

VOLUME 1: INITIAL STUDY



975-1075 MAIN STREET INITIAL STUDY

for the City of Watsonville

975-1075 MAIN STREET INITIAL STUDY

for the City of Watsonville

Prepared By:

PlaceWorks

1625 Shattuck Avenue, Suite 300
Berkeley, California 94709
510.848.3815

In Association With:

Environmental Collaborative

Table of Contents

1.	INTRODUCTION	1-1
1.1	Initial Study	1-1
1.2	Report Organization	1-2
2.	EXECUTIVE SUMMARY	2-1
2.1	Initial Study Checklist	2-1
2.2	Environmental Factors Potentially Affected	2-2
2.3	Determination.....	2-2
2.4	Summary of Impacts and Mitigation Measures	2-3
3.	PROJECT DESCRIPTION	3-1
3.1	Project Location and Site Characteristics.....	3-1
3.2	Project Components	3-9
3.3	Required Permits and Approvals	3-23
4.	ENVIRONMENTAL ANALYSIS	4-1
I.	Aesthetics.....	4-1
II.	Air Quality.....	4-6
III.	Biological Resources	4-16
IV.	Cultural Resources	4-27
V.	Energy.....	4-30
VI.	Geology and Soils	4-36
VII.	Greenhouse Gas Emissions	4-43
VIII.	Hazards and Hazardous Materials	4-49
IX.	Hydrology and Water Quality.....	4-54
X.	Land Use and Planning	4-68
XI.	Noise	4-70
XII.	Population and Housing.....	4-77
XIII.	Public Services	4-78
XIV.	Parks and Recreation	4-80
XV.	Transportation.....	4-81
XVI.	Tribal Cultural Resources	4-96
XVII.	Utilities and Service Systems.....	4-99
XVIII.	Mandatory Findings of Significance	4-106
5.	MITIGATION MONITORING AND REPORTING PROGRAM.....	5-1
6.	ORGANIZATIONS AND PERSONS CONSULTED	6-1

TABLE OF CONTENTS

APPENDICES

Appendix A: Air Quality and Greenhouse Gas Emissions Data
Appendix B: Biological Resources Assessment
Appendix C: Geotechnical Report
Appendix D: Phase I Environmental Site Assessment
Appendix E: Riparian Corridor Study
Appendix F: Noise
Appendix G: Transportation Impact Analysis

SOURCES

In addition to the technical appendices, all documents cited in this report and used in its preparation are hereby incorporated by reference into this Initial Study. Copies of documents referenced herein are available for review at <https://www.cityofwatsonville.org/DocumentCenter/Index/157> under "Projects."

TABLE OF CONTENTS

LIST OF FIGURES

Figure 3-1	Regional and Local Context	3-2
Figure 3-2	Local Context	3-3
Figure 3-3	Existing Site Conditions	3-5
Figure 3-4	General Plan Land Use Designations	3-7
Figure 3-5	Zoning Districts	3-8
Figure 3-6	Proposed Site Plan	3-10
Figure 3-7	Building 1 Floor Plan	3-11
Figure 3-8	Building 1 Elevations	3-12
Figure 3-9	Building 2 Floor Plan	3-13
Figure 3-10	Building 2 Elevations	3-14
Figure 3-11	Building 3 Floor Plan	3-15
Figure 3-12	Building 3 Elevations	3-16
Figure 3-13	Conceptual Landscape Plan.....	3-19
Figure 4-1	Special-Status Species and Sensitive Natural Communities.....	4-19
Figure 4-2	Hydrological Function	4-56
Figure 4-3	Federal Emergency Management Agency Flood Zone Map	4-58
Figure 4-4	Stormwater Treatment Plan.....	4-63
Figure 4-5	Land Use Compatibility for Community Noise Environments	4-72

TABLE OF CONTENTS

LIST OF TABLES

Table 3-1	Demolition and Construction Phasing	3-23
Table 4-1	Existing Criteria Air Pollutant Emissions	4-8
Table 4-2	Construction-Phase Particulate Matter Emissions	4-11
Table 4-3	Nonresidential Electricity Consumption in Santa Cruz County 2014–2017	4-31
Table 4-4	Nonresidential Natural Gas Consumption in Santa Cruz County 2014–2017	4-31
Table 4-5	Construction Best Management Practices	4-60
Table 4-6	Existing and Proposed Peak Flows	4-65
Table 4-7	Construction Related Noise Levels, dBA L_{eq}	4-75
Table 4-8	Vibration Levels for Typical Construction Equipment	4-76
Table 4-9	Level of Service Definitions	4-82
Table 4-10	Existing Peak Hour Levels of Service at Intersections	4-85
Table 4-11	Existing Transit Service	4-86
Table 4-12	Project Trip Generation	4-87
Table 4-13	Existing plus Project Intersection Level of Service Results	4-88
Table 4-14	Cumulative 2040 Conditions Intersection Level of Service Results	4-90
Table 4-15	Water Demands, Baseline vs. Proposed Project	4-101
Table 4-16	Landfill Capacity	4-104
Table 4-17	Solid Waste Generation, Baseline vs. Proposed Project	4-104
Table 5-1	Mitigation Monitoring and Reporting Program	5-2

1. Introduction

This document is an Initial Study for the 975-1075 Main Street Project (proposed project) prepared by the City of Watsonville (City) to determine if the proposed project may have a significant effect on the environment. This Initial Study was prepared pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000 *et seq.*) and CEQA Guidelines (California Code of Regulations (CCR) Sections 15000 *et seq.*). Pursuant to CEQA Guidelines Section 15051, the City is the Lead Agency for the proposed project.

The project is located on an approximately 3.05-acre site in central Watsonville at addresses 975 to 1075 Main Street, approximately 1 mile east of State Route (SR) 1. The project site is assigned Assessor's Parcel Numbers (APNs) 018-261-14 and 018-261-29. The site's General Plan land use designation is primarily General Commercial, although a small portion of the site is designated as Environmental Management. The site's Zoning District is Thoroughfare Commercial (CT). The project site is currently developed with building pads that previously supported primarily commercial land uses, including auto service and repair shops, an auto supply store, a grocery store, a restaurant, and a storage building. The proposed project would demolish the existing improvements on the site and construct three new one-story buildings totaling 20,000 square feet in building area. The project would also develop associated parking, outdoor seating, and landscaping. For further details on the project description, see Chapter 3 of this Initial Study.

1.1 INITIAL STUDY

Pursuant to Section 15063 of the CEQA Guidelines,¹ an Initial Study is a preliminary environmental analysis that is used by the lead agency as a basis for determining what form of environmental review is required for a project. The CEQA Guidelines require that an Initial Study contain a project description, description of environmental setting, identification of environmental effects by checklist or other similar form, explanation of environmental effects, discussion of mitigation for significant environmental effects, evaluation of the project's consistency with existing and applicable land use controls, and the name of persons who prepared the study.

¹ The CEQA Guidelines are found in California Code of Regulations, Title, 14, Section 15000 *et seq.*

INTRODUCTION

1.2 REPORT ORGANIZATION

This Initial Study is organized into the following chapters:

- **Chapter 1: Introduction.** This chapter provides an introduction and overview of the Initial Study document.
- **Chapter 2: Executive Summary.** A summary of the pertinent details for the proposed project, including lead agency contact information, proposed project location, and General Plan and Zoning designations are in this chapter. This chapter also summarizes the significant impacts that could occur from construction and operation of the proposed project and identifies the mitigation measures recommended to reduce the impact to a less-than-significant level.
- **Chapter 3: Project Description.** This chapter describes the location and setting of the proposed project, along with its principal components.
- **Chapter 4: Environmental Analysis.** Making use of the CEQA Guidelines Appendix F, Energy Conservation and Appendix G, Environmental Checklist, this chapter identifies and discusses anticipated impacts from the proposed project, providing substantiation of the findings made.
- **Chapter 5: Mitigation Monitoring and Reporting Program.** This chapter lists the impacts found to be significant and identifies the recommended mitigation measures categorized by impact area.
- **Chapter 6: Organizations and Persons Consulted.** This chapter presents a list of City staff, other agencies, and consultant team members that contributed to the preparation of the Initial Study.

2. Executive Summary

2.1 INITIAL STUDY CHECKLIST

1. Project Title: 975-1075 Main Street Project
2. Lead Agency Name and Address: City of Watsonville
250 Main Street
Watsonville, CA 95076
3. Contact Person and Phone Number: Justin Meek, AICP, Principal Planner
(831) 768-3077
4. Project Location: 975-1075 Main Street
Watsonville, CA 95076
5. Project Applicant's Name and Address: Boos Development Group, Inc.
701 N. Parkcenter Drive, Suite 200
Santa Ana, CA 92702
6. General Plan Land Use Designation: General Commercial, Environmental Management
7. Zoning: Thoroughfare Commercial (CT), Environmental Management Open Space (EM-OS)
8. Description of Project: See Project Description in Chapter 3
9. Surrounding Land Uses and Setting: See Section 3.1.2 of Chapter 3, Project Description
10. Other Public Agencies whose Approval is Required: See Section 3.3 of Chapter 3, Project Description
11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? The City has not received any request from any Tribes in the geographic area with which they are traditionally and culturally affiliated with or otherwise to be notified about projects in Watsonville.

EXECUTIVE SUMMARY

2.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by the proposed project, involving at least one impact that is a potentially significant impact, as shown in Chapter 4 of this Initial Study.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture & Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology & Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology & Water Quality | <input type="checkbox"/> Land Use & Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population & Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities & Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

2.3 DETERMINATION

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ 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.

Approved by: _____
Justin Meek, Principal Planner

Date

EXECUTIVE SUMMARY

2.4 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Due to the location of the project site, the proposed project would have no impact on Agriculture and Forestry Resources or Wildfire.² The State of California Division of Mines and Geology's Mineral Land Classification Map indicates the project site is located in Mineral Resource Zone- 1 (MRZ-1).³ Areas classified MRZ-1 are areas where there is adequate information that indicates no significant mineral deposits are present, and that there is little likelihood that mineral deposits would be found.⁴ Wildfire impacts could result from projects located in or near a state responsibility area (SRA) or lands classified as very high fire hazard severity zone. Watsonville is with the local responsibility area (LRA) and does not contain any lands with a very high fire hazard severity zone. Thus, these topics were not discussed in detail in the Initial Study.

The following lists the significant impacts by topic that could occur from construction and operation of the proposed project and identifies the mitigation measures recommended to reduce the impact to a less-than-significant level. All other topic areas were identified to have less-than-significant impacts. A detailed discussion of the project's impacts is provided in Chapter 4, Environmental Analysis, of this Initial Study.

2.4.1 BIOLOGICAL RESOURCES

Impact BIO-1a: Proposed development could potentially result in an inadvertent take of individual California red-legged frog or western pond turtle in the remote instance that individuals were to disperse onto the site during construction unless adequate controls and preconstruction surveys are not implemented.

Mitigation Measure BIO-1a: Ensure Avoidance of California Red-legged Frog and Western Pond Turtle.

The following measures shall be implemented to ensure avoidance of individual California red-legged frog (CRLF) and western pond turtle (WPT) in the remote instance individuals were to disperse onto the site in the future in advance of or during construction.

- *Pre-construction survey:* Pre-construction surveys for CRLF shall be conducted prior to initiation of project activities (including fence installation) and within 48 hours of the start of ground disturbance activities following completion of exclusion fence installation. Surveys are to be conducted by qualified biologists with experience surveying for CRLF.

² The project site is within an urban/ built-up zone, is not under a Williamson Act contract, is not zoned for forest land, and would not result in the conversion of farmland or forest land. Additionally, the project site is not located in an area where significant mineral deposits are present. Source: California Department of Conservation, 2018, Division of Land Resource Protection. Farmland Mapping and Monitoring Program, Santa Cruz County Important Farmland 2016.

³ California Department of Conservation, Division of Mines and Geology, 1983, Mineral Land Classification Map.

⁴ California Department of Conservation, Division of Mines and Geology, 1987, Mineral Land Classification: Aggregate Materials in the San Francisco- Monterey Bay Area, Special Report 146, Part IV.

EXECUTIVE SUMMARY

If project activities are stopped for greater than 14 days, a follow-up pre-construction survey may be required within 48 hours prior to reinitiating project activities.

- *Worker Training:* All workers shall be trained by a qualified biologist to understand the remote potential for occurrence of CRLF and WPT, need to avoid any potential inadvertent take, and process to follow if a frog or turtle is encountered. If a frog is encountered in the construction zone, all work must stop and the qualified biologist must determine whether it is CRLF before work proceeds. If a CRLF is encountered in the work zone, no work can proceed until the USFWS and CDFW have been consulted and an appropriate avoidance and mitigation program developed. If WPT is encountered within the work zone, the individual shall be relocated to the closest suitable natural habitat by the qualified biologist or designated foreman trained by the qualified biologist.
- *Wildlife exclusion fence:* Wildlife exclusion fencing shall be installed prior to the start of construction and maintained until construction of the proposed project is complete. All work installing exclusion fencing shall be conducted under the supervision of a qualified wildlife biologist with experience in surveying for CRLF and WPT. Exclusion fencing shall, at a minimum, run along the edge of grading along the southeastern, southern and southwestern project boundaries where the site borders riparian habitat. The exclusion fencing shall be inspected on a daily basis by a designated foreman trained by the qualified biologist, and repaired immediately if any openings are detected to prevent opportunities for CRLF and WPT to enter the site. Per CRLF standards, fencing must be at least 42 inches in height (at least 36 inches above ground and buried at least 6 inches below the ground) and stakes must be placed on the inside of the project (side on which work will take place).

Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure amphibians do not get trapped. Plastic mono-filament netting (erosion control matting), rolled erosion control products, or similar material shall not be used.

- *Earth-disturbing activities only during dry weather:* No earth disturbing activities shall take place during rain events when there is potential for accumulation greater than 0.25-inch in a 24-hour period. In addition, no earth disturbing activities shall occur for 48 hours following rain events in which 0.25-inch of rain accumulation within 24 hours.

Impact BIO-1b: Construction of the proposed project could result in inadvertent loss of bird nests in active use, which would conflict with the federal Migratory Bird Treaty Act and California Fish and Game Code if adequate controls and preconstruction surveys are not implemented.

Mitigation Measure BIO-1b: Ensure Avoidance of Bird Nests in Active Use. Tree removal, landscape grubbing, and building pad and retaining wall demolition shall be performed in compliance with the Migratory Bird Treaty Act and relevant sections of the California Fish and Game Code to avoid loss of nests in active use. This shall be accomplished by scheduling tree removal and landscape grubbing outside of the bird nesting season (which occurs from February 1 to August 31) to avoid possible impacts on nesting birds if new nests are established in the future. Alternatively, if demolition, tree

EXECUTIVE SUMMARY

removal and landscape grubbing cannot be scheduled during the non-nesting season (September 1 to January 31), a pre-construction nesting survey shall be conducted. The pre-construction nesting survey shall include the following:

- A qualified biologist shall conduct a pre-construction nesting bird (both passerine and raptor) survey within seven calendar days prior to tree removal, landscape grubbing, and/or demolition.
- If no nesting birds or active nests are observed, no further action is required and tree removal, landscape grubbing, and demolition shall occur within seven calendar days of the survey.
- Another nest survey shall be conducted if more than seven calendar days elapse between the initial nest search and the beginning of tree removal, landscape grubbing, and demolition.
- If any active nests are encountered, the Biologist shall determine an appropriate disturbance-free buffer zone to be established around the nest location(s) until the young have fledged. Buffer zones vary depending on the species (i.e., typically 50 to 100 feet for passerines and 300 feet for raptors) and other factors such as ongoing disturbance in the vicinity of the nest location. If necessary, the dimensions of the buffer zone shall be determined in consultation with the CDFW.
- Orange construction fencing, flagging, or other marking system shall be installed to delineate the buffer zone around the nest location(s) within which no construction-related equipment or operations shall be permitted. Continued use of existing facilities such as surface parking and site maintenance may continue within this buffer zone.
- No restrictions on grading or construction activities outside the prescribed buffer zone are required once the zone has been identified and delineated in the field and workers have been properly trained to avoid the buffer zone area.
- Construction activities shall be restricted from the buffer zone until the Biologist has determined that young birds have fledged and the buffer zone is no longer needed.
- A survey report of findings verifying that any young have fledged shall be submitted by the Biologist for review and approval by the City prior to initiation of any tree removal, landscape grubbing, demolition, and other construction activities within the buffer zone. Following written approval by the City, tree removal, and construction within the nest-buffer zone may proceed.

Impact BIO-2: Proposed development could introduce additional night-time lighting into the adjacent riparian habitat of the Watsonville Slough floodplain, and trash stored on the site could create nuisance conditions and attract pest species unless appropriate avoidance measures were implemented as part of future uses.

Mitigation Measure BIO-2: Appropriate controls shall be incorporated into the project to prevent nuisance conditions in the adjacent riparian habitat of the Watsonville Slough floodplain. These shall include controls on all exterior lighting to ensure that is be directed downward and screened to minimize spill-over off the site and developing a monitoring program to be implemented by future tenants to ensure trash areas are routinely cleaned and secured at night.

EXECUTIVE SUMMARY

2.4.2 CULTURAL RESOURCES

Impact CULT-1: Project-related ground-disturbing activities could affect subsurface prehistoric archaeological resources that may be present.

Mitigation Measure CULT-1: If any prehistoric or historic subsurface cultural resources, including tribal cultural resources, are discovered during ground-disturbing (including grading, demolition and/or construction) activities:

- All work within 50 feet of the resources shall be halted and a qualified archaeologist shall be consulted to assess the significance of the find according to CEQA Guidelines Section 15064.5.
- If any find is determined to be significant, representatives from the City of Watsonville Building Department and the archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation.
- All significant cultural materials recovered shall be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards.
- In considering any suggested mitigation proposed by the consulting archaeologist to mitigate impacts to historical resources or unique archaeological resources, the City shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, proposed project design, costs, and other considerations.
- If avoidance is infeasible, other appropriate measures (e.g., data recovery) would be implemented.
- Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is being carried out.

2.4.3 GEOLOGY AND SOILS

Impact GEO-1: Without proper site preparation and building design, project development could result in hazards associated with ground stability.

Mitigation Measure GEO-1: Project construction shall adhere to the recommendations of the October 9, 2018 Krazan & Associates *Geotechnical Engineering Investigation for the Proposed Commercial Development on Main Street at Auto Centre Drive*, which provides recommendations for excavation under and near building areas, fill removal and recompaction, engineered fill preparation, soil moisture content, and other construction details relevant to building design and site stability. As recommended in the Geotechnical Engineering Investigation, a licensed geotechnical engineer, or his/her representative, shall be present during all site clearing and grading operations to observe earthwork construction, and the consulting engineer's recommendations shall be followed.

EXECUTIVE SUMMARY

Impact GEO-2: Without proper site preparation and building design, project development could result in hazards associated with liquefaction and ground movement.

Mitigation Measure GEO-2: Implement Mitigation Measure GEO-1.

Impact GEO-3: Without proper site preparation and building design, project development could result in hazards associated with expansive soils.

Mitigation Measure GEO-3: Implement Mitigation Measure GEO-1.

Impact GEO-4: Project-related ground-disturbing activities could affect subsurface paleontological resources that may be present.

Mitigation Measure GEO-4: The construction contractor shall incorporate the following in all grading, demolition, and construction plans:

- In the event that fossils or fossil-bearing deposits are discovered during grading, demolition, or building, excavations within 50 feet of the find shall be temporarily halted or diverted.
- The contractor shall notify the City of Watsonville Building Department and a City-approved qualified paleontologist to examine the discovery.
- The paleontologist shall document the discovery as needed, in accordance with Society of Vertebrate Paleontology standards, evaluate the potential resource, and assess the significance of the finding under the criteria set forth in CEQA Guidelines Section 15064.5.
- The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find.
- If the project applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project based on the qualities that make the resource important. The excavation plan shall be submitted to the City for review and approval prior to implementation.

2.4.4 TRANSPORTATION

Impact TR-1: With the project, during the PM peak hour period, the Main Street/Green Valley Drive intersection would operate at an unacceptable level that exceeds the 0.1 second per vehicle (spv) threshold. During the AM and PM peak hour periods, the Main Street/Ohlone Parkway – Clifford Drive intersection would operate at unacceptable levels that exceed the 0.1 spv threshold.

Mitigation Measure TR-1: The signal system along Main Street should be retimed to reach acceptable levels of service. The following changes should be considered:

- During the AM peak hour, the signal system along Main Street should be modified to a 110-second cycle between Green Valley Road and Ohlone Parkway – Clifford Drive with a half cycle at

EXECUTIVE SUMMARY

the Watsonville Square intersection. The segment from Pennsylvania Drive to Freedom Boulevard should be modified to a 116-second cycle with a half cycle at Rodriguez Street

- During the PM peak hour, the signal system along Main Street should be modified from the current 135-second cycle between Green Valley Road and Ohlone Parkway – Clifford Drive and 120-second cycle from Pennsylvania Drive to Freedom Boulevard. The proposed signal cycle length would be 116 seconds for the entire network.
- An eastbound to southbound right turn overlap should be installed at the Main Street/Ohlone Parkway – Clifford Drive intersection. This is consistent with the Sunshine Vista Phased Development Project FEIR, May 2018.

Impact TR-2: With the project, during the PM peak hour period, the Main Street/Green Valley Drive intersection would operate at an unacceptable level that exceeds the 0.1 second per vehicle (spv) threshold.

Mitigation Measure TR-2: The project applicant shall obtain an encroachment permit from Caltrans to implement the following changes to the signal operations and lane configuration at the Main Street/Green Valley Drive:

- During the PM peak hour, the signal system along Main Street should be modified from the current 135 second cycle between Green Valley Road and Ohlone Parkway – Clifford Drive and 120 second cycle from Pennsylvania Drive to Freedom Boulevard. The proposed signal cycle length would be 116 seconds for the entire network.
- The intersection of Main Street/Green Valley Drive approaches should be reconfigured as follows:
 - Northbound approach: two left turn lanes, one through lane, and one right turn lane.
 - Southbound approach: one left turn lane, one through lane, and one right turn lane.
- Modify the signal phasing for the eastbound and westbound approaches on Green Valley Road from split phase to protected left turns. The intersection is part of a coordinated system along Main Street and the corridor should be retimed to a 110 second cycle as a result of the geometry modifications.

2.4.5 TRIBAL CULTURAL RESOURCES

Impact TCR-1: Project-related ground-disturbing activities could affect subsurface tribal cultural resources that may be present.

Mitigation Measure TCR-1: Implement Mitigation Measure CULT-1.

3. Project Description

Boos Development West, the project applicant, is proposing the 975-1075 Main Street Project (“proposed project”) to construct a 20,000-square-foot shopping center containing a mix of retail, restaurant, and drive-through uses on a 3.05-acre site. The site was previously developed with three buildings totaling approximately 21,500 square feet and associated paved parking area. The proposed project includes demolishing the existing building pads, parking lot, and other site improvements and constructing three new buildings.

This section provides a detailed description of the proposed project, including the location, setting, and characteristics of the project site; the principal project features; construction phasing and schedule; and a list of required permits and approvals.

3.1 PROJECT LOCATION AND SITE CHARACTERISTICS

3.1.1 REGIONAL LOCATION

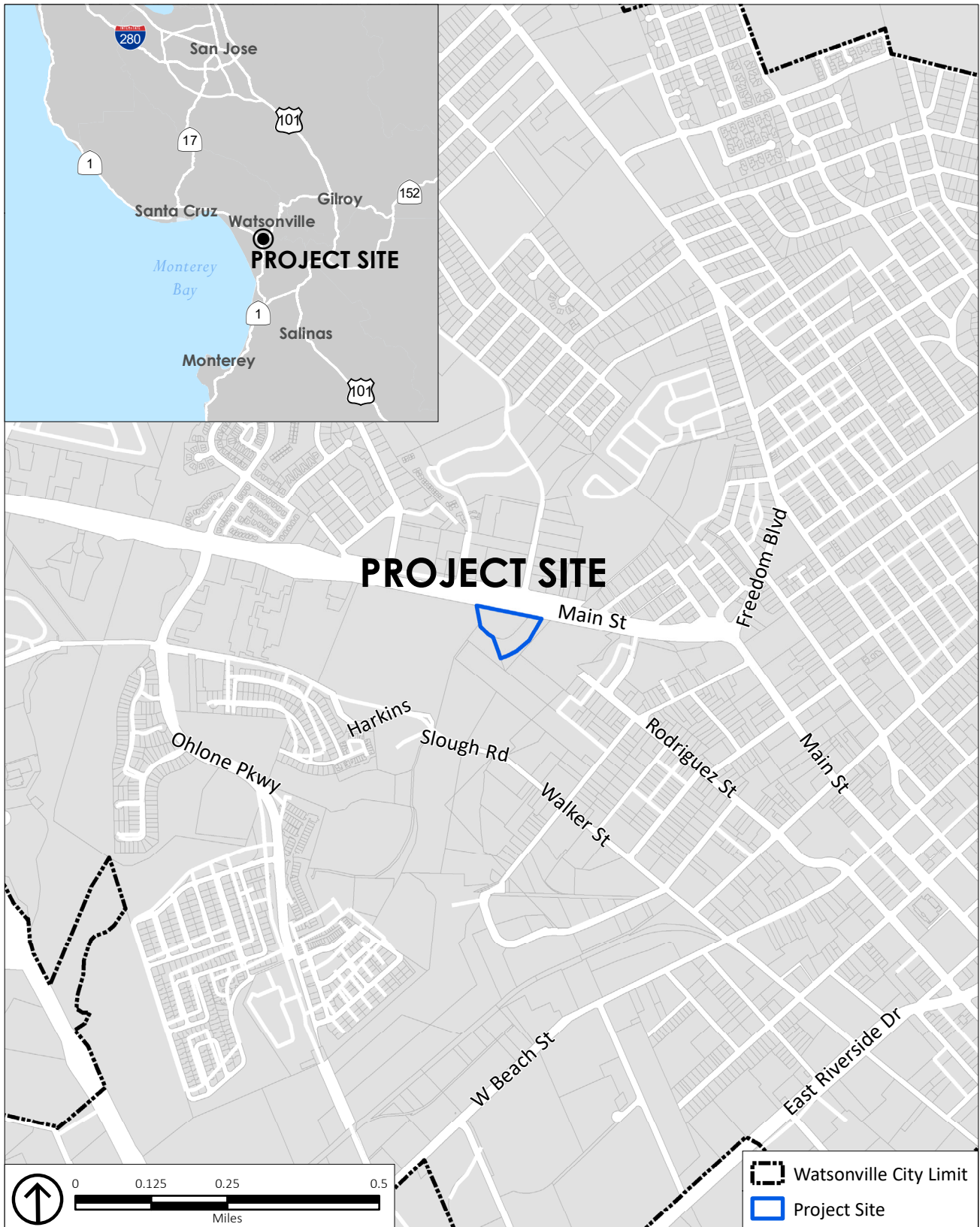
As shown on Figure 3-1, the project site is located in the City of Watsonville, which is located in the southernmost portion of Santa Cruz County. Watsonville is approximately 15 miles southeast of the City of Santa Cruz, and approximately 25 miles north of Monterey. State Route 152 (SR 152) and SR 129 provide regional access to the project site, and SR 1 links the project site to the greater Santa Cruz County and Monterey County regions.

3.1.2 LOCAL SETTING

The project site includes the properties located at 975 to 1075 Main Street, north of Downtown Watsonville. The site is located along the south side of Main Street, halfway between Main Street’s intersections with SR 1 and SR 129. As shown on Figure 3-2, the site is bounded by Main Street along its northern boundary, with several commercial establishments located across Main Street to the north; Watsonville Slough to the east and south; and Ramsay Park to the west. Watsonville Slough is the main drainage channel, draining into the greater Watsonville State Wildlife Area.⁵ Ramsay Park consists of the Ramsay Park Family Center, Soccer Central Indoor Sports Complex, and the City of Watsonville Nature Center.

⁵ Watsonville Wetlands Watch, Visiting the Sloughs, <https://www.watsonvillewetlandswatch.org/visiting-the-sloughs>, accessed on February 20, 2019.

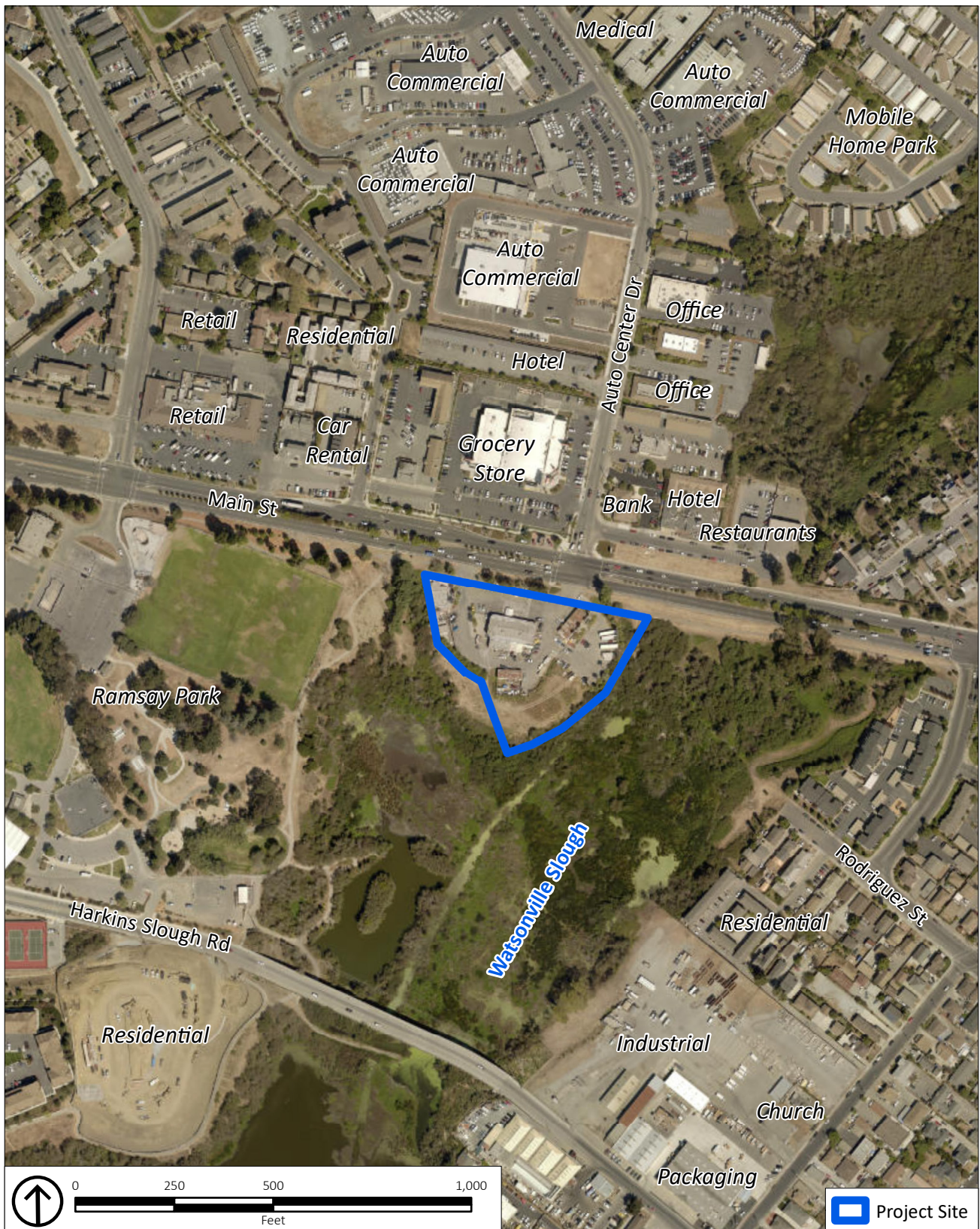
PROJECT DESCRIPTION



Source: ESRI, 2017; Santa Cruz County, 2013; PlaceWorks, 2019.

Figure 3-1
Regional and Vicinity Location

PROJECT DESCRIPTION



Source: ESRI, 2017; PlaceWorks, 2019.

Figure 3-2
Local Context

PROJECT DESCRIPTION

3.1.3 EXISTING SITE CHARACTER

As shown on Figure 3-3, the site was previously developed with three one-story commercial buildings and one storage structure, along with surface parking. The buildings were recently demolished and previously contained three auto service and repair shops, an auto supply store, a grocery store, a restaurant, and a storage building.⁶

The site contains several mature palm trees and ornamental landscaping throughout the site and along Main Street. None of these trees have been designated as historic by the City for the purpose of preservation or protection, pursuant to Chapter 7-13 of the Watsonville Municipal Code (WMC).⁷

Using data from the Classification and Assessment with Landsat of Visible Ecological Groupings (CALVEG)⁸ habitat mapping program, the site is classified as urban and is surrounded by riparian woodland to the east, south, and west.⁹ Urban areas tend to have low to poor wildlife habitat value due to replacement of natural communities, fragmentation of remaining open space areas and parks, and intensive human disturbance. Riparian woodlands are high value habitat in southern Santa Cruz County, providing year-round water and abundant fauna for foraging and nesting opportunities.

The site is generally flat, with 8- to 40-degree slopes on the southern, eastern, and western edges of the site, and an elevation of approximately 25 feet above mean sea level.¹⁰ The surficial geology is Holocene alluvial fan deposits and Quaternary river terrace deposits consisting of sands, silt, and clays from erosion of local mountain ranges.¹¹

Stormwater from the site drains generally from the northwest portion of the site to the southeast and is collected by existing drainage channel drains and inlets located near the existing driveways. Stormwater runoff is conveyed through underground facilities that enter the public system, before draining into Watsonville Slough.¹²

⁶ Roux Associates, 2018, Phase I Environmental Site Assessment.

⁷ City of Watsonville, Title 7, Public Works, Chapter 13, Preservation of Historic Trees.

<https://www.codepublishing.com/CA/Watsonville/#!/Watsonville07/Watsonville0713.html>, accessed on October 1, 2019

⁸ The CALVEG system was initiated in January 1978 by the Region 5 Ecology Group of the US Forest Service to classify California's existing vegetation communities for use in statewide resource planning. CALVEG maps use a hierarchical classification on the following categories: forest; woodland; chaparral; shrubs; and herbaceous.

⁹ RBF Consulting, 2012, Watsonville Vista 2030 General Plan EIR.

¹⁰ Roux Associates, 2018, Phase I Environmental Site Assessment.

¹¹ Krazan & Associates, Inc., 2018, Geotechnical Engineering Investigation Proposed Commercial Development Main Street at Auto Centre Drive Watsonville, California.

¹² Robert A. Kain & Associates, Inc., 2018, 975 Main Street Stormwater Control Plan.

PROJECT DESCRIPTION



Source: ESRI, 2017; PlaceWorks, 2019.

Figure 3-3
Existing Site Conditions

PROJECT DESCRIPTION

3.1.4 LAND USE DESIGNATION AND ZONING

GENERAL PLAN

The project site is assigned Assessor's Parcel Numbers (APNs) 018-261-14 and 018-261-29. As shown on Figure 3-4, the majority of the project site is designated as General Commercial land use in the Watsonville 2005 General Plan. A small portion of the project site is designated as Environmental Management. As shown in Figure 3-4, this area borders Watsonville Slough and is at the southern and northeastern tips of the project site. The General Commercial land use designation allows for the following uses intended to serve the needs of the community and surrounding region: retail sales; personal, professional, financial, business, and medical offices and services; entertainment; lodging; and restaurants. The maximum allowable floor area ratio (FAR), which is the ratio of the total building area on a lot to the total lot area, is 0.45, with a maximum of 1.0 FAR where building heights are permitted to exceed 35 feet or three stories, such as in the Visitor Commercial (CV) zoning district.

ZONING

As shown in Figure 3-5, the majority of the project site is within the Thoroughfare Commercial (CT) zoning district. A small portion of the project site next to Watsonville Slough is within the Environmental Management Open Space (EM-OS) zoning district. The purpose of the EM-OS zoning district is to provide regulations pertaining to privately owned lands which—because of poor drainage, danger of flooding, danger of land slippage or seismic action, danger of liquefaction, excessive slope, or similar reason related to the physiographic condition of the land—are unsuited or unsafe for intensive human use.

