	60 dBA	60 dBA
Cumulative period of 15 min. or more in one hour	L ₂₅	65 dBA	70 dBA
Cumulative period of 5 min. or more in one hour	L ₀₈	70 dBA	75 dBA
Cumulative period of 1 min. or more in one hour	L ₀₂	75 dBA	80 dBA

Note 1: The noise metric column was added by Illingworth& Rodkin, Inc. to provide a measurable hourly noise level to compare with the Table 21.1 noise categories. These levels equate to the sound level exceeded n% of the time in any hour. For example, the L₂₅ is the value exceeded 25% of the time or 15 minutes in any hour. These levels, which are used to evaluate noise events which occur during a given daytime or nighttime hour, differ from the CNEL metric used for the General Plan Noise and Land Use Compatibility standards, which is used to evaluate noise events over a 24 hour period.

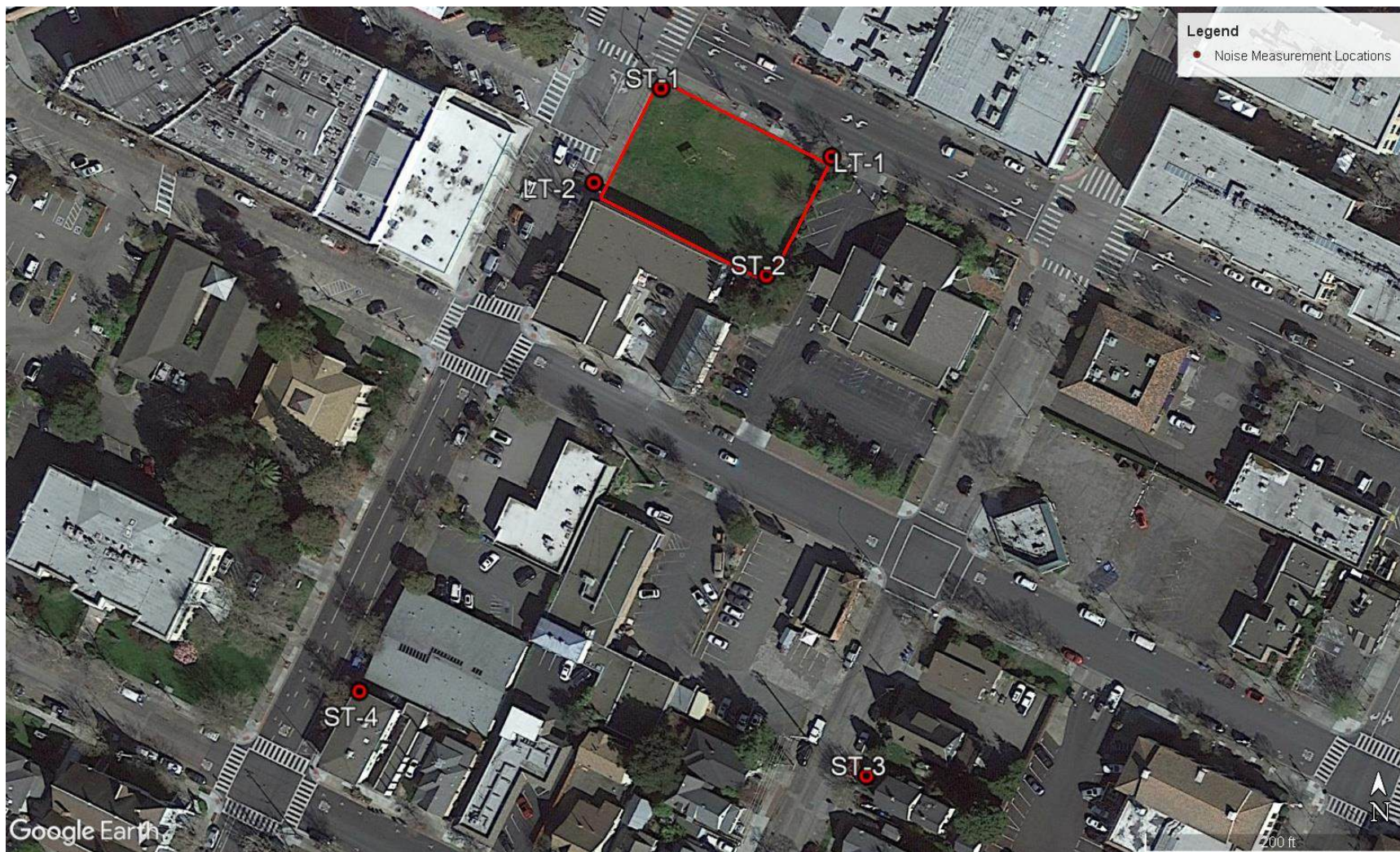
Existing Noise Environment

A noise monitoring survey was conducted between Tuesday, July 18, 2023, and Friday July 21, 2023, to quantify the existing noise environment at the project site and at nearby sensitive receptors. The noise monitoring survey included two long-term noise measurements at locations indicated as LT-1 and LT-2, and four short-term noise measurements indicated as ST-1 through ST-4 in Figure 1. The noise measurements were conducted with Larson Davis Laboratories (LDL) Model LxT1 Type I Sound Level Meters fitted with ½-inch pre-polarized condenser microphones and windscreens. The meters were calibrated with a Larson Davis precision acoustic calibrator prior to and following the measurement survey. Weather conditions were good for conducting noise measurements during the survey. Figure 1 also shows the project site, nearby land uses, and nearby sources of noise.

Long-term noise measurement LT-1 was located approximately 30 feet from the centerline of Petaluma Boulevard South. The purpose of this measurement was to quantify noise levels produced by vehicular traffic at a location representative of the planned building façade along Petaluma Boulevard South. Figures 2-5 contain graphical summaries of the noise data collected at Site LT-1. A review of these data indicates that daytime and evening hourly equivalent noise levels (L_{eq}) typically ranged from 62 to 69 dBA L_{eq} and nighttime noise levels typically ranged from 50 dBA to 67 dBA L_{eq}. The calculated community noise equivalent level at this location was 70 dBA CNEL on both Wednesday, July 19, 2023, and Thursday, July 20, 2023.

Long-term noise measurement LT-2 was located approximately 22 feet from the centerline of B Street. Noise levels were measured at this position to represent the noise exposure at the planned building façade along B Street. Figures 6-9 contain graphical summaries of the noise data collected at Site LT-2. A review of these data indicates that daytime and evening hourly equivalent noise levels (L_{eq}) typically ranged from 57 to 68 dBA L_{eq} and nighttime noise levels typically ranged from 45 to 62 dBA L_{eq}. The calculated community noise equivalent level at this location was 66 dBA CNEL on Wednesday, July 19, 2023, and 65 dBA CNEL on Thursday, July 20, 2023.

FIGURE 1 Aerial Image Showing Noise Measurement Locations



Source: Google Earth, 2023.

**Noise Levels at Noise Measurement Site LT-1
 ~30 Feet from the Centerline of Petaluma Boulevard South
 Tuesday, July 18, 2023**

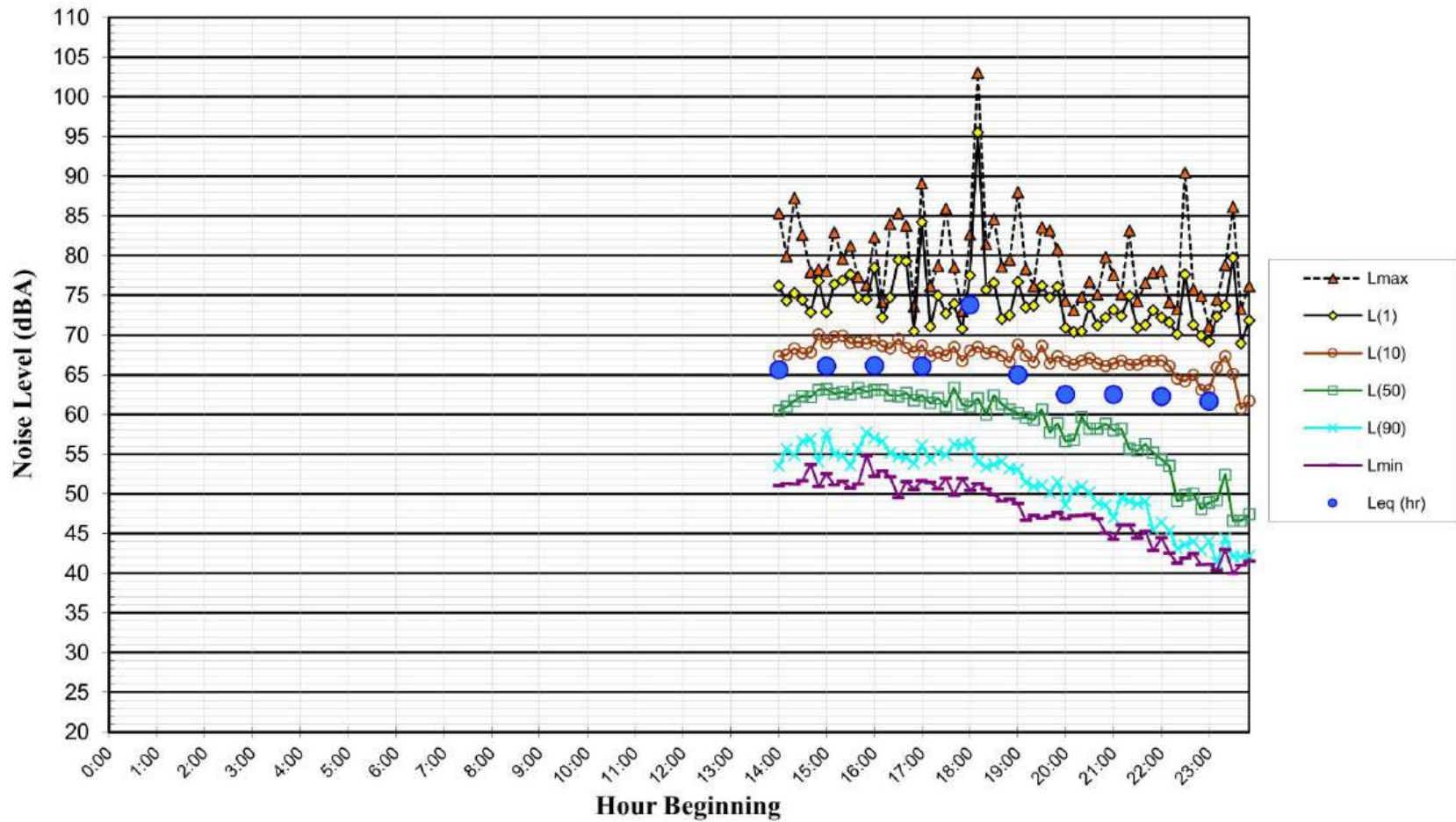


Figure 2

**Noise Levels at Noise Measurement Site LT-1
~30 Feet from the Centerline of Petaluma Boulevard South
Wednesday, July 19, 2023**

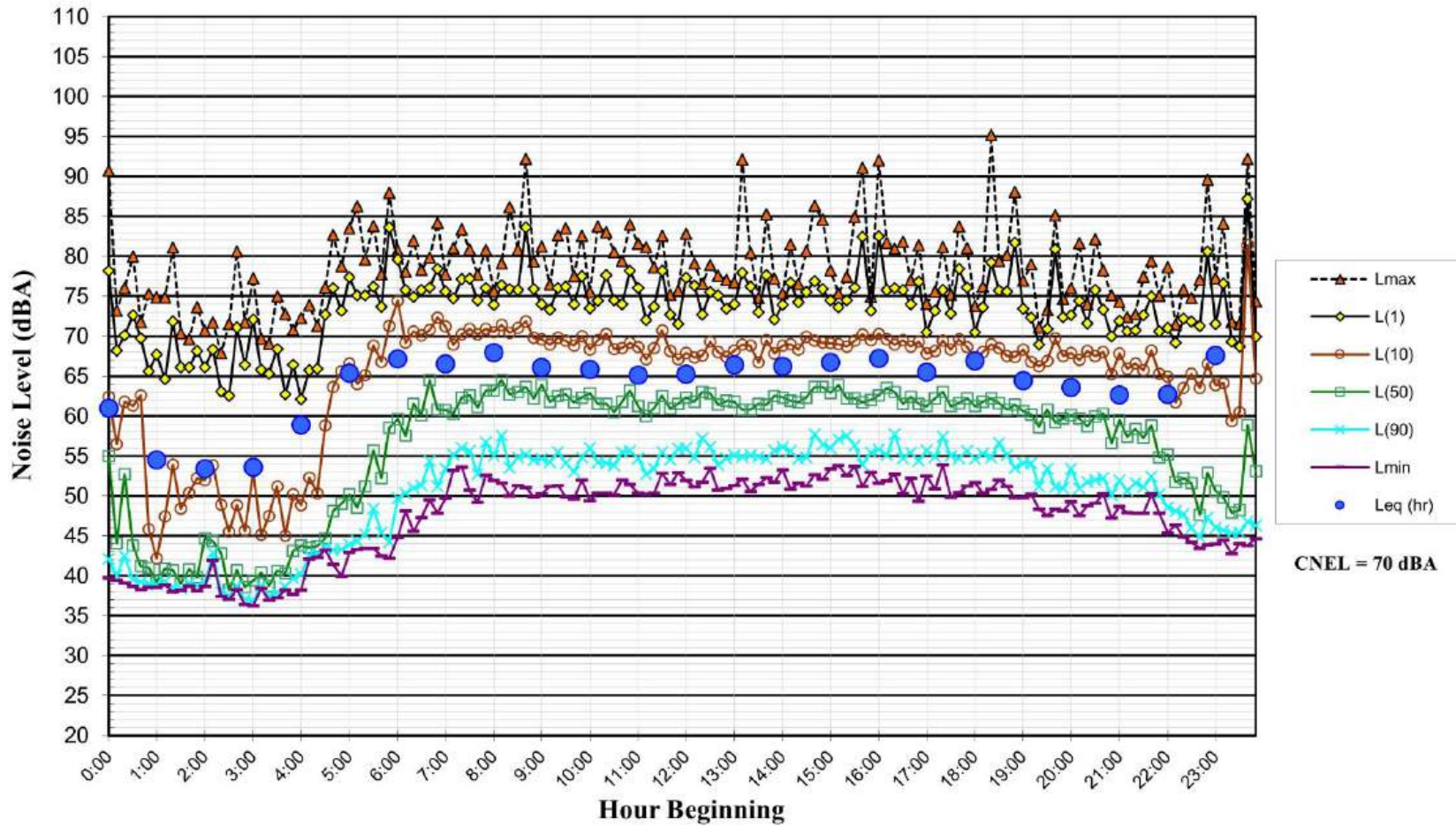


Figure 3

**Noise Levels at Noise Measurement Site LT-1
 ~30 Feet from the Centerline of Petaluma Boulevard South
 Thursday, July 20, 2023**

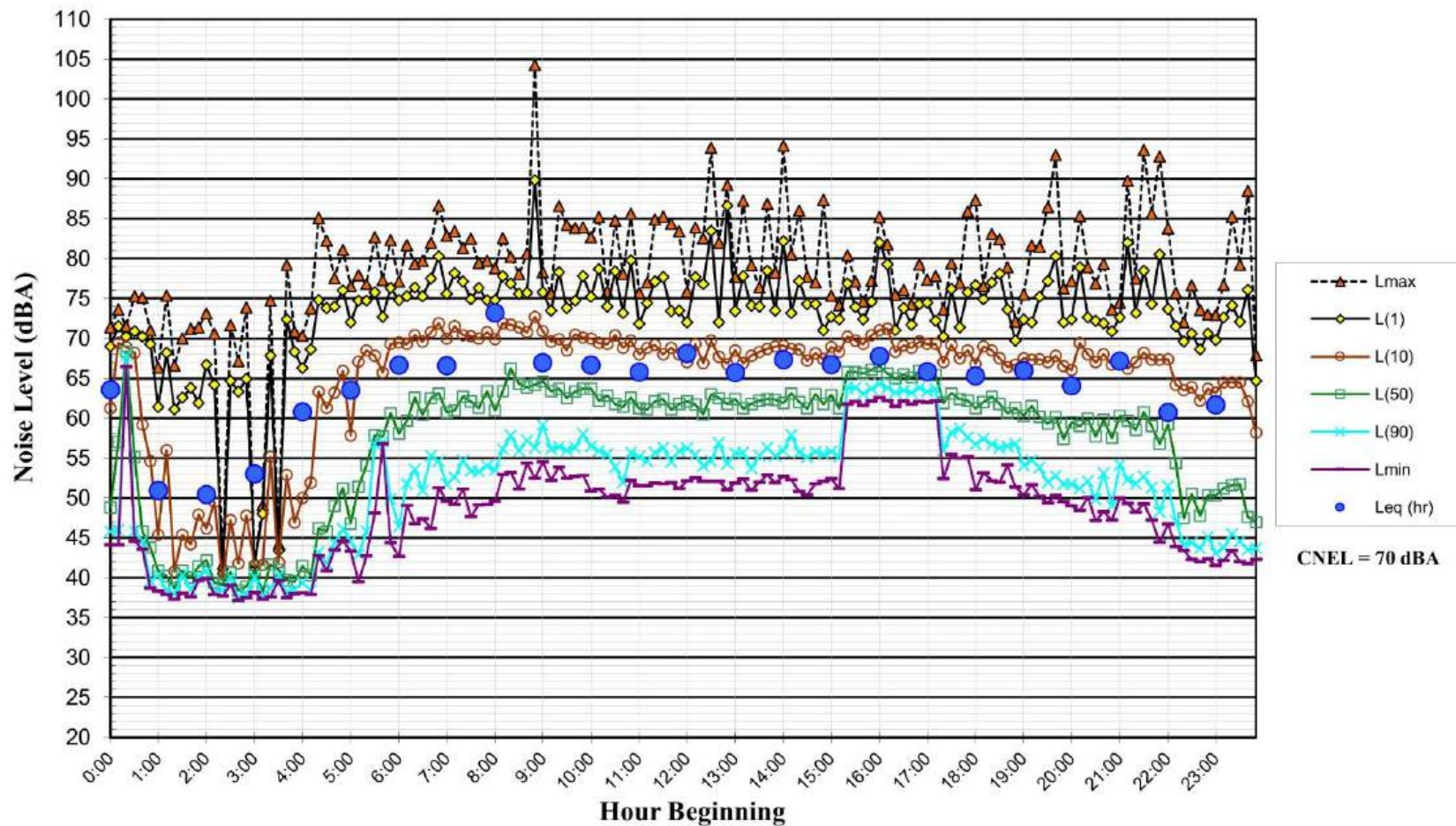


Figure 4

**Noise Levels at Noise Measurement Site LT-1
~30 Feet from the Centerline of Petaluma Boulevard South
Friday, July 21, 2023**

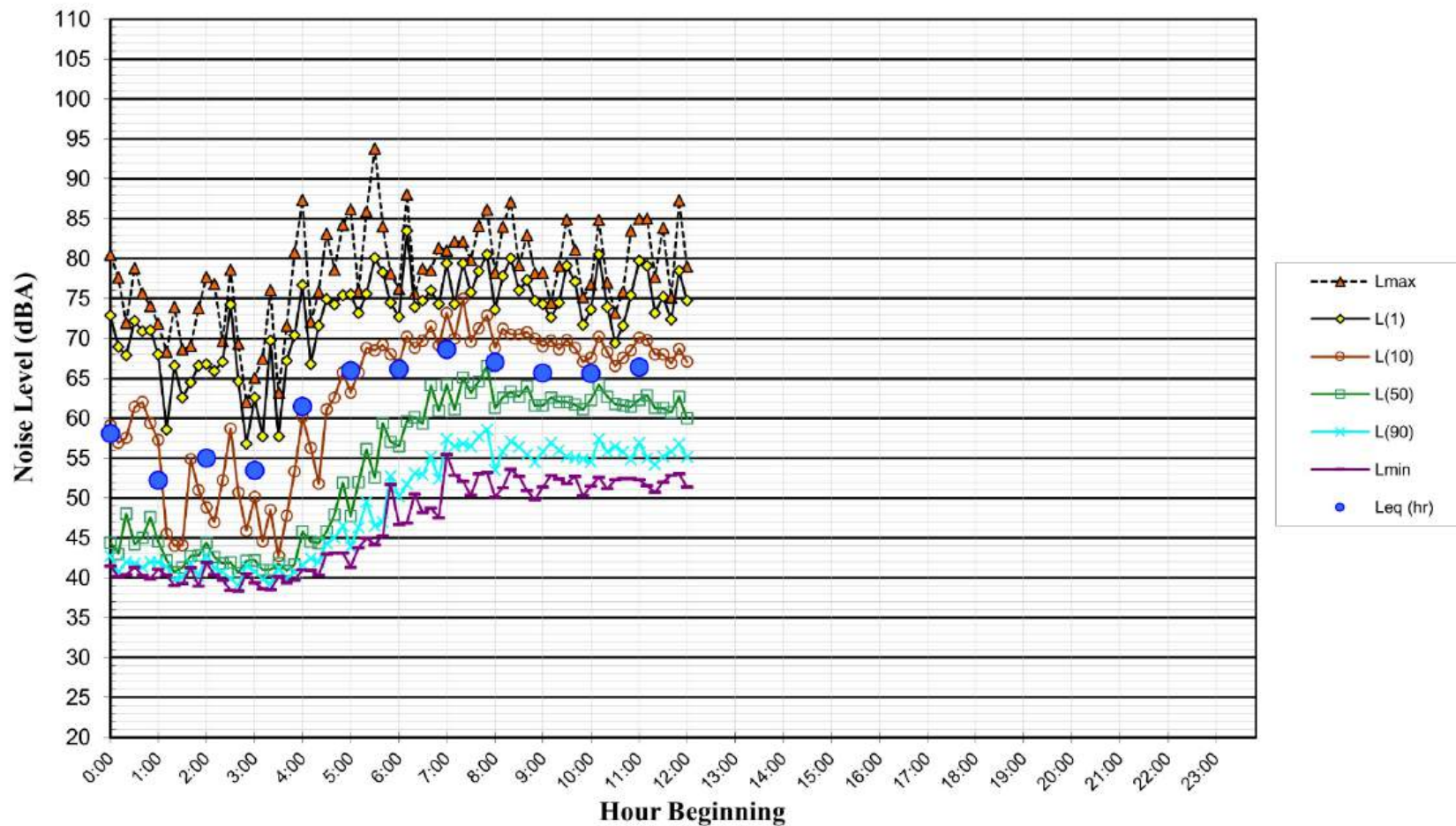


Figure 5

**Noise Levels at Noise Measurement Site LT-2
~22 Feet from the Centerline of B Street
Tuesday, July 18, 2023**

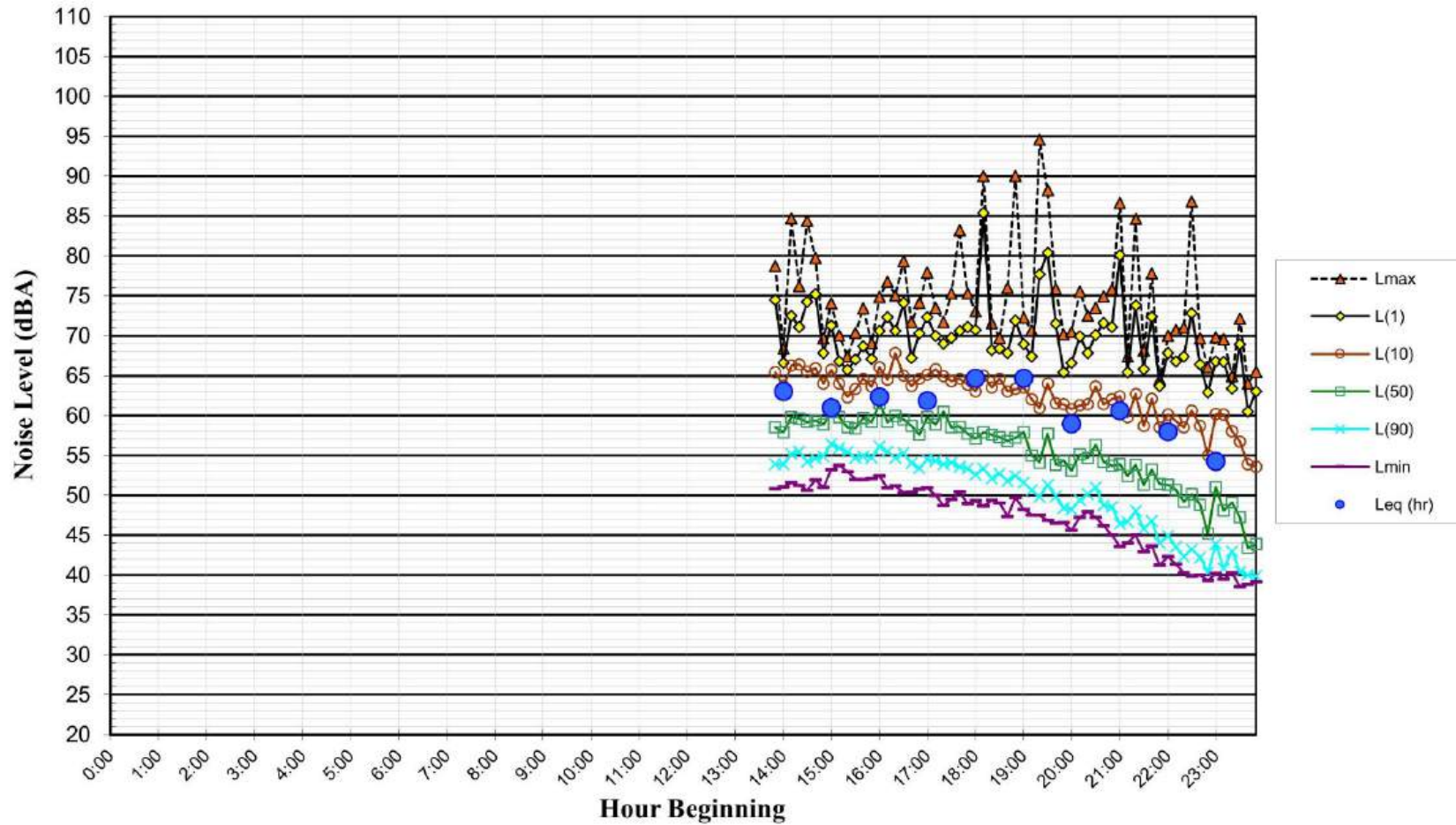


Figure 6

**Noise Levels at Noise Measurement Site LT-2
~22 Feet from the Centerline of B Street
Wednesday, July 19, 2023**

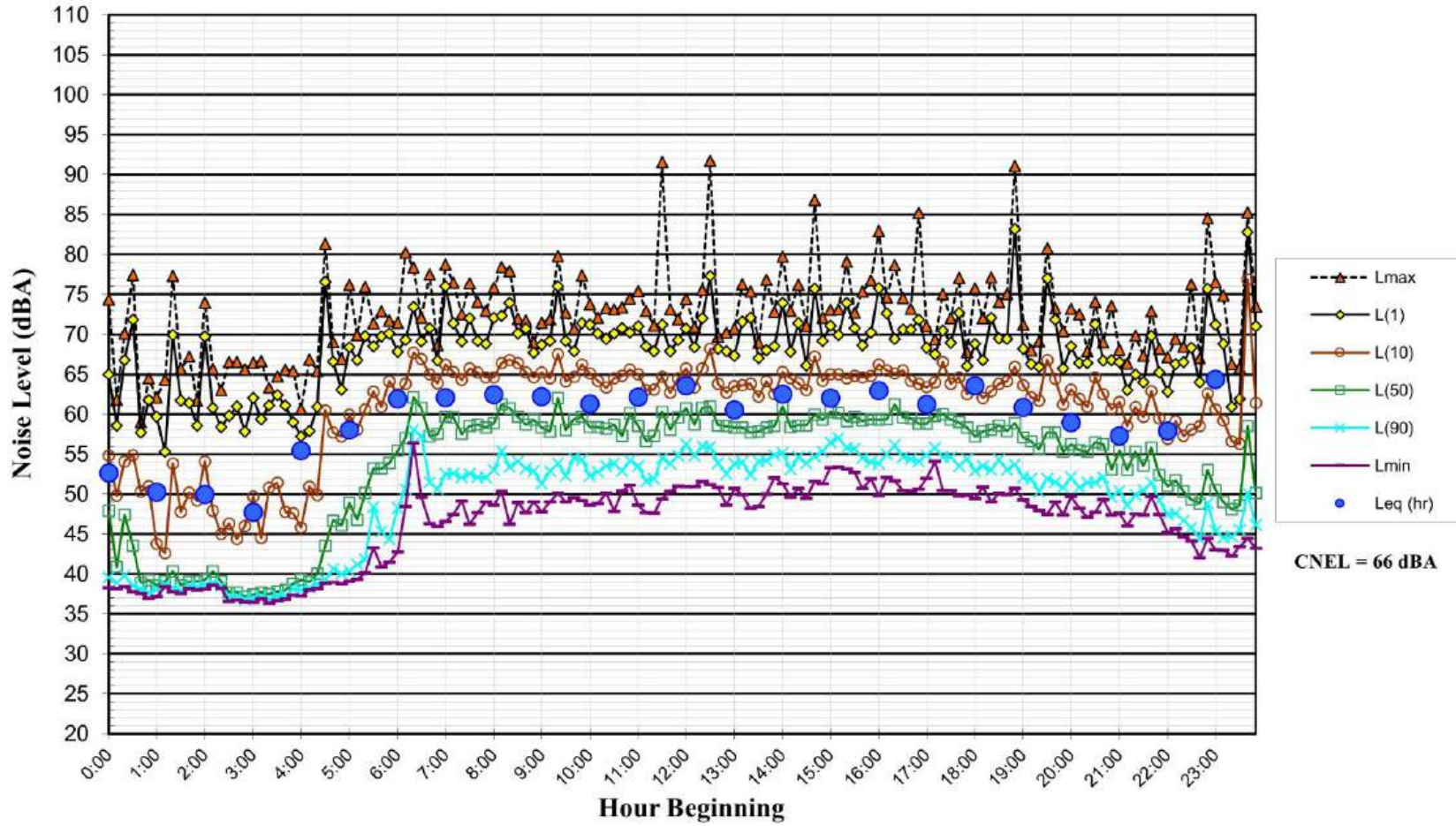


Figure 7

**Noise Levels at Noise Measurement Site LT-2
~22 Feet from the Centerline of B Street
Thursday, July 20, 2023**

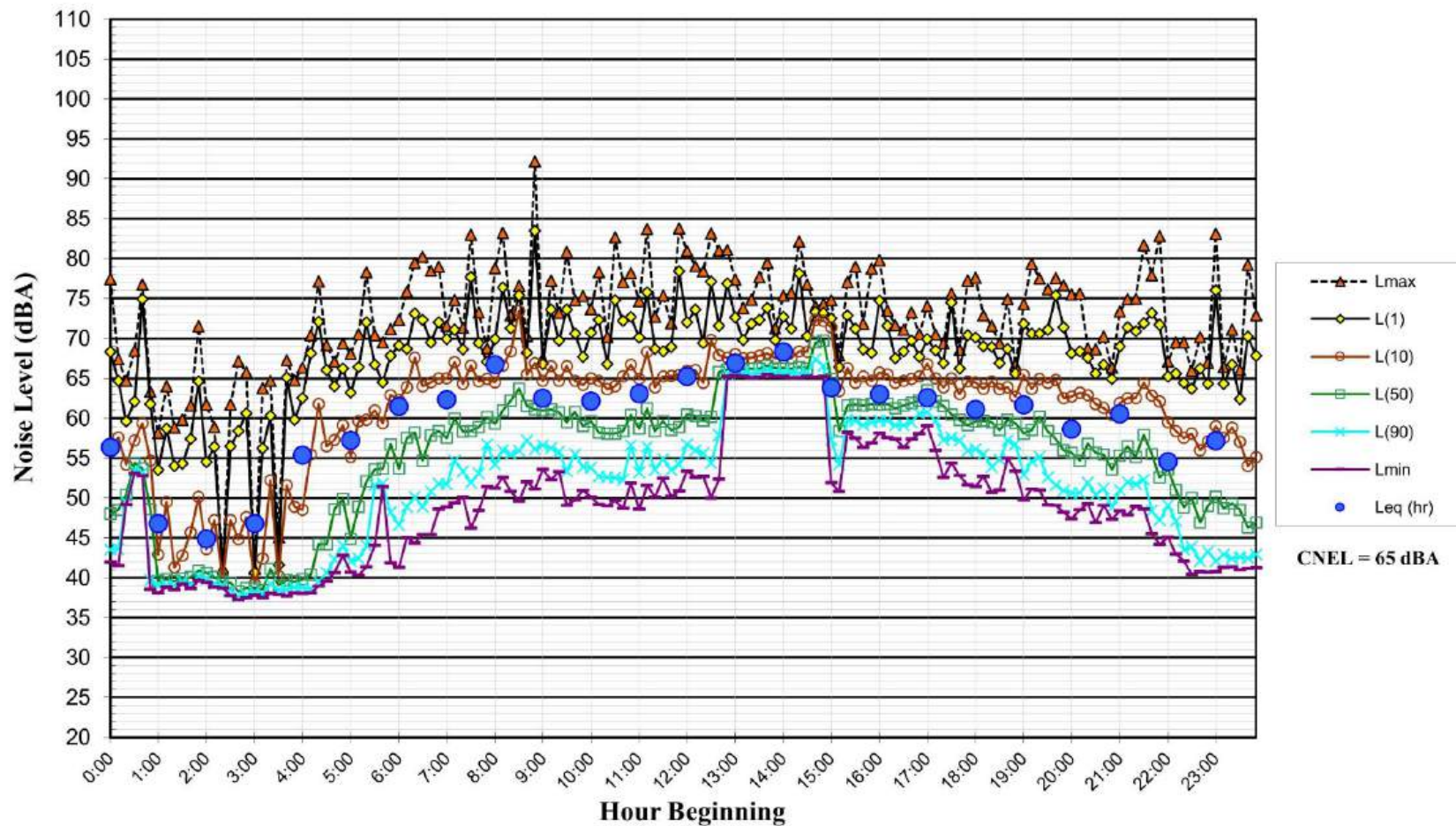


Figure 8

**Noise Levels at Noise Measurement Site LT-2
~22 Feet from the Centerline of B Street
Friday, July 21, 2023**

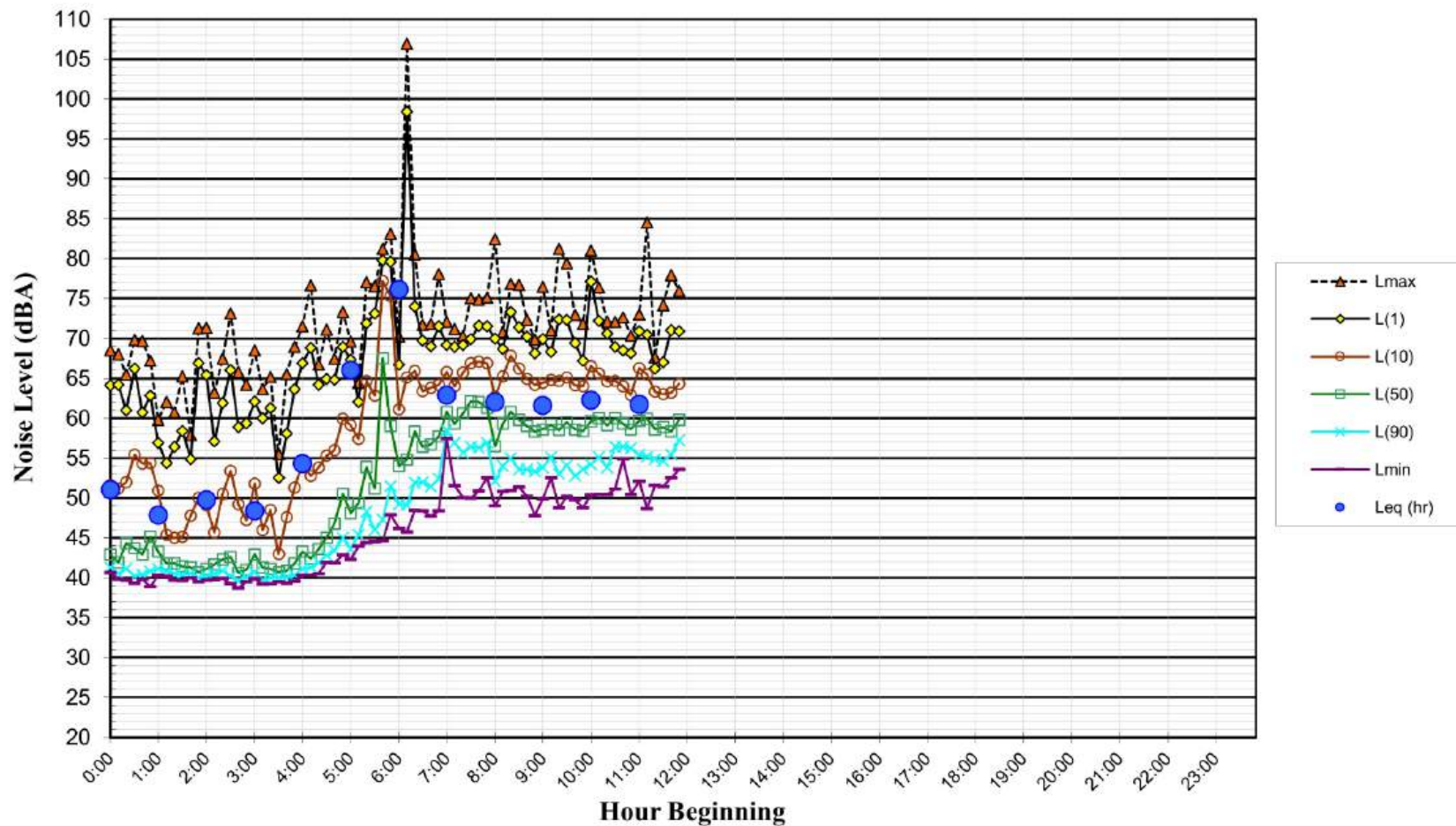


Figure 9

Short term (10-minute duration) noise measurements were made between 2:10 p.m. and 3:00 p.m. on Tuesday, July 18, 2023, at four positions to document noise levels at the site and at noise sensitive receptor locations in the project vicinity. ST-1 was made at the proposed corner of the building closest to the intersection of Petaluma Boulevard South and B Street, where noise levels were primarily the result of local traffic. ST-2 was made at the proposed corner of the building furthest from the intersection of Petaluma Boulevard South and B Street, where noise levels were also primarily the result of local traffic. ST-3 was made approximately 25 feet from the centerline of C Street, between 4th Street and 5th Street, to document local traffic noise at nearby residences along C Street. ST-4 was made approximately 30 feet from the centerline of B Street, near 5th Street, to document local traffic noise at nearby residences along B Street. The measurements were conducted simultaneously with measurements at LT-1 and LT-2. The results of the short-term measurements are shown in Table 5.

TABLE 5 Summary of Short-Term Noise Measurement Data, dBA

Noise Measurement Location	Time	L _{max}	L ₍₁₎	L ₍₁₀₎	L ₍₅₀₎	L ₍₉₀₎	L _{eq}
ST-1: North corner of site.	2:10-2:20 pm (7/18/2023)	95	77	67	61	56	71
ST-2: South corner of site.	2:10-2:20 pm (7/18/2023)	73	65	57	52	49	56
ST-3: Along C Street.	2:40-2:50 pm (7/18/2023)	67	65	58	50	47	54
ST-4: Along B Street.	2:50-3:00 pm (7/18/2023)	76	73	64	55	50	61

PLAN CONSISTENCY ANALYSIS

Compatibility Thresholds

The applicable compatibility thresholds were presented in detail in the Regulatory Background section and are summarized below for the proposed project:

- The City of Petaluma’s “normally acceptable” noise limit for hotels is 65 dBA L_{dn} or CNEL.
- The City of Petaluma’s interior noise level limit is 45 dBA L_{dn} or CNEL for new noise-sensitive uses and is consistent with the requirements of the California Building Code.

Exterior Noise Environment

Exterior noise levels in the project area are anticipated to increase by less than 1 dBA due to future traffic volume increases expected along Petaluma Boulevard South and B Street. An outdoor terrace is planned for the southwest side of the second floor of the building. This outdoor area would be shielded from the traffic noise by the building itself and the neighboring building to the southwest. The calculated shielding, which includes the setback from the centerline of the roadway, would be approximately 22 dBA at the center of the outdoor area. A wall is also planned

that will further reduce noise levels. A sixth-floor exterior roof top patio is also planned for the project, which will be 56 feet above the roadways, and shielded from traffic noise by the building itself. When considering the elevation above the transportation noise sources and the shielding provided by the building, the attenuation would be approximately 25 dBA, and traffic noise levels at the rooftop patio will be below 65 dBA CNEL. Future exterior noise levels at these two outdoor areas would be consistent with the City of Petaluma General Plan, and no additional controls would be required. However, a ground floor outdoor seating area associated with the planned restaurant would be exposed to future noise levels ranging from 65 to 71 dBA CNEL. The seating area along B Street would be within the City's normally acceptable noise exposure range, while the seating area along Petaluma Boulevard South would exceed the City's normally acceptable noise exposure range by 1 dBA. If this entire seating area is to be within the City's normally acceptable range, a basic noise barrier would need to be installed along the Petaluma Boulevard South portion of the area that would need to obstruct the direct line of site between seated customers and the vehicular traffic along Petaluma Boulevard South. It should be mentioned that there are similar outdoor seating areas at other businesses along Petaluma Boulevard South, and in this regard, this aspect of the project would be compatible with the downtown Petaluma layout.

Interior Noise Environment

The State of California Building Code and the City of Petaluma require that interior noise levels within new hotels not exceed 45 dBA CNEL. Interior noise levels would vary depending upon the design of the buildings (relative window area to wall area) and the selected construction materials and methods. For exterior noise environments ranging from 65 to 70 dBA CNEL, interior noise levels can typically be maintained below 45 dBA CNEL with the incorporation of an adequate forced-air mechanical ventilation system in each hotel room, allowing the windows to be closed. In noise environments of 70 dBA CNEL or greater, a combination of forced-air mechanical ventilation and sound-rated construction methods are often necessary to meet the interior noise level limit. The northeastern façade of the proposed building would have hotel rooms on the second through sixth floors, with setbacks from the centerline of Petaluma Boulevard South of approximately 70 feet. At this setback, hotel rooms facing Petaluma Boulevard South would be exposed to future exterior noise levels up to 71 dBA CNEL.

The following available controls shall be implemented during final design to reduce noise levels within the hotel to 45 dBA CNEL or less, consistent with the State of California Building Code and the City of Petaluma General Plan:

- Provide a suitable form of forced-air mechanical ventilation, as determined by the local building official, for all hotel rooms, so that windows can be kept closed to control noise.
- Provide sound-rated construction assemblies to reduce interior noise levels to 45 dBA L_{dn} /CNEL or less. Preliminary calculations indicate that exterior rooms facing Petaluma Boulevard South along the northeastern building façade would require windows with a minimum STC¹ rating of 28 to meet the interior noise threshold established by the City.

¹**Sound Transmission Class (STC)** A single figure rating designed to give an estimate of the sound insulation properties of a partition. Numerically, STC represents the number of decibels of speech sound reduction from one

- A qualified acoustical consultant shall review the final site plan, building elevations, and floor plans prior to construction and recommend building treatments to reduce interior noise levels to 45 dBA L_{dn}/CNEL or less. Treatments would include, but are not limited to, sound-rated windows and doors, sound-rated wall and window constructions, acoustical caulking, protected ventilation openings, etc. The specific determination of what noise insulation treatments are necessary shall be conducted on a room-by-room basis during final design of the project. Results of the analysis, including the description of the necessary noise control treatments, shall be submitted to the City, along with the building plans and approved design, prior to issuance of a building permit.

NOISE IMPACTS AND MITIGATION MEASURES

This section describes the significance criteria used to evaluate project impacts under CEQA, provides a discussion of each project impact, and presents mitigation measures, where necessary, to provide a compatible project in relation to adjacent receptors.

Significance Criteria

The following criteria were used to evaluate the significance of environmental noise resulting from the project:

- **Temporary or Permanent Noise Increases in Excess of Established Standards.** A significant impact would be identified if project construction or operations would result in a substantial temporary or permanent increase in ambient noise levels at sensitive receptors in excess of the standards contained in the local general plan or noise ordinance, or applicable standards of other agencies.
- **Generation of Excessive Groundborne Vibration.** A significant impact would be identified if the construction of the project would generate excessive groundborne vibration levels (i.e., 0.3 in/sec PPV or greater).
- **Exposure of Residents or Workers to Excessive Noise Levels in the Vicinity of a Public Airport or Private Airstrip.** A significant impact would be identified if the project would expose people residing or working in the project area to aircraft noise levels exceeding 65 dBA CNEL.

Impact 1 Temporary or Permanent Noise Increases in Excess of Established Standards.
The proposed project would not generate noise levels in excess of standards contained in the local general plan or noise ordinance, or applicable standards of other agencies at the nearby sensitive receptors. **This is a less-than-significant impact.**

Construction Noise

side of the partition to the other. The STC is intended for use when speech and office noise constitute the principal noise problem.

Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), if the construction occurs in areas immediately adjoining noise-sensitive receptors, or when construction lasts over extended periods of time.

The City of Petaluma does not quantitatively evaluate or regulate noise levels produced by construction activities. However, the Federal Transit Administration has developed general assessment criteria for analyzing construction noise, which are considered applicable in this assessment. The detailed assessment criteria set construction noise limits, which are summarized in Table 6 below.

TABLE 6 FTA Detailed Assessment Criteria for Construction Noise

Land Use	Eight-Hour Leq (dBA)	
	Day	Night
Residential	80	70
Commercial	85	85
Industrial	90	90

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, FTA Report No. 0123, Table 7-3, September 2018, Office of Planning and Environment, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed August 14, 2023.

Construction activities would include site preparation, grading and excavation, trenching and foundation work, building construction, architectural coating, and paving. During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary by stage and vary within stages, based on the amount of equipment in operation and the location at which the equipment is operating. The hauling of excavated materials and construction materials would generate truck trips on local roadways as well.

The center of the project’s construction area would be approximately 300 feet from nearest residences to the east, along Petaluma Boulevard South, approximately 450 feet from the residences to the south, along C Street, and approximately 50 feet from the nearest commercial use, sharing the southwest property line with the project site.

Construction activities generate considerable amounts of noise, especially during earth-moving activities when heavy equipment is used. Based on the applicant supplied construction equipment lists, the site preparation phase of the project is calculated to produce noise levels up to 81 dBA Leq at 50 feet. The grading and excavation phase is calculated to produce noise levels up to 79 dBA Leq at 50 feet. The trenching and foundation phase is calculated to produce noise levels up to 77 dBA Leq. The building construction phase is calculated to produce noise levels up to 79 dBA Leq. The architectural coating phase of the project is calculated to produce noise levels up to 74 dBA Leq, and the paving phase of the project is calculated to produce noise levels up to 77 dBA Leq at 50 feet. These project specific levels generally agree with the range of noise levels presented in

Table 7 for hotel building projects, assuming that only the two loudest pieces of equipment per phase are present at the site due to the relatively small size of the project site.

Hourly average construction noise levels at the nearest residential land use approximately 300 feet to the east of the center of the site are calculated to range from 58 to 65 dBA L_{eq} during construction. At the nearest commercial receptors, hourly average construction noise levels are calculated to range from 74 to 81 dBA L_{eq} .

TABLE 7 Typical Ranges of Construction Noise Levels at 50 Feet, L_{eq} (dBA)

	Domestic Housing		Office Building, Hotel, Hospital, School, Public Works		Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station		Public Works Roads & Highways, Sewers, and Trenches	
	I	II	I	II	I	II	I	II
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84
I - All pertinent equipment present at site. II - Minimum required equipment present at site.								

Source: USE.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

TABLE 8 Construction Equipment 50-Foot Noise Emission Limits

Equipment Category	L_{max} Level (dBA)^{1,2}	Impact/Continuous
Arc Welder	73	Continuous
Auger Drill Rig	85	Continuous
Backhoe	80	Continuous
Bar Bender	80	Continuous
Boring Jack Power Unit	80	Continuous
Chain Saw	85	Continuous
Compressor ³	70	Continuous
Compressor (other)	80	Continuous
Concrete Mixer	85	Continuous
Concrete Pump	82	Continuous
Concrete Saw	90	Continuous
Concrete Vibrator	80	Continuous
Crane	85	Continuous
Dozer	85	Continuous
Excavator	85	Continuous
Front End Loader	80	Continuous
Generator	82	Continuous
Generator (25 KVA or less)	70	Continuous
Gradall	85	Continuous
Grader	85	Continuous
Grinder Saw	85	Continuous
Horizontal Boring Hydro Jack	80	Continuous
Hydra Break Ram	90	Impact
Impact Pile Driver	105	Impact
Insitu Soil Sampling Rig	84	Continuous
Jackhammer	85	Impact
Mounted Impact Hammer (hoe ram)	90	Impact
Paver	85	Continuous
Pneumatic Tools	85	Continuous
Pumps	77	Continuous
Rock Drill	85	Continuous
Scraper	85	Continuous
Slurry Trenching Machine	82	Continuous
Soil Mix Drill Rig	80	Continuous
Street Sweeper	80	Continuous
Tractor	84	Continuous
Truck (dump, delivery)	84	Continuous
Vacuum Excavator Truck (vac-truck)	85	Continuous
Vibratory Compactor	80	Continuous
Vibratory Pile Driver	95	Continuous
All other equipment with engines larger than 5 HP	85	Continuous

Notes:

¹ Measured at 50 feet from the construction equipment, with a “slow” (1 sec.) time constant.² Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.³ Portable Air Compressor rated at 75 cfm or greater and that operates at greater than 50 psi.

Per the requirements of the Implementing Zoning Ordinance, construction of the project would only occur during the daytime. The construction schedule assumes that the earliest possible start date would be November 2024 and the project would be built out over an approximate 18.5-month period from November 2024 to May 2026. Average noise levels produced by the hotel construction activities would not exceed the FTA's 85 dBA L_{eq} commercial threshold or 80 dBA L_{eq} residential threshold, assuming that only the two loudest pieces of equipment per phase are present at the site. This is a less-than-significant impact; however, best management practices are recommended to reduce noise levels as low as feasible.

Best Management Practices

Reasonable regulation of the hours of construction, as well as regulation of the arrival and operation of heavy equipment and the delivery of construction materials, are necessary to protect the health and safety of persons, promote the general welfare of the community, and maintain the quality of life. Construction equipment shall be well-maintained and used judiciously to be as quiet as possible. The following best management practices will be implemented to reduce noise from construction activities near sensitive receptors:

- Pursuant to the Implementing Zoning Ordinance, restrict noise-generating activities at the construction site or in areas adjacent to the construction site to the hours between 7:00 a.m. and 10:00 p.m., Monday through Friday and 9:00 a.m. to 10:00 p.m. on Saturday, Sunday and State, Federal or Local Holidays;
- Utilize 'quiet' models of air compressors and other stationary noise sources where technology exists;
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment;
- Locate all stationary noise-generating equipment, such as air compressors and portable power generators, as far away as possible from adjacent receptors;
- Acoustically shield stationary equipment located near adjacent receptors with temporary noise barriers;
- Locate staging areas and construction material areas as far away as possible from adjacent receptors;
- Prohibit all unnecessary idling of internal combustion engines;
- Route all construction traffic to and from the project site via designated truck routes and prohibit construction related heavy truck traffic in residential areas where feasible;
- Notify all adjacent receptors of the construction schedule in writing;

- Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented; and
- Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction.

Rooftop Patio Noise

The type and size of events that will take place at the rooftop indoor event space or rooftop patio area has not been specified. The indoor event space is planned to be 1,412 square feet and the patio area is planned to be 6,200 square feet, allowing for an unspecified number of guests. To estimate the noise levels associated with events at the proposed outdoor patio area, the nature of the noise produced must be considered. Table 9, below, lists typical noise levels generated by small to moderate sized special events at a distance of 50 feet from the source.

TABLE 9 Typical Noise Source Levels for Special Events (A-Weighted L₅₀ Levels)

Event or Activity	Typical Noise Level @ 50 ft
Amplified wedding (or similar type event) Music	72 dBA
Amplified Speech	71 dBA
Non-amplified (acoustic) Music	67 dBA
Films – Voices/Music	64 dBA
Raised Conversation	64 dBA

For the purpose of establishing a credible worst-case analysis, events with amplified music would be considered the loudest type of event that could occur, with typical noise levels of 72 dBA at 50 feet. Because the patio area is to be elevated approximately 56-feet above grade and surrounded by a parapet, some noise attenuation will result from the building and parapet functioning as a noise barrier. The nearest noise-sensitive receptor that could be affected by rooftop event noise is located on the third-floor-level of a mixed-use building, approximately 300-feet from the acoustical center of the rooftop patio area. When considering the distance between the center of the patio area and the nearest receptor, as well as the attenuation provided by the hotel building itself, event noise would be 56 dBA or less at the nearest noise-sensitive receptor. Therefore, noise levels generated by an event with amplified music would not create noise levels at the nearest noise-sensitive receptor that would exceed the noise limits set by the City. This is a less-than-significant impact.

On-Site Operational Noise

On-site operational noise sources would primarily consist of mechanical equipment necessary for heating, ventilation, and cooling purposes, exhaust fans, and other similar equipment. This equipment would be located on the rooftop of the hotel building. At the time of this study, the specific models of equipment are unknown, but the quantities are known. Given the distance separating the proposed location of mechanical equipment from nearby sensitive receptors, as well

as shielding provided by the building itself and parapet, it is expected that mechanical equipment for the proposed project could feasibly be designed to meet the City's applicable noise limit of 60 dBA L_{eq} day or night.

Available project plans identify approximately 40 pieces of rooftop mechanical equipment that would potentially contribute to the noise environment. These include condensing units, heat pumps, fans, exhaust, and DOAS units. A review of I&R files indicates that this equipment would range from about 46 to 75 dBA at three feet, and would range from 56 to 58 dBA on average. For the purpose of establishing a credible worst-case analysis, all project rooftop equipment was assumed to be 75 dBA at three feet. When combining these noise generating sources, the noise level is calculated to be approximately 65 dBA at 50 feet, unshielded.

Comparable to the rooftop events component of the project, mechanical equipment that will service the building will be at a similar distance from the nearest noise sensitive receptor as event noise would be. Event noise was calculated to be 72 dBA at 50 feet and would not cause noise levels above 60 dBA L_{eq} at the nearest receptor. Combined noise levels for rooftop mechanical equipment would be less than event noise at the same distance. Therefore, like event noise, rooftop mechanical noise would not cause noise levels above 60 dBA L_{eq} at the nearest receptor. Based on the above generic assumptions, mechanical equipment noise levels are calculated to be less than 60 dBA L_{eq} at all off-site residential receptors more than 300 feet away. No mechanical equipment is anticipated for a project of this scale that would make meeting the applicable noise limits with standard noise control measures difficult. This is a less-than-significant impact.

Traffic Noise

A significant noise impact would occur if traffic generated by the project would increase noise levels at sensitive receptors by 4 dBA CNEL or more beyond acceptable standards for noise-sensitive receptors. For reference, existing traffic volumes would have to double for traffic noise levels to increase by 3 dBA CNEL, and triple for traffic noise levels to increase by 5 dBA CNEL, where traffic is the primary source of environmental noise levels.

Traffic data provided by *W-Trans* were reviewed to identify roadway segments that would experience a substantial increase in traffic volumes with the project. Primary vehicular access to the hotel site will be provided via a garage entrance along B Street. Peak hour turning movement data were provided for the intersection of Petaluma Boulevard South and B Street. Existing plus project traffic volumes were compared to existing volumes to conservatively estimate the project's contribution to the permanent noise level increase. Upon comparison of these traffic conditions, a traffic noise increase of less than 1 dBA CNEL was calculated along both Petaluma Boulevard South and B Street. Therefore, the impact is less-than-significant as the project would not increase overall noise levels by 4 dBA CNEL or more.

Mitigation Measures: None Required.

Impact 2: Exposure to Excessive Groundborne Vibration due to Construction. Construction-related vibration levels could exceed 0.3 in/sec PPV at the nearest buildings of conventional construction. **This is a significant impact.**

Construction of the project may temporarily generate perceptible vibration when heavy equipment or impact tools are used near the boundary of the site. Proposed construction phases include site preparation, grading, trenching/foundation, paving, and new building framing and finishing.

The City of Petaluma does not specify a construction vibration limit. For structural damage, the California Department of Transportation recommends a vibration limit of 0.5 in/sec PPV for buildings structurally sound and designed to modern engineering standards, 0.3 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern, and a conservative limit of 0.25 in/sec PPV for historic and some old buildings (see Table 3). The 0.3 in/sec PPV vibration limit would be applicable to properties in the vicinity of the project site.

Table 10 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet and summarizes the expected vibration levels at buildings between 5 and 30 feet of the site. Project construction activities, such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.), may generate substantial vibration in the immediate vicinity. Vibration levels would vary depending on soil conditions, construction methods, and equipment used. Jackhammers typically generate vibration levels of 0.035 in/sec PPV, and drilling typically generates vibration levels of 0.09 in/sec PPV at a distance of 25 feet.

Vibration levels are highest close to the source, and then attenuate with increasing distance at the rate $(D_{ref}/D)^{1.1}$, where D is the distance from the source in feet and D_{ref} is the reference distance of 25 feet. At a distance of approximately 5 feet, vibration levels due to most heavy equipment are conservatively calculated to reach up to approximately 1.233 in/sec PPV and would exceed the 0.3 in/sec PPV threshold for conventional buildings. Vibratory rollers or the dropping of heavy equipment would have the potential to produce vibration levels of 0.3 in/sec PPV or more at buildings of normal conventional construction located within approximately 20 feet of the project site.

The US Bureau of Mines has analyzed the effects of blast-induced vibration on buildings in USBM RI 8507², and these findings have been applied to vibrations emanating from construction equipment on buildings³. As shown on Figure 10, these studies indicate a 5% probability of “threshold damage” (referred to as cosmetic damage elsewhere in this report) at vibration levels of 0.4 in/sec PPV or less and no observations of “minor damage” or “major damage” at vibration levels of 1.1 in/sec PPV or less. Figure 10 presents the damage probability as reported in USBM RI 8507 and reproduced by Dowding assuming a maximum vibration level of 1.233 in/sec PPV at 5-feet. Based on these data, cosmetic or threshold damage would be manifested in the form of hairline cracking in plaster, the opening of old cracks, the loosening of paint or the dislodging of

² Siskind, D.E., M.S. Stagg, J.W. Kopp, and C.H. Dowding, Structure Response and Damage Produced by Ground Vibration from Surface Mine Blasting, RI 8507, Bureau of Mines Report of Investigations, U.S. Department of the Interior Bureau of Mines, Washington, D.C., 1980.

³ Dowding, C.H., Construction Vibrations, Prentice Hall, Upper Saddle River, 1996.

loose objects. Minor damage (e.g., hairline cracking in masonry or the loosening of plaster) would possibly occur. Major structural damage (e.g., wide cracking or shifting of foundation or bearing walls) would not occur at the adjacent buildings within 5 feet of the site assuming a maximum vibration level of 1.233 in/sec PPV. Other buildings of normal conventional construction located beyond 20 feet from the project site would not be exposed to vibration levels exceeding the 0.3 in/sec PPV threshold for normal buildings. The nearest historic building located near the site is located at 20th Street, and is approximately 220-feet from the site. At this distance, the 0.25 in/sec PPV limit for historic and old buildings would not be exceeded.

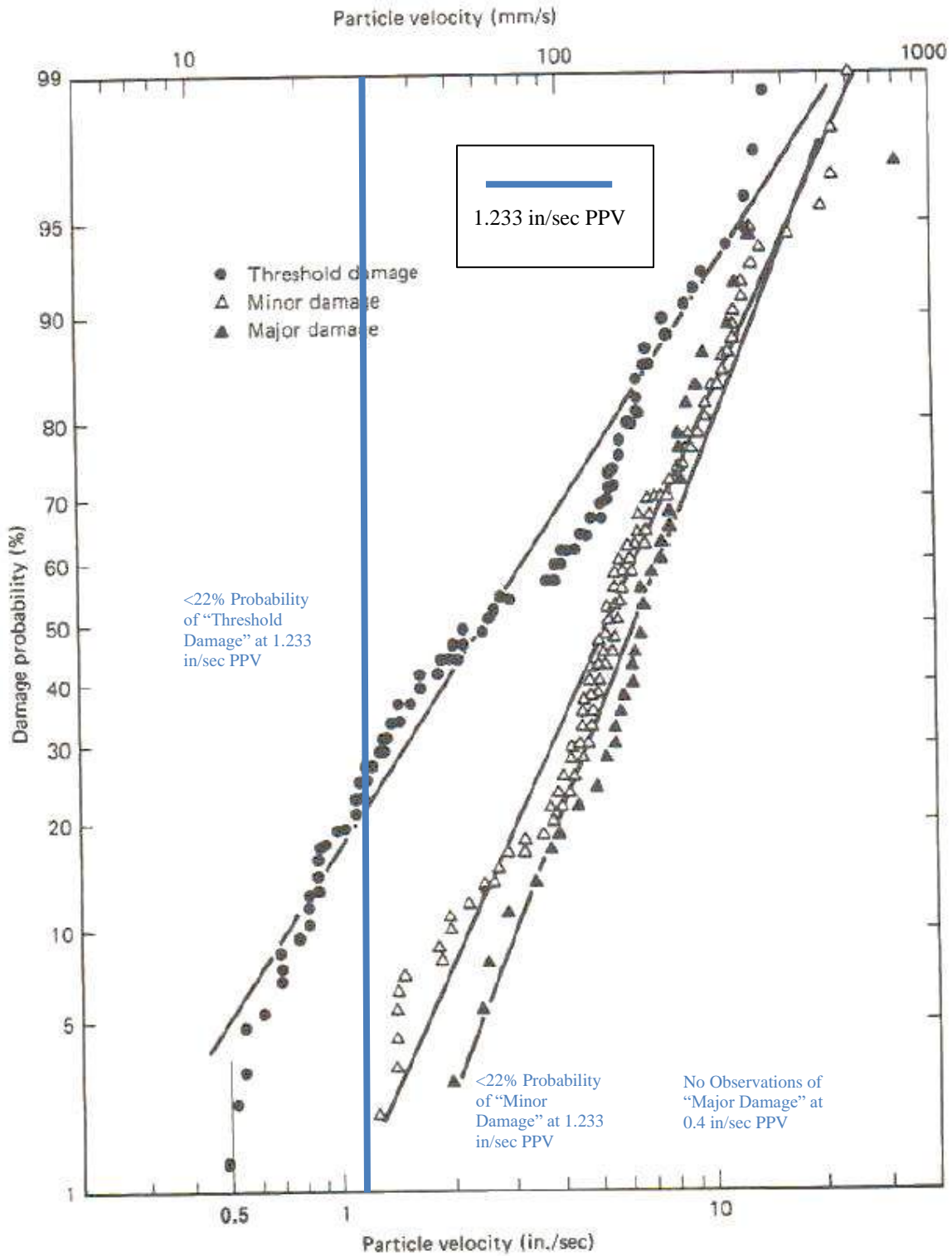
Project-generated vibration levels would be capable of cosmetically damaging the adjacent buildings and creating minor damage along the southwest boundary of the site if vibratory rollers are used, or heavy equipment is dropped, within 20 feet of the buildings. At these locations, and in other surrounding areas where vibration would not be expected to cause structural damage, vibration levels may still be perceptible. However, as with any type of construction, this would be anticipated and would not be considered significant, given the intermittent and short duration of the phases that have the highest potential of producing vibration. By use of administrative controls, such as notifying neighbors of scheduled construction activities and scheduling construction activities with the highest potential to produce perceptible vibration during hours with the least potential to affect nearby residences and businesses, perceptible vibration can be kept to a minimum.

TABLE 10 Construction Vibration Levels at Nearby Buildings

Equipment	PPV (in/sec)					
	Source Level at 25 ft	Vibration Level at 5 ft	Vibration Level at 10 ft	Vibration Level at 20 ft	Vibration Level at 30 ft	
Clam shovel drop	0.202	1.186	0.553	0.258	0.165	
Hydromill (slurry wall)	in soil	0.008	0.047	0.022	0.010	0.007
	in rock	0.017	0.100	0.047	0.022	0.014
Vibratory Roller	0.210	1.233	0.575	0.268	0.172	
Hoe Ram	0.089	0.523	0.244	0.114	0.073	
Large bulldozer	0.089	0.523	0.244	0.114	0.073	
Caisson drilling	0.089	0.523	0.244	0.114	0.073	
Loaded trucks	0.076	0.446	0.208	0.097	0.062	
Jackhammer	0.035	0.206	0.096	0.045	0.029	
Small bulldozer	0.003	0.018	0.008	0.004	0.002	

Source: Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, Office of Planning and Environment, U.S. Department of Transportation, FTA Report No. 0123, September 2018, as modified by Illingworth & Rodkin, Inc., August 2023.

FIGURE 10 Probability of Cracking and Fatigue from Repetitive Loading



Source: Dowding, C.H., Construction Vibrations, Prentice Hall, Upper Saddle River, 1996 as modified by Illingworth & Rodkin, Inc., August 2023.

Mitigation Measures:

The following measures shall be implemented where vibration levels due to construction activities would exceed 0.3 in/sec PPV at nearby buildings:

- Prohibit the use of heavy vibration-generating construction equipment within 20 feet of adjacent buildings.
- Use a smaller vibratory roller, such as the Caterpillar model CP433E vibratory compactor, when compacting materials within 20 feet of adjacent buildings. Only use the static compaction mode when within 10 feet of the adjacent buildings.
- Avoid dropping heavy equipment and use alternative methods for breaking up existing pavement, such as a pavement grinder, instead of dropping heavy objects, within 20 feet of adjacent buildings.
- Designate a person responsible for registering and investigating claims of excessive vibration. The contact information of such person shall be clearly posted on the construction site.

The implementation of these mitigation measures would reduce a potential impact to a less-than-significant level.

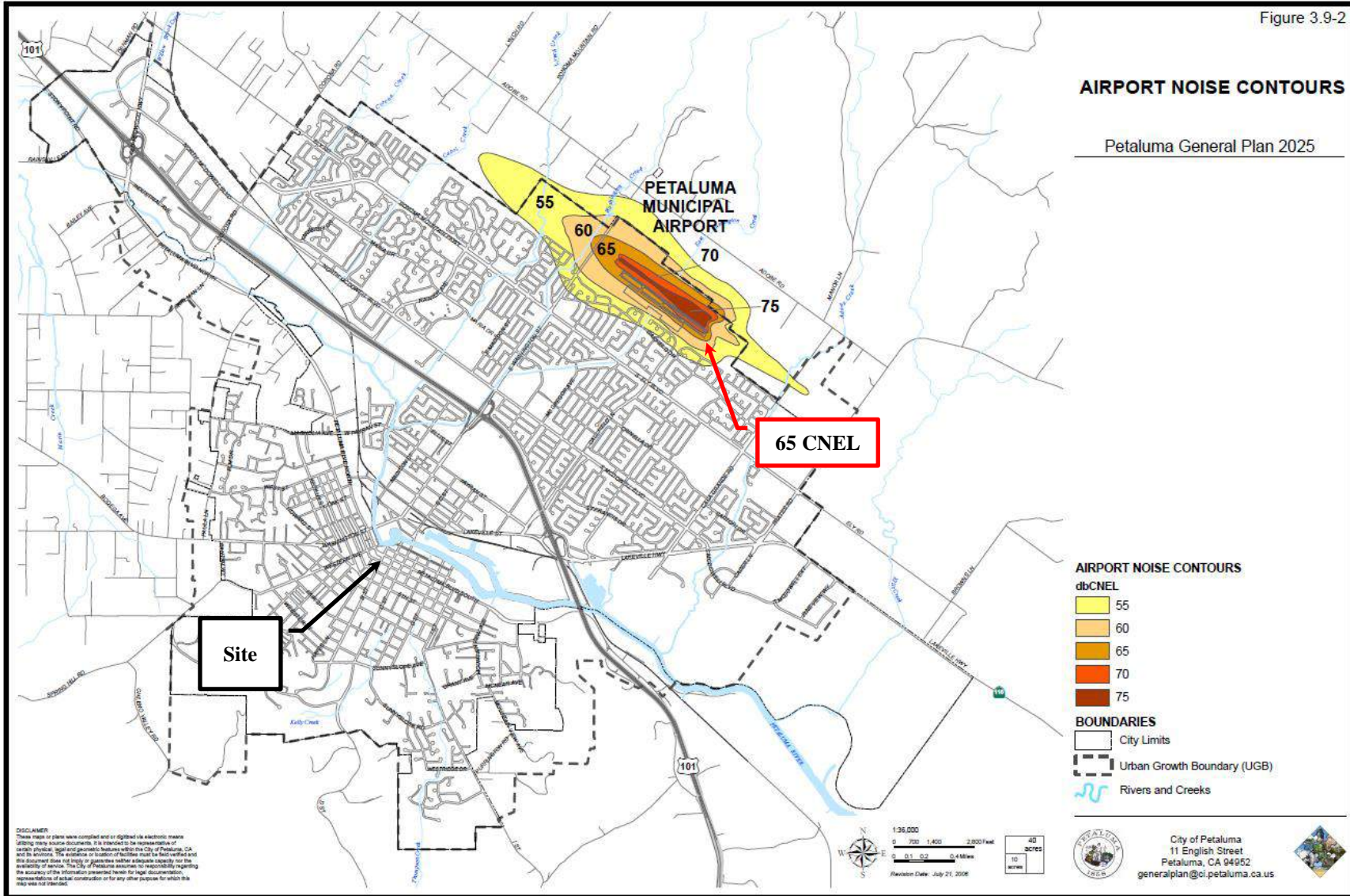
Impact 3 Exposure of Residents or Workers to Excessive Noise Levels in the Vicinity of a Public Airport or Private Airstrip. The project site would not be exposed to aircraft noise levels of 65 dBA CNEL or greater. **This is a less-than-significant impact.**

Petaluma Municipal Airport is located approximately 2.3 miles northeast of the project site and is the only significant source of aircraft noise in the project vicinity. Noise levels expected from aircraft associated with the airport are best represented by the Petaluma General Plan 2025 Airport Noise Contours. Figure 11 depicts the 65 dB CNEL noise contour that defines the noise impact boundary for new hotel development. Most aircraft activity is concentrated in the Airport's immediate environs, and the noise exposure map shows the 55 dBA CNEL noise contour located east of S. Ely Boulevard. The project site lies outside the 2025 65 dBA CNEL noise contour and noise levels resulting from aircraft would be compatible with the proposed land use.

Mitigation Measures: None Required.

FIGURE 11 Noise Exposure Map Showing Site in Relation to Airport Noise Contours

Figure 3.9-2





Traffic Impact Study for the Petaluma Appellation Hotel Project



Prepared for the City of Petaluma

Submitted by
W-Trans

July 20, 2023



**TRAFFIC ENGINEERING
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Executive Summary

The proposed project is a 93-guestroom boutique hotel with 4,394 square feet of restaurant space to be located at 2 Petaluma Boulevard South in the City of Petaluma. The proposed operation includes a valet service to pick vehicles up at the project frontage on Petaluma Boulevard and take them around the block and back to the underground parking lot off B Street or to the existing parking structure at 149 C Street where 20 spaces have been acquired. Based on the application of standard trip generation rates and assumptions of the valet service, the development would be expected to generate an average of 966 trips daily, including 79 trips during the weekday evening peak hour.

Four intersections in downtown Petaluma were evaluated to assess potential traffic impacts. Three of the four have experienced collisions at rates near the statewide average for similar facilities based on records for a five-year period. During the weekday p.m. peak hour, the study intersections are currently operating at LOS D or better and would continue to operate at the same levels of service with project volumes added.

Based on projected future volumes, Petaluma Boulevard/D Street is anticipated to operate unacceptably at LOS E during the evening peak period, but the other three intersections would continue operating acceptably at LOS D. The addition of project-generated trips would be expected to result in nominal increases in overall average delay and all intersections would continue operating at the same levels of service, indicating an acceptable impact on traffic operation.

The site's proximity to the Downtown Petaluma SMART station qualifies the project for VMT screening according to criteria established by the City, meaning the project can be presumed to have a less-than-significant impact on VMT. Beyond VMT screening there are several additional factors including proximity to two bus transit hubs, anticipated shifts in hotel guest VMT (rather than net increases in guest VMT), and the site's presence in a zone with low employee VMT according to the regional travel demand model that support a less-than-significant VMT finding.

With the planned allocation of space on the project's Petaluma Boulevard South frontage for a future transit stop together with existing transit facilities, the project site is adequately served by transit. Bicycle facilities will be adequate with the planned improvements within the area implemented. With the construction of the project, while the existing driveway on Petaluma Boulevard South would be filled in to be level with the sidewalk, the project driveway on B Street may conflict with the existing crosswalk on B Street connecting the site to the Mystic Theatre commercial row. It is recommended that the applicant either redesign the crosswalk to reduce conflicts between vehicles entering and existing the driveways with pedestrians, install a warning system at the driveway to alert pedestrians of vehicles exiting the project garage or the City should remove the crosswalk.

Sight distance at the existing project driveway on B Street is adequate, though it is recommended that any additional landscaping or signage at the project driveway be placed outside the driver's vision triangle. Based on the assumed arrival and service rates for the proposed valet service, the five-vehicle queuing capacity on Petaluma Boulevard South would be adequate. There is an approximately three percent chance that more than three vehicles will arrive and want to queue on Petaluma Boulevard South, so it is likely that the proposed operation will be adequate and not spill onto the travel lanes.

Based on City requirements, the proposed parking supply is adequate based a hotel land use at this location. To meet City requirements, the applicant should include a minimum of eight bicycle parking spaces on-site.

Introduction

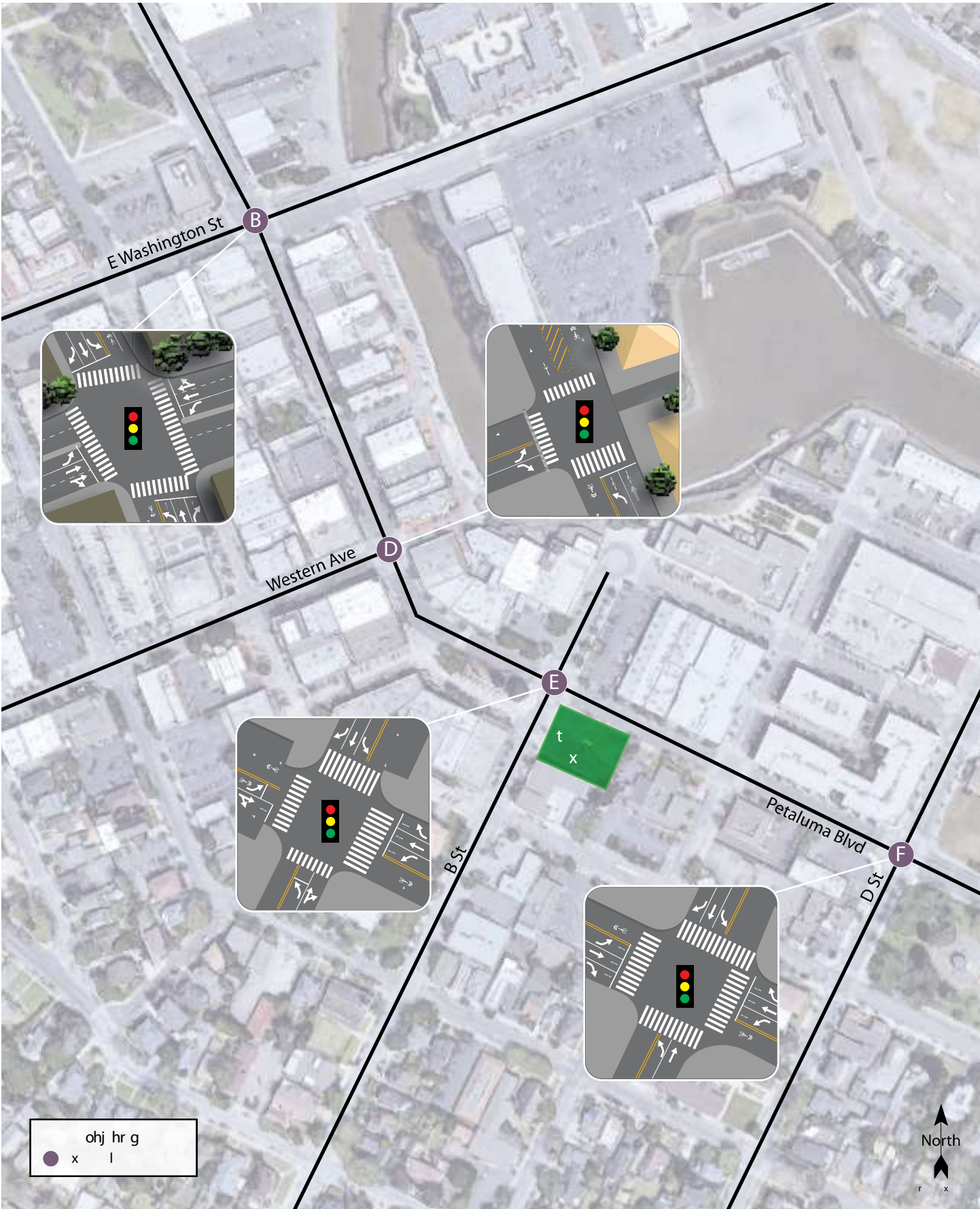
This report presents an analysis of the potential traffic impacts that would be associated with development of a proposed boutique hotel to be located at 2 Petaluma Boulevard South in the City of Petaluma. The traffic study was completed in accordance with the criteria established by the City of Petaluma and is consistent with standard traffic engineering techniques.

Prelude

The purpose of a traffic impact study is to provide City staff and policy makers with data they can use to make an informed decision regarding the potential traffic impacts of a proposed project, and any associated improvements that would be required to reduce these impacts to a level of acceptability as defined by the City's General Plan or other policies. Vehicular traffic impacts are typically evaluated by determining the number of new trips that the proposed use would be expected to generate, distributing these trips to the surrounding street system based on existing travel patterns or anticipated travel patterns specific to the proposed project, then analyzing the impact the new traffic would be expected to have on critical intersections or roadway segments. Impacts relative to access for pedestrians, bicyclists, and to transit are also addressed.

Project Profile

The project includes construction of a 93-guestroom boutique hotel, including 4,394 square feet of restaurant space. The project site is on the southwest corner of Petaluma Boulevard South/B Street in the City of Petaluma, as shown in Figure 1.



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Transportation Setting

Operational Analysis

Study Area and Periods

The study area consists of the following intersections:

1. Petaluma Boulevard/East Washington Street
2. Petaluma Boulevard/Western Avenue
3. Petaluma Boulevard/B Street
4. Petaluma Boulevard/D Street

Operating conditions during the weekday p.m. peak hour were evaluated, as this time period reflects the highest traffic volumes area-wide and for the proposed project. The evening peak hour occurs between 4:00 and 6:00 p.m. and typically reflects the highest level of congestion of the day, during the homeward bound commute.

Study Intersections

Petaluma Boulevard/East Washington Street is a four-legged signalized intersection with protected left-turn phasing on all approaches. Sharrows, or pavement markings indicating that the lane is to be shared with bicycles, are present along Petaluma Boulevard, and crosswalks with pedestrian signal phasing are present at each leg of the intersection.

Petaluma Boulevard/Western Avenue is a signalized tee intersection with protected left-turn phasing serving the northbound approach. Sharrows are present along Petaluma Boulevard, and crosswalks with associated pedestrian phasing are present at each leg of the intersection.

Petaluma Boulevard/B Street is a four-legged signalized intersection, with protected left-turn phasing on the eastbound and westbound approaches of Petaluma Boulevard. There are crosswalks and pedestrian phasing at all four legs of the intersection, and sharrows are present along Petaluma Boulevard.

Petaluma Boulevard/D Street is a four-legged signalized intersection, with protected left-turn phasing on all four approaches. There are crosswalks with pedestrian phasing at all four legs, and sharrows are present along Petaluma Boulevard.