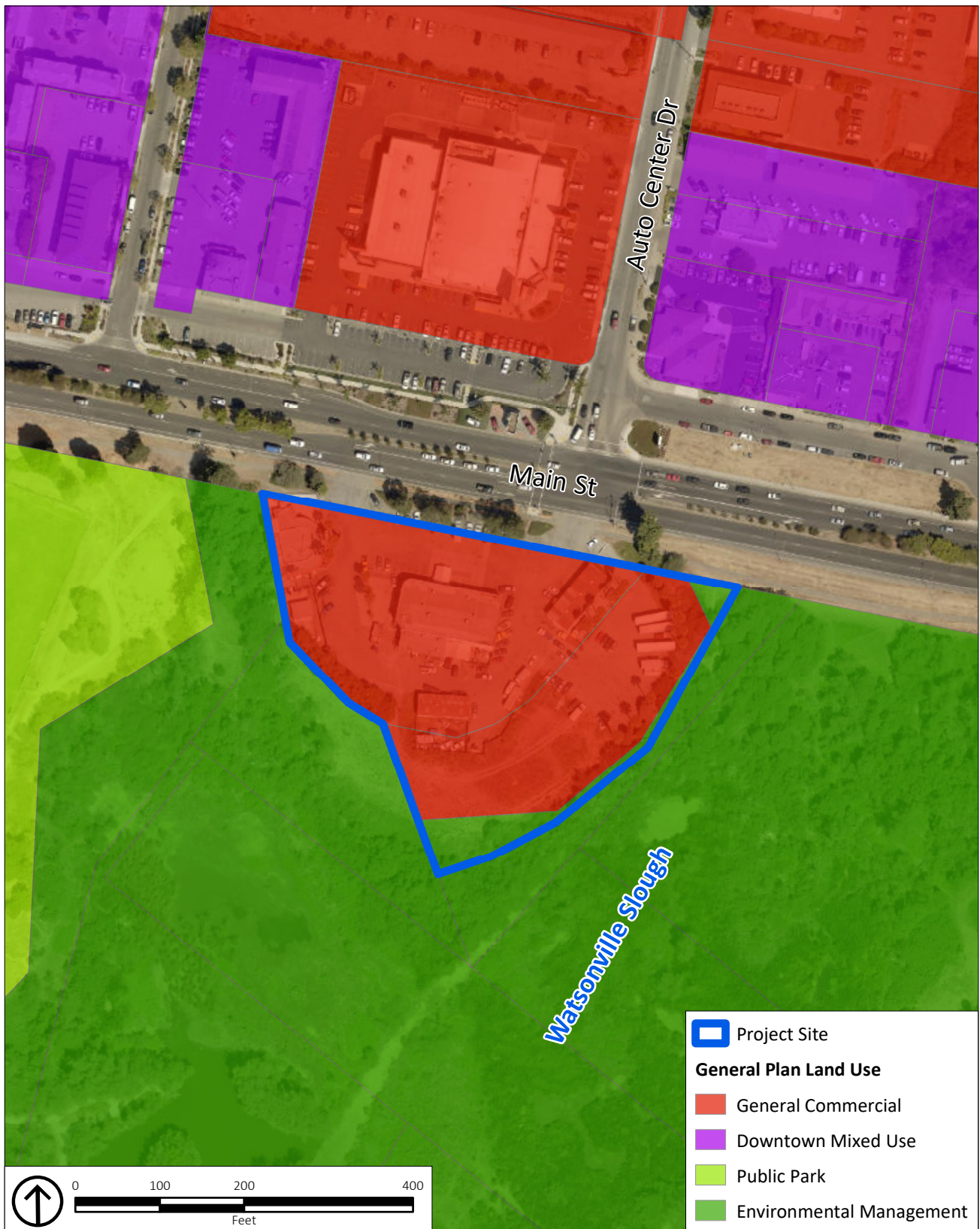
As described in Section 14-16.1200 of the WMC, the CT zoning district allows for retail, commercial, service, amusement, and transient-residential uses located and dependent upon thoroughfare travel.¹³ Land within this zoning district is located within close proximity of major streets and arterials to provide convenient vehicular access and parking for the public.

The height limit for the CT zoning district is a maximum of 35 feet or three stories.¹⁴ As stated previously, the General Plan describes the General Commercial designation with a maximum allowable FAR of 0.45 where up to three-story buildings are allowed. Specific front and side or rear abutting setbacks are required for the project site, with a minimum of 15 feet in the front and 10 feet in the side or rear.

¹³ City of Watsonville, Title 14, Zoning, Section 14-16 Part 12 – Thoroughfare Commercial District.
<https://www.codepublishing.com/CA/Watsonville/#!/Watsonville14/Watsonville1416.html#14-16.1200>, accessed on February 22, 2019

¹⁴ City of Watsonville, Title 14, Zoning, Section 14-16 Part 12 – Thoroughfare Commercial District.
<https://www.codepublishing.com/CA/Watsonville/#!/Watsonville14/Watsonville1416.html#14-16.1200>, accessed on February 22, 2019.

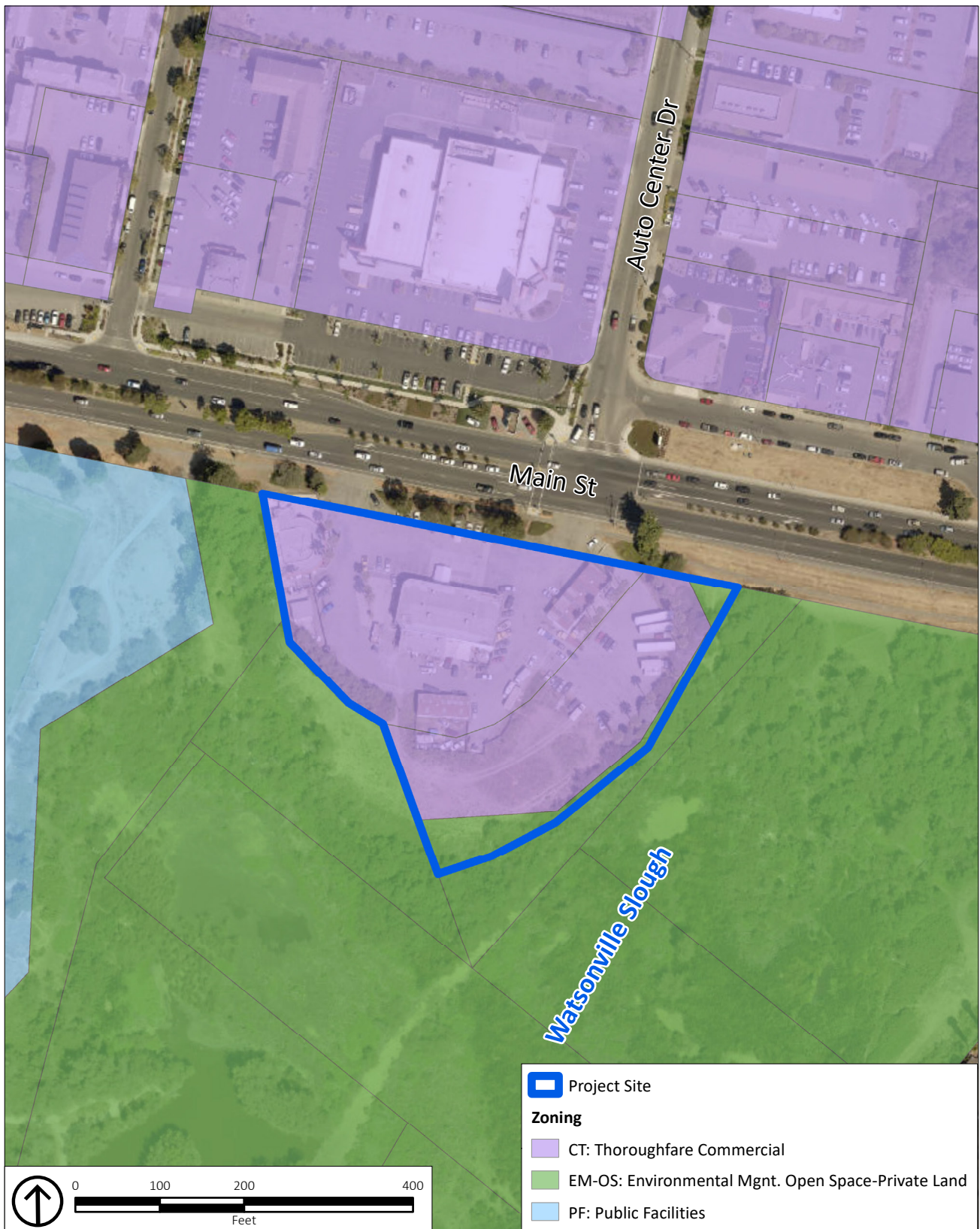
PROJECT DESCRIPTION



Source: ESRI, 2017; City of Watsonville, 2019; PlaceWorks, 2019.

Figure 3-4
General Plan Land Use Designations

PROJECT DESCRIPTION



Source: ESRI, 2017; City of Watsonville, 2019; PlaceWorks, 2019.

Figure 3-5
Zoning Districts

PROJECT DESCRIPTION

WMC Chapter 14-41 provides regulations on the siting and design of drive-through facilities throughout the city. Specific siting and design regulations, as outlined in WMC Chapter 14-41, include, but are not limited to, location of trash facilities; use of lighting; production of noise, fumes, and odors; as well as impacts on neighboring properties and to circulation of automobiles, pedestrians, and bicycles. Additional standard design regulations are included such as setbacks, height, and landscaping. These design standards are discussed further in Section 3.2, Project Components, below.

3.2 PROJECT COMPONENTS

The proposed project would redevelop the project site with three one-story buildings and two associated drive-through facilities, surface parking, and landscaping. The following provides a detailed description of the key project components. Development of the proposed project would involve demolition of existing improvements and the surface parking areas, and construction of the principal project components that are described in detail in the following sections. The proposed project is illustrated on Figures 3-6 through 3-12.

3.2.1 PROPOSED COMMERCIAL BUILDINGS

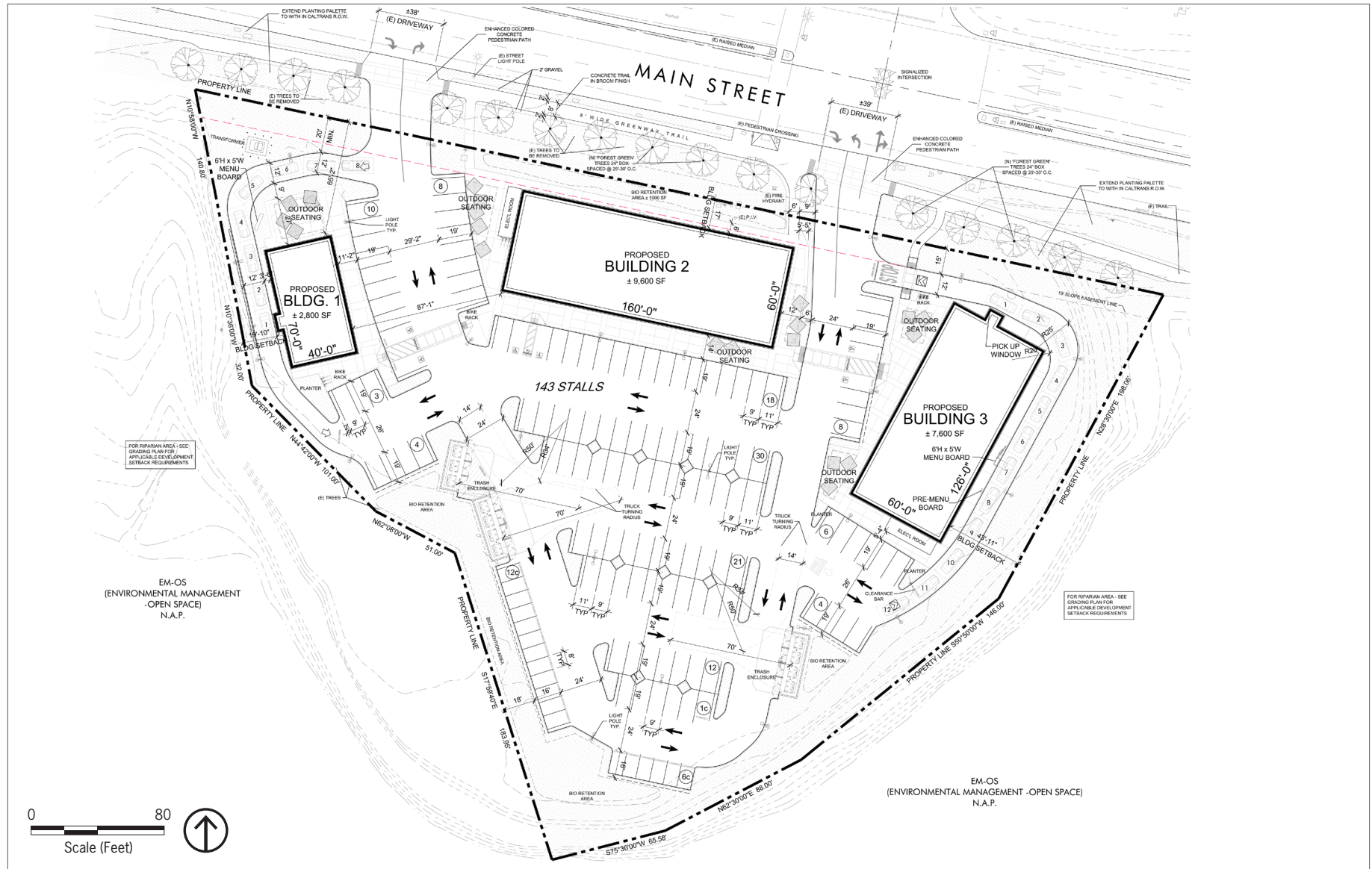
The proposed project site plan is shown on Figure 3-6. As shown on Figure 3-6, the proposed project would include the construction of three one-story commercial buildings totaling 20,000 square feet. The buildings would be located on the northern portion of the site, with parking and trash enclosures located on the southern portion of the site. Outdoor seating would be provided in the front or on the sides of the three commercial buildings and building entry points would be facing the interior of the project site.

As shown on Figure 3-6, Building 1 would be located on the northwest portion of the project site, adjacent to Main Street near Ramsay Park. Building 1 would be approximately 2,800 square feet and 28 feet tall at its highest point, shown in Figure 3-7 and Figure 3-8. This building would provide space for one fast-food restaurant tenant, with a drive-through located on the northwest side of the building and would include outdoor seating for customers.

Building 2 would be located in the north-central portion of the project site, adjacent to Main Street and between the two existing driveways, as shown in Figure 3-6. Building 2 would consist of a 9,600-square-foot building with fast-casual restaurant and retail tenant spaces, shown in Figure 3-9. Building 2 would be 38 feet tall at its highest point, as shown in Figure 3-10.

Building 3 would be located in the northeastern portion of the project site, adjacent to Main Street and the Watsonville Slough, as shown in Figure 3-6. Building 3 would be approximately 7,600 square feet and 30 feet tall at its highest point, as shown in Figure 3-11 and Figure 3-12. This building would provide space for restaurant and retail tenants. Building 3 would also include a drive-through that would wrap around

PROJECT DESCRIPTION

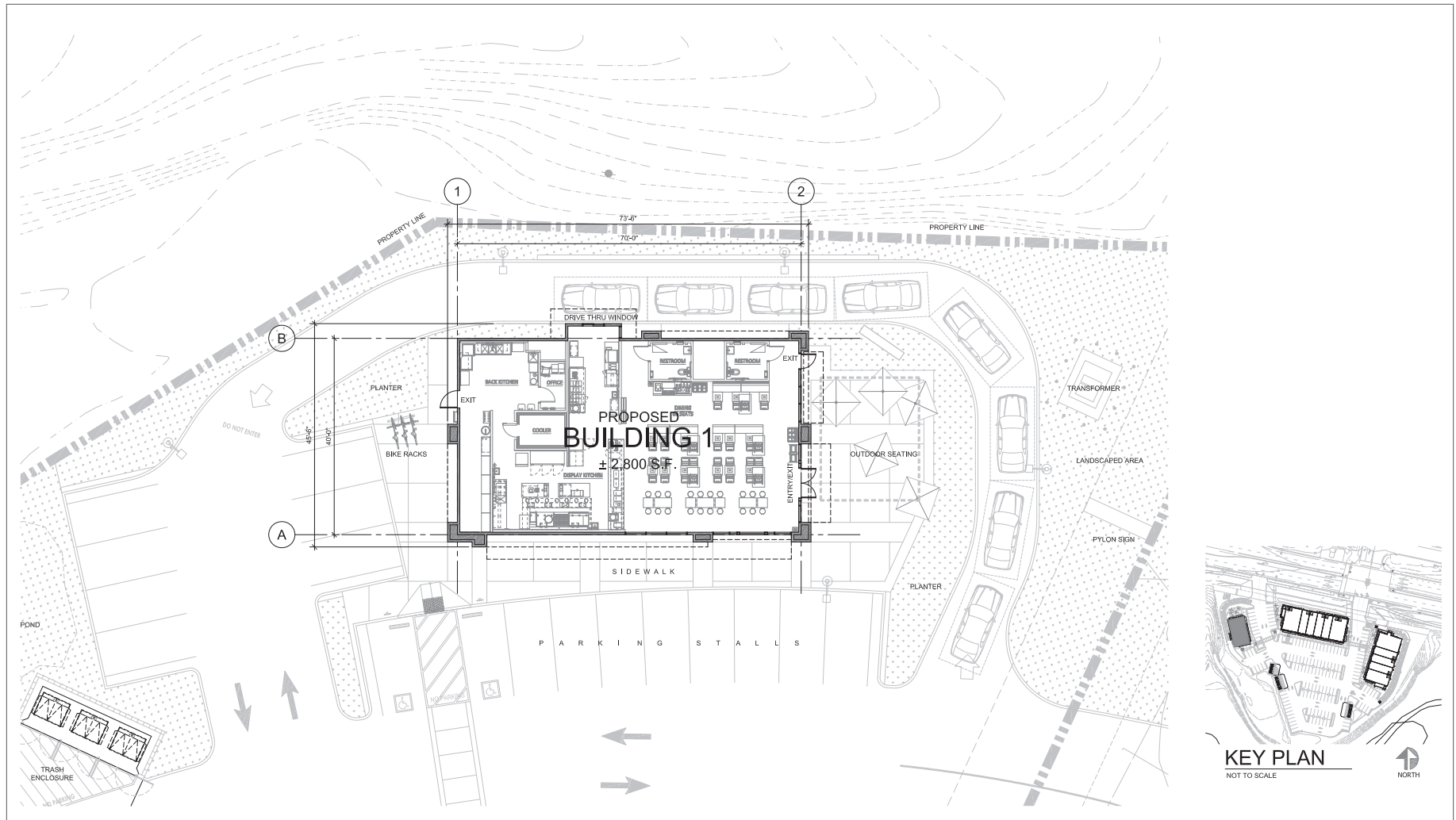


Source: McKently Malak Architects, 2019.

 Project Site

Figure 3-6
Proposed Site Plan

PROJECT DESCRIPTION



Source: McKently Malak Architects, 2019.

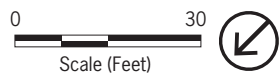


Figure 3-7
Building 1 Floor Plan

PROJECT DESCRIPTION



EAST ELEVATION (FRONT)



NORTH ELEVATION (RIGHT SIDE)



WEST ELEVATION (REAR)

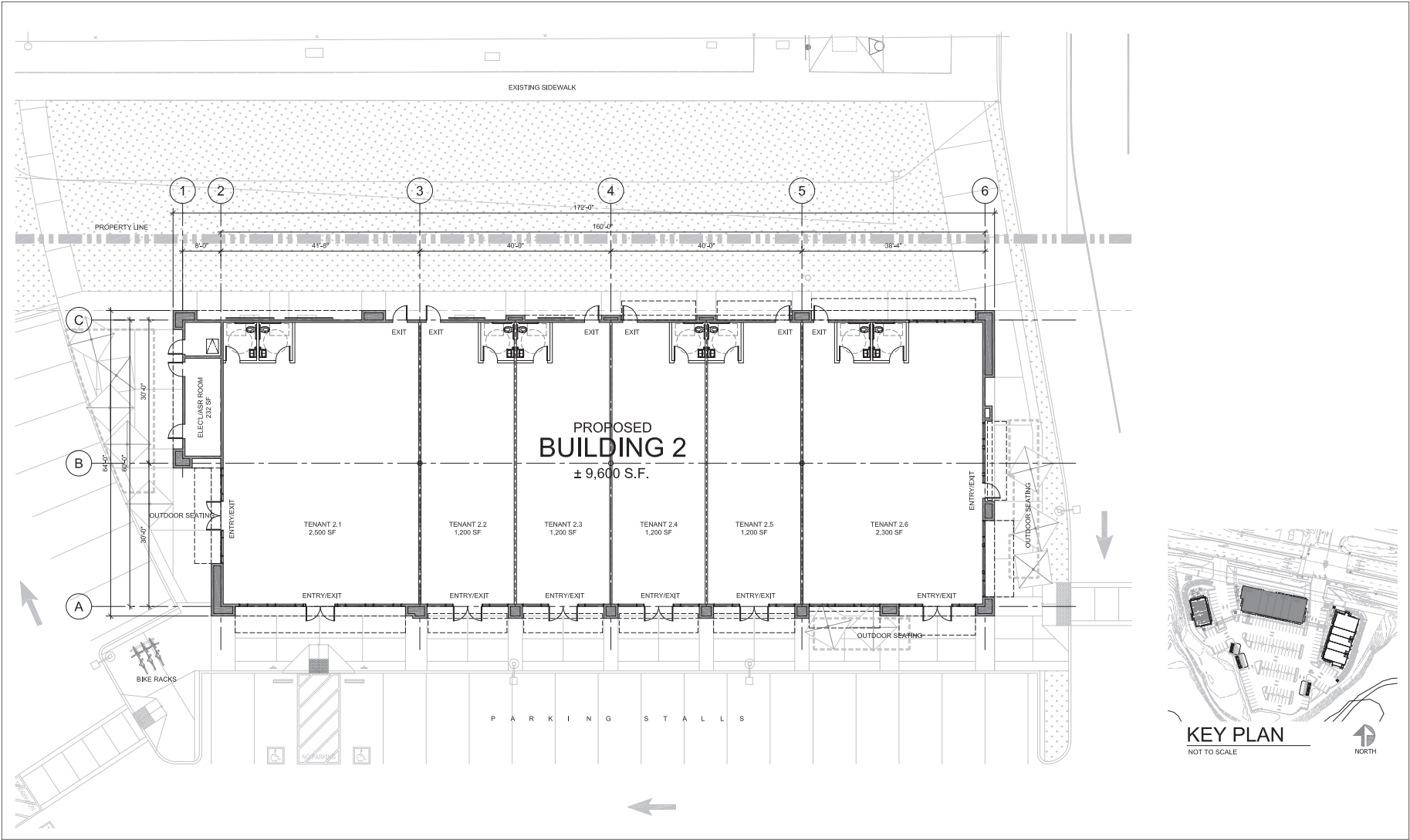


SOUTH ELEVATION (LEFT SIDE)

Source: McKently Malak Architects, 2019.

Figure 3-8
Building 1 Elevations

PROJECT DESCRIPTION



Source: McKently Malak Architects, 2019.

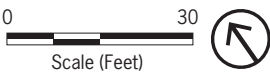


Figure 3-9
Building 2 Floor Plan

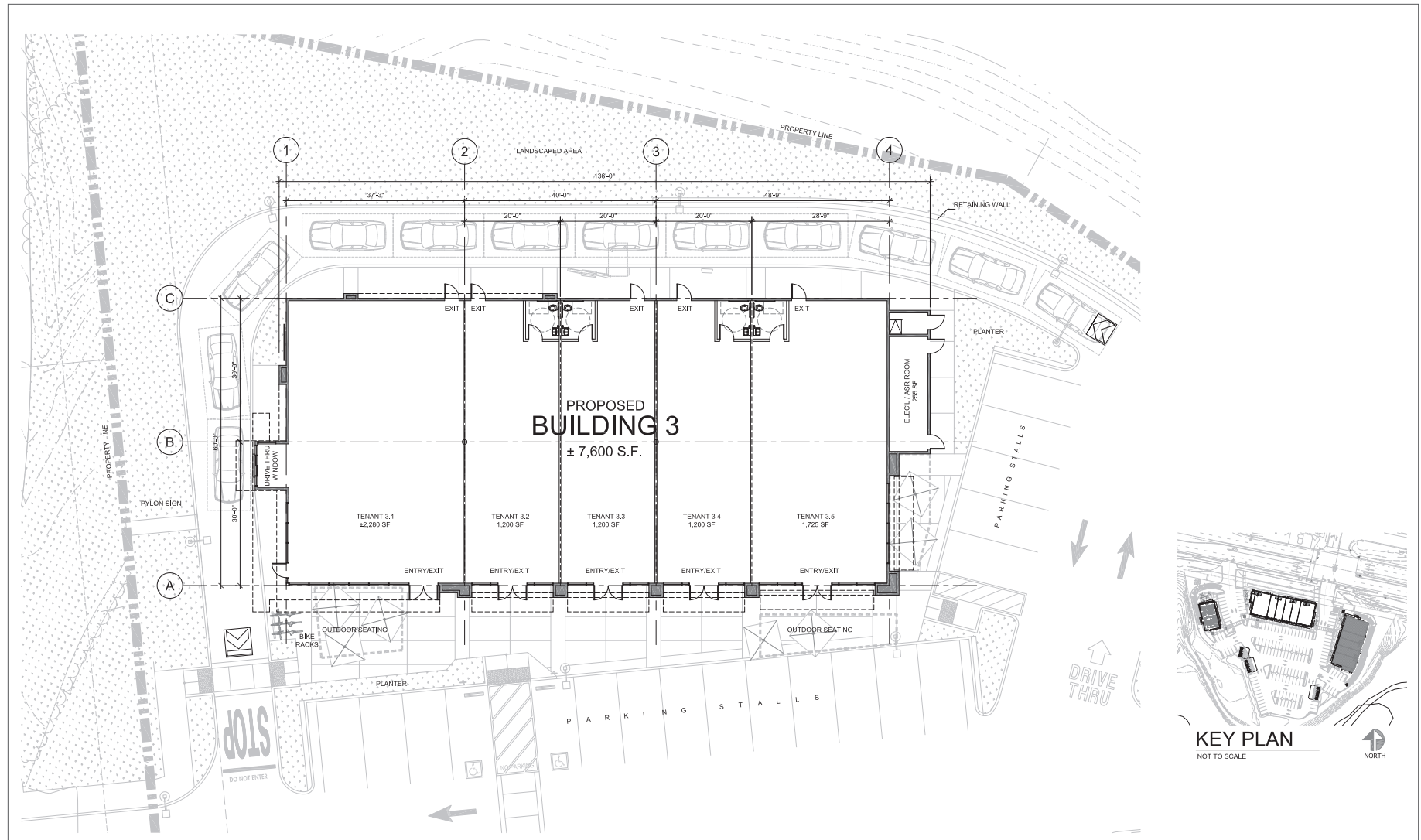
PROJECT DESCRIPTION



Source: McKently Malak Architects, 2019.

Figure 3-10
Building 2 Elevations

PROJECT DESCRIPTION



Source: McKently Malak Architects, 2019.

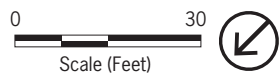


Figure 3-11
Building 3 Floor Plan

PROJECT DESCRIPTION



Source: McKently Malak Architects, 2019.

Figure 3-12
Building 3 Elevations

PROJECT DESCRIPTION

the eastern side of the building, which would serve the largest tenant space, anticipated to be a coffee shop.

According to the project applicant, the project would generate approximately 35 jobs, which would be split shift in nature.¹⁵

The proposed commercial buildings would have a FAR of 0.15.¹⁶

The proposed project would have an approximate front yard setback of 17 feet and side setbacks of 44 feet to the east and 19 feet 10 inches to the west. WMC Section 14.41.102(k) requires drive-through facilities to have a minimum 20-foot setback from the face of the curb of any street frontage. The drive-through on the west side of the project site, at Building 1, would have a setback of 61 feet and 7 inches from the Main Street curb. The drive-through on the east side of the project site, at Building 3, would have a setback of 63 feet and 8 inches from the Main Street curb.

The project has been designed to avoid disturbance within a setback of 30 feet from the high water line of the Watsonville Slough, located to the southeast of the project site.

3.2.2 CIRCULATION AND ACCESS

VEHICULAR, BICYCLE, AND PEDESTRIAN ACCESS

The project would construct the following improvements at the Main Street/Auto Center Drive/project intersection. These features would be constructed according to Caltrans and the City of Watsonville design requirements and would be subject to their review and approval:

- Modify the traffic signal to include projected left turn movements along Auto Center Drive and the project access. This was previously noted as part of the project.
- Modify the southbound Auto Center Drive striping to include a left turn lane and a through-right lane. This was previously noted as part of the project.

As shown in Figure 3-6, direct access to the project site would occur from the existing driveways located on the northern edge of the project site along Main Street. Bicyclists would access the project site from the existing Class II bike lane¹⁷ on Main Street. The western driveway would provide two lanes where drivers would enter the project site via a right turn lane from Main Street and exit the project site via a right turn onto Main Street. The eastern driveway would be located at a signalized intersection of Main

¹⁵ Fermin, Rod. Boos Development West, LLC. Email correspondence with Justin Meek, City of Watsonville. April 25, 2019.

¹⁶ Calculation: 20,000 sq. ft. ÷ 133,069 sq. ft. = 0.15

¹⁷ Class II Bikeways are bike lanes for bicyclists that are generally adjacent to the outer vehicle travel lanes and have special lane markings, pavement legends, and signage.

PROJECT DESCRIPTION

Street and Auto Center Drive and would provide three lanes. In the westernmost lane, drivers could enter the site via right or left turn lanes from Main Street. In the middle lane, drivers could exit the site and turn left onto Main Street. In the easternmost lane, drivers could exit the project site straight onto Auto Center Drive or via a right turn onto Main Street.

Circulation on-site would consist of two-lane aisles that would provide access to each building, parking areas, and drive-through lanes. All proposed on-site circulation would be adequate for emergency vehicles and the waste management vehicles.

The entrance to the drive-through lane associated with Building 1 would be located in the northwest corner of the project site, and the exit would be located along the western edge of the project site, just south of Building 1. The entrance to the drive-through associated with Building 3 would be located just south of Building 3 along the eastern border of the project site, and the exit would be located near the signalized intersection of Main Street and Auto Center Drive.

Pedestrian entrances to the site would be located along the existing sidewalk of Main Street. One pedestrian entrance would be located on the northwest portion of the site, and two pedestrian entrances would be located near the signalized intersection of Main Street and Auto Center Drive. The project would install enhanced colored concrete pedestrian paths across each of the project site driveways to provide greater visibility for drivers to see pedestrians crossing the project driveways along Main Street. The project would include the installation of an internal sidewalk and crosswalk system within the project site leading to each of the three buildings.

TRANSIT

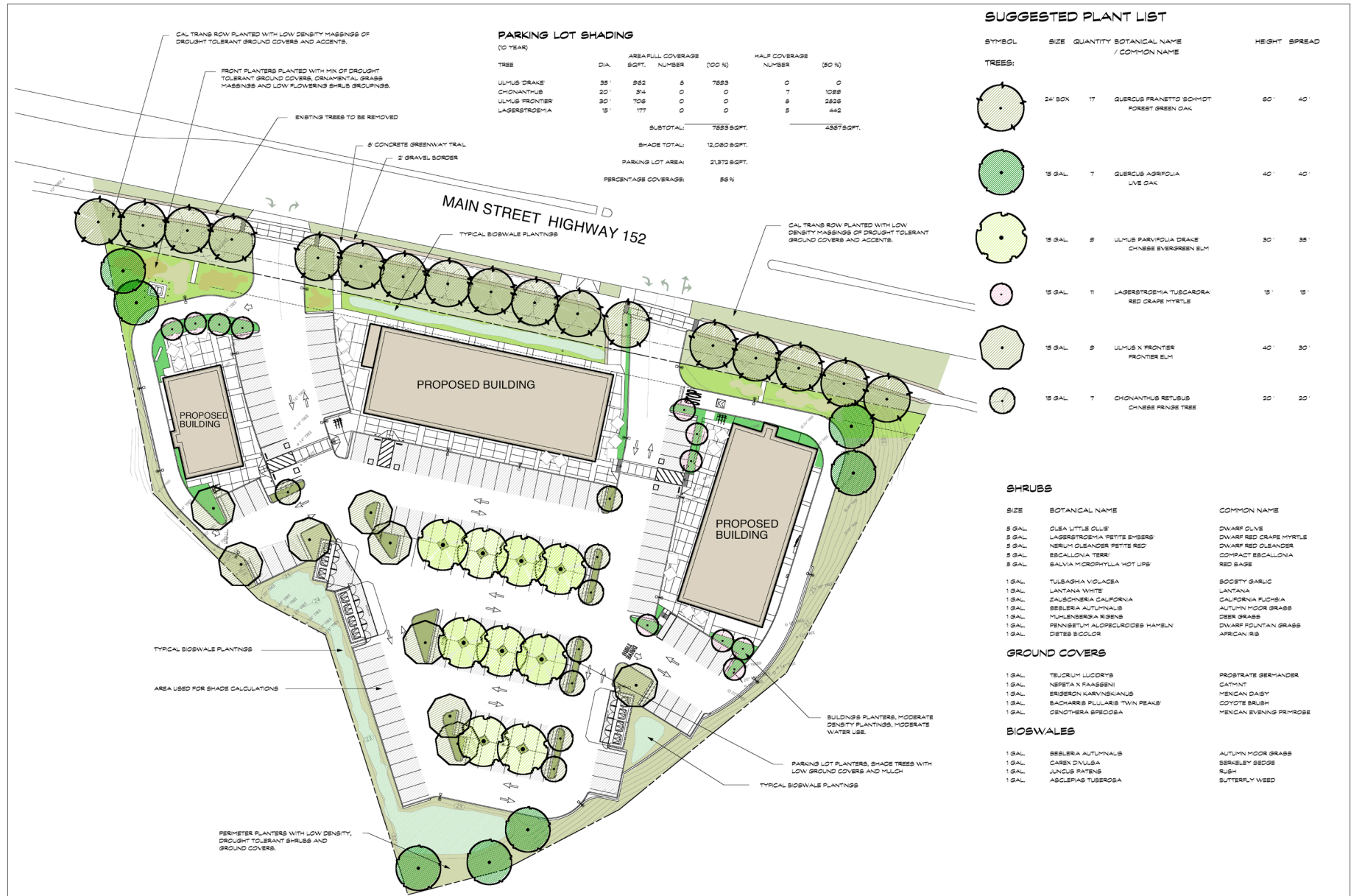
The Santa Cruz METRO (SCM) provides transit services in Watsonville. One bus stop, located adjacent to the project site along Main Street, provides access to existing bus services (Local Bus Routes 72, 72W, and 75 and Regional Bus Route 71). Regional Bus Route 71 travels between Watsonville and the City of Santa Cruz. Other local bus routes provide transit access throughout Watsonville, in addition to Corralitos and Green Valley. Figure 3-6 shows the proposed vehicular circulation map.

3.2.3 LANDSCAPING

The proposed project would include 38,004 square feet of pervious landscaped surfaces. Figure 3-13 illustrates the proposed landscaping plan. The project site includes landscaping throughout the project site's interior and the surrounding perimeter, and additional landscaping in the common open space areas. Shade trees would be located in the interior parking lot of the proposed project and would provide approximately 12,060 square feet of shade cover. Landscaping would also include two bioswales on the edge of the project site, adjacent to the Watsonville Slough.

The proposed landscaping would be consistent with the surrounding Northern California landscape and would include native and/or adaptive, and drought-resistant, plant materials of similar water use grouped

PROJECT DESCRIPTION



Source: McKently Malak Architects, 2019.

Figure 3-13
Conceptual Landscape Plan

PROJECT DESCRIPTION

by hydrozones, which are areas where plants are organized based on similar water use. Planters located along Main Street could be planted with a mix of drought tolerant groundcovers, ornamental grasses, and flow flowering shrub groupings. Other perimeter planters would be landscaped with low-density, drought-tolerant shrubs and groundcovers. Interior planters adjacent to buildings would consist of moderate density plantings with moderate water use.

3.2.4 LIGHTING

In accordance with Subsections (b) and (e) to WMC Section 14-12.403 and Subsections (b) and (e) to WMC Section 14-12.513, prior to project approval, City staff must be able to find that the site Photometric Plan demonstrates that the proposed project would not include new lighting on-site to the extent that light will spill over or create a glare nuisance to adjacent properties. Additionally, all proposed lighting would be required to be compatible with the uses on-site and to preserve the character and integrity of adjacent development, as well as to minimize adverse effects including visual impacts.

3.2.5 PUBLIC SERVICES

The project site is served by the Watsonville Police Department and Watsonville Fire Department. The police station is located at 215 Union Street, approximately 0.90 miles southeast of the project site. The fire station closest to the project site is Station 1, located at 115 Second Street, approximately 0.80 miles southeast of the project site. The project site is not located within a fire hazard severity zone, as mapped by the California Department of Forestry and Fire Protection (CAL FIRE).¹⁸

The nearest park, apart from Ramsay Park, is Callaghan Park, located approximately 0.43 miles to the northeast. Other nearby parks include Seaview Ranch Park approximately 0.80 miles to the southwest and Hope Drive Park approximately 0.80 miles to the northwest.

Nearby schools include Landmark Elementary School, 0.40 miles to the southwest; Cesar E. Chavez Middle School, 0.40 miles to the northwest; Starlight Elementary School, 0.42 miles to the northwest; HA Hyde Elementary School, 0.70 miles to the north; E.A. Hall Middle School, 0.85 miles to the northeast; and Watsonville High School, one mile to the southeast.

¹⁸ California Department of Forestry and Fire Protection, 2007 and 2008, Santa Cruz County Fire Hazard Severity Zone maps for the State Responsibility Area and Local Responsibility Area, http://frap.fire.ca.gov/webdata/maps/santa_cruz/fhszs_map.44.pdf and http://frap.fire.ca.gov/webdata/maps/santa_cruz/fhszl06_1_map.44.pdf, accessed on March 20, 2019.

PROJECT DESCRIPTION

3.2.6 UTILITIES

The proposed utility infrastructure would connect to the existing water, sewer, storm drain system, and electricity network in the area, and would be served by an existing solid waste landfill.

WATER SUPPLY AND CONSERVATION

The project site is located within Zone I of the City of Watsonville Water Service Area. The project site is currently connected to the City's water service and all water supply for the project would come from the City of Watsonville.

All landscape zones would be irrigated as required by WMC Section 6-3.437, and water uses would be tailored to meet CALGreen Building Standards. CALGreen Building Standards require water conservation and requires new buildings to reduce water consumption by 20 percent.

SANITARY SEWER SERVICE

The project site is located within the City of Watsonville service area and wastewater would be treated at the City of Watsonville Wastewater Treatment Plant. The project site is currently connected to the City of Watsonville's sewer system.

STORMWATER MANAGEMENT

The proposed project would result in 108,940 square feet of impervious coverage. Compared to 104,065 square feet of impervious coverage in existing conditions, an increase of 4,875 square feet or 3 percent is expected.

The project site is currently connected to the City of Watsonville storm drainage system, which drains to the wetlands in the Watsonville Slough. The project is also required to comply with the City of Watsonville Stormwater Post Construction Standards.

SOLID WASTE SERVICES

The City of Watsonville would provide curbside recycling, garbage, and yard waste services to the project site.¹⁹ Watsonville also has a waste and recycling drop-off center for additional waste and household

¹⁹ City of Watsonville, Garbage Services, <https://www.cityofwatsonville.org/691/Garbage-Services>, accessed on February 27, 2019.

PROJECT DESCRIPTION

hazardous waste. All non-hazardous waste collected from the project would be taken to the Monterey Peninsula Landfill, approximately 14 miles south of the project site.

OTHER UTILITIES (GAS, ELECTRIC, AND CABLE)

Electricity would be supplied to the project site by Pacific Gas & Electric (PG&E). Natural gas would also be provided by PG&E via gas line connections along Main Street. Natural gas would be used for Heating Ventilation and Air Conditioning (HVAC) systems, hot water heaters, and food preparation in restaurant spaces.

Telephone and cable television service would be available from a number of providers.

3.2.7 CONSERVATION MEASURES

The project applicant has included several conservation measures in the project, as follows:

- Electric charging equipment for a select number of parking spaces.
- Building electrical installation to accommodate future solar panels.
- Roof overhang and shading devices above glass storefront systems.
- Drought resistant landscape materials.
- Water conservation irrigation system. Landscaping would be irrigated by automatic, low volume, inline drip systems buried below grade. The landscape and irrigation would be required to comply with the 2015 updated Model Water Efficient Landscape Ordinance (Chapter 6-3, Article 8 of the WMC).

3.2.8 CONSTRUCTION PHASE

Demolition and construction would take place over a 12-month period, which is anticipated to begin in September 2019 and be completed 12 months later in September 2020, subject to regulatory approval.

DEMOLITION AND SITE PREPARATION

The project applicant proposes to demolish the existing building pads, foundations, and retaining walls that previously supported automotive care, restaurant, and market buildings on the project site. As discussed above, the seven existing trees along Main Street would be removed and replaced with 60 new trees throughout the project site consisting of: Forest green oak, Live oak, Chinese evergreen elm, Red crape myrtle, Frontier elm, and Chinese fringe trees. The removal of existing trees on-site would be required to comply with the WMC Chapter 7-11, Street Trees, and Chapter 7-13, Preservation or Historical Trees.

PROJECT DESCRIPTION

As shown in Table 3-1, demolition would take place over an approximately 5-day time period and site preparation and grading activities would take place over a 10-day period and a 15-day period, respectively. Site work would be balanced on-site, meaning that no soil import or export would be required. Sitework would be done in accordance to WMC Chapter 7-6, Excavation, Grading, Filling, and Erosion Control.²⁰ Equipment used for demolition and site preparation would include a combination of concrete/industrial saws, rubber-tired bulldozers, graders, tractors, loaders, and backhoes. The proposed project would require 1,700 tons of asphalt and 993 tons of building debris to be demolished and hauled. Demolition debris would be off-hauled for disposal at the Monterey Peninsula Landfill in Monterey County, approximately 14 miles south of the project site. This would be done in accordance with WMC Chapter 6-3, Article 6, Solid Waste and Recycling Services.²¹

TABLE 3-1 DEMOLITION AND CONSTRUCTION PHASING

Activity	Phase 1
Demolition	5 days
Site Preparation	10 days
Grading	15 days
Building Construction	373 days
Asphalt Paving	13 days
Architectural Coating	13 days

Note: Days provided are number of working days.
Source: Boos Development Group (project applicant), 2019.

CONSTRUCTION PHASING

As shown in Table 3-1, the longest construction phase would be the construction of the buildings, which would take place over a 373-day period, and would be followed by much shorter time periods for paving and painting. Project construction would result in three buildings totaling 20,000 square feet, with 78,666 square feet of paved parking lot and concrete areas and a total of 38,004 square feet of landscaping. The total area to be disturbed during construction would be approximately 2.82 acres.

3.3 REQUIRED PERMITS AND APPROVALS

Following approval of this Initial Study and adoption of the Mitigated Negative Declaration, the following discretionary permits and approvals from the City would be required for the proposed project:

- Special Use Permit with Design Review
- Sign Permit
- Caltrans Encroachment Permit

In addition, permits for demolition, grading, and building, and a certificate of occupancy, would be required from the City.

²⁰ City of Watsonville, 1981, City of Watsonville Municipal Code, Chapter 7-6, Excavation, Grading, Filling, and Erosion Control.

²¹ City of Watsonville, 2000, City of Watsonville Municipal Code, Chapter 6-3, Article 6, Solid Waste and Recycling Services.

PROJECT DESCRIPTION

This page intentionally left blank

4. Environmental Analysis

Although the on-site buildings have been recently vacated and demolished, the description of “existing conditions” throughout this analysis considers the existing on-site buildings as they were most recently occupied (i.e., with auto service, repair, and supply shops, a grocery store, a restaurant, and a storage building). Because the on-site conditions were in flux, and the buildings that were previously occupied when the project applicant took ownership of the property have since been demolished as this environmental report was prepared, a fully occupied site (i.e., the condition in place when this analysis was initiated), is considered the baseline condition. This approach is consistent with CEQA Guidelines Section 15125(a)(1), which states, in part, “Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project’s impacts, a lead agency may define existing conditions by referencing *historic conditions*, [emphasis added] or conditions expected when the project becomes operational, or both, that are supported with substantial evidence.”

I. AESTHETICS

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

EXISTING CONDITIONS

The project site previously contained three one-story buildings and one storage structure, along with surface parking. The buildings most recently contained three auto service repair shops, an aftermarket auto supply store, a grocery store, a restaurant, and a storage building. The former grocery store and auto supply store, the tallest building on-site, was located in the center of the project site and had a bright orange and yellow exterior a green and checkered awnings. The building’s appearance made the building

ENVIRONMENTAL ANALYSIS

stand out from the natural backdrop of the vegetation around the Watsonville Slough south of the project site. Surrounding the grocery store and auto supply store building was surface parking in the front and on the sides, and storage and trash enclosures in the rear. Two other structures were visible from the Main Street frontage that housed the auto service repair shops, the auto supply store, and a restaurant. The former restaurant was painted white and features an adobe style terracotta tile roof and white architectural features. This building was fronted by surface parking, with mature trees located in the rear. The third structure visible from the Main Street frontage was a single-story metal building with a flat roof which housed two auto-related businesses. This structure had surface parking in the front, and paved surfaces in the rear that were used for vehicle and trailer storage. There was a fourth structure on the project site, not visible from the Main Street frontage, which housed another auto-related business, and which was constructed from metal in the same fashion as the auto-related structure located towards the front of the site.

The site is immediately bordered by Main Street and a commercial center to the north, Watsonville Slough to the east and south, and Ramsay Park to the west. The project site contains mature trees and light landscaping along the boundaries as well as mature trees, including palm trees, scattered throughout the site; these trees and landscaping do not shield view of the project site from the Main Street frontage. Directly across from the site is a Dollar Tree and Grocery Outlet Bargain market, which are housed in the same structure. This structure uses a naturalistic paint color scheme, as well as wood architectural features. Much like the project site, the Dollar Tree and Grocery Outlet Bargain market are surrounded by surface parking with ornamental landscaping. Other development in the project vicinity includes one-story, small buildings painted white. As mentioned above, the project site is bounded by Watsonville slough to the east and south, and by Ramsay Park to the west. Both spaces are highly vegetated; therefore, the project site is surrounded by mature vegetation on three sides.

The proposed project is not located along a State-designated scenic highway; however, Main Street is eligible to be designated as a State scenic highway.²² In addition, the project site is located on Main Street and is north of Harkins Slough Road; both of these roadways fit the City's criteria for scenic routes.²³ According to the City's *Urban Design and Scenic Resource Element*, Main Street is a four-lane landscape gateway that provides a variety of views of developed commercial shopping centers, Ramsay Park, historic downtown Watsonville, the plaza, and the Pajaro River. Harkins Slough Road provides a unique beauty of the City's sloughs and marshes and affords broad view of the entire valley.

²² California Department of Transportation website, Officially Designated State Scenic Highways, http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/, accessed on April 1, 2019.

²³ City of Watsonville, 1994, Watsonville 2005 General Plan, Chapter 5: Urban Design and Scenic Resources Element, Figures 5-1 and 5-2.

ENVIRONMENTAL ANALYSIS

DISCUSSION

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

Public views of scenic corridors are views seen along a linear transportation route and public views of scenic vistas are views of specific scenic features. Scenic vistas are generally interpreted as long-range views, while scenic corridors are comprised of short-, middle-, and long-range views. The proposed project would have the potential to affect scenic vistas and/or scenic corridors if the redevelopment on the project site would block views of areas that provide or contribute to such vistas. Potential effects could include blocking views of a scenic vista/corridor from specific publicly accessible vantage points or the alteration of the overall scenic vista/corridor itself. Such alterations could be positive or negative, depending on the characteristics of the project site and subjective perception of observers.

The *Watsonville 2005 General Plan* includes designations for scenic routes but does not have designated scenic vistas. Scenic routes within proximity to the project site include Main Street (Highway 1 to Pajaro River) to the north, and Harkins Slough Road to the south.²⁴ Views from Harkins Slough Road are limited due to existing riparian and marsh vegetation in the Watsonville Slough. There are very limited views of far-field mountain ranges to the east of the project site, which are mainly visible from Main Street itself, and which are not designated as scenic vistas. These views, however, are partially obstructed by existing development around the project site, and by mature trees. Additionally, development on the project site would not obstruct or decrease access to these views from adjacent properties.

Previous on-site buildings and surrounding buildings, which are all one-story in height, currently limit the opportunity for views of scenic vistas from street-level public viewing. As shown on Figures 3-8, 3-10, and 3-12 above, the maximum allowable height for structures on the project site is 38 feet or three stories, which generally matches taller commercial development across Main Street from the project site, mainly the Dollar Tree and the Grocery Outlet. As described in Chapter 3, Project Description, of this Initial Study, the existing building pads would be removed and replaced by the proposed buildings that would consist of three one-story commercial buildings with two drive-throughs and associated parking and landscaping. At the highest points, Building 1 would be 28 feet tall, Building 2 would be 38 feet tall, and Building 3 would be 30 feet tall. The proposed project would have a similar use as the existing development and would replace and expand landscaping along the Main Street frontage.

Because the proposed project would not create buildings that are taller than surrounding development, would include the replacement and expansion of current landscaping, and because existing conditions currently limit public views of scenic resources, impacts would be *less than significant*.

²⁴ City of Watsonville, 1994, *Watsonville 2005 General Plan*, Chapter 5: Urban Design and Scenic Resources.

ENVIRONMENTAL ANALYSIS

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

A scenic road is defined as a highway, road, drive, or street that, in addition to its transportation function, provides opportunities for the enjoyment of natural and human-made scenic resources. Main Street is eligible to be designated as a State scenic highway.²⁵ In addition, Main Street and Harkins Slough Road fit the City's criteria for scenic roads.²⁶

The project site is located on a segment of Main Street that contains visual intrusions of urbanized commercial and residential uses that interrupt the views of the Watsonville Slough and nearby Struve Slough and Pajaro River. The project site is already developed with commercial uses that do not contribute to the scenic value of Main Street. The proposed development would redevelop the site with new commercial uses and the new buildings would be similar in height and orientation to commercial development adjacent to the project site on the north side of Main Street. Therefore, the project would not damage scenic resources visible from Main Street.

Views of the project site from Harkins Slough Road are limited due to existing riparian and marsh vegetation in the Watsonville Slough. The project does not propose removal of any plants on the southern boundary of the project site, along the Watsonville Slough. Additionally, the project proposes the planting of three Live Oak trees on the southern tip of the project site. Live Oak trees grow to approximately 40 feet at maturity and would further add to the natural elements of the adjacent riparian corridor.

The project site is located adjacent to the Watsonville Slough, which can be considered a scenic natural resource. The proposed project would have a 30-foot setback from the high water mark of the Watsonville Slough. Furthermore, the proposed project would provide new bioretention areas and landscaping that would complement the scenic natural resource. The project would not result in any visual changes to the Watsonville Slough. Therefore, impacts would be *less than significant*.

- c) *Would the proposed project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? Is the project in an urbanized area, and would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project would result in a significant impact if it would conflict with zoning regulations pertaining to the size, location, and appearance of development. As described in criteria (a) and (b) above, the proposed project would not result in a substantial change to any scenic resources or views. While the project site is located on the urban fringe and adjacent to the Watsonville Slough, the proposed project is located on an urbanized site along a commercial corridor. The General Plan General Commercial land use designation and Commercial Thoroughfare zoning district allow for a maximum FAR of 0.45 where up to

²⁵ California Department of Transportation website, Officially Designated State Scenic Highways, http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/, accessed on April 1, 2019.

²⁶ City of Watsonville, 1994, Watsonville 2005 General Plan, Chapter 5: Urban Design and Scenic Resources Element, Figures 5-1 and 5-2.

ENVIRONMENTAL ANALYSIS

three-story buildings are allowed and a maximum height of 35 feet or three stories.²⁷ Specific front and side or rear abutting setbacks are required for the project site, with a minimum of 15 feet in the front and 10 feet in the side or rear. WMC Section 14-41.102(k) also requires drive-through lanes to be setback from the face of the curb of any street frontage by a minimum of 20 feet. The proposed project would be required to comply with additional WMC regulations related to signage, outlined in WMC Section 8-6.102 through 8-6.132. Furthermore, the City of Watsonville has adopted the California Building Code in WMC Title 8 Chapter 2, which requires all development in the city to adhere to the most recent version of the California Building Code, which regulates some development features, such as lighting, which would reduce impacts of potential development on adjacent properties. Furthermore, the WMC regulates light pollution that may be caused by new development. All proposed lighting would be required to be compatible with the uses on-site and would preserve the character and integrity of adjacent development, as well as minimize adverse effects including visual impacts, in accordance with Subsections (b) and (e) to WMC Section 14-12.403 and Subsections (b) and (e) to WMC Section 14-12.513.

The project would result in a change from the three one-story commercial buildings and storage shed with an 0.16 FAR, to three one-story commercial buildings with two drive-throughs and a 0.15 FAR. The existing trees would be replaced with 60 trees consisting of six species, which would enhance the existing visual character. WMC Section 14.41.102(k) requires drive-through facilities to have a minimum 20-foot setback from the face of the curb of any street frontage. The proposed project would have an approximate front yard setback of 17 feet, side setbacks of 44 feet to the east and 19 feet 10 inches to the west, and a rear setback of 15 feet. The drive-through on the west side of the project site, at Building 1, would have a setback of 61 feet and 7 inches from the Main Street curb. The drive-through on the east side of the project site, at Building 3, would have a setback of 63 feet and 8 inches from the Main Street curb. Therefore, the project would not conflict with applicable zoning and other regulations governing scenic quality, and impacts would be *less than significant*.

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

Nighttime illumination and glare impacts are the effects on adjoining uses and areas of a project's exterior lighting. Light and glare impacts are determined through a comparison of the existing light sources with the proposed lighting plan or policies. As discussed in Chapter 3, Project Description, the project site and surrounding areas contain many existing sources of nighttime illumination. These include street and parking area lights, security lighting, and exterior lighting for the previous commercial buildings. Additional on-site light and glare are caused by surrounding land uses and traffic on surrounding roadways.

²⁷ City of Watsonville. Title 14, Zoning: Section 14-16 Part 12 – Thoroughfare Commercial District. <https://www.codepublishing.com/CA/Watsonville/#!/Watsonville14/Watsonville1416.html#14-16.1200>, accessed on February 22, 2019.

ENVIRONMENTAL ANALYSIS

The source, intensity, and type of exterior lighting for the proposed project would be typical for orientation and safety needs. All on-site lighting would be low-level illumination and shielded to reduce light spill or glare. In landscaped and paved areas, light sources would be concealed and not visible from public views. Proposed landscaping on the east and southern portions of the site would shield the Watsonville Slough from any new light sources. All proposed lighting would be compatible with the uses on-site and would preserve the character and integrity of adjacent development, as well as minimizing adverse effects including visual impacts, in accordance with Subsections (b) and (e) to WMC Section 14-12.403 and Subsections (b) and (e) to WMC Section 14-12.513. The proposed project includes a photometric plan that the City will review to ensure it demonstrates compliance with WMC lighting requirements to decrease the impact that proposed lighting on the project site would have on adjacent properties.

Additionally, the proposed signs in the drive-through areas would be required to comply with WMC Section 8-6.111, which prohibits the creation of a glare nuisance to surrounding development or adjacent private or public property. Therefore, light and glare impacts of the proposed project would be *less than significant*.

II. AIR QUALITY

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

AIR POLLUTANTS OF CONCERN

The Air Quality section addresses the impacts of the proposed project on ambient air quality and the exposure of people, especially sensitive individuals, to unhealthful pollutant concentrations. A background discussion on the air quality regulatory setting, meteorological conditions, existing ambient air quality in the vicinity of the project site, and air quality data can be found in Appendix A.

ENVIRONMENTAL ANALYSIS

Criteria Air Pollutants

Pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and State law under the National and California Clean Air Act, respectively. Air pollutants are categorized as primary and/or secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROGs), nitrogen oxides (NO_x), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead (Pb) are primary air pollutants. Of these, all of them except for ROGs are “criteria air pollutants,” which means that ambient air quality standards (AAQS) have been established for them. The National and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect those “sensitive receptors” most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Toxic Air Contaminants

In addition to criteria air pollutants, both the State and federal government regulate the emissions of toxic air contaminants (TACs). The California Health and Safety Code defines a TAC as “an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health.” A substance that is listed as a hazardous air pollutant pursuant to Section 112(b) of the federal Clean Air Act (42 United States Code Section 7412[b]) is a TAC. Under State law, the California Environmental Protection Agency, acting through the California Air Resources Board (CARB), is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or may pose a present or potential hazard to human health.

EXISTING CONDITIONS

When occupied, the previous buildings generated criteria air pollutants from transportation sources, energy (natural gas and purchased energy), and area sources such as landscaping equipment and architectural coatings. The previous land uses generate approximately 3,210 weekday average daily trips and 4,437 average daily trips on the weekend.²⁸ Existing emissions associated with the proposed project are shown in Table 4-1, below.

²⁸ Institute of Transportation Engineers (ITE). 2018. Trip Generation Manual, 10th Edition.

ENVIRONMENTAL ANALYSIS

TABLE 4-1 EXISTING CRITERIA AIR POLLUTANT EMISSIONS

Category	Criteria Air Pollutants (lbs/day)					
	ROGs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area	1	<1	<1	<1	<1	<1
Energy	<1	1	1	<1	<1	<1
Mobile	18	66	226	<1	37	10
Total	19	67	227	<1	37	10

Notes: Emissions may not total to 100 percent due to rounding. Highest winter or summer emissions are reported.
Source: California Emissions Estimator Model (CalEEMod), Version 2016.3.2.

Where available, the significance criteria established by the Monterey Bay Air Resources District (MBARD) are relied upon to make the determinations discussed below.

APPLICABLE GENERAL PLAN MEASURES

The Watsonville 2005 General Plan Environmental Resources and Transportation and Circulation Elements includes the following implementation measures pertaining to air quality that are relevant to this analysis:

Environmental Resources Management Element

- **Implementation Measure 9.C.1, Referral to MBARD.** The City shall refer projects with identifiable air quality impacts to MBARD for recommendation or appropriate air quality mitigations.
- **Implementation Measure 9.C.2, Alternate Travel Modes.** In order to reduce automobile related pollution, the City shall plan for and encourage the use of transit, ridesharing, bicycles, and walking as alternatives to automobile travel, and the use low-emission and electric vehicles.
- **Implementation Measure 9.C.3, Housing Jobs Linkage.** The City shall encourage new residential development to include housing suitable to employees of workplaces in the city and its immediate environs in order to minimize commuting and the motor vehicle emissions thus generated. The City shall strive to locate housing and job land uses to enhance the use of carpooling and transit.
- **Implementation Measure 9.C.4, Design Review.** The City shall require new development to include consideration for transit, Transportation Demand Management, and alternative travel modes in project designs including but not limited to transit stops, car, and vanpool preferred parking, and bicycle access and storage facilities.
- **Implementation Measure 9.C.8, Transportation Management Associations.** The City shall promote the creation of transportation management associations in areas of high employment density.

ENVIRONMENTAL ANALYSIS

- **Implementation Measure 9.C.9, Environmental Review.** The City shall use the environmental review process to determine both stationary source and transportation related potential air quality impacts for project proposals.
- **Implementation Measure 9.J.1, Alternative Transportation.** As outlined in the Transportation and Circulation chapter, the City shall promote the use and development of alternative transportation modes intended to reduce the consumption of fossil fuels and other non-renewable energy resources.
- **Implementation Measure 9.J.2, Development.** The City shall encourage energy efficient design and design which utilizes solar opportunities in residential, commercial, and industrial development.
- **Implementation Measure 9.J.3, Land Use and Transportation.** Development shall be encouraged to occur in locations and at intensities that facilitate the use of alternative transportation modes to the extent compatible with the community.

Transportation and Circulation Element

- **Implementation Measure 10.K.1, New Construction and Improvements.** New construction and improvements to designated streets shall include facilities for safe bicycle travel consistent with the City's Bicycle Plan.
- **Implementation Measure 10.K.2, Designation of Bicycle Lanes.** The City shall designate specified arterials for the development of bicycle lanes, consistent with the Bicycle Plan.
- **Implementation Measure 10.N.1, Construction/Improvement.** The City shall require facilities for safe pedestrian travel as part of new construction or improvements to existing streets.
- **Implementation Measure 10.P.1, Access to Adjoining Land Uses.** The City shall require pedestrian access between adjoining multiple family residential developments, and from such residential developments to adjacent recreational or commercial area.

DISCUSSION

Where available, the significance criteria established by the MBARD are relied upon to make the determinations discussed below.

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

The MBARD, formerly known as the Monterey Bay Unified Air Pollution Control District (MBUAPCD), is responsible for reducing emissions in the North Central Coast Air Basin (NCCAB) from area, stationary, and mobile sources to achieve the National and California AAQS. The NCCAB is designated as nonattainment for ozone under both the National AAQS and California AAQS and for PM₁₀ under the California AAQS.²⁹

²⁹ Monterey Bay Air Resources District, 2008, CEQA Air Quality Guidelines.

ENVIRONMENTAL ANALYSIS

MBARD adopted the 2012-2015 Air Quality Management Plan (AQMP) in an effort to reduce ozone levels in the NCCAB.³⁰ Consistency determinations with the AQMP are used by MBARD to address a project's cumulative impact on regional air quality (i.e., ozone levels).

MBARD utilizes regional growth projections to forecast future emission levels in the NCCAB. For the Monterey Bay area these regional growth projections are provided by the Association of Monterey Bay Area Governments (AMBAG) and are partially based on land use designations in city/county general plans. Typically, only large, regionally significant projects have the potential to affect the regional growth projections. The proposed project is not considered a regionally significant project under CEQA Guidelines Section 15206 that would affect regional vehicle miles traveled (VMT) and warrant intergovernmental review by AMBAG. The proposed project is a local-serving retail use under 50,000 square feet and is consistent with the underlying land use designation in the General Plan. The proposed project would result in an increase in nine employees on-site, but this growth is accounted for in the employment growth forecasts for the city (see also Section XII, Population and Housing). Furthermore, the net increase in regional emissions generated by the proposed project would be less than the emissions generated by the existing uses and would not exceed MBARD's emissions thresholds (see criterion (b) below). These thresholds were established to identify projects that have the potential to generate a substantial amount of criteria air pollutants. Because the proposed project would not exceed these thresholds, the proposed project would not be considered by the MBARD to substantially contribute to cumulative emissions in the NCCAB. Therefore, the proposed project would not conflict with or obstruct implementation of the AQMP and impacts would be considered *less than significant*.

b) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under applicable federal or State ambient air quality standard?*

MBARD has identified screening thresholds and thresholds of significance for construction and operational criteria pollutant emissions. Development projects below these screening and significance thresholds are not expected to generate sufficient criteria pollutant emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation. The NCCAB is designated as nonattainment for ozone under both the National AAQS and California AAQS and for PM₁₀ under the California AAQS.³¹ Therefore, ozone precursors (ROGs and NO_x) and PM₁₀ are regional pollutants of concern during construction and operation. The following describes changes in regional impacts from short-term construction activities and long-term operation of the proposed project and their cumulative impact.

³⁰ Monterey Bay Air Resources District, 2017, 2012-2015 Air Quality Management Plan.

³¹ Monterey Bay Air Resources District, 2008, CEQA Air Quality Guidelines.

ENVIRONMENTAL ANALYSIS

Construction Impacts

Ozone Precursors (VOC and NOx)

Emissions from construction activities represent temporary impacts that are typically short in duration, depending on the size, phasing, and type of project. As identified in MBARD's CEQA Air Quality Guidelines, construction projects using typical construction equipment such as dump trucks, scrapers, bulldozers, compactors and front-end loaders that temporarily emit precursors of ozone (i.e., VOC or NOx), are accommodated in the emission inventories of state- and federally-required air plans and would not have a significant impact on the attainment and maintenance of ozone AAQS.^{32,33} The project would utilize typical construction equipment; therefore, emissions of ozone precursors (VOC and NOx) would be *less than significant*.

Particulate Matter

MBARD has adopted construction emissions thresholds and screening criteria for PM₁₀ to determine a project's cumulative and project-level impact on air quality in the NCCAB. Construction activities (e.g., excavation, grading, on-site vehicles) that directly generate 82 pounds per day (lbs/day) or more of PM₁₀ would have a significant impact on local air quality when they are located nearby and upwind of sensitive receptors. MBARD's has adopted screening criteria for construction PM₁₀ that are presumed to generate 82 lbs/day or less of PM₁₀. The proposed project would result in 2.66-acres of grading on the 3.05-acre site and has the potential to exceed the construction screening criteria identified by MBARD for construction projects requiring earthmoving. Therefore, project-related construction emissions are estimated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 to determine if construction emissions would exceed the MBARD's construction significance threshold. As shown in Table 4-2, construction emissions would not exceed 82 lbs/day.

TABLE 4-2 CONSTRUCTION-PHASE PARTICULATE MATTER EMISSIONS

Category	Criteria Air Pollutants (lbs/day) ^a	
	PM ₁₀	PM _{2.5}
Year 2020	8	4
Year 2021	2	2
<i>Maximum Daily</i>	8	4
Air District Maximum Daily Project-Level Threshold ^b	82	55
Exceeds Average Daily Threshold?	No	No

Notes: lbs/day = pounds per day; NA = Not Applicable

a. Based on the preliminary information provided by the Applicant. Where specific information regarding Project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted of construction equipment.

b. The project for PM_{2.5} is based on the District's Guidelines for Implementing the California Environmental Quality Act (2016), which is the District's guidance for projects when MBARD is the lead agency.

Source: California Emissions Estimator Model (CalEEMod), Version 2016.3.2.

³² Monterey Bay Air Resources District, 2008, CEQA Air Quality Guidelines.

³³ Monterey Bay Air Resources District, 2005, Particulate Matter Plan.

ENVIRONMENTAL ANALYSIS

Although the project would be below thresholds of significance for PM₁₀, MBARD recommends the use of best management practices (BMPs) for the control of short-term construction generated emissions. Implementation of the MBARD's recommended BMPs or equivalent measure would be required for compliance with the City's General Plan Implementation Measure 9.C.10, which requires applicants to prepare a dust abatement program during construction:

- **Implementation Measure 9.C.10. Construction-related Impacts.** The City shall require construction contractors to implement a dust abatement program to reduce the effect of construction on local PM₁₀ concentrations.

The following best practices would be part of the dust abatement program implemented during construction and would further reduce particulate matter emissions identified above.

- Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil and wind exposure.
- Prohibit all grading activities during periods of high wind (over 15 mph).
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed areas.
- Haul trucks shall maintain at least two feet of freeboard.
- Cover all trucks hauling soil, sand, and other loose materials.
- Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.
- Plant vegetative ground cover in disturbed areas as soon as possible.
- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Pave all roads on construction sites.
- Sweep streets, if visible soil material is carried out from the construction site.
- Post a publicly visible sign which specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the MBARD shall be visible to ensure compliance with Rule 402, Nuisance.
- Limit the area under construction at any one time.

Consequently, PM₁₀ impacts during construction activities are *less than significant*.

ENVIRONMENTAL ANALYSIS

Operation Impacts

MBARD has adopted operational emissions thresholds and screening criteria (for ozone precursors) to determine a project's cumulative and project-level impact on air quality in the NCCAB. The proposed project would result in 20,000 square feet of restaurant and retail uses and would exceed the MBARD screening project sizes for indirect sources of ozone precursors. The project site was historically occupied with 18,035 square feet of land uses, consisting of automotive care, restaurant, and market uses on-site. Based on this mix of land uses, the site historically generated approximately 3,210 average daily trips on a weekday.³⁴ Based on the KD Anderson traffic impact analysis, the proposed project would generate 2,986 average daily trips on a weekday, which is approximately 224 fewer trips than the previous land uses.³⁵ Because the proposed project would result in fewer trips than the previous land uses and would be constructed in accordance with the latest building code, the project would result in less emissions than the previous land uses on-site and the net operational emissions generated by the project would not exceed the MBARD operational significance thresholds. Consequently, the proposed project would not cumulatively contribute to the nonattainment designations of the NCCAB, and regional operational phase air quality impacts would be *less than significant*.

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

The proposed project could expose sensitive receptors to elevated pollutant concentrations if it would cause or contribute significantly to elevated pollutant concentration levels. The nearest sensitive receptors are the multi-family and single-family residences east of the project site. These residences are approximately 570 feet east of the project site.

Construction Phase

If modeling of a project's regional (mass emissions) exceed 82 lbs/day with mitigation, MBARD requires localized dispersion modeling to ensure that construction activities would not result in emissions that exceed the State PM₁₀ AAQS (50 µg/m³) at existing receptors as averaged over 24 hours. As identified in Table 4-2, the proposed project would result in particulate matter emissions substantially less than the MBARD thresholds; therefore, the proposed project would not expose sensitive receptors to substantial concentrations of air pollutants.

MBARD currently does not require health risk assessments to be conducted for short-term emissions from construction equipment. The Office of Environmental Health Hazards Assessment (OEHHA) adopted new guidance for the preparation of health risk assessments in March 2015. Emissions from construction equipment primarily consist of diesel particulate matter (DPM), and OEHHA has developed a cancer risk factor and noncancer chronic reference exposure level for DPM. These factors are based on continuous

³⁴ Institute of Transportation Engineers. 2018, Trip Generation Manual, 10th Edition.

³⁵ KD Anderson & Associates, Inc., 2019, August 20, Traffic Impact Analysis for BTS – Main Street and Auto Center Drive Retail Center, 975 Main Street, Watsonville, CA, page 33 and Table 9 Comparison of Project Trip Rates vs Historic Trip Rates.

ENVIRONMENTAL ANALYSIS

exposure for over a 30-year time frame, and because the proposed project is anticipated to be developed over one year, exposure of off-site receptors to DPM would be limited. As described above, construction emissions would be well below the 82 lbs/day and it is anticipated that construction emissions would not pose a threat to off-site receptors near the project site. Due to the intermittent and short-term temporary nature of construction activities, emissions of DPM would not be sufficient to pose a significant risk to sensitive receptors from construction equipment operations during the course of the project.

The proposed project would not expose sensitive receptors to substantial pollutant concentrations during construction. Impacts are considered *less than significant*

Operational Phase

If modeling of a project's regional (mass emissions) exceed the MBARD significance thresholds with mitigation, MBARD requires localized dispersion modeling to ensure that operational activities would not result in emissions that exceed the AAQS at existing receptors. The proposed project would result in a reduction in square footage on-site and emissions and would not exceed the regional significance thresholds; therefore, the proposed project would not expose sensitive receptors to substantial concentrations of air pollutants. Additionally, the proposed project is not an industrial project that has the potential to generate substantial sources of DPM or other TACs on-site. Therefore, impacts are considered *less than significant*.

Carbon Monoxide

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 parts per million or the eight-hour standard of 9.0 parts per million. Hot spots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. As described in Section XV, Transportation, the project intersections would operate at level of service (LOS) D or better during the peak hour with mitigation. Furthermore, the NCCAB has been designated as attainment under both the national and California AAQS for CO. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to AAQS was previously demonstrated through an analysis of localized CO concentrations. However, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact.³⁶ The project would generate 164 AM peak hour trips, 186 PM peak hour trips, and 373 noon peak hour trips during the weekday³⁷ and would be substantially below the number of vehicles needed to generate a CO hotspot. Additionally, the project would not generate

³⁶ Bay Area Air Quality Management District, 2017, California Environmental Quality Act Air Quality Guidelines.