The locations of the study intersections and the existing lane configurations and controls are shown in Figure 1.

Study Roadway

Petaluma Boulevard runs in a diagonal direction through the City of Petaluma, and for the purpose of the study the roadway was assumed to be oriented in a north-south direction at the East Washington Street and Western Avenue intersections and in an east-west orientation at the B and D Street study intersections. The studied segment of Petaluma Boulevard South between East Washington Street and D Street runs through the City of Petaluma's downtown with one lane in each direction divided by either a painted median or a two-way left-turn lane in the center.

Collision History

The collision history for the study area was reviewed to determine any trends or patterns that may indicate a safety issue. Collision rates were calculated based on records available from the California Highway Patrol as published in their *Statewide Integrated Traffic Records System (SWITRS)* reports. The most current five-year period available is January 1, 2018 through December 31, 2022.

As presented in Table 1, the calculated collision rates for the study intersections were compared to average collision rates for similar facilities statewide, as indicated in *2016 Collision Data on California State Highways*, California Department of Transportation (Caltrans). Based on the five-year period evaluated, the intersections of Petaluma Boulevard/Western Avenue, Petaluma Boulevard/B Street, and Petaluma Boulevard/D Street experienced collision rates below the statewide average for similar facilities. The collision rate calculations are provided in Appendix A.

Table 1 – Collision Rates at the Study Intersections

Study Intersection	Number of Collisions (2018-2022)	Calculated Collision Rate (c/mve)	Statewide Average Collision Rate (c/mve)
1. Petaluma Blvd/E Washington St	23	0.42	0.33
2. Petaluma Blvd/Western Ave	6	0.30	0.33
3. Petaluma Blvd/B St	4	0.21	0.33
4. Petaluma Blvd/D St	12	0.32	0.33

Note: c/mve = collisions per million vehicles entering; **Bold** text = higher than state average

The intersection of Petaluma Boulevard/E Washington Street had a collision rate of 0.42 collisions per million vehicles (c/mve) which is above the statewide average for four-way signalized intersections in urban areas, which is 0.33 c/mve. The collision rate has not worsened since the last report, but the statewide average collision rate for similar intersections in California has improved. The collisions at the intersection of Petaluma Boulevard/E Washington Street were further reviewed to provide safety recommendations. Of the collisions reported at the intersection 14 were rear-ends, five were sideswipes, three were broadsides, and one hit object collision. Unsafe speeds were the cause of seven of the collisions, six were due to improper turning, five were caused by unsafe starting or backing, two were due to driving under the influence, two were due to ignoring traffic signals and signs, and one was caused by unsafe lane changes. Reflective backing around the traffic signals to increase visibility of the traffic signals should be considered at the intersection of Petaluma Boulevard/E Washington Street.

Alternative Modes

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. In general, a network of sidewalks, crosswalks, pedestrian signals, and curb ramps provide access for pedestrians in the vicinity of the proposed project site. Pedestrian-scaled streetlights are provided along Petaluma Boulevard South. There is an existing mid-block crosswalk approximately 70 feet south of Petaluma Boulevard South on B Street, connecting the Mystic Theater and the project site. It is noted during the time period evaluated for the collision analysis, there was a collision involving a pedestrian in the crosswalk on B Street which resulted in a minor injury.

Bicycle Facilities

The *Highway Design Manual*, Caltrans, 2017, classifies bikeways into four categories:

- **Class I Multi-Use Path** – a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- **Class II Bike Lane** – a striped and signed lane for one-way bike travel on a street or highway.
- **Class III Bike Route** – signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- **Class IV Bikeway** – also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

West of the project site, Class II bike lanes exist on B Street between 4th Street and El Rose Drive. Petaluma Boulevard is classified as a bicycle route between Lakeville Street and D Street. Bicyclists ride in the roadway and/or on sidewalks along all other streets within the project study area. According to the SCTA *Countywide Bicycle and Pedestrian Master Plan*, there are planned bicycle lanes to connect to the existing lanes on Petaluma Boulevard between D Street and Kastania Road. A bicycle route is planned on B Street between 1st Street and 4th Street, connecting to the existing bicycle lanes on B Street. Table 2 summarizes the existing and planned bicycle facilities in the project vicinity, as contained in the *SCTA Countywide Bicycle and Pedestrian Master Plan*.

Table 2 – Bicycle Facility Summary

Status Facility	Class	Length (miles)	Begin Point	End Point
Existing				
Western Ave	II	1.50	City Limits	Petaluma Blvd
B St	II	0.70	4 th St	El Rose Dr
D St	II	1.00	6 th St	City Limits
Petaluma Blvd	III	0.70	Lakeville St	D St
Planned				
Petaluma Blvd	II	1.90	D St	Kastania Rd
D St	II	0.50	6 th St	Lakeville St
B St	III	0.20	1 st St	4 th St

Source: *SCTA Countywide Bicycle and Pedestrian Master Plan*, Sonoma County Transportation Authority, 2014

Transit Facilities

The project site is within a one-quarter mile walking distance from bus stops serviced by both Golden Gate Transit and Petaluma Transit. The project site is also within an acceptable walking distance of 0.40 miles from the Copeland Transit Mall and Petaluma Downtown SMART station. The Copeland Transit Mall is serviced by the Golden Gate Transit, Sonoma County Transit, and Petaluma Transit.

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

Petaluma Transit

The Petaluma Transit provides fixed route bus service within the City of Petaluma. Petaluma Transit Route 10 provides loop service between the Copeland Transit Mall and the Factory Outlets on Petaluma Boulevard North.

Route 10 operates Monday through Friday with approximately half-hour to one-hour headways between 7:32 a.m. and 6:29 p.m.

Route 11 provides loop bus service between the Copeland Transit Mall and the Safeway Transit Center on Maria Drive. Route 11 operates Monday through Friday with approximately one-half hour headways between 6:30 a.m. and 8:23 p.m. Weekend and Holiday service operates with one-half hour headways between 7:30 a.m. and 8:23 p.m.

Golden Gate Transit

The Golden Gate Transit (GGT) provides regional bus service within Sonoma County and throughout the Bay Area. Routes 72 and 74 provides commuter bus service between Santa Rosa and San Francisco Financial District. Route 72 stops at 4th Street/C Street at 7:51 a.m. southbound and at 7:45 p.m. northbound. Route 74 operates with approximately one-half hour to 40-minute headways between 4:34 a.m. and 9:03 a.m. and then between 3:02 p.m. and 7:41 p.m.

Route 101 provides regional service between Santa Rosa and San Francisco, with a stop at the Copeland Transit Mall. Weekday service operates Monday through Friday with approximately 20-minute to one-hour headways between 4:00 a.m. and 12:00 a.m. Saturday service operates with approximately one-half hour to one-hour headways and operates almost 24 hours between 3:00 a.m. and 2:30 a.m. Similarly, Sunday and holiday service operates with approximately one-half hour to one-hour headways between 3:49 a.m. and 2:30 a.m.

Sonoma County Transit

The Sonoma County Transit (SCT) provides regional route bus service between the City of Petaluma and surrounding areas within Sonoma County. SCT Routes 40 and 53 provide weekday service between the Copeland Transit Mall and the Sonoma Plaza. Service operates Monday through Friday with approximately two- to five-hour headways between 7:00 a.m. and 7:00 p.m.

Routes 44, 48 and 54 provide regional transit service between Petaluma and Santa Rosa, with stops in Rohnert Park, Cotati, and Penngrove. All routes stop at the Copeland Transit Mall and operate Monday through Friday with approximately 30-minute to one-hour headways between 5:20 a.m. and 10:29 p.m. Routes 44 and 48 provide weekend service with approximately one- to two-hour headways between 7:00 a.m. and 10:12 p.m.

Paratransit Service

Dial-a-ride, also known as paratransit, or door-to-door service, is available for those who are unable to independently use the transit system due to a physical or mental disability. Petaluma Transit Paratransit is designed to serve the needs of individuals with disabilities within the City of Petaluma. GGT Paratransit serves the needs of individuals within 0.75 miles of a GGT regional bus route stop. SCT Paratransit serves the needs of individuals with disabilities within the City of Petaluma and the greater Sonoma County area.

SMART

The Downtown Petaluma SMART Station is located approximately 0.40 miles north of the project site, and while not within the one-quarter mile walking distance typically considered “convenient,” this station is within an acceptable walking distance for most people. The SMART Train provides service between the Sonoma County Airport and Larkspur, with stops in Santa Rosa, Rohnert Park, Cotati, Petaluma, Novato, and San Rafael. Weekday service operates with approximately 30-minute to one-hour headways between 4:30 a.m. and 9:46 p.m. Weekend service operates with one- to three-hour headways between 7:35 a.m. and 7:56 p.m.

Vehicle Capacity Analysis

Intersection Level of Service Methodologies

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

The study intersections were analyzed using methodologies published in the *Highway Capacity Manual (HCM)*, Transportation Research Board, 6th Edition, 2018. This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle.

All four of the study intersections are controlled by a traffic signal and were evaluated using the signalized methodology from the HCM. This methodology is based on factors including traffic volumes, green time for each movement, phasing, whether the signals are coordinated or not, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology. For purposes of this study, delays were calculated using signal timing obtained from the City of Petaluma.

The ranges of delay associated with the various levels of service are indicated in Table 3.

Table 3 – Signalized Intersection Level of Service Criteria

LOS A	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.
LOS B	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.
LOS C	Delay of 20 to 35 seconds. The number of vehicles stopping is substantial, although many still pass through without stopping.
LOS D	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.
LOS E	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop, and drivers consider the delay excessive.
LOS F	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.

Reference: *Highway Capacity Manual*, Transportation Research Board, 6th Edition, 2018

Traffic Operation Standards

City of Petaluma

The *Petaluma General Plan 2025* has an adopted Level of Service (LOS) standard for streets that indicates the minimum acceptable operation is LOS D, with the following criteria for motor vehicle circulation:

Policy 5-P-10 – *Maintain an intersection level of service (LOS) standard for motor vehicle circulation that ensures efficient traffic flow and supports multi-modal mobility goals. LOS should be maintained at Level D or better for motor vehicles due to traffic from any development project.*

With the current General Plan, the City is shifting toward a multimodal emphasis and LOS standard. “A multimodal analysis that, in addition to motor vehicles, takes into consideration the overall mobility and conditions for non-auto road users (i.e., bicycles and pedestrians) is highly encouraged.” The Community Character Element of the General Plan also contains circulation-related objectives and policies. This element directs that pedestrian and

bicycle circulation be integrated into street designs and improvements. It also states that the amount of paving and the apparent width of streets should be reduced where possible.

Per the General Plan, the project would be considered responsible for intersection improvements if it causes the average delay at an intersection already operating or expected to operate at LOS D or E to deteriorate to the next lower level of service.

Existing Conditions

The Existing Conditions scenario provides an evaluation of current operation based on existing traffic volumes during the weekday p.m. peak period. This condition does not include project-generated traffic volumes. Peak hour traffic volumes were previously collected in May and August of 2019 as well as October of 2021. Previous versions of this traffic study used the 2019 data since the volumes were higher than the 2021 counts. For this effort, transportation analytics obtained from the Streetlight Data platform were acquired for the segment of Petaluma Boulevard between B Street and C Street along the hotel frontage, when comparing the 2023 Streetlight traffic volume data vs. the 2019 volumes, it was found that peak hour traffic volumes were two percent higher in 2023 compared to 2019. Therefore, the 2019 intersection turning movement volumes were factored up by two percent to represent 2023 conditions for this analysis.

Under existing conditions, the study intersections are all operating acceptably at LOS C or D. A summary of the intersection level of service calculations is contained in Table 4, and copies of the Level of Service calculations are provided in Appendix B. Existing traffic volumes are shown in Figure 2.

Table 4 – Existing PM Peak Hour Intersection Levels of Service

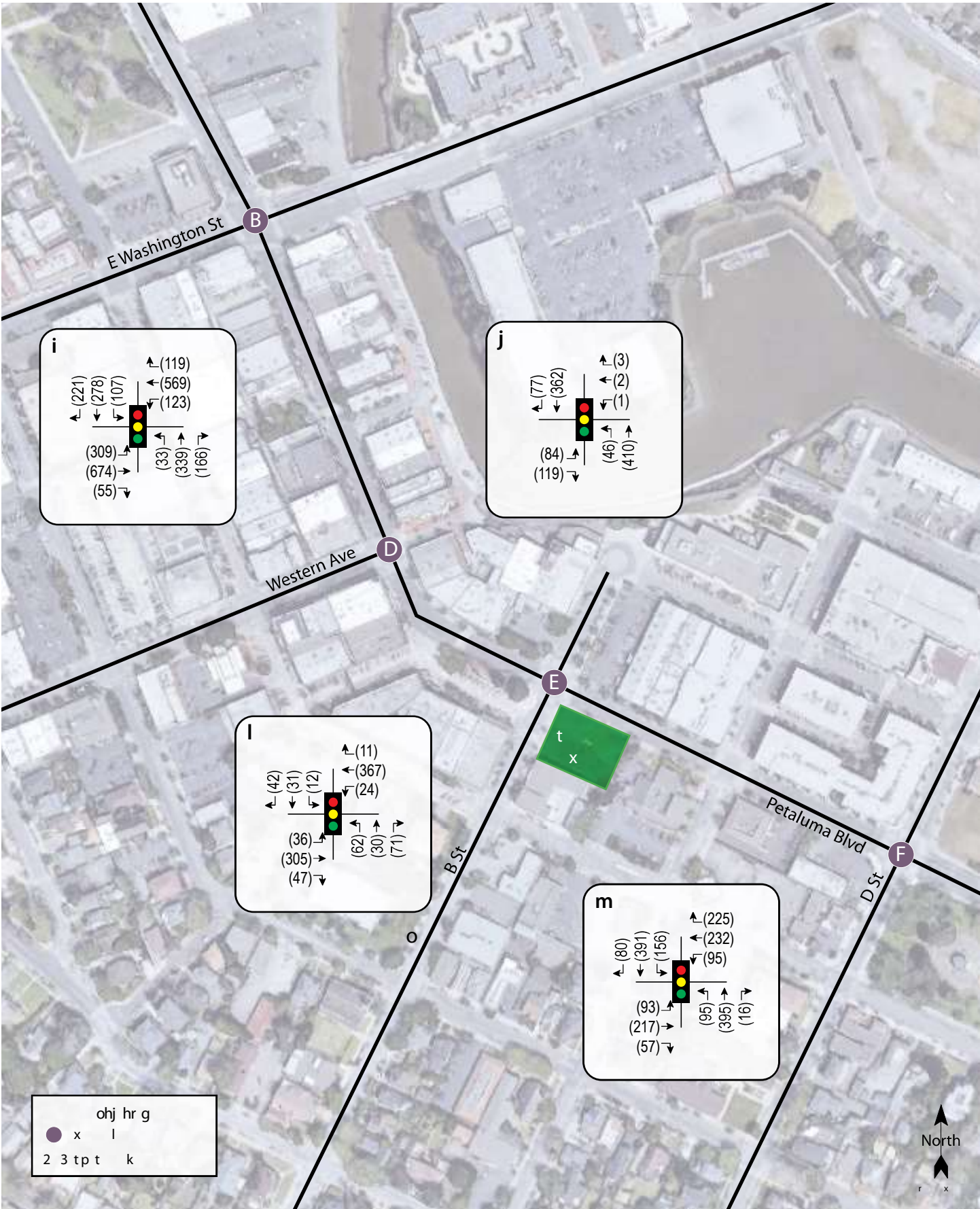
Study Intersection	PM Peak	
	Delay	LOS
1. Petaluma Blvd/E Washington St	44.3	D
2. Petaluma Blvd/Western Ave	31.7	C
3. Petaluma Blvd/B St	28.9	C
4. Petaluma Blvd/D St	53.8	D

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service

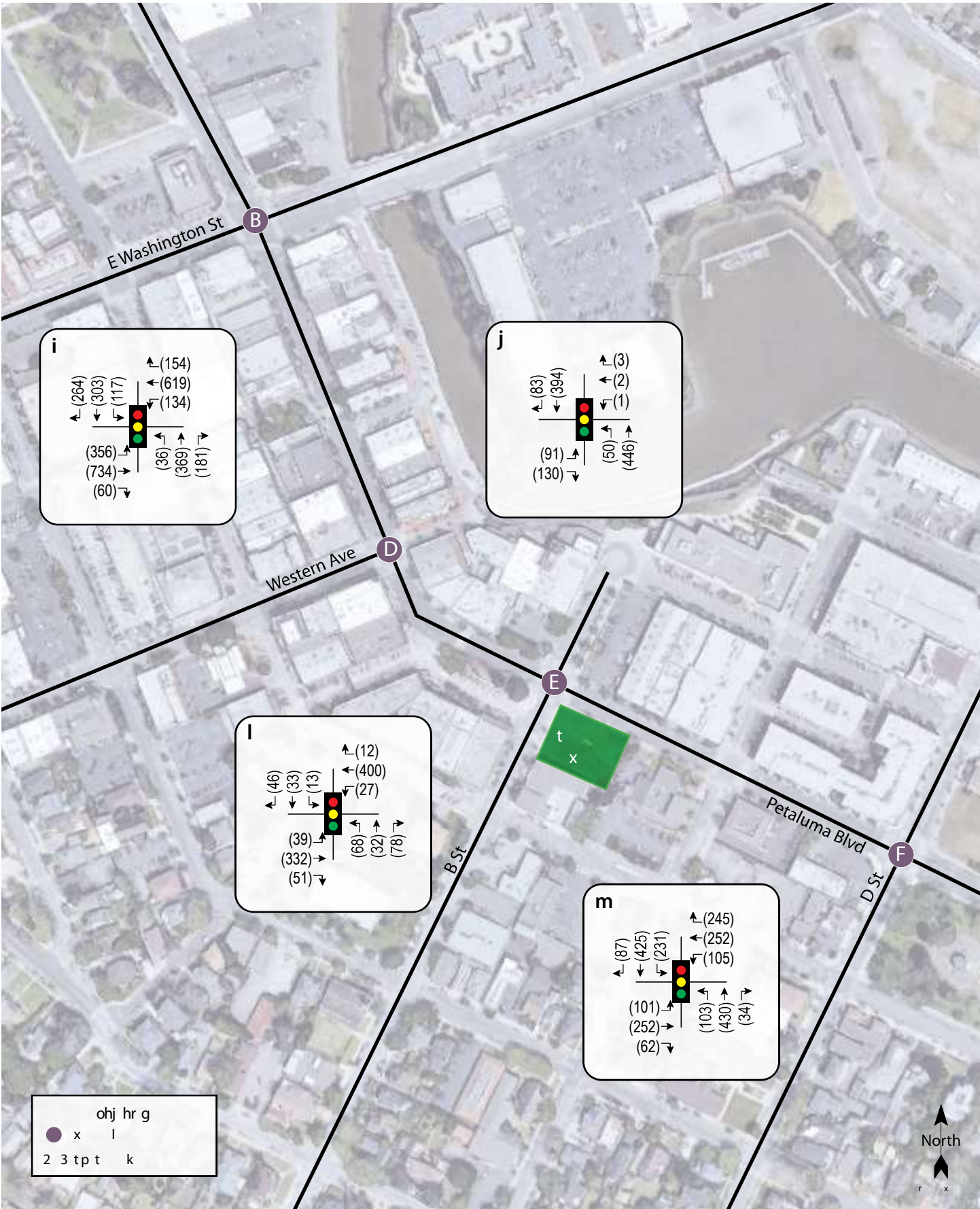
Future Conditions

Segment volumes for the horizon year of 2040 were obtained from the County’s gravity demand model, maintained by the Sonoma County Transportation Authority (SCTA), and translated to weekday p.m. peak hour turning movement volumes at the study intersections using the “Furness” method. The Furness method is an iterative process that employs existing turning movement data, existing link volumes and future link volumes to project likely turning future movement volumes at intersections. Because the County’s model does not project link volumes along B Street and projects a low future growth, a one-half percent per year growth was applied as the floor, or minimum anticipated increase in traffic volumes where model volumes were lower.

Under the anticipated Future volumes, operation at Petaluma Boulevard South/B Street would deteriorate from LOS C to LOS D, but the intersection would continue operating acceptably. Petaluma Boulevard/East Washington Street and Petaluma Boulevard/Western Avenue would operate at LOS D during the study period; it is noted that timing was optimized to match anticipated conditions in the *Petaluma General Plan 2025 Draft Environmental Impact Report* (DEIR), 2006, and since timing would reasonably be expected to change in the future as volumes change. Petaluma Boulevard/D Street would be expected to operate unacceptably at LOS E in the future p.m. peak hour, which is consistent with the *Petaluma General Plan 2025 DEIR*. Future volumes are shown in Figure 3 and operating conditions are summarized in Table 5.



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Table 5 – Future PM Peak Hour Intersection Levels of Service

Study Intersection	PM Peak	
	Delay	LOS
1. Petaluma Blvd/E Washington St	48.4	D
2. Petaluma Blvd/Western Ave	36.2	D
3. Petaluma Blvd/B St	36.8	D
4. Petaluma Blvd/D St	56.9	E

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; **Bold** text = deficient operation

Project Description

The proposed project is a new 93-guestroom boutique hotel at 2 Petaluma Boulevard South in the City of Petaluma. Additionally, a restaurant with 3,125 square feet of indoor dining on the first floor and a rooftop bar/restaurant with 1,269 square feet of outdoor dining is proposed for both guest and public use. The rooftop bar includes a total space of 5,600 square feet for events. For the purposes of this analysis, vehicle trips for the restaurant space were based on 3,125 square feet plus 1,269 square feet for a total of 4,394 square feet.

All parking at the hotel would be valet except for employees. There are 54 parking spaces proposed below ground-level plus two below-level loading spaces and 20 spaces have been secured at the existing parking structure located at 149 C Street in the Theatre District. There would also be three valet parking spots in front of the hotel on Petaluma Blvd. All the guest parking would be through a valet service which would occur on Petaluma Boulevard South along the project frontage. Employees would self-park and would be allowed to park in the underground lot if spaces are available. The project would include 26 full-time employees, including the four valets during peak operation.

The proposed project site plan is shown in Figure 4.

Trip Generation

The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 10th Edition, 2017 for “Hotel” (ITE LU #310) in a city center-core area since the proposed project would be located within the core of City of Petaluma’s downtown area. (Note: Trip rates for a hotel in a city center-core area were lower in the 11th Edition compared to the 10th Edition, so the more conservative 10th Edition rates were used.) Since the restaurant is open to the public, the land use “Quality Restaurant” (ITE LU #931) was used for both the indoor and outdoor dining space. It should be noted that the Hotel land use already assumes supporting facilities such as restaurants. However, due to the size of the proposed restaurant component and the accessibility and potential marketing towards non-guests, a separate restaurant trip generation was applied.

Internal Capture Trips

The *Trip Generation Handbook* includes data and methodologies that can be applied to determine the proportion of internal trips that may occur within a development area that includes a variety of land uses. Internal trips occur at mixed-use developments, and in the case of the restaurant would consist of hotel guests patronizing adjacent restaurant uses, as well as hotel employees patronizing the restaurant. These trips would be made by walking so would not affect the adjacent street network. A 12 percent internal capture reduction was applied to the trip generation of the use with the lower total trip generation (in this case the hotel) and the opposite ends of these trips were then deducted from the restaurant trip generation to account for internal trips and restaurant trips already included in base Hotel rate.

Total Project Trip Generation

All overnight hotel guests would be required to use the valet service for on-site underground parking. Valet service staff would drive guest vehicles from the valet drop-off at the project frontage on Petaluma Boulevard to either the site's underground parking off B Street or to the existing parking structure at 149 C Street in the Theatre District. Therefore, valet staff would drive guest vehicles around the block through Petaluma Boulevard/C Street, and then park vehicles underground off B Street or depart the valet spaces and turn left onto C Street towards the parking structure and return the vehicle by crossing Petaluma Boulevard at C Street then travelling around the block to return to the guests. These routes would add traffic to the Petaluma Boulevard/B Street intersection with the drop-off/pick-up activity of vehicles.

To account for the vehicle trips related to the valet service, it was assumed that 25 percent of the base project sub-total would be overnight guest vehicles using the valet service at the lot. This is based on the assumed percentage of overnight guest trips versus employees, restaurant patrons, delivery, etc.

Based on application of these assumptions, the proposed project is expected to generate an average of 774 vehicle trips per day, including 63 trips during the p.m. peak hour. With the addition of valet trips, the total proposed project vehicle trip generation would be 966 trips daily, with 79 trips during the evening peak hour. These results are summarized in Table 6.

Land Use	Units	Daily		PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out
Base Project Trips							
Hotel	93 rooms	5.49	511	0.40	37	18	19
<i>Internal Capture</i>		-12%	-61	-12%	-4	-2	-2
Quality Restaurant	4.39 ksf	83.84	368	7.80	34	23	11
<i>Internal Capture**</i>			-44		-4	-2	-2
Base Project Trips Sub-Total			774		63	37	26
Valet Trips							
Valet Percentage*		25%	192	25%	16	9	7
Total			966		79	46	33

Note: ksf = 1,000 square feet; *Valet Percentage of Base Project Trips Sub-Total; ** Opposite end of internally captured trips generated by the restaurant

Trip Distribution

Base Project Trip Distribution

The pattern used to allocate new project trips to/from the street network was determined by reviewing possible paths of travel between anticipated tourist attractors (i.e., the coast, wineries north of Petaluma, the Sonoma and Oakland/San Francisco Airports). The applied distribution assumptions and resulting trips are shown in Table 7.

Table 7 – Base Project Trip Distribution Assumptions

Route	Percent	Daily Trips	PM Trips
To/From East via E Washington St	30%	233	19
To/From West via B St	10%	77	6
To/From South via Petaluma Blvd S	50%	387	32
To/From North via Petaluma Blvd S	10%	77	6
TOTAL	100%	774	63

Valet Trip Distribution

As proposed, guests would drop off vehicle at the project frontage on Petaluma Boulevard North, and valet employees would either drive the vehicle around the block clockwise and then enter the valet lot via the driveway on B Street or turn left onto C Street towards and Theatre District parking structure then return via C Street to 4th Street to B Street. Both the project and valet trip routes are shown in Figure 5.

Vehicle Miles Traveled

The Vehicle Miles Traveled (VMT) associated with a project are the basis for determining traffic impacts under CEQA. The City of Petaluma identifies VMT significance thresholds and screening criteria in the *Senate Bill 743 Vehicle Miles Traveled Implementation Guidelines*, Fehr & Peers, July 2021.

CEQA allows for the use of screening criteria to identify certain types of projects that can be expected to cause a less-than-significant impact without needing to conduct a detailed analysis (CEQA Guidelines sections 15063(c)(3)(C), 15128, and the environmental checklist included in CEQA Appendix G). In Petaluma’s *Senate Bill 743 Vehicle Miles Traveled Implementation Guidelines*, one such screening parameter pertains to projects in proximity to a major transit stop, indicating that development projects within one-half mile of the Downtown Petaluma SMART station may generally be presumed to have a less than significant VMT impact. In addition to being within the defined area, projects must not: have a Floor Area Ratio (FAR) of less than 0.75, include more parking than required by the City, be inconsistent with Plan Bay Area, or replace affordable residential units.

The proposed hotel is approximately 0.4 miles from the Downtown Petaluma SMART rail station and would be accessible to the station by both walking and bicycling. The project’s FAR exceeds 0.75 and the proposed parking supply would not exceed the City’s minimum requirements. The project would not be inconsistent with Plan Bay Area or replace affordable residential units. As such, the project would meet all requirements for VMT screening, and may be presumed to have a less-than-significant VMT impact.

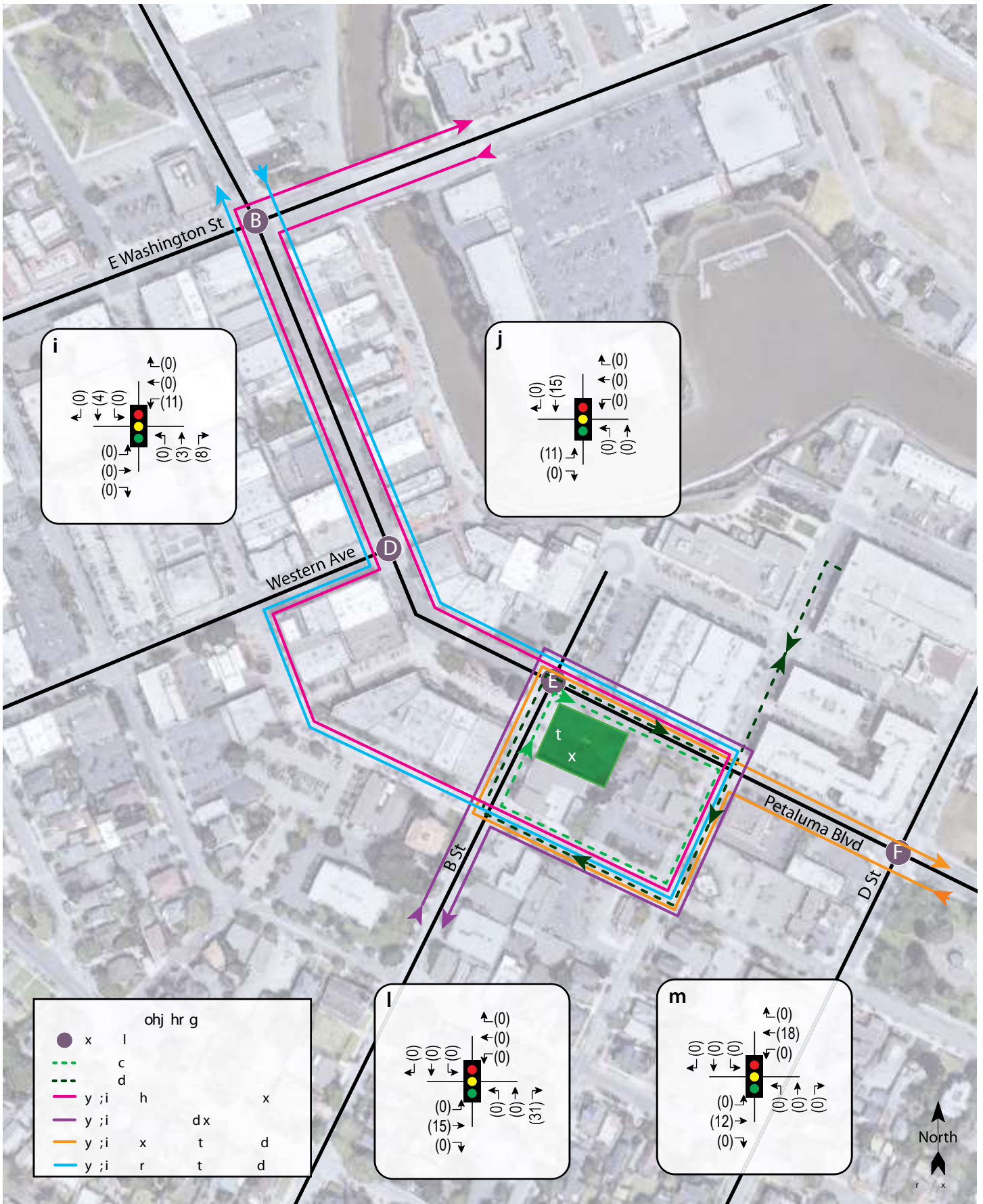
Finding – Based on the site’s proximity to the Downtown Petaluma SMART station and application of screening criteria established by the City, the project can be presumed to have a less-than-significant impact on VMT.

Supplemental Information

As indicated above, the project qualifies for VMT screening criteria established by the City of Petaluma and may be presumed to have a less-than-significant VMT impact. In addition to the site’s proximity to SMART, there are several additional factors that support a less-than-significant finding, as described below.

Proximity to Bus Transit

The hotel is located one block from the downtown transit hub on 4th Street and approximately 0.3 miles from the Copeland bus transit mall, both of which provide additional bus transit options to the hotel’s employees, customers, and guests that further reduce the project’s VMT potential.



BHME: I;DE

Regional Shifts in Visitor/Guest VMT

At a regional level, such as measured at a Countywide or Bay Area geography, the addition of a new hotel would likely have similar effects to those shown to occur when adding new non-regional retail uses, in that guests of the new hotel would more than likely have simply stayed at a different lodging location if the new hotel did not exist (similar to retail uses, where new stores generally result in a redistribution of shopping trips rather than generation of entirely new trips). In other words, adding new hotel rooms does not necessarily change the overall demand for lodging in the region (such as the total numbers of tourists and business travelers), but instead changes the distribution of where those hotel stays occur. As such, the vehicle miles traveled associated with hotel guests can often be expected to result in a net zero change, or even a reduction in vehicle miles traveled if the new hotel is located in an area where there is an unmet lodging demand that is currently being served by more distant hotels (such as, for example, guests currently wanting to stay in downtown Petaluma but having to instead stay at locations further from downtown, or a hotel in Novato or Rohnert Park).

Low VMT per Employee

The proposed hotel would generate VMT associated with employee travel. The City of Petaluma has established a significance threshold of 18.9 VMT per employee for employment-based uses, which represents a reduction of 16.8 percent below the average regional VMT per employee of 22.7 miles. Based on VMT projections produced by the SCTM\19 regional travel demand model maintained by the Sonoma County Transportation Authority (SCTA), development within the project's traffic analysis zone (TAZ 796) is projected to result in a VMT per employee of 15.5 miles. This falls below the City's significance threshold, indicating that the VMT associated with employee travel would remain less-than-significant even if the project did not qualify for screening.

Intersection Operation

Existing plus Project Conditions

Upon the addition of project-related traffic to the Existing volumes, the study intersections are expected to operate acceptably at the same levels of service as without project trips. These results are summarized in Table 8. Project traffic volumes are shown in Figure 5.

Table 8 – Existing and Existing plus Project PM Peak Hour Intersection Levels of Service

Study Intersection	Existing Conditions		Existing plus Project	
	Delay	LOS	Delay	LOS
1. Petaluma Blvd/E Washington St	44.3	D	45.9	D
2. Petaluma Blvd/Western Ave	31.7	C	34.3	C
3. Petaluma Blvd/B St	28.9	C	30.9	C
4. Petaluma Blvd/D St	53.8	D	53.5	D

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service

It should be noted that with the addition of project-related traffic volumes, average delay at the intersection of Petaluma Boulevard South/D Street would be expected to decrease during the p.m. peak hour. While this is counter-intuitive, this condition occurs when a project adds trips to movements that are currently underutilized or have delays that are below the intersection average, resulting in a better balance between approaches and lower overall average delay. The project adds traffic to the through movement on Petaluma Boulevard South, which has an average delay that is lower than the average for the intersection as a whole, resulting in a slight reduction in the overall average delay. The conclusion could incorrectly be drawn that the project actually improves operation based on this data alone; however, it is more appropriate to conclude that the project trips

are expected to make use of excess capacity, so drivers will experience little, if any, change in conditions as a result of the project.

Finding – The study intersections are expected to continue operating acceptably at the same levels of service upon the addition of project-generated traffic.

Future plus Project Conditions

Upon the addition of project-generated traffic to the anticipated Future volumes, the study intersections would continue operating at the same levels of service as without project volumes.

According to the General Plan, while Petaluma Boulevard/D Street is expected to operate unacceptably, since the project would not cause the intersection to deteriorate to a worse level, LOS F, the project’s effect on operation would be considered acceptable. The Future plus Project operating conditions are summarized in Table 9.

Table 9 – Future and Future plus Project PM Peak Hour Intersection Levels of Service				
Study Intersection	Future Conditions		Future plus Project	
	Delay	LOS	Delay	LOS
1. Petaluma Blvd/E Washington St	48.4	D	48.9	D
2. Petaluma Blvd/Western Ave	36.2	D	38.0	D
3. Petaluma Blvd/B St	36.8	D	38.3	D
4. Petaluma Blvd/D St	56.9	E	56.8	E

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; **Bold** text = deficient operation

Similar to the Existing Conditions plus Project scenario, the project adds trips to the through movements on Petaluma Boulevard South at Petaluma Boulevard South/D Street, which results in a decrease of overall delay. As stated previously, in the *Petaluma General Plan 2025 DEIR*, the intersection Petaluma Boulevard/D Street is anticipated to operate unacceptably at LOS E, and since the project would not cause the intersection to deteriorate to LOS F, the project would be acceptable under the General Plan standards.

Finding – The study intersections would be expected to continue operating at the same LOS with or without the project traffic added. Because there are no deteriorations in service level, the minor increase in delay due to the project would be acceptable under the standards applied.

Alternative Modes

Pedestrian Facilities

Given the proximity of the downtown surrounding the site, it is reasonable to assume that some project patrons and employees will want to walk, bicycle, and/or use transit between the project site and the surrounding area.

Sidewalks exist along the project frontages of Petaluma Boulevard South and B Street. Based on the proposed site plan, the existing driveway curb cut along the project frontage on Petaluma Boulevard South would be eliminated to provide a level sidewalk.

The planned driveway to the parking garage below the street level is in very close proximity with the existing crosswalk that traverses B Street and provides a connection to the Mystic Theater commercial row. This design may present vehicle/pedestrian conflicts. There are three options for addressing this issue:

- The crosswalk can be moved slightly towards Petaluma Boulevard South, thus reducing any conflicting driveway-related movements with pedestrians. The relocation of the crosswalk would require an extension of the curb on the north side of B Street to receive the other end of the crosswalk. The curb extension would “shadow” the existing diagonal parking located in the Mystic Theater commercial row. This new crosswalk location may require that the existing streetlight on the project side of B Street be moved to allow for a curb ramp. The street trees may also need to be located in such a way as to keep a minimum distance clear of the curb ramp per ADA guidelines. It is understood that as part of the project, the sidewalk frontage along the project will be removed and reconstructed. As part of this work, the location of the streetlights and street trees should be considered with the shifting of the crosswalk.
- A warning system consisting of sound and light to alert pedestrians to vehicles exiting the garage could be added.
- The crosswalk could be removed as there is the existing signalized crosswalk at the intersection with Petaluma Boulevard only 70 feet to the north. It is understood that the City is already considering removal of this crosswalk.

Finding – Pedestrian facilities serving the project site are expected to be adequate to meet demand; however, the proposed driveway may present vehicle/pedestrian conflicts with the existing crosswalk on B Street.

Recommendation – At the discretion of the City Engineer, either a) the B Street crosswalk should be moved slightly towards Petaluma Boulevard South with a new curb extension added on the north side of B Street to receive the relocated crosswalk or b) a warning system consisting of sound and light warnings to alert pedestrians of vehicles exiting the garage could be added or c) the crosswalk be removed.

Bicycle Facilities

Existing bicycle facilities, including bike routes on Petaluma Boulevard, together with shared use of minor streets provide adequate access for bicyclists.

Finding – Bicycle facilities serving the project site are adequate.

Transit

Existing transit routes are adequate to accommodate project-generated transit trips. Existing stops are within an acceptable walking distance of the site. It is understood that as part of the proposed project, City staff are requiring that a portion of the project frontage on Petaluma Boulevard South be allocated for a future Petaluma Transit bus stop.

Finding – Transit facilities serving the project site are adequate.

Access and Circulation

Site Access

The two-way driveway and ramp to access the below grade parking would be constructed on B Street approximately 100 feet south and west of the intersection with Petaluma Boulevard South. The driveway would be located at the southern terminus of the existing crosswalk on B Street. Impacts and mitigation to the crosswalk were discussed previously. Because of the low traffic volumes on B Street, movements into this driveway would not be expected to result in any substantial conflicts.

Exiting vehicles would, however, need to yield to any vehicles on the B Street approach. There is adequate sight distance in all directions which would allow motorists to access B Street in either direction.

Queuing Conditions

For the valet service, there are three allocated on-street spaces at the project frontage on Petaluma Boulevard South for vehicle pick-up/drop-off. A queuing evaluation was completed to determine if the capacity of the three on-street valet spots would be adequate given the anticipated number of guests dropping-off or picking-up vehicles at the site. It is assumed that between the four valet employees at peak operation, there would be a service rate of 32 vehicles per hour for incoming and outgoing vehicles using the valet service. With an assumed 16 inbound and outbound trips during the peak hour using the valet service, there would be an approximate 6.3 percent probability that there would be a queue of three vehicles in the pick-up/drop-off on-street spaces on Petaluma Boulevard South. Additionally, there is a 3.1 percent or less probability that more than three vehicles would queue on Petaluma Boulevard South for the valet service, so it is unlikely the queue would ever extend past the allocated on-street spots. The results of the queuing evaluation worksheets are provided in Appendix C.

It is anticipated that a portion of the hotel guests or restaurant patrons will arrive at the site via taxi or rideshare services such as Uber or Lyft, thus not using the valet service. Additionally, project employees would self-park within the below-ground parking lot and not queue on Petaluma Boulevard South. To ensure that there are not more than three drivers waiting to queue in the valet spaces at one time, the applicant should develop a valet service plan.

Finding – The proposed valet service would be adequate to accommodate the assumed peak valet demand. There is a 3.1 percent probability that the vehicle queue on Petaluma Boulevard South would exceed three spaces.

Recommendation – The applicant should develop a valet service plan and monitor ongoing activities once the service is operational to ensure the on-street queue does not exceed three vehicles.

Parking

The project was analyzed to determine whether the proposed parking supply would be sufficient for the anticipated parking demand. The project site as proposed would provide a total of 56 parking spaces in a below-ground garage and 20 spaces will be utilized from the existing parking structure at 149 C Street. The provided parking would mainly be for hotel guests and employees; however, non-hotel guests visiting the restaurant could also use the provided parking if there are available spaces. It is assumed that a majority of the restaurant guests would also be hotel guests, thus not generating additional parking demand. The addition of the project driveway would result in the elimination of one parking space from the south side of B Street.

The City of Petaluma's parking supply requirements are contained in the *Implementing Zoning Ordinance (IZO)*, Chapter 11; Parking and Facilities, Off-Street. The parking requirement for the hotel at this location is a total of 54 spaces with the project providing 76 off-street spaces when including the 20 spaces in the Theatre District. The restaurant portion's parking requirement was considered; however, it is assumed that the hotel land use includes some level of restaurant activity so estimation of the use's individual parking requirement would be overly conservative and not reflect anticipated parking activity. As stated previously, it is anticipated that a portion of the hotel guests or restaurant patrons will arrive via taxi or rideshare services, thus not generating need for a parking space. Similarly, since the site is located within the Petaluma downtown it is assumed that restaurant patrons would also visit other places within the downtown and may park elsewhere and then walk to the site.

Finding – The proposed parking supply would be adequate to meet City requirements.

Bicycle Parking

Short-term bicycle parking would be provided at the site by bike racks to be located on the project frontage on Petaluma Boulevard South, though the number of spaces to be provided is not specified on the site plan. Based on the City's requirements, bicycle parking is required at 10 percent of the total required automobile parking spaces. Based on the City's required parking spaces for the proposed project of 76 spaces, eight bicycle parking spaces would be required on-site.

Finding – The site plan should be updated to indicate eight bicycle parking spaces on-site.

Conclusions and Recommendations

Conclusions

- The project as proposed would be anticipated to generate an average of 966 daily trips, including 79 trips during the p.m. peak hour.
- The intersections of Petaluma Boulevard/Western Avenue, Petaluma Boulevard/B Street, and Petaluma Boulevard/D Street experienced collisions at rates below the statewide average for similar facilities.
- The intersection of Petaluma Boulevard/E Washington Street had a collision rate above the statewide average for similar facilities.
- Based on the site's proximity to the Downtown Petaluma SMART station and application of screening criteria established by the City, the project can be presumed to have a less-than-significant impact on VMT.
- Under existing conditions, the study intersections are operating acceptably at LOS D or better during the weekday p.m. peak hour. With project traffic added the study intersections would be expected to continue operating at the same levels of service as without.
- While Petaluma Boulevard/D Street is projected to operate unacceptably at LOS E under future conditions, the other three study intersections are expected to be operating acceptably at LOS D during the weekday p.m. peak hour. The addition of project-generated trips would be expected to result in nominal increases in overall average delay and all intersections would continue operating at the same levels of service, indicating an acceptable impact on traffic operation.
- The existing bicycle lanes on Petaluma Boulevard, along with planned improvements within the area, will be adequate for anticipated demand. Existing pedestrian and transit facilities are adequate; however, construction of the project driveway on B Street could conflict with the existing crosswalk between the project site and the Mystic Theatre commercial row.
- Sight distance at the project driveway is adequate.
- Based on the anticipated arrival and service rate for the valet service, there is a 3.1 percent chance that more than the three vehicles that could be accommodated in the proposed loading zone would queue on Petaluma Boulevard South.
- The proposed parking supply would be adequate based on the City requirements a hotel land use at this location.

Recommendations

- The applicant should either redesign the crosswalk on B Street at the project driveway to reduce conflict between project vehicles and pedestrians crossing at this location, construct a warning system to alert pedestrians of vehicles existing the project garage, or the City should remove the crosswalk.
- Reflective backing should be added to the signal heads at the intersection of Petaluma Boulevard/E Washington Street.
- It is recommended that landscaping or signage for the project be located outside of the driver's vision triangle at the project driveway to maintain adequate sight lines.
- The applicant should include a minimum of eight bicycle parking spaces on-site.

Study Participants and References

Study Participants

Principal in Charge	Steve Weinberger, PE, PTOE
VMT Review	Zack Matley, AICP
Technical Assistance	William Andrews
Editing/Formatting	Jessica Bender
Quality Control	Dalene J. Whitlock, PE, PTOE

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PET169-3



Appendix A

Collision Rate Calculations





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Intersection Collision Rate Worksheet

Petaluma Appellation Hotel TIS

Intersection # 1: Petaluma Boulevard & Washington Street

Date of Count: Thursday, August 29, 2019

Number of Collisions: 23

Number of Injuries: 12

Number of Fatalities: 0

Average Daily Traffic (ADT): 29900

Start Date: January 1, 2018

End Date: December 31, 2022

Number of Years: 5

Intersection Type: Four-Legged

Control Type: Signals

Area: Urban

$$\text{Collision Rate} = \frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times \text{Days per Year} \times \text{Number of Years}}$$

$$\text{Collision Rate} = \frac{23}{29,900} \times \frac{1,000,000}{365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	0.42 c/mve	0.0%	52.2%
Statewide Average*	0.33 c/mve	0.6%	47.7%

Notes

ADT = average daily total vehicles entering intersection

c/mve = collisions per million vehicles entering intersection

* 2019 Collision Data on California State Highways, Caltrans

Intersection # 2: Petaluma Boulevard & Western Avenue

Date of Count: Thursday, August 29, 2019

Number of Collisions: 6

Number of Injuries: 3

Number of Fatalities: 0

Average Daily Traffic (ADT): 11000

Start Date: January 1, 2018

End Date: December 31, 2022

Number of Years: 5

Intersection Type: Four-Legged

Control Type: Signals

Area: Urban

$$\text{Collision Rate} = \frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times \text{Days per Year} \times \text{Number of Years}}$$

$$\text{Collision Rate} = \frac{6}{11,000} \times \frac{1,000,000}{365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	0.30 c/mve	0.0%	50.0%
Statewide Average*	0.33 c/mve	0.6%	47.7%

Notes

ADT = average daily total vehicles entering intersection

c/mve = collisions per million vehicles entering intersection

* 2019 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Worksheet

Petaluma Appellation Hotel TIS

Intersection # 3: Petaluma Boulevard & B Street

Date of Count: Thursday, August 29, 2019

Number of Collisions: 4
Number of Injuries: 2
Number of Fatalities: 0
Average Daily Traffic (ADT): 10400
Start Date: January 1, 2018
End Date: December 31, 2022
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Urban

$$\text{Collision Rate} = \frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times \text{Days per Year} \times \text{Number of Years}}$$

$$\text{Collision Rate} = \frac{4}{10,400} \times \frac{1,000,000}{365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	0.21 c/mve	0.0%	50.0%
Statewide Average*	0.33 c/mve	0.6%	47.7%

Notes

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2019 Collision Data on California State Highways, Caltrans

Intersection # 4: Petaluma Boulevard & D Street

Date of Count: Wednesday, May 29, 2019

Number of Collisions: 12
Number of Injuries: 6
Number of Fatalities: 0
Average Daily Traffic (ADT): 20500
Start Date: January 1, 2018
End Date: December 31, 2022
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Urban

$$\text{Collision Rate} = \frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times \text{Days per Year} \times \text{Number of Years}}$$

$$\text{Collision Rate} = \frac{12}{20,500} \times \frac{1,000,000}{365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	0.32 c/mve	0.0%	50.0%
Statewide Average*	0.33 c/mve	0.6%	47.7%

Notes

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2019 Collision Data on California State Highways, Caltrans

Appendix B

Intersection Level of Service Calculations



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Intersection Level Of Service Report
Intersection 1: Petaluma Blvd/Washington St

Control Type:	Signalized	Delay (sec / veh):	44.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.724

Intersection Setup

Name	Petaluma Blvd			Petaluma Blvd			Washington St			Washington St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔↔			↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	75.00	100.00	95.00	120.00	100.00	110.00	105.00	100.00	100.00	310.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Petaluma Blvd			Petaluma Blvd			Washington St			Washington St		
Base Volume Input [veh/h]	33	339	166	107	278	221	309	674	55	123	569	119
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	26	0	0	18	0	0	4	0	0	13
Total Hourly Volume [veh/h]	33	339	140	107	278	203	309	674	51	123	569	106
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	91	38	29	75	55	83	181	14	33	153	28
Total Analysis Volume [veh/h]	35	365	151	115	299	218	332	725	55	132	612	114
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street		9			14			6			12	
v_di, Inbound Pedestrian Volume crossing major street		6			12			9			14	
v_co, Outbound Pedestrian Volume crossing minor street		8			7			4			10	
v_ci, Inbound Pedestrian Volume crossing minor street		10			4			7			8	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		3			4			3			3	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	125
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	75.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Overla	Protect	Permis	Overla	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	3	1	6	7	7	4	0	3	8	0
Auxiliary Signal Groups			2,3			6,7						
Lead / Lag	Lag	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	4	8	4	4	8	4	4	10	0	4	11	0
Maximum Green [s]	30	30	30	30	30	30	30	30	0	30	30	0
Amber [s]	3.0	3.6	3.0	3.0	3.6	3.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.2	0.0	1.0	1.6	0.0
Split [s]	32	31	14	38	37	15	15	41	0	14	40	0
Vehicle Extension [s]	2.0	4.0	2.0	2.0	4.0	2.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	17	0	0	19	0	0	21	0	0	27	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.6	2.0	2.0	2.7	2.0	2.0	2.8	0.0	2.0	3.2	0.0
Minimum Recall	No	Yes	No	No	Yes	No	No	No		No	No	
Maximum Recall	No	No	No	No	No	No	No	No		No	No	
Pedestrian Recall	No	No	No	No	No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	125	125	125	125	125	125	125	125	125	125	125	125
L, Total Lost Time per Cycle [s]	4.00	4.60	4.00	4.00	4.70	4.70	4.00	4.80	4.80	4.00	5.20	5.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.60	0.00	2.00	2.70	0.00	2.00	2.80	2.80	2.00	3.20	3.20
g_i, Effective Green Time [s]	3	35	50	11	42	75	28	52	52	10	33	33
g / C, Green / Cycle	0.03	0.28	0.40	0.09	0.34	0.60	0.23	0.41	0.41	0.08	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.02	0.22	0.11	0.07	0.18	0.15	0.21	0.23	0.24	0.08	0.22	0.23
s, saturation flow rate [veh/h]	1603	1683	1401	1603	1683	1414	1603	1683	1630	1603	1683	1549
c, Capacity [veh/h]	44	473	557	138	570	844	362	695	674	129	446	410
d1, Uniform Delay [s]	60.46	41.30	25.32	56.23	33.24	12.00	47.27	28.13	28.19	57.49	43.42	43.77
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.19	0.33	0.33	0.04	0.15	0.15
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.36	11.61	1.20	4.84	3.42	0.74	14.92	2.22	2.36	28.12	5.90	7.47
d3, Initial Queue Delay [s]	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.77	0.27	0.83	0.52	0.26	0.92	0.57	0.57	1.02	0.84	0.86
d, Delay for Lane Group [s/veh]	71.82	55.09	26.51	61.07	36.66	12.74	62.19	30.35	30.55	85.61	49.32	51.24
Lane Group LOS	E	E	C	E	D	B	E	C	C	F	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.25	11.93	3.27	3.79	7.92	3.09	11.64	9.56	9.37	5.12	11.69	11.31
50th-Percentile Queue Length [ft/ln]	31.32	298.16	81.67	94.72	198.07	77.23	291.04	238.98	234.30	128.08	292.26	282.83
95th-Percentile Queue Length [veh/ln]	2.26	17.59	5.88	6.82	12.54	5.56	17.24	14.63	14.39	8.90	17.30	16.83
95th-Percentile Queue Length [ft/ln]	56.38	439.76	147.00	170.50	313.47	139.02	430.94	365.75	359.81	222.49	432.44	420.73

Movement, Approach, & Intersection Results

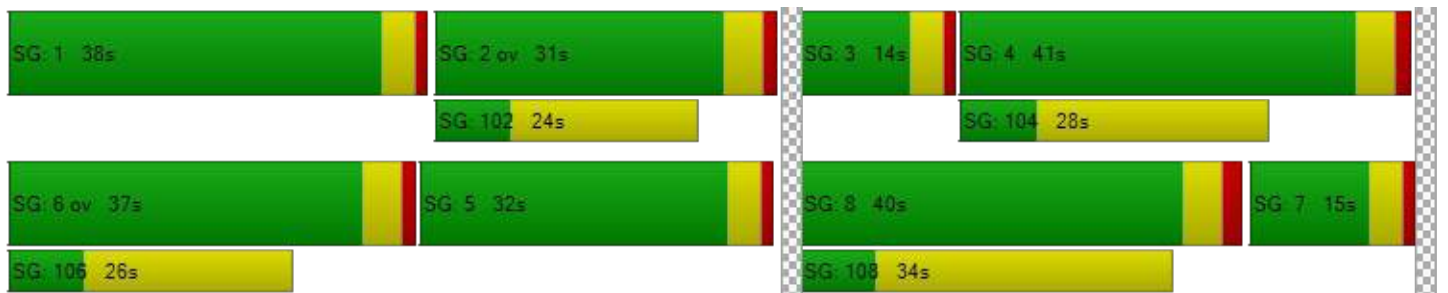
d_M, Delay for Movement [s/veh]	71.82	55.09	26.51	61.07	36.66	12.74	62.19	30.44	30.55	85.61	50.07	51.24
Movement LOS	E	E	C	E	D	B	E	C	C	F	D	D
d_A, Approach Delay [s/veh]	48.32			32.85			39.93			55.69		
Approach LOS	D			C			D			E		
d_I, Intersection Delay [s/veh]	44.27											
Intersection LOS	D											
Intersection V/C	0.724											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	641.88	326.21	631.37	516.84
d_p, Pedestrian Delay [s]	52.00	52.00	52.00	52.00
I_p,int, Pedestrian LOS Score for Intersection	2.401	2.472	2.646	2.641
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	517	579	557
d_b, Bicycle Delay [s]	38.96	34.45	31.60	32.60
I_b,int, Bicycle LOS Score for Intersection	2.512	2.632	2.480	2.278
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Petaluma Blvd/Western Ave

Control Type:	Signalized	Delay (sec / veh):	31.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.437

Intersection Setup

Name	Petaluma Blvd			Petaluma Blvd			Western Ave			Water St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	65.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	85.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Petaluma Blvd			Petaluma Blvd			Western Ave			Water St		
Base Volume Input [veh/h]	46	410	0	0	362	77	84	0	119	1	2	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	5	0	0	62	0	0	3
Total Hourly Volume [veh/h]	46	410	0	0	362	72	84	0	57	1	2	0
Peak Hour Factor	0.9200	0.9200	1.0000	1.0000	0.9200	0.9200	0.9200	1.0000	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	111	0	0	98	20	23	0	15	0	1	0
Total Analysis Volume [veh/h]	50	446	0	0	393	78	91	0	62	1	2	0
Presence of On-Street Parking	No		Yes	No		Yes	No		Yes	No		No
On-Street Parking Maneuver Rate [/h]	0	0	5	0	0	5	0	0	5	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street		7			28			29			33	
v_di, Inbound Pedestrian Volume crossing major street		33			29			28			7	
v_co, Outbound Pedestrian Volume crossing minor street		35			27			39			13	
v_ci, Inbound Pedestrian Volume crossing minor street		39			13			35			27	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		2			2			3			3	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	118
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	12.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	3	8	0	0	4	0	2	0	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lag	-	-	-	-	-
Minimum Green [s]	8	8	0	0	8	0	8	0	0	0	8	0
Maximum Green [s]	20	73	0	0	73	0	39	0	0	0	39	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	3.2	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	1.3	0.0
Split [s]	20	77	0	0	57	0	41	0	0	0	41	0
Vehicle Extension [s]	2.0	4.0	0.0	0.0	4.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0
Walk [s]	0	8	0	0	13	0	8	0	0	0	8	0
Pedestrian Clearance [s]	0	10	0	0	5	0	10	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No		No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes			Yes		No				No	
Maximum Recall	No	No			No		No				No	
Pedestrian Recall	No	No			No		No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	R	C
C, Cycle Length [s]	118	118	118	118	118	118
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.50
g_i, Effective Green Time [s]	45	94	45	16	16	15
g / C, Green / Cycle	0.38	0.80	0.38	0.13	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.03	0.30	0.34	0.07	0.07	0.00
s, saturation flow rate [veh/h]	1603	1473	1403	1318	880	1379
c, Capacity [veh/h]	611	1176	538	190	118	219
d1, Uniform Delay [s]	23.33	3.44	33.83	47.78	46.61	44.81
k, delay calibration	0.50	0.50	0.50	0.04	0.04	0.04
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.26	0.93	17.93	0.69	1.35	0.01
d3, Initial Queue Delay [s]	0.00	0.30	0.97	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.08	0.38	0.88	0.48	0.53	0.01
d, Delay for Lane Group [s/veh]	23.59	4.68	52.73	48.47	47.96	44.82
Lane Group LOS	C	A	D	D	D	D
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.95	2.83	15.14	2.52	1.72	0.08
50th-Percentile Queue Length [ft/ln]	23.83	70.68	378.55	63.04	43.11	1.96
95th-Percentile Queue Length [veh/ln]	1.72	5.09	21.52	4.54	3.10	0.14
95th-Percentile Queue Length [ft/ln]	42.90	127.23	538.09	113.46	77.59	3.53

Movement, Approach, & Intersection Results

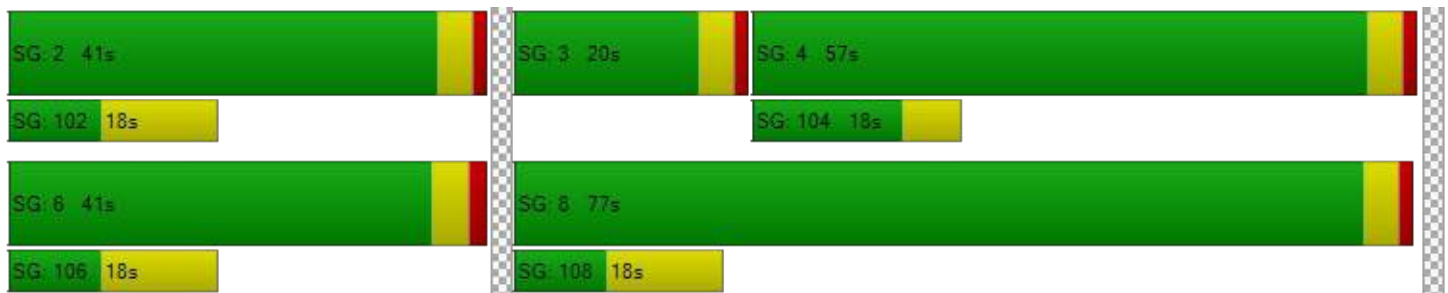
d_M, Delay for Movement [s/veh]	23.59	4.68	0.00	0.00	52.73	52.73	48.47	0.00	47.96	44.82	44.82	44.82
Movement LOS	C	A			D	D	D		D	D	D	D
d_A, Approach Delay [s/veh]	6.58		52.73			48.26			44.82			
Approach LOS	A		D			D			D			
d_I, Intersection Delay [s/veh]	31.72											
Intersection LOS	C											
Intersection V/C	0.437											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	17.0	12.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	162.20	198.70	208.20	197.08
d_p, Pedestrian Delay [s]	47.64	47.64	43.25	47.64
I_p,int, Pedestrian LOS Score for Intersection	2.228	2.274	2.132	1.445
Crosswalk LOS	B	B	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1237	898	627	618
d_b, Bicycle Delay [s]	8.61	17.94	27.87	28.21
I_b,int, Bicycle LOS Score for Intersection	2.378	2.345	1.560	1.570
Bicycle LOS	B	B	A	A

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Petaluma Blvd/B St

Control Type:	Signalized	Delay (sec / veh):	28.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.329

Intersection Setup

Name	B St			B St			Petaluma Blvd			Petaluma Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵			↵			↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	65.00	30.00	100.00	30.00	85.00	100.00	100.00	70.00	100.00	40.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	B St			B St			Petaluma Blvd			Petaluma Blvd		
Base Volume Input [veh/h]	62	30	71	12	31	42	36	305	47	24	367	11
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	30	0	0	14	0	0	6	0	0	0
Total Hourly Volume [veh/h]	62	30	41	12	31	28	36	305	41	24	367	11
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	8	11	3	8	7	9	80	11	6	97	3
Total Analysis Volume [veh/h]	65	32	43	13	33	29	38	321	43	25	386	12
Presence of On-Street Parking	No		Yes	No		No	No		Yes	No		No
On-Street Parking Maneuver Rate [/h]	0	0	5	0	0	0	0	0	5	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street		29			11			5			38	
v_di, Inbound Pedestrian Volume crossing major street		5			38			29			11	
v_co, Outbound Pedestrian Volume crossing minor street		5			12			35			2	
v_ci, Inbound Pedestrian Volume crossing minor street		2			35			12			5	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		4			2			2			2	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	59
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	54.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	8	0	0	8	0	8	9	0	6	9	0
Maximum Green [s]	0	35	0	0	35	0	10	50	0	20	50	0
Amber [s]	0.0	3.0	0.0	0.0	3.2	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.3	0.0	0.0	1.3	0.0	1.0	1.3	0.0	1.0	1.3	0.0
Split [s]	0	28	0	0	28	0	15	16	0	15	16	0
Vehicle Extension [s]	0.0	2.5	0.0	0.0	2.5	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	12	0	0	11	0	0	9	0	0	9	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.3	0.0	0.0	2.5	0.0	2.0	2.3	0.0	2.0	2.3	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	L	C	R
C, Cycle Length [s]	59	59	59	59	59	59	59	59	59	59
L, Total Lost Time per Cycle [s]	4.30	4.30	4.50	4.50	4.50	4.00	4.30	4.00	4.30	4.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.30	2.50	2.50	2.50	2.00	2.30	2.00	2.30	2.30
g_i, Effective Green Time [s]	10	10	10	10	10	18	18	18	18	18
g / C, Green / Cycle	0.17	0.17	0.16	0.16	0.16	0.31	0.31	0.31	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.05	0.06	0.01	0.02	0.02	0.02	0.26	0.02	0.23	0.01
s, saturation flow rate [veh/h]	1293	1297	1175	1683	1198	1603	1426	1603	1683	1287
c, Capacity [veh/h]	231	219	222	279	198	498	438	498	517	395
d1, Uniform Delay [s]	24.01	21.66	24.99	20.99	21.00	14.39	19.07	14.26	18.41	14.31
k, delay calibration	0.08	0.08	0.08	0.08	0.08	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.49	0.68	0.08	0.14	0.25	0.30	16.65	0.19	9.47	0.14
d3, Initial Queue Delay [s]	0.00	4.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.34	0.06	0.12	0.15	0.08	0.83	0.05	0.75	0.03
d, Delay for Lane Group [s/veh]	24.49	26.43	25.07	21.12	21.25	14.69	35.72	14.45	27.88	14.45
Lane Group LOS	C	C	C	C	C	B	D	B	C	B
Critical Lane Group	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.78	0.92	0.17	0.38	0.34	0.38	6.28	0.25	5.72	0.12
50th-Percentile Queue Length [ft/ln]	19.39	22.90	4.19	9.56	8.51	9.44	157.05	6.14	143.07	3.03
95th-Percentile Queue Length [veh/ln]	1.40	1.65	0.30	0.69	0.61	0.68	10.39	0.44	9.65	0.22
95th-Percentile Queue Length [ft/ln]	34.90	41.23	7.53	17.21	15.32	16.99	259.81	11.06	241.15	5.45

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	24.49	26.43	26.43	25.07	21.12	21.25	14.69	35.72	35.72	14.45	27.88	14.45
Movement LOS	C	C	C	C	C	C	B	D	D	B	C	B
d_A, Approach Delay [s/veh]	25.53			21.86			33.73			26.71		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	28.91											
Intersection LOS	C											
Intersection V/C	0.329											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	602.47	732.09	506.56	4598.80
d_p, Pedestrian Delay [s]	19.55	19.55	19.55	19.55
I_p,int, Pedestrian LOS Score for Intersection	2.034	2.162	2.259	2.295
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	803	796	396	396
d_b, Bicycle Delay [s]	10.61	10.71	19.01	19.01
I_b,int, Bicycle LOS Score for Intersection	1.840	1.706	2.233	2.258
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Petaluma Blvd S/D St

Control Type:	Signalized	Delay (sec / veh):	53.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.550

Intersection Setup

Name	D St			D St			Petaluma Blvd S			Petaluma Blvd S		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵			↵			↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	80.00	100.00	100.00	100.00	100.00	40.00	175.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	D St			D St			Petaluma Blvd S			Petaluma Blvd S		
Base Volume Input [veh/h]	95	395	16	156	391	80	93	217	57	95	232	225
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	23	0	0	21	0	0	105
Total Hourly Volume [veh/h]	95	395	16	156	391	57	93	217	36	95	232	120
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	101	4	40	100	15	24	55	9	24	59	31
Total Analysis Volume [veh/h]	97	403	16	159	399	58	95	221	37	97	237	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street		4			7			4			1	
v_di, Inbound Pedestrian Volume crossing major street		1			4			7			4	
v_co, Outbound Pedestrian Volume crossing minor street		6			1			8			4	
v_ci, Inbound Pedestrian Volume crossing minor street		8			4			6			1	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		4			3			0			2	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	124
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	48.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	8	9	0	8	9	0	8	9	0	8	9	0
Maximum Green [s]	30	50	0	35	50	0	30	45	0	30	45	0
Amber [s]	3.0	3.6	0.0	3.0	3.6	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	1.0	1.1	0.0	1.0	1.3	0.0	1.0	1.0	0.0	1.0	1.1	0.0
Split [s]	22	33	0	23	33	0	27	51	0	17	42	0
Vehicle Extension [s]	2.0	4.0	0.0	2.0	4.0	0.0	2.0	2.5	0.0	2.0	2.5	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	15	0	0	19	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.7	0.0	2.0	2.9	0.0	2.0	2.6	0.0	2.0	2.7	0.0
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	124	124	124	124	124	124	124	124	124	124	124
L, Total Lost Time per Cycle [s]	4.00	4.70	4.00	4.90	4.90	4.00	4.60	4.60	4.00	4.70	4.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.70	2.00	2.90	2.90	2.00	2.60	2.60	2.00	2.70	2.70
g_i, Effective Green Time [s]	9	29	14	34	34	9	54	54	9	54	54
g / C, Green / Cycle	0.07	0.24	0.11	0.27	0.27	0.07	0.44	0.44	0.07	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.06	0.25	0.10	0.24	0.04	0.06	0.13	0.03	0.06	0.14	0.09
s, saturation flow rate [veh/h]	1603	1669	1603	1683	1368	1603	1683	1408	1603	1683	1391
c, Capacity [veh/h]	119	395	183	462	376	117	733	613	119	734	607
d1, Uniform Delay [s]	56.63	47.41	54.09	42.83	34.05	56.71	22.77	20.30	56.65	23.00	21.60
k, delay calibration	0.04	0.22	0.04	0.19	0.15	0.04	0.50	0.50	0.04	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.96	47.54	4.82	8.35	0.27	4.95	1.06	0.19	5.02	1.17	0.75
d3, Initial Queue Delay [s]	6.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.81	1.06	0.87	0.86	0.15	0.81	0.30	0.06	0.81	0.32	0.20
d, Delay for Lane Group [s/veh]	67.99	94.96	58.91	51.18	34.32	61.66	23.82	20.49	61.67	24.16	22.35
Lane Group LOS	E	F	E	D	C	E	C	C	E	C	C
Critical Lane Group	No	Yes	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.19	17.45	5.17	12.76	1.38	3.12	4.48	0.67	3.16	4.80	2.33
50th-Percentile Queue Length [ft/ln]	79.65	436.26	129.17	318.91	34.46	78.02	112.06	16.73	79.12	119.99	58.29
95th-Percentile Queue Length [veh/ln]	5.73	25.15	8.89	18.61	2.48	5.62	7.95	1.20	5.70	8.39	4.20
95th-Percentile Queue Length [ft/ln]	143.36	628.69	222.37	465.35	62.04	140.44	198.87	30.12	142.42	209.82	104.91

Movement, Approach, & Intersection Results

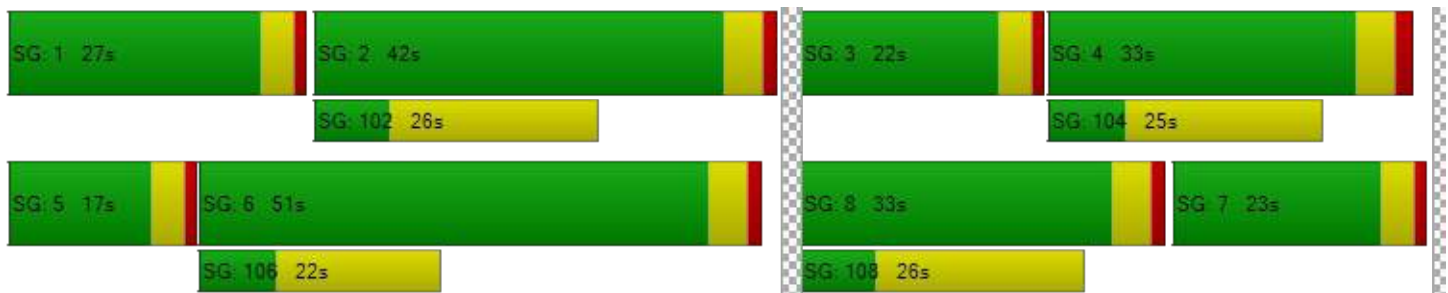
d_M, Delay for Movement [s/veh]	67.99	94.96	94.96	58.91	51.18	34.32	61.66	23.82	20.49	61.67	24.16	22.35
Movement LOS	E	F	F	E	D	C	E	C	C	E	C	C
d_A, Approach Delay [s/veh]	89.89			51.59			33.66			31.65		
Approach LOS	F			D			C			C		
d_I, Intersection Delay [s/veh]	53.83											
Intersection LOS	D											
Intersection V/C	0.550											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	908.36	2007.51	1061.25	2624.57
d_p, Pedestrian Delay [s]	51.54	51.54	51.54	51.54
I_p,int, Pedestrian LOS Score for Intersection	2.245	2.456	2.337	2.529
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	456	453	748	601
d_b, Bicycle Delay [s]	37.05	37.19	24.33	30.39
I_b,int, Bicycle LOS Score for Intersection	2.411	2.614	2.177	2.485
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 1: Petaluma Blvd/Washington St

Control Type:	Signalized	Delay (sec / veh):	45.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.725

Intersection Setup

Name	Petaluma Blvd			Petaluma Blvd			Washington St			Washington St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔↔			↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	75.00	100.00	95.00	120.00	100.00	110.00	105.00	100.00	100.00	310.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Petaluma Blvd			Petaluma Blvd			Washington St			Washington St		
Base Volume Input [veh/h]	33	339	166	107	278	221	309	674	55	123	569	119
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	8	0	4	0	0	0	0	11	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	26	0	0	18	0	0	4	0	0	13
Total Hourly Volume [veh/h]	33	342	148	107	282	203	309	674	51	134	569	106
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	92	40	29	76	55	83	181	14	36	153	28
Total Analysis Volume [veh/h]	35	368	159	115	303	218	332	725	55	144	612	114
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street		9			14			6			12	
v_di, Inbound Pedestrian Volume crossing major street		6			12			9			14	
v_co, Outbound Pedestrian Volume crossing minor street		8			7			4			10	
v_ci, Inbound Pedestrian Volume crossing minor street		10			4			7			8	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		3			4			3			3	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	125
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	75.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Overla	Protect	Permis	Overla	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	3	1	6	7	7	4	0	3	8	0
Auxiliary Signal Groups			2,3			6,7						
Lead / Lag	Lag	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	4	8	4	4	8	4	4	10	0	4	11	0
Maximum Green [s]	30	30	30	30	30	30	30	30	0	30	30	0
Amber [s]	3.0	3.6	3.0	3.0	3.6	3.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.2	0.0	1.0	1.6	0.0
Split [s]	32	31	14	38	37	15	15	41	0	14	40	0
Vehicle Extension [s]	2.0	4.0	2.0	2.0	4.0	2.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	17	0	0	19	0	0	21	0	0	27	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.6	2.0	2.0	2.7	2.0	2.0	2.8	0.0	2.0	3.2	0.0
Minimum Recall	No	Yes	No	No	Yes	No	No	No		No	No	
Maximum Recall	No	No	No	No	No	No	No	No		No	No	
Pedestrian Recall	No	No	No	No	No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	125	125	125	125	125	125	125	125	125	125	125	125
L, Total Lost Time per Cycle [s]	4.00	4.60	4.00	4.00	4.70	4.70	4.00	4.80	4.80	4.00	5.20	5.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.60	0.00	2.00	2.70	0.00	2.00	2.80	2.80	2.00	3.20	3.20
g_i, Effective Green Time [s]	3	35	50	11	42	75	28	52	52	10	33	33
g / C, Green / Cycle	0.03	0.28	0.40	0.09	0.34	0.60	0.23	0.41	0.41	0.08	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.02	0.22	0.11	0.07	0.18	0.15	0.21	0.23	0.24	0.09	0.22	0.23
s, saturation flow rate [veh/h]	1603	1683	1401	1603	1683	1414	1603	1683	1630	1603	1683	1549
c, Capacity [veh/h]	44	473	557	138	570	844	362	695	674	129	446	410
d1, Uniform Delay [s]	60.46	41.39	25.48	56.23	33.33	12.00	47.27	28.13	28.20	57.49	43.42	43.77
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.19	0.33	0.33	0.04	0.15	0.15
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.36	11.96	1.28	4.84	3.52	0.74	14.92	2.22	2.36	60.85	5.91	7.47
d3, Initial Queue Delay [s]	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.78	0.29	0.83	0.53	0.26	0.92	0.57	0.57	1.11	0.84	0.86
d, Delay for Lane Group [s/veh]	71.82	55.54	26.76	61.07	36.85	12.74	62.19	30.35	30.55	118.34	49.33	51.24
Lane Group LOS	E	E	C	E	D	B	E	C	C	F	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.25	12.08	3.46	3.79	8.06	3.09	11.64	9.56	9.37	6.30	11.69	11.31
50th-Percentile Queue Length [ft/ln]	31.32	302.06	86.60	94.72	201.45	77.23	291.04	238.99	234.30	157.44	292.30	282.80
95th-Percentile Queue Length [veh/ln]	2.26	17.78	6.24	6.82	12.71	5.56	17.24	14.63	14.39	10.79	17.30	16.83
95th-Percentile Queue Length [ft/ln]	56.38	444.58	155.88	170.50	317.84	139.01	430.93	365.76	359.82	269.83	432.50	420.70

Movement, Approach, & Intersection Results

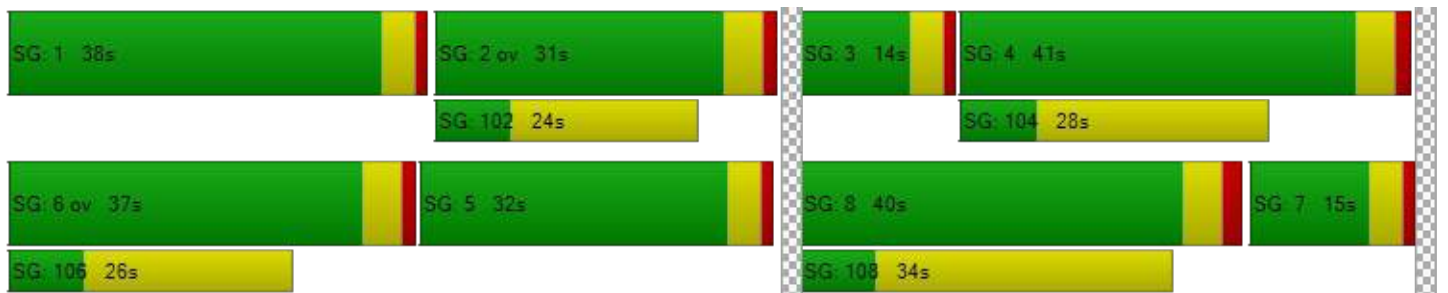
d_M, Delay for Movement [s/veh]	71.82	55.54	26.76	61.07	36.85	12.74	62.19	30.45	30.55	118.34	50.07	51.24
Movement LOS	E	E	C	E	D	B	E	C	C	F	D	D
d_A, Approach Delay [s/veh]	48.41			32.97			39.93			61.53		
Approach LOS	D			C			D			E		
d_I, Intersection Delay [s/veh]	45.94											
Intersection LOS	D											
Intersection V/C	0.725											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	641.88			326.21			631.37			509.47		
d_p, Pedestrian Delay [s]	52.00			52.00			52.00			52.00		
I_p,int, Pedestrian LOS Score for Intersection	2.406			2.473			2.646			2.644		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	422			517			579			557		
d_b, Bicycle Delay [s]	38.96			34.45			31.60			32.60		
I_b,int, Bicycle LOS Score for Intersection	2.530			2.639			2.480			2.288		
Bicycle LOS	B			B			B			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Petaluma Blvd/Western Ave

Control Type:	Signalized	Delay (sec / veh):	34.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.448

Intersection Setup

Name	Petaluma Blvd			Petaluma Blvd			Western Ave			Water St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	65.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	85.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Petaluma Blvd			Petaluma Blvd			Western Ave			Water St		
Base Volume Input [veh/h]	46	410	0	0	362	77	84	0	119	1	2	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	15	0	11	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	5	0	0	62	0	0	3
Total Hourly Volume [veh/h]	46	410	0	0	377	72	95	0	57	1	2	0
Peak Hour Factor	0.9200	0.9200	1.0000	1.0000	0.9200	0.9200	0.9200	1.0000	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	111	0	0	102	20	26	0	15	0	1	0
Total Analysis Volume [veh/h]	50	446	0	0	410	78	103	0	62	1	2	0
Presence of On-Street Parking	No		Yes	No		Yes	No		Yes	No		No
On-Street Parking Maneuver Rate [/h]	0	0	5	0	0	5	0	0	5	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	7		28			29			33			
v_di, Inbound Pedestrian Volume crossing major street	33		29			28			7			
v_co, Outbound Pedestrian Volume crossing minor street	35		27			39			13			
v_ci, Inbound Pedestrian Volume crossing minor street	39		13			35			27			
v_ab, Corner Pedestrian Volume [ped/h]	0		0			0			0			
Bicycle Volume [bicycles/h]	2		2			3			3			

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	118
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	12.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	3	8	0	0	4	0	2	0	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lag	-	-	-	-	-
Minimum Green [s]	8	8	0	0	8	0	8	0	0	0	8	0
Maximum Green [s]	20	73	0	0	73	0	39	0	0	0	39	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	3.2	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	1.3	0.0
Split [s]	20	77	0	0	57	0	41	0	0	0	41	0
Vehicle Extension [s]	2.0	4.0	0.0	0.0	4.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0
Walk [s]	0	8	0	0	13	0	8	0	0	0	8	0
Pedestrian Clearance [s]	0	10	0	0	5	0	10	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No		No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes			Yes		No				No	
Maximum Recall	No	No			No		No				No	
Pedestrian Recall	No	No			No		No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	R	C
C, Cycle Length [s]	118	118	118	118	118	118
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.50
g_i, Effective Green Time [s]	45	94	45	16	16	16
g / C, Green / Cycle	0.38	0.80	0.38	0.14	0.14	0.13
(v / s)_i Volume / Saturation Flow Rate	0.03	0.30	0.35	0.08	0.07	0.00
s, saturation flow rate [veh/h]	1603	1473	1405	1317	887	1381
c, Capacity [veh/h]	609	1172	536	194	121	223
d1, Uniform Delay [s]	23.43	3.54	34.58	47.97	46.31	44.53
k, delay calibration	0.50	0.50	0.50	0.04	0.04	0.04
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.26	0.94	21.94	0.84	1.24	0.01
d3, Initial Queue Delay [s]	0.00	0.30	0.97	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.08	0.38	0.91	0.53	0.51	0.01
d, Delay for Lane Group [s/veh]	23.69	4.78	57.49	48.81	47.55	44.54
Lane Group LOS	C	A	E	D	D	D
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.96	2.89	16.45	2.87	1.72	0.08
50th-Percentile Queue Length [ft/ln]	23.89	72.17	411.17	71.76	42.90	1.95
95th-Percentile Queue Length [veh/ln]	1.72	5.20	23.10	5.17	3.09	0.14
95th-Percentile Queue Length [ft/ln]	43.01	129.91	577.45	129.17	77.21	3.51

Movement, Approach, & Intersection Results

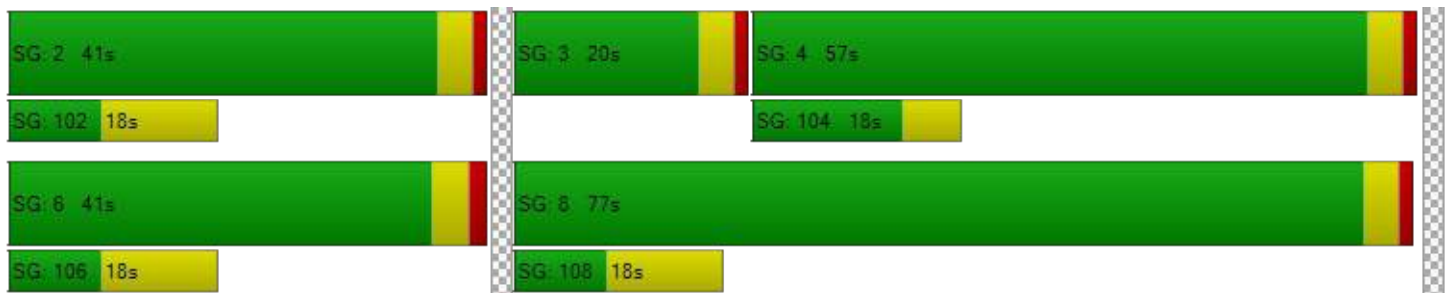
d_M, Delay for Movement [s/veh]	23.69	4.78	0.00	0.00	57.49	57.49	48.81	0.00	47.55	44.54	44.54	44.54
Movement LOS	C	A			E	E	D		D	D	D	D
d_A, Approach Delay [s/veh]	6.69		57.49			48.34			44.54			
Approach LOS	A		E			D			D			
d_I, Intersection Delay [s/veh]	34.27											
Intersection LOS	C											
Intersection V/C	0.448											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	17.0	12.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	162.20	191.47	208.20	197.08
d_p, Pedestrian Delay [s]	47.64	47.64	43.25	47.64
I_p,int, Pedestrian LOS Score for Intersection	2.233	2.302	2.135	1.445
Crosswalk LOS	B	B	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1237	898	627	618
d_b, Bicycle Delay [s]	8.61	17.94	27.87	28.21
I_b,int, Bicycle LOS Score for Intersection	2.378	2.373	1.560	1.570
Bicycle LOS	B	B	A	A

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Petaluma Blvd/B St

Control Type:	Signalized	Delay (sec / veh):	30.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.367

Intersection Setup

Name	B St			B St			Petaluma Blvd			Petaluma Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵			↵			↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	65.00	30.00	100.00	30.00	85.00	100.00	100.00	70.00	100.00	40.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	B St			B St			Petaluma Blvd			Petaluma Blvd		
Base Volume Input [veh/h]	62	30	71	12	31	42	36	305	47	24	367	11
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	31	0	0	0	0	15	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	30	0	0	14	0	0	6	0	0	0
Total Hourly Volume [veh/h]	62	30	72	12	31	28	36	320	41	24	367	11
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	8	19	3	8	7	9	84	11	6	97	3
Total Analysis Volume [veh/h]	65	32	76	13	33	29	38	337	43	25	386	12
Presence of On-Street Parking	No		Yes	No		No	No		Yes	No		No
On-Street Parking Maneuver Rate [/h]	0	0	5	0	0	0	0	0	5	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street		29			11			5			38	
v_di, Inbound Pedestrian Volume crossing major street		5			38			29			11	
v_co, Outbound Pedestrian Volume crossing minor street		5			12			35			2	
v_ci, Inbound Pedestrian Volume crossing minor street		2			35			12			5	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		4			2			2			2	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	59
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	54.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	8	0	0	8	0	8	9	0	6	9	0
Maximum Green [s]	0	35	0	0	35	0	10	50	0	20	50	0
Amber [s]	0.0	3.0	0.0	0.0	3.2	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.3	0.0	0.0	1.3	0.0	1.0	1.3	0.0	1.0	1.3	0.0
Split [s]	0	28	0	0	28	0	15	16	0	15	16	0
Vehicle Extension [s]	0.0	2.5	0.0	0.0	2.5	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	12	0	0	11	0	0	9	0	0	9	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.3	0.0	0.0	2.5	0.0	2.0	2.3	0.0	2.0	2.3	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	L	C	R
C, Cycle Length [s]	59	59	59	59	59	59	59	59	59	59
L, Total Lost Time per Cycle [s]	4.30	4.30	4.50	4.50	4.50	4.00	4.30	4.00	4.30	4.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.30	2.50	2.50	2.50	2.00	2.30	2.00	2.30	2.30
g_i, Effective Green Time [s]	10	10	10	10	10	18	18	18	18	18
g / C, Green / Cycle	0.18	0.18	0.17	0.17	0.17	0.31	0.30	0.31	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.05	0.09	0.01	0.02	0.02	0.02	0.27	0.02	0.23	0.01
s, saturation flow rate [veh/h]	1291	1263	1143	1683	1204	1603	1428	1603	1683	1286
c, Capacity [veh/h]	236	220	193	288	206	494	434	494	512	392
d1, Uniform Delay [s]	23.81	22.03	26.27	20.71	20.73	14.50	19.50	14.37	18.55	14.42
k, delay calibration	0.08	0.08	0.08	0.08	0.08	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.47	1.25	0.11	0.13	0.23	0.30	21.07	0.19	9.85	0.15
d3, Initial Queue Delay [s]	0.00	4.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.49	0.07	0.11	0.14	0.08	0.87	0.05	0.75	0.03
d, Delay for Lane Group [s/veh]	24.27	27.37	26.38	20.84	20.96	14.81	40.57	14.56	28.40	14.56
Lane Group LOS	C	C	C	C	C	B	D	B	C	B
Critical Lane Group	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.77	1.36	0.17	0.38	0.34	0.38	7.08	0.25	5.79	0.12
50th-Percentile Queue Length [ft/ln]	19.17	34.00	4.32	9.45	8.41	9.51	177.11	6.19	144.86	3.05
95th-Percentile Queue Length [veh/ln]	1.38	2.45	0.31	0.68	0.61	0.68	11.45	0.45	9.74	0.22
95th-Percentile Queue Length [ft/ln]	34.50	61.20	7.78	17.01	15.14	17.11	286.23	11.14	243.55	5.49

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	24.27	27.37	27.37	26.38	20.84	20.96	14.81	40.57	40.57	14.56	28.40	14.56
Movement LOS	C	C	C	C	C	C	B	D	D	B	C	B
d_A, Approach Delay [s/veh]	26.21			21.85			38.23			27.19		
Approach LOS	C			C			D			C		
d_I, Intersection Delay [s/veh]	30.90											
Intersection LOS	C											
Intersection V/C	0.367											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	602.47			732.09			506.56			4404.78		
d_p, Pedestrian Delay [s]	19.55			19.55			19.55			19.55		
I_p,int, Pedestrian LOS Score for Intersection	2.043			2.162			2.263			2.305		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	803			796			396			396		
d_b, Bicycle Delay [s]	10.61			10.71			19.01			19.01		
I_b,int, Bicycle LOS Score for Intersection	1.895			1.706			2.259			2.258		
Bicycle LOS	A			A			B			B		

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 4: Petaluma Blvd S/D St**

Control Type:	Signalized	Delay (sec / veh):	53.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.561

Intersection Setup

Name	D St			D St			Petaluma Blvd S			Petaluma Blvd S		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	80.00	100.00	100.00	100.00	100.00	40.00	175.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	D St			D St			Petaluma Blvd S			Petaluma Blvd S		
Base Volume Input [veh/h]	95	395	16	156	391	80	93	217	57	95	232	225
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	12	0	0	18	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	23	0	0	21	0	0	105
Total Hourly Volume [veh/h]	95	395	16	156	391	57	93	229	36	95	250	120
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	101	4	40	100	15	24	58	9	24	64	31
Total Analysis Volume [veh/h]	97	403	16	159	399	58	95	234	37	97	255	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street		4			7			4			1	
v_di, Inbound Pedestrian Volume crossing major street		1			4			7			4	
v_co, Outbound Pedestrian Volume crossing minor street		6			1			8			4	
v_ci, Inbound Pedestrian Volume crossing minor street		8			4			6			1	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		4			3			0			2	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	124
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	48.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	8	9	0	8	9	0	8	9	0	8	9	0
Maximum Green [s]	30	50	0	35	50	0	30	45	0	30	45	0
Amber [s]	3.0	3.6	0.0	3.0	3.6	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	1.0	1.1	0.0	1.0	1.3	0.0	1.0	1.0	0.0	1.0	1.1	0.0
Split [s]	22	33	0	23	33	0	27	51	0	17	42	0
Vehicle Extension [s]	2.0	4.0	0.0	2.0	4.0	0.0	2.0	2.5	0.0	2.0	2.5	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	15	0	0	19	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.7	0.0	2.0	2.9	0.0	2.0	2.6	0.0	2.0	2.7	0.0
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	124	124	124	124	124	124	124	124	124	124	124
L, Total Lost Time per Cycle [s]	4.00	4.70	4.00	4.90	4.90	4.00	4.60	4.60	4.00	4.70	4.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.70	2.00	2.90	2.90	2.00	2.60	2.60	2.00	2.70	2.70
g_i, Effective Green Time [s]	9	29	14	34	34	9	54	54	9	54	54
g / C, Green / Cycle	0.07	0.24	0.11	0.27	0.27	0.07	0.44	0.44	0.07	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.06	0.25	0.10	0.24	0.04	0.06	0.14	0.03	0.06	0.15	0.09
s, saturation flow rate [veh/h]	1603	1669	1603	1683	1368	1603	1683	1408	1603	1683	1391
c, Capacity [veh/h]	119	395	183	462	376	117	733	613	119	734	607
d1, Uniform Delay [s]	56.63	47.41	54.09	42.83	34.05	56.71	22.97	20.30	56.65	23.29	21.60
k, delay calibration	0.04	0.22	0.04	0.19	0.15	0.04	0.50	0.50	0.04	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.96	47.54	4.82	8.35	0.27	4.95	1.15	0.19	5.02	1.30	0.75
d3, Initial Queue Delay [s]	6.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.81	1.06	0.87	0.86	0.15	0.81	0.32	0.06	0.81	0.35	0.20
d, Delay for Lane Group [s/veh]	67.99	94.96	58.91	51.18	34.32	61.66	24.12	20.49	61.67	24.59	22.35
Lane Group LOS	E	F	E	D	C	E	C	C	E	C	C
Critical Lane Group	No	Yes	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.19	17.45	5.17	12.76	1.38	3.12	4.79	0.67	3.16	5.24	2.33
50th-Percentile Queue Length [ft/ln]	79.65	436.26	129.17	318.91	34.46	78.02	119.82	16.73	79.12	130.89	58.29
95th-Percentile Queue Length [veh/ln]	5.73	25.15	8.89	18.61	2.48	5.62	8.38	1.20	5.70	8.99	4.20
95th-Percentile Queue Length [ft/ln]	143.36	628.69	222.37	465.35	62.04	140.44	209.57	30.12	142.42	224.70	104.91

Movement, Approach, & Intersection Results

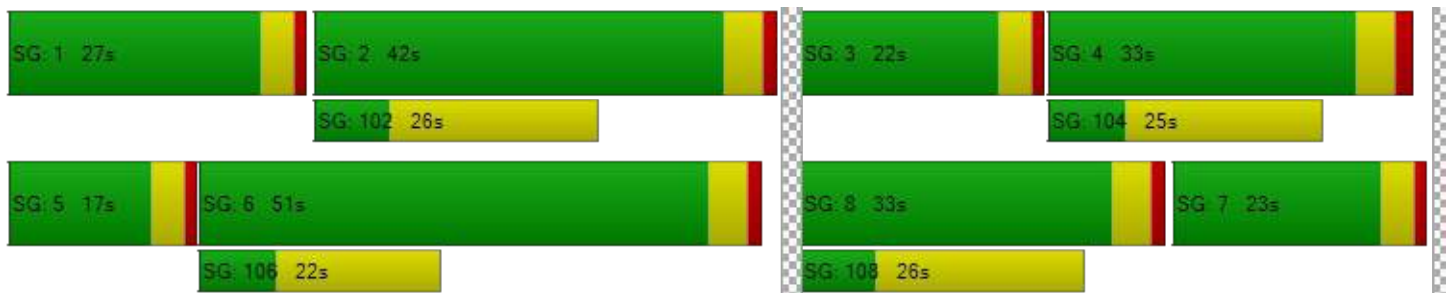
d_M, Delay for Movement [s/veh]	67.99	94.96	94.96	58.91	51.18	34.32	61.66	24.12	20.49	61.67	24.59	22.35
Movement LOS	E	F	F	E	D	C	E	C	C	E	C	C
d_A, Approach Delay [s/veh]	89.89			51.59			33.50			31.60		
Approach LOS	F			D			C			C		
d_I, Intersection Delay [s/veh]	53.45											
Intersection LOS	D											
Intersection V/C	0.561											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	908.36			2007.51			1061.25			2624.57		
d_p, Pedestrian Delay [s]	51.54			51.54			51.54			51.54		
I_p,int, Pedestrian LOS Score for Intersection	2.245			2.456			2.343			2.537		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	456			453			748			601		
d_b, Bicycle Delay [s]	37.05			37.19			24.33			30.39		
I_b,int, Bicycle LOS Score for Intersection	2.411			2.614			2.198			2.515		
Bicycle LOS	B			B			B			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 1: Petaluma Blvd/Washington St

Control Type:	Signalized	Delay (sec / veh):	48.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.755

Intersection Setup

Name	Petaluma Blvd			Petaluma Blvd			Washington St			Washington St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔↔			↔↔↔			↔↔↔			↔↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Pocket Length [ft]	75.00	100.00	95.00	120.00	100.00	110.00	105.00	100.00	100.00	310.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Petaluma Blvd			Petaluma Blvd			Washington St			Washington St		
Base Volume Input [veh/h]	36	369	181	117	303	264	356	734	60	134	619	154
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	26	0	0	18	0	0	4	0	0	13
Total Hourly Volume [veh/h]	36	369	155	117	303	246	356	734	56	134	619	141
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	92	39	29	76	62	89	184	14	34	155	35
Total Analysis Volume [veh/h]	36	369	155	117	303	246	356	734	56	134	619	141
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	9			14			6			12		
v_di, Inbound Pedestrian Volume crossing	6			12			9			14		
v_co, Outbound Pedestrian Volume crossing	8			7			4			10		
v_ci, Inbound Pedestrian Volume crossing	10			4			7			8		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	3			4			3			3		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	140
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	75.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	5	2	3	1	6	7	7	4	0	3	8	0
Auxiliary Signal Groups			2,3			6,7						
Lead / Lag	Lag	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	4	8	4	4	8	4	4	10	0	4	11	0
Maximum Green [s]	30	30	30	30	30	30	30	30	0	30	30	0
Amber [s]	3.0	3.6	3.0	3.0	3.6	3.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.2	0.0	1.0	1.6	0.0
Split [s]	15	30	17	16	31	49	49	77	0	17	45	0
Vehicle Extension [s]	2.0	4.0	2.0	2.0	4.0	2.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	17	0	0	19	0	0	21	0	0	27	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.6	2.0	2.0	2.7	2.0	2.0	2.8	0.0	2.0	3.2	0.0
Minimum Recall	No	Yes	No	No	Yes	No	No	No		No	No	
Maximum Recall	No	No	No	No	No	No	No	No		No	No	
Pedestrian Recall	No	No	No	No	No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	140	140	140	140	140	140	140	140	140	140	140	140
L, Total Lost Time per Cycle [s]	4.00	4.60	4.00	4.00	4.70	4.70	4.00	4.80	4.80	4.00	5.20	5.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.60	0.00	2.00	2.70	0.00	2.00	2.80	2.80	2.00	3.20	3.20
g_i, Effective Green Time [s]	4	39	57	12	47	85	34	58	58	13	37	37
g / C, Green / Cycle	0.03	0.28	0.41	0.09	0.34	0.61	0.24	0.42	0.42	0.09	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.02	0.22	0.11	0.07	0.18	0.17	0.22	0.24	0.24	0.08	0.23	0.24
s, saturation flow rate [veh/h]	1603	1683	1402	1603	1683	1415	1603	1683	1630	1603	1683	1526
c, Capacity [veh/h]	45	471	568	137	566	858	386	703	681	149	449	407
d1, Uniform Delay [s]	67.66	46.53	27.74	63.15	37.58	13.13	51.86	31.15	31.23	62.82	49.06	49.56
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.09	0.15	0.15	0.04	0.26	0.27
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.67	12.33	1.18	5.66	3.60	0.84	7.77	1.04	1.09	7.35	11.88	16.34
d3, Initial Queue Delay [s]	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.78	0.27	0.85	0.54	0.29	0.92	0.57	0.57	0.90	0.87	0.90
d, Delay for Lane Group [s/veh]	79.33	61.05	28.92	68.81	41.18	13.97	59.63	32.19	32.31	70.18	60.94	65.90
Lane Group LOS	E	E	C	E	D	B	E	C	C	E	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.44	13.60	3.74	4.37	9.12	3.96	13.13	10.68	10.46	5.07	14.71	14.37
50th-Percentile Queue Length [ft/ln]	35.99	339.95	93.62	109.22	227.97	99.10	328.18	267.00	261.43	126.84	367.65	359.15
95th-Percentile Queue Length [veh/ln]	2.59	19.65	6.74	7.80	14.07	7.14	19.07	16.04	15.76	8.77	21.00	20.58
95th-Percentile Queue Length [ft/ln]	64.78	491.13	168.52	194.92	351.78	178.38	476.73	400.99	394.02	219.20	524.88	514.55

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	79.33	61.05	28.92	68.81	41.18	13.97	59.63	32.24	32.31	70.18	62.76	65.90
Movement LOS	E	E	C	E	D	B	E	C	C	E	E	E
d_A, Approach Delay [s/veh]	53.33			35.98			40.75			64.37		
Approach LOS	D			D			D			E		
d_I, Intersection Delay [s/veh]	48.40											
Intersection LOS	D											
Intersection V/C	0.755											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	561.40	255.76	467.38	442.88
d_p, Pedestrian Delay [s]	59.43	59.43	59.43	59.43
I_p,int, Pedestrian LOS Score for Intersection	2.409	2.495	2.663	2.655
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	363	376	1031	569
d_b, Bicycle Delay [s]	46.97	46.26	16.44	35.91
I_b,int, Bicycle LOS Score for Intersection	2.527	2.688	2.508	2.308
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Petaluma Blvd/Western Ave

Control Type:	Signalized	Delay (sec / veh):	36.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.453

Intersection Setup

Name	Petaluma Blvd			Petaluma Blvd			Western Ave			Water St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵			↵↵			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	1	0	0	0
Pocket Length [ft]	65.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	85.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Petaluma Blvd			Petaluma Blvd			Western Ave			Water St		
Base Volume Input [veh/h]	50	446	0	0	394	83	91	0	130	1	2	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	5	0	0	62	0	0	3
Total Hourly Volume [veh/h]	50	446	0	0	394	78	91	0	68	1	2	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	112	0	0	99	20	23	0	17	0	1	0
Total Analysis Volume [veh/h]	50	446	0	0	394	78	91	0	68	1	2	0
Presence of On-Street Parking	No		Yes	No		Yes	No		Yes	No		No
On-Street Parking Maneuver Rate [/h]	0	0	5	0	0	5	0	0	5	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	7			28			29			33		
v_di, Inbound Pedestrian Volume crossing m	33			29			28			7		
v_co, Outbound Pedestrian Volume crossing	35			27			39			13		
v_ci, Inbound Pedestrian Volume crossing mi	39			13			35			27		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			2			3			3		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	160
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	12.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	3	8	0	0	4	0	2	0	0	0	0	6	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	Lag	-	-	-	-	-	-
Minimum Green [s]	8	8	0	0	8	0	8	0	0	0	0	8	0
Maximum Green [s]	20	73	0	0	73	0	39	0	0	0	0	39	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	3.2	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	1.3	0.0
Split [s]	15	128	0	0	113	0	32	0	0	0	0	32	0
Vehicle Extension [s]	2.0	4.0	0.0	0.0	4.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0
Walk [s]	0	8	0	0	13	0	8	0	0	0	0	8	0
Pedestrian Clearance [s]	0	10	0	0	5	0	10	0	0	0	0	10	0
Rest In Walk		No			No		No					No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes			Yes		No					No	
Maximum Recall	No	No			No		No					No	
Pedestrian Recall	No	No			No		No					No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	R	C
C, Cycle Length [s]	160	160	160	160	160	160
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.50
g_i, Effective Green Time [s]	65	135	65	17	17	17
g / C, Green / Cycle	0.41	0.84	0.41	0.11	0.11	0.10
(v / s)_i Volume / Saturation Flow Rate	0.03	0.30	0.34	0.07	0.09	0.00
s, saturation flow rate [veh/h]	1603	1473	1405	1314	796	1349
c, Capacity [veh/h]	654	1241	575	150	86	171
d1, Uniform Delay [s]	28.92	2.84	42.01	68.69	67.37	64.27
k, delay calibration	0.50	0.50	0.50	0.04	0.04	0.04
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.23	0.81	12.42	1.46	6.15	0.02
d3, Initial Queue Delay [s]	0.00	0.30	0.97	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.08	0.36	0.82	0.60	0.80	0.02
d, Delay for Lane Group [s/veh]	29.15	3.96	55.40	70.15	73.52	64.28
Lane Group LOS	C	A	E	E	E	E
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.26	3.05	18.76	3.63	2.81	0.11
50th-Percentile Queue Length [ft/ln]	31.51	76.23	468.91	90.80	70.19	2.81
95th-Percentile Queue Length [veh/ln]	2.27	5.49	25.86	6.54	5.05	0.20
95th-Percentile Queue Length [ft/ln]	56.72	137.21	646.48	163.43	126.34	5.06

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	29.15	3.96	0.00	0.00	55.40	55.40	70.15	0.00	73.52	64.28	64.28	64.28
Movement LOS	C	A			E	E	E		E	E	E	E
d_A, Approach Delay [s/veh]	6.50		55.40				71.59			64.28		
Approach LOS	A		E				E			E		
d_I, Intersection Delay [s/veh]	36.24											
Intersection LOS	D											
Intersection V/C	0.453											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	17.0	12.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	108.64	131.34	143.08	144.54
d_p, Pedestrian Delay [s]	68.45	68.45	63.90	68.45
I_p,int, Pedestrian LOS Score for Intersection	2.245	2.289	2.149	1.459
Crosswalk LOS	B	B	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1550	1363	0	344
d_b, Bicycle Delay [s]	4.05	8.14	80.00	54.95
I_b,int, Bicycle LOS Score for Intersection	2.378	2.347	4.132	1.570
Bicycle LOS	B	B	D	A

Sequence



Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Petaluma Blvd/B St

Control Type:	Signalized	Delay (sec / veh):	36.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.349

Intersection Setup

Name	B St			B St			Petaluma Blvd			Petaluma Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	1	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	65.00	30.00	100.00	30.00	85.00	100.00	100.00	70.00	100.00	40.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	B St			B St			Petaluma Blvd			Petaluma Blvd		
Base Volume Input [veh/h]	68	32	78	13	33	46	39	332	51	27	400	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	30	0	0	14	0	0	6	0	0	0
Total Hourly Volume [veh/h]	68	32	48	13	33	32	39	332	45	27	400	12
Peak Hour Factor	0.9500	0.9500	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	8	13	3	9	8	10	83	12	7	100	3
Total Analysis Volume [veh/h]	72	34	51	13	35	32	39	332	47	28	400	12
Presence of On-Street Parking	No		Yes	No		No	No		Yes	No		No
On-Street Parking Maneuver Rate [/h]	0	0	5	0	0	0	0	0	5	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	29			11			5			38		
v_di, Inbound Pedestrian Volume crossing	5			38			29			11		
v_co, Outbound Pedestrian Volume crossing	5			12			35			2		
v_ci, Inbound Pedestrian Volume crossing	2			35			12			5		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	4			2			2			2		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	54.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	2	0	0	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	8	0	0	8	0	8	9	0	6	9	0
Maximum Green [s]	0	35	0	0	35	0	10	50	0	20	50	0
Amber [s]	0.0	3.0	0.0	0.0	3.2	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.3	0.0	0.0	1.3	0.0	1.0	1.3	0.0	1.0	1.3	0.0
Split [s]	0	37	0	0	37	0	12	60	0	13	61	0
Vehicle Extension [s]	0.0	2.5	0.0	0.0	2.5	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	12	0	0	11	0	0	9	0	0	9	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.3	0.0	0.0	2.5	0.0	2.0	2.3	0.0	2.0	2.3	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.30	4.30	4.50	4.50	4.50	4.00	4.30	4.00	4.30	4.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.30	2.50	2.50	2.50	2.00	2.30	2.00	2.30	2.30
g_i, Effective Green Time [s]	15	15	15	15	15	41	41	41	41	41
g / C, Green / Cycle	0.13	0.13	0.13	0.13	0.13	0.38	0.37	0.38	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.06	0.07	0.01	0.02	0.03	0.02	0.27	0.02	0.24	0.01
s, saturation flow rate [veh/h]	1290	1283	1162	1683	1147	1603	1427	1603	1683	1308
c, Capacity [veh/h]	163	172	126	223	152	604	534	604	630	490
d1, Uniform Delay [s]	47.64	44.14	50.00	42.27	42.34	21.90	29.32	21.74	28.24	21.71
k, delay calibration	0.08	0.08	0.08	0.08	0.08	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.39	1.62	0.26	0.24	0.51	0.21	7.78	0.14	4.82	0.09
d3, Initial Queue Delay [s]	0.00	4.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.44	0.49	0.10	0.16	0.21	0.06	0.71	0.05	0.63	0.02
d, Delay for Lane Group [s/veh]	49.03	49.85	50.26	42.51	42.84	22.11	37.10	21.89	33.06	21.80
Lane Group LOS	D	D	D	D	D	C	D	C	C	C
Critical Lane Group	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.86	2.24	0.35	0.87	0.80	0.69	9.65	0.49	9.49	0.21
50th-Percentile Queue Length [ft/ln]	46.38	56.05	8.87	21.67	20.04	17.24	241.35	12.29	237.14	5.30
95th-Percentile Queue Length [veh/ln]	3.34	4.04	0.64	1.56	1.44	1.24	14.75	0.88	14.54	0.38
95th-Percentile Queue Length [ft/ln]	83.49	100.89	15.97	39.01	36.07	31.04	368.75	22.11	363.41	9.53

Movement, Approach, & Intersection Results

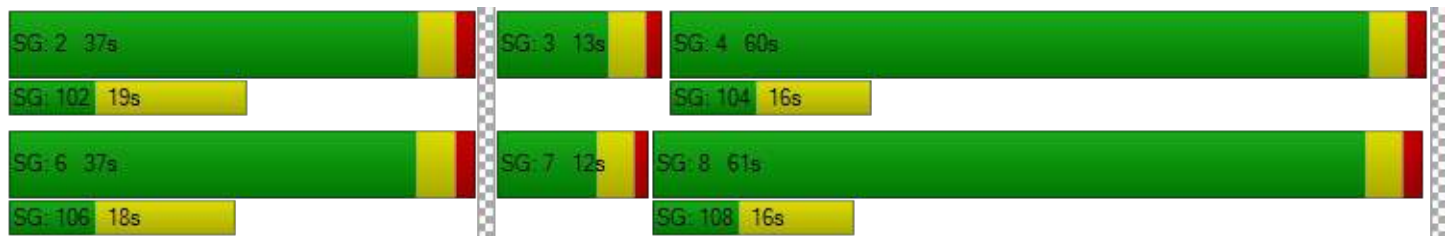
d_M, Delay for Movement [s/veh]	49.03	49.85	49.85	50.26	42.51	42.84	22.11	37.10	37.10	21.89	33.06	21.80
Movement LOS	D	D	D	D	D	D	C	D	D	C	C	C
d_A, Approach Delay [s/veh]	49.47			43.90			35.70			32.04		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	36.80											
Intersection LOS	D											
Intersection V/C	0.349											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	298.85	385.27	234.67	2268.37
d_p, Pedestrian Delay [s]	44.55	44.55	44.55	44.55
I_p,int, Pedestrian LOS Score for Intersection	2.074	2.197	2.314	2.335
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	595	591	1013	1031
d_b, Bicycle Delay [s]	27.21	27.33	13.42	12.93
I_b,int, Bicycle LOS Score for Intersection	1.868	1.715	2.259	2.286
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 4: Petaluma Blvd S/D St**

Control Type: Signalized
 Analysis Method: HCM 6th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 56.9
 Level Of Service: E
 Volume to Capacity (v/c): 0.639

Intersection Setup

Name	D St			D St			Petaluma Blvd S			Petaluma Blvd S		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌			⇌			⇌			⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	80.00	100.00	100.00	100.00	100.00	40.00	175.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	D St			D St			Petaluma Blvd S			Petaluma Blvd S		
Base Volume Input [veh/h]	103	430	34	231	425	87	101	252	62	105	252	245
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	23	0	0	21	0	0	105
Total Hourly Volume [veh/h]	103	430	34	231	425	64	101	252	41	105	252	140
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	108	9	58	106	16	25	63	10	26	63	35
Total Analysis Volume [veh/h]	103	430	34	231	425	64	101	252	41	105	252	140
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	4			7			4			1		
v_di, Inbound Pedestrian Volume crossing	1			4			7			4		
v_co, Outbound Pedestrian Volume crossing	6			1			8			4		
v_ci, Inbound Pedestrian Volume crossing	8			4			6			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	4			3			0			2		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	160
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	48.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	8	9	0	8	9	0	8	9	0	8	9	0
Maximum Green [s]	30	50	0	35	50	0	30	45	0	30	45	0
Amber [s]	3.0	3.6	0.0	3.0	3.6	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	1.0	1.1	0.0	1.0	1.3	0.0	1.0	1.0	0.0	1.0	1.1	0.0
Split [s]	42	66	0	36	60	0	18	39	0	19	40	0
Vehicle Extension [s]	2.0	4.0	0.0	2.0	4.0	0.0	2.0	2.5	0.0	2.0	2.5	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	15	0	0	19	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.7	0.0	2.0	2.9	0.0	2.0	2.6	0.0	2.0	2.7	0.0
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	160	160	160	160	160	160	160	160	160	160	160
L, Total Lost Time per Cycle [s]	4.00	4.70	4.00	4.90	4.90	4.00	4.60	4.60	4.00	4.70	4.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.70	2.00	2.90	2.90	2.00	2.60	2.60	2.00	2.70	2.70
g_i, Effective Green Time [s]	12	48	25	60	60	12	58	58	12	58	58
g / C, Green / Cycle	0.08	0.30	0.16	0.38	0.38	0.07	0.36	0.36	0.08	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.06	0.28	0.14	0.25	0.05	0.06	0.15	0.03	0.07	0.15	0.10
s, saturation flow rate [veh/h]	1603	1657	1603	1683	1377	1603	1683	1403	1603	1683	1389
c, Capacity [veh/h]	122	493	250	634	519	119	608	506	123	611	504
d1, Uniform Delay [s]	73.00	54.85	66.57	41.62	32.57	73.17	38.43	33.64	72.96	38.20	36.00
k, delay calibration	0.04	0.29	0.04	0.15	0.15	0.04	0.50	0.50	0.04	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.92	19.63	5.86	1.76	0.15	6.13	2.08	0.31	6.09	2.05	1.37
d3, Initial Queue Delay [s]	6.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.94	0.92	0.67	0.12	0.85	0.41	0.08	0.85	0.41	0.28
d, Delay for Lane Group [s/veh]	85.33	74.48	72.43	43.39	32.72	79.30	40.52	33.96	79.05	40.25	37.37
Lane Group LOS	F	E	E	D	C	E	D	C	E	D	D
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.43	21.10	9.81	14.56	1.70	4.35	7.98	1.13	4.50	7.88	4.14
50th-Percentile Queue Length [ft/ln]	110.74	527.59	245.37	364.00	42.52	108.82	199.41	28.25	112.40	197.01	103.38
95th-Percentile Queue Length [veh/ln]	7.88	28.64	14.95	20.82	3.06	7.77	12.61	2.03	7.97	12.48	7.44
95th-Percentile Queue Length [ft/ln]	197.03	715.94	373.82	520.45	76.54	194.36	315.21	50.85	199.34	312.10	186.08

Movement, Approach, & Intersection Results

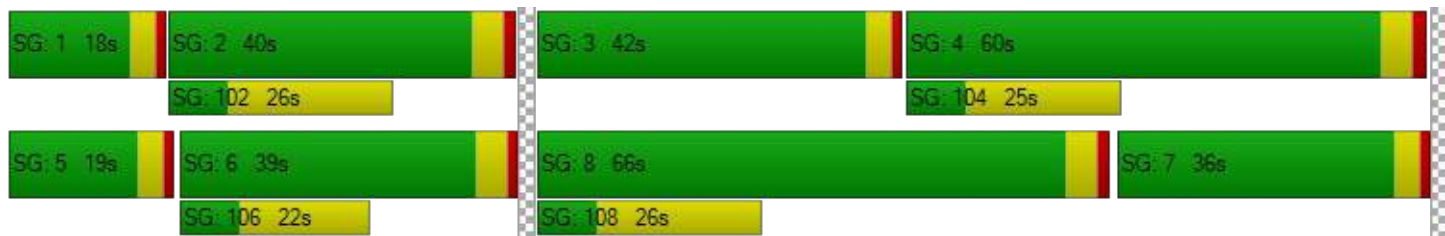
d_M, Delay for Movement [s/veh]	85.33	74.48	74.48	72.43	43.39	32.72	79.30	40.52	33.96	79.05	40.25	37.37
Movement LOS	F	E	E	E	D	C	E	D	C	E	D	D
d_A, Approach Delay [s/veh]	76.45			51.75			49.78			47.63		
Approach LOS	E			D			D			D		
d_I, Intersection Delay [s/veh]	56.89											
Intersection LOS	E											
Intersection V/C	0.639											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	676.30	1269.17	763.51	1887.09
d_p, Pedestrian Delay [s]	69.38	69.38	69.38	69.38
I_p,int, Pedestrian LOS Score for Intersection	2.281	2.500	2.362	2.581
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	766	689	430	441
d_b, Bicycle Delay [s]	30.50	34.44	49.30	48.64
I_b,int, Bicycle LOS Score for Intersection	2.495	2.786	2.244	2.553
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 1: Petaluma Blvd/Washington St

Control Type:	Signalized	Delay (sec / veh):	48.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.757

Intersection Setup

Name	Petaluma Blvd			Petaluma Blvd			Washington St			Washington St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔↔			↔↔↔			↔↔↔			↔↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Pocket Length [ft]	75.00	100.00	95.00	120.00	100.00	110.00	105.00	100.00	100.00	310.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Petaluma Blvd			Petaluma Blvd			Washington St			Washington St		
Base Volume Input [veh/h]	36	369	181	117	303	264	356	734	60	134	619	154
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	8	0	4	0	0	0	0	11	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	26	0	0	18	0	0	4	0	0	13
Total Hourly Volume [veh/h]	36	372	163	117	307	246	356	734	56	145	619	141
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	93	41	29	77	62	89	184	14	36	155	35
Total Analysis Volume [veh/h]	36	372	163	117	307	246	356	734	56	145	619	141
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	9			14			6			12		
v_di, Inbound Pedestrian Volume crossing	6			12			9			14		
v_co, Outbound Pedestrian Volume crossing	8			7			4			10		
v_ci, Inbound Pedestrian Volume crossing	10			4			7			8		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	3			4			3			3		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	140
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	75.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	5	2	3	1	6	7	7	4	0	3	8	0
Auxiliary Signal Groups			2,3			6,7						
Lead / Lag	Lag	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	4	8	4	4	8	4	4	10	0	4	11	0
Maximum Green [s]	30	30	30	30	30	30	30	30	0	30	30	0
Amber [s]	3.0	3.6	3.0	3.0	3.6	3.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.2	0.0	1.0	1.6	0.0
Split [s]	15	30	17	16	31	49	49	77	0	17	45	0
Vehicle Extension [s]	2.0	4.0	2.0	2.0	4.0	2.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	17	0	0	19	0	0	21	0	0	27	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.6	2.0	2.0	2.7	2.0	2.0	2.8	0.0	2.0	3.2	0.0
Minimum Recall	No	Yes	No	No	Yes	No	No	No		No	No	
Maximum Recall	No	No	No	No	No	No	No	No		No	No	
Pedestrian Recall	No	No	No	No	No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	140	140	140	140	140	140	140	140	140	140	140	140
L, Total Lost Time per Cycle [s]	4.00	4.60	4.00	4.00	4.70	4.70	4.00	4.80	4.80	4.00	5.20	5.20
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.60	0.00	2.00	2.70	0.00	2.00	2.80	2.80	2.00	3.20	3.20
g_i, Effective Green Time [s]	4	39	57	12	47	85	34	58	58	13	37	37
g / C, Green / Cycle	0.03	0.28	0.41	0.09	0.34	0.61	0.24	0.42	0.42	0.09	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.02	0.22	0.12	0.07	0.18	0.17	0.22	0.24	0.24	0.09	0.23	0.24
s, saturation flow rate [veh/h]	1603	1683	1402	1603	1683	1415	1603	1683	1630	1603	1683	1526
c, Capacity [veh/h]	45	471	568	137	566	858	386	703	681	149	449	407
d1, Uniform Delay [s]	67.66	46.63	27.91	63.15	37.69	13.13	51.86	31.15	31.23	63.30	49.06	49.56
k, delay calibration	0.04	0.50	0.50	0.04	0.50	0.50	0.09	0.15	0.15	0.04	0.26	0.27
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.67	12.71	1.27	5.66	3.70	0.84	7.77	1.04	1.09	15.17	11.89	16.34
d3, Initial Queue Delay [s]	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.79	0.29	0.85	0.54	0.29	0.92	0.57	0.57	0.97	0.87	0.90
d, Delay for Lane Group [s/veh]	79.33	61.54	29.18	68.81	41.39	13.97	59.63	32.19	32.32	78.47	60.95	65.90
Lane Group LOS	E	E	C	E	D	B	E	C	C	E	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.44	13.77	3.97	4.37	9.27	3.96	13.13	10.68	10.46	5.83	14.71	14.36
50th-Percentile Queue Length [ft/ln]	35.99	344.33	99.14	109.22	231.82	99.10	328.17	267.01	261.44	145.71	367.71	359.12
95th-Percentile Queue Length [veh/ln]	2.59	19.86	7.14	7.80	14.27	7.14	19.07	16.04	15.76	9.79	21.00	20.58
95th-Percentile Queue Length [ft/ln]	64.78	496.49	178.44	194.92	356.67	178.38	476.72	401.00	394.03	244.69	524.95	514.52

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	79.33	61.54	29.18	68.81	41.39	13.97	59.63	32.25	32.32	78.47	62.77	65.90
Movement LOS	E	E	C	E	D	B	E	C	C	E	E	E
d_A, Approach Delay [s/veh]	53.42			36.11			40.76			65.77		
Approach LOS	D			D			D			E		
d_I, Intersection Delay [s/veh]	48.88											
Intersection LOS	D											
Intersection V/C	0.757											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	561.40	255.76	467.38	435.52
d_p, Pedestrian Delay [s]	59.43	59.43	59.43	59.43
I_p,int, Pedestrian LOS Score for Intersection	2.414	2.497	2.663	2.658
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	363	376	1031	569
d_b, Bicycle Delay [s]	46.97	46.26	16.44	35.91
I_b,int, Bicycle LOS Score for Intersection	2.545	2.695	2.508	2.317
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Petaluma Blvd/Western Ave

Control Type:	Signalized	Delay (sec / veh):	38.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.462

Intersection Setup

Name	Petaluma Blvd			Petaluma Blvd			Western Ave			Water St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵			↵↵			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	1	0	0	0
Pocket Length [ft]	65.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	85.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Petaluma Blvd			Petaluma Blvd			Western Ave			Water St		
Base Volume Input [veh/h]	50	446	0	0	394	83	91	0	130	1	2	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	15	0	11	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	5	0	0	62	0	0	3
Total Hourly Volume [veh/h]	50	446	0	0	409	78	102	0	68	1	2	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	112	0	0	102	20	26	0	17	0	1	0
Total Analysis Volume [veh/h]	50	446	0	0	409	78	102	0	68	1	2	0
Presence of On-Street Parking	No		Yes	No		Yes	No		Yes	No		No
On-Street Parking Maneuver Rate [/h]	0	0	5	0	0	5	0	0	5	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	7			28			29			33		
v_di, Inbound Pedestrian Volume crossing m	33			29			28			7		
v_co, Outbound Pedestrian Volume crossing	35			27			39			13		
v_ci, Inbound Pedestrian Volume crossing mi	39			13			35			27		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			2			3			3		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	160
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	12.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	3	8	0	0	4	0	2	0	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lag	-	-	-	-	-
Minimum Green [s]	8	8	0	0	8	0	8	0	0	0	8	0
Maximum Green [s]	20	73	0	0	73	0	39	0	0	0	39	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0	3.2	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	1.3	0.0
Split [s]	15	128	0	0	113	0	32	0	0	0	32	0
Vehicle Extension [s]	2.0	4.0	0.0	0.0	4.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0
Walk [s]	0	8	0	0	13	0	8	0	0	0	8	0
Pedestrian Clearance [s]	0	10	0	0	5	0	10	0	0	0	10	0
Rest In Walk		No			No		No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	Yes			Yes		No				No	
Maximum Recall	No	No			No		No				No	
Pedestrian Recall	No	No			No		No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	R	C
C, Cycle Length [s]	160	160	160	160	160	160
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.50
g_i, Effective Green Time [s]	65	135	65	17	17	17
g / C, Green / Cycle	0.41	0.84	0.41	0.11	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.03	0.30	0.35	0.08	0.08	0.00
s, saturation flow rate [veh/h]	1603	1473	1407	1314	802	1352
c, Capacity [veh/h]	653	1238	575	153	88	173
d1, Uniform Delay [s]	29.00	2.90	42.78	69.08	67.12	64.03
k, delay calibration	0.50	0.50	0.50	0.04	0.04	0.04
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.23	0.82	14.38	1.89	5.45	0.01
d3, Initial Queue Delay [s]	0.00	0.30	0.97	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.08	0.36	0.85	0.67	0.78	0.02
d, Delay for Lane Group [s/veh]	29.23	4.02	58.13	70.97	72.56	64.05
Lane Group LOS	C	A	E	E	E	E
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.26	3.10	19.90	4.10	2.79	0.11
50th-Percentile Queue Length [ft/ln]	31.56	77.43	497.46	102.60	69.72	2.80
95th-Percentile Queue Length [veh/ln]	2.27	5.58	27.21	7.39	5.02	0.20
95th-Percentile Queue Length [ft/ln]	56.81	139.38	680.35	184.67	125.49	5.05

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	29.23	4.02	0.00	0.00	58.13	58.13	70.97	0.00	72.56	64.05	64.05	64.05
Movement LOS	C	A			E	E	E		E	E	E	E
d_A, Approach Delay [s/veh]	6.56		58.13				71.61			64.05		
Approach LOS	A		E				E			E		
d_I, Intersection Delay [s/veh]	38.00											
Intersection LOS	D											
Intersection V/C	0.462											

Other Modes

g_Walk,mi, Effective Walk Time [s]	12.0	12.0	17.0	12.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	108.64	124.70	143.08	144.54
d_p, Pedestrian Delay [s]	68.45	68.45	63.90	68.45
I_p,int, Pedestrian LOS Score for Intersection	2.249	2.315	2.152	1.459
Crosswalk LOS	B	B	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1550	1363	0	344
d_b, Bicycle Delay [s]	4.05	8.14	80.00	54.95
I_b,int, Bicycle LOS Score for Intersection	2.378	2.371	4.132	1.570
Bicycle LOS	B	B	D	A

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 3: Petaluma Blvd/B St**

Control Type:	Signalized	Delay (sec / veh):	38.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.386

Intersection Setup

Name	B St			B St			Petaluma Blvd			Petaluma Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌			⇌⇌			⇌			⇌⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	1	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	65.00	30.00	100.00	30.00	85.00	100.00	100.00	70.00	100.00	40.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	B St			B St			Petaluma Blvd			Petaluma Blvd		
Base Volume Input [veh/h]	68	32	78	13	33	46	39	332	51	27	400	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	31	0	0	0	0	15	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	30	0	0	14	0	0	6	0	0	0
Total Hourly Volume [veh/h]	68	32	79	13	33	32	39	347	45	27	400	12
Peak Hour Factor	0.9500	0.9500	0.9500	1.0000	0.9500	1.0000	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	8	21	3	9	8	10	87	12	7	100	3
Total Analysis Volume [veh/h]	72	34	83	13	35	32	39	347	47	28	400	12
Presence of On-Street Parking	No		Yes	No		No	No		Yes	No		No
On-Street Parking Maneuver Rate [/h]	0	0	5	0	0	0	0	0	5	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	29			11			5			38		
v_di, Inbound Pedestrian Volume crossing	5			38			29			11		
v_co, Outbound Pedestrian Volume crossing	5			12			35			2		
v_ci, Inbound Pedestrian Volume crossing	2			35			12			5		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	4			2			2			2		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	54.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	2	0	0	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	8	0	0	8	0	8	9	0	6	9	0
Maximum Green [s]	0	35	0	0	35	0	10	50	0	20	50	0
Amber [s]	0.0	3.0	0.0	0.0	3.2	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.3	0.0	0.0	1.3	0.0	1.0	1.3	0.0	1.0	1.3	0.0
Split [s]	0	37	0	0	37	0	12	60	0	13	61	0
Vehicle Extension [s]	0.0	2.5	0.0	0.0	2.5	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	12	0	0	11	0	0	9	0	0	9	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.3	0.0	0.0	2.5	0.0	2.0	2.3	0.0	2.0	2.3	0.0
Minimum Recall		No			No		No	Yes		No	Yes	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.30	4.30	4.50	4.50	4.50	4.00	4.30	4.00	4.30	4.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.30	2.50	2.50	2.50	2.00	2.30	2.00	2.30	2.30
g_i, Effective Green Time [s]	16	16	16	16	16	41	41	41	41	41
g / C, Green / Cycle	0.15	0.15	0.14	0.14	0.14	0.37	0.37	0.37	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.06	0.09	0.01	0.02	0.03	0.02	0.28	0.02	0.24	0.01
s, saturation flow rate [veh/h]	1286	1256	1132	1683	1167	1603	1428	1603	1683	1306
c, Capacity [veh/h]	177	183	107	242	168	594	527	595	621	482
d1, Uniform Delay [s]	46.48	44.27	51.67	41.18	41.24	22.32	30.26	22.15	28.73	22.09
k, delay calibration	0.08	0.08	0.08	0.08	0.08	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.11	2.75	0.38	0.20	0.40	0.21	9.37	0.15	5.08	0.10
d3, Initial Queue Delay [s]	0.00	4.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.64	0.12	0.14	0.19	0.07	0.75	0.05	0.64	0.02
d, Delay for Lane Group [s/veh]	47.59	51.11	52.05	41.38	41.65	22.53	39.64	22.30	33.82	22.18
Lane Group LOS	D	D	D	D	D	C	D	C	C	C
Critical Lane Group	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.82	3.16	0.36	0.85	0.79	0.70	10.43	0.50	9.61	0.21
50th-Percentile Queue Length [ft/ln]	45.51	79.04	9.08	21.32	19.68	17.44	260.72	12.42	240.26	5.35
95th-Percentile Queue Length [veh/ln]	3.28	5.69	0.65	1.53	1.42	1.26	15.72	0.89	14.69	0.39
95th-Percentile Queue Length [ft/ln]	81.92	142.28	16.34	38.37	35.43	31.39	393.12	22.36	367.36	9.64

Movement, Approach, & Intersection Results

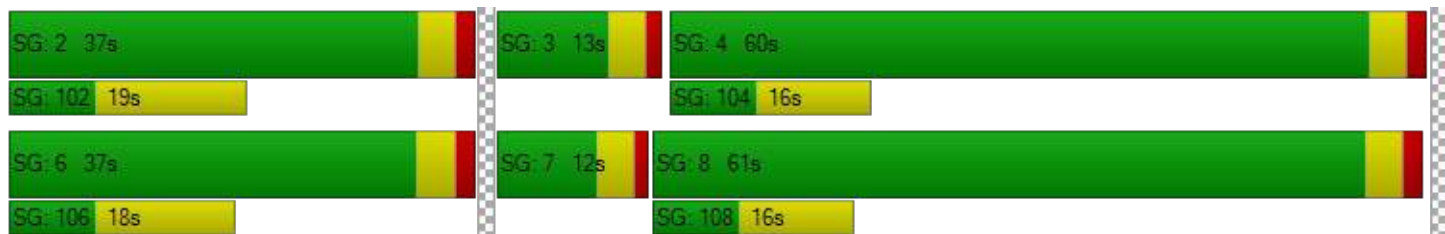
d_M, Delay for Movement [s/veh]	47.59	51.11	51.11	52.05	41.38	41.65	22.53	39.64	39.64	22.30	33.82	22.18
Movement LOS	D	D	D	D	D	D	C	D	D	C	C	C
d_A, Approach Delay [s/veh]	49.77			43.22			38.10			32.77		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	38.33											
Intersection LOS	D											
Intersection V/C	0.386											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	298.85	385.27	234.67	2080.32
d_p, Pedestrian Delay [s]	44.55	44.55	44.55	44.55
I_p,int, Pedestrian LOS Score for Intersection	2.083	2.197	2.318	2.345
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	595	591	1013	1031
d_b, Bicycle Delay [s]	27.21	27.33	13.42	12.93
I_b,int, Bicycle LOS Score for Intersection	1.921	1.715	2.284	2.286
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 4: Petaluma Blvd S/D St**

Control Type: Signalized
Analysis Method: HCM 6th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 56.8
Level Of Service: E
Volume to Capacity (v/c): 0.648

Intersection Setup

Name	D St			D St			Petaluma Blvd S			Petaluma Blvd S		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌			⇌			⇌			⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	1	0	0	1	0	0
Pocket Length [ft]	80.00	100.00	100.00	100.00	100.00	40.00	175.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	D St			D St			Petaluma Blvd S			Petaluma Blvd S		
Base Volume Input [veh/h]	103	430	34	231	425	87	101	252	62	105	252	245
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	12	0	0	18	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	23	0	0	21	0	0	105
Total Hourly Volume [veh/h]	103	430	34	231	425	64	101	264	41	105	270	140
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	108	9	58	106	16	25	66	10	26	68	35
Total Analysis Volume [veh/h]	103	430	34	231	425	64	101	264	41	105	270	140
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	4			7			4			1		
v_di, Inbound Pedestrian Volume crossing m	1			4			7			4		
v_co, Outbound Pedestrian Volume crossing	6			1			8			4		
v_ci, Inbound Pedestrian Volume crossing mi	8			4			6			1		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	4			3			0			2		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	160
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	48.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lag	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	8	9	0	8	9	0	8	9	0	8	9	0
Maximum Green [s]	30	50	0	35	50	0	30	45	0	30	45	0
Amber [s]	3.0	3.6	0.0	3.0	3.6	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	1.0	1.1	0.0	1.0	1.3	0.0	1.0	1.0	0.0	1.0	1.1	0.0
Split [s]	42	66	0	36	60	0	18	39	0	19	40	0
Vehicle Extension [s]	2.0	4.0	0.0	2.0	4.0	0.0	2.0	2.5	0.0	2.0	2.5	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	19	0	0	18	0	0	15	0	0	19	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.7	0.0	2.0	2.9	0.0	2.0	2.6	0.0	2.0	2.7	0.0
Minimum Recall	No	Yes		No	Yes		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	160	160	160	160	160	160	160	160	160	160	160
L, Total Lost Time per Cycle [s]	4.00	4.70	4.00	4.90	4.90	4.00	4.60	4.60	4.00	4.70	4.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.70	2.00	2.90	2.90	2.00	2.60	2.60	2.00	2.70	2.70
g_i, Effective Green Time [s]	12	48	25	60	60	12	58	58	12	58	58
g / C, Green / Cycle	0.08	0.30	0.16	0.38	0.38	0.07	0.36	0.36	0.08	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.06	0.28	0.14	0.25	0.05	0.06	0.16	0.03	0.07	0.16	0.10
s, saturation flow rate [veh/h]	1603	1657	1603	1683	1377	1603	1683	1403	1603	1683	1389
c, Capacity [veh/h]	122	493	250	634	519	119	608	506	123	611	504
d1, Uniform Delay [s]	73.00	54.85	66.57	41.62	32.57	73.17	38.76	33.64	72.96	38.68	36.00
k, delay calibration	0.04	0.29	0.04	0.15	0.15	0.04	0.50	0.50	0.04	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.92	19.63	5.86	1.76	0.15	6.13	2.26	0.31	6.09	2.31	1.37
d3, Initial Queue Delay [s]	6.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.94	0.92	0.67	0.12	0.85	0.43	0.08	0.85	0.44	0.28
d, Delay for Lane Group [s/veh]	85.33	74.48	72.43	43.39	32.72	79.30	41.01	33.96	79.05	40.99	37.37
Lane Group LOS	F	E	E	D	C	E	D	C	E	D	D
Critical Lane Group	No	Yes	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.43	21.10	9.81	14.56	1.70	4.35	8.44	1.13	4.50	8.57	4.14
50th-Percentile Queue Length [ft/ln]	110.74	527.59	245.37	364.00	42.52	108.82	210.91	28.25	112.40	214.13	103.38
95th-Percentile Queue Length [veh/ln]	7.88	28.64	14.95	20.82	3.06	7.77	13.20	2.03	7.97	13.36	7.44
95th-Percentile Queue Length [ft/ln]	197.03	715.94	373.82	520.45	76.54	194.36	329.99	50.85	199.34	334.12	186.08

Movement, Approach, & Intersection Results

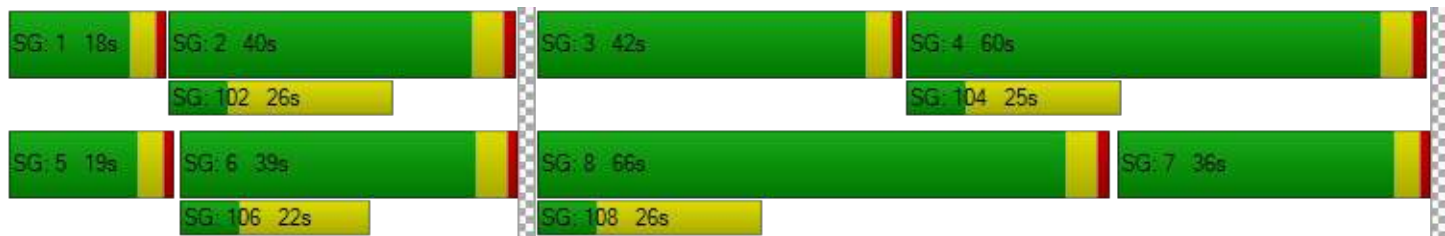
d_M, Delay for Movement [s/veh]	85.33	74.48	74.48	72.43	43.39	32.72	79.30	41.01	33.96	79.05	40.99	37.37
Movement LOS	F	E	E	E	D	C	E	D	C	E	D	D
d_A, Approach Delay [s/veh]	76.45			51.75			49.83			47.77		
Approach LOS	E			D			D			D		
d_I, Intersection Delay [s/veh]	56.81											
Intersection LOS	E											
Intersection V/C	0.648											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	676.30	1269.17	763.51	1887.09
d_p, Pedestrian Delay [s]	69.38	69.38	69.38	69.38
I_p,int, Pedestrian LOS Score for Intersection	2.281	2.500	2.368	2.588
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	766	689	430	441
d_b, Bicycle Delay [s]	30.50	34.44	49.30	48.64
I_b,int, Bicycle LOS Score for Intersection	2.495	2.786	2.264	2.583
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Appendix C

Queuing Calculations





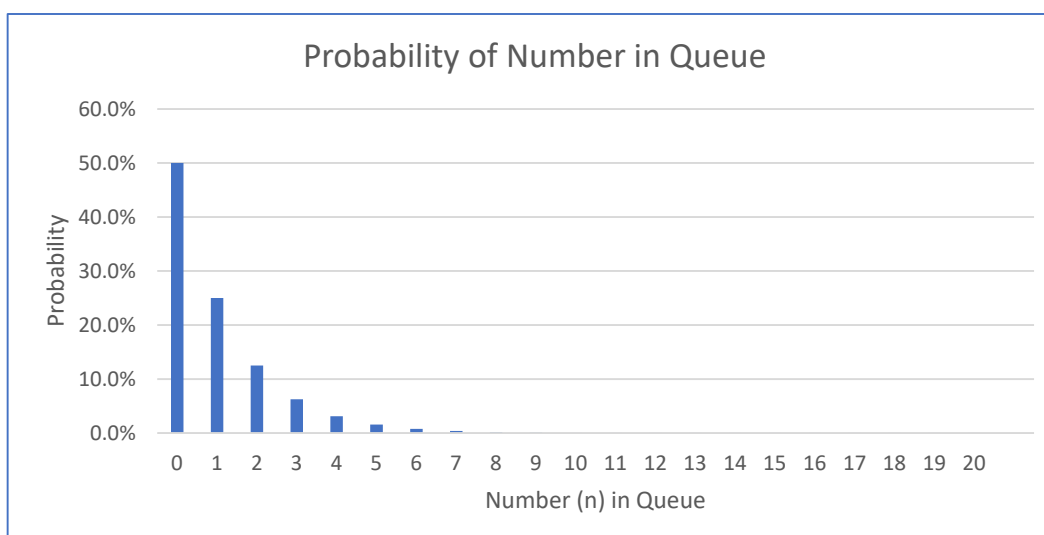
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Queuing Evaluation Worksheet

Project: Petaluma Appellation Hotel
 Project No: PET169

By: SW
 Date: 7/20/2023

Inputs		
Time Unit	Hour	
λ , Arrival Rate (veh/hr):	16	Veh/Hour
μ , Service Rate (veh/hr):	32	Veh/Hour
Intermediate Calculations		
Average Time between arrivals	0.063	hour
	225.0	seconds
Average Service Time	0.031	hour
	112.5	seconds
Performance Measures		
Rho (average Server Utilization)	0.500	
P0 (probability the System is empty)	50.0%	
L (average number in the system)	1.0	Vehicles
	25.0	Feet
Lq (average number waiting in the queue)	0.5	Vehicles
W (average time in the system)	0.063	hour
	3.8	minutes
Wq (average time in the queue)	0.031	hour
	1.9	minutes
Probability of a specific number of customers in the system		
Number of vehicles in the system (n)	4	
Probability	3.1%	
Note: the service rate must be greater than the arrival rate. If the service rate is less than or equal to the arrival rate, the waiting line would eventually grow to be infinitely large.		



A.3 - NOP Comments

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NATIVE AMERICAN HERITAGE COMMISSION

April 12, 2024

Olivia Ervin
City of Petaluma
11 English Street
Petaluma CA 94952

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Pauma-Yuima Band of
Luiseño Indians

EXECUTIVE SECRETARY
**Raymond C.
Hitchcock**
Miwok, Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

Re: 2024040565, Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel Project, Sonoma County

Dear Ms. Ervin:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit. 14, § 15064.5 (b) (CEQA Guidelines § 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan; or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:

Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- a. A brief description of the project.
- b. The lead agency contact information.
- c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report:

A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subs. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- a. Alternatives to the project.
- b. Recommended mitigation measures.
- c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- a. Type of environmental review necessary.
- b. Significance of the tribal cultural resources.
- c. Significance of the project's impacts on tribal cultural resources.
- d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
- b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, if Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

- a. Avoidance and preservation of the resources in place, including, but not limited to:
 - i. Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i. Protecting the cultural character and integrity of the resource.
 - ii. Protecting the traditional use of the resource.
 - iii. Protecting the confidentiality of the resource.
- c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
- e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
- f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

- a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
- b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
- c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at:

https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:

Cameron.Vela@NAHC.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

cc: State Clearinghouse

-----Original Message-----

From: Kathy Brandal <[REDACTED]>

Sent: Monday, April 15, 2024 7:51 AM

To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>

Subject: Overlay & Appellation Hotel

[You don't often get email from [REDACTED]. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

I cannot attend the meeting but wish to convey my utter disgust of this ludicrous project! No matter what the EIR report states (unless it says this project is bad for the environment), you will never convince me that putting a hotel on the corner of "B" Street and Petaluma Blvd. is a good idea. The problems it will cause are numerous: add cars and traffic; no adequate parking for visitors or staff; water usage when we are already conserving, to name a few. I live just 5 blocks from this proposed monstrosity. It will most likely impact my neighborhood by adding parked cars (employees looking for parking without a 2-hour limit).

I am 100% against this project!!!! It will be the beginning of the ruination of our beautiful historic downtown!

Kathy Brandal

[REDACTED]
Petaluma 94952

-----Original Message-----

From: Cynthia Huisman [REDACTED] >
Sent: Friday, April 19, 2024 5:42 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: Proposed hotel

[You don't often get email from [REDACTED] Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

There is no need for this huge building in our town for all the reasons you have probably heard. Too big, massive scale- would just ruin our downtown. And the idea of an overlay - very sneaky way to get around changing the zoning. Really insulting to the public, actually. This tactic sounds like something Scott Weiner and his buds in Sacto suggested. Petaluma will not be strangled with all the progressive ideas for our town.

The fact that the Planning Commission didn't shoot this hotel down in the first place is crazy and very concerning as to what or who influences them.

This is the wrong building in the wrong place. There is no relevance for this building anywhere in town. None. This is an ego trip for a very wealthy guy who's trying to shove himself down our throats. We reject this entire concept.

We have lots of hotels in town. We don't need the elite experience of this one. Newport Beach should check it out. Maybe they did and said no to it as well.

Cynthia Huisman

Sent from my iPhone

From: Geraldine Sbragia <[REDACTED]>
Sent: Thursday, April 18, 2024 6:46 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: Parking new hotel

Hi

The City of Petaluma appears to have the funds to congest traffic and parking with new bike lanes, while our streets are in ruins. Don't get me wrong bike lanes are a nice touch but working moms and dads don't bike to the store after work to pick up groceries. I believe 35% of the city is of a mature age, most of whom cannot ride a bike or walk to shop their basic groceries and lug bags home in rain and heat. The new hotel will no doubt impact parking severely which could impact local businesses in a negative way if it becomes difficult to park. It feels as though Petaluma is more focused on creating an image rather than serving the basic needs of their citizens. So many bike lanes, so many bathtubs in the air, but don't get me wrong The LOCAL art is wonderful. It feels like constant distractions from what the majority of citizens want. I suggest the city focus on attracting more businesses to our town. Business tax revenues, more jobs close to home, cut air pollution and maybe fix a few streets and provide teachers in our communities with higher pay... you know, the basic's that most taxpayers would rather see than additional bike lanes.

Thank you for time and consideration

Geraldine Sbragia

April 19, 2024

City of Petaluma
Planning
11 English St
Petaluma, CA 94952

Ref: Gas and Electric Transmission and Distribution

Dear Petaluma Planning,

Thank you for submitting PLGP-2023-0001 plans for our review. PG&E will review the submitted plans in relationship to any existing Gas and Electric facilities within the project area. If the proposed project is adjacent/or within PG&E owned property and/or easements, we will be working with you to ensure compatible uses and activities near our facilities.

Attached you will find information and requirements as it relates to Gas facilities (Attachment 1) and Electric facilities (Attachment 2). Please review these in detail, as it is critical to ensure your safety and to protect PG&E's facilities and its existing rights.

Below is additional information for your review:

1. This plan review process does not replace the application process for PG&E gas or electric service your project may require. For these requests, please continue to work with PG&E Service Planning: https://www.pge.com/en_US/business/services/building-and-renovation/overview/overview.page.
2. If the project being submitted is part of a larger project, please include the entire scope of your project, and not just a portion of it. PG&E's facilities are to be incorporated within any CEQA document. PG&E needs to verify that the CEQA document will identify any required future PG&E services.
3. An engineering deposit may be required to review plans for a project depending on the size, scope, and location of the project and as it relates to any rearrangement or new installation of PG&E facilities.

Any proposed uses within the PG&E fee strip and/or easement, may include a California Public Utility Commission (CPUC) Section 851 filing. This requires the CPUC to render approval for a conveyance of rights for specific uses on PG&E's fee strip or easement. PG&E will advise if the necessity to incorporate a CPUC Section 851 filing is required.

This letter does not constitute PG&E's consent to use any portion of its easement for any purpose not previously conveyed. PG&E will provide a project specific response as required.

Sincerely,

Plan Review Team
Land Management

Attachment 1 – Gas Facilities

There could be gas transmission pipelines in this area which would be considered critical facilities for PG&E and a high priority subsurface installation under California law. Care must be taken to ensure safety and accessibility. So, please ensure that if PG&E approves work near gas transmission pipelines it is done in adherence with the below stipulations. Additionally, the following link provides additional information regarding legal requirements under California excavation laws: <https://www.usanorth811.org/images/pdfs/CA-LAW-2018.pdf>

1. **Standby Inspection:** A PG&E Gas Transmission Standby Inspector must be present during any demolition or construction activity that comes within 10 feet of the gas pipeline. This includes all grading, trenching, substructure depth verifications (potholes), asphalt or concrete demolition/removal, removal of trees, signs, light poles, etc. This inspection can be coordinated through the Underground Service Alert (USA) service at 811. A minimum notice of 48 hours is required. Ensure the USA markings and notifications are maintained throughout the duration of your work.
2. **Access:** At any time, PG&E may need to access, excavate, and perform work on the gas pipeline. Any construction equipment, materials, or spoils may need to be removed upon notice. Any temporary construction fencing installed within PG&E's easement would also need to be capable of being removed at any time upon notice. Any plans to cut temporary slopes exceeding a 1:4 grade within 10 feet of a gas transmission pipeline need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.
3. **Wheel Loads:** To prevent damage to the buried gas pipeline, there are weight limits that must be enforced whenever any equipment gets within 10 feet of traversing the pipe.

Ensure a list of the axle weights of all equipment being used is available for PG&E's Standby Inspector. To confirm the depth of cover, the pipeline may need to be potholed by hand in a few areas.

Due to the complex variability of tracked equipment, vibratory compaction equipment, and cranes, PG&E must evaluate those items on a case-by-case basis prior to use over the gas pipeline (provide a list of any proposed equipment of this type noting model numbers and specific attachments).

No equipment may be set up over the gas pipeline while operating. Ensure crane outriggers are at least 10 feet from the centerline of the gas pipeline. Transport trucks must not be parked over the gas pipeline while being loaded or unloaded.

4. **Grading:** PG&E requires a minimum of 36 inches of cover over gas pipelines (or existing grade if less) and a maximum of 7 feet of cover at all locations. The graded surface cannot exceed a cross slope of 1:4.
5. **Excavating:** Any digging within 2 feet of a gas pipeline must be dug by hand. Note that while the minimum clearance is only 24 inches, any excavation work within 24 inches of the edge of a pipeline must be done with hand tools. So to avoid having to dig a trench entirely with hand tools, the edge of the trench must be over 24 inches away. (Doing the math for a 24 inch

wide trench being dug along a 36 inch pipeline, the centerline of the trench would need to be at least 54 inches [$24/2 + 24 + 36/2 = 54$] away, or be entirely dug by hand.)

Water jetting to assist vacuum excavating must be limited to 1000 psig and directed at a 40° angle to the pipe. All pile driving must be kept a minimum of 3 feet away.

Any plans to expose and support a PG&E gas transmission pipeline across an open excavation need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

6. Boring/Trenchless Installations: PG&E Pipeline Services must review and approve all plans to bore across or parallel to (within 10 feet) a gas transmission pipeline. There are stringent criteria to pothole the gas transmission facility at regular intervals for all parallel bore installations.

For bore paths that cross gas transmission pipelines perpendicularly, the pipeline must be potholed a minimum of 2 feet in the horizontal direction of the bore path and a minimum of 24 inches in the vertical direction from the bottom of the pipe with minimum clearances measured from the edge of the pipe in both directions. Standby personnel must watch the locator trace (and every ream pass) the path of the bore as it approaches the pipeline and visually monitor the pothole (with the exposed transmission pipe) as the bore traverses the pipeline to ensure adequate clearance with the pipeline. The pothole width must account for the inaccuracy of the locating equipment.

7. Substructures: All utility crossings of a gas pipeline should be made as close to perpendicular as feasible ($90^\circ \pm 15^\circ$). All utility lines crossing the gas pipeline must have a minimum of 24 inches of separation from the gas pipeline. Parallel utilities, pole bases, water line 'kicker blocks', storm drain inlets, water meters, valves, back pressure devices or other utility substructures are not allowed in the PG&E gas pipeline easement.

If previously retired PG&E facilities are in conflict with proposed substructures, PG&E must verify they are safe prior to removal. This includes verification testing of the contents of the facilities, as well as environmental testing of the coating and internal surfaces. Timelines for PG&E completion of this verification will vary depending on the type and location of facilities in conflict.

8. Structures: No structures are to be built within the PG&E gas pipeline easement. This includes buildings, retaining walls, fences, decks, patios, carports, septic tanks, storage sheds, tanks, loading ramps, or any structure that could limit PG&E's ability to access its facilities.

9. Fencing: Permanent fencing is not allowed within PG&E easements except for perpendicular crossings which must include a 16 foot wide gate for vehicular access. Gates will be secured with PG&E corporation locks.

10. Landscaping: Landscaping must be designed to allow PG&E to access the pipeline for maintenance and not interfere with pipeline coatings or other cathodic protection systems. No trees, shrubs, brush, vines, and other vegetation may be planted within the easement area. Only those plants, ground covers, grasses, flowers, and low-growing plants that grow unsupported to a maximum of four feet (4') in height at maturity may be planted within the easement area.



11. Cathodic Protection: PG&E pipelines are protected from corrosion with an “Impressed Current” cathodic protection system. Any proposed facilities, such as metal conduit, pipes, service lines, ground rods, anodes, wires, etc. that might affect the pipeline cathodic protection system must be reviewed and approved by PG&E Corrosion Engineering.

12. Pipeline Marker Signs: PG&E needs to maintain pipeline marker signs for gas transmission pipelines in order to ensure public awareness of the presence of the pipelines. With prior written approval from PG&E Pipeline Services, an existing PG&E pipeline marker sign that is in direct conflict with proposed developments may be temporarily relocated to accommodate construction work. The pipeline marker must be moved back once construction is complete.

13. PG&E is also the provider of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E’s facilities must be reviewed and approved by PG&E to ensure that no impact occurs which may endanger the safe operation of its facilities.

Attachment 2 – Electric Facilities

It is PG&E's policy to permit certain uses on a case by case basis within its electric transmission fee strip(s) and/or easement(s) provided such uses and manner in which they are exercised, will not interfere with PG&E's rights or endanger its facilities. Some examples/restrictions are as follows:

1. Buildings and Other Structures: No buildings or other structures including the foot print and eave of any buildings, swimming pools, wells or similar structures will be permitted within fee strip(s) and/or easement(s) areas. PG&E's transmission easement shall be designated on subdivision/parcel maps as **"RESTRICTED USE AREA – NO BUILDING."**
2. Grading: Cuts, trenches or excavations may not be made within 25 feet of our towers. Developers must submit grading plans and site development plans (including geotechnical reports if applicable), signed and dated, for PG&E's review. PG&E engineers must review grade changes in the vicinity of our towers. No fills will be allowed which would impair ground-to-conductor clearances. Towers shall not be left on mounds without adequate road access to base of tower or structure.
3. Fences: Walls, fences, and other structures must be installed at locations that do not affect the safe operation of PG&E's facilities. Heavy equipment access to our facilities must be maintained at all times. Metal fences are to be grounded to PG&E specifications. No wall, fence or other like structure is to be installed within 10 feet of tower footings and unrestricted access must be maintained from a tower structure to the nearest street. Walls, fences and other structures proposed along or within the fee strip(s) and/or easement(s) will require PG&E review; submit plans to PG&E Centralized Review Team for review and comment.
4. Landscaping: Vegetation may be allowed; subject to review of plans. On overhead electric transmission fee strip(s) and/or easement(s), trees and shrubs are limited to those varieties that do not exceed 10 feet in height at maturity. PG&E must have access to its facilities at all times, including access by heavy equipment. No planting is to occur within the footprint of the tower legs. Greenbelts are encouraged.
5. Reservoirs, Sumps, Drainage Basins, and Ponds: Prohibited within PG&E's fee strip(s) and/or easement(s) for electric transmission lines.
6. Automobile Parking: Short term parking of movable passenger vehicles and light trucks (pickups, vans, etc.) is allowed. The lighting within these parking areas will need to be reviewed by PG&E; approval will be on a case by case basis. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications. Blocked-up vehicles are not allowed. Carports, canopies, or awnings are not allowed.
7. Storage of Flammable, Explosive or Corrosive Materials: There shall be no storage of fuel or combustibles and no fueling of vehicles within PG&E's easement. No trash bins or incinerators are allowed.

8. Streets and Roads: Access to facilities must be maintained at all times. Street lights may be allowed in the fee strip(s) and/or easement(s) but in all cases must be reviewed by PG&E for proper clearance. Roads and utilities should cross the transmission easement as nearly at right angles as possible. Road intersections will not be allowed within the transmission easement.

9. Pipelines: Pipelines may be allowed provided crossings are held to a minimum and to be as nearly perpendicular as possible. Pipelines within 25 feet of PG&E structures require review by PG&E. Sprinklers systems may be allowed; subject to review. Leach fields and septic tanks are not allowed. Construction plans must be submitted to PG&E for review and approval prior to the commencement of any construction.

10. Signs: Signs are not allowed except in rare cases subject to individual review by PG&E.

11. Recreation Areas: Playgrounds, parks, tennis courts, basketball courts, barbecue and light trucks (pickups, vans, etc.) may be allowed; subject to review of plans. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications.

12. Construction Activity: Since construction activity will take place near PG&E's overhead electric lines, please be advised it is the contractor's responsibility to be aware of, and observe the minimum clearances for both workers and equipment operating near high voltage electric lines set out in the High-Voltage Electrical Safety Orders of the California Division of Industrial Safety (<https://www.dir.ca.gov/Title8/sb5g2.html>), as well as any other safety regulations. Contractors shall comply with California Public Utilities Commission General Order 95 (http://www.cpuc.ca.gov/gos/GO95/go_95_startup_page.html) and all other safety rules. No construction may occur within 25 feet of PG&E's towers. All excavation activities may only commence after 811 protocols has been followed.

Contractor shall ensure the protection of PG&E's towers and poles from vehicular damage by (installing protective barriers) Plans for protection barriers must be approved by PG&E prior to construction.

13. PG&E is also the owner of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E's facilities must be reviewed and approved by PG&E to ensure that no impact occurs that may endanger the safe and reliable operation of its facilities.

From: Jeffery Cox <[REDACTED]>

Sent: Saturday, April 20, 2024 4:37 PM

To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>

Subject: I AM 100% AGAINST the building of the hotel as proposed in downtown.

You don't often get email from [REDACTED] [Learn why this is important](#)

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

To Whom it May Concern:

As a 7 year resident of Petaluma I very saddened by the decision to built a big multi story hotel in the downtown area.

If it is to be built anywhere in Petaluma, it should be near the SMART train. In that way people staying at the hotel could have quick service to San Francisco to the South or to the wine county to the North. Stop this boondoggle now.

Sincerely,

Jeffery Cox

[REDACTED]
Petaluma Ca [REDACTED]

-----Original Message-----

From: s. herman <[REDACTED]>
Sent: Saturday, April 20, 2024 1:55 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: EKN, The M Group and their ilk

[You don't often get email from [REDACTED]. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

Please don't allow these corporate entities to destroy what's most attractive about Petaluma. What they propose will ruin the downtown and make lives miserable for its residents. We didn't move from the south bay to live in another Silicon Valley environment.

The M Group is profit driven. It's long past due to bring back Petaluma's in-house planning department. Geoff and Heather live in Saratoga, California. They don't have Petaluma's best interests at heart.

When we moved to Petaluma in 2004 and purchased our home here in 2005, we also had the option to purchase a lovely home walking distance of Healdsburg. However, after renting in Petaluma for a year, we realized that we valued our more rural environment far more than than Healdsburg which has become a tourist destination. We lost all interest in Healdsburg and no longer have any desire to visit, dine, or shop there. We used to enjoy visiting and staying in Healdsburg, and in fact, I gave a milestone birthday party for my husband and a large group of his Los Gatos cycling posse at the Madrone Hotel in Healdsburg. But that was then, and this is now. The Madrone Hotel has also sadly lost its allure.

Please listen to your residents. Care about those of us who live here, not those who don't.

Sincerely,

Susan & Ted Herman

[REDACTED]

Petaluma, CA [REDACTED]

-----Original Message-----

From: Joanne Ferris <[REDACTED]>
Sent: Sunday, April 21, 2024 7:53 AM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: EKN Overlay Comment

[You don't often get email from [REDACTED]. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

The EKN Overlay proposal should be cancelled for many reasons:

1. It profoundly, negatively changes the historic appearance of our downtown
2. The footprint is out of proportion to existing buildings:
 - A. In height
 - B. Distance to street
 - C. Below ground
3. Traffic congestion in the area will negatively impact downtown especially D street and Petaluma Blvd during construction AND during operations. This includes and is not limited to Contractors, sub contractors, support staff, guests and vendors. I have attended information sessions where the developers have stated the EIR and traffic study will address these concerns. However, it is all conjecture. Once approved, the owners will not be required to make any changes regardless of community impact that results.
4. Conflict of Interest with city planning contract firm and EKN project development. We all know this is the same group.

Please, shut this project down.

Sent from my iPad

From: Tina Hittenberger <[REDACTED]>
Sent: Tuesday, April 23, 2024 12:17 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Economic Opportunity Overlay

You don't often get email from [REDACTED]. [Learn why this is important](#)

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

Since I cannot attend the meeting on May 1 at the Lucchesi Center, I want to voice my objection to the process of the Economic Opportunity Overlay.

I am a citizen, real estate broker, investor, owner of a Heritage Home and active member of the community. To many of us it is, quite simply, a ploy to allow a new hotel and redefine our historic downtown Petaluma.

The design of the hotel, its size, exterior finishings and impact has a significant impact and deserves MUCH more thoughtful consideration.

I want to believe that your true mission is to cooperate with the residents, businesses and citizens of Petaluma to make projects enhance our town rather than divide it. Not only the landscape, but our future is at stake.

I hope the brevity of this statement is in indirect proportion to the many concerned people of our town.