³⁷ KD Anderson & Associates, Inc., 2019, August 20. Traffic Impact Analysis for BTS – Main Street and Auto Center Drive Retail Center, 975 Main Street, Watsonville, CA, page i.

ENVIRONMENTAL ANALYSIS

substantial heavy-duty truck traffic and would not generate substantial traffic near a major stationary source of CO. Localized air quality impacts related to mobile-source emissions would therefore be *less than significant*.

- d) *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

MBARD considers odors to be substantial if they create a nuisance under MBARD Rule 402:

No person shall discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or which endanger the comfort, repose, health, or safety of any such persons or the public; or which cause, or have a natural tendency to cause, injury or damage to business or property (MBARD Rule 402).

The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities.

The proposed project would result in operation of restaurant and retail developments. These uses would replace the previous auto-related uses (automotive repair shop, auto tint shop, towing), grocery store, and restaurant on-site. During operation, the on-site restaurant could generate odors from cooking. Odors from cooking are not substantial enough to be considered nuisance odors that would affect a substantial number of people. The proposed project would not generate substantial odors or be subject to odors that would affect a substantial number of people.

During construction activities, construction equipment exhaust and application of asphalt and architectural coatings would temporarily generate odors. Any construction-related odor emissions would be temporary and intermittent. Additionally, noxious odors would be confined to the immediate vicinity of the construction equipment. By the time such emissions reach any sensitive receptor sites, they would be diluted to well below any level of air quality concern. Therefore, impacts would be *less than significant*.

ENVIRONMENTAL ANALYSIS

III. BIOLOGICAL RESOURCES

Would the proposed project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plan, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<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"/>
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 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"/>
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"/>

Available information was reviewed and a field reconnaissance survey was performed by the Initial Study biologist on May 3, 2019. Available documentation reviewed included studies prepared for the applicant by Huntington Environmental, the California Native Plant Species (CNPS) *Inventory of Rare and Endangered Plants*, and GIS data on special-status species and sensitive natural communities was obtained from the California Natural Diversity Data Base (CNDDB) of the California Department of Fish and Wildlife (CDFW).

Studies prepared by the applicant's consulting biologist included a Biological Resource Assessment (BRA),³⁸ review of findings regarding applicable riparian corridor categories,³⁹ and an addendum to the BRA.⁴⁰ The BRA and the addendum to the BRA can be found in Appendix B of this Initial Study. The BRA

³⁸ Hunting Environmental, 2018, 975 and 1035 Main Street, Watsonville, CA 95682, Biological Resource Assessment.

³⁹ Hunting Environmental, 2018, Retail/Restaurant Project (PP2017-116) located at 975 and 1035 Main Street, Watsonville, CA. Letter report to Erick Sobotka, BOOS Development West, LLC., December 11.

⁴⁰ Hunting Environmental, 2019, Addendum to the Biological Resource Assessment for Proposed Commercial Redevelopment (PP2017-116) located at 975 and 1035 Main Street, Watsonville, CA. Letter report to Justin Meek, City of Watsonville, August 2.

ENVIRONMENTAL ANALYSIS

provided a description of biological and wetland conditions found within an approximately 28-acre study area that encompasses the site and adjacent reach of Watsonville Slough, a summary of regulations pertaining to sensitive biological resources, and a summary of potential impacts. During the May 2019 field reconnaissance, conditions observed by the Initial Study biologist were inconsistent with conclusions reached in the BRA and applicability of the City's regulations regarding riparian corridor buffers, as defined in WMC Section 7-6.152 (see assessment below under criterion (e)). A memo prepared by Justin Meek, Principal Planner with the City,⁴¹ summarized the conditions observed during the May 2019 reconnaissance, applicable methodology in determining the riparian buffer on the site, and the need for determining the highwater mark in accordance with Section 7-6.152(c). The addendum to the BRA provides a revised approach to determining the riparian corridor buffer as it extends over the southern edge of the site, using the observed "highwater mark of a marsh or a natural body of standing water," which is consistent with applicable WMC provisions.

EXISTING CONDITIONS

The project site and Main Street frontage is urbanized and developed with roadways, parking areas, structures, ornamental landscaping, and ruderal (weedy) vegetation. Trees on the developed portion of the site include Mexican fan palms (*Washingtonia robusta*), alders (*Alnus* sp.), sycamores (*Platanus* sp.), and Mediterranean cypress (*Cupressus sempervirens*). Dense riparian woodlands associated with Watsonville Slough border the southern edge of the project site, and native willows (*Salix* spp.) grow up the steep embankment that separates the level, developed portion of the site from the adjacent natural area in some locations. To the west of the project site lies Ramsay Park, which consists of playing fields and walking trails, as well as some improved facilities such as the Ramsay Park Family Center and associated parking lot.

The wildlife habitat values of the developed portion of the site are low due to the limited cover and intensity of human disturbance. The few scattered trees and ruderal cover provide perching and foraging substrate for bird species common in urbanized areas, such as mourning dove, scrub jay, northern mockingbird, American robin, brown towhee, American crow, and Anna's hummingbird, among others. Introduced species include the rock dove, European starling, house finch, and house sparrow. Introduced pest species such as the Norway rat, house mouse, and opossum also tend to be abundant in developed areas, and are likely present or frequent the site.

By contrast, the riparian woodlands associated with the floodplains of Watsonville Slough have high wildlife habitat value. This is because of the dense, complex cover that provides abundant foraging opportunities and nesting substrate to a large number of native species, as well as the presence of surface water that supports aquatic species and serves as a source of drinking water for terrestrial species. The leaf litter, fallen tree branches, and logs associated with the riparian woodlands provide cover for

⁴¹ City of Watsonville, 2019, Riparian Corridor Category Assessment. Memo from Justin Meek, Principal Planner to Rod Fermin, Boos Development, May 22.

ENVIRONMENTAL ANALYSIS

numerous amphibians and reptiles, such as long-toed slender salamander, western toad, Pacific chorus frog, western fence lizard, western skink, southern alligator lizard, and common garter snake, among others. Common bird species that likely nest and/or forage in the adjacent riparian and marshlands include chestnut-backed chickadee, bushtit, spotted towhee, song sparrow, Cooper's hawk, and red-winged blackbird.

Special-Status Species

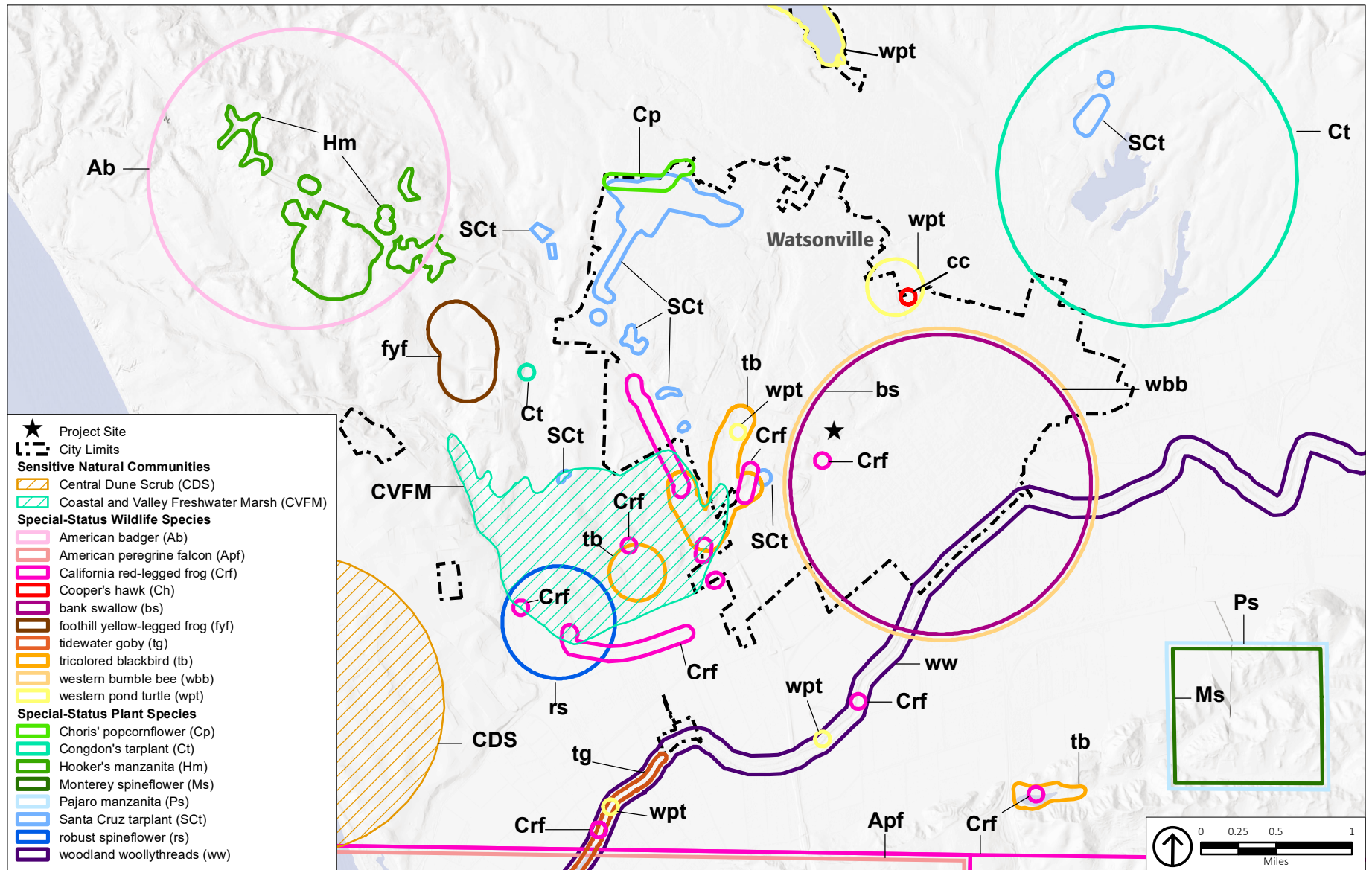
Special-status species are plants and animals that are legally protected under the State and/or federal Endangered Species Acts or other regulations, as well as other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. Species with legal protection under the federal and State Endangered Species Acts often represent major constraints to development, particularly when they are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a "take" of these species.

The primary information source on the distribution of special-status species in California is the CNDDDB inventory, which is maintained by the Biogeographic Data Branch of CDFW. The CNDDDB inventory provides the most comprehensive statewide information on the location and distribution of special-status species and sensitive natural communities. Occurrence data is obtained from a variety of scientific, academic, and professional organizations, private consulting firms, and knowledgeable individuals, and entered into the inventory as expeditiously as possible. The occurrence of a species of concern in a particular region is an indication that an additional population may occur at another location if habitat conditions are suitable. However, the absence of an occurrence in a particular location does not necessarily mean that special-status species are absent from the area in question; only that no data has been entered into the CNDDDB inventory. Detailed field surveys are generally required to provide a conclusive determination on presence or absence of sensitive resources from a particular location, where there is suitable habitat or evidence of potential occurrence.

As indicated in Figure 4-1, the CNDDDB indicates occurrences of 18 special-status species in the Watsonville vicinity. These consist of 10 special-status animal species and 8 special-status plant species. No specific occurrences of special-status species have been specifically reported from the project site, but general occurrences of bank swallow (*Riparia riparia*) and western bumblebee (*Bombus occidentalis*) have been reported from the general Watsonville vicinity. An occurrence of California red-legged frog (*Rana draytonii*) has been reported from the downstream area of Watsonville Slough, about 0.25-mile downstream from the site. The BRA provides a summary of special-status species known or suspected to occur in the Watsonville area.

Due to the extent of past and on-going human disturbance, the potential for presence of any special-status species on the developed portion of the site is considered very unlikely. No special-status plant species are suspected given that the entire developed portion of the site has been filled and graded in the past. Similarly, suitable habitat conditions for most special-status animal species are also absent from the

ENVIRONMENTAL ANALYSIS



Source: California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB), 2017; Santa Cruz County, 2018; PlaceWorks, 2019.

Figure 4-1
Special-Status Species and Sensitive Natural Communities

ENVIRONMENTAL ANALYSIS

developed portion of the site, with the possible exception of nesting birds or species that may occasionally disperse from more favorable habitat in the adjacent riparian woodlands, as summarized below. Of particular concern is the remote possibility that California red-legged frog or western pond turtle (*Actinemys marmorata*) could disperse from the adjacent riparian woodlands, and information on these species is summarized below. Given the general occurrence of western bumblebee in the Watsonville area, information on this species and its possible significance with regard to the proposed project is also summarized below.

California Red-Legged Frog

This species is federally listed as threatened by the U.S. Fish and Wildlife Service (USFWS) and recognized by CDFW as a California Species of Special Concern (SSC). California red-legged frog has been extirpated or nearly extirpated from 70 percent of its former range. Population declines of this species have been attributed to a variety of factors, with habitat loss and predation by non-native Aquatic predators (e.g., bullfrogs, crayfish, other non-native fishes) typically implicated as the primary factors. It occurs in and along freshwater marshes, streams, ponds, and other semi-permanent water sources. Optimal habitat contains dense emergent or shoreline riparian vegetation closely associated with deep (i.e., greater than 2.3 feet), still, or slow-moving water. Cattails, bulrushes, and willows provide the habitat structure that seems to be most suitable for California red-legged frogs. Although the species can occur in intermittent streams and ponds, they are unlikely to persist in streams in which all surface water disappears. Suitable breeding ponds and pools usually have a minimum depth of 20 inches, but California red-legged frogs do sometimes breed successfully in pools as shallow as 10 inches. Regardless of water depth, suitable breeding habitat must contain water during the entire development period for eggs and tadpoles. Reproduction for red-legged frogs is also sensitive to salinity levels in the water.

According to the CNDDDB records (see Figure 4-1) occurrences of California red-legged frogs have been reported from the Watsonville Slough watershed. This includes an occurrence about a quarter mile downstream of the site. While the developed portion of the site where proposed improvements are proposed as part of the project does not contain suitable habitat for this species, there is a possibility that individuals could disperse into the upland areas on the site in the future.

Western Pond Turtle

Western pond turtle has no legal protective status under the State or federal Endangered Species Acts, but is recognized as a California Species of Special Concern by the CDFW. It occurs in a wide variety of aquatic habitats, including ponds, lakes, marshes, rivers, streams, and canals that typically have a rocky or muddy bottom and contain stands of aquatic vegetation. The presence or absence of pond turtles at a given aquatic site is largely dependent on the availability of suitable basking sites and adjacent upland habitat for egg-laying (e.g., sandy banks or grassy open fields) and over-wintering. Nests are typically dug in dry substrate with a high clay or silt fraction since the female moistens the site where she will excavate the nest prior to egg laying. Hatchlings require shallow water habitat with relatively dense submergent or short emergent vegetation in which to forage.

ENVIRONMENTAL ANALYSIS

Western pond turtles have been reported by the CNDDDB from surrounding locations in the Watsonville Slough watershed, as indicated in Figure 4-1. Ponds in the adjacent floodplains of Watsonville Slough provide suitable habitat for this species and individuals could disperse through the riparian woodland in search of egg laying locations. Although the developed portion of the site does not provide suitable habitat for this species, there are no barriers that would prevent an individual from dispersing into the area in the future.

Western Bumblebee

Western bumblebee has been reported from the Watsonville vicinity and is found in a variety of habitats. Western bumblebee technically does not have any legal protective status under the State or federal Endangered Species Acts, but records on their distribution in the western United States are now being more closely monitored by the CNDDDB and other databases because of a dramatic decline in numbers and distribution over the past two decades. Their presence in the site vicinity, either foraging or nesting, would not be considered a significant constraint to development.

Nesting Birds

There is a possibility that birds could nest in trees and other landscaping on the project site or the adjacent riparian woodlands of the Watsonville Slough floodplain. The Migratory Bird Treaty Act (MBTA) and State Fish and Game code protect nests of native birds when they are in active use. Although no nests were observed in the developed portion of the site, there is a possibility that new nests could be established in the future before demolition and construction.

Jurisdictional Waters

Although definitions vary, wetlands are generally considered to be areas that are periodically or permanently inundated by surface or groundwater, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their inherent value to fish and wildlife, use as storage areas for storm and floodwaters, and water recharge, filtration and purification functions. Jurisdiction of the U.S. Army Corps of Engineers (Corps) is established through provisions of Section 404 of the Clean Water Act, which prohibits the discharge of dredged or fill material into “waters of the U.S.” without a permit. The Regional Water Quality Control Board (RWQCB) jurisdiction is established through Section 401 of the Clean Water Act, which requires certification or waiver to control discharges in water quality whenever a Corps permit is required under Section 404 of the Clean Water Act, and State waters as regulated under the Porter-Cologne Act. Jurisdictional authority of the CDFW over wetland areas is established under Sections 1600-1607 of the State Fish and Game Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed or bank of any lake, river, or stream.

A formal jurisdictional delineation of wetlands and other waters of the U.S. and State was not conducted as part of the May 2019 field reconnaissance, but no evidence of any regulated waters was observed in

ENVIRONMENTAL ANALYSIS

the developed portion of the site. The adjacent floodplain of the Watsonville Slough is likely both a federal and State regulated waters. Survey work performed as part of the addendum to the BRA indicated evidence of highwater associated with the floodplain at an elevation of about 11 feet above mean sea level. The willow overstory, indicative of the riparian woodlands through this area, generally follows this boundary but some willow limbs grow up the fill slope and up to the edge of the developed portion of the site.

DISCUSSION

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

There is a remote potential that implementation of the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. This consists of: 1) a remote possibility that individual California red-legged frog or western pond turtle could disperse onto the site in the future, although considered highly unlikely, and be injured or taken during construction; and 2) the possibility that bird nests regulated under the MBTA and CDFW code could be inadvertently destroyed during construction.

Suitable habitat for special-status species known or suspected to occur in the vicinity is generally absent from the developed site and no impacts are anticipated for most special-status species. This includes absence of suitable habitat for California red-legged frog and western pond turtle, among other special-status species, on the portion of the site proposed for new development. Although considered highly unlikely, there remains a remote potential for an individual frog or turtle to disperse onto the site in the future, which could be injured or killed during construction unless construction restrictions are implemented. In addition, the project could result in inadvertent loss of bird nests in active use, which would conflict with the federal Migratory Bird Treaty Act and California Fish and Game Code. Implementation of Mitigation Measures BIO-1a and BIO-1b would reduce these potential impacts to a *less-than-significant* level.

Impact BIO-1a: Proposed development could potentially result in an inadvertent take of individual California red-legged frog or western pond turtle in the remote instance that individuals were to disperse onto the site during construction unless adequate controls and preconstruction surveys are not implemented.

Mitigation Measure BIO-1a: Ensure Avoidance of California Red-legged Frog and Western Pond Turtle.

The following measures shall be implemented to ensure avoidance of individual California red-legged frog (CRLF) and western pond turtle (WPT) in the remote instance individuals were to disperse onto the site in the future in advance of or during construction:

ENVIRONMENTAL ANALYSIS

- *Pre-construction survey:* Pre-construction surveys for CRLF shall be conducted prior to initiation of project activities (including fence installation) and within 48 hours of the start of ground disturbance activities following completion of exclusion fence installation. Surveys are to be conducted by qualified biologists with experience surveying for CRLF.

If project activities are stopped for greater than 14 days, a follow-up pre-construction survey may be required within 48 hours prior to reinitiating project activities.

- *Worker Training:* All workers shall be trained by a qualified biologist to understand the remote potential for occurrence of CRLF and WPT, need to avoid any potential inadvertent take, and process to follow if a frog or turtle is encountered. If a frog is encountered in the construction zone, all work must stop and the qualified biologist must determine whether it is CRLF before work proceeds. If a CRLF is encountered in the work zone, no work can proceed until the USFWS and CDFW have been consulted and an appropriate avoidance and mitigation program developed. If WPT is encountered within the work zone, the individual shall be relocated to the closest suitable natural habitat by the qualified biologist or designated foreman trained by the qualified biologist.

- *Wildlife exclusion fence:* Wildlife exclusion fencing shall be installed prior to the start of construction and maintained until construction of the proposed project is complete. All work installing exclusion fencing shall be conducted under the supervision of a qualified wildlife biologist with experience in surveying for CRLF and WPT. Exclusion fencing shall, at a minimum, run along the edge of grading along the southeastern, southern and southwestern project boundaries where the site borders riparian habitat. The exclusion fencing shall be inspected on a daily basis by a designated foreman trained by the qualified biologist, and repaired immediately if any openings are detected to prevent opportunities for CRLF and WPT to enter the site. Per CRLF standards, fencing must be at least 42 inches in height (at least 36 inches above ground and buried at least 6 inches below the ground) and stakes must be placed on the inside of the project (side on which work will take place).

Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure amphibians do not get trapped. Plastic mono-filament netting (erosion control matting), rolled erosion control products, or similar material shall not be used.

- *Earth-disturbing activities only during dry weather:* No earth disturbing activities shall take place during rain events when there is potential for accumulation greater than 0.25-inch in a 24-hour period. In addition, no earth disturbing activities shall occur for 48 hours following rain events in which 0.25-inch of rain accumulation within 24 hours.

Impact BIO-1b: Construction of the proposed project could result in inadvertent loss of bird nests in active use, which would conflict with the federal Migratory Bird Treaty Act and California Fish and Game Code if adequate controls and preconstruction surveys are not implemented.

Mitigation Measure BIO-1b: Ensure Avoidance of Bird Nests in Active Use. Tree removal, landscape grubbing, and building pad and retaining wall demolition shall be performed in compliance with the

ENVIRONMENTAL ANALYSIS

Migratory Bird Treaty Act and relevant sections of the California Fish and Game Code to avoid loss of nests in active use. This shall be accomplished by scheduling tree removal and landscape grubbing outside of the bird nesting season (which occurs from February 1 to August 31) to avoid possible impacts on nesting birds if new nests are established in the future. Alternatively, if demolition, tree removal and landscape grubbing cannot be scheduled during the non-nesting season (September 1 to January 31), a pre-construction nesting survey shall be conducted. The pre-construction nesting survey shall include the following:

- A qualified biologist shall conduct a pre-construction nesting bird (both passerine and raptor) survey within seven calendar days prior to tree removal, landscape grubbing, and/or demolition.
- If no nesting birds or active nests are observed, no further action is required and tree removal, landscape grubbing, and demolition shall occur within seven calendar days of the survey.
- Another nest survey shall be conducted if more than seven calendar days elapse between the initial nest search and the beginning of tree removal, landscape grubbing, and demolition.
- If any active nests are encountered, the Biologist shall determine an appropriate disturbance-free buffer zone to be established around the nest location(s) until the young have fledged. Buffer zones vary depending on the species (i.e., typically 50 to 100 feet for passerines and 300 feet for raptors) and other factors such as ongoing disturbance in the vicinity of the nest location. If necessary, the dimensions of the buffer zone shall be determined in consultation with the CDFW.
- Orange construction fencing, flagging, or other marking system shall be installed to delineate the buffer zone around the nest location(s) within which no construction-related equipment or operations shall be permitted. Continued use of existing facilities such as surface parking and site maintenance may continue within this buffer zone.
- No restrictions on grading or construction activities outside the prescribed buffer zone are required once the zone has been identified and delineated in the field and workers have been properly trained to avoid the buffer zone area.
- Construction activities shall be restricted from the buffer zone until the Biologist has determined that young birds have fledged and the buffer zone is no longer needed.
- A survey report of findings verifying that any young have fledged shall be submitted by the Biologist for review and approval by the City prior to initiation of any tree removal, landscape grubbing, demolition, and other construction activities within the buffer zone. Following written approval by the City, tree removal, and construction within the nest-buffer zone may proceed.

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

With the revisions incorporated into the site plan to restrict improvements no closer to the riparian woodland of the Watsonville Slough floodplain than the existing development on the site (structures, curb and gutter, or paving), the proposed project would avoid direct impacts on the adjacent riparian habitat

ENVIRONMENTAL ANALYSIS

and no adverse impacts are anticipated. The existing homeless encampments along the edge of the riparian habitat on the site currently diminish its value to wildlife, due to the intensity of human activity, accumulated trash and human waste, and damage to native willows and other riparian vegetation. These activities will presumably be curtailed or prevented once the site is occupied, which would serve to improve existing conditions. Therefore, the impact would be *less than significant* and no mitigation is required.

- c) *Would the project 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?*

The proposed project would not directly affect any State or federally protected wetlands. Revisions to the limits of development made by the applicant adjusted the location of retaining walls that were originally proposed on the slope that extends down to the adjacent marsh and riparian woodlands of Watsonville Slough, but these have all been pulled back to the previous developed level portion of the site to provide a greater setback from the floodplain. Runoff from the site would no longer be discharged directly into the adjacent floodplain of Watsonville Slough but would instead be pretreated in a series of detention basins to prevent possible water quality degradation. Appropriate best management practices would be implemented to prevent any erosion or sedimentation during construction, as discussed further in Section IX, Hydrology and Water Quality. No adverse effects are anticipated; therefore, this impact is *less than significant* and no mitigation is required.

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

The level portion of the project site proposed for redevelopment has already been modified by past commercial and automotive care use, wildlife have acclimated to human activity in this area, and no substantial interference with the movement of native resident or migratory fish or wildlife, with established wildlife corridors, or native wildlife nurseries is anticipated. The adjacent riparian habitat associated with the Watsonville Slough floodplain would be avoided from direct disturbance from grading and construction. Having an occupied use on the site would presumably provide more careful monitoring to curtail and prevent occupation by homeless populations, which are compromising the value of the riparian habitat to wildlife, which would be an indirect benefit of the project. However, new night-time lighting provided for security purposes could disrupt wildlife use of the riparian woodlands, including use of these areas for nesting and roosting. Trash enclosures are shown on the site plan in close proximity to the adjacent riparian habitat, and unless these areas are carefully maintained, they could attract nuisance pest species such as Norway rat, raccoon, and opossum that could become dependent on this possible food source, disrupting natural behaviors and creating nuisance conditions. Implementation of Mitigation Measure BIO-2 would reduce this potential impact to a *less-than-significant* level.

Impact BIO-2: Proposed development could introduce additional night-time lighting into the adjacent riparian habitat of the Watsonville Slough floodplain, and trash stored on the site could create nuisance

ENVIRONMENTAL ANALYSIS

conditions and attract pest species unless appropriate avoidance measures were implemented as part of future uses.

Mitigation Measure BIO-2: Appropriate controls shall be incorporated into the project to prevent nuisance conditions in the adjacent riparian habitat of the Watsonville Slough floodplain. These shall include controls on all exterior lighting to ensure that is be directed downward and screened to minimize spill-over off the site and developing a monitoring program to be implemented by future tenants to ensure trash areas are routinely cleaned and secured at night.

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

Two aspects of the WMC pertain to biological resources associated with the site: riparian corridor buffers as defined under WMC Section 7.6-152 and regulations related to protected trees as defined under WMC Chapter 7-11. These are addressed below.

Riparian Corridor Buffer

WMC Section 7-6.152 pertains to riparian corridor buffers and defines development setbacks for proposed improvements when proposed within or adjacent to streams and other water bodies. As defined under the WMC, the riparian corridor is applied as follows for the various stream and water body types:

1. An area extending 50 feet, measured horizontally, from each side of a perennial stream. Distance shall be measured from the top of the existing bank-full flowline;
2. An area extending 30 feet, measured horizontally, from each side of an intermittent stream. Distance shall be measured from the top of the existing bank-full flowline; or
3. An area extending 30 feet from the highwater mark of a marsh or a natural body of standing water.

As described above in the introduction to this section, the original BRA was revised to address the minimum riparian setbacks called for under the highwater mark for a marsh or body of standing water that extends over the Watsonville Slough floodplain. Based on the new limits established by evidence of standing water that extended up to an elevation of about 11 feet, the riparian corridor buffer called for under the WMC was adjusted and the proposed site plan for the project was revised to remove retaining walls that originally extended down the fill slope and in close proximity to the floodplain. For the most part the revised site plan now sets development 30 feet or more from the highwater mark, in accordance with WMC Section 7-6.152(c). In some locations along the southeastern and western edge of the site, this 30-foot setback is not achieved, but this is only in areas that are already developed with existing structures, curb and gutter, or pavement. In those locations, the proposed improvements would extend no closer to the riparian habitat of the Watsonville Slough floodplain than the existing improvements. Because these areas are already developed with improvements, no major conflicts with the intent of the WMC are anticipated and no additional setbacks or revisions to the site plan are considered necessary.

ENVIRONMENTAL ANALYSIS

Protected Trees

WMC Chapter 7-11 regulates the removal of all trees growing along public streets. Trimming and removing these “protected” trees requires authorization through a permit issued by the Director of Public Works. In addition, an individual tree or a cluster of trees with special character, historical, and/or aesthetic value may be designated as a “historical” via a resolution of either the City Council or Planning Commission. None of the trees on the site have been designated “historical” under the WMC. Existing trees planted along the Main Street frontage and elsewhere on-site would be removed as part of the proposed project. However, an estimated 60 new trees would be planted as part of the project. These consist of several native coast live oaks (*Quercus agrifolia*) to be planted along the southern edge of the developed area adjacent to the natural habitat of the Watsonville Slough floodplain, as well as a variety of ornamental landscape species such as forest green oak (*Quercus frainetto* ‘schmidt’), Chinese evergreen elm (*Ulmus parvifolia* ‘drake’), red crape myrtle (*Lagerstroemia* ‘tuscarora’), frontier elm (*Ulmus x* ‘frontier’), and Chinese fringe trees (*Chionathus retusus*). No substantial conflicts with WMC Chapter 7-11 are anticipated. Therefore, the impact would be *less than significant*, and no mitigation is considered necessary.

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

The project site is not located within or near an adopted habitat conservation plan area; no conflicts would therefore occur, and *no impact* is anticipated.

IV. CULTURAL RESOURCES

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

EXISTING CONDITIONS

According to the City of Watsonville *Historic Register* and the *Historic Context Statement*, there are no identified cultural resources on or adjacent to the project site. However, structures on the project site were developed between 1945 and 1962, which is between 50 and 70 years ago. Although these structures are over the 45-year age limit for designation on the California Department of Historic

ENVIRONMENTAL ANALYSIS

Preservation filing system, none have been designated on any federal, State, or local registry. The on-site buildings were not known to be associated with significant cultural events or persons in California's past and do not have any distinctive historical characteristics, and as such do not have any qualifying historical value.

DISCUSSION

a) *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?*

Under CEQA, both prehistoric and historic-period archeological sites may qualify as historical resources.⁴² Archeological resources are addressed in criterion (b), and human remains are addressed below in criterion (d), below.

As discussed above, the project site was developed between 1945 and 1962. Although the previous buildings were over the 45-year age limit established for historical resources that should be included in the California Department of Historic Preservation filing system,⁴³ the structures are not currently listed.⁴⁴ As described in the existing conditions above, the previous buildings did not meet the criteria for listing in the California Register of Historical Resources as they are not listed on any local register of historical resources, or identified in any historical resources survey, and because the previous structures did not contain any identified historically significant architectural feature.⁴⁵ Accordingly, *less-than-significant* impacts to historical architectural resources would occur as a result of project development and no mitigation measures would be required.

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

Historical and pre-contact archaeological deposits that meet the definition of historical resource under CEQA Section 21084.1 or CEQA Guidelines Section 15064.5 could be present at the project site and could be damaged or destroyed by ground-disturbing construction activities (e.g., site preparation, grading, excavation, and trenching for utilities) associated with development allowed under the proposed project. Should this occur, the ability of the deposits to convey their significance, either as containing information about prehistory or history, or as possessing traditional or cultural significance to Native American or other descendant communities, would be materially impaired.

⁴² California Code of Regulations, Title 14, Chapter 3, section 15064.5(c), Determining the Significance of Impacts on Historical and Unique Archeological Resources.

⁴³ Office of Historic Preservation, 1995, Instructions For Recording Historical Resources, page 2, March.

⁴⁴ City of Watsonville, WatsonvilleVISTA 2030, Appendix A, City of Watsonville Historic Register, <https://www.cityofwatsonville.org/DocumentCenter/View/3954/City-of-Watsonville-Historic-Register>, accessed September 9, 2019.

⁴⁵ California Code of Regulations, Title 14, Chapter 3, Section 15064.5(c), Determining the Significance of Impacts on Historical and Unique Archeological Resources.

ENVIRONMENTAL ANALYSIS

While the project site is currently developed, the site could still contain subsurface archaeological deposits, including unrecorded Native American prehistoric archaeological materials. Therefore, any project-related, ground-disturbing activities have the potential to affect subsurface prehistoric archaeological resources that may be present. Implementation of Mitigation Measure CULT-1 would reduce impacts to unknown archaeological deposits to a *less-than-significant* level.

Impact CULT-1: Project-related ground-disturbing activities could affect subsurface prehistoric archaeological resources that may be present.

Mitigation Measure CULT-1: If any prehistoric or historic subsurface cultural resources, including tribal cultural resources, are discovered during ground-disturbing (including grading, demolition and/or construction) activities:

- All work within 50 feet of the resources shall be halted and a qualified archaeologist shall be consulted to assess the significance of the find according to CEQA Guidelines Section 15064.5.
- If any find is determined to be significant, representatives from the City of Watsonville Building Department and the archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation.
- All significant cultural materials recovered shall be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards.
- In considering any suggested mitigation proposed by the consulting archaeologist to mitigate impacts to historical resources or unique archaeological resources, the City shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, proposed project design, costs, and other considerations.
- If avoidance is infeasible, other appropriate measures (e.g., data recovery) would be implemented.
- Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is being carried out.

c) *Would the project disturb any human remains, including those interred outside of dedicated cemeteries?*

Similar to the discussion under criteria (b), there are no known human remains on the project site; however, the potential to unearth unknown remains during ground disturbing activities associated with the construction of the project could occur. Any human remains encountered during ground-disturbing activities associated with the proposed project would be subject to federal, State, and local regulations to ensure no adverse impacts to human remains would occur in the unlikely event human remains are found.

California Health and Safety Code Section 7050.5 and the CEQA Guidelines Section 15064.5(e) contain the mandated procedures of conduct following the discovery of human remains. According to the provisions

ENVIRONMENTAL ANALYSIS

in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The Santa Cruz County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner shall notify the Native American Heritage Commission within 24 hours, who would, in turn, notify the person the Native American Heritage Commission identifies as the Most Likely Descendant of any human remains. Further actions shall be determined, in part, by the desires of the Most Likely Descendant. The Most Likely Descendant has 48 hours to make recommendations regarding the disposition of the remains following notification from the Native American Heritage Commission of the discovery. If the Most Likely Descendant does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the Most Likely Descendant's recommendations, the owner or the descendent may request mediation by the Native American Heritage Commission.

With the mandatory regulatory procedures described above, potential impacts related to the potential discovery or disturbance of any human remains accidentally unearthed during construction activities associated with the proposed project would be *less than significant* and no mitigation measures would be required.

V. ENERGY

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

EXISTING CONDITIONS

Pacific Gas & Electric (PG&E) supplies electricity to much of northern and central California—from Humboldt and Shasta counties in the north to Kern and Santa Barbara counties in the south—including Watsonville. Total electricity consumption in PG&E's service area is forecasted to increase from 104,868 gigawatt-hours (GWh) in 2015 to 119,633 GWh in 2027.⁴⁶ The nearest PG&E substation to the project site is the Erta Substation, just north of the Watsonville Catholic Cemetery and east of Arista Park,

⁴⁶ California Energy Commission, 2017, California Energy Demand Updated Forecast, 2017-2027, <https://efiling.energy.ca.gov/getdocument.aspx?tn=214635>, accessed December 28, 2018.

ENVIRONMENTAL ANALYSIS

approximately 1 mile north of the project site. The nearest transmission lines to the project site are located along Harkins Slough Road, approximately 0.15 miles south of the project site.⁴⁷

The nearest large set of wind generators to the project site is in the Dinosaur Point area near Los Banos in Merced County, about 35 miles to the northeast.⁴⁸ No solar generating facilities 2 MW or above are mapped in Santa Cruz County by the California Energy Commission.⁴⁹

Electricity use is measured in kilowatt-hours (kWh), and natural gas use is measured in therms. Vehicle fuel use is typically measured in gallons (e.g., of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh.