Tina Hittenberger, MBA
Broker Associate
DRE#: 01397821

127 Fourth Street
Petaluma CA 94952
m: 707.738.5607
HomesinSonomaCounty.com

California	Delaware	Illinois	New Jersey	Tennessee	Washington
Colorado	Florida	Maryland	New York	Texas	Washington, DC
Connecticut	Georgia	Massachusetts	Pennsylvania	Virginia	

North Bay, CA

/ / / / — COMPASS

From: Karina Spalding <[REDACTED]>
Sent: Wednesday, April 24, 2024 10:22 AM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: Downtown Housing & Economic Opportunity Overlay/ EKN Appellation Hotel Projects

You don't often get email from [REDACTED] [Learn why this is important](#)

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

Hello I'm Karina Spalding,

I'm 24 I've lived in Petaluma for all of those years. I lived in turtle creek and now I have the honor of living in a home on B st. This town is gorgeous and absolutely stunning when it comes to architecture. How dare you think it's worth our time and money to put such a boring, ugly, eyesore of a building in the heart of town. There's zero love and zero respect towards the other pieces of architecture. If you truly wanted to make something luxurious and beautiful, you would also need functionality. Where are the workers going to park their cars? Where to you expect the guests to park because in front of residential homes and the garage on the theater and Petaluma market districts are not the answer. How about the traffic issues on D st and Petaluma blvd? There are more to name but we need to address these issues first before we even consider putting another hotel in town. We have the new train station hotel and the other new one by in n out. We don't need another, you all want one. That's not what we need. How about enforcing traffic laws instead. I'm seeing a LOT of distracted drivers on their phones and little to no interference.

Regardless of my complaints, this hotel is not ethically logical, and until you address the other underlining facts about this town, a hotel will not be built. And all I'm saying is I don't work, so I have time.

Please consider that this could possibly be the WRONG thing to do.

Thank you for your time in reading this.

Kindly yet firm,
Karina

-----Original Message-----

From: [REDACTED] <[REDACTED]>
Sent: Tuesday, April 23, 2024 4:57 PM
To: Greg Powell <gpowell@cityofpetaluma.org>
Subject: APPELLATION HOTEL

[You don't often get email from [REDACTED]. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

Dear Greg:

I have three rental units on Bassett Street and move back periodically. I love the idea of this hotel. We are currently living in San Luis Obispo and a similar hotel to the Appellation is one of our favorite places.

Here is the website: <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhotel-slo.com%2F&data=05%7C02%7Cgpowell%40cityofpetaluma.org%7Cbcfea2a1701d4ac7b79108dc63f1004a%7C3251706cb8d941349f26dd04acbb79d0%7C0%7C0%7C638495135208795126%7CUnknown%7CTWFpbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C40000%7C%7C%7C&sdata=TmRxj77w0Dp6id1zs3rESutvk1WLhOMj7SI%2B%2F5zi1cA%3D&reserved=0>

It fits into the downtown landscape architecture (SLO's downtown is quite similar to Petaluma) and is a real draw for the town.

Good luck on the project.

Kevin

-----Original Message-----

From: Marilyn Jaffe <[REDACTED]>
Sent: Wednesday, April 24, 2024 10:29 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: The EKN Hotel

[You don't often get email from [REDACTED] Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

Hi - Thanks for being open to public opinion on this proposed project.

I find it beyond belief that anyone could see this gigantic hotel as being in keeping with the small town feeling of downtown Petaluma.

It's way too big. Even if it wasn't a boxy design, it's just too big and out-of-proportion.

It's great have a movie theater but the "theater district" is more than enough boxy, large ugliness for our downtown.

Please don't make the same mistake twice.

No amount of hotel revenue is worth it! Petaluma might even lose money in the long run because the big, ugly hotel will diminish the charm and attractiveness of our downtown.

Thanks for listening!

Sincerely,

Marilyn Jaffe

Sent from my iPhone

-----Original Message-----

From: Maureen Hampton <[REDACTED]>

Sent: Thursday, April 25, 2024 6:20 PM

To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>

Subject: Hotel

[You don't often get email from [REDACTED]. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

We do not agree on the building of the hotel!
It DOES NOT fit in the neighborhood at all !!!
Too much traffic. Too many people and NO parking !!!!!
Sent from my iPhone

Dear City of Petaluma and M-Group Employees,

I find it concerning that the city of Petaluma has said the EIR will look at the revised hotel plans – as though they’ve been revised. Nothing regarding the changes to FAR, land coverage, height have changed, which means nothing that the initial study refers to in section 4 has been addressed within the new scope of designs (for the hotel as well as the overlay). Anyone who read the initial study can see that the EIR supplement provided (EIR Supplement, 4/4/24) doesn’t address any of these points:

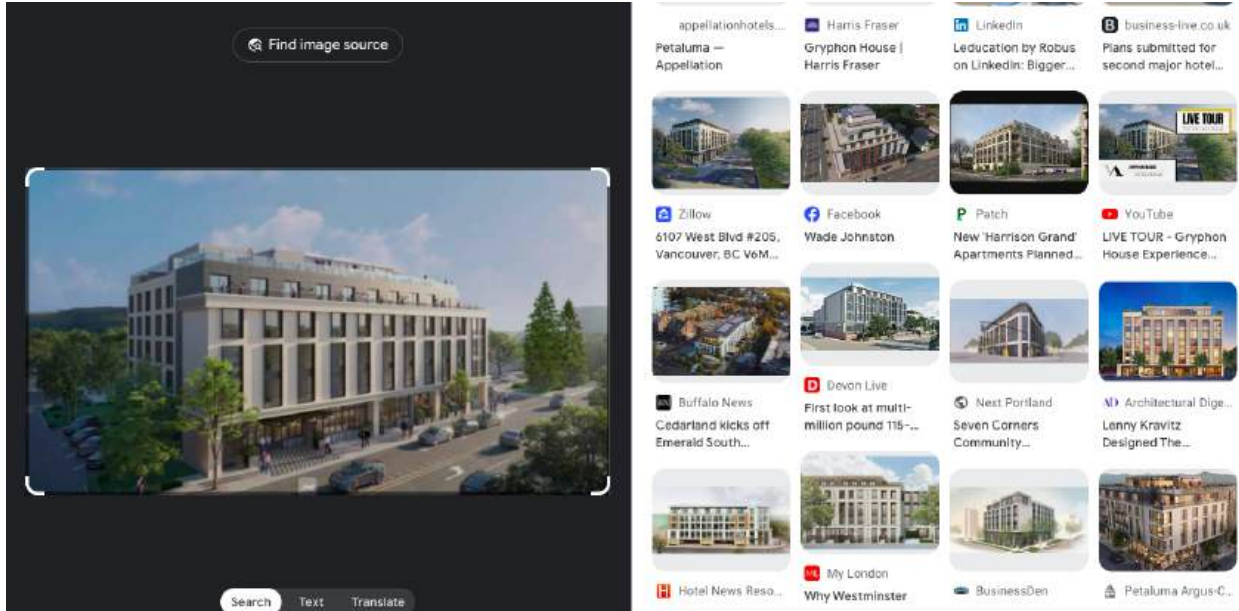
4.1. AESTHETICS

Would the project:	OVERLAY COMPONENT				HOTEL COMPONENT			
	PSI	LTS w/Mit	LTS	NI	PSI	LTS w/Mit	LTS	NI
a) Have a substantial adverse effect on a scenic vista?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sources: City of Petaluma General Plan 2025 and EIR; City of Petaluma Implementing Zoning Ordinance (IZO); California Scenic Highway Mapping System, Scenic Highway System Lists; EKN Appellation Hotel Project Plans, Page Southerland Page, Inc, June 9, 2022; September 8, 2023; Historic Preservation Compliance Review for the Hotel Weaver, Painter Preservation, June 7, 2022; Historic Cultural Resource Report for Downtown Housing and Economic Opportunity Overlay, Painter Preservation, July 31, 2023.

Notes: PSI = Potentially Significant Impact; LTS w/Mit = Less than Significant with Mitigation; LTS = Less than Significant; NI = No Impact

As far as the actual aesthetic of the building, the design is still modern and contemporary, and removed from any effort at connecting to the historical aspects that deem this property part of a National Historic District. A google image search of their new renderings brings up design after design of almost identical buildings, I encourage those reading this to do so to see how the design is a copy and paste of any place USA. If they can’t break away from this copy-and-paste design, then it would seem more optimal to move this project over a couple blocks outside the lines of the historic district. Example of clones across the US:



I've also been in contact with the NPS National Register of Historic Places about the hotel and overlay, and am currently waiting for them to send me the requested materials regarding overlay changes to a designated Historic District and have sent the initial study and EIR Supplement per request. I'm hoping to have more details on this soon after our call, and will send an addendum to this email should it fall within the window of acceptance.

The main area of concern in my correspondence with them has been areas B & C of the overlay, as allowing the overlay to apply to these areas would no longer make the area distinguishable from areas outside the Historic District and therefore a Historic District at all?

The EIR also needs to address, or to be concurrently provided, a parking demand study, parking for those who would not be hotel guests (employees, visitors, residents of Petaluma). A 190-seat restaurant (as noted on the Appellation website) with no parking is concerning; as is their (quoted) 3,000-sq feet of event space without parking. And 58 spaces for 93 rooms is also of concern as Petaluma current zoning for parking requires "1 for each living or sleeping unit, plus 1 for the owner or manager." This has not been addressed. And does not meet the guidelines of the parking ordinance 11.040(D). Also should be addressed is the parking structure and lift, which is not outlined in the EIR plans (4/4/24). The fail rate of the proposed parking lift should be disclosed, as well as an alternate plan if this is to happen.

To add, the staff contact information on the linked EKN/Overlay page the city shared on social media does not note that Greg or Isabel are not employees of the City and should be as such. Also in the name of transparency it should be noted that Olivia Ervin of M-Group did the initial study. And it should be shared who, and what company they're with, of those involved with the EIR.

Sincerely,

Mollie Kellgren

From: Mothers Vet <[REDACTED]>

Sent: Friday, April 26, 2024 10:52 AM

To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>; Greg Powell <gpowell@cityofpetaluma.org>

Subject: Proposed EKN Appellation Hotel

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

Hello Planning Commission.

I want to express my public comment to you by email regarding the proposed EKN Appellation Hotel.

I am vehemently opposed to the construction of this building or any other building in our historic downtown area that would be over 3 stories high. I think it takes away from the architectural character of our historic downtown. The overwhelming majority of Petaluman's are against this planned hotel and I hope you will honor the wishes of the residents of this city.

Thank you,
Dom Peters

From: Brad Swanson <[REDACTED]>
Sent: Saturday, April 27, 2024 5:54 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject:

You don't often get email from [REDACTED]. [Learn why this is important](#)

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Hello,

I am just curious how many Hotels you can build in this town. There's already so many people not enough Emergency Services Etc. This is ridiculous to have a big hotel downtown to bring more people to an already crowded little town that you're trying to grow too big. Build a huge Hotel downtown with low income housing and shops really existing buildings in town are empty prop them up. Your idea of low income housing like the condos over at the end of Raineer 3,500 a month for a 2 bdrm you have to make 12,000 a month to even qualify and they're 3500 bucks a month rent for a two bedroom right 3500. You guys a truly lost stop building and remodel what you have. Bring more crime.

B

From: Donna Fowler <[REDACTED]>
Sent: Saturday, April 27, 2024 11:56 AM
To: Greg Powell <gpowell@cityofpetaluma.org>
Subject: AKN Hotel

[REDACTED]

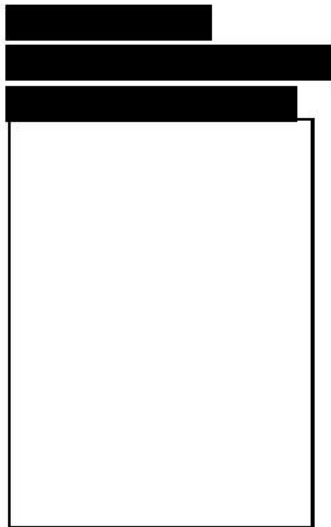
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Hello Greg,

Just reading page 2 of the plan gives us the answer. A six story hotel breaches many of the stated objectives of the city plan. Why would this even be considered? It does not maintain the character of downtown it increases car traffic. It seems clearly inappropriate based on the city's goals. So I am unclear why it continues to be looked at. For me, this is a clear no.

Warmly,
Donna

Donna Fowler
MINDWALK
CONSULTING



-----Original Message-----

From: maura moylan <[REDACTED]>

Sent: Saturday, April 27, 2024 8:02 PM

To: Greg Powell <gpowell@cityofpetaluma.org>

Subject: I am not in favor of the Overlay

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Hello, I am vehemently opposed to the overlay for our downtown area. It is my opinion that all of you should be recalled for deceiving us when you ran for office. I have yet to speak to one person who is in favor of what you were trying to do. It is already incredibly difficult to maneuver in the downtown area. I belong to the Petaluma Garden Club , which has been here for 100 years and none of the ladies that I have spoken to think that this is a good idea. The least you could do is follow the example of Sonoma city Square where they preserve the integrity of the town.

Maura Moylan
Sent from my iPhone

-----Original Message-----

From: Carol Isaak <[REDACTED]>
Sent: Monday, April 29, 2024 6:45 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: EKN and overlay

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Please, consider the nature of our historic downtown and the reason that tourists want to come here. Six story buildings overshadowing the historic district will change the city forever. Without the charm of our historic town, why would hotel guests be willing to pay the high prices that will be necessary for that hotel? (Hotels in Petaluma already have high vacancy rates.)

The EKN hotel in particular does not seem to be well thought out. The traffic at that corner is already heavy. Where will guests and hotel workers park? The underground parking will not accommodate them all. How will the garbage trucks access Hotel dumpsters? What will happen to nearby businesses when there's no parking for their customers?

I don't understand why density must be increased in the center of downtown. There is room for more buildings still within walkable distance of downtown without destroying the ambience of our special town.

Please listen to the community and the historic & cultural preservation commission!

Carol Isaak
Sent from my iPhone

From: Irene Collins <[REDACTED]>
Sent: Monday, April 29, 2024 3:08 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: Economic Overlay and Appellation Hotel

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To the council members and planning commission ,

The appellation hotel and general changes to Petaluma are a huge mistake:

1. In size and style the hotel does not fit the character of downtown Petaluma. It will overwhelm the entire neighborhood and in no way reflects the architecture and ambiance of the area.
2. The area is already lacking in sufficient parking, and traffic problems, particularly on weekends, make coming to town unpleasant and time consuming.
3. If you are trying to boost tourism, which appears to be the aim, this will be a dismal failure, as the tourists come to see quaint old style river town, not a mini San Jose North.
4. Ecologically, this also does not work due to insufficient water for the town and surrounding areas in the long range. Although these last two years have been better, we cannot count on these conditions being consistent
5. Too many massive buildings are already being built further along Petaluma Boulevard. None of these fit the area, are too large, and are built on the flood plain along the river. You will again have to combat flooding and subsidence due to the periodic heavy rains and likelihood of earthquakes in the area. The flooding the last rainy season is nothing compared to what happened in the past. Just check the records for the 19080's.
6. You cannot let greedy developers dictate the course of the city. They will take their profits, and let citizens and taxpayers bear the consequences.

-----Original Message-----

From: Janis Phillips <[REDACTED]>

Sent: Monday, April 29, 2024 12:22 PM

To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>

Subject: Downtown Overlay and Rezoning

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To the Petaluma Planning Commission,

The proposed hotel and changes to downtown are an egregious act against not only the historical pride of our community but also the culture we as Petalumans are trying to steward.

This proposed project will put money in the hands of multinational corporations and rob local developers and builders of the opportunity to continue building meaningful community projects.

We demand actual affordable housing and responsibly city planning Sonic you aren't going to listen, expect we will remove M Group and kick out the private equity developers you've decided to cozy up to.

Do better.

4th generation Petaluman,
Janis Phillips

From: [Jerol O'Hare](#)
To: [-- City Clerk](#)
Subject: For City Council
Date: Monday, April 29, 2024 2:11:33 PM

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I am opposed to the 7 story hotel that is proposed to be built next to Petalumas beloved Rex Hardware. This building is not conducive to our downtown architectural style and does not belong on that sight. I also do not agree with the bike lanes being installed on D Street. D Street is a designated truck route and also provides much needed parking especially during the many yearly events held downtown. I don't understand why bicycle traffic can not be rerouted to B Street which is two streets over, safer and quieter. While on the subject of bicycles and their riders I have observed that the majority of them don't follow even basic traffic rules such as stopping at stop signs even when towing children. Bike riders need to be ticketed along with car drivers that do not follow traffic laws. Thank you for taking my opinions into consideration

From: sandovalarturo <[REDACTED]>
Sent: Tuesday, April 30, 2024 4:59 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: zoning and hotel

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To our city and leaders,

I heard some people talking about the hotel at the hardware store. Nobody likes change I can understand but sometimes things need to be fixed.

I am tired of walking by empty lots. They are an eyesore trashed out. What good do they do? Not even the birds will go there maybe a rat or cockroach. I am not saying I love hotels but someone made a proposal, it fits well there. The hotel is modern we have buildings from lots of decades downtown. Maybe sometimes I will meet friends at the restaurant, who knows? Why not get new building downtown sometimes? It is not so tall and other buildings seem about the same nearby some seem taller even. Nobody can afford to put in a park or community garden there its not reality. I think the ground is bad for plants because of whatever whas there before.

History is important but so is change we adapt. So be it. Downtown has not changed much I know it is real hard to start a business there its so expensive. Petaluma is expensive only the rich can be here now how is that fair? Whatever we can do to give people a chance to make a living, help some young people - like families starting out. Lets do what we can, thanks.

:Arturo

From: Bob Stires <[REDACTED]>
Sent: Tuesday, April 30, 2024 4:59 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: Appellation Hotel & Overlayl - My Opposition

You don't often get email from [REDACTED]. [Learn why this is important](#)

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Dear Gentle People,

1) I have closely followed the discussion (both pro and against) the proposed Hotel project beginning as early as last year.

After careful consideration and research I am very much opposed against the project's approval.

The proposed hotel's design does not fit in with Petaluma's aesthetic character and cultural history.

2) I am also opposed to the proposed Downtown Housing & Economic Opportunity Overlay which would allow building modifications and increases to building height beyond existing zoning regulations.

The Overlay is a loophole for fast-track zoning change considerations.

Thank you for considering my objections to both the hotel and overlay.

Sincerely,

Robert Stires

From: Lion Goodman <[REDACTED]>
Sent: Tuesday, April 30, 2024 9:47 AM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: Downtown Housing and Economic Overlay and EKN Hotel

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Planning Department and Commissioners:

I appreciate that you required an EIR for this proposal. That was one of the mistakes you made initially, and your response to the public outrage over your proposed changes and approval of EKN Hotel was appropriate and measured.

However, public comment, where discussed, such as on NextDoor, continues to be 9-to-1 against your proposal for a wide variety of reasons:

https://nextdoor.com/p/R86JxKSwg_B4/c/1140785666?post=331176364&comment=1140785666&ct=sV_a908pErlIgcavzXOqHip_2OQSNgLLTccgwD0EUbcq1ENDIySu0Zmqc9pjutX0&ec=OsTQaK5EfsnyavzwbSdG6xCsaFBVDChIdtIFdebAXMw%3D

- The Hotel Project sticks out like a sore thumb and will change the entire nature of downtown Petaluma. There are plenty of other places, including large empty lots, where a hotel like this could be built. It is inappropriate aesthetically and environmentally.
- The developers have provided parking for fewer cars than required for full occupancy, and NO parking places for the employees of the hotel, which means they will add 100 or more cars to the already full parking problem around the downtown area.
- The use of water and the processing of waste have not been rationally considered. Perhaps that will be in the EIR, but developers notoriously hire EIR specialists who bend the EIR to their needs, rather than looking at it from the public's point of view.
- There is disapproval from many community groups, including the Historic Preservation Society. In the last public meeting I attended, there was ONE community group in favor of your proposal in comparison to ALL other comments from citizens and groups. You have not taken this into consideration, given that you have not told the EKN developers "No." You have simply let them continue with their proposal.
- You say you want more housing downtown, but you have not focused on low-income housing, so you're continuing to push out the workers in this community, gentrifying Petaluma further and making it impossible for young people, grocery workers, baristas, restaurant workers, and lower-middle class and low-income families to remain here. That pushing out of lower income families makes Petaluma another Mill Valley, which I watched turn from a friendly and open diverse town to a ritzy rich-people town where a family's children could not find housing. You want housing? How about making 50% of apartments low-income housing units? That would be progressive.

- If you change zoning in those three areas, you'll change the nature of downtown, which is a place we love. You need aesthetic guidance on your plans to change this town, not moneyed interests. Listen to your citizens! I understand money is the lifeblood of a city, but the way you are going about it is going to bleed the charm right out of Petaluma.

I continue to protest against these changes you are proposing, including the so-called "Economic Opportunity Overlay," which is simply an opportunity for developers who don't give a damn about aesthetics or charm to make more money. This is NOT an opportunity for more local businesses to thrive, or more reasons to come visit Petaluma to experience a delightful town.

Stop this proposal now, in its tracks, and start a planning process that begins with a vision - FROM THE CITIZENS - of what we want our city to look like in 10, 20, and 30 years.

Lion Goodman, PCC

[REDACTED]
Petaluma, CA [REDACTED]

From: Mari J <[REDACTED]>
Sent: Monday, April 29, 2024 10:47 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: EKN APPELLATION HOTEL Projects

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Hello -

Writing in with a public comment to fully support the hotel project. I think our city will benefit greatly from this project and will bring tax revenue and life to the area. As a resident of the city I would love to see the rooftop area and the life brought into the city with another great hotel.

While I think the design could match the historical aesthetic a little bit better it seems like they have done a lot of design work and have brought in lots of elements from existing historical buildings so it will tie in well.

Thank you!

From: Betty Pagett <[REDACTED]>
Sent: Tuesday, April 30, 2024 12:40 PM
To: Greg Powell <gpowell@cityofpetaluma.org>
Subject: downtown hotel

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Dear staff and council,

we wish to comment on the downtown hotel proposal. We live on Wilson near Washington so we live by the downtown and love its historic nature but also understand the need for growth. We think it would be very negative to have this hotel as designed. Height regulation needs to be no more than the historic bank buildings downtown, and design needs to fit with the historic nature of Petaluma. Also parking needs must be met, by underground parking would be most convenient and not require more land. I do not think Petaluma will continue to be a place of destination if it does not preserve its historic nature. Also, what would be the impact on the two historic hotels in and near downtown? Thank you for welcoming comment.

Robert Bradford and Betty Pagett

[REDACTED] [one of the 1904 cottages]

From: [Susan Small](#)
To: [-- City Clerk](#)
Subject: Downtown Hotel
Date: Tuesday, April 30, 2024 5:46:42 PM

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Hello, I am writing to urge the city council to reject the plan for a six-story hotel downtown. It simply does not fit into the architecture and ambience of our quaint downtown area. There are no other six story buildings downtown. The amount of parking would be excessive and we've already established two other large hotels in the area namely the Hampton Inn and the DoubleTree Hotel.

Please reject this project and keep our Petaluma downtown intact.

Sincerely,

Susan Small

From: Taryn Obaid <[REDACTED]>
Sent: Tuesday, April 30, 2024 5:53 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: Strongly oppose increase in height for downtown

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I strongly oppose obliterating our historic downtown by increasing building height limits to 6+ floors.

Visit any town that has rezoned their historic downtown and you will see that it ruins the downtown – it disappears!

It is a very bad idea to put Petaluma's core brand asset (historic downtown) at risk in this way. It is unnecessary.

I have seen zero towns where this has worked – I recently visited Walnut Creek, which lost its historic downtown in this way. It is terrible.

And do not allow a reversing of the historic designations/protectations/\$\$\$ benefits the granaries have held – and benefitted from to enable them to sell for higher \$\$\$ amount.

Please do not allow the selling-out of Petaluma!!!!!!!!!!!!!!

Thank you!
Taryn

From: BJ McWms <[REDACTED]>

Sent: Wednesday, May 1, 2024 11:26 AM

To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>

Subject: Public Comment on Economic Opportunity Overlay and EKN Appellation Project

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Dear Petaluma City Council, Planners, and others,

I have lived in this town since the mid 1990s, and remember the work regarding making downtown a Historic District, on a national level as well as the laws at a local level, and it was in direct response to some of the buildings that were built in the downtown core that grated against the historic nature of the neighborhood. At the time, the yellow building (100 Petaluma Blvd N), wasn't seen as an eyesore, but you'd be hard pressed to find anyone today who would admire its architecture and addition to the downtown streetscape. Imagine, what that infill could have looked like had been designed with historic elements in mind.

And here we are in 2024, after laws changed and national historic district recognition -- considering reverting to that time, and allowing a developer from out of the area to rewrite our zoning laws, in flippant disregard to our general plan and our citizens' voices for pure greed. I'm ashamed the City would even consider this.

As leaders it's your job to direct them to available lots outside of the Historic District should their plans not follow our citizen-decided guidelines, not to provide them ways on how to circumvent these laws.

The EIR needs to address:

-Parking (I read it's 93 rooms and 53 spots), even with public transit close, this is not enough to allow any sort of parking changes per city parking laws. Also where are people going to park to go to the hotel's restaurants? I read it's almost a 200-seat restaurant. There's not enough parking downtown as it is, I fear this will actually push people to not come downtown, knowing they'll have to fight for parking against hotel visitors. How is that going to affect small businesses in the adjacent area? Did the traffic study consider extra traffic from not the actual cars going to the hotel but circling the blocks looking for parking? They need to show rendering for the parking as well. What does this look like? How do we know this won't affect adjacent parcels? How far underground does it go?

-The fact the designs disregard the historic nature of the adjacent buildings. Why can't they follow the design elements of the area? New infill can camouflage itself into the area, but they've made no attempt to do this, it needs to be addressed as to why. The first set of renderings and the second set are almost identical (minus balconies?). Why haven't they conferred with someone who is an expert in compatible infill development in designated historic districts? This needs to be addressed too.

-The EIR also needs to note why this overlay should apply to areas A, B & C of the Historic District. Why these parcels specifically? Why not the whole Historic District? How will this overlay to these areas affect parking in areas B & C when new 6-story buildings are to be built on Keller St? Because if this overlay is allowed, that then becomes allowed in most parcels of the overlay.

-Has there been any studies in regard to shadow analysis? The EIR should address the analysis, and if not, why this is not required, which is changing zoning laws from 45 feet to 75 feet. How will adjacent public plazas and park spaces and trees be affected by less sun by buildings that are now 30 feet higher?

Don't make the mistakes of the past, which the City residents fought so hard to rectify in the 1990s. Developers need to meet the citizen-decided zoning laws or move the project elsewhere.

Sincerely,
Barbara McWilliams

God is good~~~~<><

-----Original Message-----

From: [REDACTED] >
Sent: Wednesday, May 1, 2024 3:50 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Proposed Changes to Downtown

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To Whom it may concern,

I have lived in Petaluma for almost 50 years and have family who have lived here for generations. I am opposed to the changes to the downtown height limit and the overlay in general. I am also opposed to to hotel that doesn't preserve the character and charm of our great city.To serve the interests of developers without holding to the style and charm of our town does not serve our needs. I see no attention to traffic, parking and gridlock downtown which dumps it all on us residents. '

Please don't approve this without a local vote.

Thank you,

Jim Stern

From: Lorna Johnson Print <[REDACTED]>
Sent: Wednesday, May 1, 2024 12:20 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: opposed to proposed Appellation Hotel at B and the Boulevard

[REDACTED] [important](#)

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dear Petaluma Planning Department,

I have lived nearly 30 years in Petaluma — moving here from Phoenix — a city comprised mainly of big box chain stores, chain restaurants, rapid cheap growth of massive residential areas, and no one knowing your neighbors.

People from other cities envy us — our strong sense of community; of our involvement in our town; of being able to walk down the street and say hello to a dozen friends.

Our historical downtown is a center of pride, as well as the hub of our town culture, and what brings people to visit our town.

This massive hotel being proposed by EDK Development on the corner of B and Petaluma Boulevard South is the wrong hotel at the wrong location. Put it two blocks away where the Casa Grande hotel used to be — the area around it will revitalize and flourish.

The thought of the Appellation Hotel being built on B and the Boulevard is like marrying the wrong person.

Just because they are wealthy and THEY made up THEIR mind to marry YOU — if they are *not* the right person, just don't do it.

You hold out for the right person.

I think we are all fine with a hotel going in that location, but this is just NOT the right hotel. Too big, too out of character for our historic downtown, insufficient parking. Find a hotel that is a better fit.

Unlike marrying the wrong person, we cannot divorce this monstrosity hotel once it is built.

Lorna Johnson

[REDACTED]
Petaluma, CA [REDACTED]

From: Moira Sullivan <[REDACTED]>

Sent: Wednesday, May 1, 2024 1:53 AM

To: City of Petaluma <eellis@cityofpetaluma.org>; -- City Clerk <cityclerk@cityofpetaluma.org>; -- City Council <CityCouncil@cityofpetaluma.org>; Greg Powell <gpowell@cityofpetaluma.org>; Petaluma Planning <petalumaplanning@cityofpetaluma.org>

Subject: DHEO + Hotel NOP Comment

Some people who received this message don't often get email from [REDACTED] [Learn why this is important](#)

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Dear Petaluma City Clerk, please add my attached comments to the record for the EKN Appellation Hotel project Environmental Impact Report (EIR) and the Zoning Overlay proposed for Petaluma's General Plan update, being orchestrated by the Metropolitan (M) Group Planning consultancy.

Thank you.

Sincerely,

Moira Sullivan, Petaluma Resident

April 30, 2024

Subject: DHEO + Hotel NOP Comment



Critical viewsheds of Historic District and ridges (Scott Hess)

Dear Petaluma City Council members, Planning Commissioners, Planning Dept, and Consultants overseeing the update to Petaluma's General Plan, Please add my comments to the record for the EKN Appellation Hotel project Environmental Impact Report (EIR) and the Zoning Overlay proposed for Petaluma's General Plan update, being orchestrated by the Metropolitan (M) Group Planning consultancy.

I concur with key members of Petaluma's Historic and Cultural Preservation Committee (HCPC) that the actual effects of the proposed EKN Appellation hotel need to be evaluated with a full EIR; not one that just analyzes a select subset of environmental impacts (*i.e.*, skips analyzing impacts on Air Quality, Traffic and Circulation, Noise, Utilities and Service Systems, Energy, Greenhouse Gases, as examples). Most especially, in light of the fact that this proposed hotel is located within a National Register Historic District (NR District) and that it violates Petaluma's historic regulations, an EIR evaluation that includes an *Alternative Sites Analysis* is essential.

Changes to the current height and lot coverage restrictions both for the proposed zoning overlay of our downtown and for the Appellation Hotel would have a profound – and I'd argue adverse - impact on the setting and feel of our NR District. Most of our buildings downtown are human-scale, 1-2 stories; the

historic ironfronts are 3 stories. 6-7 story buildings would positively dwarf our majestic architectural gems and destroy our sightlines, block the views of our iconic hills for which our town is named, and destroy its historic feel and unique sense of place. Petaluma has “architecture unmatched in California” as per Paige & Turnbull, expert Architectural Historians from San Francisco who did Petaluma’s historic inventory for our General Plan update. Indeed, **HCPC member Tom Whitley has stated that, “There is perhaps no worse place in the city for a proposed relaxing of building height and lot coverage restrictions [*than the proposed hotel site*]”.**

Without question, changing the height and lot coverage restrictions with the zoning overlay will make it next to impossible to maintain the district’s “integrity of feeling”. Tom Whitley, HCPC member and an expert with numerous publications in GIS and spatial analysis told the city that, “any building in this lot of a height greater than two stories, and coverage of more than 80%, would significantly reduce the visibility of the south end of the historic district to all pedestrian or vehicular traffic traveling northwest on Petaluma Boulevard South. Such a building on that site would also restrict the view of, and from, the Carnegie Library Building – a resource which is listed on the NRHP on its own”. At 65’ in height, the proposed hotel would dominate the skyline the entire length of Petaluma Boulevard (!). Further, per Whitley, “These kinds of impacts might not just be visual ones but could also include altering pedestrian or vehicular traffic flow, changes to infrastructure or utility services, as well as future reduction or segmentation of the district boundaries”. Such changes in setting and feeling constitute **significant** impacts to our NR District.



Viewshed that would be impacted, to far right of this image (where Chase Bank is currently) if lot heights were relaxed

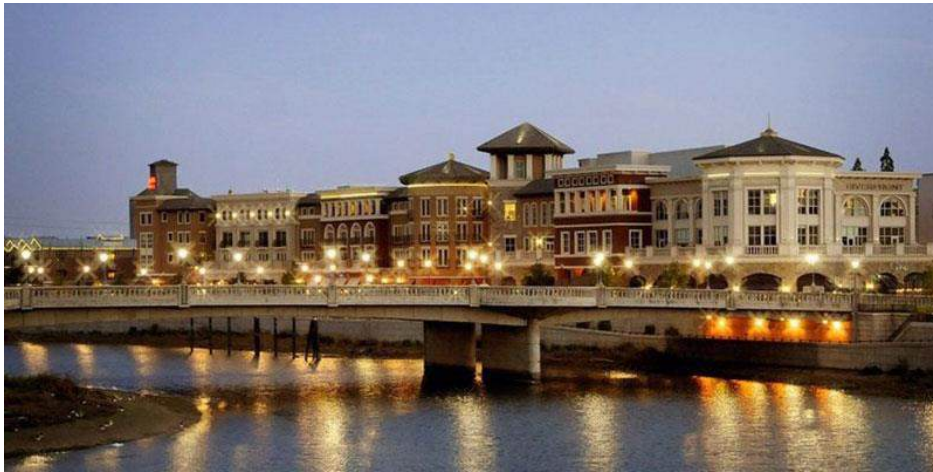
Regards aesthetics/cultural resources and the Appellation Hotel, Historic District Design Guidelines state that Infill buildings in the Historic District should “harmoniously coexist with the historic character.” This is a powerful impact that is not mitigated. The proposed hotel is not compatible with the massing, scale, and architectural features of the Historic District. This is a significant, unacceptable impact that is not mitigated by what it contributes to the common good.

In addition, because the hundreds of guests this proposed hotel would cater to, along with hotel service workers, are expected to arrive by car, the location of this hotel would greatly increase traffic and traffic emissions in our downtown. Disruption of traffic flow and emissions from hotel delivery trucks alone would be considerable. Consultants Raimi+ Associates, who are assisting in updating Petaluma’s General Plan, have stated that every census tract in Petaluma is adversely impacted by traffic emissions. Traffic pollution is associated with a number of adverse health outcomes. In short, this hotel project should undergo a full EIR evaluation, pursuant to CEQA Section 15064.

I wholeheartedly concur with HCPC member Tom Whitley that the proposed **zoning overlay be discarded in its entirety**. I am also not in favor of

modifying the IZO text nor the IZO map to allow for the zoning overlay. Petaluma is a one-off. There are **no** other towns in the entire State of California with as many ironfronts as Petaluma has. As proposed, the zoning overlay adds no protective covenants, preservation incentives, or other measures that would improve or enhance our NR District (!). Without question, the proposed zoning overlay would adversely affect the integrity of our NR District, pursuant to CEQA, and especially for the criteria of setting and feeling. It's a non-starter for our historic downtown whose very draw - its identity and notoriety - is based on its unique and unparalleled historic setting. *Refer to links below to see the national publicity Petaluma regularly receives as an NR District; critical for tourism.*

Note that when Napa expanded their downtown with their riverfront, they understood that their role was, “not to transform the downtown, rather to work within the framework, character and history that Napa already provided” (image just below). Petaluma must follow other economically-successful wine country towns (e.g., Sonoma, Healdsburg, Calistoga) and maintain a strong sense of beauty and place when it comes to zoning and new construction. Neither the Appellation Hotel nor the zoning overlay are congruent with Petaluma’s Historic Regulations, or respectful of its being an NR District.



Napa Riverfront

Thus, I ask that you reconsider moving ahead with this proposed hotel and zoning overlay changes to our Historic Downtown. Both would be catastrophic for Petaluma’s unique identity - and would materially damage her brand. New builds in our historic downtown should not exceed the

permitted 4 stories in height and 80% lot coverage - and should be congruent with our historic regulations for materials and design.

This effort to rezone our historic downtown is not an economic overlay, nor is it about housing; it's about making a historic district-violating exception for a specific developer. The State of CA approved Petaluma's Housing Element that was submitted for our General Plan update, *and it did not comprise ANY housing in the downtown (overlay area)*. Further, the city has not provided any data to back up its claim that 6-7 story buildings in an NR district would improve our economy! Refer to the article below, "historic preservation, an economic driver" that provides real statistics on heritage tourism.

If the overarching concern is for housing, there are many areas far less densely developed than Petaluma's historic downtown that constitute better locations for modern high-rise buildings with height and lot overages. Some of these areas include the Fairgrounds, Plaza North on McDowell, Kohl's Shopping Center, Target Center, the Wilco shopping center, and the Lucky's shopping center on Petaluma Blvd North, for example. None of them are in proximity to an NR District. Destroying the feel and setting of our lauded NR District with non-conforming, incongruent builds is a historic travesty that will *negatively* impact our local economy and be a brand-harming failure.

<https://www.sunset.com/travel/petaluma-california-main-street>

<https://stories.forbestravelguide.com/why-you-should-visit-petaluma-california>

<https://www.sonomamag.com/sonoma-county-town-makes-list-of-top-5-main-streets-in-the-west/>

<https://www.sonomamag.com/2-local-towns-top-list-of-best-main-streets-in-northern-california/>

<https://www.onlyinyourstate.com/northern-california/best-main-streets-norcal/>

<https://www.pressdemocrat.com/article/news/petaluma-mendocino-named-among-cutest-towns-in-northern-california-says-w/>

<https://livability.com/best-places/top-100-best-places-to-live/2016/petaluma/#:~:text=The%20city%27s%20diverse%20housing%20options,an%20attractive%20place%20to%20live.>

<https://www.pressdemocrat.com/lifestyle/8737358-181/how-petaluma-became-the-it>

<https://www.placeeconomics.com/resources/historic-preservation-an-overlooked-economic-driver-a-study-of-the-impacts-of-historic-preservation-in-rhode-island/>

Location: Rhode Island

Client: Preserve Rhode Island, The Preservation Society of Newport County

Date: 2018

The citizens of Rhode Island have long recognized the importance of their built heritage. Less than 50 years after the Declaration of Independence, the Rhode Island Historical Society was founded in 1822 as one of the earliest history organizations in the nation. This longtime commitment has meant dividends for Rhode Island – its economy, its environment, and its quality of life.

This report was commissioned to systematically look at historic preservation in Rhode Island in four areas: heritage tourism, the impact of the historic tax credit, life and culture, and sustainability. The study found that the assets of the past centuries are the base of a 21st century economy and are often locations of choice for today's Rhode Islanders.

Heritage Tourism

- Rhode Island welcomes 9.8 million heritage visitors each year.
- Those visitors add nearly \$1.4 billion to the state's economy.
- The spending of heritage visitors creates jobs for 19,000 workers directly, and another 7,000 indirectly.
- Those jobs generate paychecks of nearly \$1 billion, including \$602 million for direct jobs and \$358 million for indirect and induced jobs.

Historic Tax Credits

- For every \$1 the state invests in a tax credit project, \$10.53 of economic activity in Rhode Island is generated.
- Since 2001, the rehabilitation of 326 historic buildings has attracted over \$1.4 billion in investment that qualified for historic tax credits. When

additional, non-qualifying expenditures are included, the total project investment reaches \$1.8 billion.

- Since 2001, tax credits projects have occurred in 26 of Rhode Island's 39 municipalities
- Since 2001, tax credit rehabilitation projects have generated an average 965 direct jobs and an additional 739 indirect and induced jobs each year.
- Since 2001, the rehabilitation of historic buildings using the tax credit has generated direct salaries and wages of \$50 million plus an additional \$35 million in indirect and induced wages on average.
- The State of Rhode Island receives back nearly half of the historic tax credit before it is even awarded.

Quality of Life

- Local historic districts in Rhode Island disproportionately attract workers in the knowledge and creative fields.
- Rhode Island's local historic districts cover only 1% of the state's land area, but are home to 4% of the state's jobs, and 12% of the population.
- Rhode Island's local historic districts attract new residents. Of the population growth since 2000, more than half occurred within local historic districts.
- While 4% of all Rhode Island jobs are in historic districts, those areas are where 8% of the jobs in arts and entertainment are located.
- The historic districts in Rhode Island are virtual mirrors of the state as a whole in income, race and ethnicity.

-----Original Message-----

From: Sharon Monticello <[REDACTED]>
Sent: Wednesday, May 1, 2024 1:39 AM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: Appellation Hotel

[You don't often get email from [REDACTED]. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

Please don't allow this monster building to destroy the charm of our quaint downtown.

I would love to see a much smaller version. It will literally overpower our downtown and kill all the other hotels we already have.

Please rethink this and don't allow it to happen. It will ruin our downtown.

SHARON MONTICELLO
BRE 01321314
The ONLY name you need in real estate!
Proudly associated with Vanguard Properties
151 Petaluma Blvd So. Suite 137
Corner of 2nd and D Streets
Petaluma, CA 94952
Cell 707-477-4443

-----Original Message-----

From: Wendy Stern <[REDACTED]>
Sent: Wednesday, May 1, 2024 2:15 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: EKN hotel

[You don't often get email from [REDACTED]. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

Hello,

I am against the proposed EKN appellation hotel and the overlay. The hotel does not fit in with the charm of our city, and the hotel and overlay will start the process of building higher and higher structures which will further ruin the charm of the city. Once you open that door of opportunity it will never get shut again and our city loose its distinctive look. Leave it the way it is, and put something else in that lot.

Wendy Stern
[REDACTED]
Petaluma, CA
[REDACTED]
Sent from my iPhone

-----Original Message-----

From: Donna Forman <[REDACTED]>

Sent: Thursday, May 2, 2024 4:37 PM

To: Olivia Ervin <oervin@cityofpetaluma.org>

Subject: Downtown Overlay

[You don't often get email from [REDACTED]. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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I attended the Downtown Overlay meeting last night, curiously most of the answers were go on-line to find the information yourself. I spent the majority of the morning wading through the massive amount of information and clicking on different links. To make it easier for the public to understand the scope of the projects and changes proposed, an easy to understand summary should be created!!

I found it disturbing that the EIR study only includes aesthetics and cultural aspects when a traffic and parking study has NOT been done. Looking through the overlay it specifies that "projects will be exempt from providing off street parking and there will be no revenue collection for parking within the overlay". Really?? Traffic in town is already a mess, parking is limited and this project and the overlay possibilities will only make it worse! Where will all the disabled parking places be located for the downtown overlay area?? And the traffic already backs up on the boulevard and people get stuck in the intersections all the time blocking traffic. Just hang out at the intersections of Washington and the boulevard or D Street and the boulevard mid to late afternoon and watch. It will get even WORSE!!

How will a hotel in the middle of downtown impact Petaluma's major events like the Butter & Egg Parade, the Veteran's Parade and American Graffiti - Cruising the Boulevard?? These events have been held for decades and attract thousands of people. How will hotel guest be dropped off or be able to enter and leave the hotel parking garage with road closures and no access??

Where will the valet lots be located for the hotel?? EKN representatives have stated that the city will provide valet parking spaces. Where and how many spaces?? The answer better not be in the parking garage that already fills up!! Obviously 58 spaces at the site is not an adequate amount for a 93 room hotel, restaurant and bar! In addition, where will all the workers park??

The EPA study that was done, how long ago was that? How far down did they test the soil? Was the study done with digging specifically for an underground parking garage in mind??

Are public bathrooms and public spaces part of the equation for the overlay proposals?

How many people are on the committee making these decisions for the downtown overlay and projects? And how many of these decision makers are residents of Petaluma?

How is the overlay not effecting the harmony and appropriateness of the historic environment of downtown?? Why are buildings more than 4 stories the magic answer for filling in downtown? Let's keep our quaint and charming town's integrity and not turn it into a city with overbearing tall structures that will morph our historic downtown.

I moved to Petaluma 34 years ago. I choose to move here because of it's small town charm, all of the beautiful historic buildings and the surrounding countryside. I enjoy going downtown, eating at the restaurants, shopping in the boutiques and walking around. There are vacancies in existing structures downtown - 4th & C, Walnut Grill and numerous other spaces. Let's get those filled instead of having chain link fences and boarded up windows. What is the plan for cleaning up these places?? I don't enjoy looking at this blight and I don't enjoy the traffic congestion that has really become a big problem with road diets. There's not enough parking to sustain growth downtown. I understand the need for housing and economic growth but let's do it in a sustainable way!

Donna Forman
Long time Petaluma Resident

[REDACTED]
[REDACTED]

From: Francesca Preston <[REDACTED]>
Sent: Thursday, May 2, 2024 5:58 PM
To: Greg Powell <gpowell@cityofpetaluma.org>
Subject: Comment on EKN Hotel

You don't often get email from [REDACTED]. [Learn why this is important](#)

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Hello Mr. Powell, I am a Petaluma resident (and Sonoma County native) making comment on the proposed EKN hotel downtown. I do not pretend to understand all the nuances of each aspect of the project yet, but I have long been in opposal to its essence. My primary reason for being so (other than that I do not believe Petaluma needs a LA-style, glamorous, humongous hotel) is HEIGHT. 6 stories is way, way too tall. As I mentioned on the City's Instagram page, if you stand on the grass at Penri park (across from Hotel Petaluma), and face the area of the proposed structure, it is stunningly clear that the proposed 6 stories would loom over the town, block light and view, and in general look like a monstrosity. It would be, I believe, *two stories higher* than anything on the landscape currently.

Please, please know that the vast majority of Petalumans, whether they make comment or know exactly what's going on, are not in support of a project like this. It goes against the grain of what Petaluma is, has been, and - I hope - will be.

Thank you.

Francesca Preston

[REDACTED]

--

t u l a
f r a n
c e s
c a p
r e s
t o n
w. [REDACTED]
i. [REDACTED]

From: Kim Bruno <[REDACTED]>

Sent: Thursday, May 2, 2024 6:36 PM

To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>

Subject: Downtown Overlay - EKN Appellation Hotel - PLGP-2023-0001, PLZA-2023-0002- PLSR 2022-0017

You don't often get email from [REDACTED]. [Learn why this is important](#)

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General comments.

The progress of this application makes a mockery of the general plan. While an applicant may seek to deviate from the general plan, such deviations should be fact specific and modest in scope. This application has neither.

The application's scope far exceeds any metric memorialized in the general plan. In a town where historic character is a relevant factor in considering applications, this application does not pretend to adhere to the historic nature of downtown. The hotel massively exceeds the limits in the general plan - the FAR (max allowable floor area increases from 2.5 to 6.0 (140% increase)), building height from 45 to 75% - 66.667% increase, lot coverage from 80% to 100% (20% increase)). Nothing in the scope of the application pretends to adhere to the general plan's guidelines.

The record does not reflect meaningful mitigation measures. One suggestion is to move the massive development to the east side of the Petaluma River, perhaps along Copeland Street. The location provides easy foot access to downtown but does not overwhelm the surrounding character of downtown. The project is too big for its location.

These comments relate to the scoring study for the above project's EIR.

Until Californians abandon their vehicles, any development seeking guests must at least pay lip service to parking.

1. Where are the people working at the hotel going to park?
2. Where are the retail customers (including restaurant guests) going to park?
3. Where are the guests staying in the hotel going to park? (The cursory valet parking plan is a sop. That won't solve the problem that the development poses.)
4. The EIR should consider the considerable air pollution from cars unable to find parking spaces due to the applicant's failure to identify adequate parking for patrons. EVs do not make up an appreciable percentage of vehicles to mitigate the site's parking deficit.
5. The height and mass of the building radically changes the scenic view of downtown from a small area replete with restaurants, boutiques, antiques, bakeries, and other small retail into a behemoth commanding the skyline (The current expression of the draft EIR that it will not significantly impact the scenic views is absurd. While subjectivity may be a factor in scenic analysis, blind denial does not exclude careful objective analysis.
6. The bulk of this development radically changes the historic character of Petaluma. An EIR should honestly assess the impact of this massive departure from the general plan. The burden should fall on the applicant to show that the application is consistent with the general plan.

Because the application departs so radically from the general plan, the City should apply a heightened review of the application. If the applicant can show, by clear and convincing evidence that its application adheres to the principles of the general plan, then and only then may the planning department assess the application's compliance with state law, regulations and City ordinances.

Thank you

Kim Bruno
Petaluma

From: Douglas Lerch, MFT <[REDACTED]>
Sent: Friday, May 3, 2024 1:19 PM
To: Greg Powell <gpowell@cityofpetaluma.org>
Subject: EKN Apellation Public Opinion.

You don't often get email from [REDACTED] [Learn why this is important](#)

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Dear Mr. Powell,

I would like to express to you my opinion about the proposal to construct the hotel in downtown Petaluma (EKN Apellation.)

I strongly disagree with the plan to build such a large hotel structure in our historic downtown Petaluma for the following reasons:

1. This 6 story proposed structure would be the largest building in our Historic Downtown Petaluma, and it would change the historic feel and nature of our town, thus going against the general plan commitment preserving the historic nature of downtown Petaluma mentioned in both #2 and #7 of the general plan
2. This 6 story building would block views of the surrounding hills to businesses and residents alike. From the top of Penry park there is a beautiful panorama view of the Sonoma County Hills and the building would appear to all of those abiding in the hills as a monstrosity obstructing the views of nature. This goes against #3 of the general plan to honor the open space surrounding the town.
3. Inevitably traffic would be strained significantly with the construction of a hotel with 93 hotel rooms. The two lane road of Petaluma Blvd. would be taxed and we would be facing a problem of increased idling, thus contradicting Petaluma's plan create a sustainable and healthy living environment with low environmental impact #11 of the general plan.
4. This huge building project would do nothing to address the pressing housing needs in Petaluma and Sonoma County. #10 of the general plan states a plan for an increase in opportunities for people to be able to afford living where they work. A hotel increases the costs of living in an area, and decreases potential spaces for affordable housing.
5. This may lead to a president of other large 6 story buildings being built in town which would further disrupt the historic nature of the downtown.

Due to all of these reasons, my recommendation is that the hotel plan be denied and instead a recommendation be made to the owner of the parcel to consider proposing an affordable income housing plan 4 stories or less.

-----Original Message-----

From: Jessica Holten-Casper <[REDACTED]>

Sent: Saturday, May 4, 2024 8:46 PM

To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>

Subject: Hotel on B St

[You don't often get email from [REDACTED]. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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Hello,

A six story hotel in this location does not seem like a good idea. It is already very congested in this area of town. Does Petaluma even need more hotels?!?

Sent from my iPhone

From: [REDACTED] <[REDACTED]>
Sent: Monday, May 6, 2024 12:45 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: zoning overlay and Appellation Hotel

You don't often get email from [REDACTED]. [Learn why this is important](#)

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To be brief, I am opposed to the proposed zoning overlay.

Where did this idea come from?

At the public scoping meeting the rep from M group, who misleadingly referred to herself as a "city employee", until corrected, could NOT or would NOT answer this simple question.

When and where did this plan originate?

It is obvious to all that this is simply a way to skirt and avoid the non-conforming details of the planned hotel; height, parking, historic district, etc.

It's the same old story, money is power.

Burying this simple truth under hundreds of pages of "documents" will not hide this fact.

However, I know my comments are useless, at least to this "planning dept".

I will take my concerns directly to the city council, who being elected officials, at least have some accountability to residents.

George Mueller

[REDACTED]

homeowner in Petaluma since 1988

Sent using Hushmail

From: Patty Paula <[REDACTED]m>
Sent: Friday, May 3, 2024 4:55 PM
To: Olivia Ervin <oervin@cityofpetaluma.org>
Subject: Public comment on hotel and overlay from Patty Paula, Petaluma citizen

You don't often get email from [REDACTED]. [Learn why this is important](#)

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Hello Olivia,

I hope you are doing well.

I attended the EIR scoping meeting for the hotel and overlay that is proposed for Historic Downtown Petaluma on May 1st.

Thank you for the professional manner in which you conducted the meeting. I appreciated that.

I am submitting my comments to be considered in this proposal.

I am in favor of keeping Historic Downtown Petaluma, (my home since 1985) a vibrant and welcoming place while preserving our rich history; not only history in written form, but in aesthetic form.

My husband is a Petaluma native and has seen much growth in his hometown since the 1960s. I have seen much growth since 1985. Growth and change are necessary and good, if conducted in the best way possible.

Through my husband's Coast Guard career, we had the opportunity to live in four different states. In each of those states we saw what had been done to preserve the history of the area, but none could compare to how Petaluma preserved its rich history - in particular in the downtown area and the Historic District.

What we have in Petaluma is a goldmine of beautiful and well-preserved architecture right in our Historic Downtown. What we have is unique and should be preserved in the best way possible.

It was mentioned at the meeting that affordable housing would be a part of this development. The first thought that came to my mind was. "Whose definition of affordable will that be?" Will it be affordable for those who already are able to afford housing or will it be for the growing homeless population in our city?

Also, if that will be for housing, where will those residents park their cars?

It was mentioned at the meeting that the hotel will have 93 rooms, but only 58 parking spaces in the underground garage. Math is not my strong subject, but that just doesn't add up in my line of thinking. (common sense)

Another comment made at the meeting, by your colleague, was that "What we need in downtown is housing and economic development."

I have read and heard that a push behind getting this hotel placed in the Historic Downtown is to provide a place for tourists to stay, so they can be able to walk in our downtown area.

I believe that the reason many of the tourists who come to Petaluma come to see the quaint and lovely downtown, which up to this point, has been so beautifully preserved. If we take away that charm by adding things that they can see anywhere, will they still want to come? Speaking for myself, I would not.

The reason they come to our lovely town is to see something that they cannot see elsewhere.

I ask you to please consider an alternate location for the hotel, that is not in the beautiful Historic District of Petaluma.

Also, please consider altering the new zoning laws to limit the height of any new buildings to be no higher than the beautifully restored Petaluma Hotel, which is definitely walking distance to Historic Downtown Petaluma.

We already have what you are proposing; a hotel in downtown Petaluma.

Thank you for taking the time to read my comments.

Patty Paula
Petaluma, CA

[REDACTED]

[REDACTED]

From: CHRISTINE WHITE <[REDACTED]>
Sent: Wednesday, May 8, 2024 10:40 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>; CHRISTINE WHITE <[REDACTED]>
Subject: Re: Downtown Overlay and Hotel Project

You don't often get email from [REDACTED]. [Learn why this is important](#)

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

Hello

Here is my Phone Number: [REDACTED]

On 05/08/2024 7:22 PM PDT CHRISTINE WHITE <[REDACTED]> wrote:

To Whom It May Concern

I have attended several of the overlay meetings and at the May 1st meeting we were instructed to submit our comments via email. The following are my comments and concerns:

- Traffic - Currently it takes anywhere from 15-30 minutes to get from the west side (downtown) to the east side (Safeway/Raley's). Around noon during the D Street bridge check (or if there is a boat) it will take even longer. What infrastructure improvements are planned to handle the current traffic and the likely increases?
- People that travel to Petaluma will likely travel by car.
- Increased bike lanes have negatively impacted traffic. I see very few bicycles using the bike lanes. When people come to Petaluma to shop and enjoy our fantastic restaurants, they are not arriving by bike. Where do they park their bikes? What improvements are planned to address these concerns?
- Historic downtown: Petaluma has a unique walkable historic downtown and has sites listed with the National Register. There are only 2,300 local historic districts in the **entire** United States. Our history and historic charm are a draw for those that live here and those that come to visit. According to a Google search - "What is Petaluma famous for? Our picturesque downtown, historic architecture, and world-renowned food, wine, and beer scenes. Only 40 miles north of San Francisco, it deserves to be on any visitor's short list of must-visit destination while exploring the Bay Area." We have a historic downtown absent of sky scrapers because we have height limitations. If the downtown overlay passes the height of new projects will have an opportunity to reach a height of up to 75 feet (approximately 6 stories). That would completely change our rare and unique downtown. In the future there would be the possibility that all

buildings downtown would be 6 stories. I am deeply concerned that we will lose the charming downtown that drew us to Petaluma.


- There are other areas of Petaluma that may be more conducive to taller buildings, rather than changing our historic downtown.

- Proposed Hotel: The proposed hotel is approximately 6 stories, 93 rooms and approximately 52 parking places. The hotel is supposed to also have a restaurant and rooftop bar. Where are the visitors and workers supposed to park? People will likely seek parking on the neighborhood side streets impacting homeowners. What are the plans for parking downtown? Amy's corporate workers are parking in the parking garage, limiting parking for visitors. Why does the hotel have to exceed the 4 story limit? Is it possible to just make an exception for an added story without having to impact the rest of our Nationally registered city? Do the developers live in Petaluma? Do they have a pulse on the impact the proposed Hotel will have? Will they be living here after it is completed to see the final impacts? I am not opposed to a rooftop bar, in fact I like them; however I would not want a vista of tall buildings lined up downtown. I could see that in San Francisco.

- Current Businesses: What is Petaluma doing to support current and new businesses that are reviving our downtown, like the remodeled Petaluma Coffee and Tea, and Grand Central Petaluma Coffee?
- Other thoughts: There seem to be opportunities along the river or closer to the train station for development opportunities like an outdoor/indoor market with live music options.

I have lived in Petaluma for over 30 years. I am passionate about our town and the uniqueness we have. I have traveled to many places around the world and those that draw tourists are ones with a charm and uniqueness that you can't find everywhere.

Sincerely,
Christine White


Petaluma, CA 94952
Christine

May 7, 2024

TO: City of Petaluma Planning Division

FROM: Stephanie McAllister

RE: Initial Study: EKN Appellation Hotel Project

Downtown Housing and Economic Opportunity Overlay

I have been tracking the review of the EKN Appellation Hotel project and the associated application for the Downtown Housing and Economic Opportunity Overlay, which proposes zoning changes in the Downtown district. I have attended meetings in the past year and reviewed the evolving project documents. I consider the Petaluma Downtown district to be a unique historic resource in our region, and changes to zoning parameters that will affect future development within this district require thorough study.

I am concerned that the current Initial Study scope does not adequately outline potential impacts or define studies that need to be addressed in the EIR.

As background, I am a long-time Petaluma resident and business owner, and occupied and owned a downtown building from 1990-2022. In addition, I have direct experience with development proposals as a landscape architect that has participated on consultant teams for projects throughout the North Bay region. I have also been on the community review side of development, having served on the City of Petaluma Site Plan and Architectural Review Committee and the Planning Commission. I am currently serving on the Sonoma County Historic Landmarks Commission, which is charged with evaluating impacts of development on historic sites and structures.

Please review the comments below, broken down into sections on the Downtown Overlay and the EKN Appellation Hotel. These detailed comments add depth to the scope currently proposed in the Initial Study.

Downtown Housing and Economic Opportunity Overlay

The following are specific additions that need to be included to fully assess the impact of proposed zoning changes.

1 – A massing study that demonstrates the full build-out per the proposed guidelines and enables assessment of the cumulative effects of creating the overlay in the proposed subareas.

Although there are “community benefit criteria” to be met to achieve the maximum building height and site coverage (FAR) proposed, these are either highly subjective

(e.g. exceptional architecture/design) or not particularly difficult to achieve (e.g. Improve existing streetscape or exceed the minimum required bike parking). One can assume most developers would make the effort to achieve the required prescribed criteria and also argue that their building met the more vague subjective criteria, such as “exceptional design”. Having served on the applicable City committees, I know that debating the definition of “exceptional” is most often futile. Thus, over time, maximum build-out is quite likely, and certainly the community should be aware of the impacts of that possibility.

The EIR needs to evaluate the cumulative maximum impact of this proposed zoning change – it is not acceptable to leave it undefined. A massing study will infer an estimated range of building area, massing and occupancy for these future downtown subareas, so that a realistic cumulative impact for environmental factors can be studied in the EIR (e.g. Aesthetics, Cultural Resources, Transportation, and Utilities/Service Systems).

2 – An updated downtown parking study to document the existing conditions, and to predict traffic and resulting parking needs for the Downtown district. Existing conditions should document current use of the Keller Street and Theatre District parking garages, and surface and on-street parking within the commercial downtown.

Although many of the parcels within Subareas A, B, and C are included in the Downtown Parking Assessment District, this district was created approximately 35 years ago and did not anticipate the increased density currently proposed. The Keller Street parking garage built with that assessment was adequate for the time, but my own experience owning and occupying a downtown Keller Street building from 1990 to 2022 is that this garage is now frequently fully parked out. It is not reasonable to simply note a site’s inclusion in this assessment district and eliminate or reduce its parking requirements without any clear data on actual available parking. This is not a fair assessment of parking impact on a project basis, or of the projected future requirement for the Overlay areas at the projected build out.

3 – A reconnaissance level survey of historic resources within the Downtown and A Street Historic Districts, as well as on adjacent streets and parcels potentially affected by new development in the Overlay subareas. This is necessary to evaluate the impact on any historical resources. A more fine-grained approach to development criteria may ultimately be necessary when considering the aesthetic and cultural impacts to these significant historic districts.

4 – California State Housing Mandate: Housing opportunity is a stated goal of the Overlay, and recent legislation allows streamlined ministerial approval and density bonuses for development that includes affordable units. This recent regulatory change needs to be integrated into the density modeling and the consideration of height and site coverage limits. It is probable that future housing would be permitted to exceed whatever limits are agreed upon for the Overlay, increasing building heights further to accommodate the additional units allowed through density bonuses.

As an example, this issue recently came into play regarding the Sonoma Developmental Center (SDC) site when the Developer proposed additional housing units, beyond what was proposed in the approved specific plan. This change would result in additional impact in the Glen Ellen area not anticipated in the EIR. A court ruling was delivered last week stating that the plan failed to clearly define the number of housing units allowed, address the cumulative impacts, and respond to community concerns.

EKN Appellation Hotel Project

The Overlay comments above generally apply to the Hotel project scope, except for the State Housing Mandate legislation. The following are detailed comments more specific to the proposed Hotel scope.

1 – Aesthetics and Cultural Resources: The proposed hotel site's location within the Downtown Historic District makes building scale and aesthetics a particularly sensitive issue.

A – Accurate detailed modeling needs to be included to assess the impacts of the height, massing and design relative to both the immediate surroundings and the entire downtown district. As proposed, the building will be among the tallest in the district, and it is debatable whether it should dominate significant nearby historic resource focal points.

B – A shading study is also needed to assess impacts on adjacent sites and the public streetscape.

2 – Transportation: In particular, the parking study outlined above for the Overlay area is essential to better evaluate this specific project. Currently, the parking space requirements are calculated based on this site's inclusion in the over-subscribed parking assessment district which incorporates the Keller Street Parking Garage. An additional 20 spaces are allocated within the Theatre District Parking Garage that was built for that development and whose needs may increase over time. Having an allocation for the proposed hotel is likely not a permanent commitment or if it is, this may result in overtaking the Theatre District parking resources. Therefore, a full assessment of the

proposed Overlay area parking load at build-out needs to be completed so that the hotel parking plan also considers the future overall downtown district needs. Otherwise, future projects will absorb the financial burden of providing parking after the hotel is allowed to exhaust whatever parking supply remains at this time.

In addition, the hotel's required parking calculation in the current traffic study appears unrealistic and needs to be reassessed. Currently there are 78 spaces (20 in the Theatre District) for 93 keys, a restaurant accommodating 150 patrons, an event space, and 26 employees. It is impossible to see how that pencils out, and naïve to assume that many hotel patrons and people attending special events (e.g. weddings, private parties, etc.) will arrive by mass transit. Reliance on our limited public transit is more likely with housing uses than a high-end hotel. In addition, no parking is calculated for the restaurant use, and it is assumed these patrons will also be hotel patrons. If not modified, it seems inevitable that valets will be competing in the late afternoon and evenings for the limited commercial street parking which is currently utilized for existing restaurants and bars. Then, hotel parking will overflow onto nearby streets and will encroach on residential frontage, essentially on a nearly continual basis.

3 – Alternate Sites: A study of alternate sites for the hotel needs to be included in the EIR so that the comparative effects on Aesthetics, Cultural Resources, and Transportation can be assessed. As a beginning point, a site near the Smart Train station within the Central Petaluma Specific Plan area, and a City-owned site south of D Street with access off Petaluma Blvd and 2nd Street have both been mentioned in public comments.

Thank you for your consideration of these comments. These additions to the study scope will more accurately assess the impact of the proposed hotel, and the Downtown Overlay zoning changes that have been proposed to accommodate it.

Best regards,

Stephanie McAllister

[REDACTED]

Petaluma, CA 94952

[REDACTED]

Public Comments on EKN Appellation Hotel & DHEOO / April 2004 NOP-Initial Study
Submitted by Lydia Asselin
May 10, 2024

I hereby submit the following comments into the public record after reviewing the April 2024 NOP-Initial Study regarding the EKN Appellation Hotel and DHEOO. My comments are structured into the following five sections, with important take-aways from each section highlighted in the gray textboxes:

- A. **Introduction:** *what we expect to see in the Draft EIR*
 - 1. Second CEQA Initial Study will result in a focused EIR
 - 2. Cumulative Impact requirement
 - 3. Project Alternatives requirement

- B. **Regulatory Context:** *various regulations that will inform the EIR*
 - 1. 2025 General Plan EIR (2008)
 - 2. Central Petaluma Specific Plan (2003)
 - 3. City of Petaluma 2023-2031 Housing Element

- C. **General Plan Update Look-Ahead:** *General Plan Update Frameworks takeaways*
 - 1. Overlay zoning changes may support GPU trends toward Land Use densification
 - 2. No supporting data provided to justify the economics of developing to 6 stories
 - 3. Historic Resources Framework recommendations

- D. **CEQA questions regarding Aesthetics and Cultural Resources:**
 - 1. Comments on Hotel and Overlay in response to each CEQA checklist question
 - 2. Specifics of the Petaluma Historic District Design Guidelines

- E. **General Comments on the Hotel Design that relate to Aesthetics & Cultural Resources:**
 - 1. April 2024 renderings show a new façade design from the previous CEQA Initial Study submittal

A. INTRODUCTION:

The Downtown Housing and Economic Opportunity Overlay and the EKN Appellation Hotel have once again been classified together as the “Project” and combined into a project-level and programmatic-level Initial Study.

This time around, three CEQA Checklist sections--Aesthetics; Cultural Resources, and Tribal Cultural Resources—that were previously classified in the October 2023 IS-MND as “**Less Than Significant With Mitigation**” have now been re-classified to have “**Potentially Significant Impact**”. The remainder of the CEQA Checklist sections have been re-purposed from the October 2023 Initial Study and incorporated into the April 2024 Initial Study. Planning staff does not appear to consider these sections open to additional EIR-level scrutiny.

The EIR must include a cumulative environmental impacts assessment that will take into account all CEQA Checklist sections:

- Consider **the cumulative environmental effects** of adding as many as six stories of new mixed-use construction (or 7-8 stories of 100% affordable housing) in the three Overlay sub-zones. How are public services, land use, population and housing, and transportation & circulation affected? How will updated sea level rise estimates affect Overlay development?
- Consider the **cumulative environmental effects** of layering in 132 new condominiums at Oyster Point, 182 units at Haystack Pacifica, and the TBD proposed housing adjacent to the Lakeville Smart Station, all within 0.25 miles of the Hotel site.
- There are no comprehensive studies on traffic, parking, public services, noise, or hydrology/flooding that reflect **potential cumulative effects** due to the Overlay areas and surrounding housing development currently in the pipeline. All supporting data in this report refers specifically to the hotel.

During the EIR Scoping Meeting held on May 1, 2024 there was city pushback on addressing the impact of future Overlay build-out as part of any visual simulations. These overlay visuals are critical to understanding the future aesthetic impact to the National Register Historic Commercial District. Since the “Project” includes both Hotel and Overlay, visual simulations must include a means of representing the maximum proposed allowable six-story massing on all three Overlay areas.

The EIR must also address reasonable Project Alternatives and reasonable alternate sites for the Hotel which might be less impactful to the environment:

- A site where underground parking below the existing water table can be avoided
- A site outside of the Historic Commercial Downtown District
- A design that does not exceed 45 feet in height

The Cumulative Impact analysis and visual simulations must include an assessment of maximum-buildout potential of future buildings on the three Overlay areas A, B and C. This visualization cannot be deferred to a later date for analyze on a building-by-building, piecemeal basis.

B. REGULATORY CONTEXT:

2025 General Plan: The “Project” does not comply with current 2025 General Plan and IZO zoning standards in the areas of height, FAR, and lot coverage. Speculating on the outcome of the General Plan Update process as justification to create the Overlay should in no way cloud this point.

Back in 2008, when the current 2025 General Plan Environmental Impact Report was adopted, findings indicated significant and unavoidable cumulative impacts to traffic, traffic-related noise, air quality, and greenhouse gas emissions as a result of implementing the General Plan. At that time, the city adopted a “**statement of overriding considerations**” to merit the benefits of the plan despite significant environmental effects. These same cumulative environmental effects of traffic, traffic-related noise, air quality, and greenhouse gas emissions recognized in the 2008 EIR exist today and will be further exacerbated by the changes to FAR and height limits being proposed by the Overlay.

The “Project” does not comply with the current zoning standards set forth in the 2025 General Plan. The Hotel and Overlay are defined as a single “Project” for purposes of CEQA review, with the “Project” acting as its own justification for making changes to the current General Plan. Either put the Overlay through a separate EIR, or wait until the Updated General Plan has been put through its required EIR. Generating a second “statement of overriding considerations” over environmental impacts would be reckless.

Central Petaluma Specific Plan: the 2003 Central Petaluma Specific Plan clearly stipulates that buildings along the east side of Petaluma Blvd South that lie within the CPSP have a THREE-STORY / 45-foot maximum height. Although the two-block stretch of Overlay Area A sits directly to the west across Petaluma Blvd South from the CPSP boundary, it currently hews to the same 45-foot height limit as the east side of the Boulevard, allowing for a “balanced” gateway into Historic Downtown from the south.

By allowing any future development in Overlay Area A to increase to a potential 75 feet on one side of the Boulevard “gateway” into Historic Downtown it sets up a scenario for an unbalanced streetscape, compromised viewsheds, and an erosion of integrity at the pedestrian level to the setting and feeling of the Historic District.

Land Use issues that involve planning for the future of Petaluma need to be treated holistically and be part of the General Plan Update discussion where decisions can be put through extensive public review followed by an EIR, not treated as a “build-as-you-go” exercise.

City of Petaluma 2023-2031 Housing Element: Petaluma’s 20023-2031 Housing Element has been approved by the State of California, receiving high praise. Out of the 1910 dwelling units projected by the Regional Housing Needs Allocation, Petaluma has identified housing projects currently “in the pipeline” as well as potential ADU locations, to a total of 1888 dwelling units. Remaining needs are for 567 dwelling units, in the income groups of Very Low, Low, and Moderate Incomes. Petaluma has set up aspirational goals to a total capacity of 3241 dwelling units, by identifying “opportunity sites.”

The need for housing in Petaluma across various formats and income levels is real. However, promoting the Overlay narrative as a means to drive discussion of new housing development immediately adjacent to the Historic District risks a loss or erosion of the architectural protections currently in place.

Page 8 of the April 2024 Initial Study references the following, relative to housing: *“Given that the established residential density of 30 units per acre will not change under the proposed project, there would be no increase in population, relative to what is currently allowed.”* If this is the case, it would NOT be necessary to extend any building heights beyond the currently allowed 45 feet or 4 stories. **Six stories are not physically required to facilitate 30 dwelling units per acre.**

Consider the fact that a 100% affordable housing development could receive an 80% density bonus to build significantly higher than 75 feet, be granted an exception to parking, be exempt from CEQA review, and require absolutely NO discretionary design review. This should concern every citizen and downtown business owner who feels that Petaluma’s draw is tied to its vibrant collection of historic buildings, and the sense of place that the Historic District engenders.

C. GENERAL PLAN UPDATE LOOK-AHEAD:

Although the General Plan Update process is well underway, the zoning changes proposed for the Overlay set up the possibility of being at odds with the potential General Plan Land Use outcomes. The General Plan’s Draft Framework on Land Use has not been released for public scrutiny and comment. Furthermore, the updated General Plan will also require an EIR. It is irresponsible to rule on the environmental impacts of the Overlay in advance of a programmatic EIR being completed for the General Plan Update.

The General Plan’s Draft Framework on Historic Resources underscores the need to preserve Petaluma’s distinctive sense of place. Suggestions include:

- Updates to the Historic Design Guidelines that *“may provide additional guidance about compatible and sensitive infill development, conversion of single-family homes to multiple units, and appropriate murals and public art within historic districts.*
- Adoption of *“objective design standards for infill development within historic districts and/or adjacent to individual historic landmarks. Develop floor area ratio and other objective design standards that relate overall building size and bulk to site area for all adopted local historic districts. These objective design standards should also address the sensitive adaptation of existing buildings in a way that both retains historic integrity and addresses the needs of the community.”*

It may be possible that the need to densify and increase building heights in certain nodes of town, especially near transit hubs, could bypass Historic Downtown in favor of equally valid locations around Petaluma. At present, there is no economic data to justify development over 4 stories.

Significant community input on the General Plan may drive a different density narrative—We are creating a bad precedent for the sake of approving a non-conforming hotel in advance of setting city policy through the General Plan Update process.

D. CEQA-SPECIFIC QUESTIONS ON AESTHETICS & CULTURAL RESOURCES.

CEQA 4.1a—Would the Overlay have a substantial adverse effect on a scenic vista?

The original IS-MND for this project indicated that possible future development in the Overlay areas could result in adverse effects on a scenic vista, due to increases in height and bulk/FAR. The suggested mitigation measure would leave things up to current discretionary design review processes (SPAR & HSPAR). How can meeting baseline requirements of SPAR and HSPAR even be construed as a “mitigation” measure? The focused EIR needs to provide quantitative data to prove no substantial adverse effect.

As previously noted, affordable housing projects within the Overlay areas would not be subject to SPAR or HSPAR, and, with allowable density bonuses, could further increase height and bulk beyond the proposed 75 feet and FAR of 6.0. A significantly oversized affordable housing project could be proposed in the Overlay areas with no discretionary design recourse or zoning challenge, and thus pose substantial adverse effects on scenic vistas from neighboring properties.

CEQA 4.1a-- Would the Hotel have a substantial adverse effect on a scenic vista?

While the Hotel may block vistas of Sonoma Mountain or the Petaluma River for some stakeholders living or working nearby, its height and bulk certainly affect scenic vistas WITHIN historic downtown. It will certainly be visible from vantage points away from Downtown, and from across the Petaluma River. The viewshed analysis dated September 8, 2023 (link noted here) <https://cityofpetaluma.org/documents/ekn-appellation-view-shed/> is not adequate to realistically evaluate how this structure will impact downtown vistas from many more vantage points.

The Visual Simulation proposed for the EIR must be more forthcoming in terms of showing the Hotel height and bulk in context to downtown and how pedestrians view the building approaching from the north, south, east, and west, traveling to and through historic downtown.

CEQA 4.1c—Would the Overlay substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The Overlay seeks to completely redefine applicable zoning regulations, which may in the future degrade the scenic quality of the historic districts in and around Downtown. With current State housing mandates, it is conceivable that an affordable housing project could be located in one of the Overlay areas, with no CEQA process or discretionary design (SPAR, HSPAR) review and density bonus provisions to further increase height. This would further erode scenic quality and historic setting.

The level of community input regarding an increase in FAR from 2.5 to 6.0 and a height increase from 45 feet to 75 feet should happen in conjunction within the broader discussion of “Land Use” options in the General Plan Update, and not pushed through in selected Overlay areas.

CEQA 4.1c—Would the Hotel substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Since the Hotel sits within the Downtown Historic District, it is governed by Historic District Design Guidelines and zoning rules established by the General Plan. Infill buildings in the Historic District should “harmoniously coexist with the historic character.” While the Hotel is not in the center of the historic district, it stands within the boundary of the district, at the pivot point that is the southern “entrance” to Historic Downtown. Its height and bulk are not harmonious with the historic neighborhood—it is out of scale with its neighbors in its sheer size and height. The building as designed looms over its neighbors and lacks the cadence of delicate and rhythmic detailing seen elsewhere in the Historic District.

Additional visual simulations from multiple additional points of reference within and including the historic downtown context will show a building that will degrade the overall sense of setting and feeling at the edge of the National Register Historic Commercial District.

The Hotel Project as designed does not comply with current zoning requirements in terms of height, FAR, and lot coverage.

4.5a—Would the Overlay cause a substantial adverse change in the significance of a historic resource?

One proposed building in Overlay sub-zone A and one existing building in sub-zone B are located within the boundary of the National Register Historic Commercial District and are governed by the Secretary of the Interior’s standards. Depending on what might be proposed, it is entirely possible that there could be an adverse change to the character of the Historic Commercial District.

Any new buildings in the Overlay areas should not be allowed by their bulk or height to dilute or degrade the specific National-Register-evaluated components of **location, setting, design, materials, workmanship, feeling, and association**. These categories of our historic downtown are the reason we have a National Register Historic Commercial District.

Cumulative or maximum-case buildout on all three sub-zones must be analyzed for their aggregate height and bulk impact on the setting and feeling of the aggregate historic commercial district.

4.5a—Would the Hotel cause a substantial adverse change in the significance of a historic resource?

The Secretary of the Interior’s Standard #9 for new buildings in a National Register Historic District states:

“The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.”

In response to the Secretary of the Interior’s guidelines, Diana Painter, the historic expert that wrote EKN’s Historic Compliance Review, has written the following:

“The EKN Appellation Hotel will look new. Its design also contrasts with its immediate neighbors primarily through building height.” Also: “The EKN Appellation Hotel gains its architectural interest from its materials, finishes, and their decorative treatments, in contrast to a building like the Masonic Lodge, which gains its architectural interest and meaning from its architectural details.”

However, in reviewing information in the Secretary of the Interior’s design guidelines, as well as the following six elements of the Petaluma Historic District Design Guidelines, it is impossible to justify how the Hotel design meets the standards for harmonious new construction in the Historic District:

<i>If the site is large, the mass of the facade can be broken into a number of small bays, to maintain a rhythm similar to the surrounding buildings.</i>	There is no discernable bay articulation here; on levels 1-4; the entire façade is planar and uni-dimensional, with a grid of windows overlaid in a consistent pattern.
<i>The average height and width of the surrounding buildings determine a general set of proportions for an infill structure. The infill building should fill the entire space and reflect the characteristic rhythm of facades along the street.</i>	This building should not exceed 4 stories or 45 feet. The assumption that the 5 th and 6 th floor setbacks will not be seen by someone on the opposite sidewalk is a fallacy, as floors 5 and 6 will be clearly seen by pedestrians further away from the building.
<i>An infill facade should be composed of materials complementary to the adjacent facades.</i>	The color palette is bland but harmonious with other structures within the Historic District. One more round of value engineering of the construction costs will, I fear, bring us a stucco façade. The wall mural above the hardware store is an interesting choice for public art, but unfortunately it is not on a prominent building face or particularly visible to pedestrians.
<i>The new buildings shall not unduly stand out as inappropriate or disconnected from the scheme of the surrounding buildings.</i>	This building is overwhelming in its height and massing and towers over the one- and two-story buildings immediately within the Historic District.
<i>The size and proportion of window and door openings of an infill building should be similar to those on surrounding facades.</i>	The punched windows are consistently placed across the façade. There is no rhythmic cadence similar to what is seen with the paired window groupings on the Masonic Building
<i>The same applies to the ratio of window area to solid wall for the façade as a whole.</i>	Ratios of window to wall vary in the historic district, so this is difficult to qualify.

At issue is that the Hotel is NOT compatible with the height, massing, size, and scale of the surrounding Historic Commercial District environment. At the pivotal location that constitutes the southern gateway to historic downtown, this building as designed is over-scaled. The structure looms over its neighbors and lacks the cadence of delicate and rhythmic detailing seen in the Historic District.

This hotel design does not create enough architectural interest through materials only. Perhaps a stronger and more bold articulation of planar depths on the façade would create more rhythm and architectural interest. Or a more delicate treatment of architectural detailing. Or removal of levels 5 and 6. This is not an iconic building worthy of Petaluma’s Historic Downtown.

E. ADDITIONAL COMMENTS REGARDING THE REVISED HOTEL DESIGN:

The building design of the proposed EKN Appellation Hotel has recently changed since the October 2023 Initial Study. The exterior elevations are significantly different and degraded from the original proposal. The height and massing remain unchanged. If anything, the design has morphed into a very generic, mid-tier chain-hotel structure or a suburban low-rise office building. Nothing in the revised design is appropriate for a building within the Downtown Historic Commercial District.