The electricity consumption attributable to non-residential land uses in Santa Cruz County from 2014 to 2017 is shown in Table 4-3 (electricity consumption data at the city level is not available). As indicated, the demand has decreased since 2014.

The natural gas consumption attributable to nonresidential land uses in Santa Cruz County from 2014 to 2017 is shown in Table 4-4. As shown, demand has increased slightly since 2014.

DISCUSSION

- a) *Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?*

Following is a discussion of the potential impacts related to the consumption of energy sources resulting from the construction and operational phases of the proposed project.

TABLE 4-3 NONRESIDENTIAL ELECTRICITY CONSUMPTION IN SANTA CRUZ COUNTY 2014–2017

Year	Nonresidential Electricity Consumption (Millions of Kilowatt Hours) ^a
2017	662
2016	667
2015	683
2014	681

a. California Energy Consumption Data Management System, 2017, Electricity and Natural Gas Consumption by County. <http://www.ecdms.energy.ca.gov/>.

TABLE 4-4 NONRESIDENTIAL NATURAL GAS CONSUMPTION IN SANTA CRUZ COUNTY 2014–2017

Year	Nonresidential Natural Gas Consumption (Millions of Therms) ^a
2017	21
2016	21
2015	21
2014	20

a. California Energy Consumption Data Management System, 2017, Electricity and Natural Gas Consumption by County. <http://www.ecdms.energy.ca.gov/>.

⁴⁷ California Energy Commission, 2012, Local Reliability Maps for 2013: Enlargement Maps, http://www.energy.ca.gov/maps/infrastructure/3part_enlargements.html, accessed December 28, 2018.

⁴⁸ California Energy Commission, 2018, California Wind Projects and Wind Resource Areas 2018, https://www.energy.ca.gov/maps/renewable/wind/WindResourceArea_CA_Statewide.pdf, accessed December 28, 2018.

⁴⁹ California Energy Commission, 2018, California Operational Power Plant (Base Map), <https://www.arcgis.com/home/webmap/viewer.html?webmap=7213b586600e4ed1b468c5412aa6e502>, accessed December 28, 2018.

ENVIRONMENTAL ANALYSIS

Construction

Construction of the proposed project would consume energy, in the short-term, through electricity use, construction vehicles and equipment fuel consumption, and bound energy in construction materials (e.g., asphalt, steel, concrete, pipes, and manufactured or processed materials, such as lumber and glass).

Electricity

Construction of the proposed project would require the use of construction equipment for grading, hauling, and building activities. Electricity use during construction would vary during different phases of construction—most of the construction equipment during grading would be gas powered or diesel powered, and the later construction phases would require electricity-powered equipment, such as interior construction and architectural coatings. The use of electricity would be temporary and would fluctuate according to the phase of construction. Construction of the proposed project would be typical for an infill redevelopment project and would not require special circumstances or features that would result in wasteful or unnecessary electricity demands. Therefore, the proposed project would not result in a significant impact related to electricity use during the construction phase.

Transportation

Transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Transportation energy use during construction would come from the transport and use of construction equipment (off-road), delivery and haul trucks (on-road), and construction employee passenger vehicles (on-road). The majority of construction equipment during grading would be diesel powered.

Construction contractors are anticipated to minimize idling of construction equipment during construction as per CCR Section 2485. This code requires that non-essential idling for all diesel-fueled commercial motor vehicles must not exceed five consecutive minutes at any location. Such required practices would limit wasteful and unnecessary energy consumption. Furthermore, the use of fuel by on-road and off-road vehicles would be temporary and would fluctuate according to the phase of construction. Construction fuel use for the proposed project would cease upon completion of project construction. No unusual project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or state. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than similar development projects.

Construction Materials

Construction building materials may include recycled materials and products originating from nearby sources in order to reduce the costs of transportation. With increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. The type of construction is conventional and

ENVIRONMENTAL ANALYSIS

would be similar to other commercial developments in the city. Substantial reductions in energy inputs for construction materials can be achieved by building with recycled materials, which require substantially less energy to produce than nonrecycled materials. The 2016 California Green Building Standards Code (CalGreen), as adopted by WMC Chapter 15, requires that at least 65 percent by weight of construction be recycled, reused, or otherwise diverted from landfill disposal. As a result, the City requires submittal of construction waste management plans and payment of applicable fees and deposits to ensure proper documentation of construction material that will be reused, recycled, or landfilled. The purpose of the plan is to ensure that development projects are meeting the 65 percent requirement. The project applicant would be required to submit a construction waste management plan to the City for approval.

The incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes, and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ reasonable energy conservation practices in the interest of minimizing the cost of doing business.

Operation

Operation of the proposed project would result in energy demands for building electricity and natural gas, in addition to fuel and electricity consumption for transportation.

Transportation

The most recent tenants on the project site generated approximately 3,210 weekday average daily trips.⁵⁰ Based on the traffic impact analysis, the proposed project would generate 2,986 average daily trips on a weekday, which is approximately 224 fewer trips than the previous land uses. Fuel consumption associated with the operational phase of the proposed project would therefore be less than existing conditions.

Furthermore, fuel consumption in passenger vehicles and trucks is regulated by federal and State laws regarding average corporate fuel economy of vehicles. As vehicles turn over, the overall fuel economy of California's vehicle fleets is improved. Additionally, one of the primary goals of CARB's 2017 Scoping Plan is to provide clean transportation options for California residents. California is home to nearly half of the country's zero-emission vehicles. Alternative fuel producers and oil companies are bringing more low carbon fuels to market than required by the Low Carbon Fuel Standard (LCFS). The State has invested in zero-emission vehicles and infrastructure, land use planning, and active transportation options such as walking and biking.⁵¹ In January 2012, CARB approved the Advanced Clean Cars program for model years

⁵⁰ Institute of Transportation Engineers, 2018, Trip Generation Manual, 10th Edition.

⁵¹ California Air Resources Board, 2017, California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target, https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, accessed September 16, 2019.

ENVIRONMENTAL ANALYSIS

2017 through 2025. The program combines the control of smog, soot, and global warming gases with requirements for greater numbers of zero electric vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent less global warming gases and 75 percent less smog-forming emissions.⁵²

The proposed project would be consistent with the requirements of these energy-related regulations and would not result in wasteful or unnecessary fuel demands. Therefore, the proposed project would not result in a significant impact related to transportation energy during the operational phase.

Building Energy Use

The proposed buildings would have a reduced square footage compared to existing conditions and will result in a decrease in electricity and natural gas consumption during the operational phase. Energy is used for heating, cooling, and ventilation of the building; water heating; equipment; appliances; indoor, outdoor, perimeter, and parking lot lighting; and security systems.

Furthermore, the proposed project will be compliant with California's Building Energy Efficiency Standards. The 2019 Building Energy Efficiency Standards were adopted on May 9, 2018 and go into effect for new construction starting January 1, 2020. The 2019 standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements.⁵³ The proposed buildings will also be in compliance with the standards of the 2019 California Green Building Standards (CALGreen). CALGreen was established to make buildings more efficient in the use of materials and energy and reduce environmental impact during and after construction. CALGreen contains requirements for indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. Additionally, all appliances will comply with the 2012 Appliance Efficiency Regulations.

Solid waste from the operational phase will be managed in accordance with the County of Santa Cruz's Integrated Waste Management Plan (IWMP) in order for the city to reach the diversion and other goals mandated by the California Integrated Waste Management Act of 1989. The County adopted the IWMP in response to Assembly Bill (AB) 939. AB 939 requires all California cities to divert 50 percent of their waste stream from landfills by the year 2000.

The proposed project would be consistent with the requirements of these energy-related regulations and would not result in wasteful or unnecessary electricity demands. Therefore, impacts would be *less than significant*.

⁵² California Air Resources Board, 2011, September 9, Facts About the Advanced Clean Cars Program, https://www.arb.ca.gov/msprog/zevprog/factsheets/advanced_clean_cars_eng.pdf, accessed September 16, 2019.

⁵³ California Energy Commission, 2018, News Release: Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation, http://www.energy.ca.gov/releases/2018_releases/2018-05-09_building_standards_adopted_nr.html.

ENVIRONMENTAL ANALYSIS

b) Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

The California Renewables Portfolio Standard (RPS) was established in 2002 under SB 1078 and was amended in 2006 and 2011. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. Renewable energy sources include wind, small hydropower, solar, geothermal, biomass, and biogas. Electricity production from renewable sources is generally considered carbon neutral. Executive Order S-14-08, signed in November 2008, expanded the state's renewable portfolios standard (RPS) to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Senate Bill (SB) 350 (de Leon) was signed into law in September 2015 and establishes tiered increases to the RPS. SB 350 requires renewable energy resources of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures. On September 10, 2018, Governor Brown signed SB 100, which raises California's RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under SB 100 the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

The project site is currently being serviced by PG&E. PG&E obtains electricity from conventional and renewable sources. In 2018, 20 percent of PG&E's electricity was generated from natural gas; 27 percent from nuclear power; 33 percent from renewable energy sources; 18 percent from large hydroelectric generators; and 2 percent from market purchases.⁵⁴ The net increase in power demand associated with the proposed project is anticipated to be within the service capabilities of PG&E and would not impede PG&E's ability to implement California's renewable energy goals. Therefore, the proposed project would not obstruct a State or local plan for renewable energy. Additionally, and with reference to the discussion under criterion (a) above, the proposed project would not obstruct a State or local plan for energy efficiency.

Furthermore, the project will include electric charging equipment for a select number of parking spaces, and electrical installation to accommodate future solar panels and impacts would be *less than significant*.

⁵⁴ Pacific Gas and Electric, 2018, Where Your Electricity Comes From, https://www.pge.com/pge_global/common/pdfs/your-account/your-bill/understand-your-bill/bill-inserts/2018/10-18_PowerContent.pdf, accessed October 3, 2019.

ENVIRONMENTAL ANALYSIS

VI. GEOLOGY AND SOILS

Would the proposed project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides, mudslides, or other similar hazards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined by Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?	<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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EXISTING CONDITIONS

A Geotechnical Investigation Report for the proposed project was completed by Krazan and Associates, Inc., on October 9, 2018. This report is attached as Appendix C.

Geology

Watsonville lies south of San Francisco Bay and east of the Santa Cruz Mountains within the northern portion of the Coast Ranges Geomorphic Province of California. The near-surface deposits on the project site consist of Holocene alluvial fan deposits and Quarternary river terrace deposits consisting of sands,

ENVIRONMENTAL ANALYSIS

silts, and clays derived from erosion of local mountain ranges.⁵⁵ The site is generally flat, with elevation of 25 to 30 feet above mean sea level.

Soils

Based on web-accessible soil mapping data, the predominant soil types for the project site are soils of the Aquepts, flooded complexes including Aquepts, Fluventic Haploxerolls, Aquic Xerofluvents, and Soquel soil types, which are generally formed on beaches and toe slope valleys. In almost all instances, these soils are reportedly very low drained, and are typified by high runoff and ponded water.⁵⁶

Fault Rupture

The San Francisco Bay Area is one of the most seismically active regions in the United States. The significant earthquakes that occur in the Bay Area region are generally associated with crustal movement along well-defined active fault zones such as the San Andreas Fault system. The project site is located within close proximity to five major faults, including: The Zayante-Vergeles fault, San Andreas fault, Monterey Bay-Tularcitos fault, Rinconada fault, Calaveras fault, Monte Vista-Shannon fault, and San Gregorio fault. However, the site is not located within a State-designated Alquist-Priolo Earthquake Fault Zone (known formerly as a Special Studies Zone) or a Santa Cruz County-designated Fault Rupture Zone.⁵⁷ No active fault traces are known to cross the site.⁵⁸ The project site is within approximately 2.1 miles of the Zayante-Vergeles fault, which is considered capable of producing an earthquake of magnitude 7.0.

Liquefaction

During cyclic ground shaking, such as seismic shaking during an earthquake, cyclically induced stresses may cause increased pore water pressures within the soil matrix, resulting in liquefaction. Liquefied soil may lose shear strength that may lead to large shear deformations and/or flow failure. Liquefied soil can also settle as pore pressures dissipate following an earthquake.

Soils most susceptible to liquefaction are loose to moderately dense, saturated, non-cohesive soils with poor drainage, such as sands and silts with interbedded or capping layers of relatively low permeability soil.

⁵⁵ Krazan & Associates, Inc., 2018, Geotechnical Engineering Investigation Proposed Comment Development Main Street at Auto Centre Drive Watsonville, California.

⁵⁶ UC Davis Soil Resource Laboratory, 2014, California Soil Resource Lab, Online Soil Survey, <http://casoilresource.lawr.ucdavis.edu/soilweb/>, accessed on April 4, 2019.

⁵⁷ County of Santa Cruz, 2009, Fault Zone Hazard Areas Map.

⁵⁸ County of Santa Cruz, 2009, Fault Zone Hazard Areas Map.

ENVIRONMENTAL ANALYSIS

The site is located within a high to very high seismically induced liquefaction hazard zone, as mapped by the State of California and Santa Cruz County.⁵⁹

Lateral Spreading

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or “free” face such as an open body of water, channel, or excavation. In soils, this movement is generally due to failure along a weak plane, and may often be associated with liquefaction. As cracks develop within the weakened material, blocks of soil are displaced laterally toward the open face. Cracking and lateral movement may gradually propagate away from the face as blocks continue to break free. Because of the high potential for liquefaction, the risk of lateral spreading at the site is also considered high.

Paleontological Resources

A review of the University of California’s Museum of Paleontology’s fossil locality database was conducted for the City of Watsonville. No paleontological resources have been identified on the project site; however, the presence of Pleistocene deposits that are known to contain fossils indicates that, overall, the city could contain paleontological resources.

DISCUSSION

- a) *Would the project 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; (ii) Strong seismic ground shaking; (iii) Seismic-related ground failure, including liquefaction; (iv) Landslides, mudslides, or other similar hazards?*

Fault Rupture

The project would result in a significant impact if it would exacerbate hazards associated with surface fault rupture. There are no Alquist-Priolo Earthquake Fault Zones mapped within the City of Watsonville; however, there are two zones that have been mapped to the northeast of the city. Because the project site is not located within a State-designated Alquist-Priolo Fault Zone or Santa Cruz County-designated Fault Zone Hazard Area, and no active faults are known to traverse the site, the risk of fault rupture is considered low. Therefore, impacts from project development as they relate to surface fault rupture are considered *less than significant*. No mitigation measures would be required.

⁵⁹ RRM Design Group, 2012, Monterey Bay Sanctuary Scenic Trail Network Master Plan EIR, Section 4.6. Geology and Soils.

ENVIRONMENTAL ANALYSIS

Strong Seismic Ground Shaking

The project would result in a significant impact if it would exacerbate hazards associated with seismic ground shaking. An earthquake of moderate to high magnitude within the Monterey Bay and Santa Cruz County region could cause considerable ground shaking at the project site. The degree of shaking is dependent on the magnitude of the event, the distance to its zone of rupture, and local geological conditions. As mentioned in the existing conditions above, the project site is located in close proximity to five major faults, however, it is not located within a State-designated Alquist- Priolo Earthquake Fault Zone, nor a Santa Cruz County-designated Fault Rupture Zone. Additionally, there are no active fault traces known to cross the project site. The project site is within approximately 2.1 miles of the Zayante-Vergeles fault, which is considered capable of producing an earthquake of magnitude 7.0. In the event of an earthquake of a high magnitude, the project site may experience moderate to severe seismic ground shaking. However, the proposed project is required to adhere to the California Building Code (CBC) and the City's building permit requirements, which would ensure that the impacts associated with strong seismic ground shaking are minimized to the maximum extent practicable. Therefore, impacts of project development as they relate to strong seismic ground shaking would be *less than significant*.

Ground Failure

As mentioned in the Existing Conditions section above, the project site is located within a high to very high seismically induced liquefaction hazard zone, as mapped by the State of California and Santa Cruz County.⁶⁰ The detailed Geotechnical Investigation Report conducted for the project site in 2018 highlighted that the site lies within a potential liquefaction hazard zone, and followed with a site-specific analysis. The site-specific evaluation found a low potential for seismic settlement on the site.⁶¹ The preparers concluded that existing soils on-site are relatively conducive to the development of the proposed project. However, the geotechnical investigation preparers identified the following soil concerns:

- Surface soils have a loose consistency that have low strength characteristics and are compressible when saturated.
- Fill material was found to have varying strength characteristics and limited testing was performed.
- On-site clayey soils present a minor to moderate hazard to construction from possible post-construction movement of slab-on-grade construction.
- Excavation of existing utilities and structures would disturb upper soils.
- Sandy soils on-site could cave in trench wall excavations.

⁶⁰ RRM Design Group, 2012, Monterey Bay Sanctuary Scenic Trail Network Master Plan EIR, Section 4.6. Geology and Soils.

⁶¹ Krazan & Associates, Inc., 2018, Geotechnical Engineering Investigation Proposed Comment Development Main Street at Auto Centre Drive Watsonville, California, page 7.

ENVIRONMENTAL ANALYSIS

- Ground water was encountered at approximately 13.5 feet below existing site grade and the historic high groundwater level for the site was determined to be 2 feet below grade. Therefore, dewatering may be required.
- If earthwork is performed during or soon after periods of precipitation, subgrade soils may become saturated and not respond to densification techniques.

Accordingly, the preparers developed design recommendations to increase the geotechnical stability of the site. With implementation of Mitigation Measure GEO-1, the impact of ground failure would be *less than significant*.

Impact GEO-1: Without proper site preparation and building design, project development could result in hazards associated with ground stability.

Mitigation Measure GEO-1: Project construction shall adhere to the recommendations of the October 9, 2018 Krazan & Associates *Geotechnical Engineering Investigation for the Proposed Commercial Development on Main Street at Auto Centre Drive*, which provides recommendations for excavation under and near building areas, fill removal and recompaction, engineered fill preparation, soil moisture content, and other construction details relevant to building design and site stability. As recommended in the Geotechnical Engineering Investigation, a licensed geotechnical engineer, or his/her representative, shall be present during all site clearing and grading operations to observe earthwork construction, and the consulting engineer's recommendations shall be followed.

Landslides

The project site is not subject to landslide hazards due to the relatively flat nature. However, the Watsonville Slough is located downslope from the project site along the southern, eastern, and western edges of the project site. The slough is approximately 10 to 15 feet deep within the site vicinity, with slopes of approximately 28 to 38 percent.

WMC Section 7-6.400(a) provides the following design standards for excavated slopes: "Cut slopes shall be no steeper than three (3) horizontal to one vertical and shall not exceed twenty (20) feet in vertical height without a terrace break. Due to individual site soils and geology, flatter and shorter slope lengths may be conditioned on the permit by the City Engineer. Cut slopes shall be rounded off so as to blend in with the natural terrain." The Geotechnical Engineering Investigation for the project site recommends that "the edges of the site be sloped 3:1 (horizontal to vertical) [consistent with WMC Section 7-6.400(a)] or flatter along the edge of the slough. In lieu of these slopes, retaining walls may be used. All structures should be set back a minimum of 20 feet or one-third the slope height, whichever is greater."⁶² The project would meet the 3:1 maximum slope requirement, and would set buildings back 20 feet, and would therefore

⁶² Krazan & Associates, Inc., 2018, Geotechnical Engineering Investigation Proposed Comment Development Main Street at Auto Centre Drive Watsonville, California, page 4.

ENVIRONMENTAL ANALYSIS

adhere to the WMC standard and Geotechnical Engineering Investigation recommendation. The impacts from project development as they relate to landslides are considered *less than significant*. No mitigation measures would be required.

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

The project site was previously fully developed with commercial buildings and associated parking lots. Substantial soil erosion or loss of topsoil during construction could, in theory, undermine structures and minor slopes during development of the project site. However, compliance with existing regulatory requirements, such as the implementation of grading erosion control measures specified in the CBC and the WMC, would reduce erosion and the loss of topsoil.

Title 7, Chapter 6 of the WMC outlines permit requirements, conditions, and design standards for all excavations, grading, filling, and erosion control. Section 7-6.404 specifically outlines design standards for erosion and sediment control. The proposed project must follow all requirements of the City of Watsonville and must apply for a permit with the City Engineer. Adherence to these regulations would help ensure that the impacts of project development as they relate to substantial soil erosion or loss of topsoil would be *less than significant*.

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

The project site is located within a high to very high seismically induced liquefaction hazard zone, as mapped by the State of California and Santa Cruz County.⁶³ However, as discussed in Impact GEO-1 above, the detailed Geotechnical Investigation Report concluded that existing soils on-site are relatively conducive to the development of the proposed project. Clayey soils were found to exist on-site, which, in their present condition, present a minor to moderate hazard of liquefaction. Additionally, sandy soil conditions were encountered at the project site, which is characterized as a cohesionless soil with a tendency to cave in. Accordingly, the preparers developed design recommendations to increase the vertical and lateral support of foundations and outlined appropriate floor slab preparation and construction and grading approaches. If these recommendations are not adhered to, project construction could result in significant impacts with respect to liquefaction and ground movement. However, with implementation of Mitigation Measure GEO-2, the potential for the project to exacerbate hazards associated with unstable soils would be *less than significant*.

Impact GEO-2: Without proper site preparation and building design, project development could result in hazards associated with liquefaction and ground movement.

Mitigation Measure GEO-2: Implement Mitigation Measure GEO-1.

⁶³ RRM Design Group, 2012, Monterey Bay Sanctuary Scenic Trail Network Master Plan EIR, Section 4.6. Geology and Soils.

ENVIRONMENTAL ANALYSIS

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

As discussed in the Geotechnical Investigation Report, the project site consists primarily of clayey and sandy soils. Sandy soils are non-expansive in nature. Clayey soils are expansive in nature and would have the potential to expand when exposed to water, creating substantial direct or indirect risks to life or property. As discussed in Impact GEO-1 above, the detailed Geotechnical Investigation Report provides recommendations for excavation and use of Engineered Fill that is non-expansive in nature that would provide stability for the proposed project. With implementation of Mitigation Measure GEO-3, the proposed project would be considered to have a *less-than-significant* impact on-site soil expansion.

Impact GEO-3: Without proper site preparation and building design, project development could result in hazards associated with expansive soils.

Mitigation Measure GEO-3: Implement Mitigation Measure GEO-1.

- e) *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?*

The proposed project would connect to the City's wastewater collection system and would not include the use of a septic tank or alternative waste disposal system. Therefore, there is *no impact*.

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

As discussed above in existing conditions, while no paleontological resources have been identified on the project site, because the proposed project requires substantial excavation that could reach significant depths below the ground surface where no such excavation has previously occurred, there could be fossils of potential scientific significance and other unique geologic features that have not been recorded. Such ground-disturbing construction associated with development under the proposed project could cause damage to, or destruction of, paleontological resources or unique geologic features. Impacts to paleontological resources on-site or unique geologic features would be reduced to a *less-than-significant* level with implementation of Mitigation Measure GEO-4.

Impact GEO-4: Project-related ground-disturbing activities could affect subsurface paleontological resources that may be present.

Mitigation Measure GEO-4: The construction contractor shall incorporate the following in all grading, demolition, and construction plans:

- In the event that fossils or fossil-bearing deposits are discovered during grading, demolition, or building, excavations within 50 feet of the find shall be temporarily halted or diverted.
- The contractor shall notify the City of Watsonville Building Department and a City-approved qualified paleontologist to examine the discovery.

ENVIRONMENTAL ANALYSIS

- The paleontologist shall document the discovery as needed, in accordance with Society of Vertebrate Paleontology standards, evaluate the potential resource, and assess the significance of the finding under the criteria set forth in CEQA Guidelines Section 15064.5.
- The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find.
- If the project applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project based on the qualities that make the resource important. The excavation plan shall be submitted to the City for review and approval prior to implementation.

VII. GREENHOUSE GAS EMISSIONS

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

GREENHOUSE GASES

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as greenhouse gases (GHGs), into the atmosphere. The primary source of these GHGs is fossil fuel use. The Intergovernmental Panel on Climate Change has identified four major GHGs—water vapor, carbon dioxide (CO₂), methane (CH₄), and ozone (O₃)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHGs identified by the Intergovernmental Panel on Climate Change that contribute to global warming to a lesser extent include nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and chlorofluorocarbons (CFCs).^{64,65}

⁶⁴ Water vapor (H₂O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

⁶⁵ Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of PM emitted from burning fuels. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and

ENVIRONMENTAL ANALYSIS

This section analyzes the project's contribution to global climate change impacts in California through an analysis of project-related GHG emissions. Information on manufacture of cement, steel, and other "life cycle" emissions that would occur as a result of the project are not applicable and are not included in this analysis.⁶⁶ A background discussion on the GHG regulatory setting and GHG data can be found in Appendix A to this Initial Study.

EXISTING CONDITIONS

The previous buildings generated greenhouse gases from transportation sources, energy (natural gas and purchased energy), and area sources such as landscaping equipment and architectural coatings. Previous land uses generate approximately 3,210 weekday average daily trips and 4,437 average daily trips on the weekend.⁶⁷

APPLICABLE GENERAL PLAN MEASURES

The Watsonville 2005 General Plan Environmental Resources and Transportation and Circulation Elements include the following implementation measures pertaining to GHG emissions that are relevant to this analysis:

Environmental Resources Management Element

- **Implementation Measure 9.C.2, Alternate Travel Modes.** In order to reduce automobile related pollution, the City shall plan for and encourage the use of transit, ridesharing, bicycles, and walking as alternatives to automobile travel, and the use of low-emission and electric vehicles.
- **Implementation Measure 9.C.3, Housing Jobs Linkage.** The City shall encourage new residential development to include housing suitable to employees of workplaces in the City and its immediate environs in order to minimize commuting and the motor vehicle emissions thus generated. The City shall strive to locate housing and job land uses to enhance the use of carpooling and transit.

burning activities (California Air Resources Board, 2017, March 14. Final Proposed Short-Lived Climate Pollutant Reduction Strategy. <https://www.arb.ca.gov/cc/shortlived/shortlived.htm>). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

⁶⁶ Life cycle emissions include indirect emissions associated with materials manufacture. However, these indirect emissions involve numerous parties, each of which is responsible for GHG emissions of their particular activity. The California Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions found that lifecycle analyses was not warranted for project-specific CEQA analysis in most situations, for a variety of reasons, including lack of control over some sources, and the possibility of double-counting emissions (see Final Statement of Reasons for Regulatory Action, December 2009). Because the amount of materials consumed during the operation or construction of the proposed project is not known, the origin of the raw materials purchased is not known, and manufacturing information for those raw materials are also not known, calculation of life cycle emissions would be speculative. A life-cycle analysis is not warranted (OPR 2008).

⁶⁷ Institute of Transportation Engineers, 2018, Trip Generation Manual, 10th Edition.

ENVIRONMENTAL ANALYSIS

- **Implementation Measure 9.C.4, Design Review.** The City shall require new development to include consideration for transit, transportation demand management, and alternative travel modes in project designs including but not limited to transit stops, carpool, and vanpool preferred parking, and bicycle access and storage facilities.
- **Implementation Measure 9.C.8, Transportation Management Associations.** The City shall promote the creation of transportation management associations in areas of high employment density.
- **Implementation Measure 9.C.9, Environmental Review.** The City shall use the environmental review process to determine both stationary source and transportation related potential air quality impacts for project proposals.
- **Implementation Measure 9.J.1, Alternative Transportation.** As outlined in the Transportation and Circulation chapter, the City shall promote the use and development of alternative transportation modes intended to reduce the consumption of fossil fuels and other non-renewable energy resources.
- **Implementation Measure 9.J.2, Development.** The City shall encourage energy efficient design and design which utilizes solar opportunities in residential, commercial, and industrial development.
- **Implementation Measure 9.J.3, Land Use and Transportation.** Development shall be encouraged to occur in locations and at intensities that facilitate the use of alternative transportation modes to the extent compatible with the community.

Transportation and Circulation Element

- **Implementation Measure 10.K.1, New Construction and Improvements.** New construction and improvements to designated streets shall include facilities for safe bicycle travel consistent with the City's Bicycle Plan.
- **Implementation Measure 10.K.2, Designation of Bicycle Lanes.** The City shall designate specified arterials for the development of bicycle lanes, consistent with the Bicycle Plan.
- **Implementation Measure 10.N.1, Construction/Improvement.** The City shall require facilities for safe pedestrian travel as part of new construction or improvements to existing streets.
- **Implementation Measure 10.P.1, Access to Adjoining Land Uses.** The City shall require pedestrian access between adjoining multiple family residential developments, and from such residential developments to adjacent recreational or commercial area.

ENVIRONMENTAL ANALYSIS

DISCUSSION

- a) *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

A project does not generate enough GHG emissions on its own to influence global climate change; therefore, this section measures the project's contribution to the cumulative environmental impact associated with climate change.

Construction Impacts

MBARD does not have thresholds of significance for construction-related GHG emissions, however, the Bay Area Air Quality Management District (BAAQMD) advises that the lead agency should quantify and disclose GHG emissions that would occur during construction and make a determination on the significance of these construction-generated GHG emissions in relation to meeting AB 32 GHG reduction goals. GHG emissions from construction activities are one-time, short-term emissions and, therefore, would not significantly contribute to long-term cumulative GHG emissions impacts of the proposed project. One-time, short-term emissions are converted to average annual emissions by amortizing them over the service life of a building. For buildings in general, it is reasonable to look at a 30-year time frame, since this is a typical interval before a new building requires the first major renovation.⁶⁸ When amortized over a 30-year project lifetime, average annual construction emissions from the proposed project of 13 metric tons of carbon dioxide equivalent per year (MTCO₂e/year) would represent a nominal source of GHG emissions and would not exceed MBARD's threshold of 1,000 MTCO₂e/year. One-time construction-related GHG emissions would be *less than significant*.

Operational Phase

Development permitted under the proposed project would contribute to global climate change through direct and indirect emissions of GHG from transportation sources, energy (natural gas and purchased energy), water use, wastewater generation, and solid waste generation. The site previously housed restaurant, grocery store, and auto care uses. Based on the mix of land uses, the site generated approximately 3,210 average daily trips on a weekday.⁶⁹ Based on the KD Anderson traffic impact analysis, the proposed project would generate 2,986 average daily trips on a weekday, which is 224 fewer trips than the previous land uses.⁷⁰ Because the proposed project would result in less square footage and fewer trips than the existing condition and would be constructed in accordance with the latest building code,

⁶⁸ International Energy Agency, 2008, Energy Efficiency Requirements in Building Codes, Energy Efficiency Policies for New Buildings, March.

⁶⁹ Institute of Transportation Engineers, 2018, Trip Generation Manual, 10th Edition.

⁷⁰ KD Anderson & Associates, Inc. 2019, August 20. Traffic Impact Analysis for BTS – Main Street and Auto Center Drive Retail Center, 975 Main Street, Watsonville, CA, page 33 and Table 9 Comparison of Project Trip Rates vs Historical Trip Rates.

ENVIRONMENTAL ANALYSIS

the proposed uses would not generate an increase in GHG emissions from the current land uses on-site. Therefore, GHG emissions impacts of the project are *less than significant*.

b) *Would the project conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?*

Applicable plans adopted for the purpose of reducing GHG emissions include the CARB Scoping Plan, AMBAG's Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), and Watsonville's *Climate Action Plan*. A consistency analysis with these plans is presented below.

CARB's Scoping Plan

In accordance with AB 32 and SB 32 the CARB *2017 Climate Change Scoping Plan*⁷¹ (Scoping Plan) outlines the State's strategy to achieve 1990 level emissions by year 2020 and a 40 percent reduction from 1990 emissions by year 2030. The Scoping Plan is applicable to State agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

Statewide strategies to reduce GHG emissions in the latest Scoping Plan (2017) include implementing SB 350, which expands the Renewables Portfolio Standard to 50 percent by 2030 and doubles energy efficiency savings; expanding the Low Carbon Fuel Standard to 18 percent by 2030; implementing the *Mobile Source Strategy* to deploy zero-electric vehicle buses and trucks; implementation of the *Sustainable Freight Action Plan*; implementation of the *Short-Lived Climate Pollutant Reduction Strategy*, which reduces methane and hydrofluorocarbons 40 percent below 2013 levels by 2030 and black carbon emissions 50 percent below 2013 levels by 2030; continuing to implement SB 375, the Sustainable Communities and Climate Protection Act; creation of a post-2020 Cap-and-Trade Program; and development of an *Integrated Natural and Working Lands Action Plan* to secure California's land base as a net carbon sink. Statewide GHG emissions reduction measures that are being implemented as a result of the Scoping Plan would reduce the proposed project's GHG emissions.

The proposed project would be constructed to achieve the standards in effect at the time of development and would not conflict with Statewide programs adopted for the purpose of reducing GHG emissions. While the measures in the CARB Scoping Plan apply to State agencies and not the proposed project, the project's GHG emissions would be reduced due to the project's compliance with Statewide measures that have been adopted since AB 32 and SB 32 were adopted. Therefore, the impact would be *less than significant*.

⁷¹ Note that the *2017 Climate Change Scoping Plan* is an update to the 2008 and 2014 Scoping Plans.

ENVIRONMENTAL ANALYSIS

AMBAG 2040 RTP/SCS

The Association of Monterey Bay Area Governments (AMBAG) is the metropolitan planning organization (MPO) for the Monterey Bay area. AMBAG coordinates the development of the Metropolitan Transportation Plan (MTP)/Sustainable Communities Strategy (SCS) with the Regional Transportation Planning Agencies (RTPAs) (the Santa Cruz County Regional Transportation Commission, Transportation Agency for Monterey County, and San Benito County Council of Governments), transit providers (Santa Cruz METRO Transit District, Monterey Salinas Transit, and San Benito County Local Transit Authority), and the MBARD. AMBAG also coordinates transportation planning and programming activities with the three counties and eighteen local jurisdictions within the tri-county Monterey Bay Region. AMBAG adopted the 2040 MTP/SCS on June 13, 2019. The proposed project is an infill development and would be consistent with the overall goals of the SCS. The proposed project would not conflict with the MTP/SCS and impacts would be *less than significant*.

City of Watsonville Climate Action Plan

The Climate Action Plan (CAP) and Carbon Fund Ordinance were adopted by the City Council on February 24, 2015. The CAP is a strategic planning document that identifies sources of GHG emissions within the City's boundaries, presents current and future emissions estimates, and identifies a GHG reduction target for future years. The emissions reduction strategies developed by the City were developed to comply with the requirements of AB 32 and achieve the goals of CARB's 2008 Scoping Plan. The City of Watsonville identified a 2020 target (AB 32) of 15 percent below 2005 levels by 2020 and a 2030 target that puts the City on a trajectory to reach the 2050 reduction target of Executive Order S-03-05 of 25 percent below 2005 emissions by 2030. The City's CAP includes existing actions, new actions, and supporting actions to achieve reductions in energy, transportation, green buildings/green business, solid waste disposal, and water and wastewater sectors.⁷²

Since the adoption of the CAP in April of 2015, the Legislature adopted SB 32 (September 2016) and CARB adopted the 2017 Climate Change Scoping Plan (December 2017), aimed at meeting SB 32's GHG reduction goal of 40 percent below 1990 levels by 2030. The City is planning an update to the CAP in 2020 to adjust Watsonville's goal upward to reflect the State goal under SB 32. The City conducted a CAP 2018 Progress Report in February 2019 to document the process the City has made toward its 2020 and 2030 GHG targets. As identified in the progress report, the City has reduced emissions by 21.7 percent from 2005 levels and has achieved the 2020 goal and is two-thirds of the way toward achieving the current 2030 goal.⁷³ The proposed project would be required to pay Carbon Impact Fees that fund measures

⁷² Watsonville. 2015, April 9. City of Watsonville Climate Action Plan. Prepared by KEMA and DNG-VL

⁷³ Watsonville. 2019, February. City of Watsonville Climate Action Agenda Item 5A, 2015-2018 Progress Report. Plan[https://www.cityofwatsonville.org/DocumentCenter/View/10684/Climate-Action-Plan-2015-2018-Progress-Report---](https://www.cityofwatsonville.org/DocumentCenter/View/10684/Climate-Action-Plan-2015-2018-Progress-Report---PowerPoint-Presentation) PowerPoint-Presentation

ENVIRONMENTAL ANALYSIS

identified in the City's CAP. The proposed project would not conflict with the goals of the CAP and impacts would be *less than significant*.

VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the proposed project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXISTING CONDITIONS

A Phase I Environmental Site Assessment (ESA) was prepared for the project on December 18, 2018 by Roux Associates, Inc, and is included as Appendix D of this document. The purpose of the Phase I ESA was to identify potential Recognized Environmental Conditions (RECs) associated with the presence of hazardous substances or petroleum products in the vicinity of the project site. The Phase I ESA included a review of federal, State, tribal, and local databases, site reconnaissance, and a review of historical sources.

ENVIRONMENTAL ANALYSIS

The following impact discussion is based in part on the information in the Phase I.⁷⁴ There were no RECs identified in the Phase I ESA.

As stated in the Phase I ESA, the project site was used for agriculture until 1937. Two of the structures on-site were built by 1945, with a third building constructed by 1956 and the fourth constructed by 1962. A gasoline service station existed on-site by the 1950s, ceasing operation by 1976. Underground storage tanks (USTs) associated with the service station were subsequently removed in 1984. The project site is not identified as an REC, however, the project site has historically been used as a truck stop, truck/bus facility, auto repair shop, and gasoline and diesel service station, which are uses that are known to actively store and use petroleum and other chemicals. These uses were active on-site for approximately 60 years.⁷⁵

The Geotechnical Engineering Investigation prepared for the project shows evidence of unconsolidated fill material within the project site.⁷⁶ However, the City does not have any records that the site was previously used for illegal dumping or landfill purposes.⁷⁷

DISCUSSION

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

Construction Impacts

Construction activities at the project site would involve the use of larger amounts of hazardous materials than would operation of the proposed project, such as petroleum-based fuels for maintenance and construction equipment, and coatings used in construction, which would be transported to the site periodically by vehicle and would be present temporarily during construction. These potentially hazardous materials would not be of a type or occur in sufficient quantities on-site to pose a significant hazard to public health and safety or the environment, and their use during construction would be short-term. Additionally, as with proposed project operation, the use, transport, and disposal of construction-related hazardous materials would be required to conform with existing laws and regulations. Any businesses that transport, generate, use, and/or dispose of hazardous materials in Watsonville are subject to existing hazardous materials regulations, such as those enforced by Santa Cruz County Environmental Health

⁷⁴ Roux Associates, Inc., 2018, Phase I Environmental Site Assessment, 975 Main Street, Watsonville, Santa Cruz County, California. December 18, 2018.

⁷⁵ Roux Associates, Inc., 2018, Phase I Environmental Site Assessment, 975 Main Street, Watsonville, Santa Cruz County, California. December 18, 2018. Page iii.

⁷⁶ Krazan & Associates, Inc., 2018, Geotechnical Engineering Investigation Proposed Comment Development Main Street at Auto Centre Drive Watsonville, California, page 9.

⁷⁷ Meek, Justin. Principal Planner, City of Watsonville. Email correspondence with Alexis Mena and Steve Noack, PlaceWorks. September 10, 2019.

ENVIRONMENTAL ANALYSIS

Department's Certified Unified Program Agency (CUPA), and through hazardous materials permits from the Santa Cruz County Environmental Health Department. Consequently, associated impacts from construction of the proposed project would be *less than significant*.

Operational Impacts

The proposed commercial development would not involve the routine transport or disposal of hazardous materials. Project operation would involve the use of small amounts of hazardous materials for cleaning and maintenance purposes, such as cleansers, degreasers, pesticides, and fertilizers. These potentially hazardous materials would not be of a type, or be present in sufficient quantities, to pose a significant hazard to public health and safety or the environment. Furthermore, such substances would be used, transported, stored, and disposed of in accordance with applicable federal, State, and local laws, policies, and regulations. Any businesses that transport, generate, use, and/or dispose of hazardous materials in Watsonville are subject to existing hazardous materials regulations, such as those implemented by Santa Cruz County Department of Environmental Health Services Division's CUPA, whose Hazardous Materials Team is responsible for enforcing State statutes and regulations as well as the local Ordinance pertaining to the storage, use, and disposal of hazardous materials and wastes. Additionally, CUPA is responsible for conducting compliance checks which are verified through annual routine inspections.⁷⁸ The Santa Cruz County Central Fire Protection District also maintains Hazmat First Responder personnel to support the Santa Cruz County Hazardous Materials Team that respond to both non-emergency and emergency calls for hazardous materials incidents.⁷⁹ Furthermore, the proposed project would be required to comply with the County of Santa Cruz Code Chapter 7.100, Hazardous Materials–Hazardous Waste–Underground Storage Tanks.⁸⁰ Thus, associated impacts from the operational phase of the project would be *less than significant*.

b) *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

As described in the existing conditions above, the project site has historically been used as a truck stop, truck/bus facility, auto repair shop, and gasoline and diesel service station, and was most recently occupied by three auto service, supply, and repair shops; a grocery store; and a restaurant. These operations would have actively stored and used petroleum products such as gasoline, diesel, and motor oil, as well as other chemicals during daily business activities for more than 60 years. Furthermore, as discussed in criterion (a) above, construction and operation of the proposed project would involve the

⁷⁸ County of Santa Cruz, Hazardous Materials- Hazardous Waste- CUPA. <http://scceh.com/Home/Programs/HazardousMaterialsPrograms-CUPA.aspx>, accessed on April 19, 2019.

⁷⁹ County of Santa Cruz Central Fire Protection District, Hazardous Materials, <http://www.centralfpd.com/2186/Hazardous-Materials>, accessed on April 19, 2019.

⁸⁰ County of Santa Cruz Code, Chapter 7.100 Hazardous Materials- Hazardous Waste- Underground Storage Tanks, <https://www.codepublishing.com/CA/SantaCruzCounty/#!/SantaCruzCounty07/SantaCruzCounty07100.html>, accessed on April 19, 2019.

ENVIRONMENTAL ANALYSIS

storage and use of common cleaning substances, building maintenance products, paints, and solvents, as well as petroleum-based fuels for maintenance and construction equipment, and coatings used in construction, not unlike construction and operation of the development existing on-site.

The Phase I ESA did not determine there are any potential RECs on-site. Therefore, this impact would be *less than significant*.

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

There are no schools within 0.25-mile of the project site. Thus, *no impact* would occur, and no mitigation measures would be required.

- d) *Would the project be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?*

As stated in the existing conditions discussion above, the project site has been identified as a site that has used hazardous materials in the past and continued to use hazardous materials under recent land uses. However, the project site is not listed as a site pursuant to California Government Code Section 65952.5. Additionally, the Phase I ESA concluded that there are no hazards on-site or included in the proposed development that may create a significant hazard. Accordingly, impacts would be *less than significant*.

- e) *For a project within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people living or working in the project area?*

Santa Cruz County has been identified as a “no procedures county” as there is only one public use airport—the Watsonville Municipal Airport—in the county. In accordance with Public Utilities Code Section 21670.1(e), the preparation of an airport land use compatibility plan is not required; however, the City must submit its general and specific plans to Caltrans Division of Aeronautics for review.

The *California Airport Land Use Planning Handbook* (Caltrans 2011) provides guidance for airport land use compatibility planning, as required by Public Utilities Code Section 21670-21679.5. The Handbook is intended to ensure compatible airport land uses by ensuring the safe and efficient operation of airports and the safety of people living or working near airports. The Handbook defines six airport safety zones, ranging from Zone 1 (Runway Protection Zone) to Zone 6 (Traffic Pattern Zone), and outlines land use restrictions for each zone. For example, the Handbook indicates that all new structures and residential land uses are prohibited in Airport Safety Zone 1 because the risk level is “very high” due to the high parentage of near-runway accidents in this zone. At the other end of the spectrum, the Handbook does not recommend prohibiting any residential or nonresidential uses in Airport Safety Zone 6, yet recommends avoiding “outdoor stadiums and similar uses with very high intensities” (Caltrans 2011). The Handbook indicates that the risk level is “low” for Zone 6.

ENVIRONMENTAL ANALYSIS

The project site is located approximately 1.5 miles southeast of the Watsonville Municipal Airport. The City of Watsonville City Council approved the Watsonville Airport Master Plan on June 24, 2003, a plan that evaluated growth of the Airport through the year 2020. The Airport Master Plan and associated EIR include evaluation of additional facilities and reconstruction of existing facilities in order to meet aviation demand through the planning period. The Airport Master Plan also delineates the six safety zones surrounding the Airport. The project site is not located within any safety zone associated with the Airport.⁸¹ Furthermore, the project site is located outside of the airport noise contour map.⁸² Therefore, the proposed project would not result in safety hazards or excessive noise for people working on the project site and there would be *no impact*.

f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The City of Watsonville does not have any adopted emergency response or emergency evacuation plan. The County of Santa Cruz, however, adopted an Operational Area Emergency Plan in 2015. The project would not impair implementation of, or physically interfere with, the County's Emergency Plan. Current street configuration would not change. Therefore, the proposed project would not create, interrupt, or otherwise reduce the ability of streets to convey traffic and would result in *no impact* to impairing or physically interfering with an adopted plan.

g) *Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

The project site is not located in or adjacent to a moderate, high, or very high fire hazard severity zone and Watsonville does not contain any areas within a very high fire hazard severity zone.⁸³ Although the site is adjacent to Watsonville Slough, a wildland area, the project site is in an urbanized area well served by fire protection services. In addition, the project is a commercial redevelopment project that does not contain any features or improvements that would have the potential to create or exacerbate any wildfire hazards. Therefore, the proposed project is not expected to subject people or structures to wildfire hazards, and a *less-than-significant* impact would occur.

⁸¹ City of Watsonville, 2003, Watsonville Municipal Airport Master Plan 2001-2020, Exhibit 13, Safety Compatibility Zones, page 75.

⁸² City of Watsonville, August 2002, Watsonville Municipal Airport Master Plan Draft Environmental Impact Report, State Clearinghouse No. 20022062089, Figure 4.7-3, 2020 Noise Contour Maps, page 4.7-9.

⁸³ California Department of Forestry and Fire Prevention, 2007, Santa Cruz County, Draft Fire Hazard Severity Zone in LRA, https://osfm.fire.ca.gov/media/6770/fhszl06_1_map44.pdf, accessed September 12, 2019.

ENVIRONMENTAL ANALYSIS

IX. HYDROLOGY AND WATER QUALITY

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

EXISTING CONDITIONS

Watsonville, including the project site, is located within the Pajaro River Watershed. The Pajaro River Watershed is a 1,300-square-mile watershed and the project site is within the Pajaro Valley region at the far western portion of the watershed. The Pajaro Valley region encompasses the City of Watsonville and parts of Santa Cruz and Monterey counties.⁸⁴ The Pajaro Valley Water Management Agency (PVWMA), the San Benito County Water District, and the Santa Clara Valley Water District entered into a Memorandum of Understanding for the purpose of coordinating water resources planning and implementation activities in the Pajaro River Watershed. The three agencies, collectively known as the Pajaro River Watershed Collaborative, led the development and implementation of the Pajaro River Watershed IWMP.⁸⁵ The

⁸⁴ Pajaro River Community Flood Risk Management, 2019, The Pajaro Watershed Information Center, <http://www.pajarowatershed.org/index.html>, accessed September 11, 2019.

⁸⁵ City of Watsonville, 2016, 2015 Urban Water Management Plan, <https://www.cityofwatsonville.org/DocumentCenter/View/2046/2015-Urban-Water-Management-Plan-Chapters-1-10-PDF>, accessed September 13, 2019.

ENVIRONMENTAL ANALYSIS

IWMP addresses water supply, water quality, flood management, and environmental enhancement challenges within the watershed.

Water quality in Watsonville is regulated by the Central Coast RWQCB and its Water Quality Control Plan (Basin Plan). The Basin Plan contains water quality standards and identifies beneficial uses (wildlife habitat, agricultural supply, fishing, etc.) for receiving waters along with water quality criteria and standards necessary to support these uses consistent with federal and State water quality laws. Section 303(d) of the 1972 Federal Clean Water Act requires states to identify water bodies that do not meet water quality objectives and are not supporting their beneficial uses. The RWQCB maintains a list of impaired water bodies and the identified pollutant/stressors. The Watsonville Slough is listed as impaired due to low dissolved oxygen, pathogens, pesticides, and turbidity.⁸⁶

Furthermore, the project site is within the Pajaro Valley Groundwater Basin, which is managed by the PVWMA. To meet the California's AB 3030 Groundwater Management Act, the PVWMA adopted a Basin Management Plan Update in 2014. The purpose of the Basin Management Plan Update is to define the appropriate course of action toward optimizing the use of available supplies and solving seawater intrusion and overdraft problems in the basin.⁸⁷

As shown on Figure 4-2, the site is bounded by Main Street along its northern boundary, Watsonville Slough to the east and south, and Ramsay Park to the west. The Watsonville Slough originates beyond Main Street to the north (in Watsonville) and connects to the Pajaro River near the beach at Monterey Bay. The portion of the Watsonville Slough in the vicinity of the project site (see Figure 4-2) contains a seasonal floodplain, detention basin, and intermittent creek. The segment of the creek in the vicinity of the site is dry during the months of May through December and has seasonal flow during the months of March and April.⁸⁸

The site topography is moderately sloped with elevations ranging from 25 to 30 feet above mean sea level, generally sloping from the northwest corner of the site towards the southeast corner. Currently, the property surface drains from the northwest to the southeast and runoff is collected by existing drain channel drains and inlets located near the existing driveways and in Auto Center Drive. Runoff is conveyed via existing underground storm drainage facilities that connect to the public storm drain system, before ultimately discharging into Watsonville Slough.

⁸⁶ California Environmental Protection Agency State Water Resources Control Board, 2019, Impaired Water Bodies, https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml.

⁸⁷ Pajaro Valley Water Management Agency, 2014, February, Basin Management Plan Update, https://www.pvwater.org/images/about-pvwma/assets/bmp_update_eir_final_2014/BMP_Update_Final_February_2014_screen.pdf, accessed September 16, 2019.

⁸⁸ Hunting Environmental, 2018, December 11, Letter Regarding the Retail/Restaurant Project (PP2017-116) located at 975 and 1035 Main Street –Watsonville, CA.

ENVIRONMENTAL ANALYSIS



Source: Hunting Environmental, 2018.



Figure 4-2
Hydrological Function

ENVIRONMENTAL ANALYSIS

The northern portion of the project site is not in a Federal Emergency Management Agency (FEMA) flood zone; however, the southern portion is within FEMA Zone AE (see Figure 4-3). Zone AE is within the 100-year floodplain with an established base flood elevation of approximately 26 feet.

As mentioned in Section VIII, Hazards and Hazardous Materials, a Phase I ESA was prepared for the project to identify potential recognized environmental conditions (RECs). There were no RECs identified in the Phase I ESA. However, the site has historically been occupied with truck stops, truck/bus facilities, auto repair shops, and gasoline and diesel service stations, and is currently occupied by three auto service shops. These operations would involve the storage, usage, and disposal of petroleum products such as gasoline, diesel, and motor oil, as well as other chemicals during daily business activities for more than 60 years. Additionally, there are numerous historic facilities that have used petroleum products directly across Main Street to the north of the site, such as truck/bus facilities, auto repair shops, and gasoline service stations. Several of these facilities are known to have had gasoline and diesel USTs, although none of the facilities are currently under environmental investigation or have known contamination issues.⁸⁹

Significant buildup of motor oil was observed by the Phase I ESA preparer across the site's parking areas in paved but degraded asphalt as well as in unpaved areas. Oil buildup has the potential to contaminate stormwater with discharge into the storm drains during rain events.⁹⁰

DISCUSSION

a) *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Water quality impacts to receiving waters would occur during different phases of a development project:

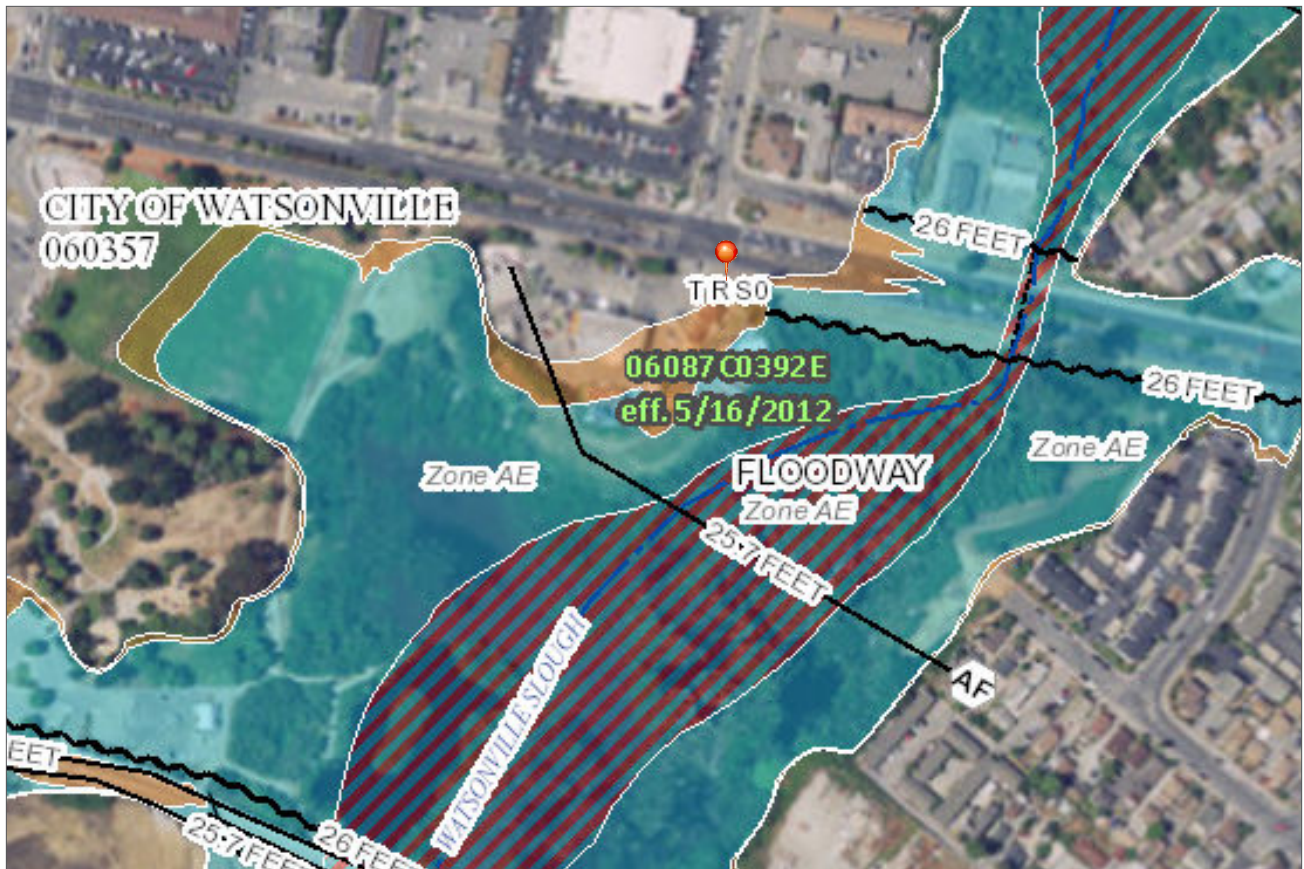
- During the earthwork and construction phase, the potential for erosion, siltation, and sedimentation is the highest.
- Following construction and before the establishment of ground cover, the erosion potential remains relatively high.
- Upon project completion, the impacts related to sedimentation decrease markedly, but impacts associated with urban runoff increase.

Following is a discussion of the potential water quality impacts resulting from urban runoff that would be generated during the construction and operational phases of the proposed project.

⁸⁹ Roux Associates, Inc., 2018, Phase I Environmental Site Assessment, 975 Main Street, Watsonville, Santa Cruz County, California.







⁹⁰ Roux Associates, Inc., 2018, Phase I Environmental Site Assessment, 975 Main Street, Watsonville, Santa Cruz County, California.

ENVIRONMENTAL ANALYSIS



Source: FEMA, 2018.



SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i> Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



Figure 4-3
Federal Emergency Management Agency Flood Zone Map

ENVIRONMENTAL ANALYSIS

Project Construction

Construction-related runoff pollutants are typically generated from soil destabilization areas, waste and hazardous materials handling or storage areas, outdoor work areas, material storage areas, and general maintenance areas (e.g., vehicle or equipment fueling and maintenance, including washing). The proposed project's construction phase could result in water quality impacts to Watsonville Slough if construction-related sediments or pollutants are not controlled.

Construction-related activities could result in sediment releases if previously stabilized soils are mobilized by rainfall/runoff and wind. This could result during removal of vegetation from the site, grading the site, and trenching for infrastructure improvements. Environmental factors that affect erosion include topographic, soil, and rainfall characteristics. Motor oil build-up, which has been observed across the site, could be released and is of particular concern.

Non-sediment-related pollutants that may be of concern during construction involve construction materials (e.g., paint and stucco), chemicals and petroleum products used during heavy equipment maintenance, and concrete or curing residues. Such pollutants can enter the drainage system by rainfall/runoff or spills. Construction-related activities of the proposed project could generate pollutants that could adversely affect the water quality of downstream receiving waters if appropriate management measures are not used.

Construction projects of one acre or more (like the proposed project) are regulated under the Statewide General Construction Permit (GCP), Order No. 2012-0006-DWQ, issued by the State Water Resources Control Board (SWRCB) in 2012. To minimize these potential impacts, the proposed project will be required to comply with the GCP as well as prepare a Storm Water Pollution Prevention Plan (SWPPP) that requires the incorporation of Best Management Practices (BMPs) to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. The GCP also requires that prior to the start of construction activities, the project applicant must file Permit Registration Documents (PRDs) with the SWRCB, which includes a Notice of Intent (NOI), risk assessment, site map, annual fee, signed certification statement, SWPPP, and post-construction water balance calculations. Categories of BMPs used in SWPPPs are described in Table 4-5.

The proposed project's construction contractor would be required to prepare and implement an SWPPP and associated BMPs in compliance with the GCP during grading and construction. The SWPPP would specify BMPs, such as those outlined in Table 4-5, that the construction contractor would implement to protect water quality by eliminating and/or minimizing stormwater pollution prior to and during grading and construction. Furthermore, Chapter 6, Excavations, Grading, Filling, and Erosion Control, of the WMC requires an erosion control plan be prepared as a part of the grading plan. The erosion control plan shall show the runoff comparison within and without the project.

ENVIRONMENTAL ANALYSIS

TABLE 4-5 CONSTRUCTION BEST MANAGEMENT PRACTICES

Category	Purpose	Examples
Erosion Controls and Wind Erosion Controls	Cover and/or bind soil surface, to prevent soil particles from being detached and transported by water or wind	Mulch, geotextiles, mats, hydroseeding, earth dikes, swales
Sediment Controls	Filter out soil particles that have been detached and transported in water.	Barriers such as straw bales, sandbags, fiber rolls, and gravel bag berms; desilting basin; cleaning measures such as street sweeping
Tracking Controls	Minimize the tracking of soil off-site by vehicles	Stabilized construction roadways and construction entrances/exits; entrance/outlet tire wash.
Non-Storm Water Management Controls	Prohibit discharge of materials other than stormwater, such as discharges from the cleaning, maintenance, and fueling of vehicles and equipment. Conduct various construction operations, including paving, grinding, and concrete curing and finishing, in ways that minimize non-stormwater discharges and contamination of any such discharges.	BMPs specifying methods for: paving and grinding operations; cleaning, fueling, and maintenance of vehicles and equipment; concrete curing; concrete finishing.
Waste Management and Controls (i.e., good housekeeping practices)	Management of materials and wastes to avoid contamination of stormwater.	Spill prevention and control, stockpile management, and management of solid wastes and hazardous wastes.

Source: California Stormwater Quality Association, 2015, Stormwater Best Management Practice Handbook for New Development and Redevelopment.

Adherence to the BMPs in the SWPPP and the preparation of an erosion control plan would reduce, prevent, minimize, and/or treat pollutants and prevent the degradation of downstream receiving waters. BMPs identified in the SWPPP would reduce or avoid contamination of stormwater with sediment and other pollutants such as trash and debris, oil, grease, fuels, and other toxic chemicals, paint, concrete, asphalt, and bituminous⁹¹ materials.

With the implementation of the GCP and WMC requirements, water quality and waste discharge impacts from project grading and construction activities would be *less than significant*.

Project Operation

Operational-related activities of the proposed project (e.g., runoff from parking areas, solid waste storage areas, and landscaped areas) could generate pollutants that could adversely affect the water quality of downstream receiving waters if effective measures are not implemented.

The Phase II Municipal General Stormwater Permit (2013-0001-DWQ) regulates discharges from municipal storm drain systems with populations less than 100,000. The regulation requires the City of Watsonville to

⁹¹ Bituminous = resembling or containing bitumen; bitumen = any of various viscous or solid impure mixtures of hydrocarbons that occur naturally in asphalt, tar, mineral waxes, etc.; used as a road surfacing and roofing material.

ENVIRONMENTAL ANALYSIS

oversee a variety of activities within the city, including public education about pollution prevention, good housekeeping for municipal projects, and implementation of best management practices throughout the city.⁹²

In addition to the NPDES permit requirements, the City of Watsonville's Low Impact Development (LID) ordinance became effective in February 27, 2014. The ordinance requires post construction measures for managing storm runoff from new development and redevelopment projects by incorporating the Stormwater Post-Construction Standards into the Public Improvement Standards.⁹³

LID is a stormwater management and land development strategy that combines hydrology and site design with pollution prevention measures to minimize land development impacts on hydrology and water quality. LID techniques mimic the site predevelopment hydrology by using site design techniques that store, infiltrate, evapotranspire, biofilter, or detain runoff close to its source. Source control BMPs reduce the potential for pollutants to enter runoff and are classified in two categories—structural and nonstructural. Structural source control BMPs have a physical or structural component, such as inlet trash racks or trash bin covers, that capture or prevent pollutants from contacting stormwater runoff. Nonstructural source control BMPs are procedures or practices used in project operation, such as stormwater training, waste management, and litter control practices.

The proposed project would comply with requirements set forth in the Municipal Phase II MS4 Permit and the City's LID ordinance. The project is required to meet the City's Performance Standard 3, Runoff Retention, because more than 15,000 square feet of impervious surface will be created or replaced, and Performance Standard 4, Peak Management, because more than 22,500 square feet of impervious surface will be created or replaced. The Stormwater Control Plan report (see Appendix E) specifies BMPs that would be implemented to minimize water pollution from the project site during the operational phase.

The existing site has a high percentage of impervious area within the developed footprint. The proposed project would create a more balanced site, incorporating landscaped pervious areas and treatment BMPs dispersed throughout the site. Runoff from the existing site primarily sheet flows with water exiting the site into the public right-of-way without treatment or is captured via the storm drain infrastructure. The proposed project would result in runoff being captured and treated with three bioretention areas, with most of the site runoff infiltrating into the ground after treatment. The bioretention areas would have overflow drain inlets that connect to the storm drain infrastructure to account for runoff in excess of the design storm event or if the bioretention area fails. Percolation data obtained in the vicinity of the site suggest that the site has a high percolation rate that is suitable for infiltration. Layers of soil that may be encountered at the site that do not meet percolation rates will be replaced.⁹⁴

⁹² Watsonville Public Works and Utilities, 2019, State Stormwater Permits, <https://www.cityofwatsonville.org/747/State-Stormwater-Permits>, accessed September 11, 2019.

⁹³ City of Watsonville, 2014, Resolution No. 4-14, January 14, <https://www.cityofwatsonville.org/DocumentCenter/View/2684/Stormwater-Post-Construction-Standards-PDF?bidId=>, accessed September 13, 2019.

⁹⁴ RAK Civil Engineers, 2018, Stormwater Control Plan Report.

ENVIRONMENTAL ANALYSIS

The proposed project would maintain the current drainage pattern on-site with stormwater flowing from the northwest portion of the site to the southeast. As shown in Figure 4-4, one bioretention area would be located near the southeastern portion of the site along the property line. Runoff would sheet flow and/or travel in the curb and gutter before entering the bioretention area. A second bioretention area would be located near the southwestern portion of the site along the property line. Runoff would sheet flow, travel in pipes, and/or travel in the curb and gutter before entering the bioretention area. A third bioretention area would be located near the northern portion of the site in front of the proposed building in a landscape area. Runoff would sheet flow into this area.

Furthermore, the proposed project has been designed to minimize potentially impacted areas. Paved parking areas and drive aisles have been designed to be efficient and limit the development envelope as much as possible. Proposed drainage features will contain elements of vegetation for both function and aesthetics. And no natural drainage features will be disturbed or removed with implementation of the project.

Prior to completion of project construction, the applicant would execute an Agreement Regarding Maintenance of Structural or Treatment Control BMPs. Such an agreement would “run with the land” and be enforceable on subsequent property owners. The applicant would provide the City access to stormwater treatment devices for inspection.

With the implementation of these site design, source control, treatment control, and LID features, as well as compliance with the City and MS4 permit requirements, no significant water quality or waste-discharge impacts from project operation activities would occur and impacts would be *less than significant*.

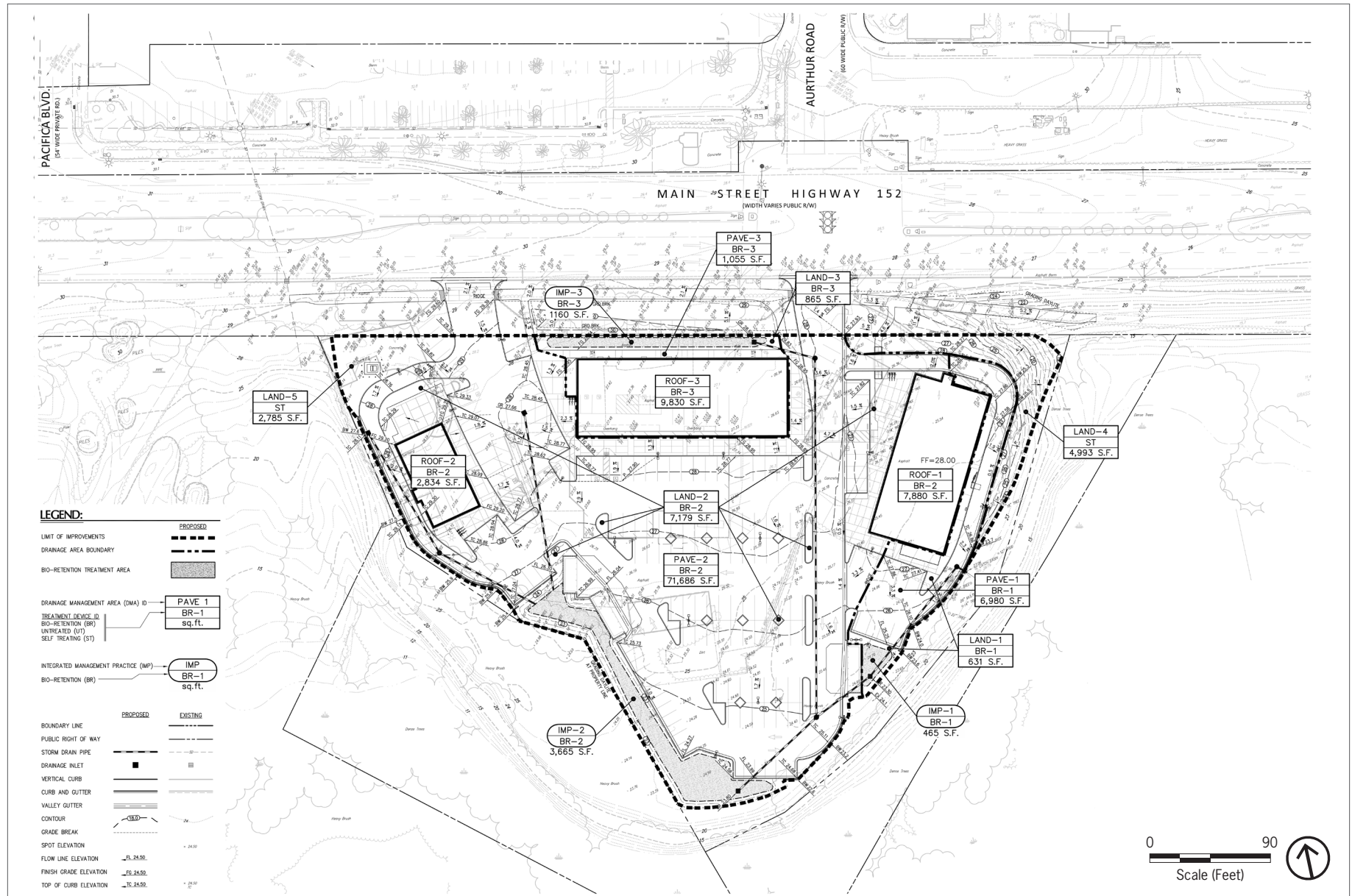
b) *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The project site is located within the Pajaro Valley Groundwater Basin. The City uses approximately twelve percent of the groundwater pumped from the Pajaro Valley Groundwater Basin to provide potable water to its service area, including the project site. Fourteen groundwater wells provide an average of 7,000 acre-feet per year (AFY) and have a capacity of 21,000 AFY. The PVWMA manages groundwater resources in the Pajaro Valley Basin and the basin is not adjudicated. To meet the California’s AB 3030 Groundwater Management Act, the PVWMA adopted a Basin Management Plan in 2014.⁹⁵

The City estimates that water demands in its service area for normal years would increase from approximately 8,132 AFY in 2020 to approximately 8,560 AFY in 2040. The City forecasts that it will have sufficient water supplies to meet water demands in its service area for normal, single-dry, and multiple dry years. Projected populations in the City’s service area were based on projections obtained from the

⁹⁵ City of Watsonville, 2016, 2015 Urban Water Management Plan, <https://www.cityofwatsonville.org/DocumentCenter/View/2046/2015-Urban-Water-Management-Plan-Chapters-1-10-PDF>, accessed September 13, 2019.

ENVIRONMENTAL ANALYSIS



Source: RAK Civil Engineering; Robert A. Karn & Associates, Inc., 2019.

Figure 4-4
Stormwater Control Plan

ENVIRONMENTAL ANALYSIS

California Department of Finance (DOF) and the U.S. Census Bureau.⁹⁶ The DOF data incorporates demographic trends, existing land use, and general plan land use policies. Therefore, development of the proposed project has been accounted for in the City's estimates of future water demands. Project water demands would not substantially deplete groundwater supplies.

Furthermore, the project site is currently developed with a large percentage of impervious surfaces. The proposed project would include three bioretention areas with a total stormwater storage capacity of 11,121 cubic feet. Most of the stored stormwater runoff will be infiltrated into the ground and contribute to groundwater recharge. Therefore, the proposed project would not substantially interfere with groundwater supplies or groundwater recharge and impacts would be *less than significant*.

- c) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
 - (i) *Result in a substantial erosion or siltation on- or off-site;*

The proposed project would maintain the current drainage flow on-site with the addition of three bioretention areas. The proposed project would slightly increase the impervious area on-site by 4,875 square feet as compared to existing conditions. Although the Watsonville Slough contains a seasonal floodplain, detention basin, and intermittent creek (low flow channel) in the area adjacent to the project site, the project would not infringe on the stream or floodplain and will not alter the course of the creek.

The proposed project would involve grading and soil exposure during construction that could result in erosion and/or siltation if not controlled. To minimize this potential impact, the project would be required to comply with all of the requirements of the State GCP, including preparation of a SWPPP prior to the start of construction activities. The SWPPP includes BMPs for runoff, erosion, and sediment transport as discussed above in Section 4.IX.a.

Compliance with the GCP and implementation of the BMPs in the SWPPP would reduce, prevent, or minimize soil erosion from project-related grading and construction activities. Therefore, project-related construction activities would not result in substantial erosion or siltation on- or off-site and impacts would be *less than significant*.

Once the proposed project has been completed, there would be no bare or disturbed soil on-site that would be vulnerable to erosion or siltation.

Implementation of the BMPs specified in the Stormwater Control Plan Report would direct stormwater runoff into three on-site bioretention areas, with subsequent infiltration into the soil, thus eliminating the potential for erosion and siltation downstream.

⁹⁶ City of Watsonville, 2016, 2015 Urban Water Management Plan, <https://www.cityofwatsonville.org/DocumentCenter/View/2046/2015-Urban-Water-Management-Plan-Chapters-1-10-PDF>, accessed September 13, 2019.

ENVIRONMENTAL ANALYSIS

Therefore, development of the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation on- or off-site. Impacts would be *less than significant*.

- (ii) *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;*

With implementation of the project, the site will have 108,940 square feet of impervious surfaces. The existing condition consists of 104,065 square feet of impervious coverage. Therefore, the proposed project would result in a minimal increase of 4,875 square feet of impervious surfaces or 3 percent.

As shown in Table 4-6, post-construction stormwater runoff would result in a marginal increase as compared to existing conditions. However, this calculation does not account for the proposed bioretention areas and infiltration of the majority of site runoff into the ground. Therefore, there should be no net impact to existing storm drain infrastructure as a result of this project. Peak flows will be mitigated by the volume of stormwater being infiltrated in the bioretention areas. Any flows that exceed the bioretention areas will overflow through spillways to the southeast corner of the site where flow from the site is discharged under existing conditions.

TABLE 4-6 EXISTING AND PROPOSED PEAK FLOWS	
	10 Year Flow (cfs)
Proposed Conditions	3.72
Existing Conditions	3.63
Difference	0.09

Note: cfs = cubic feet per second

Source: RAK Civil Engineers, 2018, Stormwater Control Plan Report.

The City will not grant final project approval for the project until it has been determined that the Stormwater Control Plan for the project meets the requirements detailed in the City's LID ordinance. The project must also comply with the Municipal Phase II MS4 Permit. Post-development runoff will be addressed by the site BMPs and bioretention areas and will not exceed the capacity of existing or planned stormwater drainage systems or substantially alter the existing drainage pattern of the project in a manner that would result in flooding on- or off-site. Therefore, project impacts would be *less than significant*.

- (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;*

The proposed project involves construction on an existing developed property that is currently connected to the City's storm drain system. The proposed project would result in a reduction in the amount of surface runoff from the property by the installation of three on-site bioretention areas and infiltration of runoff into the soil. Therefore, the capacity of the existing storm drain system would not be exceeded with implementation of the proposed project.

Also, BMPs will be implemented across the project site during both construction and operation. These BMPs will control and prevent the release of sediment, debris, and other pollutants into the storm drain

ENVIRONMENTAL ANALYSIS

system. Implementation of BMPs during construction will be in accordance with the provisions of the SWPPP. Operational BMPs will meet the requirements of the Municipal Phase II MS4 Permit and the City's LID ordinance. The three bioretention areas installed within the project site will reduce the volume and improve the quality of stormwater runoff from the site. With implementation of these BMPs in accordance with State and City requirements, the potential impact on water quality will be *less than significant*.

(iv) *Impede or redirect flood flows?*

As stated previously, the northern portion of the project site is not in a FEMA flood zone, however the southern portion is within Zone AE (see Figure 4-3), including a portion of the proposed Building 3 and parking structures.

In accordance with WMC Chapter 2, Floodplain Management, all nonresidential construction shall either:

- Have the lowest floor of the entire structure, including basement, one foot above the base flood elevation. Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor and verified by the community building inspector to be properly elevated. Such certification and verification shall be provided to the Floodplain Administrator.
- Or be flood-proofed below the elevation specified above so that the structure is watertight with walls substantially impermeable to the passage of water and have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect must certify that these standards are satisfied. Such certification shall be provided to the Floodplain Administrator.

The applicant would also obtain a floodplain development permit before any construction or other development begins within any area of special flood hazard.

With the implementation of the WMC requirements, the proposed project would not impede or redirect flood flows and impacts would be *less than significant*.

d) *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

As mentioned above, a portion of the site is in a special flood hazard area subject to inundation by the 100-year flood. For any structure within a special hazard zone, materials and equipment shall be managed in line with WMC Section 9-2.502 as follows:

- The storage or processing of materials which in time of flooding are buoyant, flammable, explosive, or could be injurious to human, animal, or plant life shall be prohibited.
- The storage of other materials or equipment may be allowed if not subject to major damage by floods and if firmly anchored to prevent flotation or if readily removable from the area within the time available after a flood warning.

ENVIRONMENTAL ANALYSIS

Adherence to WMC standards would reduce the impact related to the release of pollutants to less than significant.

A seiche is an oscillating surface wave in a restricted or enclosed body of water, generated by ground motion, usually during an earthquake. Seiches are of concern for water storage facilities, because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. There are no adjacent enclosed bodies of water that would pose a flood hazard to the site due to a seiche. The proposed project is not at risk of inundation by seiche.

Tsunamis are a type of earthquake-induced flooding produced by large-scale sudden disturbances of the sea floor. Tsunami waves interact with the shallow sea floor when approaching a landmass, resulting in an increase in wave height and a destructive wave surge into low-lying coastal areas. The proposed project is approximately 4.3 miles inland from the Pacific Ocean. Therefore, the site is outside the tsunami hazard zone and would not be affected by a tsunami.

Additionally, the proposed site is not within a dam inundation area and would not be affected by dam failure.⁹⁷

Therefore, the proposed project would not release pollutants as the result of floods, tsunami, or seiche and impacts would be *less than significant*.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Watsonville is within the jurisdiction of the Central Coast RWQCB and its Basin Plan. As discussed under criterion (a) above, the proposed project will not violate any water quality standards and, therefore, would not obstruct the implementation of the Basin Plan. Also, the proposed project would not conflict or obstruct the implementation of the IWMP. The Pajaro Valley Groundwater Basin is managed by the PVWMA as described in the Basin Management Plan Update. As discussed under criterion (b), the proposed project will not decrease groundwater supplies nor interfere substantially with groundwater recharge and would therefore not impact the implementation of the Basin Management Plan Update. Therefore, impacts would be *less than significant*.

⁹⁷ Department of Water Resources Division of Safety of Dams, 2019, Dam Breach Inundation Map Web Publisher, https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2, accessed September 16, 2019.

ENVIRONMENTAL ANALYSIS

X. LAND USE AND PLANNING

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

EXISTING CONDITIONS

The General Plan land use designation for the project site is primarily General Commercial, with a small portion designated as Environmental Management, as illustrated in Figure 3-4. Additionally, the project site is zoned Commercial Thoroughfare (CT), as described in Section 14-16.1200 of the WMC. A more detailed description of the General Commercial and Environmental Management land use designations, as well as the project site's Zoning District, is presented in Section 3.1.4, Land Use Designation and Zoning, in Chapter 3 of this Initial Study.

DISCUSSION

f) *Would the proposed project physically divide an established community?*

Because the development of the proposed project would occur on a site that is currently developed, would relatively retain the existing roadway patterns, and would not introduce any new major roadways or other physical features through existing residential neighborhoods or other communities that would create new barriers, the project would not physically divide an established community. Therefore, *no impact* would occur.

g) *Would the proposed project 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?*

The proposed project does not include a request for any modification to the existing General Plan land use designation or the Zoning District. However, the project does include proposal of two drive-through uses that do not currently exist on-site. Drive-through uses are allowed in the CT zoning district with a Special Use Permit, subject to specific location and design regulations for such development. Per WMC Chapter 14-41, drive-throughs in the CT zoning district cannot be located within 150 feet of a residential parcel or 300 feet of a designated "gateway" intersection. For all other signalized intersections in commercial zones, no more than one drive-through facility may be within 200 feet of the nearest portion of the intersection. The project site is not next one of the "gateway" intersections listed in WMC Section 14-41.100(a)(3), and

ENVIRONMENTAL ANALYSIS

only one of the two proposed drive-through facilities is within 200 feet of the signalized intersection of Main Street and Auto Center Drive.

Drive-through facilities must also meet the following design standards, some of which help to avoid environmental effects:⁹⁸

- Trash facilities are located to accommodate patrons using the drive-through facilities in an areas away from residential uses;
- Lighting, noise, fumes, rodents, pests, and odors can either be eliminated, mitigated, or reduced so as not to adversely affect neighboring properties or uses;
- The impact on neighboring properties or uses due to activities associated with the proposed facility and its hours of operation do not unreasonably interfere with adjoining residential uses;
- Traffic generated by the drive-through facility can be reasonably accommodated by the property and neighborhood streets, without creating a materially adverse traffic impact, or a material or safety hazard to vehicles or pedestrians;
- On-site pedestrian walkways shall not intersect the drive-through vehicle lanes, except where visibility is clear, and the pedestrian walkway is emphasized by enriched paving and striping;
- Drive-through lanes shall be a minimum of 14-feet wide on curves and 11-feet wide on straight sections;
- Drive-through lanes shall provide sufficient vehicle stacking area behind the menu board to accommodate a minimum of four cars;
- No drive-through lanes shall exit directly onto a public right-of-way;
- Landscaping shall screen drive-through and drive-in lanes from the public right-of-way and shall minimize the visual impact of the menu board and directional signs;
- Drive-through lanes shall be constructed with PCC [plain cement concrete] concrete;
- Drive-through lanes shall be set back from the face of the curb of any street frontage a minimum of 20 feet;
- Only one menu board may be permitted and shall be a maximum of 30 square feet in the area of the sign face, with a maximum height of 7 feet and shall face away from the street.

The proposed project meets the locational requirements and all the above design standards; thus, the proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose

⁹⁸ City of Watsonville, Title 14, Zoning: Section 14-41 Part 1 – Drive-Through Facility Restrictions, <https://www.codepublishing.com/CA/Watsonville/#!/Watsonville14/Watsonville1416.html#14-16.1200>, accessed February 22, 2019.

ENVIRONMENTAL ANALYSIS

of avoiding or mitigating a potential environmental impact. Therefore, the proposed project would have a *less-than-significant* impact.

XI. NOISE

Would the proposed project result in:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
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 in other applicable local, state, or federal standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>

EXISTING CONDITIONS

Sensitive Receptors

Certain land uses are particularly sensitive to noise and vibration. These uses include residences, schools, hospital facilities, houses of worship, and open space/recreation areas where quiet environments are necessary for the enjoyment, public health, and safety of the community. The proposed project site is primarily in the vicinity of commercial uses. The nearest sensitive receptors are Ramsay Park, residences, and the Valley Inn. Ramsay Park is located to the west, the nearest residences are located northeast across Main Street and to the east and southeast, and the Valley Inn is located northeast across Main Street. There is no active outdoor use area at the Valley Inn. Appendix F includes background on the fundamentals of noise and common definitions used in this analysis.

Applicable Standards

State Regulations

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a general plan that includes a noise element which is to be prepared according to guidelines adopted by the Governor's Office of Planning and

ENVIRONMENTAL ANALYSIS

Research. The purpose of the noise element is to “limit the exposure of the community to excessive noise levels.”

City of Watsonville

Noise Element

The City of Watsonville has adopted a Noise and Land Use Compatibility standards as part of their Public Safety Element of the General Plan. Goal 12.8, Noise Hazard Control, is to evaluate new and existing land uses in the city for compatibility related to noise effects and require, as appropriate, mitigation where harmful effects can be identified, and measurable improvement will result. Policy 12.M, Noise, states that the City shall utilize land use regulations and enforcement to ensure that noise levels in developed areas are kept at acceptable levels, and that future noise-sensitive land uses are protected from noise that is harmful.

The Public Safety Element also identifies the City’s noise compatibility guidelines for different land uses. According to Figure 12-6 of the General Plan (see Figure 4-5), the normally acceptable noise limit for single family residential land uses is 60 Community Noise Equivalent Level (CNEL), for lodging land uses 65 CNEL, and for office and other commercial land uses 75 CNEL.

Municipal Code Standards

To implement the City’s noise policies, the City adopted Chapter 8, Noise, in Title 5, Public Welfare, Morals, and Conduct, of the WMC. WMC Chapter 5-8 prohibits specific types of noises, such as continuous or unusually loud noise that disturbs residential property or public ways within the city. Specifically, it is unlawful for any person to generate noise which either annoys, disturbs, injures, or endangers the comfort, repose, health, peace, or safety of others on residential property or public ways within the city, including, but not limited to:

- The use of radios, music instruments, stereos, televisions, or other similar devices that disturb the peace and quiet of neighboring residential inhabitants, including the use of such devices between the hours of 10:00 p.m. and 7:00 a.m. that are plainly audible at a distance of 50 feet from the structure in which the device is located (WMC Section 5-8.02(a)).
- Yelling, shouting, hooting, whistling, or singing originating from any residential property or upon any public way at any time so as to annoy or disturb the quiet comfort and repose of nearby persons (WMC Section 5-8.02(c)).

The WMC does not establish quantified noise standards; therefore, for the purposes of this Initial Study analysis, the Santa Cruz County Code is used. The County of Santa Cruz enforces noise standards through County Code Chapter 8.30, Noise. The county sets a noise standard of 75 dBA during the daytime (8:00 a.m. – 10:00 p.m.) and 60 dBA during the nighttime (10:00 p.m. – 8:00 a.m.).

ENVIRONMENTAL ANALYSIS

Figure 4-5 Land Use Compatibility for Community Noise Environments

LAND USE CATEGORY	COMMUNITY NOISE Ldn or CNEL, dB						INTERPRETATION
	55	60	65	70	75	80	
Residential - Single Family Duplex, Mobile Home							NORMALLY ACCEPTABLE Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
Residential - Multi-Family							
Transient Lodging - Motel, Hotel							CONDITIONALLY ACCEPTABLE New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
School, Library, Church, Hospital, Nursing Home							
Auditorium, Concert Hall, Amphitheatre							NORMALLY UNACCEPTABLE New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Sports Arena, Outdoor Spectator Sports							
Playground, Neighborhood Park							CLEARLY UNACCEPTABLE New construction or development should generally not be undertaken
Golf Course, Stable, Water Recreation, Cemetery							
Office Building, Business, Commercial & Professional							
Industrial, Manufacturing, Utilities, Agriculture							

Noise Source Characteristics

The land use - noise compatibility recommendations should be viewed in relation to the specific source of the noise. For example, aircraft and railroad noise is normally made up of higher single noise events than auto traffic, but occurs less frequently. Therefore, different sources yielding the same composite noise exposure do not necessarily create the same noise environment.

Suitable Interior Environments

One objective of locating [both single and multi-family] residential units relative to a known noise source is to maintain a suitable interior noise environment at no greater than 45 dB CNEL or Ldn. This requirement, coupled with the measured or calculated noise reduction performance of the type of structure under consideration, should govern the minimum acceptable distance to a noise source.

Source: Watsonville 2005 General Plan, Figure 12-6.

ENVIRONMENTAL ANALYSIS

Vibration Standards

The City of Watsonville and Santa Cruz County do not establish vibration thresholds; therefore, for the purposes of this Initial Study analysis, the Federal Transit Administration (FTA) threshold of 0.2 inches/second (in/sec) peak particle velocity (PPV) will be used to assess vibration impacts.

DISCUSSION

- a) *Would the project 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 in other applicable local, state, or federal standards?*

Traffic Noise

With respect to projected-related increases, noise impacts can be put into three categories. The first is “audible” impacts, which refer to increases in noise level that are perceptible to humans. Audible increases in general community noise levels generally refer to a change of 3 dBA or more since this level has been found to be the threshold of perceptibility in exterior environments. The second category, “potentially audible” impacts, refers to a change in noise level between 1 and 3 dBA. The last category includes changes in noise level of less than 1 dBA that are typically “inaudible” to the human ear except under quiet conditions in controlled environments. Only “audible” changes in noise levels at sensitive receptor locations (i.e., 3 dBA or more) are considered potentially significant. Note that a doubling of traffic flows (i.e., 10,000 vehicles per day to 20,000 per day) would be needed to create a 3 dBA increase in traffic-generated noise levels. An increase of 3 dBA is often used as a threshold for a substantial increase.

Daily trip generation was provided and used to determine the permanent traffic noise level increase due to implementation of the proposed project. This analysis compares project average daily trips (ADT) to existing daily trips logarithmically to estimate the project noise increase along Main Street, from Green Valley Road to Freedom Boulevard. Existing ADT on Main Street is 29,900 trips and the project would generate 2,986 net new daily trips. The existing plus project volume would be 32,886 ADT, resulting in a noise level increase of approximately 0.4 dBA. Cumulative growth would add approximately 1,500 ADT, calculated using the AMBAG model by taking the difference between existing trips and 2040 scenario. This would result in a cumulative plus project noise increase of approximately 0.6 dBA. The projected traffic noise increase is less than 3 dBA and, therefore, would be *less than significant*.

Construction Noise

Construction vehicles such as worker vans and haul trucks used to transport equipment and haul off demolition debris may create momentary noise levels of up to 85 dBA L_{max} at 50 feet. Haul trips would

ENVIRONMENTAL ANALYSIS

occur when hauling demolition debris off-site. However, these occurrences would be generally infrequent and short-lived.

Noise generated during demolition and construction is based on the type of equipment used, the location of the equipment relative to sensitive receptors, and the timing and duration of the noise-generating activities. Each phase of construction involves the use of different kinds of construction equipment and, therefore, has its own distinct noise characteristics. Noise levels from construction activities are dominated by the loudest piece of construction equipment. The dominant noise source is typically the engine, although work piece noise (such as dropping of materials or buckets) can also be noticeable.

The noise produced at each construction stage is determined by combining the L_{eq} contributions from each piece of equipment used at a given time, while accounting for the on-going time variations of noise emissions (commonly referred to as the usage factor). Heavy equipment, such as a dozer or a loader, can have maximum, short-duration noise levels of 85 dBA at 50 feet. However, overall noise emissions vary considerably, depending on what specific activity is being performed at any given moment. Noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks at each construction phase would result in different noise levels from construction activities at a given receptor. Since noise from construction equipment is intermittent and diminishes at a rate of at least 6 dBA per doubling of distance (conservatively ignoring other attenuation effects from air absorption, ground effects, and/or shielding/scattering effects), the average noise levels at noise-sensitive receptors could vary considerably, because mobile construction equipment would move around the site with different loads and power requirements. Noise levels from project-related construction activities were calculated from the simultaneous use of all anticipated construction equipment during a given phase at spatially averaged distances (i.e., from the acoustical center of the general construction site) to the property line of the nearest receptors. Although construction may occur across the entire phase area, the area around the center of construction activities best represents the potential average construction-related noise levels at the various sensitive receptors.

Construction is anticipated to last approximately one year, separated into six phases: demolition, site preparation, grading, building construction, paving, and painting. Construction activity is proposed to occur during daytime hours. Each phase will use a variation of construction equipment/equipment mix with associated noise levels. The use of pile driving is not anticipated. The WMC and Santa Cruz County Code do not establish quantified thresholds for construction noise levels; therefore, the FTA recommended criterion of 80 dBA L_{eq} is used to assess construction noise impacts that occur in the daytime hours.

Noise levels were determined by modeling the anticipated equipment mix by phase using the Federal Highway Administration's Roadway Construction Noise Model (RCNM). Table 4-7 summarizes noise levels per phase below at the nearest sensitive receptors. Appendix F contains the RCNM modeling inputs and outputs. As shown in Table 4-7, construction-related noise is not projected to exceed the FTA 80 dBA L_{eq} criterion. Therefore, this impact would be *less-than-significant*.

ENVIRONMENTAL ANALYSIS

TABLE 4-7 CONSTRUCTION RELATED NOISE LEVELS, DBA L_{EQ}

Phase	Valley Inn (450 Feet Northeast) ^a	Ramsay Park (450 Feet West) ^a	Residential (800 Feet Southeast and Northeast) ^a
Demolition	67	67	62
Site Preparation	66	66	61
Grading	66	66	61
Building Construction	64	64	59
Paving	67	67	62
Painting	55	55	50

a. Measured from the acoustical center of the construction site to property line of sensitive receptor.
Source: Federal Highway Administration RCNM.

Stationary Noise

The project would contribute stationary noise sources from heating and cooling mechanical equipment (HVAC) and drive-through speaker box noise. Typical HVAC units range from 70 to 75 dBA at a distance of three feet. The nearest sensitive receptor is the Valley Inn located 325 feet northeast from proposed Building 2. At this distance, HVAC equipment noise levels would attenuate to approximately 34 dBA. Operational noise levels would be lower at receptors further away such as the residences and the park.

Field measurements conducted by PlaceWorks staff found that typical drive-through speaker box noise is about 72 dBA at 4 feet.⁹⁹ Drive-through noise from the speaker box would attenuate to approximately 33 dBA at the Valley Inn. The combination of HVAC and drive-through noise is estimated to be 37 dBA. This would not exceed the County's threshold of 75 dBA during the daytime or 60 dBA during the nighttime. Operational noise levels would be lower at receptors further away such as the residences and the park. This would result in a *less-than-significant* impact.

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

Potential vibration impacts associated with development projects are usually related to the use of heavy construction equipment during (a) demolition and grading phases of construction and/or (b) the operation of large trucks over uneven surfaces during project operations.

⁹⁹ A Larson Davis LxT sound level meter satisfying the American National Standards Institute (ANSI) standard for Type 1 instrumentation was used. The sound level meter was set to "slow" response and "A" weighting (dBA) and was calibrated before and after noise measurement. Measurements were taken at a local restaurant drive-through approximately 4 feet from the speaker box.

ENVIRONMENTAL ANALYSIS

Construction Vibration

Construction activities generate varying degrees of ground vibration, depending on the construction procedures, construction equipment used, and proximity to vibration-sensitive uses. The generation of vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight damage at the highest levels. Table 4-8 lists reference vibration levels for different types of commonly used construction equipment.

TABLE 4-8 VIBRATION LEVELS FOR TYPICAL CONSTRUCTION EQUIPMENT

Equipment	Approximate PPV (in/sec) at 25 Feet
Vibratory Roller	0.21
Large Bulldozer, Hoe Ram, Caisson Drilling	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer	0.003

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

The term architectural damage is defined as minor surface cracks (in plaster, drywall, tile, or stucco) or the sticking of doors and windows. This is below the severity of structural damage, which compromises structural soundness or threatens the basic integrity of the building shell. Building damage is typically not a concern for most projects, with the occasional exception of blasting and pile driving during construction.¹⁰⁰ No blasting, pile driving, or rock-crushing activities will be required during project construction.

For reference, 0.2 in/sec PPV is used as the limit for non-engineered timber and masonry buildings. Beyond 25 feet, construction-generated vibration levels would be less than 0.2 in/sec PPV. The nearest building is approximately 250 feet to the north (Grocery Outlet Bargain Market) of proposed construction activity. There are no buildings or other sensitive structures within 25 feet of the proposed construction area. Therefore, this impact would be *less than significant*.

Operational Vibration

The operation of the proposed project would not include any long-term vibration sources. Thus, no significant vibration effects from operations sources would occur and there would be *no impact*.

- 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 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

The nearest airport to the project site is the Watsonville Municipal Airport, approximately 1.5 miles to the northwest. The project is, however, located outside of the airport's 55 dB CNEL noise contour. Therefore, this impact would be *less than significant*.

¹⁰⁰ Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Assessment*. September.

ENVIRONMENTAL ANALYSIS

XII. POPULATION AND HOUSING

Would the proposed project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Induce substantial unplanned population growth or growth for which inadequate planning has occurred, 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"/>
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"/>

EXISTING CONDITIONS

There is no population on-site, because the site is currently developed with commercial uses. The buildings on-site most recently contained three auto service and repair shops, an auto supply store, a grocery store, a restaurant, and a storage building, providing about 26 jobs on-site.¹⁰¹

DISCUSSION

a) *Would the project induce substantial unplanned population growth or growth for which inadequate planning has occurred, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The proposed project would construct three commercial buildings to include two drive-through style restaurants, and space for fast casual restaurants and retail spaces that are expected to generate 30 split shift style jobs. The project site is under the General Commercial General Plan land use designation and the Commercial Thoroughfare zoning district and is therefore designated in both the General Plan and the Zoning Code as a site planned for commercial development. The commercial land uses proposed on-site would not introduce any permanent residents on-site and does not propose any extension of roadways or infrastructure. In addition, the proposed project is not a regionally significant employer and it is anticipated that future employees of the proposed project would come from within Watsonville and surrounding communities. As discussed in the Existing Conditions above, the previous commercial uses on-site employed approximately 26 people, and the proposed project is expected to accommodate approximately 35 employees, leading to a net increase of 9 jobs.

¹⁰¹ Fermin, Rod. Boos Development West, LLC. Email correspondence with Justin Meek, City of Watsonville. April 25, 2019.

ENVIRONMENTAL ANALYSIS

According to AMBAG, Watsonville is projected to have 26,772 jobs by 2040, which is an 18 percent increase from the 22,644 jobs in 2015.¹⁰² The project's estimated nine new jobs would be well within the forecasted employment increases in Watsonville. Therefore, the proposed project's potential to impact growth on future new employment, and for inducement of unplanned growth, would be *less than significant*.

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

The project site does not contain any residential units and would not displace housing. Therefore, the project would have *no impact* associated with the displacement of substantial numbers of housing.

XIII. PUBLIC SERVICES

Would the proposed project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Libraries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

¹⁰² Association of Monterey Bay Area Governments, *2040 Metropolitan Transportation Plan/Sustainable Communities Strategy, Appendix A: Regional Growth Forecast*, https://ambag.org/programs/met_transp_plann/documents/Final_2040_MTP_SCS/08-AMBAG_MTP-SCS_AppendixA.pdf, accessed April 22, 2019.

ENVIRONMENTAL ANALYSIS

EXISTING CONDITIONS

The public service providers for the project site are as follows:

- The City of Watsonville Fire Department (WFD) is responsible for fire protection and prevention, emergency, medical, and citywide disaster planning and recovery.
- The City of Watsonville Police Department (WPD) is solely responsible for police protection services.
- The project site is within the Pajaro Valley Unified School District.
- The Watsonville Public Library governs and administers one community library, one library branch, a literacy program, and many programs for all ages. The Watsonville Public Library is approximately 0.75-mile southeast of the project site, located at 275 Main Street in Watsonville.

DISCUSSION

- a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: (i) Fire protection, (ii) Police protection, (iii) Schools, (iv) Libraries, or (v) Other public facilities?*

The primary purpose of the public services impact analysis is to examine the impacts associated with physical improvements to public service facilities required to maintain acceptable service ratios, response times or other performance objectives. Public service facilities need improvements (i.e., construction, renovation, or expansion) as demand for services increase. Increased demand is typically driven by increases in population. The proposed project would have a significant environmental impact if it would exceed the ability of public service providers to adequately serve residents, thereby requiring construction of new facilities or modification of existing facilities.

As discussed above in Section XII, Population and Housing, the proposed project would result in construction of commercial businesses and would not result in any new residences on the project site. Additionally, the proposed project would not create a substantial amount of jobs on the project site that would directly result in any additional new population or employment growth beyond what is accounted for in the City's General Plan or regional projections. Because the proposed project would not create a substantial amount of new jobs, impacts to public services providers as a result of the proposed project would also be *less than significant* and no mitigation measures would be required.

ENVIRONMENTAL ANALYSIS

XIV. PARKS AND RECREATION

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

EXISTING CONDITIONS

The City of Watsonville Parks and Community Services Department is responsible for the maintenance of the city's 26 parks, one planned pocket park, and one planned neighborhood park over approximately 143 acres of park land.¹⁰³ The City has adopted a parkland dedication standard of three acres of parkland for every 1,000 residents.¹⁰⁴ According to the California Department of Finance, the City of Watsonville had an estimated population of 53,434 in 2018,¹⁰⁵ meaning there is approximately 2.6 acres of parkland per 1,000 residents. The City of Watsonville has an adopted in-lieu park fee that require developers to either dedicate land to parks and open space or pay an impact fee; however, this impact fee is only required of residential subdivisions and developments. Commercial development is exempt from paying into parkland in-lieu fees.

DISCUSSION

- 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?*

The proposed project would increase the number of employees at the project site; however, no families with children or other permanent residents that are assumed to frequently use the existing neighborhood and regional parks would be introduced to the city as a result of the proposed project. Accordingly, the project is not expected to increase the use of any existing neighborhood and regional parks or other recreational facilities and no new facilities would be required to meet the demand.

¹⁰³ City of Watsonville. Parks Master Plan. MIG Consulting. September 2009.

¹⁰⁴ City of Watsonville Municipal Code, Section 13-6.06, Standards and Formula for Dedication of Parkland.
<https://www.codepublishing.com/CA/Watsonville/#!/Watsonville13/Watsonville1306.html>, accessed on April 22, 2019.

¹⁰⁵ California Department of Finance, *E-1 Population Estimates for Cities, Counties, and the State- January 1, 2017 and 2018*. May 2018.

ENVIRONMENTAL ANALYSIS

As described above in Section XII, Population and Housing, the estimated 35 employees would likely be residents of Watsonville or the surrounding area and would not relocate from other locations thereby generating new population to the city. The proposed project is purely commercial and would not directly result in any additional new population growth to the city. Therefore, impacts to parks and recreational services as a result of the proposed project would be *less than significant* and no mitigation measures would be required.

b) *Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

As discussed in criterion (a) above, unlike permanent residents in Watsonville, future patrons of the proposed development are not expected to use park and recreational facilities; therefore, the proposed project would not result in substantial deterioration or cause the need for construction of new built facilities. Therefore, impacts to parks and recreational services as a result of the proposed project would also be *less than significant* and no mitigation measures would be required.

XV. TRANSPORTATION

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

METHODOLOGY

The following is based on the Traffic Impact Analysis (TIA) prepared for the proposed project. The TIA is included in Appendix G, Transportation Impact Analysis, of this Initial Study. The objective of the TIA was to determine the number of new trips generated by the project, the specific routes that the new traffic takes, and to identify street intersections based on City of Watsonville and Caltrans significance criteria that may be impacted by development of this project.

The trip generation for this project was calculated using trip generation rates published in the Trip Generation Manual (Institute of Transportation Engineers, 10th Edition, 2017). The TIA also took into account “pass-by trips” and “internally capture trips” based on the ITE Trip Generation Handbook, 3rd

ENVIRONMENTAL ANALYSIS

Edition and Caltrans' 5 percent internal capture rate from their Guide for the Preparation of Traffic Studies, respectively. (See page 20 of the in TIA in Appendix G for additional information on methodology).

The project would generate 2,986 new daily trips, 164 new AM peak hour trips, 186 new PM peak hour trips and 373 new noon peak hour trips.

Significant Impact Criteria

For the purposes of this Initial Study, the criteria used to determine significant impacts on signalized intersections are based on the City's level of service standards, also referred to as "LOS" when accompanied by a qualitative description of operating conditions ranging from LOS "A," or free-flow conditions with little or no delay; to LOS "F," or jammed conditions with excessive delays. Table 4-9 presents the level of service definitions.

TABLE 4-9 LEVEL OF SERVICE DEFINITIONS

Level of Service	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
"A"	Uncongested operations, all queues clear in a single-signal cycle. Delay ≤ 10.0 sec	Little or no delay. Delay ≤ 10 spv	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. Delay > 10.0 sec and ≤ 20.0 sec	Short traffic delays. Delay > 10 spv and ≤ 15 spv	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. Delay > 20.0 sec and ≤ 35.0 sec	Average traffic delays. Delay > 15 spv and ≤ 25 spv	Ability to maneuver and select operating speed affected.
"D"	Significant congestion of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay > 35.0 sec and ≤ 55.0 sec	Long traffic delays. Delay > 25 spv and ≤ 35 spv	Unstable flow, speeds and ability to maneuver restricted.
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55.0 sec and ≤ 80.0 sec	Very long traffic delays, failure, extreme congestion. Delay > 35 spv and ≤ 50 spv	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. Delay > 80.0 sec	Intersection blocked by external causes. Delay > 50 spv	Forced flow, breakdown.

Note: sec = seconds; spv = seconds per vehicle

Source: KD Anderson & Associates, Inc., 2019, Transportation Impact Analysis, August.

ENVIRONMENTAL ANALYSIS

Intersection Level of Service

City of Watsonville

The City of Watsonville identifies LOS D as the acceptable level of service at intersections. Based on previously prepared traffic studies in the City of Watsonville and direction from City of Watsonville staff, the following significance criteria apply for intersections under the jurisdiction of the City of Watsonville. It shall be noted that all study intersections are along Main Street, which is a Caltrans state route (SR 152).

A significant impact at a signalized study intersection is defined to occur under either of the following two conditions:

- A significant impact would occur if an intersection operating at LOS A, B, C, or D degrades to E or F; or
- For intersections already operating at unacceptable LOS E or F, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 second.

A significant impact at a minor street stop-controlled study intersection is defined to occur under either of the following two conditions:

- A significant impact would occur if any traffic movement operating at LOS A, B, C, D, or E degrades to F; or
- For intersections already operating at unacceptable LOS F, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 second.

Caltrans

Caltrans strived to achieve LOS C at its facilities. The following significance criteria have been used within this study at all intersections, which are under the jurisdiction of Caltrans.

A significant impact at a signalized study intersection is defined to occur under either of the following two conditions:

- A significant impact would occur if an intersection operating at LOS A, B, or C degrades to D, E, or F; or
- For intersections already operating at unacceptable LOS D, E, or F, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 second.

A significant impact at a one- or two-way stop-controlled study intersection is defined to occur under either of the following two conditions:

- A significant impact would occur if any traffic movement operating at LOS A, B, C, D, or E degrades to F; or
- For intersections already operating at unacceptable LOS F, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 second.

ENVIRONMENTAL ANALYSIS

Intersection Queuing

The quality of traffic flow can also be affected by queuing at signalized intersections. For this study, the lengths of peak period queues have been identified and compared to available storage in order to determine whether spillover from turn lanes can affect adjoining travel or extend through adjacent intersections. 95th percentile queue lengths have been calculated as a byproduct of the Synchro-SimTraffic simulation. Those locations where the 95th percentile queue exceeds the available storage have also been noted.

EXISTING CONDITIONS

The existing conditions without the proposed project for intersections, pedestrian and bicycle facilities, and transit services are discussed below.

The project is located in the south quadrant of the Main Street/Auto Center Drive intersection. Local east-west circulation is provided on Main Street. North-south circulation is provided on Auto Center Drive. Access to the project site the site is provided at the existing signalized Main Street/Auto Center Drive intersection. Regional access to the project site is provided by California SR 1 to the southeast and California SR 129 to the south.

Intersections

The TIA prepared for the proposed project analyzed the following seven intersections within the vicinity of the project.

- Main Street/South Green Valley Road
- Main Street/Watsonville Square Shopping Center
- Main Street/Ohlone Parkway – Clifford Drive
- Main Street/Pennsylvania Drive
- Main Street/Auto Center Drive
- Main Street/Rodriguez Street
- Main Street/Freedom Boulevard/Western Drive

The existing level of service for the study intersections are listed in Table 4-10 below. All intersections, except the Main Street/Green Valley Drive intersection and the Main Street/Ohlone Parkway – Clifford Drive intersection operate within acceptable level of service, which is LOS C or better according to Caltrans criteria. The intersections of Main Street/Green Valley Drive, and Main Street/Ohlone Parkway – Clifford Drive intersections operates at LOS D, which are considered below the minimum acceptable per Caltrans criteria.

ENVIRONMENTAL ANALYSIS**TABLE 4-10** **EXISTING PEAK HOUR LEVELS OF SERVICE AT INTERSECTIONS**

Location	AM Peak Hour		PM Peak Hour		Noon Peak Hour	
	LOS	Average Delay	LOS	Average Delay	LOS	Average Delay
1. Main Street/Green Valley Road	D	39.0	D	50.4	C	28.8
2. Main Street/Watsonville Square Shopping Center	A	7.9	B	14.7	B	14.9
3. Main Street/Ohlone Parkway – Clifford Drive	D	36.0	D	54.1	D	35.9
4. Main Street/Pennsylvania Drive	B	13.4	B	18.6	B	13.9
5. Main Street/Auto Center Drive – East Project Access	B	14.2	B	18.2	B	16.0
6. Main Street/Rodriguez Street	A	9.9	B	12.0	A	9.1
7. Main Street/Freedom Boulevard – Western Drive	C	25.1	C	29.3	B	20.3
8. Main Street/West Driveway NB Right	No observed driveway traffic					

Note: **Bold** = indicates deficient intersection

Source: KD Anderson & Associates, Inc., 2019, Transportation Impact Analysis, August.