- Balconies with decorative metal railings that served to create a rhythm along both facades have been stripped out in favor of a monolithic wall with no significant articulation.
- Decorative perforated metal panel detailing adjacent to the windows has been stripped off the facades.
- There is an overall reduction in planting materials since the balconies were removed.
- The ground floor “public-activating” outdoor dining area seems to have been reduced in size.
- Overall, the hotel facades have lost all sense of rhythm and articulation, and any decorative materials that gave a nod to the historic cast iron buildings have been removed.
- The continuous metal railing and planting at the fifth floor has given way to a simple cornice that looks more at home on a suburban office building. There are so many rich examples of cornice detailing a half-block away that could have been alluded to.
- The shade trellis at the sixth-floor roof deck has been deleted, possibly to let the public know they can’t see the sixth floor from the street; the previous design version had a very visible trellis.
- In summary, there are no distinguishing physical aspects that give even a slight nod to the historic district—no shapes, no roof features, no projections, recesses, or voids. No rhythm, façade articulation, or gracefulness that makes this building harmonious with Historic Petaluma. This building neither belongs nor fits in on this site.

I hereby resubmit my 11/2/23 comments on the October 2023 IS-MND with the following summary for these CEQA checklist categories:

A. 4.7--Geology & Soils / Appendices G & H:

- Location of sample cores on the hotel site appear inadequate in both location and depth for addressing extent of residual soil contamination, especially adjacent to property lines.
- High water table encountered during testing; likely to be exacerbated by sea level rise. Underground construction should be rethought for Overlay Area A.
- Even after remediation on the Hotel site, soil remains contaminated from previous underground fuel tanks; new construction is subject to residual risk management plan. There may be a risk of contaminated soil under adjacent buildings (Rex Hardware) from possible chemical migration; this has not been addressed.
- Overlay area C also includes a parcel with remediated Leaking Underground Storage Tank. No supporting information available on a residual risk management plan or potential migration of contamination under adjacent structures.

B. 4.9—Hazards/ Hazardous Materials:

- Hazardous residual soils; mitigation plan must address property line soils testing.

C. 4.10—Hydrology & Water Quality / Appendix J:

- Updated FEMA Sea Level Rise mapping extends current areas of flooding downtown during heavy rainfall. Overlapping of flooding and high water table with residual soil contamination not addressed for Overlay Area A buildout in terms of managing runoff.

D. 4.13—Noise / Appendix K:

- All three Overlay areas are adjacent to residential neighborhoods and may be affected by a cumulative noise impact. No testing done except at Hotel site.
- Noise and vibration assessment for the Hotel is incorrect in assuming a “rooftop parapet” will attenuate sound from the rooftop bar and event space; plans clearly show a 48-in high glass railing lieu of a parapet, which will not attenuate sound to the same extent. Prevailing winds not addressed for potential to carry sound.

E. 4.15—Public Services:

- Fire emergency response plan is not addressed for capacity to evacuate structures higher than 6 stories on Overlay parcels (i.e., 100% affordable housing with an 80% density bonus to potentially 7 to 9 stories)

F. 4.17--Transportation / Appendix L:

- Cumulative effect of multiple pipeline projects + Overlay projects on traffic, transportation, circulation not addressed. Parking impacts from Amy’s employees not assessed. Old intersection data from 2019 and 2021 needs re-investigation for cumulative impact as well as post-pandemic traffic levels.

PUBLIC RESPONSE TO DRAFT INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY ZONING DISTRICT &
EKN APPELLATION HOTEL

COMMENT PERIOD 10/13/23 – 11/13/23
ATTN: KRISTLE RIZZI / krizzi@cityofpetaluma.org

DATE SUBMITTED: 11/2/23
BY: Lydia Asselin

CEQA Public Draft Section or Appendix Number:

1 & 2: Introduction & Project Description

Public Comment:
Pertaining to Zoning Overlay

Public Comment:
Pertaining to EKN Appellation Hotel

The Downtown Housing and Economic Opportunity Overlay (DHEOO) and the EKN Appellation Hotel (EKN-AH) must not be combined into this single draft report.

While the Planning Department has attempted to compartmentalize the CEQA checklist questions into two distinct projects, it is clear that the intent is to vote on the merits of this report as a single entity, which it most certainly is not. Petaluma Planning staff have continued to assert that the overlay and the hotel are separate entities, though approval of the overlay is necessary in order for the hotel to proceed as designed. Yet they are now being re-packaged as one entity.

Because the two entities (DHEOO & EKN-AH) are ultimately packaged together, it also appears as if the hotel is no longer required to obtain these three Entitlements; they have simply been cleared away by an assumption that the IS-MND for the Overlay makes any requirement moot for the hotel:

- Zoning Map Amendment to create three distinct overlay areas.
- Zoning Text Amendment to change allowable building heights from 45’ to 75’ with a CUP; change lot coverage from 80% to 100%; and allow ground floor residential.
- General Plan Amendment to increase FAR from 2.5 to 6.0

The DHEOO with its zoning ramifications must not be “brought forward” from the in-progress General Plan Update and allowed to stand on its own without looking at the cumulative environmental impacts within the context of the more comprehensive General Plan Update.

Section 1.3; pp. 7 & 8 / Petaluma General Plan 2025 EIR: The environmental ramifications of the DHEOO have **not** been adequately evaluated in this document. Fifteen years ago, the General Plan 2025 EIR found **significant and unavoidable cumulative impacts** to traffic, traffic-related noise, air quality, and greenhouse gas emissions as a result of implementing the General Plan. At that time, the city adopted a “statement of overriding considerations” to merit the benefits of the plan despite significant environmental effects. These same impacts exist today.

The introductory paragraph of Section 4/EVALUATION OF ENVIRONMENTAL IMPACTS defines compliance as including the following: **“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.”** Cumulative environmental impact analysis is missing from sections 4.1a, 4.1c, 4.5, 4.13a, 4.15, and 4.17.

**PUBLIC RESPONSE TO DRAFT INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY ZONING DISTRICT &
EKN APPELLATION HOTEL**

CEQA Public Draft Section or Appendix Number:

1 & 2: Cont'd

**Public Comment:
Pertaining to Zoning Overlay**

**Public Comment:
Pertaining to EKN Appellation Hotel**

Yet throughout this report, comments about the Overlay gloss over any environmental impact by saying the changes are “programmatic” in nature and do not represent any physical development. Kind of a “no-harm-no foul” approach. As in, “may be an impact in the future, but not now. We’ll deal with it later.”

- What are **the cumulative environmental effects** of adding as many as six stories of new housing in the three Overlay sub-zones?
- What are the **cumulative environmental effects** when you layer in 132 new condominiums at Oyster Point, the 182 units at Haystack Pacifica, and the TBD proposed housing adjacent to the Lakeville Smart Station, all within .25 miles of the EKN-AH site?
- Why are there no comprehensive studies on traffic, parking, water use, noise, or hydrology/flooding that reflect **potential cumulative effects** due to the Overlay areas and surrounding housing development currently in the pipeline? All supporting data in this report refers specifically to the hotel.

An Environmental Impact Report **must** be undertaken for the Overlay, addressing cumulative environmental effects. Since the Overlay is being “brought forward” in advance of the Updated General Plan, it should receive the same scrutiny of a full EIR that it would receive as part of the wider EIR for the General Plan Update.

**PUBLIC RESPONSE TO DRAFT INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY ZONING DISTRICT &
EKN APPELLATION HOTEL**

CEQA Public Draft Section or Appendix Number:	
4.1: Aesthetics	
Public Comment: Pertaining to Zoning Overlay	Public Comment: Pertaining to EKN Appellation Hotel
<p><i>4.1a--Substantial adverse effect on a scenic vista?</i></p> <p>Since the DHEOO doesn't itself cause new work, this is a hypothetical question. However, future building within the overlay zones may cause an adverse effect on vistas. The cumulative impacts of additional height and bulk allowances on all overlay parcels must be addressed now, or deferred until the EIR for the General Plan Update has been completed.</p>	<p><i>4.1a--Substantial adverse effect on a scenic vista?</i></p> <p>While the EKN-AH may not block vistas of Sonoma Mountain or the Petaluma River, its height and bulk affect scenic vistas WITHIN historic downtown. The viewshed angles provided on sheet 2.6 of the SPAR drawings are too cartoonish to realistically evaluate how this structure will impact downtown vistas. Angles were selected to leverage locations of street trees. What will be revealed during Fall & Winter when these trees shed their leaves? Photos in Appendix F show the downtown surroundings in Winter, with bare trees, which show how much more of Downtown is visible behind the tree canopies.</p>
<p><i>4.1c—conflict with applicable zoning and other regulations governing scenic quality?</i></p> <p>The DHEOO seeks to completely redefine applicable zoning regulations, which may in the future cause conflict with scenic quality. The cumulative impacts of additional height and bulk allowances on all overlay parcels must be addressed now, or deferred until the EIR for the General Plan Update has been completed.</p>	<p><i>4.1c—conflict with applicable zoning and other regulations governing scenic quality?</i></p> <p>Since the EKN-AH sits within the Downtown Historic District, it is governed by Historic District Design Guidelines and influenced by the General Plan. Infill buildings in the Historic District should “harmoniously coexist with the historic character.” While EKN-AH is not in the midst of the historic district, it stands at the pivot point that is the southern “entrance” to Historic Downtown. Its height and bulk are not harmonious with the historic neighborhood—it is out of scale with its neighbors in its sheer size. The building as designed looms over its neighbors and lacks the cadence of delicate and rhythmic detailing seen in the Historic District.</p>

**PUBLIC RESPONSE TO DRAFT INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY ZONING DISTRICT &
EKN APPELLATION HOTEL**

CEQA Public Draft Section or Appendix Number:	
<h2 style="color: red;">4.5: Cultural Resources + Appendix F</h2>	
Public Comment: Pertaining to Zoning Overlay	Public Comment: Pertaining to EKN Appellation Hotel
<p><i>4.5a--cause a substantial adverse change in the significance of a historic resource.</i></p> <p>One proposed building in Overlay sub-zone A and one existing building in sub-zone B are located within the boundary of the National Register Historic Commercial District and are governed by the Secretary of the Interior’s standards.</p> <p>Per the Secretary of the Interior’s Standard #9: “The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.”</p> <p>The DHEOO, by virtue of a proposed zoning text amendment, would increase allowable building heights by 20 feet. The proximity of the three overlay zones to the boundaries of the National Register Historic Commercial District has the potential for an adverse effect due to the risk of visually “walling off” sections of three and four-story historic buildings with six and seven-story structures.</p> <p>Cumulative or maximum-case buildout on all three sub-zones must be analyzed for their aggregate height and bulk impact on the historic commercial district.</p> <p>Additionally, three buildings in overlay sub-zone area A are age-eligible to be considered as historic structures and could be lost with future development in that sub-zone.</p>	<p><i>4.5a--cause a substantial adverse change in the significance of a historic resource.</i></p> <p>Per the Secretary of the Interior’s Standard #9: “The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.”</p> <p>Per the Historic Compliance Review: “The EKN Appellation Hotel will look new. Its design also contrasts with its immediate neighbors primarily through building height.”</p> <p>At issue is that EKN-AH is NOT compatible with the height, massing, size, and scale of the surrounding environment. At the pivotal location that constitutes the southern gateway to Historic Downtown, this building as designed is simply too over-scaled. The structure looms over its neighbors and lacks the cadence of delicate and rhythmic detailing seen in the Historic District.</p> <p>A case can be made, however, that a four-story hotel in this location could likely be more harmonious with its surrounding environment.</p> <p><i>Appendix F: Historic Compliance Review</i></p> <p>This report continues to refer to the EKN-AH as a 5-story building. This is a false representation. This is a 6-story building. The 6th floor site landscape plan (SPAR-1.7) shows outdoor seating for approximately 100 patrons, exclusive of any occupants INSIDE the enclosed sixth floor event space.</p>

**PUBLIC RESPONSE TO DRAFT INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY ZONING DISTRICT &
EKN APPELLATION HOTEL**

CEQA Public Draft Section or Appendix Number:	
4.5: Cont'd	
Public Comment: Pertaining to Zoning Overlay	Public Comment: Pertaining to EKN Appellation Hotel
	<p><i>Appendix F: Historic Compliance Review</i></p> <p>Per the Historic Compliance Review: “There is no definitive answer as to what constitutes good infill design. Good design will vary according to the surrounding setting. Because an infill building is new, it should look new. However, its appearance must always be sensitive to the character of its neighbors without mimicking them.”</p> <p>Design is always subjective, but a building of this size and mass is not at all sensitive to the character of its smaller historic neighbors.</p>
	<p><i>Appendix F: Historic Compliance Review</i></p> <p>Per the Historic Compliance Review: “The EKN Appellation Hotel gains its architectural interest from its materials, finishes, and their decorative treatments, in contrast to a building like the Masonic Lodge, which gains its architectural interest and meaning from its architectural details.”</p> <p>Again, design is subjective, but this hotel design does not create enough architectural interest through materials only. Perhaps a stronger and more bold articulation of planar depths on the façade would create more rhythm and architectural interest. Or a more delicate treatment of architectural detailing.</p>

**PUBLIC RESPONSE TO DRAFT INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY ZONING DISTRICT &
EKN APPELLATION HOTEL**

CEQA Public Draft Section or Appendix Number:	
4.7: Geology & Soils + Appendices G & H	
Public Comment: Pertaining to Zoning Overlay	Public Comment: Pertaining to EKN Appellation Hotel
<p><i>4.7a.ii: adverse effects from ground shaking?</i> <i>4.7a.iii: adverse effects from liquefaction?</i></p> <p>Since the DHEOO doesn't itself cause new work, this is a hypothetical question. Future building within the overlay zones may cause adverse effects to any structure from severe seismic shaking or soil liquefaction.</p>	<p><i>4.7a.ii: adverse effects from ground shaking?</i> <i>4.7a.iii: adverse effects from liquefaction?</i></p> <p>EKN-AH will require a structural design capable of withstanding severe seismic ground shaking, and accompanying soil liquefaction. The basement garage will need to act like a "bathtub" to keep groundwater out of the basement, ideally through positive-side membrane waterproofing.</p> <p><i>Appendix G/Geotechnical Report: high water table; post-liquefaction settlement; localized flooding during strong rainfall.</i></p> <p>Appendix G indicates possible basement settling due to seismic liquefaction. What methods will be in place to deal with groundwater intrusion in the event of waterproof membrane failure? Or water intrusion from the parking ramp during high rainfall events? Is a sump pump provided? If so, due to potential groundwater contamination as noted in Appendix H, how will sump pump water be treated to avoid pumping contaminants into the storm drain system? Continuous sump pump may have issues of noise, power failure.</p> <p><i>Appendix H/Environmental covenant: risk management plan from former fuel tanks.</i></p> <p>EKN-AH would sit on land formerly occupied by a gas station. Though fuel tanks have been removed, there is still a potential risk of residual contaminants in the soil, groundwater, and soil vapor. Mitigation methods are outlined, but if groundwater were to get into the basement, how would pumping out of water potentially containing contaminants be addressed?</p>

**PUBLIC RESPONSE TO DRAFT INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY ZONING DISTRICT &
EKN APPELLATION HOTEL**

CEQA Public Draft Section or Appendix Number:	
4.9: Hazards / Hazardous Materials	
Public Comment: Pertaining to Zoning Overlay	Public Comment: Pertaining to EKN Appellation Hotel
<p><i>4.9d: location on a hazmat site?</i></p> <p>Two parcels in DHEOO Areas A and C are identified as Leaking Underground Storage Tank (LUST) sites. They have been remediated but may require additional verification if there are plans for future development.</p>	<p><i>4.9d: location on a hazmat site?</i> <i>Appendix H/Environmental covenant: risk management plan from former fuel tanks.</i></p> <p>EKN-AH would sit on land formerly occupied by a gas station. Though fuel tanks have been removed, there is still a potential risk of residual contaminants in the soil, groundwater, and soil vapor. Mitigation methods are outlined, but if groundwater were to get into the basement, how would pumping out of water potentially containing contaminants be addressed?</p>
<p><i>4.9f: impair adopted emergency response/evacuation plan?</i></p> <p>The DHEOO proposes increasing building heights to as tall as 75 feet and six floors. While this question is hypothetical, there may be a point in time when the Petaluma Fire Department might need to evacuate building occupants from as high as a 75-foot rooftop. Does the Petaluma Fire Department currently have ladder truck equipment capable of evacuating occupants from this height?</p>	<p><i>4.9f: impair adopted emergency response/evacuation plan?</i></p> <p>The rooftop bar/event space has a potential occupancy of 56 guests, per EKN’s description. The furniture layout shown on the rooftop landscape plan has seating for as many as 100 patrons. The proposed floor level of the rooftop patio would be approximately 57 feet above grade. Does the Petaluma Fire Department currently have ladder truck equipment capable of evacuating occupants from this height?</p>

**PUBLIC RESPONSE TO DRAFT INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY ZONING DISTRICT &
EKN APPELLATION HOTEL**

CEQA Public Draft Section or Appendix Number:	
4.10: Hydrology + Appendix J	
Public Comment: Pertaining to Zoning Overlay	Public Comment: Pertaining to EKN Appellation Hotel
<p><i>4.10d: flood zones; risk release of pollutants due to project inundation</i></p> <p>While not currently in a 100-year flood zone, rising sea / river levels over time, coupled with high groundwater levels, may put DHEOO Area A at risk of inundation during heavy rain runoff, possibly releasing contaminants. Comprehensive flooding analysis due to sea level rise is not included in this report and should be addressed now, or deferred until the EIR for the General Plan Update has been completed.</p> <p>.</p>	<p><i>4.10d: flood zones; risk release of pollutants due to project inundation</i></p> <p>While not currently in a 100-year flood zone, rising sea / river levels over time, coupled with high groundwater levels, may put EKN-AH at risk of basement inundation during heavy rain runoff. Flooded basement parking will release contaminants. Electric vehicles exposed to flooding may cause battery fire issues.</p>
	<p><i>Appendix J: Prelim Stormwater Control Plan</i></p> <p>Stormwater Control Plan includes measures for runoff in raised planters and street trees, as well as runoff from hosing out food service equipment and garbage cans. Architectural plan also indicates that elevator shaft sump pump and parking garage floor drains will be pumped to sanitary sewer. Need to ensure that all basement water be separately pre-treated due to potential for groundwater contamination from previous LUST's, as well as from any contaminants from parked cars, and not plumbed directly to the sanitary line.</p>

**PUBLIC RESPONSE TO DRAFT INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY ZONING DISTRICT &
EKN APPELLATION HOTEL**

CEQA Public Draft Section or Appendix Number:	
4.13: Noise + Appendix K	
Public Comment: Pertaining to Zoning Overlay	Public Comment: Pertaining to EKN Appellation Hotel
<p><i>4.13a: substantial temporary or permanent increase in ambient noise levels?</i></p> <p>Since the DHEOO doesn't itself cause new work, this is a hypothetical question. However, future building within the overlay zones may cause adverse effects from noise being transmitted into surrounding neighborhoods.</p> <p>Cumulative impact of noise from planned developments in and around downtown must be addressed now, or deferred until the EIR for the General Plan Update has been completed.</p>	<p><i>4.13a: substantial temporary or permanent increase in ambient noise levels?</i></p> <p>City General Plan & IZO policies stipulate a cutoff for noise at 10PM. Acceptable noise limit is 65dBA.</p> <p>Aside from noise generated during construction, EKN-AH states that the loudest operational noise would be generated from rooftop mechanical equipment and would affect patrons vs. surrounding neighborhoods. However, the rooftop bar and entertainment venue (as well as first floor restaurant) will be open until midnight. The potential for nuisance noise from amplified music and drunk patrons is real. The noise study estimates amplified music 56 feet above the street at 72 dBA should result in ambient noise of only 56 dBA. The report assumed there was a rooftop parapet wall to attenuate sound. The rooftop patio (with seating for approx. 100 patrons shown) does not have a parapet wall to help attenuate noise—it has a 48" glass railing, which will not tamper noise to the same effect.</p> <p>Airborne noise patterns in Petaluma can be significant, especially with prevailing winds. Sounds from the Fairgrounds (1.3 miles from the proposed site) can be heard throughout the city.</p> <p>Noise may be a continuing source of friction with residential neighborhoods a block away.</p>

**PUBLIC RESPONSE TO DRAFT INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY ZONING DISTRICT &
EKN APPELLATION HOTEL**

CEQA Public Draft Section or Appendix Number:	
4.15: Public Services	
Public Comment: Pertaining to Zoning Overlay	Public Comment: Pertaining to EKN Appellation Hotel
<p><i>4.15: adverse physical impact to maintain acceptable service/response time? Need for new or altered facilities?</i></p> <p>The DHEOO proposes increasing building heights to as tall as 75 feet and six floors. While this question is hypothetical, there may be a point in time when the Petaluma Fire Department might need to evacuate building occupants from as high as a 75-foot rooftop. Does the Petaluma Fire Department currently have ladder truck equipment capable of evacuating occupants from this height?</p> <p>What is the expected cumulative effect on response time and facilities of adding hundreds of new dwelling units with the overlay zones and immediately adjacent to Downtown?</p>	<p><i>4.15: adverse physical impact to maintain acceptable service/response time? Need for new or altered facilities?</i></p> <p>The rooftop bar/event space has a potential occupancy of 56 guests. The proposed floor level of the rooftop patio would be approximately 57 feet above grade. Does the Petaluma Fire Department currently have ladder truck equipment capable of evacuating occupants from this height?</p>

**PUBLIC RESPONSE TO DRAFT INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
DOWNTOWN HOUSING & ECONOMIC OPPORTUNITY OVERLAY ZONING DISTRICT &
EKN APPELLATION HOTEL**

CEQA Public Draft Section or Appendix Number:	
4.17: Transportation + Appendix L	
Public Comment: Pertaining to Zoning Overlay	Public Comment: Pertaining to EKN Appellation Hotel
<p><i>4.17a: conflict with program plan, ordinance, or policy</i></p> <p>Potential cumulative effect on transportation and parking congestion with fulfilled goals for infill development downtown. The three overlay areas, the 300+ units planned for the Haystack and Oyster Cove developments, and anticipated housing on the SMART site, will stress the downtown traffic intersections. New construction downtown will push parking onto neighborhood streets, as parking requirements are reduced due to CEQA VMT criteria and proximity to transit. These concerns should be addressed now, or deferred until the EIR for the General Plan Update has been completed.</p> <p>Although the new Amy’s HQ is just outside DHEOO Area C, it needs to be factored into cumulative transportation and parking effects. Need to investigate where their employees are currently parking, and whether they walk, bike, or take transit to work.</p>	<p><i>4.17c: increased hazards</i></p> <p>Service and delivery vehicles arriving at EKN-AH will likely park or double-park on B Street, at the BOH entry corridor. Food, wine, supplies, etc. are supposed to be taken in at the basement garage level loading zone, but service delivery vehicles may not be able to be accommodated due to low clearances at two points down the ramp. Any 16-ft box trucks (12 ft height), or transit delivery vans (9 ft height) will need to deliver goods at the street level. This will cause congestion along B Street.</p> <p><i>Appendix L: Traffic Impact Study</i></p> <p>Skewed assumptions in this study:</p> <ul style="list-style-type: none"> *Assumes some guests may arrive via public transit then Uber the last half-mile (not likely for a hotel charging \$400-500/night). *Assumes restaurant patrons will mostly be hotel guests, and thus not need to park (probably not for a Charlie Palmer restaurant). *Employees will self-park elsewhere, unless there’s space in the basement garage, then they could self-park on-site. (more likely, extra space will be held for \$\$ restaurant patrons). *Data from three Blvd intersections is from 8/19; the D St intersection is from 10/21 (mid-pandemic). Although factored to reflect 2023 volume, work-from-home and other pressures since the pandemic may have changed patterns. This intersection will have a lot of cumulative stress in the future and should reflect 2023 data. *Interesting comment that “adding new hotel rooms does not necessarily change the overall demand for lodging in the region.”

From: A Bock <[REDACTED]>
Sent: Saturday, May 11, 2024 7:37 AM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: Proposed hotel on B St and Petaluma Blvd

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Hello,

I am a Petaluma resident opposed to the plan for the hotel at the corner of B St. and Petaluma Blvd as currently proposed. I feel it is too large/tall/modern and will change the character of the downtown area. I am also concerned that changing the building height code in that area will set a new precedent and other development may ensue. Where will the parking be? West Petaluma is a special area because of its historical heritage. It seems like there is a push for this project to inject money into downtown area but will the benefit be worth risking the loss of the Petaluma many of us know and love?

I wish the people wanting this project to go through would consider a smaller project or another site to build on.

Thanks for accepting input from Petaluma residents.

Sincerely,

Annette Bock
[REDACTED]
Petaluma, CA

From: Bialowe <[REDACTED]>

Sent: Saturday, May 11, 2024 4:06 PM

To: Greg Powell <gpowell@cityofpetaluma.org>; Isabel Castellano <icastellano@cityofpetaluma.org>

Subject: Responses to EKN and Appellation Petaluma Hotel

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Dear Isabel and Greg, City of Petaluma

I'm writing today to add my comments, concerns and suggestions to you regarding the proposed Appellation Petaluma Hotel.

LOCATION: My first question about the proposed hotel is why build it there? Wouldn't both the stated goals of the hotel and of the city be better served by building the hotel within the CPSP location? Please allow me to elaborate:

* Our location in southern Sonoma (including Novato) produces many of the nation's prime artisanal, organic delicacies. You name it, we've got it: from wines to beers, sustainable seafood to world-class bakeries, world-renown dairy and meat products, the list goes on...

Why not expand the vision of the Appellation Petaluma to reflect this richness, include a food court on the lower level and/or the surrounding area... an arcade of local shops... thus helping to expand retail opportunities, grow our local economy, ...as well as capitalize on the burgeoning food tourism in our area.

This would be best achieved within the CPSP area, where planning could supply ancillary structures, walkways and landscaping... not in the proposed location,... the footprint of which is already circumscribed, and curtailed by traffic.

* With our commitment to carbon neutrality by 2030, Petaluma is exemplary in our adherence to and implementation of green practices, and climate resiliency. Why not make the Appellation Petaluma reflect our green identity, by becoming a one-of-a kind, state-of-the-art green hotel? As a traveler, I know how traveling green is not incompatible with traveling in comfort. Travelers enjoy the opportunity to explore green products and practices, to align our actions with our values. It would enhance EKN's efforts to be a destination hotel, and it would have "Petaluma" written all over it.

With these defining attributes, and within the CPSP target location, Appellation Petaluma could well become the fulcrum of highly-energized urban life... utilizing the nearby train and bus line transit stations, and its proximity to the 101,...as well as meeting our CPSP goal: drawing resources to central Petaluma, uniting the east and west sides.

*Let's envision the area replete with demonstration gardens, landscaped walkways, parklets and performance spaces ... **with the Appellation Hotel Petaluma at its heart.***

DESIGN/ARCHITECTURE:

Petaluma already has its own unique architectural vernacular. In addition, our city is home to sculptors and ceramicists, and a variety of other makers of public art. Why not incorporate the playfulness-mixed-with-utility that is integral to our civic palette? Sadly, EKN's visuals of the future hotel reflect only the blandest of corporate aesthetics.... It says nothing about our location, our community or our history! It would be wise if Appellation Hotel hired local architects and artists to consult. For example: many of the sculptors in the area famously work with metal... the entry metalwork could be much more relevant to our community if designed and fabricated by one of our own!

NOISE:

"At 50 feet, amplified music would generate a noise level of 72 dBA. Based on the height of the Hotel building, and attenuation provided by the parapet of the Hotel building and the building itself, noise levels at the nearest sensitive receptor will be approximately 56 dBA which is within the noise limits established by the City. " (pg 87)

I realize the dBA levels have already been established by the city, but it's worth noting: most bands are well above 80 dBAs...more like 110 dBAs. From the proposed outdoor rooftop bar sound waves could be carried by evening winds. In the evening, marine air blowing eastward through the Petaluma Gap, branches into southward and northward streams and could attenuate the reach of noise. Many of us experience this on an ongoing basis, with the roaring of the racetrack, or the sound of rock bands blaring from the fairgrounds. If the rooftop's bar's operating hours extend to 2 am (as most do) the noise would be unacceptable, and in violation of our noise ordinance.

TRAFFIC: With multiple, ongoing truck deliveries, passenger drop-offs, and the plan for ongoing events, not to mention the 93+ guests, I have concerns about how local residents and shopkeepers will deal with the jump in traffic and difficulty with parking. 4th street becomes a one way at B street. Parking on 4th between B and Western is difficult, and not much relieved by the parking lot. I believe we're asking for trouble to invite the kind of congestion a hotel in that spot will create. At such times when hotel parking is maxxed out, I suspect a valet service will be called in to park cars on neighborhood streets...only to frustrate multi-resident households with more than one car... and compromise safety for pedestrians and bicyclists.

Again, I urge our city planners to consider the CPSP location for the Appellation Petaluma, where both the city and the hotel could only benefit.

Thank you for reading this letter and giving it your attention.

respectfully,

Bia Lowe
Petaluma
94952

From: robert robopix [REDACTED] <[REDACTED]>
Sent: Saturday, May 11, 2024 10:35 AM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: proposed Appellation Hotel

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I cannot support the Appellation Hotel and the Overlay to the General Plan as proposed.

I have lived in Petaluma for 33 years on both West and East sides of town. I am not opposed to gradual development in the historic downtown as long as it doesn't interfere with or detract from the **character of the** existing local architecture that still survives from the late nineteenth and early twentieth centuries. For example, the Theater District development has improved and increased the "walkability" of the downtown area with modern structures that have been designed to resemble textures and styles of the existing local architecture and without exceeding the three story limit. This commercial and residential space is attractive and pleasant to stroll through, especially along the Petaluma River, both for locals and visitors, and contributes to Petaluma's value as a destination city. I would prefer some kind of commercial structure with street level retail or restaurant space to a weedy vacant lot on the corner of B Street and Petaluma Boulevard. I have no objection to adding a restaurant and more bedrooms for visitors adjacent to the Historic Downtown so long as adequate parking for guests is provided for without increasing pressure on the already limited street parking in the area.

My concern about this project's impact on the Historic Downtown is the sheer massiveness of the structure caused by the additional fifth and sixth stories. The artist's rendering of the proposal shows the emphasis on the bright facade of the first four floors, its height corresponding with local architecture, but it also attempts to de-emphasize the darker, set back top floors. The first four story facade does make some sense in context, however just making the top floors darker and set back does not make them invisible and they would be taller than any structures in the area, with the exception of the grain elevator on Copeland Street and a few decorative interruptions like church spires or the Masonic building's clock tower. But none of these exceptions are actually occupied spaces, so there is really no precedent for anything so tall. Not only would it be

more massive than anything else around it would set a new height precedent for the area included in the Overlay to the General Plan, where any vacant space or parking lot could be home to another six story structure to loom over local residences.

Maximizing the number of guest rooms and event spaces on the same small footprint will obviously maximize the income to be derived from the property, increasing the likelihood that the investors will get a better return on their investment and certainly the property owner will be able to collect greater rent. All of these participants will most likely benefit from the project but what does the rest of the community get in return for this disruption to the character of the Historic Commercial District? Additional business means more sales and property tax revenue for the city, more guests staying downtown will spend some of their money at other venues, and locals may enjoy an expensive restaurant meal or attend an event occasionally, but the sheer number of guests must have some negative impact on local traffic and eliminating even a few slots will make street parking that much harder. More disturbing is what happens to the flavor and character of old Petaluma when you allow this massive (if profitable) structure to land here? If Petaluma loses its nineteenth century charm why would it remain a destination for those potential hotel guests? EKN is a developer from Southern California, where those of us who love Northern California know that the building philosophy is more, more, and more, and nothing is too excessive as long as a few people profit excessively. Do we want to encourage that kind of heedless development here in Petaluma, the first community to ever dare impose modest limits on growth?

Yes, a quality hotel and restaurant are better than a vacant lot, but a huge building out of character with our small historic city that only profits a few stakeholders and opens the door to more of the same is not better at all.

ROBERT DOUGHERTY

██████████
██████████

From: Claudia Aron Ross <caronross@sbcglobal.net>
Sent: Sunday, May 12, 2024 4:42 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Proposed Hotel and Economic Overlay

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Ladies and Gentlemen: so here it is the day before the last day to submit comments on the above referenced project(s) and the proposed EIR. I have put this off, because there is so much to say and I am unsure that I will be able to adequately articulate how astounded and dismayed I am at the way this is being shoved down the throats of the citizens of Petaluma.

The proposed EIR is a total joke. I worked as a real estate paralegal for many, many years. Never have I seen a less adequate or meaningless EIR proposed. Evidently we are supposed to go to another document to discover how the City has already dealt with issues such as parking, congestion, soils and results of building underground so close to a river in earthquake country. Would you please tell me where this document hides on the City of Petaluma page? I have looked. Regardless, unless these issues were studied through a process as thorough as a legitimate EIR, I would question the findings. Just for starters, a 93 room hotel with parking for 54 (or so)? How could this possibly make sense? Maybe you are relying on the fact that even in high season we have 60% vacancy in the existing hotels? Although you are claiming this hotel will be an economic lift to our town.....

The proposed Overlay puts the whole fabric of our historic downtown in jeopardy. It opens the door to tall, architectural eyesores. It has been brought to the attention of the City Council and the City Attorney that it also opens the door for state mandated changes that would forever change our town. It is reckless. It challenges the Petaluma that we live here for, that people visit here for. Both Healdsburg and Sonoma have thriving downtowns, without exceeding height limits. I cannot fathom why Petaluma cannot do the same, or why the Council would allow this.

We have height limits for good reason. I implore the Council to follow set guidelines. Do not risk the future of Petaluma. Thousands of us are watching you.

Very truly yours,

Claudia Aron Ross
341 Black Oak Drive
caronross@sbcglobal.net

From: jf hancock [REDACTED] >
Sent: Sunday, May 12, 2024 8:46 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: Overlay & EKN Intial Study

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The Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel Initial Study overlooks key areas, does not fully consider alternatives, and claims mitigation of potentially significant impacts where there is none.

Specifically:

Buildings in the overlay will only be required to meet CalGreen Building Tier 1 standards. Tier 1 is the lowest standard and, in order to programmatically allow for cumulative effects of densification, Tier 2 standards should be applied.

The scope of the EIR should be broadened to include the use of Tier 2 standards throughout the overlay.

The EIR should also examine the required use of active solar throughout the overlay including the use of transparent solar panels for windows and vertical solar panels as cladding or siding for buildings.

In order to further decarbonize electricity demand in the overlay, projects should be required to have onsite solar batteries to provide electricity at night and on cloudy days.

The EIR should further consider the alternative of making all projects in the overlay net-zero when it comes to electricity usage. All projects should generate enough of their own electricity.

The hotel does not meet BL1: Green Buildings

It does not have a cool roof.

The Initial EIR claims that it does but fails to mention that, because its roof is open to guests, it cannot be a cool roof. The hotel has a flat roof and, under CalGreen, a roof with a slope of less than 2:12 needs to have a Solar Reflective Index of at least 75 meaning that they would mostly have to be white. A roof that reflective would not be comfortable for guests and the plans show that the roof will be a combination of non-reflective wood, gray decorative concrete pavers, and tan pre-cast pavers.

There is no solar water heating system.

Recycled building materials are not detailed.

Furthermore, Tier 1 is the lowest CalGreen Tier. The EIR scope should include the alternative to enclosing the roof to make it a cool roof and a requirement to comply with CalGreen Tier 2.

The hotel does not meet Building Control Measure BL4: Urban heat island Mitigation.

The Initial EIR claims mitigation in that “the proposed hotel would be required to incorporate passive solar building design and landscaping conducive to passive solar energy use for both residential and commercial uses, i.e., building orientation in a south to southeast direction, encourage planting of deciduous trees on west sides of structures, landscaping with drought resistant species, and use of groundcovers rather than pavement to reduce heat reflection.”

The building is oriented to the northeast. It’s main side, facing Petaluma Blvd., South is about 140’ long and faces NE, the back of it faces SW and the shorter sides, at less than 100’ face SE and NW. None of it faces south. Nowhere in the project description that I’ve read are passive solar features mentioned.

The hotel does not meet EN1: Decarbonize Electricity Generation.

The Initial EIR claims it does because natural gas will not be used and the operators will have “the option to participate in the Sonoma Clean Power Program.” the general plan calls for Petaluma to “Achieve carbon neutrality by 2030 and equitably foster a sustainable and resilient community in which today’s needs do not compromise the ability of the community to meet its future needs”, the scope of the EIR needs to include more than a Tier 1 compliance with CalGreen, Tier 2 or greater is called for. It should include the alternative of incorporating active solar siding and windows. Transparent solar panels are commercially available and can be used as windows. Vertical solar panels can also be used as siding. The EIR should consider these alternatives and calculate the effect of requiring the hotel to use facility-wide solar battery power at night and on cloudy days. Hotels keep lights on 24-hours a day and there is lots of energy use with cooking, housekeeping, lobby lights., etc. Requiring energy efficient appliances still results in an increase of energy usage. The EIR needs consider the alternative of making this a net-zero project.

The hotel does not meet EN2: Decrease Electricity Demand

Even with the use of energy efficient devices and construction, the building of this hotel, as it is planned, will increase electricity demand. All of the appliances are electric, there are 27 car elevators, 2 hotel elevators, HVAC equipment, and all-electric kitchen, hundreds of lights, laundry, dishwashing, cleaning, Wi-Fi, televisions, etc. to contend with. No matter what, electricity demand will increase.

The EIR should consider the impact of limiting the hotel to the current 45’ limit and compare which usage would be less.

The hotel does not meet TR9: Bicycle and Pedestrian Access and Facilities

There is no dedicated bicycle lane on B Street or Petaluma Blvd. at the location making which makes cycling less safe and less likely to be used. Furthermore, the hotel only provides parking for 10 bicycles, 6 on the street and 4 in the hotel. People rarely use bike racks correctly and park them lengthwise to them which makes it so that only 2 can use them.

Travel to the hotel by bicycle is dangerous and bicycle parking is insufficient and the EIR scope should consider the alternative of adding protected bicycle lanes in increasing bicycle parking.

Jeremy Hancock
Petaluma

From: mary beth cohen <[REDACTED]>
Sent: Sunday, May 12, 2024 3:25 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: scoping meeting comment

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Dear Petaluma City Planners and Members of the Petaluma City Council,

I am writing to ask you to take great care in your consideration of the EKN Appellation Hotel and Downtown Housing and Economic Opportunity Overlay.

With regard to the hotel, once built, it cannot be undone. Our current General Plan, Implementing Zoning Ordinance and Petaluma Historical District Guidelines contain solid, common-sense guidelines for preserving our historical downtown with its unique iron front buildings and vintage character. These contribute greatly to making Petaluma such a special place to live as well as attracting visitors to our town.

The scale of the proposed Appellation Hotel would be out of character with existing buildings just one block away on Petaluma Blvd. N. This should be taken into consideration. The city should maintain its current 45 foot height limit for the area. Ideally no building should be higher than the Masonic building (not including the clock tower) and its clock tower should remain the visual high point of downtown.

The developers of the hotel say it will point us in the direction of “traditional urban development” and that the hotel will serve as a “counterpoint” to our historic iron fronts. Is that truly what the people of Petaluma want? “Traditional urban development” has not been the high point of architectural aesthetics in my opinion. Additionally, we do not need a “counterpoint” to our iron fronts, we need buildings that are in keeping with their architectural design.

Another concern with the hotel is the valet parking. It will take away street parking and would seem likely to lead to further traffic congestion and delays when navigating the downtown streets whether by car, bike or on foot.

As regards the Overlay, why now? Your report states the economic benefits and future projects are unknown at this time. It seems we should try to identify needs e.g. affordable housing, businesses that provide **good** paying (not “living wage”) jobs, preservation and creation of green spaces in the midst of development, downtown businesses that provide useful and affordable services for Petaluma residents. None of these would seem to require a change in building height limits and density.

Let’s not put the cart before the horse. We have a good General Plan that is coming up for review. I see no rush for an Overlay at this point in time.

Thank you for the opportunity for input into this important planning decision.

Sincerely,

Mary Beth Cohen

[REDACTED], Petaluma

[REDACTED]

From: Nancy Chien-Eriksen <[REDACTED]>
Sent: Sunday, May 12, 2024 12:32 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Proposed hotel design

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The design of the hotel for Pet Blvd and B Street does not fit in whatsoever with the architecture of our historic downtown. It fits in Orange County. It is too big and too imposing and tasteless. There are ways of making it more appealing, more human friendly. Also, where are all the cars of staff and visitors going to park?

You must require the architects and designers to study and reflect the building character of the era (curves, insets, and decor), and I don't mean straightedge Bauhaus geometry. The corner of B Street is hugely visible and impactful. It is absolutely crucial that we maintain the character of downtown Petaluma. If those architects cannot fulfill that, then get the ones who can.

Your vote will have a forever effect on this city. If Santa Fe, N.M., could do it, we can too.

Nancy Chien-Eriksen

From: Nancy Rogers <[REDACTED]>
Sent: Sunday, May 12, 2024 5:14 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Environmental Review of Appellation Hotel and Downtown Overlay Proposal

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May 13, 2024

Thank you for the opportunity to comment regarding the proposed development for the Appellation Hotel and associated neighborhood overlay.

I understand that my comments should be restricted to the environmental review of impacts to Aesthetic Design and Cultural Resources in the historic district where the hotel and overlay are located.

I am opposed to the current design of the Appellation Hotel because it violates the City of Petaluma Historic District Guidelines. The height exceeds limit required in the guidelines and the design is not complementary to the surrounding buildings within in the District. The Appellation Hotel design, scale and scope are inappropriate for the location within the Petaluma Historic District and the vacant lot itself- objections are listed below:

Appellation Hotel

1. The architectural design does not meet standards required by the City's Historic District Guidelines. The height and scale of the current proposed hotel exceeds that of adjacent buildings, does not meet Historic District Guidelines and is too big for the small lot- ie: too many hotel rooms.
2. No attempt has been made to blend the new design with existing buildings in the area. Current design sticks out like a "sore thumb".
3. Inadequate parking for the number of rooms proposed.

The developers should be required to redesign the hotel to meet the restrictions in the current guidelines for both aesthetic and cultural resources reasons.

Downtown Housing and Economic Opportunity Overlay

The Overlay requirements were developed to maintain the character of surrounding neighborhood and should be complied with. I disagree with the premise that the Historic District is in need of economic development.

The Overlay includes existing buildings and businesses that will be impacted with any further development. I would like to know how the businesses feel about this proposal and if it would result in their closure. These are businesses that Petaluma citizens support everyday. Empty lots could be developed for housing, but the City needs to

follow its own height and design requirements for that area. I do not support changes to these requirements.

I think the City Council wants the development fees and is concerned about the State of California's demands that cities waive development restrictions to accommodate new housing. There has not been sufficient thought given to irreparable damage to the Historic District or discussion with the public regarding the hotel and development overlay. I believe additional housing can be accommodated within the existing guidelines and the increased resident population will support the local businesses in the area. I don't think you have to give up one thing to get another.

Please step back to consider what the area is losing by approving the development as currently proposed. Tourists and citizens alike love downtown Petaluma. It's a big reason why I moved here in 1985- the thriving and bustling historic downtown. I love walking the downtown and I support it's businesses there. If you begin to carve away the historic district with a hotel and neighboring development that does not comply with the City's own guidelines- you lose it forever. Tourists come here because Petaluma is one of the few communities to make the decision to preserve what it has. You only have to travel to downtown Santa Rosa to see what happens when you don't.

Respectfully,

Nancy Rogers

[REDACTED]

Petaluma, CA 94954

[REDACTED]

From: Bill Rinehart <[REDACTED]>
Sent: Monday, May 13, 2024 12:34 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Public Comment - EKN Hotel/Overlay EIR scoping

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Hi there,

Thanks for taking this project to EIR level review. Please consider the points below and also please send a reply to confirm receipt.

1. An updated inventory of historic resources needs to be conducted to evaluate the impacts on known and potential contributors to our Nationally registered Downtown Historic Commercial District, and the locally listed "A" Street district. This should begin with a "Reconnaissance" level survey of the properties within and surrounding the study area (at minimum, between 6th/Howard streets and 2nd/Water streets, and from "D" street to Washington and including parcels fronting Washington on the NW side). Intensive level survey analysis should then be conducted for all parcels exhibiting potential for local significance. Not only will this inform the EIR, but will also serve to objectify the process for future applications under the overlay development standards.
2. Current design guidelines for the downtown and "A" street districts are not adequate to inform or control design of buildings of this scale. They also lack any provisions for issues related to 100% lot coverage, such as utilities and waste management, and they are outdated in general. Updated design guidelines, prepared by professionals, are a necessity if we are to consider up-zoning to this extent.
3. There are no apparent ways to mitigate or control the potential aesthetic/historic resource impacts of projects which qualify for streamlined, ministerial processing, and which are not subject to discretionary review or subjective standards. Objective standards and regulations must be developed to avoid degrading the integrity and value of our historic resources and character. In addition to controlling form, massing, and placement of buildings, these standards must somehow also set standards for criteria normally considered subjective, such as materials, design, and detailing of facades, fenestration, entrances, etc. Or, these projects should be limited in height/mass. For example, No buildings exceed 45' without discretionary design review.
4. One of the "project alternatives" to be considered alongside the hotel should be the merger of the hotel parcels with the vacant bank parcel next door (24 Petaluma Blvd South), and consolidating the project withing 3 or 4 stories.

Best regards,
Bill Rinehart

From: Chantal Rogers <[REDACTED]>
Sent: Monday, May 13, 2024 5:03 PM
To: Olivia Ervin <oervin@cityofpetaluma.org>
Subject: EIR scoping

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Hi Olivia,

Just a quick email as I haven't had time to go through the over 100 page initial study to evaluate where the EIR might need to be broadened, and now I have literally ten minutes until the response window closes.

The first thing I would say is that it's illogical to me than any scope EIR would be considered simultaneously for the hotel and the Overlay. With the hotel being the only project being considered, my understanding from your response at the meeting was that it would be the only thing considered for the entirety of the EIR. So no evaluation of any additional impacts that may come from development facilitated by adoption of the Overlay. That just doesn't make sense to me.

The area that I have seen that needs to be considered is parking and traffic. The original hotel proposal had 58 onsite and 30 offsite parking spots and the current one has 54 onsite and 20 offsite. How did that change? I don't see anywhere that parking for the 4, 000 plus foot rooftop venue guests is addressed. The assumption is that most of the 2 restaurant guests would also be hotel guests seems arbitrary. The idea that hotel guesst might come in on Smart and not have cars is ridiculous, for many reasons. And the traffic report seems to not coincide with what Petalumans experience driving through the intersections noted. Traffic downtown is often seriously backed up and the statement that B street at the boulevard is never a problem is incorrect.

Thanks, and I'll see you at the next meeting.

-Chantal Rogers

From: Constance Bay <loudbarkers54@gmail.com>
Sent: Monday, May 13, 2024 8:13 PM
To: Greg Powell <GPOWELL@cityofpetaluma.org>
Subject: Re: Comment on nest EIR for overlay and hotel

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Sorry about that, here it is.

City of Petaluma Planning Department Staff, I am writing with suggestions for the next Environmental Impact report covering the EKN Appellation Hotel project and the proposed Downtown Housing and Economic Opportunity Overlay. There are multiple areas of concern. Parking: Where in the heck are all the cars going to park? 58 underground parking spaces requiring an elevator and valet service is not near enough for a hotel with 93 rooms, seating for 150, event space, roof top bar, etc. I'd like to see this issue addressed in detail. The parking garage located near by is already close to full capacity whenever I try to park there already. There are homes located in nearby neighborhoods with out driveways. Will residents need to park several blocks away from home in the future like those in cities such as San Francisco? Driving around looking for parking places will increase traffic? How will this impact pedestrian and bicycles? Lets look at this too. Traffic: There will be more traffic! Lets look at not only the distance between places, but also the length of time an increase in traffic will take for drivers to reach their destinations. How will this impact the environment? Infrastructure: Do we have the infrastructure to support all of this building? What are the other alternatives to promote housing and economic opportunities. Lets focus development near current or future transit facilities. What around utilizing areas closer to the smart train? Lets look at free shuttle service to transport people and decrease traffic. Could you include this in the next EIR? Design: What about following the guidelines already in place for new construction. Residential property owners in the historic district are required to follow certain guidelines when changing the exterior of their homes. New construction should be designed to coexist and harmonize with downtowns historic buildings. The hotel is a modern design which does nothing to promote or fit in with the existing historic character of our downtown. Please include the impact of Petaluma's historic status in the next EIR. I'll stop here as I know there were many other concerns and suggestions at the Public Meeting. Please let me know where I can access these online. I have not been able to find them yet. I'd also like to suggest that all Metropolitan Group employees identify themselves any and all

From: Dale O'connor <[REDACTED]>
Sent: Monday, May 13, 2024 4:53 PM
To: Olivia Ervin <oervin@cityofpetaluma.org>
Subject: Hotel and Overlay Proposal

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Dear Ms. Ervin,

Sonoma County Budget of 2 Billion dollars. Where does it go? Petaluma is one of the cities as it the second largest city in Sonoma County. It is the gateway to all of the adventures in the county. There are exceptional sites and experiences as well and Petaluma is one of them. Visitors come from all over the world to visit our exceptional location and historical well preserved downtown district. By changing the atmosphere of the downtown, with a high rise hotel, near over 100 year old buildings takes away of the romance of a period that was once vibrant with parades and celebrations. A condo or housing on and around Keller street would take away of a theater for some teenager to feel welcome. To a favorite neighborhood grocery store to a locally owned small business restaurant. These "improvements" would have a great impact on our community. Also, there are many historical homes in the area that were built around the time California became a state. Victorian, Queen Anne, Italianate and Pioneer homes. A condo would stick out like a sore thumb. The traffic alone would be horrific in the downtown area. Instead of adding more congestion, try to make it better.

What about the property near the SMART Station? That process fell through, restart the thing there too! Better parking for the tenants. The property at the old Casa Grande Motel? Why has it been vacant for so long? The property on the corner of D Street and Petaluma Blvd. South?

Historical cities of Columbia, Sonora, Auburn do not have companies coming in and trying to change the historical presence of these cities. Visitors from San Francisco, Oakland and San Jose need to have a day trip place to go and relax and envision what it was like so many years ago. If you take away from the Historical District, you will have visitors scratching their heads wondering why didn't they leave well enough alone.

Thank you,
Ms. Dale O'Connor
Former Employee of the Visitors Center
Member of the Petalumans of Yesteryear

[REDACTED]
[REDACTED]

From: David Keller <[REDACTED]>

Sent: Monday, May 13, 2024 7:40 AM

To: -- City Clerk <cityclerk@ci.petaluma.ca.us>; -- City Clerk <CityClerk@cityofpetaluma.org>

Subject: Scoping IS/MND Public Comments for proposed zoning overlay district, downtown Petaluma

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TO: MEMBERS, CITY COUNCIL, PETALUMA PLANNING COMMISSION (PC)
MEMBERS, HISTORIC AND CULTURAL PRESERVATION COMMITTEE (HCPC)
May 13, 2024
By email.

PUBLIC COMMENTS ON SCOPING IS/MND Downtown Housing and Economic Opportunity Overlay and EKN Appellation Hotel ("Projects").

These written comments are timely sent here, and incorporated by reference, to be included in the Public Record for the Projects.

I hereby incorporate by reference into the Public Record for the above Projects, my verbal comments delivered in person to the joint Planning Commission and HCPC "Study Session" meeting of June 13, 2023.

Further, I hereby incorporate by reference for the Public Record for the above Project, all the public comments received, in writing or in person, and the PC and HCPC members and staff comments and Agenda packets and reports, from both the June 13, 2023 and Aug. 8, 2023 "Study Sessions". Both of these meetings are available as recorded video at the City of Petaluma archives.

I also incorporate by reference or the Public Record for the SCOPING IS/MND for the above Projects, the Public Comments, City Council and staff comments, and all items from the staff report and attachments for the Petaluma City Council meeting, Nov. 6, 2023, "Agenda Item #9, Consideration of a Resolution to Direct Installation of Story Poles to Evaluate Potential Visual Effects of the Proposed Hotel Project, EKN Appellation Hotel, at 2 Petaluma Blvd South (APN 008063009; 008; & 011)" The meeting is available as recorded video at the City of Petaluma archives.

Thank you.
Sincerely,

David Keller
Petaluma River Council
[REDACTED]
Petaluma, CA 94952

From: Donald Bullick <[REDACTED]>
Sent: Monday, May 13, 2024 2:07 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Concerns about the EKN Appellation Hotel Project

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Petaluma Planners,

I object to the proposed EKN Appellation Hotel project for several reasons. First, it is out of character and scale with the Petaluma Historic Downtown District. Secondly, it does not contribute to a more walkable city.

A vertical edifice from the literal edge of the sidewalk towering four stories up without a setback (with an additional two setback levels), is an oppressive change to the open pedestrian walkway along B Street and Petaluma Blvd. In addition views of the surrounding hills will be blocked from the restaurants on the river side of B Street.

Finally, the charm and history of downtown Petaluma is not well-served by adding yet another hotel, especially one that is six stories tall. May I suggest that the primary planning goal for Petaluma be to strive toward a more walkable city. Such a goal is well understood to improve the health and happiness of any city's population.

Thank you,

Don Bullick

[REDACTED]
Petaluma, CA [REDACTED]

From: Hecules GrytpypeThynne <[REDACTED]>
Sent: Monday, May 13, 2024 6:40 AM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>
Subject: Overlay & EKN Initial Study Comment

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The initial study for the Overlay & EKN Hotel failed to address the cultural impact on the annual Butter & Egg Days parade. The hotel is in the path of the parade and hotel activity will interfere with it. Any EIR needs to include the impact of it on this cultural institution.

From: Isabelle M Beardsworth <[REDACTED]>

Sent: Monday, May 13, 2024 3:47 PM

To: Greg Powell <gpowell@cityofpetaluma.org>; Olivia Ervin <oervin@cityofpetaluma.org>

Subject: DHEO+Hotel NOP Comment

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NOP (Notice of Preparation- EIR (Environmental Impact Report)
EKN Appellation Hotel Project
Comments May 13 2024

The Scope and the Content of the proposed EIR is wholly deficient. I have included a summary of the deficiencies previously addressed in the analysis of the "Initial Study" in November, 2023. The majority of the public voiced their concerns regarding the "mitigation" and the "evaluation" information presented particularly with respect to Air Quality, Noise, Geology, Hydrology and Transportation. However, these concerns seem to have been disregarded yet again for other interests.

I will constrain myself to address the only permissible issues at this juncture, under protest, those only eligible to be considered: Aesthetic and Cultural Resources only. These are indeed significant environmental impacts.

Any and all construction within this "Overlay: Area A and "EKN" should be required to be constructed in accordance with the Petaluma Historic Commercial District Guidelines and including the Secretary of Interior's Standards. It is imperative that we obtain a Reconnaissance Level Survey which, as aptly noted in Diana Painter's Report, was not included.

HCRR Report concludes that the city needs to "conduct a comprehensive, city-wide survey of historic and cultural resources for the purpose of creating a historic resource inventory" for this A Street District. These should include the National and California Registry of Historic Places. The City goals provide that the area should "Inspire" not develop to denigrate an area. Tourism occurs in Petaluma in large part because of its history and buildings. This "streetscape" is its value.

This EKN project is clearly not in accordance with Chapter 3 in the General Plan, "Historic Preservation"; the preservation, protection, rehabilitation and restoration of historical and cultural resources". Any project that dominates the landscape in height, density and design clearly detracts from the historical buildings within the district. The Commercial District sits adjacent to the Historic "A" Street District including Heritage Homes which will be dwarfed by the monstrous size of the "Hotel". This district is essential to the

character of the historic downtown area and its unique identity. This 21st Century building will tower over the one and two story homes in the vicinity with decreased property values. The view of the historic Petaluma River will be completely obscured by this massive structure. The southerly direction of Petaluma Blvd South through the downtown will be accosted by this building and the entryway along Petaluma Boulevard South in a northerly direction will similarly be visually assaulted.

The goals of “complementary” and “compatible” will never be achieved in this proposal. This is a building that is appropriate for a modern town that does not have the history and significance of Petaluma. In fact, it could be placed in any new town and looks much the same as any number of buildings on the “M” Group website. This does not “fit” this unique town and its personal history of river, commerce, community and agriculture. It would be wholly detrimental to the culture and environment of Petaluma to allow such a visual atrocity in scope and design.

The commercial and economic vitality of the town is due to its unique character and traditions: its quaint shops, buildings, museum, historical docent tours. These would be overshadowed by a massive development. The “Viewshed Analysis” and street level amateur photographs do not do justice to the impact of the “hotel”. It is imperative to have an actual visual representation to “see” the impact of the size and scope of the proposed building in the vicinity. “Storey Poles” do, in fact, tell a story that the community can truly visualize the impact. The “Visual Simulations”, “Line of Sight” and “Shadow and Shade” drawings do not give an accurate and comprehensive representation. The City is spending \$100,000 of Tax payers money for a very limited EIR. Previously the community had been advised that all costs were to be at the developers’ expense. Are we continuing to see special interest groups placed above the interests and needs of the citizens.

We have not taken into consideration the cumulative impacts of this development beyond the “EKN” and the future “Overlay” development. This is a significant issue if we can anticipate future California state mandated housing development and county imposed “in-fill” over which the City has little or no control. In addition, the City has yet to experience the full effects of existing development on Petaluma Blvd South and North and River projects under construction. Lastly, the EIR does not appear to conform to the 2025 General Plan which has to take into consideration the total effect of all these decisions.

In short, wrong place, wrong time! There are alternatives. This project may be entirely suited to a different location and eastside of the river. The proximity of transit and access to downtown via the new Smart Train may be a highly viable alternative on a smaller scale that will “fit” the needs of

local residents and the desire to increase tourism and revenue for city coffers.

Isabelle Beardsworth

November, 2023

Public Comment to the CEQA Initial Study

Please be advised I wish to enter into the record I **strongly oppose** the “Downtown Housing and Economic Opportunity Overlay” and the “EKN Appellation Hotel/EKN Development/Weaver Hotel Etal”. The “plan” is solely designed **to bypass current building regulations** established in the current Petaluma General Plan based on building height, floor area ratio and increased lot coverage. Initial studies and community feedback clearly indicated this year that any significant “overlay” **should be incorporated** within the **2025 General Plan**. There is insufficient information for potential future commercial or residential development in these (3) subareas to adequately address **the Environmental Impact**

The Initial Study/Mitigated Negative Declaration (ISMND) is essentially written to **avoid an Environmental Impact Report (EIR)**. The nature of both the proposed “Overlay” and the “Hotel” is the most overwhelming reconstruction project in the history of downtown Petaluma, the towns history. In its proposed form, the “plan” would visually **destroy the old town center**, dwarf the Registered Historical Buildings and the “A” Street Historical District. In short, it would create a modern corridor on Petaluma Boulevard/D Street and convert Petaluma to **“Any town, U.S.A.”**

If an EIR is not required on this project, **no EIR** would be needed on any project in the entire town **now or in the future**. This “overlay” will have a significant effect on the environment particularly on **Aesthetics, Air Quality, Geology, Hydrology, Parking and Transportation**. These items cannot be “mitigated” until a full study is completed on all the elements to determine the exact scope of the issues. **The public deserves** a thorough review of a plan that would impact the quality of life for local residents and degrade the historic character of Petaluma.

“Planning” has approved a substantial number of projects in the last few years and a number of projects are pending. We have not yet had time to **assimilate** the **impact** of these **projects** such as the Burbank Housing and PEP Housing on Petaluma Blvd South, Mid Pen Affordable Housing and AG Spars on Petaluma Blvd North or **286 housing units** and Amys Kitchen **20,000 sq ft office** space on Kentucky Street. The proposed

Oyster Cove development of **132 units** on 100 East D Street would also directly impact the “Overlay”.

The most significant impact is **Aesthetics**. We cannot begin to assess this until we have installed **story poles** and request the City Council approve the installation at the corner of each block, as identified Sub Areas 1, 2 & 3, impacted by the future potential development. Once these have been constructed, we can **“see”** the impact from the Washington Overpass, McNear Peninsula and Rocky Memorial Dog Park. (page 10 4.1a)

The height will certainly degrade the **visual character** and **scenic quality** of the area. There is a large open area providing clear views of Walnut Park, the 4th Street Post Office, the Petaluma Museum, McNears, the Iron Fronts, St. John’s Episcopal and St. Vincents Catholic Churches. Petaluma Boulevard South and D Street are **main arteries to the downtown area** and 75 foot structure height will be an eyesore. No amount of “mitigation” or “proper design” is going to change the height for this city block, it is still 6+ story buildings. The “Hotel” Setbacks and recesses on the higher floors can only reduce the visual impact for pedestrians across the street from a building. This will not change the view traveling along the street. Effectively this hotel is **triple the height** of adjacent neighbor **ACE Hardware**. It will not change **the impact on one and two story residences** in the surrounding area on 5th, 6th, 7th A, B, C & D Streets and commercial buildings. It will dominate the skyline, block out the light and create tremendous shadows. It will not change the fact that as you walk down the hill from **Helen Putnam Park** down B Street you will not see the river nor the hills. The proposed hotel has a particularly prominent position at the corner of the Subarea A and only the story poles will show the impact. The **“Hotel View Shed Study”** is most **misleading** in its depiction of the site and its surroundings. The vantage points are not appropriate, indistinct and the building is posed with large adjacent trees which is factually incorrect. **Light and glare** will certainly exist with windows towering above all other structures in the vicinity.

These types of **structures cannot “harmoniously exist”** at this location. The City and consultant planners have not collaborated with current landlords to determine their needs and interests. The majority of owners within the “Overlay” do not have an interest in rezoning. Unless the City plans to eliminate property rights and take over these parcels there is no reason to implement radical and unnecessary zoning changes. The planning department has a history of **rejecting plans from local owners**, requiring extensive modifications, parking restrictions and significant costs to comply with codes particularly in the Historical District. These include, for example El Roys and 4th and Sea.

I have contacted the Downtown Merchant Association, The Visitors Bureau, the City of Petaluma and the Planning Department in an attempted to obtain relevant data pertinent to establishing the **building needs in Petaluma**. None of these parties have been able to provide some **basic information** on current hotel occupancy rates, amount of TOT collected, unoccupancy rates for office, retail and residential rental units, parking needs evaluation for all occupancies, data analysis of ridership for SMART train, Sonoma and Petaluma Transit Systems.

Whilst **Section 4.1 (c)** acknowledges it “**could degrade the visual character**” and scenic quality “if not properly designed” I assert it cannot be designed at this height (floor ratio and set back). It **will** suffer degradation. The report simply states that any future specific plans in this overlay will be subject to review. I contend the approval of this Overlay without an EIR will set the **precedent for unlimited future projects** without due consideration of all these issues

With respect to **4.3 Air Quality**, it is impossible to determine the environmental impact without formulating an estimate of the number, type, size and occupancy of future buildings. The Initial Study for the hotel reflects the environmental effects can be mitigated. During the extensive almost 2 year Hotel construction phase the report indicates a “dust management for sensitive communities.” There is a **significant health risk to seniors** and health impaired individuals during this phase and beyond. This is an extended residential area of elderly residents subject to physical limitations including respiratory illnesses. No account has been made for the social/geographic specific area.

Greenhouse Gas Emissions are reasonably foreseeable during construction and implementation of buildings within the overlay and including operation of vehicles. The “**Initial Study**” indicates **assuming “existing transit”** aka SMART, Sonoma Transit, Petaluma Transit, Bicycle and Pedestrian Pathways will “**mitigate**” emissions. This is **Utopia!** Individuals may (or may not) elect to take public transportation. Businesses will require delivery of products in this “zone” and it is not available by public transportation. Future Housing units will require individual deliveries in the 21st century for online purchases (aka Amazon) and food service delivery. A hotel will require a more significant amount of supplies to provide full services to cater to an elite wealthy clientele.

The purpose of the Report is prepared to provide specific, technical and scientifically exacting analysis, however the future of building in the “Overlay” consistently and redundantly utilizes the phrase subject to “**independent discretionary review**”. This is a term overutilized in the analysis which means “whatever, whenever, whoever” with no precise definition, meaning and subject to interpretation. This is a very dangerous

precedent and subject to manipulation. There is no Air Quality Emission (AQE-page 37) because there is no “physical development” and does not “generate emission” meaning: no analysis required!

4.3 (a) only addresses “economic generating” meaning revenue derived it does **not otherwise have to pass** the “smell test”. Similarly, “**employee generating**” means if you hire new employees no need to have any benchmarks **for Air Quality**. The expected “fees”, property taxes, sales tax and TOT are pie in the sky based on expected revenue with **no basis in reality**. A \$300-400 per night hotel stay (basis of hotel revenue with 65% occupancy) and restaurant/bar sales competing with a plethora of available choices by locally owned companies. These prices are unaffordable for local residents and only serve wealthy tourists. The “low income” hotel employee wages will merely **generate new “low income”** housing needs the city cannot afford and add more to proposed needed units in the 2025 General Plan Housing Element.

4.3.(b) Is the most significant **AQE** which **cannot be “mitigated”** by “management practices”. See comments on Greenhouse Emissions which equally apply to neighboring area. A 2 year project involving removal of **two stories of dirt below ground** is significant including dust particles, emission of diesel fumes, and odors. This will severely impact vehicular, cyclist and pedestrian traffic and impacting local businesses and residences. “Mitigation” measures are standard operating procedures for contractors that common sense would dictate and will not reduce the substantial exposure. Further, it provides no third party independent evaluation of any measures taken during this phase.

4.4 Biological Resources provides a pass to the **Trees in the Public Right of Way**. It cannot address potential development in the “Overlay” since there are no current plans! However, the “hotel” proposes to eliminate existing street trees onsite and merely promises to replace with “container” trees which is not at all the same thing. There is an inherent conflict with Section “**Special Status Species/Wildlife**” since Shollenberger Park provides a unique **bird habitat** in the wetlands. Birds migrate from the sanctuary to the large trees in **downtown Petaluma** and I have witnessed the Peregrine Falcon raise its young in the 150 ft Oak trees on my property. Hawks and Eagles fly in the area. In the Golden Eagle Shopping Center trees, adjacent to the former brew pub, the **trees house nesting** families of Snowy Egrets. A significant high rise development will conflict with this wildlife activity. **Bird Collisions (d)** are a significant exposure with structures of 6 story height and essentially cannot be mitigated given the migration corridor next to the river and the wetlands.

The City of Petaluma has instituted **energy efficient standards** and the (only) specific project on the “overlay” site is the “hotel”. The excavation of

two stories below grade constitutes a “wasteful, inefficient and unnecessary consumption of energy” **4.6 (a)**. It relies on gasoline and diesel powered heavy equipment to moves tons of dirt and debris off site.

Any subterranean project has a significant exposure to loss at the site itself and to the surrounding suburban area. The initial report for the “hotel” identifies **4.7** ground shaking, liquefaction, erosion and unstable geologic unit. This exposure requires **significantly more analysis** and is of catastrophic potential. Similarly, in a historically sensitive area with Registered Historic Buildings and the “A” Street Historic District in close proximity to the site, any settlement and lateral movement of the ground as a result of excavation would be devastating to these structures.

The City of Petaluma has expended a great deal of time and effort on “**Climate Resilience**” efforts. However, it appears there has been no consideration given to the fact that the “Overlay” and the “hotel” are only 2 blocks from the Petaluma River. Despite the talk of “**Sea Rise**” the river is apparently not within the scope of any change in sea levels. The study only relies on the FEMA maps and the flood prevention work completed by the Army Corps of Engineers - which has not proved effective in the last decade.

The planning department does not seem to have taken into consideration the fact that additional development will necessarily consume a significant amount of **additional water and sewage disposal requirements**. The City has recently adopted a 5% rate increase for the next 5 years (2% rate increase and 3% inflation per annum). This is in addition to a provision in the event the city has to purchase additional water in the event of a drought. These additional costs will be passed on to the consumer. The City has also expended a significant amount of tax payor revenue for improvement of the sewer system. The study shows apparently the city has “an adequate water supply” thus any new developments have been paid for by residents. A hotel occupancy is one of the most inefficient type of operations with respect to water usage i.e. transient occupancy, daily laundering of sheets/towels etc. “Planning” approved the construction of two new large hotels, now completed, and a third 18 room hotel addition is under construction in Petaluma.

The Study asserts there is **no significant impact** of this “in-fill” in **land use** for this “Overlay” or the “hotel”. There is significant pedestrian traffic in this Area A “Overlay” encompassing the Theatre District, Walnut Park (home to Farmers Market and Events), Post Office, Museum and retail establishments. Any development in this area will be significantly impacted. The changes proposed: to eliminate the pedestrian cross walk between Petaluma Blvd South and 4th Street is very significant. It provides an essential link, given the speed and number of vehicular traffic, for

pedestrians to cross the road with any safety. Further, the installation of a new driveway to enter the subterranean parking (adjacent to ACE Hardware) will be a huge hazard to pedestrians. An estimated 80% of ACE customers are pedestrians or cyclists who frequent this mainstay of the community.

The **Noise Impact Analysis 4.13** is one of the most deficient elements of the study and requires much more analysis. Any development in this downtown area will (not “could” page 83) “**result in increases** in the ambient noise”. Any construction in this focused area will significantly affect the business and residential areas. Any construction should be completed in the area at the same time so residents, businesses and visitors do not have to live through a decade of construction.

The “hotel” proposal is extremely problematical with subterranean construction. There are **inherent issues** with seismic waves and **ground vibrations** not to mention the resultant structural and cosmetic damage to nearby structures and historic buildings during construction and settlement thereafter. There is no way to mitigate this effect except to relinquish the plan of construction underground. The adjacent “Vacant and underutilized lots” could be used for parking. There is no provision in the “analysis” to account for any noise as a result of the hydraulic lifts proposed to be utilized in the subterranean parking. This is not credible.

The operation of the “hotel” analysis (page 85) alleges the sound of the rooftop **mechanical equipment and amplified music** on the 6th floor open top bar are “within the noise limits established by the city” The Study assumes the same level of **noise from traffic** currently. This is a false assumption because the more development in the vicinity, on this block and other developments in the downtown area completed and proposed, will only serve to **exponentially increase**. Traffic will increase of necessity with the hotel for vehicle drop off for valet parking and increased driving as the vehicles tour the block and into the below ground parking. Vehicles essentially will be parked around the block as they wait for the mechanized device to transport the vehicles underground one at a time snarling traffic to a standstill. Further, the addition of a bus stop will create the noise and pollution of idling vehicles on the street. Lastly, but by no means least, is the effect the wind will create amplifying noise at 75 feet in the open air bar. If renovations to one story single family dwellings are required to **install wind sheer walls** according to code the city evidently recognizes this exposure. The sound will be amplified when the wind begins at 4pm; this is not southern California. A bar that plans to close at 12am is not a good neighbor.

There are some grave concerns that have not been adequately addressed in the Study (4.15 Public Services) relative to **Emergency Response**. The

proposed “overlay” has a nearby Fire Station on D Street, however, should a catastrophic event take place in the area will this unit be able to respond? The proposed zoning includes a 75 foot height and a dense in-fill. Does the **Fire Department** have the necessary equipment and work force to respond to this emergency. In the event additional units are required, there is a great deal of concern with the operation of the train, the D Street drawbridge and significant vehicular traffic to dramatically impede response time. **Police logs** reflect ongoing crime issues in the downtown area which will only increase with additional development. The main issues are drugs, alcohol and mental health impaired individuals causing a disturbance. There has been some discussion the Fire and Police departments, including the City offices, will be relocated to the Fairgrounds in the future which would make any further development in this area highly ill advised by risk management.

The most compelling argument for this “Overlay” is the inclusion of “**Housing**” which is not at all addressed in the “**plan**”: **there is none**. It would seem if a specific type of housing and density is desired it should be specifically outlined in any proposal. The “overlay” is a **blanket provision** to eliminate current building limits and establish the new height, lot coverage and floor area. This is a dangerous precedent. It allows, with few limitations, a broad scope of future subjective interpretations. It is a planners dream to rubber stamp any proposal submitted.

4.14 Population and Housing does not address the fact that the population of Petaluma has not increased but actually **decreased** by half a percent in the last two years. This reflects the data for Sonoma County and the State of California. There are many reasons for this and I am sure the cost of housing is one but some of the top reasons are job opportunities, lifestyle, freedoms of choice and lower taxes. A corporate hotel will engage its own contractors and its own management teams. The additional employees will consist of **low income earners** and the City will then need to provide more “**Affordable Housing**”. Petaluma needs companies that will provide higher paying jobs for skilled workers. A hotel will only serve wealthy visitors and not Petalumans who cannot afford to patronize another restaurant and bar. The hotel, restaurant and bar will directly compete with the local companies who have struggled to survive during COVID. Many businesses have not survived in the downtown area as evidenced by the significant vacancies. The **2025 General Plan Housing Element** provides for the increase in housing units required by Sonoma County and the State of California not approved by voters in the historical no growth/slow growth. Approval of a hotel in a downtown location will primarily serve to **escalate the cost of real estate** and decrease the affordability of homes and rental properties.

The other significant issue is the wholly deficient **4.17 Transportation** category “**Less than significant**”. This is the most compelling reason against the “Overlay” and the “Hotel”. The City is envisioning Utopia if it assumes that all citizens will use **public transportation**: SMART, Sonoma County and Petaluma Bus Transit, bicycle or walk. This is not reality. It is impossible to find objective and reliable data for the current ridership in the transit system relative to the population. Personal vehicles are the 21st Century choice of independence, flexibility and convenience. We should not make these **broad assumptions** of decreasing vehicle use in data analysis to substantiate a position. It is a Wishlist for planners to obtain approvals. All new construction incorporates a parking requirement. If the City truly thinks, or mandates, personal vehicles will not be utilized in the future there needs to be an adjustment in the legal and planning departments. Certainly, a hotel guest paying \$300-400 per night **will not** be taking public transportation anywhere with elite valet parking; perhaps a limousine service

The current **4.17 traffic analysis** is wholly deficient. I would like to obtain the data utilized in the “Study Intersections”. As a downtown resident, I travel everyday on these routes and these do not represent my experience “existing”. **What are the days, hours, time periods used in the calculations?** What are the basis and **assumptions** for “future” and “future + project”. Does this contemplate the Completed, In Progress and Planned projects in the Planning Department website? The left hand turn from Washington to Petaluma Blvd N is substantially “over utilized” currently leading to long delays and inability to proceed east on Washington.

The **proposed new bus stop** on Petaluma Blvd North will **impede vehicular traffic** which will affect the “Overlay” and the “hotel” The valet plan will also create backups regardless of the number of cars and employees: it is a function of the “service”. The new “**Bicycle and Pedestrian Plan**” attempts to address reduction in vehicle lanes and increased/protected new bicycle lanes. This will serve to limit vehicle movement thereby causing traffic back up, delays and idling vehicles. The plan to reduce lanes i.e. traffic calming has already shown to cause additional traffic backups. The plan to close streets to vehicular traffic in the future for pedestrian traffic only will merely serve to move traffic from one street to another street as occurred during COVID.

The City has not yet completed its “**Downtown Parking Plan**” to address the current needs. The issue relative to the proposed “Hotel” and the “Overlay” potential development merely adds to the existing problem. The ill advised **underground** parking would only provide **58** spaces, an additional **20** spaces would be specifically allocated from the **C street**

public parking facility. Essentially, this is privatizing a public parking space and increases the need for downtown parking. However, this is a 93 room hotel which has a full staff in addition so the parking is totally **inadequate**. Many planning submissions have been rejected primarily on the basis of lack of parking. There has been no comprehensive parking study completed for downtown to my knowledge. It is difficult to park downtown as a resident, particularly with a **2 hour** parking limit and it takes an act of congress to obtain a permit. **Special events** draw many visitors to the ambience of the town which only increases the need for parking.

From: Jane Hamilton [REDACTED] >
Sent: Monday, May 13, 2024 4:55 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Comments for Scope of EKN and Overlay zones EIR

You don't often get email from [REDACTED]. [Learn why this is important](#)

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Jane Hamilton
[REDACTED]
[REDACTED]

Jane Hamilton

[REDACTED] Petaluma, CA [REDACTED]
[REDACTED]

I submit the following comments regarding the April 2024 NOP-Initial Study regarding the EKN Appellation Hotel and Downtown Housing and Economic Opportunity Overlay zones.

Ordinarily, a zoning change to our historic downtown would be worked through as part of our general plan update, allowing much open discussion, professional analysis, and public input into the process and a full EIR. With the zoning overlay coming as part of a development proposal that requires this change, the public process has been shortchanged and truncated. We are being offered a readymade solution to a problem that has yet to be adequately defined other than the EKN hotel developer wants to build to 6 stories and has put an offer on the table. There has been very little definition given to what our current conditions consist of in terms of economic opportunities and housing downtown nor has there been any definition given to what it is specifically that we hope to gain by making this change. The proposed areas of exploration in the EIR fall woefully short of what the public and the decision makers deserve to know and expect from both the Hotel development and the overlay zones. Below is a shortlist of items that must be analyzed in the EIR.

1. Cumulative environmental impacts must be evaluated in terms of all recent project approvals within range, projects now underway and existing conditions. Cumulative environmental impact analysis must be part of the EIR for both the Hotel and the Overlay zones.
2. The EIR needs to Identify exactly what the Housing and Economic Opportunity Overlay zones intend to achieve. How much more housing would we be able to achieve with a 6 story height rather than our current height limit. Given that Petaluma's identity and draw is that of an Historic Town, how will changing the zoning help us to maintain that identity? Can the same goals be achieved within the current zoning? Given that other Historic towns in Sonoma County have addressed the same needs for their downtowns successfully without raising their height limits, the EIR must provide evidence that 6 stories are needed in Petaluma. We do not have clearly data driven goals that justify a building height

change, but we do have a hotel proposal that wants it. Why not just change the zoning, height limit and FAR for the hotel? The proposal to create overlay zones belongs as part of the public discussions for the land use portion of our new general plan. Slipping it in here before the GP has been processed circumvents the public participation that would and should be part of such a proposed change.

3. The obvious questions of parking and traffic circulation in the downtown area as usage is intensified with overlay zoning needs to be addressed in the EIR. We need current traffic studies that project the potential cumulative effect of the overlay zoning on traffic and parking to be addressed in the EIR. Downtown is already congested with traffic, too few bike lanes and scant parking. As developments already in the pipeline come to fruition, these conditions will intensify. To change the zoning to invite more development without studying the effects on these current conditions and projected conditions at buildout is unacceptable. The traffic impact study previously done for the hotel is inadequate. Aside from the obvious problems that will occur during construction phase, there will be ongoing congestion on B street and PBN during operations for deliveries, hotel guest parking, restaurant customers. The parking assumptions made in the report are not realistic. In the EIR the traffic and parking data needs to be updated and have current numbers that reflect what we have now and cumulative impact numbers for projects like Oyster Cover which have already been approved.
4. Will the Keller Street parking garage be expected to serve the new development of apartments and commercial buildings in the overlay zones? The EIR needs to address how this will impact existing businesses who are part of that parking district.
5. The cumulative effect that the zoning overlay will have on vistas, mass and bulk throughout downtown needs to be explored, visually shown and thoroughly vetted for the public to see. The cumulative impact that 6 story buildings will have on the context, integrity and setting of our Historic Downtown must be explored and addressed. The cumulative impacts of additional height and bulk allowances on all overlay parcels must be addressed now, not on a project-by-project basis. Visual simulations need to be provided for each view corridor to and from each overlay zone as well as the hotel. The EIR for the overlay zones needs to be evaluated for how it will impact the historic District in terms of creating walled off areas and building canyons, and disrupting the texture of the built environment surrounding the Historic District
6. The EKN Hotel, as proposed, is out of context and disturbs the integrity, context and setting of our Historic District. The hotel is oversized and architecturally inappropriate for its proposed location. It is out of scale with its neighbors in its sheer size. Historic District Design Guidelines state that Infill buildings in the Historic District should “harmoniously coexist with the historic character.” The EIR needs to show if and how this incompatibility with surrounding massing, scale and architectural features of the Historic District will be mitigated.

7. Alternatives sites need to be identified and analyzed. The hotel could be built at 4 stories by leasing the land now being occupied by Bank of the West or placed in a different location at its present proposed height and mass. The EIR needs to explore project alternatives.
8. The EIR needs to identify what can be expected with imminent sea level change in relation to the underground parking garage. It should also identify what the alternative will be, should sea levels rise more quickly than predicted as is now happening. Will sea level rise surpass the expected life of the hotel?
9. The EIR needs to define a detailed plan to accommodate CAL-OSHA's new rules on the treatment of lead contamination which will go into effect on January 1, 2025. Given that the parking garage will be disturbing the soil of what was once a gas station, construction workers and the public need to know how they will be protected from lead contamination.
10. The question of changing the zoning and height limit downtown is a worthy exploration for our new General Plan where it would undergo a public and thorough analytical process. Hopefully the General Plan will develop a vision for our downtown with the public to include what we need and how we get that without eroding what we have. It would also have clear goals defining how we as a community want to build on the identity of our core business area. To try to change the zoning at the request of the hotel developer to suit EKN's vision for their preferred version of their enterprise should require a fully scoped EIR, at the very least. The EIR should address why it is appropriate to skip ahead of the 2025 General Plan to accommodate a development proposal and effectively circumventing what should be a creative and open public process.

From: Jane Hamilton <[REDACTED]>
Sent: Monday, May 13, 2024 5:00 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Comments for EKN Hotel and Overlay DEIR

You don't often get email from [REDACTED]. [Learn why this is important](#)

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Enter into public record please

Jane Hamilton

[REDACTED]



The following 27 compelling letters to the Petaluma City Council and Planning Commission have been excerpted from 179 comments (totaling 382 pages) and emailed in advance of the November 14, 2023 Planning Commission / Historic and Cultural Preservation Committee Hearing regarding the CEQA study and the Downtown Housing and Economic Opportunity Overlay.

To view all 382 pages of comments, use this link:

<https://cityofpetaluma.primegov.com/Portal/viewer?id=0&type=7&uid=4acbc1a0-08ee-4675-b64d-1988fecf3343>

From: isabelle beardsworth <[REDACTED]>
Sent: Wednesday, October 11, 2023 7:18 PM
To: Greg Powell <GPOWELL@cityofpetaluma.org>
Subject: Hotel and Overlay City statistical information

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---
I am hoping the City of Petaluma can provide additional information to some Petaluma specific statistical information. I have contacted the Chamber of Commerce, Visitors Bureau and general information at the City website and by telephone to no avail. I think it is within the purview of the planning department but please correct and redirect me to the appropriate department if this is not the case.

In evaluating the proposed "Overlay" and development there has been some considerable issues relative to the basis for the proposals. During the Council meetings, planning and historical review meetings some of the same issues have been raised and not resolved.

Does the city have the following information for stakeholders to evaluate the proposals:

- Current occupancy rates for the (9) hotels in Petaluma
- Number of rooms available
- Number of rental units available for short term rentals i.e. AirBnb, Vacasa, VRBO etc
- Amount of TOT collected annually from all these for the city
- Current occupancy rates for downtown:
 - office
 - retail
 - residential rental units
- Downtown parking needs study including :
 - occupancy of (2) parking garages
 - 2 hour street parking limitations
 - private parking needs for commercial & retail business

There has been an outline of the inventory of "blight" and "underutilized" parcels in the downtown area but has there been a similar study, in conjunction with new development in other areas of the City, for these areas and prospective hotel and residential development? If so, where.

I look forward to receiving your advices,

Isabelle Beardsworth

From: Anthony Gilbert <[REDACTED]>
Sent: Tuesday, October 24, 2023 4:58 PM
To: Uriel Orozco <uorozco@cityofpetaluma.org>
Subject: Appellation Hotel

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NEWPORT BEACH COMES TO PETLUMA WITH “APPELATION PETALUMA” HOTEL

EKN DEVELOPMENT GROUP is prototypical Orange County, in fact Newport Beach. That’s where they’re from and that’s what they want to bring to us. Look at their other projects – boxy high rises along with a sprawling casino resort complex in Nevada.

UGLY AND OUT OF SYNC WITH ANY ASPECT OF OUR CITY

EKN thrives on ugly. Look at their website. Like their other projects, their proposed hotel is modern-ugly. If Petaluma approves this design, we will be burdened with shame and embarrassment for its lifetime, many horrendous decades (think Santa Rosa mall). Thank goodness none of the surrounding area bears any resemblance to the monstrous planned hotel, not traditional Petaluma and not even the modern Petaluma Theatre District buildings. Could they have designed anything more out of keeping with our Historic District and our traditions?

UNNECESSARY AND DAMAGING TO OUR EXISTING HOTELS

Their studies may say Petaluma needs another large hotel. Based on what? Are there figures on current vacancy rates? Has anyone considered how this project will affect our existing hotels, the ones that conform to the rules and provide very nicely for guests in our city. Do we really want to harm them?

THE PLANNERS HAVE DONE AN UNSOPHISTICATED ANALYSIS OF THE ECONOMICS

The Economic Impact Study purports to analyze the economic impact on Petaluma, but what it really does is just accept at face value what the developer claims regarding jobs, revenues generated, and tax results. How have the planners tested those claims? And have they considered the possibility that those revenues will not be achieved or, even if achieved, that they could have an adverse effect on the revenues of other Petaluma businesses. Same for tax revenues – as if EKN was to be singularly responsible for ever increasing revenue without regard to what else is going on in the hotel world of Petaluma. And here’s an example of a revealing failure by the planners: the analysis says the architectural and legal services will generate nearly \$5 million for lawyers and architects, but who will those people be? Do you really think the Newport Beach guys are turning exclusively to Petaluma suppliers of these services, or even to *any* Petaluma suppliers? Yet the “analysis” assumes *all* Petaluma suppliers. As they say in the software world about this kind of data analysis: “garbage in, garbage out.”

EKN ISN’T THE ONLY GAME IN TOWN

Let’s assume that EKN can generate some of the jobs, revenue, and tax payments they claim. But what’s the cost to us? The cost is a revolutionary change not just in the hotel site alone, but to big pieces of the rest of the Historic District. A correct economic analysis would consider the financial difference between the EKN proposal with all its downside in destroying traditional Petaluma values and another potential use. Even if an alternative use for the hotel site might produce fewer jobs, revenue, and tax, if it didn’t involve the destructive downside of bringing Orange County values to Petaluma, wouldn’t Petaluma be better off?

MITIGATION

The planners have found lots of issues, but they seem to be wearing very rosy glasses. They’re just wishing those the issues away with “mitigation.” But overall, those “mitigations” won’t begin to address the outrageous deviations from the current rules and regulations that all the rest of us must comply with.

PLEASE DO NOT APPROVE THIS FUNDAMENTAL ATTACK ON OUR TOWN

Respectfully submitted
Tony & Laurel Gilbert, Petaluma

From: Lion Goodman <[REDACTED]>

Sent: Tuesday, October 24, 2023 11:12 PM

To: Uriel Orozco <uorozco@cityofpetaluma.org>; [REDACTED]

[REDACTED]
[REDACTED]
rogermcerlane@mac.com <rogermcerlane@mac.com>; Janice Cader-Thompson <jcaderthompson@cityofpetaluma.org>; --
City Council <citycouncil@cityofpetaluma.org>; Andrew Trippel <atrippel@cityofpetaluma.org>; editor@arguscourier.com
<editor@arguscourier.com>; don.frances@arguscourier.com <don.frances@arguscourier.com>

Subject: Public comment on Economic Opportunity Overlay and EKN Appellation Hotel Draft Study

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TO: Petaluma City Council Members: citycouncil@cityofpetaluma.org

Planning Commission:

[REDACTED]
[REDACTED]
jcaderthompson@cityofpetaluma.org, Planning Director Andrew Trippel: atrippel@cityofpetaluma.org

Argus Courier: editor@arguscourier.com

don.frances@arguscourier.com

Regarding "Downtown Housing and Economic Opportunity Overlay and EKN Appellation Hotel Draft Initial Study / Mitigated Negative Declaration.

I am a resident of Petaluma, My wife has lived here for 25 years. I have lived here for 12 years.

These are my comments on your Economic Opportunity Overlay and Hotel Draft Study, based on statements made within the document:

Page 8:

"The Petaluma General Plan 2025 was adopted... in 2008 and serves the purpose of reflecting a commitment on the part of the City Council... 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 the community..."

COMMENT: The proposed Economic Opportunity Overlay and proposed Hotel does NOT enhance the quality of life for ALL residents and visitors. It does NOT reflect the aspirations of the community. If you read the comments on NextDoor about this proposal, they are 95% NEGATIVE toward this proposal.

Page 8:

Goals...

1. Maintain a close-knit neighborly and family friendly city.
2. Preserve and enhance Petaluma's historic character...
7. Enhance downtown by preserving its historic character, increasing accessibility and residential opportunities, and ensuring a broad range of businesses and activities
8. Foster and promote economic diversity and opportunities.
- 9.... while ensuring that new development is in keeping with Petaluma's character.
10. Continue efforts to achieve a jobs/housing balance, emphasizing opportunities for residents to work locally.
14. Encourage cultural, ethnic and social diversity.

COMMENT: The current proposal for a 6-story hotel does NOT maintain a family friendly and neighborly city. It does NOT preserve NOR enhance Petaluma's historical character. It does NOT enhance downtown by increasing accessibility and residential opportunities. It does NOT foster NOR promote economic diversity and opportunities. (More on this below.). It does NOT ensure that new development is in keeping with Petaluma's character. It does NOT achieve anything like a jobs/housing balance, NOR does it emphasize opportunities for residents to work locally. People who would work at a hotel cannot AFFORD to live in Petaluma at the pay rate of those jobs. It certainly does NOT encourage cultural, ethnic or social diversity. If you want to accomplish these goals, approve of more non-profit housing developers who will build more low-income housing. NOT a fancy hotel for wealthy visitors.

Page 11:

Enhance Petaluma's historic downtown by preserving its historic character...

-

Preserve Downtown's historic buildings and features while allowing for infill development that HARMONIOUSLY COEXIST with the historic character ...

-

Address traffic congestion and parking issues....

COMMENT: This proposal does NOT preserve Petaluma's historic character, nor will a 6-story hotel "harmoniously coexist" with the historic character. The hotel will NOT address traffic congestion and parking issues, in fact it will exacerbate the current traffic congestion and parking issues we are now dealing with.

Page 16:

... Establish a conditional use permit... to allow for an increase to the building height limit of 45 feet to a maximum of 75 feet

... Increase lot coverage limit from 80% to 100%

... Increase the FAR limit from 2.5 to 6

... Eliminate the setback standards

... 93 room 6 story hotel over a below grade, 58-space parking garage.

COMMENT: Why would you even CONSIDER increasing the building height limit by 40%, increasing FAR limits by more than double, and eliminate setback standards? It will completely change the character of downtown.

Your Overlay Plan will spread this negative impact out around town to build even MORE 6 story buildings. This is COMPLETELY out of character for downtown Petaluma. In addition, you have 93 hotel rooms, which when fully utilized will house more than 140 people. You're asking for 58 parking spaces? Where will everyone else park? Including the hotel staff? That will be another 40 to 50 cars, because hotel staff won't be able to afford to live downtown. They will have to drive in to work from elsewhere - from further East or North. Causing MORE traffic on the freeways, more pollution, and jamming up downtown streets.

Page 29:

Though the Overlay component of the project proposes to increase lot coverage, floor area ratio, and building height, thereby increasing the intensity of development permitted, such intensity of development is supported and encouraged but the ongoing General Plan update, which seeks among other objectives to promote affordable housing and a diversity of housing options,

COMMENT: You say that the General Plan seeks to promote affordable housing and a diversity of housing options. However, the apartment buildings you have already encouraged and approved, and the 8 or 9 hotels you have ALREADY approved and allowed to be built, are NOT affordable housing. This proposal is in direct contradiction to the General Plan.

Here are the facts, as posted on NextDoor by Kevin McDonnell who attended an educational seminar on housing in the North Bay, illustrating that the people moving OUT of Sonoma are mostly earning less than \$50,000 per year, and people moving INTO Sonoma are mostly making \$100,000+ per year. Consequently, the county is getting too expensive for working class and service income people :

The North Bay lost nearly 9,000 people in 2022 due to high domestic out-migration, low foreign immigration and near zero net births.

North Bay components of population change, 2000 - 2022

Year	Net Births/Deaths	Net Foreign Migration	Net Domestic Migration
2000	1,489	3,882	3,044
2001	1,390	3,312	2,088
2002	1,344	2,148	1,821
2003	1,344	1,848	1,344
2004	1,344	1,344	1,344
2005	1,344	1,344	1,344
2006	1,344	1,344	1,344
2007	1,344	1,344	1,344
2008	1,344	1,344	1,344
2009	1,344	1,344	1,344
2010	1,344	1,344	1,344
2011	1,344	1,344	1,344
2012	1,344	1,344	1,344
2013	1,344	1,344	1,344
2014	1,344	1,344	1,344
2015	1,344	1,344	1,344
2016	1,344	1,344	1,344
2017	1,344	1,344	1,344
2018	1,344	1,344	1,344
2019	1,344	1,344	1,344
2020	1,344	1,344	1,344
2021	1,344	1,344	1,344
2022	1,344	1,344	1,344

Source: CA Department of Finance • Analysis: Bay Area Council Economic Institute

Kevin McDonnell
Oak Hill • 17 hr ago • 7

Who is leaving Sonoma County? Two great slides from a seminar I attended. The takeaway is that an net average 9000 people leave the County each year, slide 1. This includes births, deaths, move in and move out folks. Of those 9000 people moving out, 75% made less than \$50k/yr (Slide #2) and all of those moving out made less than \$100k/yr. People making more than \$100k are still increasing in numbers. This County is getting too expensive for working class and service income people. What are the consequences?

Betty Harrison • Walnut Park/Aqus/Wickersham • 16h
Shocked though, not surprised. Is this the kind

Lower income residents (making \$100k or less) comprised 100% of the total net out-migration from the North Bay in 2021

Net migration to/from the North Bay in 2021 (people moving in minus people moving out)

Income Bracket	Net Migration
$\le \\$50k$	-6,699
$\\$51k - \\$100k$	-1,406
$\\$101k - \\$150k$	286
$\\$151k - \\$250k$	2,072
$\\$251k - \\$350k$	978
$\\$351k+$	1,144

Source: US Census Bureau, IPUMS • Analysis: Bay Area Council Economic Institute

Kevin McDonnell
Oak Hill • 17 hr ago • 7

Who is leaving Sonoma County? Two great slides from a seminar I attended. The takeaway is that an net average 9000 people leave the County each year, slide 1. This includes births, deaths, move in and move out folks. Of those 9000 people moving out, 75% made less than \$50k/yr (Slide #2) and all of those moving out made less than \$100k/yr. People making more than \$100k are still increasing in numbers. This County is getting too expensive for working class and service income people. What are the consequences?

Betty Harrison • Walnut Park/Aqus/Wickersham • 16h
Shocked though, not surprised. Is this the kind

COMMENT; Your Staff has stated that identified impacts can be reduced to "less than significant" with mitigation, however I did not see anywhere in the proposal the exact mitigation efforts that will be taken, or how a 6-story hotel will mitigate visual blockage of downtown, or how a hotel will mitigate the lack of affordable housing in Petaluma. I wonder whether your staff is actually aware of the impact on Petaluma citizens, or whether they are actually trying to mitigate the Owners and Developers' COSTS so they can make more profit?

COMMENT: You are treating both the Hotel and the Overlay as one project because the hotel as designed cannot be approved without the overlay zoning being approved. Why don't you separate them so they can be looked at separately? Why are you trying to shove this dual change down the throats of us Petalumans? **COMMENT:** I do NOT want a Mitigated Negative Declaration approved. **There MUST be a complete and official Environmental Impact Report that will cover in detail:** traffic impacts, parking needs, impacts on our Historic District, impacts on views, changes to the ambiance of the downtown, the height and mass of 60 ft buildings, site alternatives, the amount and type of housing the city is hoping to bring into the downtown and the associated traffic, the economic benefit the city expects to gain from this zoning change, and the need for modeling the cumulative impacts of the zoning change. A complete EIR and CEQA Report MUST be Required for ANY approval of ANY portion of this proposal.

FINAL COMMENT: Petaluma has 30,000 jobs and 85% of those employees live out of town. Many of the people who live in Petaluma don't work in Petaluma. They drive to other cities daily. Young people, single parents, students and young adults can't afford to live here, so the community is diminished. Petaluma will become just another rich town with no real character or diversity - like Mill

Public Comments Received October 3 to November 6, 2023 (partial)

Valley, where I lived before. Why not have small housing units that our young people can afford built into the apartments downtown? We have to solve this problem so our hard working families can actually afford to live here.

I will attend the public meeting on November 14th and wish to speak publicly to these issues.

Sincerely,

Lion Goodman, PCC
[REDACTED], Petaluma
[REDACTED]

From: Janet Gracyk <[REDACTED]>

Sent: Tuesday, October 24, 2023 7:37 PM

To: [REDACTED]

Cc: -- City Council <citycouncil@cityofpetaluma.org>; Kevin McDonnell <kmcdonnell@cityofpetaluma.org>; Barnacle, Brian <bbarnacle@cityofpetaluma.org>; Janice Cader-Thompson <Jcaderthompson@cityofpetaluma.org>; Mike Healy <mhealy@cityofpetaluma.org>; Karen Nau <knau@cityofpetaluma.org>; Pocekay, Dennis <dpocekay@cityofpetaluma.org>; John Shribbs <jshribbs@cityofpetaluma.org>; -- City Clerk <cityclerk@cityofpetaluma.org>

Subject: Downtown Overlay

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---
Please don't support the mitigated negative declaration for the overlay for downtown (PLGP-2023-0001, PLZA-2023-0002 & PLSR 2022-0017).

I have many concerns about the proposal as well as the process. I have served on City of Petaluma committees, including the Site Plan and Architectural Review Committee. I supported and continue to support the Central Petaluma Specific Plan. I am eager to see appropriate infill in town. There is no compelling reason to consider granting this approval outside of our general plan process.

It seems that the desire for some to gain a downtown hotel has resulted in a rush to approve increased density in parts of downtown where it is inappropriate. Do you truly approve of the idea of six-story buildings lining parts of Western and Washington? All of Subarea A?

The applicant should be required to provide renderings showing how our streets would really look if all of the overlay district was built out to allowed heights - and show the buildings filling the building envelope. The applicant has not been as forthcoming as I would expect in this regard, but maybe some would rather we didn't think about this too much. (We were also promised updated renderings of the proposed hotel, showing all the facades.)

I lived in Redwood City for a few years, recently, due to a job change in my family. Redwood City has been busy building apartments and offices like this - with building envelopes to the sidewalks, 6-9 storeys high. It has changed the character of the town enormously and I would be distressed to see us take that route in more parts of town than CPSP already allows. I recommend a visit to the area of Redwood City, east of El Camino Real, to see if that's how you want Petaluma to look - another anonymous little city. It was harsh and unpleasant for walking my errands, and it was not a nice place to live. I'd be surprised if that's your vision for our community.

Please keep in mind that many projects have been approved in town, but never built. It's entirely possible the hotel won't be financially feasible - most recently approved projects haven't been. You may have seen today's news that a hotel project in Sonoma, also a hard-fought project, may not prove financially feasible. Sonoma spent a lot of time and money on the idea. I can't remember how many projects were approved for the lot near the depot, but somehow they never pencil out. Oh, and the OUtlet Mall was going to be our financial salvation. Having been involved in City issues for a couple of decades, I have learned, the hard way, to be very skeptical of a developer's promises.

You may find you have given away more than you imagined if you allow this ill-conceived, and far too hurried, overlay proposal to proceed.

Sincerely yours, Janet Gracyk

From: Katherine Applegarth <[REDACTED]>

Sent: Wednesday, October 25, 2023 4:19 PM

To: -- City Council <citycouncil@cityofpetaluma.org>; kmdonnell@cityofpetaluma.org <kmdonnell@cityofpetaluma.org>; Barnacle, Brian <bbarnacle@cityofpetaluma.org>; Janice Cader-Thompson <Jcaderthompson@cityofpetaluma.org>; Mike Healy <mhealy@cityofpetaluma.org>; Karen Nau <knau@cityofpetaluma.org>; Pocekay, Dennis <dpocekay@cityofpetaluma.org>; John Shribbs <jshribbs@cityofpetaluma.org>

Subject: I am STRONGLY OPPOSED TO THE Proposal to build 6 story hotel on B St.

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

Dear City Council-

As a 23 year resident of Petaluma, I am proud to say that I have been in favor of many of the adaptations I have witnessed to accommodate increases in population reflecting necessary traffic mitigation, as well as the need for more affordable housing. I must speak out on the proposal to build a 6-story "ordinary" and monstrous block of a building in our downtown historic district, which is currently before the City Council. As the granddaughter of a prominent San Francisco Beaux Art architect, I have grown up with an awareness of, and an appreciation for the beauty that can be seen in thoughtfully designed buildings. Buildings can be large or small, but their beauty and their architectural impact on the neighboring buildings is the result of thoughtful and meticulous planning, the architect taking into consideration the scale of the immediate surroundings, the impact the building may have on the sunlight to the surrounding areas, and the contribution that the design of a particular building may make to enhance the community and its surroundings. Buildings I am well familiar with in many prominent areas in San Francisco were built with purpose and thoughtful consideration, including style, design, intended use, and architectural impact in the community. Such were the early buildings in San Francisco constructed; Design and details were of utmost importance, and the result was typically a building where artistry and imagination came together, resulting in something of extraordinary and lasting beauty.

When I moved to Petaluma from our family home in San Francisco, I noticed many buildings which were artistically significant and quite extraordinary. I was pleased that these had been carefully preserved, for they told a story of a small town which grew during the time San Francisco was being built. Petaluma had a distinct architectural past, and the Victorian buildings reflect an age that was unique to early California. There are hundreds of examples of landmark homes in this town which people take great care to preserve.

Many of these homes are in the streets adjacent to the downtown area. The unique and historic architecture found here, the quaintness of our small town, is not insignificant -- in fact, it's part of what draws tourists to visit. That the new Petaluma Hotel has preserved its historic past and enhanced the downtown with a beautifully restored building is a priceless gift to this town. The new Bank tenants on C St have taken a spectacular and historic building and transformed the interior to showcase the incredible artistry of that building.

The quaint shopping and restaurant area along the river (the one housing the 24 Hr Fitness) is a tremendous use of this historic building. This is the kind of historic preservation which enhances a town's value and interest. People will come visit if we care for and preserve these unique landmarks

The council should investigate the need for more hotel rooms in this town before considering any new hotels here. Furthermore, dropping a 6 story nondescript BLOCK of a building seriously detracts from all that is unique and appealing about this town. Out of town guests would see it and think- "What were they thinking?", and "Who allowed that monstrosity to be built THERE?" If this project goes through, you ALL will be held accountable for selling out our architectural and historical heritage, and YOU will have to answer to generations to come as to how and why you even considered such an inappropriate project for the corner of B and Petaluma Blvd. It is shameful that it is even being proposed.

You are supposed to be looking out for the interests of our town, NOT selling us out! That corner is in the HEART of downtown Petaluma! I suggest we find a use for this unique location which compliments the surrounding area, and fits in to the architectural style already in place! This requires thoughtful planning and design..... not \$\$\$.

With respect, I sincerely hope that you will vote to maintain our architectural past and historical "uniqueness", and firmly reject any project that is oversized and inappropriate.

This project is both of those.

Sincerely,

Katherine Applegarth

From: Karina Spalding <[REDACTED]>

Sent: Friday, October 27, 2023 2:55 PM

To: Andrew Trippel <atrippel@cityofpetaluma.org>; [REDACTED] <[REDACTED]>; -- City Council <citycouncil@cityofpetaluma.org>; [REDACTED] <[REDACTED]>; don.frances@arguscourier.com <don.frances@arguscourier.com>; editor@arguscourier.com <editor@arguscourier.com>; [REDACTED] <[REDACTED]>; Janice Cader-Thompson <[REDACTED]>; [REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>

Subject: B st and Petaluma Blvd concerns

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---
Hello, my name is Karina.

I work at a restaurant called Luma(as a cook), and when I was five I received a book for Christmas and it was called "Pet a Luma" based off a unicorn that was named Luma, that book sparked my love for this town.

I've lived in Petaluma since I was a child, 23 years in this town, and I've always loved it. I started on Grey Owl in Turtle Creek. Now I live on B st and couldn't be happier. You could say I've always had a connection with this town. I've loved the people, I've loved the town itself. However, now more than ever, more and more people are coming to our town and disrespecting the love that we all have for it. This hotel has no space in this town. We are already dealing with ridiculous traffic up to our ears(lakeville and E Washington are always backed up) and crime up to our noses. In what world would adding more people be a good thing for this town. The traffic alone has gotten so ridiculous. In my opinion our money is more well spent fixing the roadways, then adding a hotel and destroying our beautiful historical town.

I want to be very clear there is no space for this hotel, there is no space for gentrification here in Petaluma. My generation and the younger generations deserve better than this. I was not able to vote these people who are in charge into office, but know that if you're not gonna take our town serious, I will vote you out.

We have a strong sense of community. We care about our family and friends. We care about our neighbors we only want what's best for this town and a hotel is not it.

Thank you for reading my words and concerns I pray that you will do the right thing and understand that this would be an issue down the line maybe not next year maybe not three years from now but 10 years from now it will be an issue that we cannot draw back from.

Thank you again
Sincerely, Karina Spalding

From: Beverly Schor <[REDACTED]>
Sent: Tuesday, October 31, 2023 4:00 PM
To: Rizzi, Krystle <krizzi@cityofpetaluma.org>
Subject: Public Comment regarding Draft IS/MND

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---
Please submit my attached public comment for the November 14 meeting to all members of the Planning Commission, Historic & Cultural Preservation Committee, and Staff.

Thank you,
Beverly Schor
Petaluma Resident

Planning Commission, Historic & Cultural Preservation Committee, Staff

I admit, I did not read all 234 pages of the Draft IS/MND regarding the downtown overlay and EKN Appellation Hotel (Project). I didn't have too. All the key guidelines governing this or any other significant development in Petaluma are clearly stated in pages 6-8: These documents are:

1. the Petaluma General Plan 2025 (which has its own Council adopted EIR)
2. the Housing Element certified in May 2023
3. the Historic and Commercial Guidelines adopted in 1999
4. the Central Petaluma Specific Plan
5. the current General Plan Update, provisions of which are extensively referenced

All of these sited plans are the result of an **astonishing commitment by Petaluma's own citizens** to provide guidance to Council and staff about our community priorities to:

1. Foster a close-knit, neighborly, and family-friendly city
2. Enhance our downtown by preserving its historic character and increase residential opportunities in our core
3. Build a sustainable community

So, when I read staff recommendations regarding the zoning and EKN hotel project, I asked myself, "Who's minding the store?" How on earth can staff recommend 75 foot height limits in spot zones downtown and still preserve the surrounding historic look and feel of our town? How can staff recommend a hotel and ignore CEQA? Don't they read their own reports?

I personally prefer housing to a hotel. People, not buildings foster community and support for downtown businesses. That said, I understand we cannot demand how builders choose to spend their money. However, **we can demand that they build within our vision for our town.**

Please support the existing 48 foot height limit in our downtown. This is an ideal building height both visually compatible with neighboring buildings as well as fostering a sustainable building size able to power and heat with a zero-carbon footprint. This is what planning for the real future of our downtown should look like.

Thank you,
Beverly Schor
Petaluma Resident

From: michael.shockro [REDACTED] <[REDACTED]>

Sent: Thursday, November 2, 2023 5:26 PM

To: -- City Council <citycouncil@cityofpetaluma.org>; [REDACTED];

[REDACTED]; Janice Cader-Thompson <jcaderthompson@cityofpetaluma.org>; Greg Powell <gpowell@cityofpetaluma.org>; Andrew Trippel <atrippel@cityofpetaluma.org>; editor@arguscourier.com <editor@arguscourier.com>

Cc: [REDACTED]; editor@arguscourier.com <editor@arguscourier.com>

Subject: Saddened by Petaluma's DH&EOOandEKNAHDIS/MND

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

My wife and I live on Liberty Street. We are opposed to the proposed EKN hotel and the Downtown zoning overlay. We are opposed to the proposed Initial Study/Mitigated Negative Declaration that will pave the way for developers.

We are concerned by the City's support of a monster hotel that will be crammed into a small area at the southern gateway to our historic district. The hotel will have significant adverse aesthetic impacts on our historic downtown.

It would be nice to have a quality hotel that fits into our historic downtown area. Cities that we like, such as Healdsburg and Santa Barbara, have done an impressive job of permitting three and four-story hotels that are compatible with their historic surroundings. By contrast, Petaluma is not even trying to find a fit. Instead, it is trying to bury us in words that assert that significant impacts are not so significant, after all.

Many very articulate people have already spoken out against the EKN hotel project, on many grounds. We join in the rising chorus of their voices.

As we began looking more closely at the barrage of pages being generated by city staff, we realized that it is not just the hotel that is being proposed. Of even more concern to us is the removal of building restrictions elsewhere in the downtown area--under a proposal with a tongue-twisting title: "Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel Draft Initial Study/Mitigated Negative Declaration".

We feel at home in this city's historic district. We were drawn to the architecture of the buildings that have been here for well more than a century. We have sold one of our cars, and rarely drive the other. We walk from home for virtually all of our shopping, dining, banking and other needs.

We would have thought our lifestyle is exactly what Petaluma hopes to promote, given all its talk about traffic calming and active transportation and the like. But, that quite obviously is not what our city is contemplating for Petaluma.

Instead, the City proposes removing restrictions on developers in our downtown. They will be freer to replace our grocery store, our bank, our restaurants with tall multi-use buildings. In time, we will have no reason or desire to walk through town. Instead, we will drive for what we need, or move to a town closer to the look and feel of what Petaluma once was.

We have read the 123-page proposed Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel Draft Initial Study/Mitigated Negative Declaration. It demonstrates no vision of what a new downtown will look like. In some instances, it does acknowledge issues, but states they can be mitigated. It is largely silent, however, on what the mitigations might be. And, in a demonstration of arrogance typical of a government that does not care what its residents think, it asserts all this can be done without a full CEQA analysis.

In short, it appears that the city proposes leaving the vision for our downtown to the developers. We cannot think of any city where that approach has worked out very well.

Michael and Deborah Shockro

[REDACTED]
Petaluma, CA 94952

From: LINDA LIPPS <[REDACTED]>
Sent: Friday, November 3, 2023 3:50 PM
To: Orozco, Uriel <uorozco@cityofpetaluma.org>
Subject: Downtown Housing & Economic Opportunity Overlay
Dear Council Members:

Although I have been to all of the public meetings re: this project I have not spoken because other citizens have eloquently expressed my own concerns. But I don't feel that we are being taken seriously.

I was a military brat who settled in Sonoma in 1969, and have built my entire life here since leaving home. I have lived in Petaluma for over 33 yrs, on both the East and West sides of Petaluma; my husband even longer, and we've raised 4 children here. I graduated from SRJC, got a BA and Graduate Degree from SSU, and enjoyed a 35 yr. career there as a faculty member and administrator. I moved here from Santa Rosa when my son was in 3rd grade, specifically because I wanted to raise him in this quaint town, where I had lived as a college student and later professional.

When the planners give us examples of already existing, "equally tall" buildings as this proposed hotel, and show us with a straight face the grain silo, clock tower, and the church steeples, I find it to be very disingenuous and duplicitous. My distrust and anxiety grows.

Those particular structures do not alter the entire environment they surround, do not cast a humongous shadow on all the nearby existing buildings, business and thoroughfares, and do not obstruct the view of all of the surrounding residential areas. This behemoth does not belong on this corner. The rezoning overlay amplifies the problem many times over.

I keep hearing how chain-link fences are a blight on our historic town, just like when a judge once said that the wonderful Schollenberger Park was a blighted area. I begin to wonder if someone is trying to dupe us. This hotel does not belong on the corner next to Rex's, across the street from some of the most important historic buildings in our town and many wonderful small businesses, ie the entrance to our downtown - all of which already attract wealthy visitors as well as many locals. The proposed rezoning changes all of this.

The proposed building is designed to cater to those who can afford its amenities and is not a common space for all. It is a luxury entertainment center, touted to hopefully rescue city economics. Obviously, rezoning will bring more like it, and now I've learned how easy it is for developers to get "exceptions." I've gotten increasingly anxious every time I attend these meetings and have now seen how development and planning work in Petaluma.

I think it's a fine building of modernity, but does not belong downtown. We have other truly "blighted" areas where it would fit nicely. If you truly believe you're going to get a lot of tax dollars out of this, regardless of our prolific potholes, limited parking, water concerns, city infrastructure, traffic, and current ample available hotel space, please show us the specifics! This is a luxury hotel. Where is the affordable housing for those new low-wage jobs? And how will rezoning impact the existing small businesses in that area of downtown?

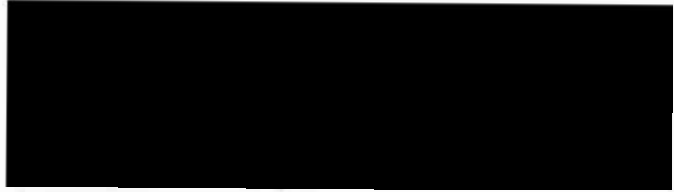
The city needs to put more thought into this. I am now very angry where I was just curious before. There are a few people who talk about how there's need for a change for progress for younger residents, referring to all of the gray haired people in the room - which felt disrespectful and ageist re: people who have lived a long time, contributed to society, paid high taxes and funded important social needs, and who may now be retired but volunteer their time to protect and preserve the things about Petaluma that make it special.

Preserving our unique history does not mean living in the past or having no vision of an even better future - not just for ourselves, but for all Petalumans and those who wish to share in our unique piece of paradise. No one has ever accused me of being an old fogey, short sighted, or stuck in the past. Perhaps we have gained some wisdom from our many years of living and learning.

Elders and the City Council are the caretakers of legacy. Please reconsider the comments, perspectives, and suggestions that so many long-time Petalumans are providing you. More analysis and community input is needed. NO REZONING and NO APPELLATION.

Sincerely,
Linda Lipps (and Pete Musser)
[REDACTED] Petaluma, CA 94952 [REDACTED]

Chris Albertson



April 29, 2023 & July 7, 2023 & November 14, 2023

Petaluma Planning Commission
c/o City Clerk and/or Community Development
City of Petaluma

RE: Proposed new multi-story hotel at the corner of 'B' Street and Petaluma Blvd. South

Planning Commissioners -

I commend the developers and the City for addressing this long term vacant lot, that has served as a scab on Petaluma's historic downtown.

The property's previous owner had attempted a similar development on this lot, incorporating 53 hotel rooms and a roof top restaurant, all within 4 stories. There were two elements of design/function that were difficult to overcome: 1) Size and scale of a four story building, built straight up from the sidewalks on 'B' Street and PBS; and 2) Adequate parking for hotel guests, restaurant guests, and employees. These earlier identified issues appear to be exacerbated by the larger, increased volume hotel now proposed.

The new proposed hotel wants 93 rooms, for an increase of 75% over the previous proposed density. They want the building to be 50% higher, with 6 stories versus the previous plans for 4 stories. The public renderings in the newspaper, again show a building built right out to the respective sidewalks on two sides. The size and scale of the previously designed 4 story hotel seemed excessive. IF . . . this size of building were necessary, could it be *stair-stepped* back from the sidewalks, beginning at the second floor and extending to the sixth floor? It is easy for me to request such a change but difficult for the developer to design such a building and achieve the desired internal elements. The hotel will be the developer's building but the historic downtown belongs to all of Petaluma. The developer needs to accommodate their new neighbors.

Parking : The story in the newspaper indicates that there will be 58 parking spaces located in the basement level. How will 58 parking spaces accommodate guest in 93 hotel rooms; plus up to 150 guests in over 3,100 sq/ft of restaurant and beverage space; plus adequate parking for hotel employees? This corner lot is close enough to the Petaluma River that the water table may be too high for any underground parking. Does that water table fluctuate with daily tides and annual seasons? Will climate change and sea level rise have a long term impact on the water table? What additional parking provisions are the developers proposing? The previous owner was negotiating to lease a vacant lot on Fifth Street and provide valet service from the hotel's front door. What happens when that lease terminates? Does the hotel's parking problem become the city's parking problem?

Again, my compliments in doing something creative with this very visible downtown lot. However, is this proposal the appropriate plan for the historic downtown?

Respectfully,

A handwritten signature in black ink that reads "Chris Albertson". The signature is written in a cursive, flowing style.

Chris Albertson

Fwd: Public Comment: EKN Proposal for hotel + subsequent zoning overlay

Tina Hittenberger [REDACTED]

Mon 11/6/2023 3:23 PM

To: Orozco, Uriel <uorozco@cityofpetaluma.org>

You don't often get email from [REDACTED]. [Learn why this is important](#)

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

Gentle Council Members,

I understand that today is the deadline for submitting written public comments for the Planning Commission Meeting to be held on November 14.

My husband, Chuck Pyle, and I have attended Council Meetings, EKN presentations, researched the project, explored relevant websites, introduced the proposal to real estate agents and met with many community influencers.

The anger and frustration is palpable at every gathering.

When there is a forum for civil discourse, experts, professionals and informal groups agree on one thing: the project needs thoughtful consideration and there should not be a rush to approve such an important addition to our town. Our Cool Block of 45 households has been meeting for over two years and at the last discussion, "Topic Four: Improve Buildings" the proposed hotel was given as an example of a misdirected building proposal. The distorted renderings and lack of story poles misguide the public and, so far, no one has heard viable solutions to parking, traffic, delivery issues, the effect upon city services and the impact on the immediate and long-term environment.

Wherever and whenever the topic of the new hotel arises, the disappointment in our city leadership permeates all conversations. The process is painfully pro forma and communications are obscure. Specific questions about the hotel are not answered satisfactorily by EKN, staff or officials. More importantly, calling the overlay a "Downtown Housing and Economic Opportunity" is misleading. It is an obvious manipulation to allow a non-compliant building. It is not an *opportunity* - it is a re-zoning that puts our Historic District and Main Street status in jeopardy. Such an "tip of the wedge" opens up so called "blighted" areas to future developers who bring their own agendas with unintended consequences. **It is obvious that the entire project is driven by motives counter to the values, history, unique charm and culture of Petaluma. It is polarizing our city at the worst possible time.**

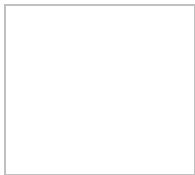
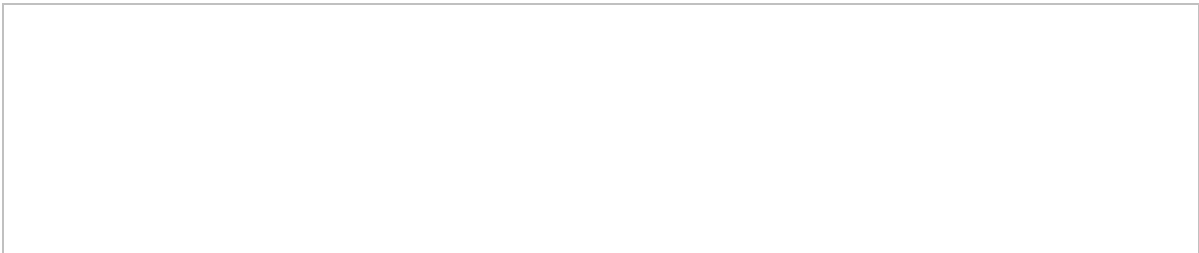
PLEASE slow down. Think this through. Do not be manipulated and seduced by false promises. The City Council may have inherited economic challenges from the past, but make time for cooperation and communication now. It is your legacy.

The PEOPLE who love Petaluma are NOT against an appropriate hotel, or tourists, or housing or a creating a vibrant town. We are against selling our souls - piece by piece, block by block.

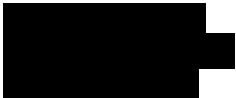
Sincerely,
Tina Hittenberger



Tina Hittenberger, MBA
Broker Associate



Tina Hittenberger, MBA
Broker Associate



Nov 6, 2023



Critical viewsheds of Historic District and ridges (Scott Hess)

Dear City Council members –

I want to register my strong opposition to both the EKN Hotel project and the rezoning overlay being proposed by the City for 3 separate areas in Petaluma’s Historic Downtown, and I ask that you deny both the hotel and the zoning overlay at this time in light of the fact that they violate no fewer than two of our major policy documents, our General Plan and Historic Regulations, and require a great deal more study. At the very least, both the hotel and zoning overlay require full Environmental Impact Reports (EIRs). A Mitigated Negative Declaration (MND) is woefully insufficient for such substantive zoning changes.

Significantly, we are a Rivertown that regularly floods, and our historic downtown is in direct proximity to the Petaluma River, a tidal slough. Development affects the soil and water flow (*i.e.*, replacing soil with impervious surfaces means water can’t seep into the ground as it did before, and causes more water to accumulate in the river). Therefore you’re *increasing* the average flow rate year round as a result with each build on a vacant lot. And there’s been a tremendous amount of development along our riverbanks and floodway/floodplain in the past

few years, as is, as well as more in the pipeline (*e.g.*, Oyster Cove, Scannell, Sid Commons, etc).

Tidal rivers in particular are more prone to flooding during severe weather events than other types of rivers because precipitation events can combine with coastal events, creating synergistic effects (more severe and prolonged flooding). The low-lying nature of our historic downtown is resulting in stormwater management challenges exacerbated by all this increased flooding (as we've readily seen). As NOAA states, "A stormwater management system impaired by coastal flooding events can have far-reaching effects on the community at large. Minor flood events can disrupt transportation, which affects everything from emergency access to the flow of goods and services, as well as the ability of people to get to and from their homes. Floodwaters that cannot infiltrate or drain may become stagnant, creating additional impacts on human health. Excessive flooding over time, even minor events, can change how people live and how businesses and the community operate. This can cause detrimental economic impacts on real estate values and tourism, and other negative impacts to businesses". Thusly, the ability of the land and the soil and the infrastructure to handle storm surges positively needs to be surveyed/assessed – especially as climate change continues to worsen.

Secondly, as you well know, the EKN hotel site was the site of a prior gas station with leaking underground storage tanks that required substantive remediation. The site was not excavated, and contaminated soils removed, to a depth of a 2-story underground garage. Additionally, with an underground structure (garage) specifically, there is an increased risk of inundation due to climate change impacts and the associated increased flood risk.

Also in regards to the zoning overlays, the *cumulative impacts* of numerous, up to 8-story buildings on traffic, emissions, fire, flooding, surface water and groundwater, etc have to be assessed (M Group commissioned a feasibility study from Strategic Economics for up to 8-story structures in the downtown). Where the City has identified the parcels/lots it wants to build on or repurpose throughout the 3 overlay areas, it can readily do this analysis. As Raimi + Associates has already demonstrated, every single census tract in Petaluma is adversely

impacted by traffic emissions. Adding a lot more high-rise development to the downtown will result in a significant increase in traffic and air pollution. And where modern construction has a massive carbon footprint (39% of all carbon emissions), all this development will have a sizeable impact on Petaluma's carbon footprint, including creating more heat islands, etc. Hotels, especially, are massive users of energy and water, and create a lot of waste. There will be zero chance for net zero (Petaluma's stated climate goal for 2030).

Petaluma has just come through a 7-year drought and is one of only 2 cities in Sonoma County that, due to insufficient groundwater, has had to form a Groundwater Sustainability Agency (GSA). So the cumulative impacts of a major rezoning - that would see a significant increase in population and tourism - on our groundwater basin absolutely needs to be fairly assessed via the EIR process. Hotels both use, and waste, tremendous amount of water.

As our City leaders well know, Petaluma has a strong identity as a historic, agricultural Rivertown. It is said we have the greatest number of ironfronts West of the Mississippi and, per the expert SF architectural historians Paige & Turnbull hired to do our historic inventory for the General Plan update we have, "architecture unmatched in California". Because of the unparalleled architectural gems in our downtown, and our listing on the National Historic Register, that sets a high bar for new builds within and in proximity to the downtown. Our viewsheds of these majestic historic buildings, in addition to views of our iconic ridges (for which our town is named), give Petaluma a distinct identity and sense of place, and put us on the map for tourists and filmmakers alike. More than 20 Hollywood movies have been shot in Petaluma.

In addition to movies filmed here, Petaluma's picturesque historic setting has been called out in numerous national and local media: Sunset, Forbes, San Francisco Chronicle, Sonoma Magazine, The Press Democrat, etc (refer to links included, below) for having one of the Best Main Streets in the West. ***Heritage Tourism is a real economic force. A change in our current zoning*** - that would allow for non-conforming, incongruent structures to obscure our distinct identity and sense of place - ***will irreparably damage the economics of our City***; inappropriate developments cannot be undone. Petalumans must not

settle for a homogenization of our unique identity and sense of place that would damage our economic vitality.

The proposal for a rezoning overlay would see our 1-3 story National Historic Register-listed architectural masterpieces dwarfed by 6-8 story developments (M Group Planners hired Strategic Economics to look at the feasibility of up to 8-story buildings in Petaluma's historic downtown). This will destroy **Petaluma's most valuable economic asset, her historic downtown**. If, for example, in the image below a modern 6-8 story build were to go in where Chase Bank is now, it will disrupt the setting/context of the historic district.

Indeed, the cumulative effect that the zoning overlay will have on vistas, mass and bulk throughout downtown has not been addressed. The cumulative impact that 6-story (or greater) buildings will have on the context, integrity, and setting of our Historic Downtown have not been addressed. The cumulative impacts of additional height and bulk allowances on all overlay parcels must be addressed now, or deferred until the EIR for the General Plan Update has been completed.



Setting that would be impacted, to far right of this image (where Chase Bank is currently).

In regards to EKN's Appellation Hotel specifically, the current lot comprises 2 parcels in our historic district, and the hotel would occupy a prominent corner on Petaluma's main boulevard, in full view of the majestic Italianate iron fronts, Masonic clock tower, Brainerd Jones's neo-classical Carnegie Library built in 1904, and the Old Petaluma Mill. By necessity, that merits a high bar in terms of architectural design.

EKN's proposed hotel exceeds current planning policies for Floor Area Ratio (FAR), building height, and lot coverage maximums. It is oversized and architecturally inappropriate for its proposed location. It is out of scale with its neighbors in its sheer size. It disturbs the integrity, context and setting of our Historic District. Without the rezoning overlay, the hotel cannot be built as currently proposed. Strolling down Petaluma's main drag, where one now sees Petaluma's iconic Victorian clock tower silhouetted against the sky, you would instead see the modern, 6-story EKN Appellation hotel rising above it. It has no place here in this historic town; it doesn't in any way represent Petaluma's unique brand, and it violates our General Plan. From an economic vantage point, our nationally-recognized historic downtown cannot afford brand-harming project failures.

Historic District Design Guidelines state that Infill buildings in the Historic District should "harmoniously coexist with the historic character." This is a powerful impact that is not mitigated. The proposed hotel is not compatible with the massing, scale, and architectural features of the Historic District. This is a significant, unacceptable impact that is not mitigated by what it contributes to the common good.

Note Santa Rosa's Newest "Historic Charm Meets Modern Luxury" Hotel E (Greystone Hotels) in their downtown (image below): "Hotel E displays a *stunning amalgamation of old-world charm and modernity*. Our boutique hotel finds its ideal location in the iconic Beaux-arts building on Old Courthouse Square". A total of 110 rooms – and *neither structure exceeds 4 stories*. The exterior of the new hotel *is designed to mesh* with the existing beaux arts Empire building on the square, a Santa Rosa landmark since 1908. Surely if Santa Rosa's downtown design aesthetic is deserving of (focused on/ concerned with) historic consideration (merit/congruency/implementation), Petaluma's

downtown with its “unmatched California architecture” most decidedly is.

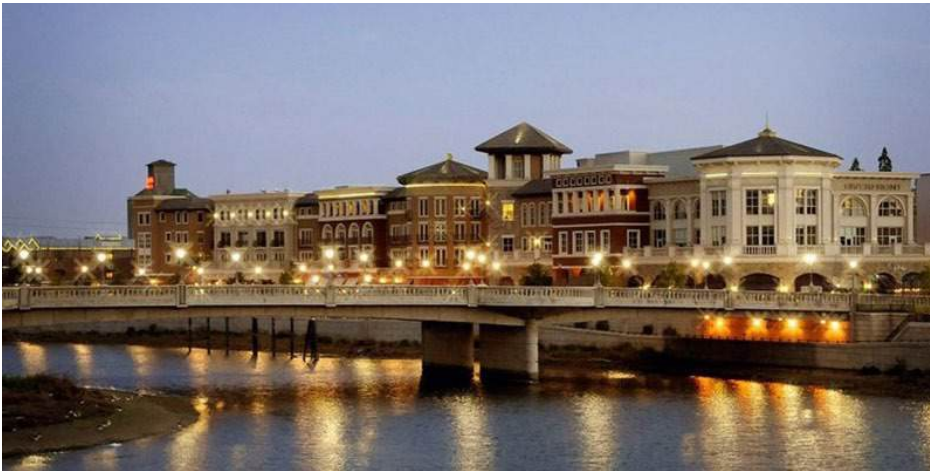


Santa Rosa’s Old Empire Bank building repurposed as luxury boutique hotel with converted garage on left.



Greystone’s Hotel E, Santa Rosa Downtown

Note that when Napa expanded their downtown with their riverfront, they understood that their role was, “not to transform the downtown, rather to work within the framework, character and history that Napa already provided” (image just below). Petaluma must follow other economically-successful wine country towns (*e.g.*, Sonoma, Healdsburg, Calistoga) and maintain a strong sense of beauty and place when it comes to zoning and new construction.



Napa Riverfront

While it's vital that we protect our farms and green spaces from encroachment, that can't result in a panicked narrative that leads to truly bad planning decisions, like this proposed Building Form Overlay (IZO zoning overlay) of Petaluma's downtown district. We have to focus on growing in an intelligent, measured way, approving structures that are beautiful and that will delight tourists and residents alike. Developers will always try and negotiate the best outcome. With this proposed IZO zoning overlay, not only are we *not* going to be allowed to place obligations on developers (they will be able to flout our planning policies with vastly inflated densities and height/lot coverage breaches), but we're also going to end up with a lot of ugly, oversized structures that don't make sense for us as a town. This zoning overlay will greatly impact our functionality, increase our pollution, and irreparably impact our unique brand. It will open us to enormous exploitation by developers, and trample the interests of us citizens.

The last thing Petalumans want is for new builds to dwarf our iconic structures. We want to maintain our unique sense of place. In short, a re-zoning overlay of our historic and downtown district that would allow for higher than normal buildings, and buildings that cover more of a lot would be a terrible thing to have come to pass for our beautiful town. **Please vote the IZO zoning overlay down and allow the citizens – not developers – to maintain control of what gets built in our downtown.**



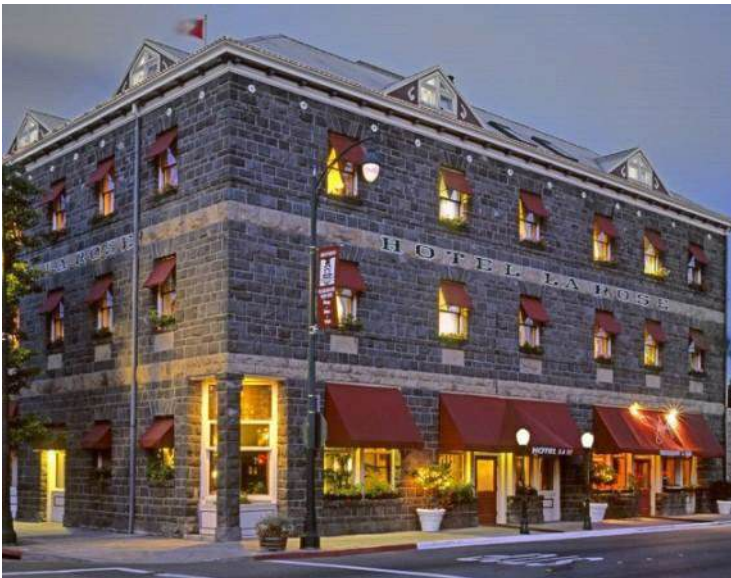
Petaluma's Masonic Clock Tower Victorian Ironfront

In (stark) contrast to EKN's proposal, other hotels in Petaluma's downtown are congruent with our illustrious architectural past. The Petaluma Hotel has the advantage of a welcoming courtyard, u-shaped design, and pleasing countenance, and the Hampton Inn's Twine Factory exterior has charm to spare (and it was only ever intended to be a perfunctory commercial building, and not decorative). But it's a classic, as is the Burdell building in the vicinity.

Newer builds in close proximity to our downtown (*e.g.*, Petaluma's theater district) have been sensitive in their design to our storied historical past – just as is done in Healdsburg/Sonoma/Napa. And any arguments claiming EKN's Hotel vacant lot is outside the historic district are bunk. The theater district further to the South describes itself as, "the heart of downtown Petaluma". And both the historic D Street

Bridge and Walnut Park, as well as many grand Victorian homes and our historic post office (listed on the National Register), lie to the South of the EKN's hotel lot. In 2000, the U.S. Library of Congress officially recognized Petaluma's Walnut Park, built in 1873, as a "Historic American Landmark".

EKN's hotel design needs to fit within the framework, character and history that Petaluma historic downtown already provides. They don't have to reinvent the wheel. If they want to build a blocky structure, they can build a classic structure with awnings (and warmth) like the Hotel La Rose in Santa Rosa's historic railroad square (image below).



Santa Rosa's Historic La Rose Hotel

When an addition was required to the historic Silk Mill (originally built in 1892), renowned architect Brainerd Jones designed the (seamless) addition to go with the original classic Georgian Revival style of the mill. (all this effort for a perfunctory twine factory!). Today, we are grateful for this design foresight. With EKN's hotel, now we're talking about a **significant** addition to our storied downtown historic district; a structure that would dwarf our iconic historic clock tower iron front and McNear buildings. The fact that this hotel will be adjacent to one of our downtown's most picturesque blocks, makes it an obligation to fit into the character of Western Petaluma. Let's do right by our unique brand, as Healdsburg/Napa/Sonoma routinely do. Those are the towns we want to emulate – to be successful.

Petaluma residents want this to be a hotel they can call their own, and be proud of. Recall that there were 850 individuals that contributed to the financing and support of The Petaluma Hotel. Pretty darn progressive for the 1920s. And, "Visionary architects from San Francisco" were recruited to design it. The design of this prominently-placed hotel in our historic downtown needs to be more of a community-influenced process.

Buildings stand for a long time; typically 50-100 years. What we are making now we will all have to live with for a very long time. We cannot afford to diminish our brand with yet more botched urban development/blight as we saw with the inappropriate Courtyard Marriott hotel, a brand harming project failure. Please do not approve EKN's Appellation Hotel as designed, and do not approve the IZO zoning overlay that would irreparably change the setting, context and integrity of our Historic Downtown. Any changes to our zoning/General Plan require, at a minimum, an EIR – and must be judiciously and meticulously considered. An MND is in no way appropriate or adequate for these substantive changes/violations of our current zoning regulations.

Thank you for your time and consideration to this critical issue.

Sincerely,

Moira Sullivan
Petaluma Resident

<https://www.sunset.com/travel/petaluma-california-main-street>

<https://stories.forbestravelguide.com/why-you-should-visit-petaluma-california>

<https://www.sonomamag.com/sonoma-county-town-makes-list-of-top-5-main-streets-in-the-west/>

<https://www.sonomamag.com/2-local-towns-top-list-of-best-main-streets-in-northern-california/>

<https://www.onlyinyourstate.com/northern-california/best-main-streets-norcal/>

<https://www.pressdemocrat.com/article/news/petaluma-mendocino-named-among-cutest-towns-in-northern-california-says-w/>

<https://livability.com/best-places/top-100-best-places-to-live/2016/petaluma/#:~:text=The%20city%27s%20diverse%20housing%20options,an%20attractive%20place%20to%20live.>

<https://www.pressdemocrat.com/lifestyle/8737358-181/how-petaluma-became-the-it>

<https://www.placeeconomics.com/resources/historic-preservation-an-overlooked-economic-driver-a-study-of-the-impacts-of-historic-preservation-in-rhode-island/>

Location: Rhode Island

Client: Preserve Rhode Island, The Preservation Society of Newport County

Date: 2018

The citizens of Rhode Island have long recognized the importance of their built heritage. Less than 50 years after the Declaration of Independence, the Rhode Island Historical Society was founded in 1822 as one of the earliest history organizations in the nation. This longtime commitment has meant dividends for Rhode Island – its economy, its environment, and its quality of life.

This report was commissioned to systematically look at historic preservation in Rhode Island in four areas: heritage tourism, the impact of the historic tax credit, life and culture, and sustainability. The study found that the assets of the past centuries are the base of a 21st century economy and are often locations of choice for today's Rhode Islanders.

Heritage Tourism

- » Rhode Island welcomes 9.8 million heritage visitors each year.
- » Those visitors add nearly \$1.4 billion to the state's economy.
- » The spending of heritage visitors creates jobs for 19,000 workers directly, and another 7,000 indirectly.

- » Those jobs generate paychecks of nearly \$1 billion, including \$602 million for direct jobs and \$358 million for indirect and induced jobs.

Historic Tax Credits

- » For every \$1 the state invests in a tax credit project, \$10.53 of economic activity in Rhode Island is generated.
- » Since 2001, the rehabilitation of 326 historic buildings has attracted over \$1.4 billion in investment that qualified for historic tax credits. When additional, non-qualifying expenditures are included, the total project investment reaches \$1.8 billion.
- » Since 2001, tax credits projects have occurred in 26 of Rhode Island's 39 municipalities
- » Since 2001, tax credit rehabilitation projects have generated an average 965 direct jobs and an additional 739 indirect and induced jobs each year.
- » Since 2001, the rehabilitation of historic buildings using the tax credit has generated direct salaries and wages of \$50 million plus an additional \$35 million in indirect and induced wages on average.
- » The State of Rhode Island receives back nearly half of the historic tax credit before it is even awarded.

Quality of Life


- » Local historic districts in Rhode Island disproportionately attract workers in the knowledge and creative fields.
- » Rhode Island's local historic districts cover only 1% of the state's land area, but are home to 4% of the state's jobs, and 12% of the population.
- » Rhode Island's local historic districts attract new residents. Of the population growth since 2000, more than half occurred within local historic districts.
- » While 4% of all Rhode Island jobs are in historic districts, those areas are where 8% of the jobs in arts and entertainment are located.
- » The historic districts in Rhode Island are virtual mirrors of the state as a whole in income, race and ethnicity.

EKN proposal + Subsequent zoning overlay

Suzanne Biaggi [REDACTED]

Sun 11/5/2023 12:58 PM

To: Andrew Trippel <atrippel@cityofpetaluma.org>; rwhisman@yahoo.com <rwhisman@yahoo.com>; heidibauer2000@gmail.com <heidibauer2000@gmail.com>; bmhooper@gmail.com <bmhooper@gmail.com>; darrenracusen@gmail.com <darrenracusen@gmail.com>; rogermcerlane@mac.com <rogermcerlane@mac.com>
Cc: Greg Powell <GPOWELL@cityofpetaluma.org>

 1 attachments (174 KB)

Challenge to EKN Financial Impact Study.pdf;

Some people who received this message don't often get email from [REDACTED]. [Learn why this is important](#)

---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

I have been attending meetings and listening to folks that are interested in having the 6 + story Appellation hotel in the historic district. As it has been made clear, the hotel cannot be developed without making major changes to our General plan and current zoning and historical codes. The major motivation to make these radical changes seems to be with financial considerations and the possibility of bringing more \$\$ to our downtown merchants. I don't believe that these considerations have been carefully examined.

I have attached a financial analysis for you to ponder that doesn't correspond with what the city is being told it will reap in benefits. In addition I have been told from the EKN developers at the meeting on 10/1 that the average price of a room would be between \$275-\$300 and double that during the "season". That number doesn't pencil out with the proposal being presented to the city. I think to expect full occupancy @ Average room rate \$400.00 is unrealistic considering what the average price of a room in Petaluma is. EKN at the same meeting said they expected people would come by train or Uber so the parking and traffic wouldn't be so bad; another unrealistic expectation. Regarding the rooftop bar. It will need to closed @ 10:00 on the week-ends due to noise factors and possibly sooner when the adjacent high-end neighborhood is adversely affected.

I once again would like to go on record as opposing the EKN proposal at this time, as well as the mitigated Negative Declaration. To make such radical changes we need time to full consider the consequences. We do not want to repeat failed projects such as the Factory Outlet Mall that also had town opposition and was hastily pushed through. Long term effects should also be considered such as what has happened at the "Trader Joes" shopping center and it's empty buildings. Not to be mention geological considerations for a 2 story underground excavation due to the high water table in the area.

Our town does not have many, if any good examples of architecture that matches the quality of our historic center. It would be shame to the have type of architecture we see going up along Pet. Blvd (new luxury apts.) be in our historic center. Since this letter is written in haste due to a deadline that I just heard about yesterday I haven't had time to document examples of new building going up alongside historic ones that are of the same quality. This documentation will be coming soon.

Thank you for considering my concerns.
Suzanne Biaggi

APPELLATION HOTEL / FINANCIAL QUESTIONS

The developers have submitted an Economic Impact Study to Petaluma's Planning Department that outlines 1) temporary economic impacts and job creation during construction, 2) ongoing economic impacts and job creation once the hotel is up and running, and 3) Projected tax revenue streams. This document attempts to analyze the veracity of EKN's numbers.

The tax revenue impacts are quite rosy and presumably are eye-catching to Petaluma's elected officials. However, they don't stand up to scrutiny—the city needs to be asking the developers to “show your work, please.” The supposed tax windfall of \$3.94M annually is going to be significantly less coming to Petaluma's general coffers.

EKN'S KEY TAX REVENUE ASSUMPTIONS:

Developer's Tax impact summary provides a 25-year total tax revenue picture. For simplicity, dividing by 25 gives an average annual tax revenue benchmark: However, not all of this tax revenue will go directly to Petaluma.

Tax revenue from:	PROJECTED BY EKN:		MORE REALISTIC:
	total over 25 yrs	avg per year	avg per year
Transient Occupancy Tax	\$37.1 M	\$1.48 M	\$650K - \$750K
Sales Tax	\$36.5 M	\$1.46 M	\$308K
Property Tax	\$24.9 M	\$1.0 M	\$130K
Total:	\$98.5 M	\$3.94 M	\$1.08 M - \$1.18 M

WHERE DO THESE TAXES GO ONCE THEY ARE COLLECTED?

Transient Occupancy Tax (TOT) is calculated at 10% of the hotel room rate, and goes directly to the local jurisdiction.
 Sales Tax (9.5%) is split between state, county, and local. Petaluma's portion is 2%.
 Property Taxes are collected by the county; 13% of each dollar goes to Petaluma

WHAT ARE PEOPLE WILLING TO PAY PER NIGHT FOR A HOTEL IN PETALUMA?

Hotel Petaluma	\$203 - \$223
Hampton Inn	\$148 - \$167
Sheraton	\$145 - \$159
Courtyard by Marriott	\$131 - \$149
Home 2 Suites	\$151 - \$178
Appellation Hotel	???

TOT TAXES ARE CALCULATED AT 10% OF THE GUESTROOM RATE:

EKN's TOT revenue projection is \$1,480,000 annually, so the guestroom revenue would be \$14,800,000. What is EKN proposing for an average guestroom rate?

Doing the basic math, it seems inconceivable that a TOT revenue of \$1.48M is possible:

If all 93 rooms were occupied 365 days a year, this would mean an average room rate of **\$436/night**.

If all 93 rooms are occupied for only 60% of the nights/year, the average room rate jumps to **\$727/night**.

If all 93 rooms are occupied for only 50% of the nights/year, the average room rate jumps to **\$872/night**.

APPELLATION HOTEL / FINANCIAL QUESTIONS

**WHAT IS A REALISTIC APPELLATION HOTEL ROOM RATE, AND WHAT TOT REVENUE WILL THAT BRING?
HERE ARE SOME ASSUMPTIONS, BASED ON THE BREAKDOWN OF ROOM TYPES AND POSSIBLE ROOM RATES:**

Room Type	Number of rooms	Nightly Room Rate	Nightly Revenue 100% full	All rooms full 100% occ. 365 nights	All rooms full 60% occ. 219 nights	All rooms full 50% occ. 183 nights
King	69	\$400	\$27,600	\$10,074,000	\$6,044,400	\$5,037,000
Queen	15	\$400	\$6,000	\$2,190,000	\$1,314,000	\$1,095,000
Corner Suite 2,3,4	3	\$800	\$2,400	\$876,000	\$525,600	\$438,000
Exec Suite	4	\$1,000	\$4,000	\$1,460,000	\$876,000	\$730,000
Deluxe Suite	1	\$1,500	\$1,500	\$547,500	\$328,500	\$273,750
Bridal Suite	1	\$1,500	\$1,500	\$547,500	\$328,500	\$273,750
Totals:	93	avg \$462	\$43,000	\$15,695,000	\$9,417,000	\$7,847,500
Annual TOT:				\$1,569,500	\$941,700	\$784,750

For this group of room rates before tax = \$7.85M, adding sales, TOT, and other taxes would come close to EKN's proposed hotel revenue of \$9.5M.

Room Type	Number of rooms	Nightly Room Rate	Nightly Revenue 100% full	All rooms full 100% occ. 365 nights	All rooms full 60% occ. 219 nights	All rooms full 50% occ. 183 nights
King	69	\$300	\$20,700	\$7,555,500	\$4,533,300	\$3,777,750
Queen	15	\$300	\$4,500	\$1,642,500	\$985,500	\$821,250
Corner Suite 2,3,4	3	\$800	\$2,400	\$876,000	\$525,600	\$438,000
Exec Suite	4	\$1,000	\$4,000	\$1,460,000	\$876,000	\$730,000
Deluxe Suite	1	\$1,500	\$1,500	\$547,500	\$328,500	\$273,750
Bridal Suite	1	\$1,500	\$1,500	\$547,500	\$328,500	\$273,750
Totals:	93	avg \$372	\$34,600	\$12,629,000	\$7,577,400	\$6,314,500
Annual TOT:				\$1,262,900	\$757,740	\$631,450

Room Type	Number of rooms	Nightly Room Rate	Nightly Revenue 100% full	K&Q + Corner full 100% occ. 365 nights	K&Q + Corner full 60% occ. 219 nights	K&Q + Corner full 50% occ. 183 nights
King	69	\$400	\$27,600	\$10,074,000	\$6,044,400	\$5,037,000
Queen	15	\$400	\$6,000	\$2,190,000	\$1,314,000	\$1,095,000
Corner Suite 2,3,4	3	\$800	\$2,400	\$876,000	\$525,600	\$438,000
Exec Suite	4	\$1,000	\$4,000	\$1,460,000	\$876,000	\$730,000
Deluxe Suite	1	\$1,500	\$1,500	\$547,500	\$328,500	\$273,750
Bridal Suite	1	\$1,500	\$1,500	\$547,500	\$328,500	\$273,750
Totals:	93		\$43,000	\$13,140,000	\$7,884,000	\$6,570,000
Annual TOT:				\$1,314,000	\$788,400	\$657,000

At an average room rate of \$372-\$462/night the TOT revenue would likely be in the range of \$650,000-\$750,000 annually. This is half of the revenue EKN has projected.

APPELLATION HOTEL / FINANCIAL QUESTIONS

PROJECT EXPENSES DURING PRE-CONSTRUCTION AND CONSTRUCTION / FROM EKN'S ECONOMIC IMPACT STUDY:

Construction of New Commercial Structures	\$40,000,000 *	78,000 gross sq ft =
<i>PLUS:</i>		\$512 /sq ft
Architecture & Engineering Services	\$3,000,000	
Other Local Government Enterprises	\$3,250,000	
Legal Services	\$1,250,000	
Management Company Services	\$2,000,000	
Wholesale-other durable merchant wholesalers	\$8,000,000	
Other Real Estate	\$2,000,000	
TOTAL:	\$59,500,000 **	

*Construction cost figure at \$512/sq ft seems low; **\$600/sq ft** in this location may be more likely.

This would increase the construction cost to ***\$46,800,000** and total to ****\$66,300,000**

KEY PROJECT REVENUE ASSUMPTIONS:

Anticipated annual hotel revenue:	\$9.5M	<i>*stabilized revenue projection (year 3) \$\$</i>
Anticipated annual restaurant revenue:	\$8.5M	<i>*stabilized revenue projection (year 3) \$\$</i>
Total:	\$18M	<i>Assumed to be gross revenue</i>

HOTEL REVENUE:

EKN's projected Annual Hotel Revenue is \$9,500,000. Let's assume this is a GROSS figure.

Hotel vacancy factor 50%

Hotel operating expense factor 50%

NET Annual Hotel Revenue would be \$4,750,000

RESTAURANT REVENUE:

EKN's projected Annual Restaurant Revenue is \$8,500,000. Again, we assume this is a GROSS figure.

If restaurant & rooftop bar (3680 sq ft) are leased to an operator at \$4/sf/month Triple Net, lease income = \$176,640

NET Annual Restaurant Lease Revenue would be \$176,640

Let's assume NET Hotel + Restaurant operating income = \$4,750,000 + \$176,640 = \$4,926,640 annually

Construction expenses / LOW: \$59.5M

Construction expenses / HIGH: \$66.3M

\$5M annual revenue with a 1.25% debt service coverage ratio means \$4M available for debt servicing

A project operating revenue of approximately \$5M annually could likely support a \$38.4M loan at 8.5%.

That would require the developer/owner to fund somewhere between \$21.1M and \$27.9M in equity to build the project.

THOUGHTS:

Transient Operating Tax (TOT) revenue of \$1.48M annually seems highly overstated without astronomical room rates.

Revised annual estimate for TOT + Sales + Property taxes is likely to be closer to \$1.08M - \$1.18M annually for Petaluma.

Does EKN have \$27M in capital lined up on top of a \$38M+ loan in order to finance 40% of this project?

Is Appellation Hotels all in on this venture? Their portfolio doesn't have any open and operating venues.

EKN and Overlay Zone proposals

Jane Hamilton [REDACTED]

Sun 11/5/2023 11:27 AM

To:-- City Council <citycouncil@cityofpetaluma.org>;rwhisman@yahoo.com <rwhisman@yahoo.com>;heidibauer2000@gmail.com <heidibauer2000@gmail.com>;kvkarch@gmail.com <kvkarch@gmail.com>;Blake Hooper <bmhooper1@gmail.com>;darrenracusen@gmail.com <darrenracusen@gmail.com>;rogermcerlane@mac.com <rogermcerlane@mac.com>;Janice Cader-Thompson <jcaderthompson@cityofpetaluma.org>;Andrew Trippel <atrippel@cityofpetaluma.org>;Greg Powell <GPOWELL@cityofpetaluma.org>

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---Warning: Use caution before clicking any attachments. THIS EMAIL IS FROM OUTSIDE OUR EMAIL SYSTEM.---

Dear Mayor, Council and Planning Commission,

The EKN-Appelation Hotel proposal and Downtown Housing and Economic Opportunity Overlay Zones have brought forward a new low in planning procedures to Petaluma. Before I offer my comments on the negative declaration promoted by our planning staff, I have some general comments.

Ordinarily, a zoning change to our historic downtown would be worked through as part of our general plan update, allowing much open discussion, professional analysis, and public input into the process. With the zoning overlay coming as part of a development proposal that requires this change, the public process has been shortchanged and truncated. We are being offered a readymade solution to a problem that has yet to be adequately defined and asked to either support or oppose it. There has been very little definition given to what our current conditions consist of in terms of economic opportunities and housing downtown nor has there been any definition given to what it is specifically that we hope to gain by making this change. I object to what I call a dumbed down process with very little substance offered to support it.

Unfounded Claims: We are being told if we want to support our downtown businesses or house people who need homes, we must support the hotel and the overly zone needed to approve it. I have had council members tell me that opposition to these proposals are a symptom of rampant white privilege, that the zoning overlay will get rid of chain link fences defined as "Blight", that they were elected to make these decisions and thereby know more than the general public, and that the height must go to 6 stories because developers have told them that is what is needed for anything to pencil out. I just want to point out that while 85% of our town is steeped in white privilege, wanting to protect our Historic District is not a symptom of that. Council members were elected to make informed decisions and to listen to constituents and to defend our assets. Many developers in Sonoma County are finding success within 3 stories even in our town.

As a former council member (1992-2000) and co-chair of the Central Petaluma Specific Plan and River Enhancement Plan, I am well versed in what a healthy planning process looks like even in today's world and this is not it. I was part of the council that registered our downtown with the National Historic Registry, and I feel both proud and protective of this, Petaluma's calling card. Tourists come to Petaluma not for our shopping centers, or our ball fields but for our Historic Downtown. Changing the zoning here deserves a thorough examination and justification. "Because the Hotel needs it" is not a legitimate justification.

Most members of the public do not know what a Mitigated Negative Declaration is or what it implies or even how to comment on the substance of it. One of your planners told me that EKN wants this issue to move forward faster and one can only assume the Planning Commission and Historical and Cultural Preservation Committee are meeting in joint sessions to accommodate this request. Again, this is another example of truncating the public process.

Both the Hotel and the Zoning Overlay require a full EIR at the very least.

Below are my specific comments and objections to staffs request that the council adopt a Neg Dec:

1. Cumulative environmental impacts must be evaluated in terms of recent project approvals, projects now underway and the whole General Plan Update. The Hotel and Overlay must not be considered outside of the General Plan Update which is underway right now. Cumulative environmental impact

analysis is missing. What are the cumulative environmental effects of adding as many as six stories of new buildings in the three Overlay sub-zones?

2. Exactly what are the Housing and Economic Opportunities we are trying to achieve? Will we be aiming for the low-income housing our community desperately needs? If so, how will we restrict development to ensure we fulfill that goal and don't end up with more expensive apartments downtown? How will changing the zoning help us to bring in more economic opportunities downtown? Can the same goals be achieved within the current zoning? Given that every town in Sonoma County is trying to address the same needs for their downtowns, and that none have proposed 6 story buildings, what makes our planners think 6 stories are needed other than that is what EKN who funded the study wants?

3. This Neg dec report does not adequately study or address the obvious questions of parking and traffic in the downtown area as usage is intensified. It treats the overlay as though it were merely an on-paper change rather than something that will translate into a built environment that we all will navigate daily. The potential cumulative effect of this zoning change on traffic and parking needs to be addressed in a full EIR. Downtown is already heavily impacted with too much traffic, too few bike lanes and not enough parking. As developments already in the pipeline come to fruition, these unsolved problems will intensify. To change the zoning without studying the effects on these current problems is unacceptable.

4. The cumulative effect that the zoning overlay will have on vistas, mass and bulk throughout downtown has not been addressed. The cumulative impact that 6 story buildings will have on the context, integrity and setting of our Historic Downtown have not been addressed. The cumulative impacts of additional height and bulk allowances on all overlay parcels must be addressed now, or deferred until the EIR for the General Plan Update has been completed.

5. As above, the EKN Hotel as proposed, is out of context and disturbs the integrity, context and setting of our Historic District. The hotel is oversized and architecturally inappropriate for its proposed location. It is out of scale with its neighbors in its sheer size. Historic District Design Guidelines state that Infill buildings in the Historic District should "harmoniously coexist with the historic character." This is a powerful impact that is not mitigated. The proposed hotel is not compatible with the massing, scale, and architectural features of the Historic District. This is an unacceptable impact that is not mitigated by what it contributes to the common good.

6. The overlay zone needs to be evaluated for how it will impact the historic District in terms of creating walled off areas, building canyons and disrupting the texture of the built environment surrounding the Historic District.

7. Alternatives were not analyzed, and they need to be. The hotel could be built at 4 stories or placed in a different location at its present proposed height and mass. A full EIR will give us an analysis of project alternatives. We could leave the building height at 45 ft and actively solicit employers or housing developers to locate or build in our downtown.

8. The traffic impact study for the hotel is inadequate. Aside from the obvious problems that will occur during the construction phase, there will be ongoing congestion on B street and PBN during operations for deliveries, hotel guest parking, and restaurant customers. The parking assumptions made in the report are not believable. Guests will not be arriving via public transit or uber. They will be visiting the area and traveling to the coast, wine country and the redwoods during their stay. A Charlie Palmer restaurant will be drawing patrons area wide and not just from hotel guests. The traffic and parking data needs to be updated and have current numbers that reflect what we have now and cumulative impact numbers for projects like Oyster Cove which have already been approved.

There is a better way to achieve the worthy goals of increased housing and revenue by focusing on Downtown. Deny the hotel because it is out of context for the setting. Deny the overlay because it has not been proven to be needed and the goals for it are not well defined. Embark on an open Downtown Improvement process as part of the General Plan to design an overlay with professional scrutiny and community input to sort out what the town wants and needs. Asking us to accept an overlay zone already packaged up that will have sweeping ramifications but was designed to meet the needs of one project (which is offensive to many) tramples what should be a collaborative and exciting process for our town. Please do better than this!

Jane Hamilton

Fw: Appellation Hotel

Eric Danly <EDanly@cityofpetaluma.org>

Sat 11/4/2023 8:51 AM

To:-- City Clerk <CityClerk@cityofpetaluma.org>; Brian Oh <boh@cityofpetaluma.org>; Andrew Trippel <atrippel@cityofpetaluma.org>; Orozco, Uriel <uorozco@cityofpetaluma.org>
Cc:-- City Attorney <cityattorney@cityofpetaluma.org>

Public comment

Eric Danly

City Attorney
City of Petaluma | City Attorney
office. 707-778-4402 |
EDanly@cityofpetaluma.org



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From: Juli Walters [REDACTED]
Sent: Friday, November 3, 2023 11:42 PM
To: -- City Council <citycouncil@cityofpetaluma.org>
Cc: [REDACTED]
Subject: Appellation Hotel

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I am strongly opposed to the proposed hotel structure at the corner of B street and the Boulevard as it is currently designed. Too many Petalumans have worked tirelessly over the last five decades to preserve

our cherished architectural downtown history and maintain its integrity and uniqueness for the benefit of our citizens and visitors alike to now approve a hotel that has no discerning architectural charm and plopped it in the midst of our beloved historic district. It would be a great disservice to the dedicated citizens whose efforts to cultivate an aesthetic of beauty and a love of our history into the heart of our community. My parents were founding members of Heritage Homes and they understood the responsibility we have to cherish what makes our town unique and not succumb to the pressures to take money from developers who look to cash in on the beauty and charm that has been painstakingly preserved here.

I say "back to the drawing board" on this current hotel design. I do not oppose a hotel, but this cookie cutter structure is just that. We shouldn't be ashamed of imposing a higher bar of artistic vision, and in that vein, I would throw out "tall, curved window casings wouldn't kill you"!

Thank you for your service and for making the hard decisions in this regard,

Juli Walters

Sent from my iPhone

Opposition to Downtown Zoning Overlay Proposal

Chuck Dalldorf [REDACTED]

Tue 11/7/2023 3:30 PM

To: Orozco, Uriel <uorozco@cityofpetaluma.org>

Cc: Mike Healy <mhealy@cityofpetaluma.org>; pflynn@cityofpetaluma.or <pflynn@cityofpetaluma.or>; -- City Clerk <cityclerk@cityofpetaluma.org>

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November 7, 2023

TO: Honorable Members City of Petaluma Planning Commission; Honorable Members Petaluma Historic and Cultural Preservation Committee; Honorable Mayor and Members, Petaluma City Council

FROM: Downtown Petaluma Resident Charles "Chuck" Dalldorf

RE: OPPOSITION to proposed Downtown Housing & Economic Opportunity Overlay amendments to the General Plan

Dear Honorable Members:

I am writing to express my opposition to the approval requested by Mike Jolly, on behalf of EKN Development, to amend The General Plan, as well as the Mixed Use Land Use Classification and the Implementing Zoning Ordinance to increase building height from 45 feet to 75 feet in the Downtown area.

A building's height and mass absolutely defines its relationship to the buildings around it and the identity of a city. As a downtown Petaluma resident, I am fully opposed to any zoning overlay amending Petaluma's General Plan that would allow for increased building height in downtown. The existing building height limit is critical in preserving the consistency of Petaluma's streetscape and the physical interface between modern buildings and our unique, historic structures which define Petaluma.

As the former Chief of Staff to three Mayors of the City of Sacramento, I can say with experience that General Plan amendments, especially in historic neighborhoods, for a specific development project create further developer demands and legal problems for the city. Once the height standard is amended, our downtown's look and feel will be inexorably changed and we will have traded Petaluma's historic and very livable identity to become some other city.

Sincerely,

Charles "Chuck" Dalldorf
[REDACTED]

Urban Chat Recommendations on Proposed Downtown Overlay

Submitted for November 14, 2023 Petaluma Planning Commission/HCPC Hearing

Summary

Urban Chat supports the Downtown Overlay as currently proposed and encourages a positive recommendation by the Planning Commission and Historical and Cultural Preservation Committee.

However, Urban Chat has comments and concerns about how the Overlay was presented to the public. Also, we have recommendations for subsequent, post-approval steps that are integral to our support. Both are further explained below.

Alignment of Petaluma Urban Chat with Downtown Overlay

The Urban Chat support of the Downtown Overlay flows largely from the alignment between the Urban Chat mission statement and the Overlay. The four pillars of the mission statement demonstrate this alignment:

- Adequate Housing - The Overlay is intended to provide a possible path toward new housing.
- Reduced Car-Dependency - The downtown location of the Overlay would create more homes and offices that can be accessed without cars or with reduced car travel.
- Sustainable Municipal Finances – The buildings incentivized by the Overlay would have a high ratio of private investment to public infrastructure, which is a principal path to improved city finances.
- Climate Action - Both multi-story buildings and reduced car travel are among the principal options for climate action.

Despite this alignment, Urban Chat members, during their participation in the public process to-date, have suggested improvements to the Downtown Overlay and process and continue to believe that the Overlay could be more effective. These suggestions are further delineated later.

Background Comments

Relationship of Downtown Overlay and Proposed Appellation Petaluma Hotel: We understand that the hotel applicant has no interest in the Overlay beyond its impact on the hotel site. Instead, the hotel applicant became the Overlay applicant and agreed to pay for the consultant

Petaluma Urban Chat Recommendations on Proposed Downtown Overlay (cont'd)
Submitted for November 14, 2023 Petaluma Planning Commission/HCPC Hearing

studies and staff time needed to process the Overlay application only after being advised that the hotel couldn't proceed without the Overlay. Thus, we understand that the hotel applicant became the Overlay applicant only to preserve their investment in the hotel entitlement process.

Furthermore, we understand that the Overlay can be largely justified under the current General Plan, although a few minor amendments are still required, and presumably wasn't proposed at an earlier date only because of the lack of resources which the hotel applicant has now provided.

Remaining Flexible: There will always be unknowns about how new zoning standards will work in practice. Over time, as Petaluma adjusts to a climate-change world and as applicants devise new ways to work with the Downtown Overlay, it is certain that the impact of the Overlay will differ from what might be expected today. It will be essential to monitor what happens under the Overlay and to adjust as needed.

Separation of Overlay and Hotel: We understand that the Downtown Overlay must be approved before the hotel process can proceed and that, except for the EIR, the only topic of the November 14 Planning Commission/HCPC hearing is the Overlay. Thus, these comments pertain only to the Overlay and not to the hotel.

Comments on the Process

1) We understand that approximately six months passed between when Planning advised the hotel applicant of the need for the Downtown Overlay and when the public was alerted to this significant proposed zoning change. We appreciate that these six months allowed the Overlay configuration to be presented to the public closer to a final form. However, those six months also created an aura of secrecy and collusion that was not conducive to effective public involvement. In the future, we encourage a more open process.

2) While Planning has acknowledged that the hotel applicant became the Downtown Overlay applicant only to protect their hotel entitlement investment, the public communication of this point hasn't been expressed in sufficiently clear language or frequently enough to allay community concerns about the relationship between the two processes. These concerns interfered with the broader community dialogue about how the Overlay might encourage the

Petaluma Urban Chat Recommendations on Proposed Downtown Overlay (cont'd)
Submitted for November 14, 2023 Petaluma Planning Commission/HCPC Hearing

development of vacant parcels, help address the housing shortage, positively impact City coffers with tax revenue that can be applied to public projects, etc.

3) Planning could have been clearer in the explanation that the Downtown Overlay could have been largely justified under the current General Plan. Not having this point generally understood by the public created a sense of misunderstanding and mistrust that was unhelpful to the public process.

4) Even as Urban Chat accepted the task of organizing the first public forum on the proposed Downtown Overlay, we argued that multiple forums should proceed under multiple organizers, with the additional information sharing improving the public process. We still believe that additional forums would have been helpful, although we admit the possibility that we're placing too much hope in the public process.

5) Based on a development feasibility study prepared for the General Plan update and cited in the staff report for this item, it's apparent that little downtown development will be feasible in the foreseeable future regardless of whether the Downtown Overlay is adopted. Further supporting this expectation is that the Central Petaluma Specific Plan, which was adopted in 2003 and adjoins but does not overlap the Overlay area, allows six-story buildings but none have broken ground after 20 years.

Sharing this information effectively would have allayed fears that the Overlay adoption would rapidly result in multiple new building projects and a runaway transformation of downtown. Instead, it would have made it clear that the Overlay is intended to facilitate a long time evolution of downtown over the coming decades, as should be the role of planning.

Possible Post-Adoption Adjustments

1) We concur that the setbacks proposed for the Downtown Overlay are generally desirable for aesthetic and shadowing reasons. However, we also understand that they can complicate the structural engineering of a building, increasing the cost per square foot. As one of the goals of the Overlay is to facilitate affordable downtown housing, we suggest that Planning coordinate with structural engineers regarding the cost impacts of the setback requirements and adjust the Overlay if appropriate.

Petaluma Urban Chat Recommendations on Proposed Downtown Overlay (cont'd)
Submitted for November 14, 2023 Petaluma Planning Commission/HPCPC Hearing

2) We support the “economic benefit” provisions that would be linked to conditional use approval of buildings above 60 feet. However, there is a nationwide history of applicants technically complying with provisions like these without providing the intended public benefits. We suggest reviewing the history of these provisions in other communities and adjusting the Overlay as appropriate.

3) While not solely related to the Downtown Overlay, we note that the proposed hotel was first presented to the Planning Commission in about 2008. Given the need for housing and other possible community-serving land uses, we propose a renewed assessment of how development reviews can proceed more expeditiously.

4) Too many downtown sites remain vacant. The Downtown Overlay could be a step toward the needed correction. Consistent with the goal of adding housing and other community needs to the downtown, we suggest consideration of a vacancy tax.

Urban Chat Members Who Participated in these Recommendations

Dan Lyke

Katherine Gregor

Sharon Kirk

Nathan Spindel

Sean Payne

Kris Rebillot

Teddy Herzog

Dave Alden

Barry Bussewitz

Isaiah Chass

Urban Chat is an organization of local residents which connects with more than 500 people and has been advocating for the betterment of Petaluma since its founding nearly 12 years ago.

Fw: IS/MND - Petaluma Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel

Petaluma Planning petalumaplanning@cityofpetaluma.org

Mon 11/13/2023 9 26 AM

To: Orozco, Uriel <uorozco@cityofpetaluma.org>; Isabel Castellano <icastellano@cityofpetaluma.org>

Planning Division

City of Petaluma | Community Development
petalumaplanning@cityofpetaluma.org



Would you like to apply for a Planning permit? Click [HERE](#) and check out our new online permitting system

From: [REDACTED]

Sent: Sunday, November 12, 2023 3 37 PM

To: Petaluma Planning petalumaplanning@cityofpetaluma.org ; City Council citycouncil@cityofpetaluma.org

Cc: rwhisman@yahoo.com rwhisman@yahoo.com ; heidibauer2000@gmail.com heidibauer2000@gmail.com ; kvkarch@gmail.com kvkarch@gmail.com ; bmhooper1@gmail.com bmhooper1@gmail.com ; darrenracusen@gmail.com darrenracusen@gmail.com ; rogermcerlane@mac.com rogermcerlane@mac.com ; Janice Cader Thompson jcaderthompson@cityofpetaluma.org ; Greg Powell GPOWELL@cityofpetaluma.org ; Andrew Trippel atrippel@cityofpetaluma.org ; editor@arguscourier.com editor@arguscourier.com ; don frances@arguscourier.com don frances@arguscourier.com

Subject: Re: IS/MND Petaluma Downtown Housing & Economic Opportunity Overlay and EKN Appella on Hotel

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12 November 2023

Re: IS/MND - Petaluma Downtown Housing & Economic Opportunity Overlay and EKN Appella on Hotel

Dear MEMBERS OF THE CITY OF PETALUMA PLANNING COMMISSION and HISTORIC & CULTURAL PRESERVATION COMMITTEE,

I am writing to urge that you deny the proposed Petaluma Downtown Housing & Economic Opportunity Overlay as well as the application in its current form for the EKN Hotel.

As the current process for approval intertwines – confusingly in my estimation – the General Plan amendment and the hotel proposal, my comments in some cases will apply to each consideration

THE NEED FOR A COMPREHENSIVE ENVIRONMENTAL IMPACT REPORT
(Overlay and Hotel)

Under the California Environmental Quality Act (CEQA), an EIR must be prepared whenever there is substantial evidence, in light of the whole record, that a project may have a significant effect on the environment.

Clearly, the increase in occupancy and use of the downtown area, the construction impacts, and the usage changes will have a significant effect on the environment.

In the draft proposal to declare negative impact, it is noted **WHEREAS**, pursuant to CEQA Guidelines Sec on 15063(a) (4), in evaluating the potential environmental effects of the project within the Initial Study, the City erred from the program Environmental Impact Report (EIR) for the City of Petaluma General Plan 2025, certified on April 7, 2008 (General Plan EIR) through adoption of Resolution No. 2008-058 N.C.S.;

That 2008 plan indicated: *...despite incorporation of measures and polices to mitigate impacts of build out under the General Plan the General Plan EIR identified significant and unavoidable impacts related to traffic, noise, air quality, and greenhouse gas emissions; yet the City adopted a statement of overriding considerations, which balanced the merits of approving the plan despite the significant environmental effects;*

As the introduction to the recent housing element adapted earlier this year stated, much has changed since the 2025 General Plan was adopted in 2008.

That same consideration should be applied to the current discussion of the overlay. Much *has* changed, and I do not see how the City can claim to have effectively considered new levels of negative effects – let alone know how to mitigate them - without a CEQA-required Environmental Impact Report.

TRAFFIC
(Overlay and hotel specific)

I have been unable to find a traffic study as called for with this project

The current plan for the EKN hotel indicates 93 rooms and 58 parking spaces. The municipal parking assessment district appears to exempt structures within the district from providing off-street parking. It is high me to reconsider that exemption not only in light of the hotel but also the increase in business and residential population.

Does anyone reasonably expect that 40% of the hotel rooms will be occupied by people who have come here by other than automobile?

Current arrival alternatives include bus, SMART train and taxi. Oh yes, bike. (That will certainly be an oft-chosen op on!)

I expect the most reasonable means, given the expanse of the system, would be bus. This means Golden Gate transit or possibly an airport bus connection.

Have you ever traveled by Golden Gate Transit with luggage? The overhead racks on most of the buses are so narrow even a small backpack will not fit. Suitcases end up taking up seat space or even aisle space, which really becomes unacceptable.

And tourists who arrive from outside the area will have to negotiate multiple modes and changes in services because Golden Gate Transit and SMART do not service the major airports and train stations in the Bay Area.

How will traffic be affected by service vehicles? Where is the loading dock for this? And what will it be like when trucks need to back into such a delivery area?

How many cars will be able to queue waiting for valet service? Will they back into the ONE lane of traffic on Petaluma Blvd?

And for those who come to dine specifically at the hotel, many will be local people, so auto is probably the most used form. Popular mes are already difficult for parking. How will that be affected by the addition of an additional load for hotel guests and diners?

How will the increase in congestion and parking from the hotel affect the desire for people to go downtown to shop or dine? Will it create aggravation and an actual drop in customer visits to other businesses, and contribute to a decline rather than increase in economic activity?

NOISE AND LIGHT

How far will the sound travel from the rooftop lounge? Indicating that there will be limits on the hours does nothing to afford nearby residents the opportunity to enjoy their own outdoors areas without being bombarded by the playlist dictated by the hotel.

Councilmember John Shribbs made a reasonable recommendation to illustrate the need to portray the noise and lighting generated by the top floor bar/event space. Unfortunately, the council failed to make any provisions for representing the height, light and noise effects upon the surrounding community.

One councilmember referred to the story poles for the Water Street Tub fiasco, and noted how well *that* worked out. It is reasonable to extrapolate that the council voted against any representation as it felt such an undertaking would help solidify public dissatisfaction with the project.

NEW HEIGHT STANDARDS (Overlay)

I understand from City records that an overlay is being proposed specifically because it allows the hotel in its currently proposed form to exist.

The Economic Impacts Assessment notes that the hotel would be a concrete and steel structure given the height of the building and the additional engineering and structural support required at that height.

Yet the report notes that other structures, especially residential structures, would most likely opt to build out a 45 feet or less as the cost to go higher becomes prohibitive due to structural standards. The increase in cost would make it less likely that a developer would be able to realize a recoupment on the investment of a building over 45 feet.

Since the current height support buildings up to 45 feet, why change such a large area in the downtown just to accommodate the hotel?

There clearly are aesthetic reasons to avoid such new heights adjacent to or within the historical district of the town, and many of the public's comments emphasize that concern.

The General Plan 2025 states: *Maintain the historic-era integrity within the Oak Hill-Brewster and "A" Street Historic districts as adopted local historic districts.*

This hotel design certainly does not integrate with the historical "look" of downtown.

As for setbacks, the older buildings don't have them, and I think that issue could be handled on a per-project basis.

Again, the new parameters in the proposed overlay and hotel definitely have an environmental impact, and need a thorough review as only offered by a comprehensive EIR.

SUMMARY

Environmental Impact Reports have often been used as a cudgel by people opposing a project. Members of the current City Council have been supporters of such reviews when they have resisted projects such as the Ranier Connector, Deer Creek shopping Center, Dutra Asphalt Plant, and the Factory outlet and Target shopping centers.

And those same councilmembers have often vociferously railed against the traffic impacts of those projects. (Most recently in opposing the Davidian development on D Street and Windsor.)

So it is rather disingenuous that suddenly these same people decry any a empt to request an EIR for this hotel and overlay project.

I am not against new projects on the downtown area. And I would welcome a comprehensive plan that envisions how such development can work within the current desire by so many Petaluma residents to not bastardize the feeling that is Petaluma.

A robust EIR is a necessary tool in the process of crafting such a forward-looking plan.

Rejec ng the EKN hotel proposal and overlay, ini a ng a new EIR in concert with the new General Plan, and taking the me needed for the community to become involved in the process could do wonders for a city-wide sa sfac on of the projects that unfold in the future.

Sincerely,

Peter deKramer



LUBIN OLSON & NIEWIADOMSKI LLP

THE TRANSAMERICA PYRAMID

600 MONTGOMERY STREET, 14TH FLOOR SAN FRANCISCO, CALIFORNIA 94111

TEL 415 981 0550 FAX 415 981 4343 WEB lubinolson.com

November 13, 2023

CHARLES R. OLSON


VIA ELECTRONIC MAIL


Krystle Rizzi, Principal Planner
City of Petaluma Planning Division
11 English Street
Petaluma, CA 94952

Re: **Downtown Housing & Economic Opportunity Overlay (“Overlay”) and EKN Appellation Hotel (the “Hotel”) Draft Initial Study/Mitigated Negative Declaration (“IS/MND”)**
SCH #2023100359, City of Petaluma (the “City”)
Applicant: Mike Jolly, on behalf of EKN Development
City Record Numbers: PLGP-2023-0001, PLZA-2023-0002 & PLSR-2022-0017

Dear Ms. Rizzi:

Our firm represents Petaluma Historic Advocates, a coalition of architects, real estate professionals, historic preservation experts, local property and business owners, and concerned citizens. Petaluma Historic Advocates submits the following comments on the above-referenced IS/MND to inform the City, as the Lead Agency, of the IS/MND’s failure to fully and adequately analyze environmental impacts for the Overlay and the Hotel under the California Environmental Quality Act (“CEQA”). As outlined in further detail below, the City must address these shortcomings by preparing a programmatic-level environmental impact report (“EIR”) of the Overlay, and then a project-specific EIR for the Hotel.

First and foremost, the City’s overall approach to the IS/MND violates CEQA because it fails to analyze any potential environmental impacts of the Overlay, and defers such analysis to future discretionary reviews. In each impact analysis section of the IS/MND, a statement is included that the Overlay “will not in and of itself result in physical development” (see, e.g., IS/MND, pp. 29, 37, 42, 47, 53), then states that CEQA analysis will occur when future discretionary projects are proposed in the Overlay. This is incorrect. The IS/MND is required to evaluate the “whole of the action” and must take into account *both* direct changes and reasonably foreseeable indirect changes to the environment. (Public Resources Code (“PRC”) §21065; 14 Cal. Code Regs. (“CEQA Guidelines”) §15378(a); see IS/MND, p. 27 (“... 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.”.) The statements in the IS/MND only mislead the public as to the reality of the potential impacts from the Overlay and subvert full consideration of the actual environmental impacts which would result. There are no extensive, detailed evaluations of the full development allowed under the Overlay on the environment in its current state.

Accordingly, an EIR must be prepared to evaluate the environmental impacts of the proposed Overlay on both the existing physical environment and the environment envisioned by any adopted plan. (See CEQA Guidelines §15125(e).) Implementation of the Overlay consists of the following changes to three areas located in the Downtown Subarea of the General Plan, which includes the City’s Historic Commercial District, through a combination of amendments to the City’s Zoning Map Amendments, Zoning Ordinance, and General Plan: (1) increasing allowable building heights from 45’ to 75’ with a conditional use permit, (2) changing lot coverage from 80% to 100%, (3) allowing ground floor residential, (4) increasing the maximum FAR from 2.5 to 6.0, and (5) establishing development and design controls. (IS/MND, p. 2.) Within the Overlay Areas, floor area ratios in Area A range from 0.00 to 0.73, Area B from 0.20 to 0.30, and Area C from 0.00 to 0.98. (IS/MND, p. 12.) The proposed maximum FAR is 6.0, which is more than *eighteen* times existing conditions when averaging the floor area ratios of the three Overlay Areas. A denser, commercial core, with more housing units, retail, office and the Hotel, necessarily brings more people, traffic and noise, to the area. This presents substantial evidence that supports a fair argument that the Overlay may have a significant effect on the environment, which requires preparation of an EIR.

As the Hotel cannot be approved unless the Overlay is adopted, it is evident that the “tail is wagging the dog” and that the IS/MND’s deficient analysis and the rushed entitlement process is all for EKN Development, not the City’s constituents. The City’s poor planning and reticence to engage in necessary public outreach becomes even clearer when certain supporting reports analyzing the need for the Overlay, which presumably the IS/MND incorporates as part of its analysis, were only published on November 9, 2023. This is just five days prior to a joint Planning Commission and Historic & Cultural Preservation Committee hearing which would recommend the Overlay and IS/MND to the City Council for adoption. The timing of the Strategic Economics Memorandum analyzing the Overlay is especially suspect: even though the IS/MND was made available for review on October 13, 2023, how is it possible that the memorandum rationalizing the Overlay’s development is only available now? The City clearly needs to spend more time and care in analyzing the Overlay’s need, which should have been handled through an amendment to the relevant specific plan or in the General Plan update that is currently underway. Instead, in an attempt to satisfy EKN Development’s objectives, the City prepared an inadequate environmental document and supporting exhibits that completely fail to fulfill its informational requirements under CEQA. (See *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903 (rejecting a mitigated negative declaration based on testimony that the project’s inconsistency with adopted development standards would have a significant aesthetic impact and noting its findings are devoid of reasoning and evidence).)

I. The City Cannot Adopt the MND When Future Applicants in the Overlay Have Not Agreed to the Stated Mitigation Measures.

As a preliminary procedural matter, the IS/MND underestimates potentially significant environmental impacts of the Overlay by assuming that future applicants who propose projects within the Overlay area can agree to be bound by the proposed mitigation measures. However, such mitigation measures must be agreed to by the applicant prior to any adoption of the MND. (See PRC §21064.5 (providing that MNDs may be used “when the initial study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals *made by, or agreed to by, the applicant* before the 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 on the environment would occur, and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment.”) (Emphasis added).)

Here, the *sole* applicant who has an active interest in the approval of the Overlay (which must be approved prior to the Hotel’s approval) is EKN Development. EKN Development is listed as the only applicant for the IS/MND, and for each of the public hearing notices. EKN Development cannot agree on behalf of future project applicants to the mitigation measures imposed for the Overlay; the appropriate legal approach to such issues would be to assume that a potentially significant impact will result and to prepare an EIR. Furthermore, by making short shrift of the three mitigation measures imposed for the Overlay (all of which are prospective, deferred mitigation which is not allowed under CEQA), it makes the City’s underlying goal even clearer: the entire process of developing the Overlay is for the sole benefit of one developer.

II. The IS/MND Fails to Fully Analyze Environmental Impacts of the Overlay.

The IS/MND should analyze the maximum potential environmental impacts that could occur at full buildout of the three Overlay Areas compared to existing conditions. (See *Environmental Planning & Information Council v. County of El Dorado* (1982) 131 Cal.App.3d 350.) The City artificially downplays the potential level of environmental impacts by erroneously evaluating “reasonably foreseeable future development” in the Overlay (see, e.g., IS/MND, p.30), and ignores the fact that approving the Overlay embodies a decision to encourage the full complement of development contemplated by the Overlay. There are multiple examples of this erroneous approach throughout the IS/MND that need to be corrected, such as in the discussion of Aesthetics (IS/MND, p. 30), Air Quality (IS/MND, p. 36), and Hazards/Hazardous Materials (IS/MND, p. 68).

III. Approval of the Overlay Is Impermissible Spot Zoning.

Implementation of Overlay Area A is a clear example of impermissible spot zoning. After EKN Development proposed a Hotel that did not fit into the existing site’s maximum building height, lot coverage and floor area ratios (“FAR”) allowed by the City’s General Plan and Implementing Zoning Ordinance (“IZO”), the City first evaluated EKN Development’s ability to obtain a variance. City staff determined that granting a variance would be inconsistent with the

stated purposes of a variance, that no evidence exists to suggest that there are extraordinary situations or conditions that apply to the Hotel site, and that granting a variance would constitute a special privilege. (Frequently Asked Questions, p. 5.) As such, the City decided to shoehorn all of the modifications to the City's current development standards necessary to develop the Hotel into the Overlay. Although the City recognized that granting a variance would provide EKN Development a special privilege, adopting the Overlay would grant EKN Development exactly the same special privilege and is no more valid under the State's land use and planning law.

While spot zoning can be allowed in certain circumstances, spot zoning cannot be justified if there are no facts demonstrating that a substantial public need exists. (*Foothill Communities Coalition v. County of Orange* (2014) 222 Cal.App.4th 1302, 1314.) The IS/MND offers only a token effort to describe the purpose of the Overlay and why the changes recommended for the Overlay serves a substantial public need beyond what the City's General Plan already provides. Only the Hotel's economic impact study was provided at the same time of the IS/MND's availability. The subsequent Strategic Economics Memorandum for the Overlay and the Hotel, provided four days prior to the close of the public comment period on the IS/MND, still primarily focuses on the Hotel's economic benefits to the area. It provides scant information that would support the location of the Overlay Areas (especially for Areas B or C), and does not explain why those areas are particularly suited for housing or would provide greater economic potential to the historic downtown.

Accordingly, the City's process of developing the Overlay violates good zoning practice, comprehensive zoning planning when an update to the General Plan is already in process, and remains unreasonable, arbitrary and discriminatory with respect to owners of property similarly situated in the downtown area.

IV. The IS/MND's Evaluation of Environmental Impacts Is Inadequate.

Below are Historic Petaluma Advocates' specific comments, by section, to the Draft IS/MND.

A. Aesthetics

As previously stated, the IS/MND incorrectly evaluates only "reasonably foreseeable development" (IS/MND, p. 30) of the Overlay. Instead, the IS/MND should analyze the environmental impacts of the maximum development envelope in the Overlay Areas compared to existing conditions. Implementation of the Overlay will increase allowable building heights from 45' to 75' with a conditional use permit, change lot coverage from 80% to 100%, allow ground floor residential, and increase the maximum FAR from 2.5 to 6.0. (IS/MND, p. 2.) The cumulative impacts of additional height, lot coverage and FAR on all three of the Overlay Areas must be evaluated given the potential that future development may cause an adverse effect on scenic vistas. (*See Citizens For Responsible & Open Gov't v. City of Grand Terrace* (2008) 160 Cal.App.4th 1323 (an EIR may be required when neighbors express concerns that project density and height may substantially change aesthetic conditions and neighborhood character for the public in general).) Residential and mixed-use projects could also be proposed using State Housing Density

Bonus law and the Housing Accountability Act (of which the City will have minimal discretion to deny) that further exceed the Overlay’s maximum development standards for height, bulk and density. Such potential projects, completely out of scale with the surrounding one to three story buildings, could result in significant aesthetic impacts.

In the IS/MND’s analysis of the Hotel’s impacts on aesthetics, the IS/MND explains that the Hotel is governed by Historic Commercial District Design Guidelines and Secretary of the Interior’s Standards. Infill buildings in the Historic District should “harmoniously coexist with the historic character.” The Hotel stands at the pivot point that is the southern “entrance” to the historic downtown. Its height and bulk are not harmonious with the neighborhood—it is completely out of scale with its neighbors. The IS/MND fails to discuss this potential impact in any detail.

In addition, the view shed angles provided on sheet 2.6 of the Site Plan and Architectural (“SPAR”) drawings do not provide a realistic depiction on how the Hotel will impact downtown scenic vistas. Angles were selected to leverage locations of street trees. More view shed angles should be provided, at different times of year, in order to accurately assess the Hotel’s potential impacts on scenic resources.

B. Cultural Resources; Appendices C and F to the IS/MND

The Overlay would increase allowable building heights by at least 20 feet, and could be even taller if a project is proposed using the State’s Housing Density Bonus law. The proximity of the three Overlay Areas to the boundaries of the National Register Historic Commercial District has the potential for an adverse effect due to the risk of visually “walling off” sections of three- and four-story historic buildings with six-story, 75-foot structures in the Overlay Areas. The maximum development envelope of potential buildings, which should assume the full height and bulk permitted in the Overlay, should be analyzed for its potential impacts on historic resources, especially on the Historic Commercial District.

The Hotel is evaluated for compliance with the Secretary of the Interior’s Standards, of which Standard No. 9 states, “The new work shall be differentiated from the old and shall be *compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.*” (Emphasis added.) (See IS/MND, p.31.) The design of the Hotel does not meet this standard as the building as-designed is over-scaled given its pivotal location serving as the southern gateway to the historic downtown. The Hotel’s height, massing, size and scale are not compatible with the surrounding environment as its uniform blocky mass is a jarring juxtaposition against the proportions of the average height, width and character of the neighboring buildings. This is a potentially significant cultural resources impact that cannot be glossed over. (See, e.g., *Georgetown Pres. Soc’y v. County of El Dorado* (2018) 25 Cal.App.5th 358 (public comments established fair argument of aesthetic impacts in a historic district where comments focused on size and appearance of project compared to other district buildings; court rejected argument that future design review would serve as a substitute for CEQA review); *Protect Niles v. City of Fremont* (2018) 25 Cal.App.5th 1129 (based on context of a designated historic overlay district, objections by members of historic resources board grounded in inconsistencies

with prevailing building heights and architectural styles constituted substantial evidence supporting a fair argument of a significant effect on aesthetic resources).)

In addition, the Historic Compliance Review inaccurately refers to the Hotel as a five-story building, when it is a six-story building (see SPAR-1.7) inclusive of a rooftop event space. In Section 7.0, Guidelines for New Construction, the Historic Compliance Review discusses how the Hotel's appearance will look new and contrast with its immediate neighbors primarily through building height. (Historic Compliance Review, p. 5.) These statements are incompatible with the Petaluma Historic Commercial District Design Guidelines which requires new buildings to be sensitive to the character of its neighbors without mimicking them. The Hotel drawings demonstrate only a cursory attempt to relate to the historic character of the district, through minor revisions to the fenestration pattern, along with the addition of decorative iron railings, neither of which have been formally approved. The Historic Compliance Review also states that the Hotel gains its architectural interest from its materials, finishes, and decorative treatments (*Id.*); however, the materials are simplistic and the façade treatment could include bolder articulation of planar depths to create more rhythm and visual interest. While the Design Guidelines state the colors chosen for the face of an infill building shall compliment the colors of the neighboring buildings, the description of the Hotel is described as a "visual counterpoint" to the more vividly colored buildings, which would suggest the neutral colors do not meet this standard. (*Id.* At 7.) The City should request that EKN Development re-examine its Hotel design in light of the above comments.

C. Geology and Soils; Appendices G and H of the IS/MND

The Overlay analysis of geology and soils impact related to seismic-related ground failure, including liquefaction, as well as subsections c) and d) of Geology and Soils, dismiss any concerns because future development would be required to comply with applicable building code and General Plan policies. This misses the point entirely. The significance threshold poses the question whether the Project would expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving any of the specified seismic or soils events. This analysis needs to be expanded to assess the risk of bringing more people to the Overlay Areas. (*See California Building Industry Association v. Bay Area Quality Management District* (2015) 62 Cal.4th 369 (explaining that CEQA Guidelines §15126.2(a) indicates that CEQA requires an agency to evaluate environmental conditions and hazards existing on a proposed project site if such conditions and hazards may cause substantial adverse impacts to future residents or users of the project).) This section merely provides a conclusory statement without any analysis or substantial evidence whatsoever.

D. Hydrology; Appendix J to the IS/MND

The discussion of the Hotel's impacts on water quality standards includes information on the Preliminary Stormwater Control Plan, and concludes that as proposed and conditioned, the Hotel's potential to violate water quality or waste discharge standards throughout operation of the Hotel is less than significant. (IS/MND, p. 77.) The Final Stormwater Control Plan for the Hotel will need to ensure that all basement water is separately pre-treated due to potential for groundwater contamination from previous Leaking Underground Storage Tanks located on the

Hotel site, as well as from any hazardous materials or contaminants leached from parked cars, and ensure that such water is not plumbed directly to the sanitary line.

E. Land Use and Planning

As stated above in Section III, the City has created a convenient mechanism by which EKN Development is able to skirt compliance with the existing General Plan and Zoning Ordinances, and rely on the Overlay which currently serves no other purpose but to permit the development of the Hotel.

Without the Overlay, the Hotel is out of compliance with existing General Plan policies. As recommended by many members of the public and in the Historic Cultural Resource Report dated September 22, 2023, and revised November 7, 2023, rather than adopting a freestanding overlay area, the Overlay Area should be analyzed as part of an amendment to the Central Petaluma Specific Plan or as part of the pending General Plan update.

F. Noise

The IS/MND incorrectly evaluates the increase in noise from potential future development in the Overlay Areas to noise levels at General Plan build-out, as opposed to existing conditions. (IS/MND, p. 83-85.) For instance, the IS/MND concludes that the Overlay's construction noise impacts will be less than significant with mitigation. (IS/MND, p. 84.) However, OVL NOI-1 improperly defers mitigation by providing vague requirements and suggesting that site-specific recommendations will be developed in the future. The deferment of the analysis of construction noise and vibration, and failure to include specific mitigation measures, means that the IS/MND fails as an informational and disclosure document in violation of CEQA. (*See Citizens for Responsible & Open Gov't v. City of Grand Terrace* (2008) 160 Cal.App.4th 1323, 1341 (rejecting mitigated negative declaration for senior housing project based on evidence of significant noise impacts and noting there is no evidence of any measures that would ensure that noise standards would be effectively monitored and enforced).) Without concrete and required mitigation, this measure cannot be relied upon to conclude that the Overlay will have less than significant construction noise impacts.

Airborne noise patterns in Petaluma can be significant and need to be factored into the impact discussion, especially with prevailing winds. Sounds from the Fairgrounds (1.3 miles from the proposed Hotel site) can be heard throughout the City. Cumulative impact of noise from planned developments in and around the Overlay Areas must be addressed, including the impact of amplified music from an active open-air rooftop bar/event space with nothing but a glass railing to attenuate the sound, and within 0.25 mile of nearby residential neighborhoods.

G. Population and Housing

The IS/MND states that the Overlay "will not result in direct physical development but will allow future development proposals to increase lot coverage, FAR, and height relative to what is currently allowed by the General Plan and Implementing Zoning Ordinance and will also allow

development of exclusively residential uses.” (IS/MND, p.88.) The analysis provides no information as to an increase in the number of residential units that could be developed in the Overlay Areas, and the potential estimated increase in the number of residents. In addition, it is likely that future residential developments will take advantage of the State Housing Density Bonus law and Housing Accountability Act, both of which combined provides very little discretion to the City to deny such projects.¹ Denser development and its potential impact on population and housing must be analyzed.

H. Public Services

The IS/MND contains absolutely no information on the expected cumulative effect on response time and emergency facilities necessary given the reasonably foreseeable development of new dwelling units within the Overlay Areas and pipeline projects immediately adjacent to Downtown. New residents in the area will likely increase the demand for police and fire services. The analysis provides no substantial evidence to support the conclusions that these impacts would be less than significant.

I. Transportation; Appendix L of the IS/MND

The IS/MND concludes that the Overlay will have a less than significant transportation impact because it is overall consistent with General Plan policies, but cites just one of the General Plan policies that supports transit-oriented development, and then defers the remaining analysis to future discretionary review for proposed projects in the Overlay Areas. (IS/MND, p. 93.) This is not substantial evidence to support its conclusion. The analysis completely ignores the practical implications and potential increase in visitors and population that would result from future development in the Overlay Areas.

Furthermore, the transportation analysis for the Hotel relies on data and assumptions contained in the Traffic Impact Study at Appendix L of the IS/MND; however, this information may no longer be relevant to post-COVID-19 pandemic conditions. Data from three boulevard intersections is from August 2019; data for the D Street intersection is from October 2021 (in the middle of the COVID-19 pandemic). Although the 2019 intersection turning movement volumes were factored up by two percent to represent 2023 conditions (Traffic Impact Study, p. 9), the Traffic Impact Study does not appear to apply that same factor to address the 2021 data. As more and more workers return to the office, or have different commuting and travel behavior since the COVID-19 pandemic, the analysis should be re-done to reflect more current 2023 data. In addition, the study assumes that restaurant patrons will mainly be hotel guests, which lowers the number of daily trips. (Traffic Impact Study, p. 12 and 14.) Given the media coverage and prominence of celebrity chef Charlie Palmer, who will head the Hotel’s restaurant, it is a more

¹ Although the Strategic Economics Memorandum for the Overlay suggests that a taller and denser residential project in the Overlay Areas may not currently be financially feasible, the assumptions ignore the possibility of a 100% affordable product, and a potential developer’s ability to leverage state funds, housing tax credits, or other subsidies to finance a project.

likely scenario that visitors from both the City and outside of the City will travel by car, and that the internal capture trips is overstated.

In the transportation impact's discussion for the Hotel, the IS/MND fails to evaluate potential loading impacts. Service and delivery vehicles for the Hotel (which includes a restaurant and event spaces), will likely need to park or double-park on B Street, at the BOH entry corridor. If the basement garage level loading zone has too low of a clearance, box trucks or transit delivery vans will need to deliver goods at the street level, causing ripple effects on traffic and potentially causing traffic congestion along B Street. This is a potentially significant impact that must be analyzed.

In addition, the IS/MND completely ignores the potential cumulative effect on transportation and potential congestion from the approved and/or pipeline projects listed in Section IV.K below, which the IS/MND does not even mention by name. The development of all of these projects, between 0.25 and 0.50 miles of the Hotel, will put pressure on the downtown traffic intersections. This potentially significant impact must be discussed.

J. Utilities and Service Systems

The IS/MND appears to contradict itself when discussing potential residential development. In its discussion of utilities impacts, it indicates “the permitted residential density will not increase as a result of the proposed Overlay and as such, a substantial increase in population beyond what has already been considered in the General Plan and associated General Plan EIR is not anticipated.” (IS/MND, p. 97.) However, the IS/MND previously identifies that two sites located within Area C of the proposed Overlay are identified as opportunity sites in the City's 6th Cycle Housing Element. (IS/MND, p. 87.) The Overlay will also permit ground floor residential uses. (IS/MND, p. 2.) Accordingly, it is unclear where the environmental impacts of this potential residential development have been evaluated. In addition, the comparison of environmental impacts is inappropriately to the existing General Plan, not existing conditions. (See CEQA Guidelines §15125(e).) With the passage of new housing-oriented State legislation that will streamline the development of multi-family residential units coming into effect on January 1, 2024, and the strengthening of the Housing Accountability Act, it is likely that denser residential developments will be proposed in these Overlay Areas that would impact the City's existing utilities and service systems, and this potential development must be analyzed.

K. Mandatory Findings of Significance

The IS/MND does not include any of the following projects, which have recently been approved or are in the City's pipeline, as part of its cumulative impact analysis: (1) 182 residential dwelling units, approximately 24,855 square feet of ground floor commercial use, 10,470 square feet of tenant amenity area, ancillary utility spaces, and public and private open space areas at Haystack Pacifica, which was approved by the Planning Commission on May 28, 2019, and (2) 132 new condominium units at Oyster Cove, which is included as a pipeline project in the City's Housing Element Update of May 2023. These referenced projects are all between 0.25 to 0.50 miles of the Hotel. The IS/MND then fails to analyze in any detail whether the Overlay or the

Hotel has a cumulatively considerable effect when viewed in connection with these projects. For example, it is likely that residential uses of the approved projects and the mixed-uses in the Overlay Areas will increase reliance on vehicles, and contribute to cumulative air quality impacts. A more robust cumulative analysis is necessary to understand the impacts of the Overlay and consequently the Hotel.

V. Conclusion

The Hotel cannot be approved without proper CEQA analysis of both the Overlay and the Hotel. An agency must prepare an EIR whenever substantial evidence in the record supports a fair argument that a project may have a significant effect on the environment. (*Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602; see PRC §21151 (An EIR must be prepared for any project that “may have a significant effect on the environment.”).) As stated in the multiple comment letters provided by members of the public on the IS/MND, there is substantial evidence that supports a fair argument that both the Overlay and Hotel may cause a significant impact on aesthetics, cultural resources, land use, noise and transportation, amongst the other impact categories described above. (*See Visalia Retail, LP v. City of Visalia* (2018) 20 Cal.App.5th 1, 12.)

The City cannot rely on the IS/MND to approve the Overlay and the Hotel. Two separate EIRs must be prepared to comply with CEQA: one program-level EIR for the Overlay and one project-level EIR for the Hotel.

Very truly yours,



Charles R. Olson

CRO/CJL

cc: Uriel Orozco, Planning Analyst (uorozco@cityofpetaluma.org)
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Petaluma Historic Advocates (t.lewisrest@gmail.com; lydiaasselin@gmail.com)



November 9, 2023

Via email

Re: SUPPORT for Petaluma's Downtown Housing & Economic Opportunity Overlay

Dear Chair Hooper, Councilmember Cader Thompson, Commissioners, and staff:

Generation Housing and Greenbelt Alliance write today to express our **strong support** for Petaluma's Downtown Housing & Economic Opportunity Overlay, a critical initiative that advances us towards fulfilling this vision by expanding housing and mixed-use opportunities in the core of Petaluma.

Problem: Underinvestment in Downtown Petaluma and Its Impact

In 2003, the Central Petaluma Specific Plan ("CPSP") was instituted with a promising vision for the core of our city. Covering nearly 400 acres in the geographic heart of Petaluma, adjacent to our historic downtown and the Petaluma River, the CPSP was designed to catalyze a vibrant mix of employment opportunities, diverse housing, retail, and entertainment. The idea was to create a lively urban environment where all these elements coexisted harmoniously. Unfortunately, despite the ambitious goals of the CPSP, development has been sparse and far from the integrated vision initially laid out.

Exacerbating the Issue: Detrimental Effects of Recent Commercial Development

While commercial development in Petaluma over the last two decades has mostly focused outside the downtown area, it has provided valuable lessons on the need for integrated planning. Take, for example, retail centers like Target and Deer Creek, which were initially zoned for mixed use but ultimately did not include residential components. These projects represent missed opportunities for holistic community development, both in terms of diversified consumer spending and increased tax revenue to support the downtown area.

Together, the two shopping centers encompass approximately 50 acres and were initially estimated to contribute around \$34,000 per acre to Petaluma's economy. However, the actual tax revenue generated has fallen short of expectations. For example, in 2019, Deer Creek generated only 41% of its projected revenue and was significantly less economically productive per acre compared to Theatre Square development in downtown—by a factor of 11 (see below).

Deer Creek Village				
007-038-033	\$166,819.84	24.6	\$6,781.29	
007-038-034	\$326,529.78	9.56	\$34,155.83	
Total	\$493,349.62	34.16	\$14,442.32	Dollars/acre return
Theater Square				
008-690-005	\$93,391.46	0.40	\$234,582.63	
008-690-006	\$90,424.52	0.89	\$102,149.69	
008-690-007	\$17,794.50	0.00	\$17,794.50	
Total	\$201,610.48	1.28	\$157,099.08	Dollars/acre return

This data underscores the opportunity for more effective land use and revenue generation, particularly in downtown Petaluma. It reinforces the argument for projects like the Downtown Housing & Economic Opportunity Overlay, which aim to create a more vibrant, equitable, and resilient community while maximizing economic benefits.

The Cost of Disinvestment: How Downtown Businesses and Infrastructure Are Suffering

The ongoing lack of investment in downtown Petaluma has created a cascade of challenges that are hard to ignore. Local businesses are grappling with multiple financial pressures: inflation, soaring rents, and increasing costs for materials and labor, all while facing a shortfall in low-wage workers. This is creating an unsustainable environment that puts the very fabric of our community at risk.

Compounding the problem is the city's underfunded capital projects. The 2023–2024 budget reveals a staggering \$66 million in unfunded projects spanning parks, facilities, and public works. Particularly alarming is that nearly 40% of these unfunded projects, amounting to \$26 million, are directly tied to Petaluma's downtown and its historic preservation.

Solution: Champion Downtown Investment and Direct the Returns for Community Benefit

Promoting higher density in our downtown area not only stimulates economic growth as the data above indicates, but it also broadens the consumer reach for local enterprises and boosts tax revenue, essential for financing key municipal initiatives and services. Placing homes next to businesses in transit-oriented downtown zones is not just convenient but sustainable, helping to reduce commute times and emissions. Furthermore, supporting development concentrated in downtown, transit-oriented



areas align with the city's collective commitment to preserving the agricultural lands and open spaces that the community holds dear and frequently champions.

The Downtown Housing & Economic Opportunity Overlay presents an opportunity for the city to gain tangible financial benefits that can be channeled directly into priority projects. Incremental revenues generated within the overlay area can be systematically allocated towards services and improvements that enjoy widespread support and meet critical needs. For example, the city could stipulate that from the additional property, sales, and TOT tax revenues generated by the three housing and economic opportunity districts, allocations would be apportioned as follows:

- + At least 25% set aside for deed-restricted affordable housing targeting 120% of Area Median Income (AMI) or below.
- + At least 10% dedicated to historic preservation and enhancements in the downtown area.
- + At least 10% aimed at the maintenance and improvement of parks.

In doing this, we create a sustainable and equitable funding mechanism to support various facets of community well-being.

We are grateful for the opportunity to participate in open dialogue, thoughtful engagement, and decisive action that leads us closer to realizing a more sustainable future for Petaluma.

As always, thank you for your time, consideration, and continued service to the community.

Respectfully,

Jen Klose
Executive Director, Generation Housing

CC Ciralo
Resilience Manager, Greenbelt Alliance

height, floor area ratio and increased lot coverage Initial studies and community feedback clearly indicated this year that any significant “overlay” **should be incorporated** within the **2025 General Plan** There is insufficient information for potential future commercial or residential development in these (3) subareas to adequately address **the Environmental Impact**. The “overlay” is not a “plan” but a method a “for profit” company “M Group”, purportedly acting on behalf of the City of Petaluma for their own financial gain. The company is paid for “cost recovery services” i.e. fees paid directly to them by the developer to advance acceptance of planning permission for a project. However, it appears this “overlay”, if approved, will then be incorporated into the 2025 General Plan for which the company will be reimbursed a **fee by the city** i.e. tax payers. (see page 10)

The “M” Group has now released an Initial Study/Mitigated Negative Declaration (ISMND) which essentially is written to **avoid an Environmental Impact Report (EIR)**. The nature of both the proposed “Overlay” and the “Hotel” is the most overwhelming reconstruction project in the history of downtown Petaluma, the towns history. In its proposed form, the “plan” would visually **destroy the old town center**, dwarf the Registered Historical Buildings and the “A” Street Historical District. In short, it would create a modern corridor on Petaluma Boulevard/D Street and convert Petaluma to **“Any town, U.S.A.”**

If an EIR is not required on this project, **no EIR** would be needed on any project in the entire town **now or in the future**. Interestingly, in the City Planning website there are no projects that have required an EIR-including recently completed projects, under construction, recently approved and in planning. This “overlay” will have a significant effect on the environment particularly on **Aesthetics, Air Quality, Geology, Hydrology, Parking and Transportation**. These items cannot be “mitigated” until a full study is completed on all the elements to determine the exact scope of the issues. **The public deserves** a thorough review of a plan that would impact the quality of life for local residents and degrade the historic character of Petaluma.

The Petaluma General Plan **2025** update is only in the **Policy stage**. This “overlay” isolates one town district based on its centrality and proximity to alternative transportation without considering a broader perspective and **a comprehensive plan for Petaluma**. It is imperative we identify all of these areas in the greater city prior to rezoning The new housing development adjacent to the planned second **SMART** station could be the site of so many more high density projects in the area a project highly acclaimed amongst some members of the city council.

“Planning” has approved a substantial number of projects in the last few years and a number of projects are pending. We have not yet had time to **assimilate the impact** of these **projects** such as the Burbank Housing and PEP Housing on Petaluma Blvd South, Mid Pen Affordable Housing and AG Spars on Petaluma Blvd North or **286 housing units** and Amys Kitchen **20,000 sq ft office** space on Kentucky Street. The proposed Oyster Cove development of **132 units** on 100 East D Street would also directly impact the “Overlay”.

The most significant impact is **Aesthetics**. We cannot begin to assess this until we have installed **story poles** and request the City Council approve the installation at the corner of each block, as identified Sub Areas 1, 2 & 3, impacted by the future potential development. Once these have been constructed, we can **“see”** the impact from the Washington Overpass, McNear Peninsula and Rocky Memorial Dog Park (page 10 4 1a)

The height will certainly degrade the **visual character** and **scenic quality** of the area.

There is a large open area providing clear views of Walnut Park, the 4th Street Post Office, the Petaluma Museum, McNears, the Iron Fronts, St. John’s Episcopal and St. Vincents Catholic Churches. Petaluma Boulevard South and D Street are **main arteries to the downtown area** and 75 foot structure height will be an eyesore. No amount of “mitigation” or “proper design” is going to change the height for this city block, it is still 6+ story buildings. The “Hotel” Setbacks and recesses on the higher floors can only reduce the visual impact for pedestrians across the street from a building. This will not change the view traveling along the street. Effectively this hotel is **triple the height** of adjacent neighbor **ACE Hardware**. It will not change **the impact on one and two story**

residences in the surrounding area on 5th, 6th, 7th A, B, C & D Streets and commercial buildings. It will dominate the skyline, block out the light and create tremendous shadows. It will not change the fact that as you walk down the hill from **Helen Putnam Park** down B Street you will not see the river nor the hills. The proposed hotel has a particularly prominent position at the corner of the Subarea A and only the story poles will show the impact. The **“Hotel View Shed Study”** is most **misleading** in its depiction of the site and its surroundings. The vantage points are not appropriate, indistinct and the building is posed with large adjacent trees which is factually incorrect. **Light and glare** will certainly exist with windows towering above all other structures in the vicinity.

These types of **structures cannot “harmoniously exist”** at this location. The City and consultant planners have not collaborated with current landlords to determine their needs and interests. The majority of owners within the “Overlay” do not have an interest in rezoning. Unless the City plans to eliminate property rights and take over these parcels there is no reason to implement radical and unnecessary zoning changes. The planning department has a history of **rejecting plans from local owners**, requiring extensive modifications, parking restrictions and significant costs to comply with codes particularly in the Historical District. These include, for example El Roys and 4th and Sea

I have contacted the Downtown Merchant Association, The Visitors Bureau, the City of Petaluma and the Planning Department in an attempt to obtain relevant data pertinent to establishing the **building needs in Petaluma**. None of these parties have been able to provide some **basic information** on current hotel occupancy rates, amount of TOT collected, unoccupancy rates for office, retail and residential rental units, parking needs evaluation for all occupancies, data analysis of ridership for SMART train, Sonoma and Petaluma Transit Systems.

Whilst **Section 4.1 (c)** acknowledges it **“could degrade the visual character”** and scenic quality “if not properly designed” I assert it cannot be designed at this height (floor ratio

and set back) It **will** suffer degradation. The report simply states that any future specific plans in this overlay will be subject to review. I contend the approval of this Overlay without an EIR will set the **precedent for unlimited future projects** without due consideration of all these issues.

With respect to **4.3 Air Quality**, it is impossible to determine the environmental impact without formulating an estimate of the number, type, size and occupancy of future buildings. The Initial Study for the hotel reflects the environmental effects can be mitigated. During the extensive almost 2 year Hotel construction phase the report indicates a “dust management for sensitive communities.” There is a **significant health risk to seniors** and health impaired individuals during this phase and beyond. This is an extended residential area of elderly residents subject to physical limitations including respiratory illnesses. No account has been made for the social/geographic specific area.

Greenhouse Gas Emissions are reasonably foreseeable during construction, implementation of building within the overlay and including operation of vehicles. The “**Initial Study**” indicates **assuming “existing transit”** aka SMART, Sonoma Transit, Petaluma Transit, Bicycle and Pedestrian Pathways will “**mitigate**” emissions. This is **Utopia!** Individuals may (or may not) elect to take public transportation. Businesses will require delivery of products in this “zone” and it is not available by public transportation.

Future Housing units will require individual deliveries in the 21st century for online purchases (aka Amazon) and food service delivery. A hotel will require a more significant amount of supplies to provide full services to cater to an elite wealthy clientele.

The purpose of the Report is prepared to provide specific, technical and scientifically exacting analysis, however the future of building in the “Overlay” consistently and redundantly utilizes the phrase subject to “**independent discretionary review**”. This is a term overutilized in the analysis which means “whatever, whenever, whoever” with no precise definition, meaning and subject to interpretation. This is a very dangerous precedent and subject to manipulation. There is no Air Quality Emission (AQE page 37) because there is no “physical development” and does not “generate emission” meaning: no analysis required!

4.3 (a) only addresses “economic generating” meaning revenue derived it does **not otherwise have to pass** the “smell test”. Similarly, “**employee generating**” means if you hire new employees no need to have any benchmarks **for Air Quality**. The expected “fees”, property taxes, sales tax and TOT are pie in the sky based on expected revenue with **no basis in reality**. A \$300-400 per night hotel stay (basis of hotel revenue with 65% occupancy) and restaurant/bar sales competing with a plethora of available choices by locally owned companies. These prices are unaffordable for local residents and only serve wealthy tourists. The “low income” hotel employee wages will merely **generate new “low income”** housing needs the city cannot afford and add more to proposed needed units in the 2025 General Plan Housing Element.

4.3.(b) Is the most significant AQE which **cannot be “mitigated”** by “management practices”. See comments on Greenhouse Emissions which equally apply to neighboring

area A 2 year project involving removal of **two stories of dirt below ground** is significant including dust particles, emission of diesel fumes, and odors. This will severely impact vehicular, cyclist and pedestrian traffic and impacting local businesses and residences. “Mitigation” measures are standard operating procedures for contractors that common sense would dictate and will not reduce the substantial exposure Further, it provides no third party independent evaluation of any measures taken during this phase.

4.4 Biological Resources provides a pass to the **Trees in the Public Right of Way**. It cannot address potential development in the “Overlay” since there are no current plans! However, the “hotel” proposes to eliminate existing street trees onsite and merely promises to replace with “container” trees which is not at all the same thing. There is an inherent conflict with Section “**Special Status Species/Wildlife**” since Shollenberger Park provides a unique **bird habitat** in the wetlands. Birds migrate from the sanctuary to the large trees in **downtown Petaluma** and I have witnessed the Peregrine Falcon raise its young in the 150 ft Oak trees on my property. Hawks and Eagles fly in the area. In the Golden Eagle Shopping Center trees, adjacent to the former brew pub, the **trees house nesting** families of Snowy Egrets. A significant high rise development will conflict with this wildlife activity. **Bird Collisions (d)** are a significant exposure with structures of 6 story height and essentially cannot be mitigated given the migration corridor next to the river and the wetlands.

The City of Petaluma has instituted **energy efficient standards** and the (only) specific project on the “overlay” site is the “hotel”. The excavation of two stories below grade constitutes a “wasteful, inefficient and unnecessary consumption of energy” **4.6 (a)**. It relies on gasoline and diesel powered heavy equipment to moves tons of dirt and debris off site.

Any subterranean project has a significant exposure to loss at the site itself and to the surrounding suburban area. The initial report for the “hotel” identifies **4.7** ground shaking, liquefaction, erosion and unstable geologic unit This exposure requires **significantly more analysis** and is of catastrophic potential. Similarly, in a historically sensitive area with Registered Historic Buildings and the “A” Street Historic District in close proximity to the site, any settlement and lateral movement of the ground as a result of excavation would be devastating to these structures

The City of Petaluma has expended a great deal of time and effort on “**Climate Resilience**” efforts. However, it appears there has been no consideration given to the fact that the “Overlay” and the “hotel” are only 2 blocks from the Petaluma River. Despite the talk of “**Sea Rise**” the river is apparently not within the scope of any change in sea levels. The study only relies on the FEMA maps and the flood prevention work completed by the Army Corps of Engineers - which has not proved effective in the last decade.

The planning department does not seem to have taken into consideration the fact that additional development will necessarily consume a significant amount of **additional water and sewage disposal requirements**. The City has recently adopted a 5% rate increase for the next 5 years (2% rate increase and 3% inflation per annum). This is in

addition to a provision in the event the city has to purchase additional water in the event of a drought. These additional costs will be passed on to the consumer. The City has also expended a significant amount of tax payor revenue for improvement of the sewer system. The study shows apparently the city has “an adequate water supply” thus any new developments have been paid for by residents. A hotel occupancy is one of the most inefficient type of operations with respect to water usage i.e. transient occupancy, daily laundering of sheets/towels etc. “Planning” approved the construction of two new large hotels, now completed, and a third 18 room hotel addition is under construction in Petaluma.

The Study asserts there is **no significant impact** of this “**in-fill**” **in land use** for this “Overlay” or the “hotel”. There is significant pedestrian traffic in this Area A “Overlay” encompassing the Theatre District, Walnut Park (home to Farmers Market and Events), Post Office, Museum and retail establishments. Any development in this area will be significantly impacted. The changes proposed: to eliminate the pedestrian cross walk between Petaluma Blvd South and 4th Street is very significant. It provides an essential link, given the speed and number of vehicular traffic, for pedestrians to cross the road with any safety. Further, the installation of a new driveway to enter the subterranean parking (adjacent to ACE Hardware) will be a huge hazard to pedestrians. An estimated 80% of ACE customers are pedestrians or cyclists who frequent this mainstay of the community.

The **Noise Impact Analysis 4.13** is one of the most deficient elements of the study and requires much more analysis. Any development in this downtown area will (not “could” page 83) “**result in increases** in the ambient noise” Any construction in this focused area will significantly affect the business and residential areas. Any construction should be completed in the area at the same time so residents, businesses and visitors do not have to live through a decade of construction.

The “hotel” proposal is extremely problematical with subterranean construction. There are **inherent issues** with seismic waves and **ground vibrations** not to mention the resultant structural and cosmetic damage to nearby structures and historic buildings during construction and settlement thereafter. There is no way to mitigate this effect except to relinquish the plan of construction underground. The adjacent “Vacant and underutilized lots” could be used for parking. There is no provision in the “analysis” to account for any noise as a result of the hydraulic lifts proposed to be utilized in the subterranean parking. This is not credible.

The operation of the “hotel” analysis (page 85) alleges the sound of the rooftop **mechanical equipment and amplified music** on the 6th floor open top bar are “within the noise limits established by the city” The Study assumes the same level of **noise from traffic** currently. This is a false assumption because the more development in the vicinity, on this block and other developments in the downtown area completed and proposed, will only serve to **exponentially increase**. Traffic will increase of necessity with the hotel for vehicle drop off for valet parking and increased driving as the vehicles tour the block and into the below ground parking. Further, the addition of a bus stop will create the noise and

pollution of idling vehicles on the street. Lastly, but by no means least, is the effect the wind will create amplifying noise at 75 feet in the open air bar. If renovations to one story single family dwellings are required to **install wind sheer walls** according to code the city evidently recognizes this exposure. A bar that plans to close at 12am is not a good neighbor.

There are some grave concerns that have not been adequately addressed in the Study (4.15 Public Services) relative to **Emergency Response**. The proposed “overlay” has a nearby Fire Station on D Street, however, should a catastrophic event take place in the area will this unit be able to respond? The proposed zoning includes a 75 foot height and a dense in-fill. Does the **Fire Department** have the necessary equipment and work force to respond to this emergency. In the event additional units are required, there is a great deal of concern with the operation of the train, the D Street drawbridge and significant vehicular traffic to dramatically impede response time. **Police logs** reflect ongoing crime issues in the downtown area which will only increase with additional development. The main issues are drugs, alcohol and mental health impaired individuals causing a disturbance. There has been some discussion the Fire and Police departments, including the City offices, will be relocated to the Fairgrounds in the future which would make any further development in this area highly ill advised by risk management.

The most compelling argument for this “Overlay” is the inclusion of “**Housing**” which is not at all addressed in the “**plan**”: **there is none**. It would seem if a specific type of housing and density is desired it should be specifically outlined in any proposal. The “overlay” is a **blanket provision** to eliminate current building limits and establish the new height, lot coverage and floor area. This is a dangerous precedent. It allows, with few limitations, a broad scope of future subjective interpretations. It is a planners dream to rubber stamp any proposal submitted.

4.14 Population and Housing does not address the fact that the population of Petaluma has not increased but actually **decreased** by half a percent in the last two years. This reflects the data for Sonoma County and the State of California. There are many reasons for this and I am sure the cost of housing is one but some of the top reasons are job opportunities, lifestyle, freedoms of choice and lower taxes. A corporate hotel will engage its own contractors and its own management teams. The additional employees will consist of **low income earners** and the City will then need to provide more “**Affordable Housing**”. Petaluma needs companies that will provide higher paying jobs for skilled workers. A hotel will only serve wealthy visitors and not Petalumans who cannot afford to patronize another restaurant and bar. The hotel, restaurant and bar will directly compete with the local companies who have struggled to survive during COVID. Many businesses have not survived in the downtown area as evidenced by the significant vacancies. The **2025 General Plan Housing Element** provides for the increase in housing units required by Sonoma County and the State of California not approved by voters in the historical no growth/slow growth. Approval of a hotel in a downtown location will primarily serve to **escalate the cost of real estate** and decrease the affordability of homes and rental properties.

The other significant issue is the wholly deficient **4.17 Transportation** category “**Less than significant**”. This is the most compelling reason against the “Overlay” and the “Hotel” The City is envisioning Utopia if it assumes that all citizens will use **public transportation**: SMART, Sonoma County and Petaluma Bus Transit, bicycle or walk. This is not reality It is impossible to find objective and reliable data for the current

ridership in the transit system relative to the population. Personal vehicles are the 21st Century choice of independence, flexibility and convenience We should not make these **broad assumptions** of decreasing vehicle use in data analysis to substantiate a position. It is a wishlist for planners to obtain approvals All new construction incorporates a parking requirement. If the City truly thinks, or mandates, personal vehicles will not be utilized in the future there needs to be an adjustment in the legal and planning departments Certainly, a hotel guest paying \$300-400 per night will not be taking public transportation anywhere with elite valet parking; perhaps a limousine service

The current **4.17 traffic analysis** is wholly deficient. I would like to obtain the data utilized in the “Study Intersections”. As a downtown resident, I travel everyday on these routes and these do not represent my experience “existing”. **What are the days, hours, time periods used in the calculations?** What are the basis and **assumptions** for “future” and “future + project”. Does this contemplate the Completed, In Progress and Planned projects in the Planning Department website? The left hand turn from Washington to Petaluma Blvd N is substantially “over utilized” currently leading to long delays and inability to proceed east on Washington.

The **proposed new bus stop** on Petaluma Blvd North will **impede vehicular traffic** which will affect the “Overlay” and the “hotel” The valet plan will also create backups regardless of the number of cars and employees it is a function of the “service” The new “**Bicycle and Pedestrian Plan**” attempts to address reduction in vehicle lanes and increased/protected new bicycle lanes This will serve to limit vehicle movement thereby causing traffic back up, delays and idling vehicles. The plan to reduce lanes i.e. traffic calming has already shown to cause additional traffic backups The plan to close streets to **vehicular** traffic in the future for pedestrian traffic only will merely serve to move traffic from one street to another street as occurred during COVID

City Council has **punted the “parking”** issue relative to the proposed “hotel” and not addressed the “Overlay” potential development. The ill advised **underground** parking would only provide **58** spaces, an additional **20** spaces would be specifically allocated from the **C street public parking** facility. However, this is a 93 room hotel which has a full staff in addition so the parking is totally **inadequate**. Many planning submissions have been rejected primarily on the basis of lack of parking. There has been no comprehensive parking study completed for downtown to my knowledge It is difficult to park downtown as a resident, particularly with a **2 hour** parking limit and it takes an act of congress to obtain a permit **Special events** draw many visitors to the ambience of the town which only increases the need for parking.

Let's **work together** to maintain this **small town** and its **friendly community**. It was a joy to participate in meeting young families and giving out candy this Halloween. It is a longstanding Petaluma tradition. I don't think imposing **wholesale changes** downtown in the neighborhood will achieve this goal.

Isabelle Beardsworth

Public Comment

mady cloud [REDACTED]

Mon 11/13/2023 3:28 PM

To: Orozco, Uriel <uorozco@cityofpetaluma.org>

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To the Planning Commission and Historical and Cultural Preservation Committee members,

I cannot attend this joint meeting of the Petaluma City Planning Commission and the Historical and Cultural Preservation Committee on Tuesday, November 14, but I would like my concerns about the Public Hearing and matters up for consideration to be part of the public record.

My concerns about this project are specific to the adoption of the proposed Downtown Housing and Economic Opportunity Overlay Plan. Since my expertise is not in city planning, I am struggling to understand how this Overlay Plan will help revitalize parts of our historic downtown areas. Apparently, our present zoning ordinances allow for four stories, a reasonable floor/area ratio, and 80% lot coverage. Also, my understanding it that within our historical district zoning ordinances, there are allowances for in-fill projects and housing, so I'm confused as to why this Overlay Plan is even being considered, other than to allow one building to be built that is apparently, according to our own zoning rules, too big, too tall, and too capacious for the proposed lot. Yet, the developers of EKN Hotel will not change or revise their planned hotel to accommodate our zoning requirements, but are instead demanding that we change our requirements and approve this Overlay Plan that they developed, in order to accommodate their plans. Otherwise, they will rescind their proposal. To me, this is a completely inappropriate highjacking of our planning process.

No one likes to see our downtown filled with fencing and empty buildings and lots. Some areas that are part of the Overlay Plan have been vacant for years. Since the City has not found developers to build there, how exactly does this Overlay Plan remedy that? By making buildings, taller, bigger, thus better? I truly cannot see how making these changes to our existing zoning laws will encourage or enable more and better development than is allowed now.

Most importantly, I feel this proposal sets our City on a dangerous course to basically kill the goose that laid the golden egg by diluting and forever changing the historic character of our downtown. We almost lost Petaluma's heritage once, in 1968, when there was a proposal, the Petaluma Core Area Plan, to tear down the historic buildings and instead build a downtown mall next to the new freeway. The same arguments were used then - the downtown is dowdy, underutilized, not economically viable. The City leaders at the time and many others in town believed that tearing down the old buildings and building a shopping mall would be the answer to the dying downtown economy. They began to tear down the old residences and buildings, but after one magnificent residence, the Healey Mansion, was razed, they began to realize they were actually destroying what made Petaluma unique and historically and culturally important. It feels like this dilemma is reborn now, and I hope that we can pause and consider what may be lost if we go ahead with this proposal.

So, for the record, I am not opposed to change or modernization.
I am not opposed to building a hotel on this property.

I am not opposed to building AFFORDABLE housing and/or multi-use developments in the downtown area.

I am opposed to approving changes to our laws based on data coming from the self-interested developer asking for these changes.

I am opposed to approving these zoning ordinance changes before the revised General Plan has been approved.

I am opposed to a rushed approval process, which has led to much misinformation and suspicion. My concern is that the integrity of our planning process be maintained and not subject to the threats of invested parties.

Frankly, I really do fear that this Overlay Plan will negatively alter the character of Petaluma and it will be irreversible. I could be wrong, but I have not heard anything from City leaders or the City itself that alleviates that fear. Actually I have heard a lot of name calling and distorted claims. It seems to me that this has not been a thoughtful, considered process, but rather the opposite, and the result has been an angry, confused, and divided community. I, for one, am really tired of that. I am appealing to you, Planning Commissioners and the Historical and Cultural Preservation Committee members, to pause this process until all of us have a more thorough understanding of the consequences to our community if you approve this plan.

Thank you all!

Madv Cloud



Public Comment re: Proposed Downtown Housing & Economic Opportunity Overlay

[REDACTED]
Mon 11/13/2023 11:57 PM

To: Orozco, Uriel <uorozco@cityofpetaluma.org>

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To the Petaluma Planning Commission,

Please add my vote to the total of those who oppose the approval of the proposed Downtown Housing & Economic Opportunity Overlay as you consider it during your meeting on November 14th, 2023.

If there are, indeed, reasons to accept it as a wise move toward the future of our Historic downtown, those possible reasons have been badly obscured by the apparent coupling of the EKN Appella on Hotel and the Overlay, which I understand to be essential to the approval of the hotel. I fail, so far, to see any reason to rush this decision, other than, possibly, catering to a hopeful developer. Before this Overlay is even considered for approval by the Commission, I hope to see much more outreach done in order to provide concrete information to the residents of this City regarding:

- >Specific long-term objectives.
- >Short-term effects on the included parcels.
- >Why the included parcels were chosen and how they were identified.
- >What the planning process will look like when the included parcels are modified and/or developed in the future.
- >What will prevent further addition of other parcels to the Overlay if its initial concept is approved, and what recourse would residents have if such additions are proposed or made.

As we begin the task of updating our General Plan in 2025, this abrupt proposal feels opportunistic, at best. Laying it on the table seemingly simultaneously with the proposed hotel feels manipulative.

Please slow this process down. Do NOT approve this Downtown Housing & Economic Opportunity Overlay at tonight's meeting. Thank you.

Best,

Mary Jarvis
[REDACTED]

Public Comment

Nathan Spindel [REDACTED]

Tue 11/14/2023 10:32 AM

To: Orozco, Uriel <uorozco@cityofpetaluma.org>; rogermcerlane@mac.com <rogermcerlane@mac.com>; heidibauer2000@gmail.com <heidibauer2000@gmail.com>; bmhooper1@gmail.com <bmhooper1@gmail.com>; rwhisman@yahoo.com <rwhisman@yahoo.com>; darrenracusen@gmail.com <darrenracusen@gmail.com>; jcthompson@cityofpetaluma.org <jcthompson@cityofpetaluma.org>; jessicamoz@gmail.com <jessicamoz@gmail.com>; whitley@sonoma.edu <whitley@sonoma.edu>; ppitingaro@gmail.com <ppitingaro@gmail.com>; brknmad@yahoo.com <brknmad@yahoo.com>; bill@johnsonrinehart.com <bill@johnsonrinehart.com>; alicevano@att.net <alicevano@att.net>

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Dear Planning Commission and Historic & Cultural Preservation Committee,

I support the Overlay proposal in its current form. I am a signer of the Urban Chat position letter on the Overlay I'd like to add a more personal perspective as well

My young family has lived and worked in West Petaluma for almost five years We plan to stay here for decades. Every day I go downtown to work, shop, eat, and stroll. I love walking in our historic neighborhoods and downtown; it is one of the primary reasons we moved here

I believe our downtown should be upzoned for higher density commercial and residential uses We need more housing, retail space, downtown activity, and activated street space. Such density has many benefits from livability to affordability and climate adaptability More downtown activity and housing has a significant economic benefit to our city; increased revenues and more affordable housing will go hand in hand to improve all Petalumans' quality of life Decreased downtown activity and more expensive housing? Not so much.

With the above in mind, I support the Downtown Overlay proposal. Six stories is a fine height for buildings in our downtown (there's already a number of buildings around that height) A few new five/six story buildings is SO much preferred over the status quo of vacant and under-built lots — our town deserves better than that I am embarrassed to walk visitors by Walnut Park among the many sad, ugly, fenced off empty lots. I fear that if we don't allow and incentivize more intense building that our town will weaken in the coming decades as more people move out; largely due to unaffordable housing, boarded up buildings, uncomfortably empty streets, and blighted lots. That's the opposite of what I want for Petaluma I want to see more housing, more activated streets, and more small businesses with more beautiful views of our river and mountains!

Successful places grow. Growth either happens up or out. If growth doesn't happen, successful places get expensive If you want affordability, you need to increase building All new building commercial, high end residential, anything - helps increase supply and takes pressure off the market. Building up is the only logical choice given our city's climate stance and policies Building up makes sense in the commercial core.

Regarding historic aesthetic and/or preservation concerns that I've heard some community members raise: the Overlay could be further designed to consider historic/aesthetic context. Our City Attorney indicated that this could be done at the public meeting on July 12 2023. There is precedent of such objective design policy in other cities (Napa, Fresno, etc); I encourage our committees and staff to explore if there is a way to include this in the Overlay and/or the General Plan Update. That would allow for increased density while alleviating historic preservation concerns. Please do not let the voice of the few historic preservation extremists to allow our town to stagnate and weaken. We need a path forward for a strong and vibrant future for Petaluma.

Thank you,
Nathan Spindel

FW: Petaluma resident opposing the overlay proposed for downtown Petaluma

Greg Powell <gpowell@cityofpetaluma.org>

Tue 11/14/2023 11:22 AM

To: Orozco, Uriel <uorozco@cityofpetaluma.org>

Greg Powell, Principal Planner

M-Group Consulting Planner

Serving the City of Petaluma

11 English Street, Petaluma, CA 94952

Hours: Monday-Thursday 8am-5pm, closed Fridays

Greg Powell

Principal Planner, M-Group Consulting

Planner serving the City of Petaluma

City of Petaluma | Planning

GPOWELL@cityofpetaluma.org



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From: Mollie McWilliams [REDACTED]**Sent:** Tuesday, November 14, 2023 11 21 AM**To:** Greg Powell <gpowell@cityofpetaluma.org>; Isabel Castellano <icastellano@cityofpetaluma.org>**Cc:** Brian Oh boh@cityofpetaluma.org**Subject:** Petaluma resident opposing the overlay proposed for downtown Petaluma

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11/14/23

To Greg Powell, Isabel Castellano and others this concerns:

When Mike Jolly of Newport Beach filed an application for the Hotel Weaver in April of 2022, he notes in the application he *knows* it's in Petaluma's Historic District and more specifically that it's in MU2. It's pre y flippant -- EKN *knew* the zoning laws of this parcel when they purchased it -- and they *knew* that their proposal ignored every one of them, and

then *knew* they'd push to get their project through to make money in a City they have no ties in -- as they have before.

A simple Google search shows past projects where the community had concerns about their proposals and they steam rolled them: Tahoe, Rochester, MN; citizens, like those in Petaluma, had real concerns regarding zoning and historic elements. And it's remarkable and unnerving Petaluma would even entertain a developer rewriting the zoning laws when it's so blatant they're being rewritten to benefit their company, not the town, not the historic nature of the district, no one but themselves.

To allow this company to rewrite the zoning laws of Petaluma purely for their own economic gain is distasteful and disrespectful to everyone who lives here. To that end, the fact the Wine Growers Association and Urban Chat have been the only community groups [as noted as the outreach efforts in the report from Greg Powell to the Planning Commission 6/13/23] to garner opinions from is frankly concerning as well: reach out to Petaluma Mothers Club, PTAs, Elks, Rotary, the Senior center, churches, synagogues -- Urban Chat is a very specific group of people with very specific viewpoints, why were they approached 3 times? Nevermind the Wine Growers Association, a group that was approached (as even EKN notes on their Instagram) would benefit from them being here. That's not true community outreach.

If EKN would like to build something within what current zoning laws allow, great! And if zoning laws and historic preservation elements truly need to be altered for downtown (or any portion of Petaluma), then take the proposal from a Petaluma-based person with no development ties, it's the only way this can happen within a being tainted by money and power.

To allow a commercial entity (with no ties to the community no less) to change the zoning laws of Petaluma goes against everything I, and now my daughters, are taught in the schools of this city about the history of this city (truly, in Petaluma schools students are taught about the urban growth boundary, Supreme Court case involving Petaluma, historic homes and buildings downtown and more).

Please do not allow this overlay.

-Mollie Kellgren, Petaluma resident

Fw: General Plan, Zoning and CEQA comments

Andrew Trippel <atrippel@cityofpetaluma.org>

Tue 11/14/2023 2:05 PM

To: Rizzi, Krystle <krizzi@cityofpetaluma.org>; Orozco, Uriel <uorozco@cityofpetaluma.org>

Cc: Greg Powell <GPOWELL@cityofpetaluma.org>

Hello,

Krystle hoping you've already received this

Uriel - can you verify that this has been published?

Andrew

Andrew Trippel, AICP

Planning Manager, M Group Consulting
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Sent: Thursday, November 9, 2023 11:02 AM
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Subject: General Plan, Zoning and CEQA comments

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11/6/23

I have just read, with increasing concern, a public notice sent out regarding a General Plan Amendments, creation of an overlay zone, and a proposed outrageous plan for an oversized spot zoned hotel, this one on the bottom end of B Street. A negative declaration is proposed to be used to give environmental review clearance of all these actions.

I do not support the method of merged hearings on the same day, the proposed changes, or the use of a draft negative declaration rather than a full Environmental Impact Report. I do not also support the size, lack of parking and potential poor designs permitted by an increase to 100% lot coverage for a hotel and current lack of parking for new developments.

Method of Notice and Actions:

The public notice I received is vague, using relatively unknown acronyms such as "FAR" floor area ratios which here relates to the "maximum number allowed floors" and unclear language such as, "non specific mixed land use designations" rather than detailed clarifying language for public notices of this sort. This and other factors make me believe the notice is inadequate public notice for General plan and Rezoning discussion purposes.

What I don't like is deliberately using jammed together hearings which can create confusion among issues and unclarity of process. I've seen this muddled mashed together approach before in other Cities with poor planning. Do we have to be one? The actions proposed, in essence, have all the bad trademarks of finding a way to do "Spot Zoning" using a shotgun approach to approve a project, a project which is currently contrary to the existing General land use Plan and Zoning. The proposed

actions require a more impartial and thorough review than what is offered. I am also concerned because the hearings approach and poor recommendations on environmental review show that neutral city staff oversight may be lacking. My suggestion is that you stretch out the hearings to permit clear and separate review of the issues and General Plan changes being considered before taking up relative zoning changes or project reviews.

Environmental Comments:

CEQA is being ignored when it comes to determining if an EIR is needed or not:

The use of a Mitigated Negative declaration suggested for a General Plan amendment and new zoning standards as recommended is a farce. Diligence is missing. No or little mitigations for the limited negative impacts are shown for many effects that aren't mentioned but will happen if the proposed changes are adopted. Where is the "no project" and "alternate sites" review alternatives? It is clear that the General Plan amendments and proposed new overlay zones are being suggested without thorough analysis or complete environmental review. What are the buildout parking demands and circulation mitigations needed downtown to accommodate the proposed changes? Where are the stats on new housing needed by type and as may be produced by these proposals? Where is the comparison with our current General Plan needs? What is the range of additional buildout expected for the General Plan amendments? What is the assumption basis of projections for these figures? Why is the environmental impact report review not recommended when it is so clear it is needed as a basis for consideration?

Mitigation measures should be required for additional off-street parking, circulation patterns and linked traffic lights, once additional parking and higher traffic demands are shown by a proper EIR (Environmental Impact Report). Just looking at future parking demands caused by the recommended General Plan amendments and increased demand on downtown streets justifies a full EIR. I urge you to require that an EIR be conducted to include also review site alternatives for the proposed hotel and additional housing and the actual mitigations that would be needed to affect the proposed changes.

I have also looked at the recent building height study of the downtown area which appears to be trying to support increased heights of buildings. The problem is that using church towers which are already exempted in the zoning ordinance as a basis for increased building density and heights is like comparing apples to oranges. Office and housing buildings are not church towers. Using other older buildings built before zoning height requirements were made, as a basis for the recommendations, leaves out the fact that it was these very buildings that caused the City

to zoning limit heights to begin with. Church towers from at that time have been excluded from height restrictions regardless of zone.

Technically, an off street parking district exists in the downtown area, and I am under the understanding that new parking places are not required when development occurs. This could be a real problem for new proposals as additional parking demand that is not met with new places will degrade current parking and circulations options.

Current available parking is already not enough to support our increasing demand created by new restaurants, as well as intensification in existing buildings. Many upstairs floors in existing buildings downtown are still underutilized. We should find solutions before adding to our parking and circulation problems generated by this proposal. I do not want us to become another Carmel with poor planning, not enough parking and overcrowded streets in our downtown area. Much as we might want to, we are not moving towards using alternatives such as mopeds, bicycle use etc. replacing our ownership of vehicles per household anytime soon.

Increasing the General Plan density under these circumstances without adding new available parking is folly. Two existing downtown parking structures in the area are not designed to handle the existing buildout of the downtown area allowed by the current General Plan and zoning. That means there is not enough parking now, particularly during holidays and on weekends, or for current allowed buildout.

It's definitely problematic to add on a new overlay zones. What environmental effects do people driving around to find non existent parking do to the environment and our increasingly crowded street patterns?

Where are the recommendations on traffic lights, traffic levels of service, lane changes, timing, future parking needs for the proposed areas and changes? Where are considerations of alternatives to the proposals? The related environmental Impacts needs to be studied before further actions are taken. Alternative scale, location sites, traffic and parking needs and service access capacities should also be reviewed by an EIR.

Hotel Plan:

There should be an EIR prepared for the proposed hotel on B Street. It will have too big an impact. It is too big, too high, and way under-designed in creating parking spaces and off street service access. There is just not enough parking for hotel staff, restaurants staff, hotel rooms, and restaurant patron demands. The proposal is way out of scale size-wise for the neighborhood, and could easily be an absolute monstrosity with no redeeming architectural grace to fit in with the historic nature of the area. Since 100% lot coverage is proposed, what will the West side or South

Easterly sides of the building look like if it is permitted to sit on the property line? Will it show 6 stories of blank wall to people coming down B Street or perhaps as seen coming up the Boulevard? What visual damage to one of downtown's major entrance that would be to see -- I pity anyone having to look at any 6 story blank sides and think about what the City is not doing to protect historic values of Downtown Petaluma. I am an owner located on B street, and will be really upset if I have to look past the historic homes down the street to see something out of place sticking up way above the existing buildings.

Economic Impact comments:

If the city wishes to make decisions based on estimated economic return to the city such provided by hotels then the city should look at the effects of another hotel added to the city's overall supply now. A quick review of the existing hotels in town will show that now they are only about half full most of the week with only a slight increase on weekends. This is not good for sustainability of hotels. What I am saying is that more approvals of hotels right now will further weaken existing ones. Under these conditions If we approve more new hotels, overall hotel bed and tax revenues for the city will be unlikely to show much improvement, for some time. What is the actual figures for this? Overbuilding can be a problem lasting for years. Does the city actually know the overall demand for additional hotel space and their overall economic impact in town?

The saying that's coming to me is that people pushing this idea are "GETTING THE CART BEFORE THE HORSE" . We expect the City Planning Commissioners and City Council members to require a full review of what is proposed, as well as what is needed here, on behalf of all of us, before taking any further action.

Regarding the proposed actions: Lastly, rushing to an unduly quick approval without all the facts sets a poor planning example and is certain folly for the future of this City. We can be better than this!

Greg Freitas
Freitas Enterprises
American Planning Association, Planners Advocacy Network
Past Community Development Director, City of Petaluma



This document is a revision to comments provided during a public hearing on November 14, 2023, and originally submitted in written form on November 15, 2023.

Conclusions on the Proposed Downtown Economic Opportunity and Housing Overlay and EKN Appellation Hotel.

- HCPC Committee Member Whitley

Clarifications: on further reflection, I would like to make some amendments to my comments (below). I realize now that some of my comments could be interpreted as unclear or even insensitive, and that is not my intention at all. The original comments were written prior to the joint public meeting on Nov 14th, combined with my notes from that meeting. Clarifications or amendments to those comments from after the meeting are interspersed within, but in red italics.

I'd like to begin by first showing my appreciation to the city staff and planners who have put in a great deal of work to do this study and analysis. I feel I can also speak for the entire HCPC, when I say we appreciate all of the residents who have come forward to voice their support of, or opposition to, both the proposed zoning overlay as well as the proposed EKN Appellation Hotel development. At this point, we've heard a great deal of information on both sides of the issues, and I personally, feel satisfied that I can come to an appropriate and objective conclusion on both issues.

With regard to the zoning overlay (as it is the only topic for tonight's discussion), from the perspective of the purview of the HCPC and the Initial Study/Mitigated Negative Declaration (IS/MND), it boils down to whether the IS/MND adequately assesses the potential environmental effects, pursuant to the stipulations of CEQA, of the overlay on the collective National Register (NR) District, individual contributing structures, or elements, within that district, as well as other NR-listed, or NR-eligible properties, California Register of Historic Places (CR)-listed, or CR-eligible resources, in the historic downtown. In my mind, this triggers several questions:

- Question #1: "Does the proposed zoning overlay *benefit* the district, its contributing elements, or other significant historic resources, either directly or indirectly?"

Direct effects would include physical measures that improve the preservation and/or protection of historic resources or specifically enhance their significance and/or integrity. Since the proposed zoning overlay includes relaxing the height and lot coverage restrictions and adds no protective covenants, preservation incentives, or other measures that would directly improve or enhance the NR District, or any other NR/CR-listed or NR/CR-eligible resources, I would have to say that no *benefits* have been presented, that would directly enhance preservation, protection, significance, or integrity of historic resources, beyond the protections already in place. It does not trigger additional survey or documentation of the historic resources in the district or other parts of the overlay, nor does it provide any financial resources to the HCPC to carry out additional survey or documentation of the many historic structures or buildings within the city. *Keep in mind that these kinds of items are stipulations in the current General Plan Policies 3-P-1 (specifically Programs 3-P-1-A, 3-P-1-C, and 3-P-1-D) 3-P-2 (Programs 3-P-2-A and 3-P-2-B), 3-P-4 (in its entirety), and 3-P-6 (in its entirety). All of these General Plan Policies could be enhanced or promoted as potential mitigation measures for individual Conditional Use Permits (CUPs) under the proposed zoning overlay.*

This is important to understand as the IS/MND specifically uses the overlay itself as a potential mitigation measure – stating that the additional overlay criteria for SPAR or HSPAR review will

avoid or mitigate significant effects – when compliance with those criteria would already be in place. Meeting *existing* requirements cannot be considered *mitigation* of potentially significant adverse effects. In other words, the city would not be asking the applicants who apply for a Conditional Use Permit (CUP) under the proposed overlay to meet *additional* historic preservation or protection requirements that *exceed* what would already be asked of them under a By Right building application.

What about indirect benefits? Will there be economic benefits to owners of the individual properties, or residents, within the historic downtown, that come from approving the zoning overlay? Will it increase/decrease pedestrian traffic, local residency, or economic opportunity, within the historic heart of Petaluma and in turn perhaps increase preservation efforts in the future? These are somewhat murkier questions. The argument has been presented that the overlay should be implemented in areas of “urban blight” and that developing those lots, and allowing denser commercial and residential occupancy, will improve the economic conditions and benefit the historic downtown and its property-owners and residents in turn.

Despite the presentations by the applicant’s team and the city staff, there is no compelling evidence to suggest that the height and lot coverage limitations in, or near, the NR District are what is preventing re-development of vacant lots. There are lots all over Petaluma that do not fall under the same restrictions as the historic downtown, some very close to it, that sit vacant and are not being developed due to other reasons that have, seemingly, not been explored. The “if you build it, they will come” (or rather, the “if you allow it, they will build it”) argument has not presented sufficient evidence. In fact, the inability of the city staff to provide financial projections for hypothetical build-outs of the overlay tracts, suggest that the concept that the proposed overlay would stimulate development is entirely speculative at this point. I see nothing to suggest that a wave of economic opportunity or new affordable housing will suddenly appear because this zoning overlay is permitted – regardless of what the proposal is named. *By stating “the inability of the city staff to provide financial projections” above, I was not impugning their ability to do so, just the inability of anyone – even the city staff – to foresee what the financial benefits might be for creating infill opportunities from this zoning overlay. We are essentially flying blind in that regard, and no projections good or bad should be accepted without evaluating similar examples in similar situations.*

We all recognize that affordable housing is an issue throughout California, but we need to see some comparable examples of such zoning overlay implementations, in similar cities with similar conditions. Other nearby cities in Sonoma County, such as Santa Rosa or Rohnert Park, are struggling to increase economic opportunity and residential vitality in their downtowns (does Rohnert Park even have a downtown?) and they have no similar height restrictions. Sonoma, Healdsburg, and Napa, do have similar height and build-out restrictions, yet still produce viable residential as well as commercial development projects at those reduced heights – some more affordable, some much less so.

- Question #2 then, is “Does the proposed zoning overlay *adversely affect* the NR District?”

If there are no direct or indirect benefits to the NR District that come from approving the zoning overlay, then the effects must be either neutral or adverse. Again, the proposed zoning overlay

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primarily modifies the height and lot coverage restrictions. It does not change the individual CEQA, SPAR, or HSPAR review processes themselves, only the nature of allowable projects that might come under review. The question is though, how much of an effect would changing the height and lot coverage limitations have on the NR District, its individual contributing elements, or other NR/CR-listed or NR/CR-eligible resources?

National Register eligibility has already been determined for, and applied to, the district, and (as stated in the IS/MND) the proposed overlay would not immediately adversely affect that. However, significance under both CEQA and the NHPA is also determined by the application of criteria for *integrity*. These seven aspects of NR-evaluation include location, setting, design, materials, workmanship, feeling, and association. These are encoded in Federal Law under 36 CFR part 60.4 (Criteria for Evaluation) and are referenced within the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR part 68) and in greater detail within the National Park Service's National Register Bulletin (1990: *How to Apply the National Register Criteria for Evaluation*). The same criteria apply under CEQA, which references the California Register of Historic Places (CRHR) – integrity is specifically itemized under Cal. Code Regs. Tit. 14, § 4852 (*Types of Historical Resources and Criteria for Listing in the California Register of Historical Resources*), and further identified within the California Office of Historic Preservation's Technical Assistance Series #6 (*California Register and National Register: A Comparison*).

In considering the effects on each of these criteria, I would argue that location, design, materials, workmanship, and association are likely to NOT be affected by the proposed zoning overlay, and the effects could be considered neutral – at least in the short term, or as regards non-cumulative effects. On the other hand, setting and feeling ARE very likely to be adversely affected by changes to the height and lot coverage restrictions.

Setting is the physical environment of the district, and without question adding new construction anywhere within, or near, it would have some kind of effect (good or bad), and any proposed project would need to be evaluated individually for its specific impacts, pursuant to CEQA, SPAR, and/or HSPAR. But it *is reasonably foreseeable* that allowing taller and larger construction projects, in general, makes it more difficult to minimize adverse direct or indirect effects to the district's integrity of setting. These kinds of impacts might not just be visual ones but could also include altering pedestrian or vehicle traffic flow, changes to infrastructure or utilities services, as well as future reduction or segmentation of the district boundaries.

To clarify, CEQA may regard changes to patterns of parking specifically as not significant, but that does not mean that changes in parking availability, increased or decreased traffic flow, disruptions to pedestrian access, or increases in air pollution resulting from parking changes is not a significant effect upon historic resources. These are all *reasonably foreseeable* adverse *physical* effects that have not been taken into consideration by the IS/MND. Overall, there would be much greater potential for more adverse and inappropriate disruptions to the continuity of the district's setting should the zoning overlay be approved. *To further clarify this statement, I am suggesting that potential changes to parking itself are being confounded for potential changes to the integrities of setting and feeling of the NR District brought about by those changes to parking. This is not the fault of city staff in any way, it comes from the inherent complexity of how integrity needs to be evaluated for a district.*

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Of equal importance is the criterion of feeling. Feeling is the property's expression of the aesthetic or historic sense of a particular period of time. The feeling associated with Petaluma's Downtown NR District is conveyed not just by the presence of these individually significant buildings, but by the entire collective of them – which is why it was nominated as a district to begin with. Largely, the expression of feeling in this instance is the visual relationship between and among all of the buildings. The district is much more than the sum of its parts, as was its intention from the beginning. It is also *reasonably foreseeable* that changing the height and lot coverage restrictions will make it far more difficult to maintain the district's integrity of feeling, even if proposed projects still need to be evaluated individually.

I would conclude from this that the proposed zoning overlay would adversely affect the integrity of the NR District, pursuant to CEQA; especially for the criteria of setting and feeling. As I already mentioned, I don't see any benefits, economic or otherwise, that would mitigate, or offset, the adverse effects we would likely witness. Over the long run, if this zoning overlay were to be approved, and the city did not provide counter-acting preservation incentives, or some other forms of actual mitigation, it is entirely *reasonable* that we would likely see the cumulative erosion of additional integrity criteria, such as design, materials, workmanship, and association, as individual historic buildings become neglected, abandoned, or separated from the larger district. Although the erosion of these integrity criteria is possible, or even likely, without the zoning overlay. It is very clear that the zoning overlay would have an inordinate effect on increasing the rate of that erosion by damaging the integrities of setting and feeling.

- Question # 3: “Do any of the parcels subject to the proposed zoning overlay – identified as A, B, and C – clearly have *specific* adverse effects?”

The Draft IS/MND determines that the proposed overlay, and the hotel specifically, could result in potentially significant impacts to historic resources. However, it determines that through the standard city SPAR and HSPAR procedures, along with mitigation measures to avoid or minimize direct physical impacts, and *compliance with the provisions of the zoning overlay itself, (the highlights here mean to refer back to that discussion under Question #1 above)* those impacts would be less than significant. I think this is not supported by the applicant's analysis and bears closer examination within Parcel A specifically.

The north end of the north half of Parcel A is the proposed location of the hotel, but I am not addressing the hotel design or site plan issues directly, only the appropriateness for Parcel A to be included in the zoning overlay. Parcels B and C are in locations that may have additional issues regarding the proposed overlay, but Parcel A provides a prime example for the overlay in general. Parcel A falls partially, but not entirely, within the boundary of the NR District. The north half, roughly, of the north half (so, maybe a quarter of the parcel in total) is in the district while the southern three-quarters is not. The argument has been made *(at one of the Study Sessions I believe)* that building a large structure in this lot would be appropriate since it has been built-in before and has a history of occupation similar to other parcels in the district. This is not entirely accurate.

Although the lot originally included an undertaker's business, the Chinese Mission school, a blacksmith/wheelwright shop, and other residential buildings in the mid to late-19th Century,

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and was followed by a gas station in the early to late 20th century, none of these buildings exceeded two stories (around 20 feet), nor was the maximum lot coverage ever more than 60 to 70%. In fact, since 1887, the lot has had less than 50% coverage by any building footprint (*I admit that I did not do acreage calculations on the Sanborn maps specifically, but estimated percentages instead*). Even during the longest tenure of any building on site – the gas station – the lot was largely an open area of asphalt providing an unobstructed view of Center Park and the B-to-Western Street front of historic buildings. All of the former buildings on the proposed lot have always been of much smaller scale than most of the other lots in the downtown district.

A comprehensive GIS-based cumulative pedestrian viewshed analysis (carried out by myself – an expert in the use of GIS and spatial analysis for more than 35 years, with multiple significant publications in the use of GIS for historical and cultural resource identification and evaluation) of the entire historic downtown shows that any building in this lot of a height greater than two stories, and coverage of more than 80% would significantly reduce the visibility of the south end of the historic district to all pedestrian or vehicular traffic travelling northwest on Petaluma Blvd South. Such a building on that site would also obstruct the view of, and from, the Carnegie Library building – a resource which is listed on the NRHP on its own.

A building exceeding 45 feet in height would be visible from across the river, and one exceeding 65 feet would dominate the skyline along the entire length of Petaluma Blvd as far north as the current Bank of America building. Visuals of this quantitative analysis were provided to the city planning staff, by me, on January 13, 2023. These are not subjective arguments about visibility from one location, but a quantitative analysis for the entire historic district. In our study sessions, I repeatedly asked for the applicant to provide their own quantitative viewshed analysis, and have yet to see anything that I would consider factual evidence, or analysis, of viewsheds, only simplistic speculation about sightlines.

To clarify the foregoing comments, there is a fairly common misperception of what constitutes a “viewshed” versus what constitutes a “visibility” or “sightline” analysis. A quantitative viewshed analysis is done using GIS (Geographic Information Systems) and identifies the entirety of areas visible from a given location. A visibility, or sightline, analysis is done in a similar way, but evaluates the visibility between two points – the location of the viewer and the location of the object being viewed. The visual analysis provided by the applicant’s team is a visibility analysis between eight points on the landscape and the proposed hotel. It incorporates some attributes of a viewshed with highlights showing a restricted viewshed from the observation point itself, but is not a “viewshed” analysis, and especially not a cumulative one.

No visual analysis is provided for the zoning overlay itself – the assumption being that it is not possible to project what constructions (other than the proposed hotel) might be foreseeable in the zoning overlay. But what is missing is a viewshed analysis of the NR District. In other words, the entirety of areas visible from the collective of contributing elements in the district. A “cumulative” viewshed analysis is the combination of viewsheds from each of the contributing elements of the district – which is what was provided in my analysis (e.g., Figure 1 – where the cumulative viewshed is depicted as a continuous value of high to low “total visibility” and the actual quantitative values are the number of locations evenly spaced at 10 ft on a grid at street

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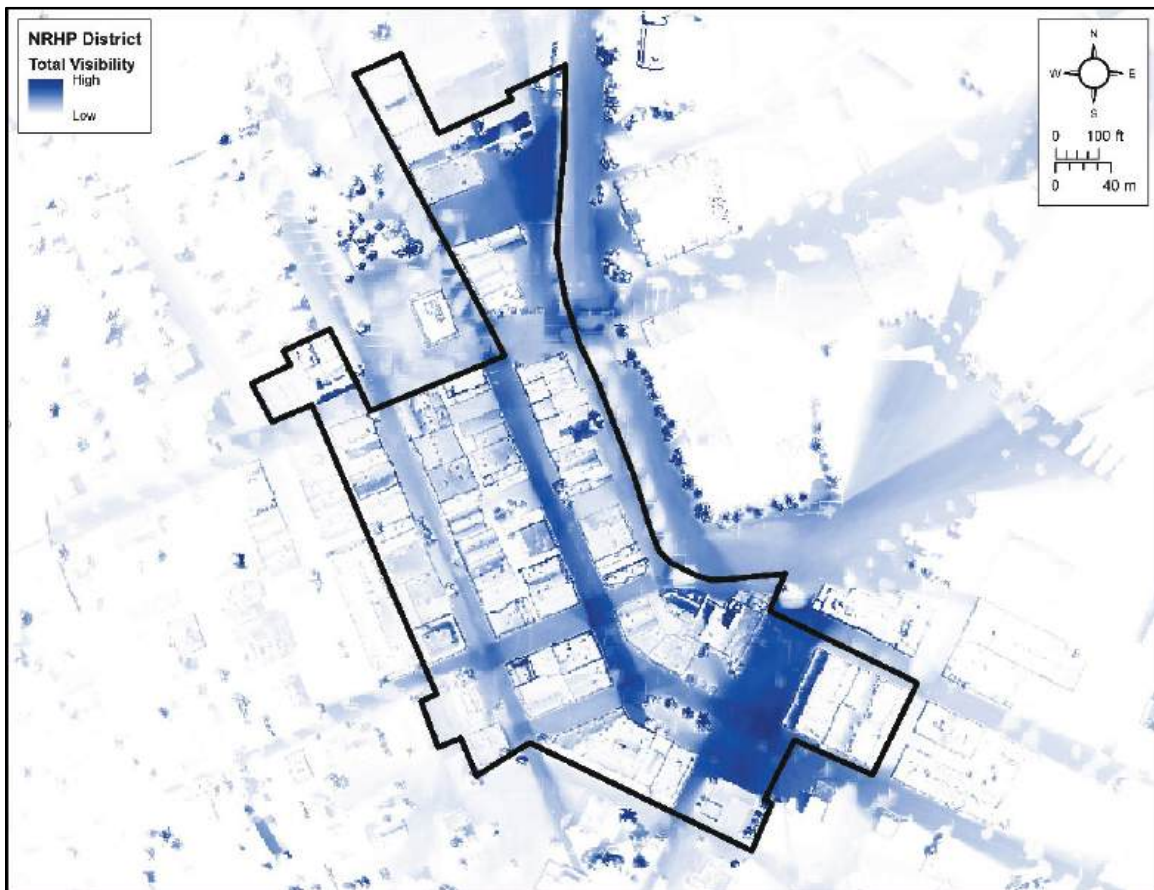


Figure 1 - Cumulative GIS-based viewshed analysis of the NR District.

level from which each contributing building is visible). Only by seeing the cumulative viewshed of the district as a whole, is it possible to evaluate the effects of any single construction, such as the proposed hotel, on the integrities of setting or feeling. The “objects” in the cumulative viewshed are not the proposed hotel, but the elements, and the entirety, of the district.

With respect to the potential effects on the integrities of setting and feeling in the NR District, those areas indicated as darker in Figure 1, are reasonably foreseeable as being more sensitive to potential effects than those which are lighter. Additionally, the use of Google Earth in the applicant’s analysis to provide a simulation of the sightlines from the eight vantage points identified is particularly flawed given that the 3D Google Earth models do not provide for visualizing partially permeable views – such as through trees when no leaves are present. It treats vegetation as impermeable balloons, and with quite inaccurate masses as well since the photogrammetry used to generate them is based on very few data points. LiDAR data gives a better approximation, though it too is flawed in many ways. I also do not recall the applicant’s visibility analysis being presented at any of the Study Sessions – though I may be mistaken.

The argument has also been made, and presented in the proposed mitigation measures, that stepping back the top two floors of any structure above 45 feet (regardless of what is proposed on Parcel A) would preserve the historic 45-foot street wall along Petaluma Blvd South and therefore not adversely impact the visual setting. This purely speculative argument is not

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supported by the evidence as provided. The visual impacts I mention are demonstrably not significantly reduced when the top two floors are set back the minimal amount proposed. The visual impacts to the historic district of a large construction on Parcel A are to the integrities of setting and feeling and as the quantitative GIS/spatial analysis shows, occur at the pedestrian level. The issue is not maintaining a theoretically unbroken height-line of 45 feet, it is in blocking the view of the street wall at ground level from the opposite side of the obstructing building. Any construction on the north half of Parcel A will unquestionably adversely affect the integrities of setting and feeling for the historic district, and the significance of that effect gets larger as the proposed building gets taller and wider.

Let's be clear, I'm not arguing against the hotel specifically. It could provide a nice tax boost to the city and a modicum of permanent jobs. But with respect to Parcel A, there are definite and obvious adverse effects and *Parcel A has no business being included in the proposed zoning overlay at all*. There is perhaps no worse place in the city for a proposed relaxing of building height and lot coverage restrictions. As I mentioned, there may be additional issues with Parcels B and C, but they are far less worrisome in the short run. *As should be clear from the GIS analysis, Parcels B and C are in very light areas, while A is in a very dark area with respect to the NR District viewshed.*

- Question #4: "Does the IS/MND, or its supporting documents, actually address these clear and obvious adverse effects?"

The documents which are supposed to cover the potential effects on historic resources are Appendix C (for the overlay) and Appendix F (for the hotel). Neither document actually addresses the nature of the integrity criteria specifically, mentioning only the general setting (not as an integrity criterion) and never the integrity of feeling. Although Appendix C does go into sufficient detail about the historic occupation and existing conditions of the lots in Parcel A (references to Parcels B and C aside), and makes recommendations regarding step-backs and other mitigation measures, it never actually assesses the effects of the proposed overlay on the district as a whole, or its individual contributing elements. It references an earlier study that determines the district retains a "high degree of architectural integrity and maintains its associations to the historic period" (Napoli 1994:27). Appendix C does not actually assess that integrity in 2023, nor does it specifically address any of the seven criteria of integrity. *I realize that this may sound quite critical of the historical resources reports, but I'm not questioning the reporting or findings of most of the document, only that there are elements missing that one would expect for an assessment of effects that includes an NR-listed District.*

In contrast, Appendix F states that "... the south end of the historic district has seen some loss of integrity in the last ten-to-twenty years" (Painter 2023:8). Yet no specific evidence of this conclusion is presented – only an opinion. What is "some loss" and how are we defining "the south end" of the district? We are not pointed to anything that represents a specific physical impact to the "loss of integrity" nor do we know what criterion, or criteria, of integrity are being referenced in this statement. *In contrast, there is evidence pointing towards the general integrity of individual contributing elements, but again the specific integrity is not identified, nor is the entire district adequately assessed as a whole.*

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An MND must sufficiently provide *factual evidence*, or a fully articulated *expert opinion*, that impacts are less than significant, or can be mitigated through some appropriate measures. This portion of the process is called the “Assessment of Effects” and AOE sections or documents (whether stand-alone, or as portions of an EIS, EA, EIR, or MND) should always specifically reference each of the pertinent criteria for integrity and evaluate the potential effects of the project, or undertaking, objectively. This appears not to be the case for either of these supporting documents, and I would suggest that they are inadequate to support an MND for the zoning overlay or the hotel. An expert-opinion is presented, but it has not been fully articulated, nor justified with any details or evidence. It is just a vague statement.

The proposed overlay clearly is what we would call a “but-for” condition – “but for” the proposed EKN Appellation Hotel, the zoning overlay would not have been proposed. It is also being proposed as a mitigation measure in and of itself. The suggestion that it would increase economic opportunity and the availability of residential housing without any actual supporting evidence is somehow supposed to mitigate the potential adverse effects to historic resources. In fact, the opposite seems more likely. There is an assumption of increased revenue flowing into the city should the overlay be passed, but the long-term stability of that assumption is very questionable. Even if there were an immediate payoff due to the hotel project, reducing long-term protections for short-term payoffs is ill-advised and unsustainable. Also, as we learned from the applicant, purchase of the proposed hotel property in Parcel A is contingent upon passage of the zoning overlay. This is seriously ill-advised, as that parcel should not be included in the overlay to begin with.

I disagree with the city staff recommendations regarding the proposed zoning overlay. I appreciate the work they did, but they have mistakenly overlooked the insufficiency of the supporting historic resources documents, and therefore both the conclusions and the appropriateness of the IS/MND. I would recommend that planning staff evaluate more intensively the evidence provided for expert opinions regarding potential effects under CEQA projects, and not just accept them without thorough scrutiny. *Here it sounds as if I am impugning the city staff, and that is not my intention. I recognize that this level of scrutiny is standard procedure in many CEQA projects, and probably acceptable in most of them. However, when effects on a NR-listed District are being considered, the standards are more stringent, and always should be so.* I do not know if this has been an on-going issue, or if it relates to this proposal specifically. *Here I am only implying that it could have been an issue in past CEQA projects that was overlooked as well, not that the city staff are in any way negligent. They are carrying out their tasks as they should and I would not expect them to be highly experienced experts in either NR-eligibility or evaluation, which you would need to be to override what is normally seen as a sufficient expert opinion.* I also do not know if this carries over to “expert” recommendations on other environmental effects, in this or other CEQA documents. *I did not mean to suggest anyone providing evidence was not an expert in their field, only that there may be environmental effects that require the recommendations of specific experts and others that may be concluded through specific guidelines, policies, or mitigation measures.* Although I do recognize that “integrity” is a subjective assessment, it always has to be evaluated in the context of the criteria of integrity, and with respect to a historic district, has to be applied to the collective whole, as well as the individual elements. Potential effects to historic resources also have to be assessed cumulatively, particularly in a case where the proposed changes would likely occur piecemeal over a long period of time.

This document is a revision to comments provided during a public hearing on November 14, 2023, and originally submitted in written form on November 15, 2023.

This leads me to conclude that the actual effects of the proposed hotel need to be evaluated with an EIR, and especially one which includes an Alternative Sites Analysis. The proposed zoning overlay needs to be discarded entirely. I do not find that it would do anything positive for the NR District or other NR/CR-listed, or NR/CR-eligible resources in the downtown. Its potential to drive infill development, or stimulate affordable housing is entirely speculative at this point, and these issues are more appropriate for the upcoming general plan instead. I am not in favor of modifying the IZO text nor the IZO map to allow the zoning overlay, and I would recommend that the planning commission and city council reject the Draft IS/MND as inadequate, and call for a full EIR for the proposed hotel on its own pursuant to CEQA Section 15064.

Petaluma Planning/Historic Preservation--EKN Hotel Application /Overlay/ IS/MND-11/14

Veronica Olsen [REDACTED]

Tue 11/14/2023 5 31 PM

To: Orozco, Uriel <uorozco@cityofpetaluma.org>

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Dear Commissioners,

I am writing to oppose the proposals before you tonight. The hotel needs to step down its height and improve its design. The overlay concept is out of place and out of sync with Petaluma's General Plan update process.

-No to General Plan and Zoning Amendments

-No to adopting the Proposed Downtown Housing & Economic Overlay – Keep Historic Downtown and adjacent to Oakhill Brewster Historic District 4 Stories.

No to the Planning Commission considering adopting an IS/MND for the Proposed EKN hotel and the Proposed Downtown Housing & Economic Overlay.

The staff report subject line takes up half the page, indicating the complexity of combining a project application with an urban planning policy discussion

So many of my fellow residents have articulated the downside of approving General Plan and Zoning Amendments, the concept and specifics of Downtown Housing and Economic Overlay, and the worrying recommendation that neither the hotel project application nor the tag along overlay needs a full EIR.

DOES OUR GENERAL PLAN AND PLANNING PROCESS MATTER?

For years, many community members have pondered and vetted the City's guiding documents, namely the General Plan, Central Specific Plan, and Historic Preservation Guidelines. Pushing through an overlay proposal without a robust community process that adequately elicits feedback on the impacts of increasing building heights and floor area ratios and removing active ground floors, demonstrates a disinvestment in the community of Petaluma.

EKN reported at a community meeting that the planning department encouraged them at the beginning of 2022, to please pursue a 75 foot height proposal, despite our General Plan mandate of 45-feet. EKN was also encouraged to pay for their own economic analysis report and the proposed overlay. What message does this send to the development community about Petaluma? How can the developer's application be the driver and the decider as to the shape and experience of our historic downtown?

OVERLAY – HOUSING AND ECONOMIC SOLUTION?

No evidence that building six stories and increasing the floor area ratio will increase economic activity. Economic development is linked to enhancing and preserving our unique historic downtown experiences. How can taking away active ground floors in the historic downtown help interaction? How can six stories enrich our landmark assets?

Petaluma should focus on updating a downtown plan that preserves many more historic structures, as historical experts Page & Turnball reported in the Existing Conditions Report. Combined with an Economic Revitalization Strategy, this would lay the foundation for appropriate next steps

Petaluma has a lot of empty commercial buildings. Why not start with engaging landowners? A program for entrepreneurial incubation with inactive spaces? A creative economy initiative? Many solutions are only possible with necessitating six story structures

HOUSING, WHY SIX STORIES, WHY DOWNTOWN?

YIMBY endorsed the Petaluma Housing Element in 2023. This is a sign that we have more than adequately addressed our housing allocations. In the Housing Element, there have been no historic downtown sites, so the assertion that six stories in large parts of downtown are necessary to meet our needs for housing, does not add up. What about the needs of the historic downtown, Petaluma's economic driver? Don't kill the goose

ULI TAP REPORT 2020, a housing analysis report designed for Petaluma, asserts that a downtown district should be along the river. There is no mention of 6 stories, and there is no mention of the historic Downtown

"The historic Downtown area along Petaluma Boulevard and the residential blocks around Fourth Street are a large part of Petaluma's identity and the biggest draw for visitors. Today, the river tends to be more of a back door to Downtown, but the reverse was true for many years.The opportunity for Downtown now is to develop more housing that can benefit from reviving the river as a key urban open space that connects people to nature and each other. One key focus would be to restore the river as Petaluma's "front door" so the river could once again become Petaluma's social and ecological lifeblood and a major part of its identity."

https://storage.googleapis.com/proudcity/petalumaca/uploads/2021/03/ULI-SF-Petaluma-TAP_Report.pdf

HOW WILL DOWNTOWN DEVELOP WITH THE PROPOSED OVERLAY?

Petaluma has no design standards or separate design review committee. It has no objective design standards and has only dedicated a few months to complete this critical work, whereas other jurisdictions have prioritized and budgeted these over 1-2 years. Compared to other jurisdictions, this also shows how vulnerable Petaluma is to more substandard architecture and developers who are less concerned with the human scale and livability. Will this be robust enough to ensure we

get the right product Downtown, if six stories are the new height limit? Where is the plan for public spaces and places? What kind of businesses and services do we need? As Jan Gehl Architect and Urban Designer whose work focuses on creating cities for people, said "First life, then spaces, then buildings – the other way around never works."

MISSING STAKEHOLDERS PROPERTY, BUSINESS, COMMUNITY

Instituting an overlay without engaging property owners' existing businesses and the community opens the outcomes to significant flaws, oversights, and inequities.

If continued and endorsed, this unilateral process sets a precedent that openly minimizes a robust community process. It also confirms that it is okay and right to encourage development with rules that apply on a case-by-case basis.

SEND EKN BACK TO THE DRAWING BOARD

Comply with the height limits of 45" – stick to historic guidelines.

Give the community a design it cannot refuse. The hotel design has stayed the same since its initial iteration for a corporate chain hotel, such as Marriott or Hilton, except for changing the tiles and some facades. Petaluma deserves better than that.

Thanks for reading and your consideration

Best,

Veronica

From: Jean Haner <[REDACTED]>
Sent: Monday, May 13, 2024 12:52 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Appellation Hotel Project

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I'm writing to voice support for **denying** the current plans for the Appellation Hotel project in downtown Petaluma.

1) The current design for the hotel clashes horribly with our beautiful Victorian downtown area. I've seen many projects in other cities where new construction was designed to blend beautifully with older style buildings and maintains the attractive charm of the area. As it is now, this design would really be a terrible sore thumb and ruin the wonderful ambiance of downtown.

2) The current design exceeds height restrictions and would tower over the rest of the neighborhood. Please do enforce the height restrictions for this building.

This hotel could be a gorgeous addition to downtown if it blended in with the style of architecture and height of the other buildings.

Please take action to ensure we don't lose Petaluma's charm that is such a draw for tourists and so good for our economy.

Thank you,

Jean Haner

From: Jeremy Hancock <[REDACTED]>
Sent: Monday, May 13, 2024 3:50 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Comment Overlay &

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The Downtown Housing & Economic Opportunity Overlay and EKN Appellation Hotel Initial Study overlooks key areas, does not fully consider alternatives, and claims mitigation of potentially significant impacts where there is none.

Specifically:

Buildings in the overlay will only be required to meet CalGreen Building Tier 1 standards. Tier 1 is the lowest standard and, in order to programmatically allow for cumulative effects of densification, Tier 2 standards should be applied.

The scope of the EIR should be broadened to include the use of Tier 2 standards throughout the overlay.

The EIR should also examine the required use of active solar throughout the overlay including the use of transparent solar panels for windows and vertical solar panels as cladding or siding for buildings.

In order to further decarbonize electricity demand in the overlay, projects should be required to have onsite solar batteries to provide electricity at night and on cloudy days.

The EIR should further consider the alternative of making all projects in the overlay net-zero when it comes to electricity usage. All projects should generate enough of their own electricity.

The hotel does not meet BL1: Green Buildings

It does not have a cool roof.

The Initial EIR claims that it does but fails to mention that, because its roof is open to guests, it cannot be a cool roof. The hotel has a flat roof and, under CalGreen, a roof with a slope of less than 2:12 needs to have a Solar Reflective Index of at least 75 meaning that they would mostly have to be white. A roof that reflective would not be comfortable for guests and the plans show that the roof will be a combination of non-reflective wood, gray decorative concrete pavers, and tan pre-cast pavers.

There is no solar water heating system.

Recycled building materials are not detailed.

Furthermore, Tier 1 is the lowest CalGreen Tier. The EIR scope should include the alternative to enclosing the roof to make it a cool roof and a requirement to comply with CalGreen Tier 2.

The hotel does not meet Building Control Measure BL4: Urban heat island Mitigation.

The Initial EIR claims mitigation in that “the proposed hotel would be required to incorporate passive solar building design and landscaping conducive to passive solar energy use for both residential and commercial uses, i.e., building orientation in a south to southeast direction, encourage planting of deciduous trees on west sides of structures, landscaping with drought resistant species, and use of groundcovers rather than pavement to reduce heat reflection.”

The building is oriented to the northeast. It’s main side, facing Petaluma Blvd., South is about 140’ long and faces NE, the back of it faces SW and the shorter sides, at less than 100’ face SE and NW. None of it faces south. Nowhere in the project description that I’ve read are passive solar features mentioned.

The hotel does not meet EN1: Decarbonize Electricity Generation.

The Initial EIR claims it does because natural gas will not be used and the operators will have “the option to participate in the Sonoma Clean Power Program.” the general plan calls for Petaluma to “Achieve carbon neutrality by 2030 and equitably foster a sustainable and resilient community in which today’s needs do not compromise the ability of the community to meet its future needs”, the scope of the EIR needs to include more than a Tier 1 compliance with CalGreen, Tier 2 or greater is called for. It should include the alternative of incorporating active solar siding and windows. Transparent solar panels are commercially available and can be used as windows. Vertical solar panels can also be used as siding. The EIR should consider these alternatives and calculate the effect of requiring the hotel to use facility-wide solar battery power at night and on cloudy days. Hotels keep lights on 24-hours a day and there is lots of energy use with cooking, housekeeping, lobby lights., etc. Requiring energy efficient appliances still results in an increase of energy usage. The EIR needs consider the alternative of making this a net-zero project.

The hotel does not meet EN2: Decrease Electricity Demand

Even with the use of energy efficient devices and construction, the building of this hotel, as it is planned, will increase electricity demand. All of the appliances are electric, there are 27 car elevators, 2 hotel elevators, HVAC equipment, and all-electric kitchen, hundreds of lights, laundry, dishwashing, cleaning, Wi-Fi, televisions, etc. to contend with. No matter what, electricity demand will increase.

The EIR should consider the impact of limiting the hotel to the current 45' limit and compare which usage would be less.

The hotel does not meet TR9: Bicycle and Pedestrian Access and Facilities

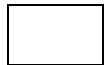
There is no dedicated bicycle lane on B Street or Petaluma Blvd. at the location making which makes cycling less safe and less likely to be used. Furthermore, the hotel only provides parking for 10 bicycles, 6 on the street and 4 in the hotel. People rarely use bike racks correctly and park them lengthwise to them which makes it so that only 2 can use them.

Travel to the hotel by bicycle is dangerous and bicycle parking is insufficient and the EIR scope should consider the alternative of adding protected bicycle lanes in increasing bicycle parking.

The initial study failed to look at the cultural impact of the hotel operation interfering with the annual Butter & Egg Parade.

The hotel is within the path of the parade and valets moving cars, guests checking in and out will necessarily interfere with it. The draft EIR needs to address this.

Jeremy Hancock
Petaluma



Virus-free. www.avg.com

From: Judith Allewelt <[REDACTED]>
Sent: Monday, May 13, 2024 4:05 PM
To: Olivia Ervin <oervin@cityofpetaluma.org>
Subject: Regarding Overlay

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While I am not in favor of the hotel or overlays A,B,C I am willing to compromise and say put the overlay on section A, let the hotel be built on A and do NOTHING to sections B and C - leave them alone. The community does not want 75' ceiling buildings all over town. That is my thought on this issue.

--

Judi Allewelt Coldwell Banker Realty #00785270

[REDACTED] [REDACTED]

-----Original Message-----

From: Julia Allen <[REDACTED]>

Sent: Monday, May 13, 2024 4:37 PM

To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>

Subject: Comment on the Overlay and Appellation Projects

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I have been trying my best to absorb the monstrous amount of information on Petaluma's Official City Website pertaining to the Economic Opportunity Overlay and EKN Appellation Projects and it is next to impossible. So much knowledge, effort and time has been put into this, but to what avail for the Petaluma's community at large who will be physically, visually, and physically effected should this disastrous project come to fruition?

There needs to be more public hearings. We need to see renderings, not just of the hotel, but in its relationship to all of the surrounding structures. The existing rendering of the hotel is extremely misleading considering the small size of the lot. It's actually difficult to believe that so many grand proposals (stores, restaurants, bars, 93 rooms, event spaces, etc.) could be squeezed into that proposed space. Only an ugly big block design which in no way respects our city's historic and cultural heritage could possibly attempt to meet these criteria.

Lastly, the Downtown Housing and Economic Opportunity Overlay zones A, B, & C need to somehow be identified as such in situ. The public should be better informed so they can be more involved.

Thank you for your time.

Julia Allen

From: Julia Cort <[REDACTED]>
Sent: Monday, May 13, 2024 6:41 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Hotel project and overlay

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Hello city representatives,

As a resident of Petaluma I am expressing my love of our town and it's historic architecture that creates the charm of Petaluma downtown.

The new proposed overlay and hotel is not in keeping with this charm we all embrace. Can't the developer work with a 4 story hotel structure and in an architectural design that is in keeping with Petaluma?

Why must we allow this to be altered to the point of losing our unique sweet historic downtown? Also, the parking issue is obvious with this many hotel guests needing to park their cars.

Regards
Julia Cort

Julia Cort [REDACTED] Cell

May 10, 2024

Petaluma Planning Dept
11 English Street
Petaluma, California 94952
Cc: M Group, Petaluma City Council

Dear City Planners,

I am writing to you as you requested to hear concerns as to why I am against the proposed hotel and the overlay. I am not a native of Petaluma but have lived here for 54 years so I think that comes pretty close. We moved here in 1970 to a very affordable town at that time. My husband is a retired Petaluma 5th grade teacher at Valley Vista Elementary for over 50 years and I have been a preschool teacher at Little Shepherd Lutheran Preschool for 30 years and I am also retired. We love our town as it has grown with all its expansions but still kept the beautiful historic downtown.

This proposed seven story hotel which forces a complete change of the overlay of our downtown is totally inappropriate. To think that it would open the possibility of other buildings that could be built would ruin our town. It would block out our beautiful green rolling hills on the westside, the gorgeous Sonoma Mountains on the eastside and dwarf our iconic St Vincent Cathedral which is so much a part of our downtown. It would change our skyline forever. Please tell the for profit M Group from San Jose that we do not want to look like San Jose. This proposed project will destroy this historic town. If you think it will bring in tourists you are sorely mistaken. Visitors come here to escape the overbuilt highrise towns they live in. They come to Petaluma because of its beautiful Nationally Registered iron front

buildings, its quaint welcoming streets with boutique stores and amazing restaurants that offer such a variety of dining. During the holidays they flock to Petaluma to cut down their Christmas trees at the local tree farms, tie them to the roof of their cars and then park downtown and roam our streets for a respite before they head back to their overbuilt cities. Why would they want to come to a town that looks like theirs?

Please don't let this out of town developer make us change our town. Tell him he is welcome to build a small boutique hotel that was originally planned for that lot in the first place and within our existing building requirements. Encourage small businesses with keeping affordable rent and perhaps suggest that some of our Victorian homes become B and B's.

We have plenty of hotels in town, the beautiful refurbished Petaluma Hotel, the Hampton Inn which rebuilt the historic line and twine factory. The Sheraton and the new Hilton Home2 which are rumored to be empty most of the time. Concentrate on our infrastructure which is really in need of help. Washington Blvd is a nightmare in both directions as is D St. The water and sewer plant is beyond capacity not to mention the water shortage.

I am asking you please not to change our overlay and vote NO on the proposed mega hotel. Listen to the majority of your citizens of Petaluma who are against both these proposals and continue to keep our town a place that visitors want to come to and our citizens want to continue to live in.

Thank You

Karen Pesutich

[REDACTED]

Petaluma, California [REDACTED]

From: Kate Bolton <[REDACTED]>
Sent: Monday, May 13, 2024 11:24 AM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Comments re Overlay District and EKN hotel Project

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1. Since the General Plan calls for “new, context-sensitive buildings” in the Downtown area (p. 5 of the Initial Study), please explain how the proposed hotel meets that criteria as well as the Plan’s vision to “Honor, celebrate and preserve Petaluma’s heritage and historic character”.

2. Among the Guiding Principles and Supporting Concepts cited (p. 5 of Initial Study) as “particularly relevant to the proposed project include: ... Preserve Downtown’s historic buildings and features while allowing for infill development that harmoniously coexists with the historic character...”

Please explain how the proposed Overlay as well as the proposed hotel will “harmoniously coexist” with the historic character of the Downtown, especially considering the existing building heights and the current height limit, which contribute so strongly to the aesthetics and character of Petaluma.

3. Why does the Project History omit the fact that, while the Planning Commission found the environmental review “adequate”, the Historic & Cultural Preservation Committee that participated in all the public hearings did not.

Please include any findings of the Historic & Cultural Preservation Committee regarding the Project.

4. I understand that an EIR must focus on an actual building project. However, the Overlay District is a large part of the project being studied yet there is little mention of the potential impacts on overlay areas B and C other than vague words about zoning amendments. While page 20 of the Initial Study shows the massing of the 6-story hotel among adjacent structures, the Overlay areas lack any visual presentation of the potential massing that the Overlay will allow. Although any actual buildout remains unknown, it would be very helpful to community understanding of the Overlay if there is a visual representation of the proposed massing/height allowance. An outline on a plan map, as presented so far, is inadequate in understanding the full project.

Please include a massing study visual of the potential buildout being proposed for the Overlay areas and including adjacent structures. It could be done with blank blocks and possibly dotted lines similar to the diagrams on page 20 of the Initial Study.

5. Why does the City feel it's necessary to change the current 45 foot height limit downtown? It appears that the only reason is to find a way to allow a taller hotel on a site that is basically too small for comfortable accommodation just so the development will pencil out. There is no one else clamoring to build bigger in any part of our town. So why then extend the development changes to other areas of town?

6. How will the increased height allowance affect the aesthetics and character of the southern entrance to downtown Petaluma, not to mention views out to the hills and the serious shade that taller structures cast on the pedestrian/outdoor experience?

7. The hotel design looks like a stock design that could be located anywhere; there is little about it that makes it fit with the character of downtown Petaluma. It has no character in itself except to declare itself as 'modern' in our historic downtown. A fancy metal canopy and some tile are appliqué responses to the request to make the building more 'local' or 'Petaluman'. It does not change the boxy blandness anywhere-ness of the design. It's just a fancied-up box.

Thank you for the opportunity to comment. I hope the City will take my requests and comments to heart.

Sincerely,

Kate Bolton

From: kathrine king <[REDACTED]>
Sent: Monday, May 13, 2024 4:59 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>; Greg Powell <gpowell@cityofpetaluma.org>; Isabel Castellano <icastellano@cityofpetaluma.org>
Subject: B Street resident letter upossing zoning changes and the hotel proposal

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Petaluma Planning Commission,

I strongly disapprove and I'm outraged about these two proposals and the City Councils preference for preference for tax revenue over the aesthetics of the downtown area. I am 1000% in favor of maintaining our historic downtown. Having said this, it doesn't mean all construction is bad.

I agree with a citizen who said: "This is not an "either or" choice in regard to this hotel. Density can be increased in a manner that preserves the character of our historic downtown. It is not a choice between 6 or 7 story buildings throughout our historic downtown or sprawl. Our city "planners" seem to have NO sense of design, and no respect for what makes Petaluma special and desirable in the first place. The stupidity of this proposal is astounding.

Some folks have argued that building in town in favor of the rural areas is preferred. This is a ridiculous statement. No one opposed the zoning change and hotel are suggesting we build in the rural areas of Petaluma. But there are much more suitable locations for this hotel IF it was to be built.

There are plenty of other places for a big hotel, and many communities, including Sonoma town, have built lower 3-story hotels and kept the look and feel of their downtowns. City Council and the M Group - corporate-owned planning commission, not local people who care about our town.

This is a list of just some of the reasons NOT to make changes and build a hotel on B Street

- I live on B Street and object to having this tall & ugly & out of character building on this valuable corner with the historic Rex Hardware store next door.
- The changes in light due to this tall building will be awful.
- No one I know can afford to pay \$400. a night to stay there.
- No one I know could afford to work at a hotel based on the current wages paged to hotel workers.
- Current hotels are not filled to capacity; we don't need more.
- He noted there is no parking for employees.

-- No access for service trucks coming and going with hotel necessities.

-- No area for commercial trash disposable containers.

-- The layout does not fit the location.

-- Violating the downtown building ordinance is unacceptable.

-- This building will overwhelm everything around it, and it does not include enough parking places for employees, residents, and workers at the hotel, so it also creates more traffic and parking problems.

-- Our historic district is on the Nat'l Federal Register. Please Petaluma - go to bat for our majestic town!

-- Our viewsheds of our iconic hills and the majesty of the iron front historic buildings being the tallest structures - will be a thing of the past.

-- Violating the downtown building ordinance is unacceptable.

-- Ruining the historic district is unconscionable.

-- Historic Districts have specific protections for a reason; this is architecture that cannot be had again. Many movies have been filmed here. One needs to move methodically, carefully, intelligently. If you're concerned with city dollars, WHY has the City hired 130 people . This is ludicrous

-- The infrastructure isn't there to support a lot of density in the small, historic downtown. And our hotels are nowhere near capacity. I have heard that the Sheraton is so underutilized it's falling into disrepair. Where there is a lot of capacity is at the fairgrounds, and in repurposing all the badly designed, car centric shopping centers such as the North Plaza on McDowell, Kohl's shopping center, the Target Center, the old Lucky's on Petaluma Blvd, etc. And there are huge, underutilized parcels on Petaluma Blvd North near the police station.

Kathrine King

██████████
Petaluma CA ██████████
██████████

From: Lance Kuehne [REDACTED] >
Sent: Monday, May 13, 2024 11:01 AM
To: City of Petaluma <eellis@cityofpetaluma.org>; -- City Clerk <cityclerk@cityofpetaluma.org>; Greg Powell <gpowell@cityofpetaluma.org>; -- City Council <CityCouncil@cityofpetaluma.org>; Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: DHEO + Hotel NOP Comment

Some people who received this message don't often get email from [REDACTED]. [Learn why this is important](#)

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Dear Petaluma City Clerk, please add my attached comments to the record for the EKN Appellation Hotel project Environmental Impact Report (EIR) and the Zoning Overlay proposed for Petaluma's General Plan update, being formulated by the M Group.

Dear Petaluma City Council members, Planning Commissioners, Planning Dept, and Consultants overseeing the update to Petaluma's General Plan,

Please add my comments to the record for the EKN Appellation Hotel project Environmental Impact Report (EIR) and the Zoning Overlay proposed for Petaluma's General Plan update

I believe the proposed EKN Appellation hotel needs a full EIR. It is readily apparent that this hotel would change the entire character of our historic downtown and will have major (negative) impacts if built. Even Petaluma's own Historic and Cultural Preservation Committee (HCPC) thinks there should be a full EIR. A full EIR is essential since this proposed hotel violates Petaluma's historic regulations, and any EIR should include an Alternative Sites Analysis.

As to regard to the proposed overlays to the current zoning of our downtown historic district. They would effectively destroy the historic character of our downtown (which is our primary tourist attraction and contributes greatly to the quality of life of Petaluma's citizens). I strongly oppose any version of the proposed overlays.

As a side note, I think this whole process is moving at too fast a pace to get meaningful input from the citizens of Petaluma, and shows a lack of transparency on the part of city officials.

Finally, SDAT was invited to this town by the initiative of private Petaluma citizens (not by city officials or consultants) to help create a vision for development in Petaluma for a more green, livable, and prosperous city. There is no mention in their report of increasing building heights in the downtown (nor of increasing density there), they did advocate for infill development around the train station (as part of invigorating the downtown). These proposed overlays have nothing to do with ANY of their recommendations in their well thought out report. This was an elite group of planners from throughout the United States who gave us invaluable recommendations with lots of community input, and nothing about this overlay has any resemblance to what they recommend. These overlays are quite literally the opposite of a 15 minute city. It seems that the city is using the SDAT report as a door stop, and not in any other capacity.

If you want to try an overlay, consider some of our sprawled out shopping centers around town, instead of destroying our crown jewel.

Sincerely,

Lance Kuehne

Petaluma Resident

From: [REDACTED] <[REDACTED]>
Sent: Monday, May 13, 2024 2:30 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Comments on EIR for the EKN Hotel Project

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I'm very concerned about the decision to omit the following critical items from the EIR: air quality, water quality, transportation, noise, population and housing, How can the impact of a major construction project in the middle of our downtown area be evaluated without reviewing these critical issues?

What is the explanation for omitting this level of review? These are the very issues that many Petalumans have voiced their concern about during the public hearings and in the public comments!

Should the pressure to move this project ahead affect the decision-making process?
What is the rush to move forward without due diligence?

Laurie Treleven

-----Original Message-----

From: [REDACTED] <[REDACTED]>
Sent: Monday, May 13, 2024 2:23 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Against building the new hotel at B/Pet Blvd

[You don't often get email from [REDACTED]. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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My husband and I object to the plan that would allow the hotel at B Street and Petaluma Blvd South to be built. They are planning an underground garage that will have 52 parking spaces for a 93 room hotel, restaurant, bar and employees. The math does not make sense in an already crowded part of downtown where parking is already limited.

We both vote and we do not support this or the building height increase proposed.

Liz and Bill Anderson
Sent from my iPad

From: Lynn Van Houten <[REDACTED]>
Sent: Monday, May 13, 2024 8:50 PM
To: Greg Powell <gpowell@cityofpetaluma.org>
Subject: DHEO and Hotel NOP Comment (Public Comment- Proposed Hotel & Overlay

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To Whom It May Concern:

Having lived in Petaluma 52 years, this is the very first time that I have written to Petaluma's city government officials and committee members regarding any issue! I have voted in every Petaluma election during those years.

I am writing to comment on the proposed hotel and overlay in relation to the environmental impact on aesthetics and historical impact to Petaluma's beautiful and historic downtown. I feel so strongly about this issue and want to let you know that I think the city would be making a grave mistake to allow this hotel to be built as proposed.

During the 52 years, I have both lived and worked in Petaluma. I am a retired Professional Librarian with a Masters Degree from UC Berkeley. I am currently an active watercolor artist and have sold many paintings of our lovely downtown architecture.

I find the height and aesthetics of the proposed hotel design to be offensive and inappropriate. The hotel is not compatible with Petaluma's uniquely beautiful and historic downtown area. It is the responsibility of the City Council and Planning Commission to protect and preserve the historical nature of the Petaluma downtown. The lure of additional city revenue should not be an issue in this decision. There are other more appropriate areas in Petaluma where this hotel at this height and design could be built.

Please listen to the citizens of Petaluma in regard to this proposed project.

Sincerely,
Lynn M. Van Houten MLIS

[REDACTED]
Petaluma, CA [REDACTED]
[REDACTED]

From: MARY CAVANAUGH <[REDACTED]>
Sent: Monday, May 13, 2024 12:45 PM
To: Petaluma Planning <PetalumaPlanning@cityofpetaluma.org>; Greg Powell <gpowell@cityofpetaluma.org>
Subject: Downtown Hotel Project - DHEO & Hotel NOP comment

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I am a 56 yr. Resident of Petaluma. My name is Mary Jane Cavanaugh at [REDACTED].

This is a "NO" vote to allowing any changes to the existing height requirements for buildings in the historic downtown Petaluma area.

Any building in the area should preserve the "look" of our existing downtown area. A small boutique hotel, no higher than 4 stories ,with complimenting historical architecture and their own parking would be fine.

Any hotel taller or with modern architectural designs should be built elsewhere in the City.

The historical downtown area, makes Petaluma the community that we are.

Thank you for the opportunity to voice my decisions.

Mary Jane Cavanaugh

(Please confirm receipt of this email).

[Sent from AT&T Yahoo Mail on Android](#)

From: Mike Thompson <mthompson10044@hotmail.com>
Sent: Monday, May 13, 2024 2:22 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: Comments on Hotel and Overlay EIR

You don't often get email from mthompson10044@hotmail.com. [Learn why this is important](#)

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For context, my family and I are 35 year residents of Petaluma. I've worked my entire career in construction, mostly not in Sonoma County.

In addressing several of the issues in the Housing and Economic Opportunity Overlay and the EKN Hotel Initial Study, I disagree with the findings on the following issues regarding the Hotel:

1. Water supply:

With the climate changing and our population increasing, I find a Less Than Significant Impact on water supply to be an incorrect finding. With the perimeters used the findings may be correct for the Overlay but not for a 90+ room Hotel. The drought years will return and at some point in time, we'll need to allocate water. Once built, the City will be liable if it can not support the Hotel water needs. I don't see anywhere the cost of that future liability.

2. Hotel Guest Parking

I believe that the Hotel's proposal of valet parking and use of the two city parking garages is unsustainable over the Hotel's lifetime and should not be classed as Less Than Significant Impact. Often it is currently difficult to find parking in the garages and another 30 to 40 cars (guests beyond 58 and employee) will only make it more difficult. As the Hotel ages and changes ownership, a new owner could easily find it unsustainable to continue with the valet style parking and push more parking toward the garages. The cost of supporting a 90 room downtown hotel over time with a new parking garage does not seem to be taken into account in the LTS conclusion.

3. Hotel Height

a. The height of the Hotel seems inappropriate for Petaluma's downtown. Floor setbacks and sight line studies do not give a clear sense of what a person feels when a significantly different proportioned building is set within an existing downtown context. The current proposed Hotel height needs to be reviewed and is certainly not a LTS issue.

My above comments are for the Hotel, not the Housing and Economic Overlay generally. I support the concept and planning involved in the Overlay. I do worry that we are using perimeters that were developed before the time of our changing climate and that those perimeters are going to need to change long before the service life of any downtown development is over.

Thank you for reading and considering my comments.

Michael Thompson
91 Rocca Dr
Petaluma, CA
347 752-3228

From: Morgan Bellinger <[REDACTED]>
Sent: Monday, May 13, 2024 4:58 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: EKN Overlay Comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

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I'd like to encourage City Council, staff, and other decision makers on this project to temper the requirements for parking for the hotel overlay project based on the fact that the city of Petaluma doesn't currently charge for street parking.

As you've seen in other comments about this project, street parking is enormously valuable to the people of Petaluma. But since we charge \$0 for it, it's often all taken. Requiring a business to make expensive changes to preserve city street parking that the city refuses to charge for makes no economic sense. Imagine giving city water away for free and requiring a restaurant to build their own well because there's no water left!

Furthermore, please consider Petaluma taxpayers who don't own cars. Street parking provides them no benefit, but the opportunity cost of all of the public land used to store cars and the cost of maintenance of the street are quite high - and are mostly paid for with taxes completely unrelated to gas tax and registration.

I have no financial interest in this project, my family owns one car, I live in Petaluma, and I'd happily pay a market rate parking fee for public parking - like so many other economically vibrant cities do - because it would mean less time waiting for a spot to open up.

Thanks for your time and consideration.

Morgan Bellinger

May 13, 2024

Via Electronic Mail Only

Mr. Greg Powell
Consulting Principal Planner, M-Group
Planning Division
11 English Street
Petaluma, CA 94952
gpowell@cityofpetaluma.org

**Re: Notice of Preparation - Environmental Impact Report
Downtown Housing & Economic Opportunity Overlay & EKN
Appellation Hotel Project**

Mr. Powell:

This firm represents the Petaluma Historic Advocates (“PHA”), a community organization promoting harmonious urban growth within Petaluma’s unique historic downtown, in connection with the proposed Downtown Housing & Economic Opportunity Overlay & EKN Appellation Hotel Project (“Project”). We have reviewed the NOP for the proposed Project, and offer the following comments regarding issues that should be evaluated in the EIR. First, sound planning principles call for the City to consider the Project as part of the General Plan Update, which is well underway, to ensure comprehensive planning and evaluation of the impacts of both the Hotel and Overlay aspects of the Project on the Commercial Historic District. Simply put, from both a planning and sound public policy perspective, it makes no sense for the City to consider approving an Overlay that could have major impacts on the City’s future without considering those impacts—and the need for, scope of, and details regarding that Overlay—as part of the planning process designed to address the City’s vision for that same future.

Second, under CEQA, the draft Environmental Impact Report (“DEIR”) must analyze the full scope of the Project’s environmental impacts and may not defer such

analysis until future discretionary reviews. Especially given the community's concerns about the proposed Project, as evidenced by the extensive comments submitted on the Project to date, the City's approach to this Project thus far is untenable. This letter explains PHA's particular concerns about the Project and identifies specific impacts that the City of Petaluma should carefully evaluate as part of an informative and comprehensive Draft EIR.

I. The EIR Must Analyze The Full Spectrum Of Impacts That Will Result From The Project.

The City proposes to prepare a DEIR that analyzes impacts only for those effects not found significant in the Initial Study/Mitigated Negative Declaration ("IS/MND") for the Project. (Notice of Preparation ("NOP") at p. 3). This will result in a DEIR that analyzes only impacts related to Aesthetics and Cultural and Tribal Cultural Resources. *Id.* However, this approach violates CEQA. As explained in comments on the IS/MND submitted by Lubin Olson (November, 2023), the IS/MND failed to analyze any potential environmental impacts of the Overlay, and deferred such analysis to future discretionary reviews. In each impact analysis section, the IS/MND stated that the Overlay "will not in and of itself result in physical development" (*see, e.g.*, IS/MND, pp. 29, 37, 42, 47, 53), then deferred analysis to some point in the future when discretionary projects are proposed in the Overlay. This approach is not allowed under CEQA.

The IS/MND is required to evaluate the "whole of the action" and must take into account *both* direct changes and reasonably foreseeable indirect changes to the environment. (Public Resources Code ("PRC") §21065; 14 Cal. Code Regs. ("CEQA Guidelines") §15378(a)). Indeed, the IS/MND itself recognized this requirement. (*See* IS/MND, p. 27 ("... 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.*")). Despite these statements, the IS/MND failed to include an evaluation of the full development allowed under the Overlay. Breaking the project into smaller sub-projects, as has been done here, will lead to inadequate environmental review. (*See, e.g., Bozung v. Local Agency Formation Comm'n* (1975) 13 Cal.3d 263, 283-84 (CEQA mandates that "environmental considerations do not become submerged by chopping a large project into many little ones"); *id.* at 282 (emphasizing that CEQA review for the whole of the project must take place "at the earliest possible stage" even where all future project details are not yet known)).

Therefore, the EIR must evaluate the environmental impacts of the proposed Overlay on both the existing physical environment and the environment envisioned by

any adopted plan (in this case the Downtown Subarea of the General Plan). (See CEQA Guidelines §15125(e)). Implementation of the Overlay consists of the following changes to three areas located in the Downtown Subarea of the General Plan, which includes the City's Historic Commercial District, through a combination of amendments to the City's Zoning Map Amendments, Zoning Ordinance, and General Plan: (1) increasing allowable building heights from 45' to 75' with a conditional use permit, (2) changing lot coverage from 80% to 100%, (3) allowing ground floor residential, (4) increasing the maximum FAR from 2.5 to 6.0, and (5) establishing development and design controls. (IS/MND, p. 2). Within the Overlay Areas, floor area ratios in Area A range from 0.00 to 0.73, Area B from 0.20 to 0.30, and Area C from 0.00 to 0.98. (IS/MND, p. 12). The proposed maximum FAR is 6.0, which is more than eighteen times existing conditions when averaging the floor area ratios of the three Overlay Areas. A denser, commercial core, with more housing units, retail, office and the Hotel, necessarily brings more people, traffic and noise, to the area. These potentially significant effects on the environment must be included in the EIR for the Project.

Relatedly, because the City proposes to defer analysis of any impacts related to the Overlay in the IS/MND, the Project as described in the NOP does not provide sufficient detail about the nature of the whole Project. It does not include land use and design standards or any meaningful discussion about how the Project will fit in with the overall plan for the area, despite the fact that the City's General Plan Update process is well underway. Consequently, the City and the public are left with very little understanding of what the whole of the Project will look like at build-out or how it will work in the context of other planned development in the area. It appears the City is taking the position that it need not evaluate the impacts of the Overlay because the precise development that will take place, aside from the proposed hotel in area A, is unknown. However, it is not sufficient for the City to assert that no specific development project has been proposed in the overlay areas B and C at this time. Since the City is proposing to approve the Overlay now, it must analyze the potential impacts of the full range of development allowed under that Overlay before doing so. (See *Bozung*, 13 Cal.3d at 282, 286).

II. The NOP Lacks Necessary Information Regarding The Project And Its Probable Environmental Impacts.

The purpose of an NOP is to solicit guidance from public agencies and the public as to the scope and content of the environmental information to be included in the EIR. (California Environmental Quality Act ("CEQA") Guidelines § 15375; see also CEQA Guidelines § 15082). In order to effectively solicit such guidance, the NOP must provide adequate and reliable information regarding the nature of the project and its probable

environmental impacts. Unfortunately, the NOP does not provide sufficient information to allow the public to meaningfully respond to the NOP.

A. Alternatives

CEQA emphasizes that an EIR must analyze a range of reasonable alternatives to the project. The alternatives must feasibly attain most of the basic project objectives while avoiding or substantially lessening the project's environmental impacts. (Public Resources Code § 21100(b)(4); *see also* CEQA Guidelines § 15126.6(a)). The CEQA Guidelines state that the selection and discussion of alternatives should foster informed decision making and informed public participation. (CEQA Guidelines § 15126(d)(5)).

The NOP does not identify any alternatives to the proposed Project. Given the size and scale of the Project, the potential exists for significant environmental impacts. Consequently, as acknowledged in the NOP, the EIR should identify and evaluate several alternatives to the Project capable of avoiding or substantially reducing those impacts. It will also be important for the EIR to flesh out the details of each alternative so that the public and decisionmakers are adequately informed of each alternative's benefits and environmental impacts.

We encourage the EIR preparers to consider alternatives that reduce the intensity of uses in the historic downtown area. The Project proposes development on a site located less than 500 feet from the riverfront at an intensity and density that has the potential to result in potentially severe environmental impacts to the City's historic district. Consequently, the draft EIR should include an alternative that considers other types of development projects to reduce these environmental impacts.

B. Analysis of the Project's Probable Environmental Effects

An NOP must provide sufficient information describing the probable environmental effects of the project, in order to enable the public to make a meaningful response to the NOP. (CEQA Guidelines § 15082(a)(1)(C)). Here, the NOP simply lists the environmental factors that will be addressed in the DEIR, but it fails to provide any specificity as to the nature of these impacts or the inquiry that will be made to thoroughly evaluate those impacts and identify strategies to avoid or significantly reduce their severity.

1. Transportation Impacts

The DEIR must thoroughly analyze the Project's transportation and circulation impacts including documenting its methodological approach to evaluating the Project's

potential to increase vehicle miles travelled (“VMT”) and clearly identifying its thresholds for determining the significance of these impacts. This analysis of transportation impacts must necessarily take into account traffic resulting from the hotel portion project site and traffic and VMT from development anticipated throughout the Overlay areas at the maximum densities allowed under the Project.

The DEIR must also evaluate the Project’s potential to conflict with local and regional circulation and transit plans. As part of this analysis, it must analyze the Project’s contribution to traffic congestion in the area. In addition, the DEIR must evaluate how the increase in traffic from the Project could pose a risk to pedestrians and bicyclists (including school children at nearby schools) who routinely rely on the area’s roadways.

2. Climate Change Impacts

The DEIR must include a thorough evaluation of the Project’s consistency with applicable greenhouse gas-related plans, policies or regulations with which the Project would be required to be consistent. This analysis is particularly important because existing conditions are such that we have already exceeded the capacity of the atmosphere to absorb additional GHG emissions without risking catastrophic and irreversible consequences. Therefore, even seemingly small additions of GHG emissions into the atmosphere must be considered cumulatively considerable. (*See Communities for a Better Environment v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 120 (“[T]he greater the existing environmental problems are, the lower the threshold for treating a project’s contribution to cumulative impacts as significant.”); *see also Center for Biological Diversity v. National Highway Traffic Safety Administration* (9th Cir. 2007) 508 F.3d 508, 550 (“[W]e cannot afford to ignore even modest contributions to global warming.”)).

The City must ensure that the DEIR accurately identifies the Project’s increase in GHG emissions and adequately analyzes how the increase in emissions would contribute to climate change. As part of this analysis, the DEIR must specifically analyze the Project’s consistency with: (1) Executive Order (EO) S-3-05 which calls for reducing GHG emissions to 80% below 1990 levels by 2050; (2) EO B-30-15, which establishes an interim target to reduce GHG emissions by 40 percent below 1990 levels by 2030; and (3) Climate Ready 2030, the City’s Blueprint for Carbon Neutrality. It will be critical that the DEIR identify mitigation measures to ensure that GHG emissions are reduced to less than significant levels.

3. Energy Impacts

CEQA requires agencies to analyze whether their projects will result in the wasteful or inefficient use of energy. (Public Resources Code § 21100(b)(3); Guidelines, Appendix F). “Under CEQA, an EIR is ‘fatally defective’ when it fails ‘to include a detailed statement setting forth the mitigation measures proposed to reduce wasteful, inefficient, and unnecessary consumption of energy.’” (*Cal. Clean Energy Com.*, 225 Cal.App.4th at 209 (quoting *People v. County of Kern* (1976) 62 Cal.App.3d 761, 774)). The Draft EIR must provide a thorough analysis of the Project’s energy impacts. The proposed Project itself must demonstrate a decreased reliance on fossil fuel use and commit to clean-energy (all electric) new construction.

4. Air Quality Impacts

The DEIR should thoroughly analyze the Project’s air quality impacts. Particular attention must be paid to comprehensively identifying each source of emissions that would be generated by development within the Project including from motor vehicle traffic, stationary sources, and area sources. The DEIR must also evaluate the Project’s potential to threaten public health from the increase in toxic air contaminants during Project construction and operation. If the Project’s air quality impacts are determined to be significant, the DEIR must identify feasible mitigation measures to avoid or reduce those impacts.

5. Noise and Vibration Impacts

The Project has the potential to generate noise both during the Project’s construction and during operation. The DEIR should ensure that noise and vibration resulting from the excavation and demolition of existing buildings does not adversely affect nearby sensitive receptors, and does not damage nearby historical buildings. In addition, the DEIR should analyze noise from increased traffic.

6. Hydrology and Water Quality Impacts

Significant impacts to the hydrologic regime and water quality could occur as a result of the construction and operation of the proposed Project, particularly given the existing Covenant and Environmental Restriction on the Property. The DEIR must determine whether development of the proposed Project would result in the violation of any water quality standards, result in substantial new amounts of polluted runoff, or alter

the existing drainage pattern of the site. If such impacts are determined to be significant, the DEIR must identify feasible mitigation measures to avoid or reduce those impacts.

7. Land Use Impacts

The DEIR's analysis of land use and planning impacts is critically important. The DEIR must describe the existing land uses adjacent to and within the Project site and the reasonably foreseeable development within the Overlay. The DEIR must also evaluate the Project's consistency with Petaluma's General Plan and any other applicable policy documents.

8. Population, Housing and Growth Inducing Impacts

As noted above, the DEIR must disclose the amount of growth contemplated within the Project vicinity, including development at Overlay sites other than the hotel site. The DEIR must also assess whether the proposed Project will induce substantial population growth either directly or indirectly (by extension of infrastructure such as service facilities). The growth inducing analysis in the DEIR must include: (a) an estimate of the amount, location, and time-frame of growth that may occur as a result of the Project and (b) identification of mitigation measures or alternatives to address significant direct and indirect impacts.

9. Public Services Impacts

The DEIR must analyze the increased demand for all essential public services and utilities resulting from the allowable development under the proposed Project. As part of this analysis, the DEIR must provide information about the current capacity of wastewater treatment system(s) and landfills. The DEIR must also provide information about current levels of service and response times for fire, police and emergency services. A detailed analysis of project and cumulative development demands must be included in order to determine whether there will be a need for expansion of services. Where expansion of services would have environmental impacts, the DEIR must analyze those impacts as well. If the Project's impacts are determined to be significant, the DEIR must identify feasible mitigation measures to avoid or reduce those impacts.

10. Cumulative Impacts

An EIR must discuss the cumulative impacts of a project if the incremental effects of a project are considerable when viewed in connection with the effects of other past, current, and probable future projects. (CEQA Guidelines §§ 15130(a), 15065(c)). Projects currently under environmental review by the City clearly qualify as reasonably probable

future projects to be considered in a cumulative impacts analysis. (*See San Franciscans for Reasonable Growth v. City & County of San Francisco*, 151 Cal.App.3d 61, 74 n.13 (1984)). In addition, projects anticipated beyond the near future should be analyzed for their cumulative effect if they are reasonably foreseeable. *See (Bozung v. Local Agency Formation Comm'n*, 13 Cal.3d 263, 284 (1975)). The DEIR must evaluate the Project's impacts together with any other planned development in the area.

The DEIR must also evaluate the cumulative environmental impacts resulting from the increase in housing production required to meet the most recent Regional Housing Needs Allocation. The California Department of Housing and Community Development identified the Bay Area's Regional Housing Need Determination as 441,176 additional housing units.¹ The ABAG Executive Board allocated 14,562 in Sonoma County, and 1,910 of these units in Petaluma. This substantial increase in residential development has the potential for extensive environmental impacts, particularly on the local governments' ability to meet future water supply and wastewater demand. The DEIR must thoroughly analyze the environmental effects from this Project together with the anticipated increase in residential development in the region.

III. Conclusion

We appreciate the opportunity to provide these comments. PHA remains concerned about the potential far-reaching impacts of this Project and about the lack of detailed information provided about the whole of this proposed development.

Please notify us of the release of the draft EIR for the proposed Project. We also request that the City keep us informed of all contracts, notices, hearings, staff reports, briefings, meetings, and other events related to the Project.

¹ [https://www.hcd.ca.gov/community-development/housing-element/docs/abagrhna-final060920\(r\).pdf](https://www.hcd.ca.gov/community-development/housing-element/docs/abagrhna-final060920(r).pdf); accessed May 8, 2024.

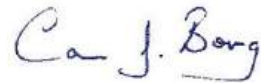
May 13, 2024
Page 9

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP



Robert "Perl" Perlmutter



Carmen J. Borg, AICP
Urban Planner

cc: Andrew Trippel, Planning Manager (atrippel@cityofpetaluma.org)
Eric Danly, City Attorney (edanly@cityofpetaluma.org)
Petaluma Historic Advocates

From: peter almond <[REDACTED]>
Sent: Monday, May 13, 2024 6:31 PM
To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>
Subject: DEO Plan and EIR

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City representatives and EIR consulting assigned company First Carbon Solutions rep narrowed the range of issues for scoping the EIR to aesthetics and cultural group relations. (I have not found this explanation advanced in print, so this summary may have limitations). The representatives explained that the Petaluma Planning Dept. process had arrived at these unresolved areas and that these issues (in terms of the EIR) would figure exclusively in the scoping process (as provided in the May 1, 2024 public meeting and in written submissions to the Petaluma Planning Department).

I have no way of knowing about the project in relation to cultural group understandings.

In connection with the DEO proposed aesthetics item, there are two issues. And they raise a chicken and egg question (of all things in this town). Which comes first? The proposed Overlay chunks indicated in DEO chunks B and C and the Appellation Hotel, chunk A of the DEO (chunk A includes other random elements besides the hotel). Further they pose another chicken and egg question (what else!): the DEO project and the city's General Plan (2025) process. If major changes are instituted under the DEO plan how do they correlate to the General plan? And so forth.

The hotel is real. That is, there is a design, a rendering of that design and a development company which is investing in the entire process (including financial support to the city for the cost of the entire DEO plan, including the so-called Overlay plan.) As a result one can comment on aspects of the aesthetics of the project as presented as of mid-May, 2024.

The hotel design in scale and scope is out of whack with the site, the downtown historical nature, and the overall city. It aspires to another place and culture. This morning newspaper of record includes this statement.

In late April, I met her for lunch at the rooftop restaurant of a Beverly Hills hotel.

<https://www.nytimes.com/2024/05/12/movies/anya-taylor-joy-furiosa.html>

The hotel in its 70 feet height and blunt rectangular form dwarfs its surroundings and shuts out much of the sightings downtown Petaluma offers walkers - say from B street and 1st. The view west would stop at the hotel, whereas today one gazes through lower building outlines to the westward hills. and beyond in the mind's eye to the sea and Tomales Bay.

But the rooftop denizens would enjoy the sight of all a guest can visually digest. They would own the river and the inlet, the artifact of another era, the big cement mixing plant on the river's quirky island, and east and to the west, the slumping hills and ridges of Sonoma Marin and Napa. Does Petaluma have roof envy, aspirations of Visitors arriving in valet parked Teslas?

And the building upon its site appears top heavy not only plain and heavy but its bulged domination of place indicates a toppling over or sinking of its own weight. It's an exercise in too-muchness. And the movie stars and the rooftops? Leave those to places like Beverly Hills and the major cities.

Or offer a rooftop at the 3rd floor limit. Do something like this:



On roughly similar square footage the Normandy Inn of Carmel-By-the-Sea offers over 100 rooms (including suites). It is roughly 2 storeys and provides inner courtyards and an outdoor pool. While its faux tudor style has a certain kitsch it offers a pleasing site appropriate aesthetic. This particular solution is not suggested for Petaluma, but the general atmosphere seems both warm and unobtrusive to its overall setting.

The anticipated aesthetic for the B and C overlay chunks starts with proposed refigured dimensions, virtually doubling present day zoning standards. What does the 2025 General Plan say about downtown zoning changes? It does not compute with existing visual aesthetic of Petaluma downtown life. Looking new structures as provided in the reimagined dimensions would set the downtown in a gloom of shadow and heights doubling and tripling heights.

And the narrow ambition indicated in the 2 undeveloped chunks promises revisions for the entire downtown aligning with the precedent settling dimensions of the DEO plan. The B and C chunks are spooky vacant ideas that qualify as trojan horses for changes to the downtown that no one can foresee precisely, but one can sense in dark, shadowed streets, once cheerful light flooded planes for people and diverse commerce.

The planning initiative signified by the DEO plan in its entirety suggests a tendency toward developer mentality in the Planning Department's role in advancing the DEO. A citizen would not expect the department to stand in opposition to development, but one expects a deeper view of change and transformation not the development for tax revenue and scaling up to the obliteration of light and the visual delights that represent Petaluma as we have known it.

-peter almond

From: Sonya Karabel <[REDACTED]>
Sent: Monday, May 13, 2024 9:54 PM
To: Greg Powell <gpowell@cityofpetaluma.org>; Olivia Ervin <oervin@cityofpetaluma.org>
Subject: DHEO + Hotel NOP Comment

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Dear City of Petaluma,

I am writing on behalf of UNITE HERE Local 2, the hotel workers' union in the North Bay and around the Bay Area. We are happy to see that an Environmental Impact Report is being prepared for the Downtown Housing and Economic Opportunity Overlay and EKN Appellation Hotel Project. However, the Notice of Preparation states that the EIR will only address Aesthetics and Cultural and Tribal Resources. **The EIR should study Greenhouse Gas Emissions, Air Quality, and Transportation impacts of the Overlay, as well as a housing-only Alternative Overlay.**

The Mitigated Negative Declaration neglects to analyze the Overlay's impacts on Greenhouse Gas, Air Quality, Transportation, stating that "the proposed Overlay in and of itself will not result in any physical development and will not generate any emission until such time as future development is proposed, which would be independently evaluated." This is backwards, leaving environmental review to the individual project level rather than as part of zoning policy. However, each individual project may qualify as an infill development and therefore may fall through the cracks, with its' environmental impacts never being studied.

The environmental review plan includes both an overlay and a proposed hotel within the overlay. The stated goal of the overlay is to create more housing. A staff report from August 2023 states that the project would implement the General Plan by "encouraging higher density, mixed-use infill developments that prioritize additional housing and economic opportunities in the Downtown core on underutilized sites." Petaluma struggles with a housing shortage, particularly of affordable housing. Our members working at the Petaluma Sheraton and other hotels in Sonoma County experience that shortage through cramped housing, difficulty paying rent, and long commute times.

The Environmental Impact Report should study a housing-focused alternative overlay that allows for additional height for housing development, but not for hotels. There is reason to believe that developing more housing in Downtown Petaluma, near transit and employment centers, would result in fewer Vehicle Miles Traveled compared to the current proposal, which would permit not only the EKN Appellation Hotel but also additional potential hotel development. Given the distance many of our members commute on a regular basis due to lack of affordable housing, it seems logical that building housing, rather than hotels, in Downtown Petaluma would have less severe environmental impact.

Though this overlay was proposed and is being studied in conjunction with a hotel project, the City of Petaluma planning department and City Council have repeatedly stated that the Overlay should be evaluated separately. If the goal of the overlay is not just to rewrite Petaluma's zoning code to favor one hotel developer, but to create good policy that allows for the economic flourishing of Petaluma and its' citizens, then the overlay, not just the hotel, should be thoroughly environmentally reviewed and a non-hotel alternative should be studied.

Best,

Sonya Karabel
Researcher
UNITE HERE Local 2 & 49



From: Tom Gaffey <[REDACTED]>

Sent: Monday, May 13, 2024 12:32 PM

To: City of Petaluma <eellis@cityofpetaluma.org>; -- City Clerk <cityclerk@cityofpetaluma.org>; -- City Council <CityCouncil@cityofpetaluma.org>; Greg Powell <gpowell@cityofpetaluma.org>; Petaluma Planning <petalumaplanning@cityofpetaluma.org>

Subject: EKN Hotel, Downtown Petaluma Overlay proposal

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Members of the Petaluma City Council:

I submit this, to tell Petaluma council members to add my voice, that I am against moving forward with the EKN Hotel plan for the corner of Petaluma Blvd and B St, as designed at above the current 45 foot height limits outlined in Petaluma's current General Plan.

I am also against moving forward with the planned overlay of several blocks in downtown Petaluma that would raise height limits of 45 feet in the downtown area especially as it encroaches on the nationally recognized historic area of our downtown. A 70 ft building at the corner of 4th St and Western Ave, are you kidding?

I am against moving forward with a truncated EIR report that cannot address traffic issues, infrastructural issues, environmental issues, historic legacy, aesthetic issues, crowded street and pedestrian issues and in general quality of life issues.

I am aware that in politics and developer driven issues "please" is not enough, but PLEASE for those of you that truly love what Petaluma is now and was in our historic past, please do not move forward with this project.

Tom Gaffey
Petaluma citizen and business person

-----Original Message-----

From: Tracy Wilson <[REDACTED]>

Sent: Monday, May 13, 2024 12:27 PM

To: Petaluma Planning <petalumaplanning@cityofpetaluma.org>

Subject: Proposed Hotel at B Street & Pet Blvd

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I'm writing to reiterate my disapproval of the proposed hotel.

If the overlay is approved there's no telling what our quaint downtown will look like in the future!!

It's completely against the historical guidelines to preserve downtown the way it is and shouldn't even be considered.

The M-Group is trying to ruin downtown Petaluma and all because of greed.

Sent from Tracy's iPhone

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