Existing Pedestrian, Bicycle, and Transit Facilities*Pedestrian Facilities*

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. The main access to the site is provided at the signalized intersection of Main Street and Auto Center Drive. Sidewalks exist along the north and south sides of Main Street between Green Valley Road and Freedom Boulevard. Sidewalks are also present along the east and west side of Auto Center Drive. The project site can be accessed via crosswalks and pedestrian signals present along the north, east, and west approaches. A crosswalk and pedestrian signal intersection are not present along the south approach.

Marked crosswalks with pedestrian signal heads and push buttons are provided at all study area intersections. Although some crosswalk connections are missing, the overall network of sidewalks and crosswalks in the study area has adequate connectivity and provides pedestrians with safe routes to transit services and other points of interest in the vicinity of the project site.

Bicycle Facilities

Designated bicycle facilities exist on various part of the City of Watsonville. An existing street-based trail exists along Main Street between Ramsay Park and the west side of Rodriguez Street along the project frontage. The City's 2012 Trails and Bicycle Master Plan identifies the Lower Watsonville Slough Loop Trail as a greenway loop along the perimeter of the slough from Highway 1 along Main Street. When completed, the existing street-based trail will become a portion of this larger trail. In 2015 a Bicycle Safety Assessment was conducted by ITS Berkeley to improve bicycle traffic safety and enhance circulation along the city's transportation corridors. Among the key findings were that Main Street is a well-used bicycle

ENVIRONMENTAL ANALYSIS

route but is in need of improvements to make the corridor more bicycle-friendly. Currently, marked bicycle lanes are present along Main Street between Ohlone Parkway and Rodriguez Street.

Public Transportation Facilities

Transit Service

Santa Cruz County Metro Transit District provides bus service throughout Santa Cruz County in Watsonville. Four routes stop are located directly north of the project site at the Main Street/Auto Center Drive intersection. Table 4-11 summarizes the destinations, closest stop to the project site, hours/days of operation, and service frequencies for transit services within walking distance.

TABLE 4-11 EXISTING TRANSIT SERVICE

SANTA CRUZ METRO LOCAL BUS SERVICE					
				Weekdays	
Routes	From	To	Distance to Nearest Stop	Operating Hours ^a	Peak Headway ^b
Santa Cruz Metro Local Bus Routes					
71	Santa Cruz Metro Center	Watsonville Transit Center	100 feet	5:33 a.m. to 12:15 a.m.	30 minutes
72	Watsonville Transit Center	Pinto Lake	100 feet	6:45 a.m. to 5:45 p.m.	60 minutes
72W	Watsonville Transit Center	Pinto Lake	100 feet	9:25 a.m. to 5:25 p.m.	120 minutes
75	Watsonville Transit Center	Monte Vista High School	100 feet	5:15 a.m. to 6:15 p.m.	60 minutes
69W	Santa Cruz Metro Center	Watsonville Transit Center	875 feet	6:37 a.m. to 8:37 p.m.	30 minutes
91X	Santa Cruz Metro Center	Watsonville Transit Center	875 feet	6:55 a.m. to 4:50 p.m.	30 minutes

Notes: AM = morning commuter period; PM = evening commute period; NB = northbound; SB = southbound

a. Operating hours consider earliest and latest stop for the bus lines closest stop to the project site.

b. Headways are defined as the time interval between two transit vehicles traveling in the same direction over the same route.

Source: KD Anderson & Associates, Inc., 2019, Transportation Impact Analysis, August; Santa Cruz Metro Transit District, Schedule, 2019.

DISCUSSION

- a) *Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?*

The trip generation for this project was calculated using trip generation rates published in the Trip Generation Manual (Institute of Transportation Engineers, 10th Edition, 2017) and adjusted taking into account pass-by trips and internal capture trip reductions (see Table 4-12). More details are discussed in pages 21 to 24 of the TIA. The sum of individual land uses would generate about 6,103 total daily trips, 332 AM peak hour trips, 371 PM peak hour trips and 773 noon peak hour trips. After taking into account

ENVIRONMENTAL ANALYSIS

TABLE 4-12 PROJECT TRIP GENERATION

Category	Trips Per Unit									
	Daily	AM Peak Hour			PM Peak Hour			Noon Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
Land Use Trip Generation	6103	173	159	332	192	179	371	431	342	773
Internal Capture	(305)	(9)	(8)	(17)	(10)	(9)	(19)	(22)	(17)	(39)
Pass-Bys	(2,812)	(79)	(72)	(152)	(87)	(80)	(167)	(202)	(160)	(362)
Net New Trips	2,986	86	79	164	96	90	186	208	165	373

a. Trip generation based on average trip rates for Shopping Center (land use 820), Fast Casual Restaurant (land use 930), Fast Food with Drive Thru (land use 934) and Coffee Shop (land use 937) published in ITE's Trip Generation Manual, 10th Edition, 2017.

Source: See Table 4 of the Transportation Impact Analysis prepared for the proposed project by KD Anderson & Associates.

trip reductions due to pass-by trips and internal capture, the project would generate a net 2,986 daily trips, 164 AM peak hour trips, 186 PM peak hour trips and 373 noon peak hour trips.

The distribution of traffic was developed based on the existing traffic patterns and the patterns developed in the travel demand model provided by AMBAG. To evaluate the traffic related effects of the project, trips that would be generated by the project were distributed onto the roadway network. The traffic distribution and project traffic volumes are shown in Figures 5 and 6 of the TIA.

The following analysis was performed to evaluate traffic conditions during the weekday morning (AM), weekday evening (PM), and mid-day peak hours for the following scenarios:

- *Existing plus Project Conditions.* In addition to the Existing Without Project conditions discussed previously, the Existing plus Project conditions were evaluated by adding traffic from the proposed project.
- *Cumulative plus Project Conditions (2040).* The analysis of the long range 2040 cumulative condition is intended to consider the impact of this project within the context of the Monterey/Santa Cruz region buildout projected to occur by 2040.

Existing plus Project Conditions

Intersection levels of service were calculated with the new traffic added by the project to evaluate the operating conditions of the intersections and identify potential impacts to the roadway system. The results of the intersection level of service calculations for Existing plus Project conditions are presented in Table 4-13. As shown on Table 4-13 all intersections except the Main Street/Green Valley Road and Main Street/Ohlone Parkway – Clifford Drive intersections will operate above the minimum LOS threshold (i.e., LOS C or better).

ENVIRONMENTAL ANALYSIS

TABLE 4-13 EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE RESULTS

ID	Intersection	Peak Hour ^a	Existing Without Project		Existing Plus Project	
			Delay	LOS	Delay	LOS
1	Main Street/Green Valley Road	AM	39.0	D	38.8	D
		PM	50.4	D	52.8	D
		Noon	28.8	C	29.8	C
2	Main Street/Watsonville Square Shopping Center	AM	7.9	A	8.2	A
		PM	14.7	B	14.2	B
		Noon	14.9	B	14.6	B
3	Main Street/Ohlone Parkway – Clifford Drive	AM	36.0	D	39.1	D
		PM	54.1	D	55.0	E
		Noon	35.9	D	34.5	C
4	Main Street/Pennsylvania Drive	AM	13.4	B	11.9	B
		PM	18.6	B	17.7	B
		Noon	13.9	B	13.6	B
5	Main Street/Auto Center Drive – East Project Access	AM	14.2	B	21.8	B
		PM	18.2	B	50.1	C
		Noon	16.0	B	27.6	C
6	Main Street/Rodriguez Street	AM	9.9	A	12.1	B
		PM	12.0	B	37.0	B
		Noon	9.1	A	10.0	B
7	Main Street/Freedom Boulevard – Western Drive	AM	25.1	C	28.8	C
		PM	29.3	C	37.0	C
		Noon	20.3	B	20.8	C
8	Main Street/West Project Access NB Right	AM	No observed driveway traffic		18.5	A
		PM			37.0	B
		Noon			9.8	A

Note: **Bold** indicates a significant impact.

a. AM = morning peak hour, PM = evening peak hour.

Source: See Table 6 of the Transportation Impact Analysis prepared for the proposed project by KD Anderson & Associates.

The Main Street/Green Valley Road intersection will operate at LOS D in the AM and PM peak hours. The AM peak hour is within 0.1 second per vehicle (spv) of the pre-project conditions. This is not considered significant. The PM peak hour operates at 52.8 spv which is greater than 0.1 spv difference. This is considered a significant impact.

The Main Street/Ohlone Parkway – Clifford Drive intersection will operate at LOS D/E in the AM and PM peak hours. The AM peak hour operates at 39.1 spv while the PM peak hour operates at 55.0 spv. Both are greater than the 0.1 spv difference. The project will contribute fees to the existing citywide traffic impact mitigation (TIM) fee program, which are calculated based on the number of trips generated by the project and according to the fee schedule issues by the City. With the implementation of Mitigation Measure TR-1, this impact would be reduced to a *less-than-significant* level.

Impact TR-1: With the project, during the PM peak hour period, the Main Street/Green Valley Drive intersection would operate at an unacceptable level that exceeds the 0.1 spv threshold. During the AM

ENVIRONMENTAL ANALYSIS

and PM peak hour periods, the Main Street/Ohlone Parkway – Clifford Drive intersection would operate at unacceptable levels that exceed the 0.1 spv threshold.

Mitigation Measure TR-1: The signal system along Main Street should be retimed to reach acceptable levels of service. The following changes should be considered:

- During the AM peak hour, the signal system along Main Street should be modified to a 110-second cycle between Green Valley Road and Ohlone Parkway – Clifford Drive with a half cycle at the Watsonville Square intersection. The segment from Pennsylvania Drive to Freedom Boulevard should be modified to a 116-second cycle with a half cycle at Rodriguez Street
- During the PM peak hour, the signal system along Main Street should be modified from the current 135-second cycle between Green Valley Road and Ohlone Parkway – Clifford Drive and 120-second cycle from Pennsylvania Drive to Freedom Boulevard. The proposed signal cycle length would be 116 seconds for the entire network.
- An eastbound to southbound right turn overlap should be installed at the Main Street/Ohlone Parkway – Clifford Drive intersection. This is consistent with the Sunshine Vista Phased Development Project FEIR, May 2018.

With implementation of these new timing plans all intersections will operate better or within 0.1 seconds of delay of the pre-project conditions as identified below:

- Main Street/Green Valley Drive: This intersection will operate with delays of 33.7 spv in the AM peak hour and 46.8 spv in the PM peak hour. These delays are within the level of service threshold mitigation parameters of the pre-project conditions.
- Main Street/Ohlone Parkway – Clifford Drive: This intersection will operate with delays of 35.7 spv in the AM peak hour and 46.8 spv in the PM peak hour. These delays are within the level of service threshold mitigation parameters of the pre-project conditions.

Signal timing is the technique that traffic engineers use to distribute right-of-way at a signalized intersection. Signal timing involves deciding how much green time the traffic signal provides to an intersection approach among other factors. While these timing modifications will require Caltrans implementation, it is anticipated that Caltrans retimes intersections frequently based on traffic conditions that change overtime. Because signal timing would not require physical improvements and approvals, and because signal timing is frequently adjusted, the implementation of this mitigation is considered to be feasible.

Cumulative plus Project 2040 Conditions (2040)

The level of service analysis results from the Cumulative plus Project conditions are summarized in Table 4-14. The results presented in Table 4-14 compare the Cumulative and Cumulative plus Project peak hour levels of service for each study intersection. The Main Street/Green Valley Road intersection will operate at LOS D (35.5 spv) in the AM peak hour and LOS D (46.0 spv) in the PM peak hour. The AM delay

ENVIRONMENTAL ANALYSIS

is within 0.1 spv of the delay under 'No Project' conditions and is not considered a significant impact. The PM delay is greater than 0.1 spv of the delay under 'No Project' conditions and is considered a significant impact.

The Main Street/Freedom Boulevard intersection was analyzed as an intersection and also as a roundabout based on a request from City staff. Table 4-14 also presents the results using both configurations. It will operate at LOS C as a signalized condition. As a roundabout it will operate at LOS B conditions.

TABLE 4-14 CUMULATIVE 2040 CONDITIONS INTERSECTION LEVEL OF SERVICE RESULTS

ID	Intersection	Peak Hour ^a	Cumulative without Project		Cumulative plus Project	
			Delay	LOS	Delay	LOS
1	Main Street/Green Valley Road	AM	36.4	D	35.5	D
		PM	44.6	D	46.0	D
		Noon	30.7	C	31.2	C
2	Main Street/Watsonville Square Shopping Center	AM	8.5	A	9.6	A
		PM	12.0	B	14.7	B
		Noon	15.2	B	15.8	B
3	Main Street/Ohlone Parkway – Clifford Drive	AM	26.4	C	30.2	C
		PM	32.0	C	31.5	C
		Noon	25.8	C	26.9	C
4	Main Street/Pennsylvania Drive	AM	14.3	B	12.4	B
		PM	24.0	C	16.5	B
		Noon	15.3	B	14.5	B
5	Main Street/Auto Center Drive – East Project Access	AM	15.8	B	20.2	C
		PM	32.1	C	24.6	C
		Noon	18.2	B	27.3	C
6	Main Street/Rodriguez Street	AM	15.2	B	16.0	B
		PM	29.1	C	22.3	C
		Noon	13.6	B	14.3	B
7	Main Street/Freedom Boulevard – Western Drive	AM	23.8	C	23.4	C
		PM	29.1	C	30.3	C
		Noon	21.5	C	23.1	C
7(2)b	Main Street/Freedom Boulevard – Western Drive	AM	<8.1>	<A>	<8.4>[9.6]	<A> [A]
		PM	<15.8>		<16.9> [21.7]	 [C]
		Noon	<10.2>		<11.1> [13.5]	 [B]
8	Main Street/West Project Access NB Right	AM	No observed driveway traffic		7.9	A
		PM			24.9	C
		Noon			10.6	B

Notes: **Bold** indicates intersection operates with significant impact.

a. AM = morning peak hour, PM = evening peak hour.

b. <XX> – roundabout analysis with existing approach lane configuration; [XX] – roundabout analysis with single lane approach along Freedom Boulevard (reduced lane configuration at request of City).

Source: See Table 12 of the Transportation Impact Analysis prepared for the proposed project by KD Anderson & Associates.

As stated above, all intersections except the Main Street/Green Valley Road intersection would operate within acceptable level of service thresholds, at LOS C or better. The Main Street/Green Valley Drive

ENVIRONMENTAL ANALYSIS

intersection would operate at LOS D (35.5 spv) in the AM peak hour and LOS D (46.0 spv) in the PM peak hour. The AM scenario is within 0.1 seconds of the pre-project condition and is not considered a significant impact while the PM peak hour exceeds the 0.1 spv threshold. Mitigation Measure TR-2 would reduce the PM peak hour impact to a *less-than-significant* level.

Impact TR-2: With the project, during the PM peak hour period, the Main Street/Green Valley Drive intersection would operate at an unacceptable level that exceeds the 0.1 second per vehicle (spv) threshold.

Mitigation Measure TR-2: The project applicant shall obtain an encroachment permit from Caltrans to implement the following changes to the signal operations and lane configuration at the Main Street/Green Valley Drive:

- During the PM peak hour, the signal system along Main Street should be modified from the current 135 second cycle between Green Valley Road and Ohlone Parkway – Clifford Drive and 120 second cycle from Pennsylvania Drive to Freedom Boulevard. The proposed signal cycle length would be 116 seconds for the entire network.
- The intersection of Main Street/Green Valley Drive approaches should be reconfigured as follows:
 - Northbound approach: two left turn lanes, one through lane, and one right turn lane.
 - Southbound approach: one left turn lane, one through lane, and one right turn lane.
- Modify the signal phasing for the northbound and southbound approaches on Green Valley Road from split phase to protected left turns. The intersection is part of a coordinated system along Main Street and the corridor should be retimed to a 110 second cycle as a result of these modifications.

With implementation of TR-2, the intersection will improve to LOS D with a delay of 43.6 spv, which is improved compared to No Project conditions.¹⁰⁶

Intersection Queues

The quality of traffic flow can also be affected by queuing at signalized intersections. In the TIA the lengths of left turn peak period queues have been identified and compared to available storage in order to determine whether spillover from turn lanes can affect adjoining travel or extend through adjacent intersections. The available storage is presented along with the 95th percentile queue length. The peak hour queues for existing conditions are presented in Table 3 of the traffic study, and for Existing plus Project conditions are presented in Table 7 of the traffic study. The 95th percentile queue exceeds available storage in six locations under existing and Existing plus Project conditions:

¹⁰⁶ Flecker, Jonathan. KD Anderson & Associates, Inc. Email correspondence with Christopher Bjornstad, Caltrans, August 5, 2019.

ENVIRONMENTAL ANALYSIS

- Intersection #1: Main Street/Green Valley Drive
 - Northbound left
 - Eastbound left
- Intersection #3: Main Street/Ohlone Parkway – Clifford Drive
 - Northbound left
- Intersection #4: Main Street/Pennsylvania Drive
 - Eastbound left
- Intersection #5: Main Street/Auto Center Drive
 - Eastbound left
- Intersection #7: Main Street/Freedom Boulevard
 - Northbound left

A comparison of Existing and Existing plus Project conditions indicates that the only location where queues would increase with the project would be the northbound left turn lane on Main Street at Freedom Boulevard in the PM peak hour, which would increase by one car. The City of Watsonville and Caltrans do not have significance criteria to assess peak hour queues at intersections. Given that the increase would be small (one car) and would only occur in the PM peak hour, the impact would be *less than significant*.

Under 2040 plus Project conditions five movements have queues that will exceed the available storage. These include:

- Intersection #1: Main Street/Green Valley Drive
 - Northbound left
 - Eastbound left
- Intersection #3: Main Street/Ohlone Parkway – Clifford Drive
 - Northbound left
- Intersection #6: Main Street/Rodriguez Street
 - Northbound left
- Intersection #7: Main Street/Freedom Boulevard
 - Northbound left

Three of the movements, northbound left at the Main Street/Green Valley Drive intersection, northbound left at the Main Street/Ohlone Parkway – Clifford Drive intersection and northbound left at the Main Street/Rodriguez Street intersection will not exceed the Cumulative No Project queues. These are not considered significant impacts.

The eastbound left turn lane queue at the Main Street/Green Valley Drive intersection would exceed the available left turn storage under Cumulative and Cumulative No Project conditions during the PM peak

ENVIRONMENTAL ANALYSIS

hour by one foot. Given one car is approximately 20 feet in length, in practice there would be no increase to the queue.

The northbound left turn lane queue at the Main Street/Freedom Boulevard intersection will exceed the available left turn storage under Cumulative and Cumulative No Project conditions during the PM peak hour by over 30 feet, one car. However, as previously discussed this increase would be negligible and no mitigation would be required.

Pedestrian Facilities

The project is expected to increase the number of pedestrians using the existing sidewalks and crosswalks in the area. One pedestrian entrance would be located on the northwest portion of the site, and two pedestrian entrances would be located near the signalized intersection of Main Street and Auto Center Drive. The project would install enhanced colored concrete pedestrian paths across each of the project site driveways to provide greater visibility for drivers to see pedestrians crossing the project driveways along Main Street. Although some crosswalk connections are currently missing, the overall network of sidewalks and crosswalks in the study area has adequate connectivity and provides pedestrians with safe routes to transit services and other points of interest in the vicinity of the project site. The project would not eliminate or impede any existing pedestrian facilities, nor would it conflict with any of the goals and policies in the City's Pedestrian Plan.

Bicycle Facilities

The project would not remove any bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities. The vehicular access to the project site would remain similar to the existing conditions and would not eliminate or impede the existing bicycle facilities. Bicyclists would access the project site from the existing Class II bike lane on Main Street. The City's 2012 Trails and Bicycle Master Plan identifies the Lower Watsonville Slough Loop Trail as a greenway loop along the perimeter of the slough from Highway 1 along Main Street. When completed, the existing street-based trail will become a portion of this larger trail. The project would provide bike racks adjacent to Building 1, Building 2, and Building 3. Therefore, the proposed project would not obstruct or hinder the implementation of the City's Bike Plan and would support the use of bicycling by providing adequate bike facilities for guests and employees.

Transit

The project site is served by existing Santa Cruz County Metro bus routes. The closest bus stops are located at Main Street and Auto Center Drive and provide access to local bus routes 71, 72, 72W, 75, 69W, and 91X. The Santa Cruz Metro has not established policies or significance criteria related to transit vehicle delay in their Short-Range Transit Plan (2013). The new transit trips generated by the project are not expected to create demand in excess of the transit service that is currently provided.

ENVIRONMENTAL ANALYSIS

Summary

As described, by incorporating the above mitigation measures (Mitigation Measures TR-1 and TR-2), the proposed project would not exceed the City's level of service standards for vehicular transportation. Furthermore, there would be adequate availability of alternative modes of travel including pedestrian, bicycle, and transit in the project area. The proposed project would not displace, modify, or interfere with any transit stop, sidewalk, or bicycle lanes. In addition, the project would not generate a demand for transit that would exceed the capacity of the system. Therefore, the project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Therefore, impacts would be *less than significant* with mitigation.

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

CEQA Guidelines Section 15064.3 was added to the updated CEQA Guidelines on December 28, 2018. This new section describes specific considerations for evaluating a project's transportation impacts. As stated in Section 15064.3(a), VMT is the most appropriate measure of transportation impacts evaluated pursuant to Section 15064.3(b).

VMT is a useful metric in understanding the overall effects of a project on the transportation system. VMT is the sum of all of the vehicle trips generated by a project multiplied by the lengths of their trips to and from the site on an average weekday. A vehicle driven 1 mile is 1 VMT. Therefore, a project with a higher VMT would have a greater environmental effect than a project with a lower VMT.

The trip lengths vary by the land use type and the trip purpose. For example, a trip from a residence to a job may be longer than the trip from a residence to a neighborhood school. The VMT values stated below represent the full length of a given trip, and are not truncated at city, county, or region boundaries.

Many factors affect travel behavior and trip lengths such as density of land use, diversity of land uses, design of the transportation network, distance to high-quality transit, and demographics. Low-density development separated from other land uses and located in areas with poor access to transit generates more automobile travel and higher VMT compared to development located in urban areas with more access to transit.

While the updated CEQA Guidelines were approved on December 28, 2018, cities and other agencies have an opt-in period until July 1, 2020 when CEQA VMT analysis becomes mandatory Statewide. At that time, impacts on auto delay or level of service, as described in criterion (a), will no longer be considered a significant impact under CEQA. The City has not implemented VMT metrics yet and currently uses the established level of service criteria. Therefore, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) and impacts would be *less than significant*. No mitigation measures are required.

ENVIRONMENTAL ANALYSIS

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

As shown on Figure 3-6, Site Plan, in Chapter 3 of this Initial Study, vehicular and bicycle access to the project site would be provided from two existing driveways located on Main Street: one located at the western end of the project site and one located at the eastern end of the project site.

It is expected that the driveways would be reconstructed to current City standards. The east driveway, located between Buildings 2 and 3, serves as the south leg of the Main Street/Auto Center Drive intersection. Currently, a single lane exists with permitted signal phasing concurrent with southbound Auto Center Drive. It is expected that signal modifications will be implemented at the intersection to provide protected left turns for Auto Center Drive and driveway traffic as well as to reduce conflicts for pedestrians crossing Main Street. The west driveway, located between Buildings 1 and 2, provides right-in, right-out access and will continue to do so with the project; the west driveway is about 250 feet upstream of the Auto Center Drive intersection. Parking for the site will be provided on the back side of the site. The site has a triangular shape, with both driveways/drive aisles meeting near the south side of the parcel; a short drive aisle connects them.

Building 1 is the proposed fast food restaurant with drive-through window location. The applicant has stated that a Chipotle restaurant with drive-through window is slated to occupy the space. Chipotle is considered a “fast-casual” restaurant with the restaurant opening at 10:45 a.m. The drive-through window serves only customers who pre-order; no orders are accepted at the drive-through window. Access to the drive-through is about 60 feet south of Main Street along the west driveway. The drive-through lane is about 180 feet long and provides nine spaces. Based on a site study conducted by KD Anderson & Associates which included a Starbucks drive-through lane and Burger King drive-through lane the fast food restaurant lane was shown to have a maximum of six vehicles during any of the three peak periods. Because Chipotle’s drive-through lane is for order pick-up only, fewer delays occur as all orders have been pre-paid and are waiting for pickup. Thus, the drive-through lane should be adequate for the Chipotle use.

However, were the space to convert to a typical fast food restaurant the drive-through lane would provide four spaces between the menu order board and the pick-up window and five spaces behind the menu order board. One concern of the site’s location is that additional vehicles could block the inbound lane of the west driveway. A review of other agencies indicates that between 8 and 12 spaces should be provided for queuing. Requirements and standards from other agencies can be found in the appendix of the TIA. It is recommended that a queue study be conducted should the drive-through lane be modified to allow ordering to confirm that the proposed nine length queue would be adequate for the different use.

Building 3 is located east of the main driveway at Auto Center Drive. This building includes a coffee shop with drive-through window and retail shops. The drive-through entrance is located on the south side of the building with the drive through lane long enough to accommodate four spaces behind the pick-up window and nine spaces between the menu board and the internal drive aisle. Queues that spill back beyond the drive-through entrance would queue within the site. The drive-through exit will be located about 60 feet from the intersection. During the AM peak hour the drive-through lane is expected to be

ENVIRONMENTAL ANALYSIS

used frequently. Outbound vehicles should be able to exit the site as the remaining uses will not have yet opened. As noted earlier, KD Anderson & Associates prepared a study for a Starbucks location that analyzed the length of coffee shop drive-through queues. A second study prepared by the University of Washington ITE Student Chapter was also reviewed. Both analyses show that the queue in the drive-through lane for coffee shops are high in the AM peak hour and decline throughout the remainder of the day. The highest observed queues were ten vehicles in the AM peak hour and declining to fewer than four vehicles in the noon and PM peak hours. The drive-through lane entrance is located at the west side of Building 3 and allows any overflow, were it to occur, to queue in the parking aisles, away from Main Street. The 13 spaces should accommodate the drive-through traffic.

The three proposed commercial buildings would be compatible with the surrounding commercial land uses and would not result in a design that would substantially increase hazards in the area. Therefore, a *less-than-significant* impact would occur, and no mitigation measures would be required.

d) Would the project result in inadequate emergency access?

Access to the proposed project would generally be the same as under existing conditions. As described in criterion (c) above, no hazardous driving conditions due to a design feature would occur. Emergency vehicles would continue to access the site in much the same way as it is accessed today. While the WFD and City of Watsonville Building Division would coordinate the review of building permits for precise final measurements, the preliminary plans have been designed to meet the turning radius requirements for emergency vehicles. Project plans include approved fire and emergency access through all phases of construction and operation. Compliance with the provisions of the Watsonville Fire Code and Watsonville Building Code would ensure that adequate access would be provided. Therefore, the proposed project would not result in inadequate emergency access, a *less-than-significant* impact would occur, and no mitigation measures would be required.

XVI. TRIBAL CULTURAL RESOURCES

Would the proposed project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
a) 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:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Listed or eligible for listing in the California				
ii) Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or				

ENVIRONMENTAL ANALYSIS

Would the proposed project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
iii) A resource determined by the lead agency, in iv) its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resource Code Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance to a California Native American tribe.				

EXISTING CONDITIONS

AB 52, which took effect on July 1, 2015, amended CEQA to add standards of significance that relate to Native American consultation and certain types of cultural resources. Projects subject to AB 52 are those that file a notice of preparation for an EIR or notice of intent to adopt a negative or mitigated negative declaration on or after July 1, 2015. As of July 1, 2016, the Governor’s Office of Planning and Research developed guidelines and the Native American Heritage Commission informed tribes which agencies are in their traditional area.

AB 52 requires the CEQA lead agency to begin consultation with a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if the Tribe requests in writing to be informed by the lead agency through formal notification of the proposed projects in the area. The consultation is required before the determination of whether a negative declaration, mitigated negative declaration, or EIR is required. In addition, AB 52 includes time limits for certain responses regarding consultation. AB 52 also adds “tribal cultural resources” to the specific cultural resources protected under CEQA.¹⁰⁷ CEQA Section 21084.3 has been added, which states that “public agencies shall, when feasible, avoid damaging effects to any tribal cultural resources.” Information shared by tribes as a result of AB 52 consultation shall be documented in a confidential file, as necessary, and made part of a lead agencies administrative record. With regard to AB 52, the City of Watsonville has not received any request from any Tribes in the geographic area with which it is traditionally and culturally affiliated with or otherwise to be notified about projects in the city.

CEQA Section 21074.3(a) defines a tribal cultural resource under AB 52 as a site, feature, place, cultural landscape that is geographically defined in terms of size and scope, sacred place, and object with cultural value to a California Native American tribe that are either included or eligible for inclusion in the California Register of Historic Resources or included a local register of historical resources, or if the City, acting as the

¹⁰⁷ California Environmental Quality Act Statute, Section 21074.

ENVIRONMENTAL ANALYSIS

lead agency, supported by substantial evidence, chooses at its discretion to treat the resource as a tribal cultural resource.

DISCUSSION

- a) *Would the proposed 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*
 - 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 Resource Code section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resource Code section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance to a California Native American tribe?*

As discussed under criteria (b) and (c) in Section IV, Cultural Resources, no known archeological resources, ethnographic sites, or Native American remains are located on the project site. As discussed under criterion (b) of Section IV, implementation of Mitigation Measure CULT-1 would reduce impacts to unknown archaeological deposits, including tribal cultural resources, to a less-than-significant level. As discussed under criterion (c), compliance with State and federal regulations would reduce the likelihood of disturbing or discovering human remains, including those of Native Americans. Therefore, implementation of Mitigation Measure CULT-1 and compliance with State and federal regulations related to the protection of human remains would reduce impacts to tribal cultural resources to a *less-than-significant* level.

Impact TCR-1: Project-related ground-disturbing activities could affect subsurface tribal cultural resources that may be present.

Mitigation Measure TCR-1: Implement Mitigation Measure CULT-1.

ENVIRONMENTAL ANALYSIS**XVII. UTILITIES AND SERVICE SYSTEMS**

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

EXISTING CONDITIONS

As mentioned under Section 3.2.6, the project site is located within Zone I of the City of Watsonville Water Service Area. The project site is currently connected to the City's water and wastewater service and all water supply and wastewater conveyance and treatment for the project would come from the City of Watsonville. The project site is currently connected to the City of Watsonville storm drainage system, which drains to the wetlands in the Watsonville Slough.

The City of Watsonville provides curbside recycling, garbage, and yard waste services to the project site.¹⁰⁸ Watsonville also has a waste and recycling drop-off center for additional waste and household hazardous waste. All non-hazardous waste collected from the project would be taken to the Monterey Peninsula Landfill, approximately 14 miles south of the project site.

Electricity and natural gas would be supplied by PG&E. Telephone and cable television service would be available from a number of providers.

¹⁰⁸ City of Watsonville, Garbage Services, <https://www.cityofwatsonville.org/691/Garbage-Services>, accessed February 27, 2019.

ENVIRONMENTAL ANALYSIS

DISCUSSION

- a) *Would the project 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?*

Following is a discussion of the proposed project's potential impacts on water, wastewater treatment, storm water drainage, electric power, natural gas, and telecommunications facilities.

Water Supply and Treatment Facilities

The City's water service area is larger than the City limits, extending into the unincorporated areas of Santa Cruz County. The service area consists of nine hydraulic pressure zones, fourteen wells, eight reservoirs and water storage facilities, nine booster stations, over 177 miles of pipelines, and the Corralitos Filter Plant (CFP). The City's water system delivers to a population of 65,966 customers. The City does not purchase or import water. During years of normal rainfall, the City utilizes a combination of surface water and groundwater supply sources.

The City enjoys pre-1914 water rights on the Corralitos and Browns creeks, north of the City limits. The surface diversions are piped to the CFP and are treated via slow sand filtration and disinfection. The CFP averages approximately 900 acre-feet per year (AFY) of water, though it has a capacity of 2,400 AFY. Its operation is limited by the amount of surface water available in the Corralitos and Browns Creeks.¹⁰⁹

Groundwater wells currently provide the City with an approximate average of 7,000 AFY. All City water is treated at each well site and meets or exceeds State and federal drinking water standards. The City's wells are capable of producing 21,000 AFY. The City uses approximately 12 percent of the groundwater pumped from the Pajaro Valley Basin. Groundwater resources in the Pajaro Valley Basin have been managed by the PVWMA since 1984. The basin is not adjudicated. The PVWMA has constructed the Harkins Slough Diversion and Recharge Facilities, Watsonville Recycled Water Facility, supplemental wells, and over 20 miles of the Coastal Distribution System to reduce groundwater overdraft and seawater intrusion.¹¹⁰

Water demand estimates for the proposed project and previous on-site uses are included in Table 4-15. As shown in the table, the proposed project would consume 1,556,837 additional gallons per year compared to the previous on-site uses.

¹⁰⁹ City of Watsonville, 2016, 2015 Urban Water Management Plan, <https://www.cityofwatsonville.org/DocumentCenter/View/2046/2015-Urban-Water-Management-Plan-Chapters-1-10-PDF>, accessed September 13, 2019.

¹¹⁰ City of Watsonville, 2016, 2015 Urban Water Management Plan, <https://www.cityofwatsonville.org/DocumentCenter/View/2046/2015-Urban-Water-Management-Plan-Chapters-1-10-PDF>, accessed September 13, 2019.

ENVIRONMENTAL ANALYSIS**TABLE 4-15 WATER DEMANDS, BASELINE VS. PROPOSED PROJECT**

Land Use	Square Feet	Indoor Generation Rate (Gallons per Square Feet per Year)	Outdoor Generation Rate (Gallons per Square Feet per Year)	Total (Gallons/Year)
Previous Tenants				
Automobile Care Center	6,342	94.08	57.66	962,335
High Turnover (Sit Down Restaurant)	5,982	303.53	19.37	1,931,588
Supermarket	5,711	123.27	3.81	725,754
<i>Total</i>	<i>18,035</i>	—	—	<i>3,619,677</i>
Proposed Project				
Fast Food Restaurant With Drive Through	5,000	303.53	19.37	1,614,540
High Turnover (Sit Down Restaurant)	8,700	303.53	19.37	2,809,300
Strip Mall	6,300	74.07	45.40	752,674
<i>Total</i>	<i>20,000</i>	—	—	<i>5,176,514</i>
Difference	—	—	—	1,556,837

Source: California Emissions Estimator Model (CalEEMod), 2016, Appendix D Default Data Table, http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/05_appendix-d2016-3-1.pdf.

The City estimates that it will have sufficient water supplies to meet proposed growth for normal, single-dry, and multiple-dry years.¹¹¹ Therefore, project development would not require the construction of new or expanded water treatment facilities and impacts would be *less than significant*.

Wastewater Treatment Facilities

The City's Wastewater Treatment Facility (WWTF) collects and treats all of the wastewater from a 21 square mile service area comprising users within the City, Freedom County Sanitary District, Pajaro County Sanitary District, and Salsipuedes Sanitary District. The WWTF has served as a first line of defense in protecting the Monterey Bay's water quality. The WWTF is located on the Pajaro River, southwest of Watsonville between Highway 1 and the Monterey Bay. More than 170 miles of pipeline are used to transport wastewater to the facility for treatment. The WWTF treats a daily average of between 6 to 7 million gallons of wastewater in dry weather and is permitted to treat up to 12 million gallons per day. In

¹¹¹ City of Watsonville, 2016, 2015 Urban Water Management Plan, <https://www.cityofwatsonville.org/DocumentCenter/View/2046/2015-Urban-Water-Management-Plan-Chapters-1-10-PDF>, accessed September 13, 2019.

ENVIRONMENTAL ANALYSIS

2010, the City completed its upgrade of the WWTF to include tertiary treatment, making recycled water an available resource.¹¹²

The amount of wastewater that would be generated by the proposed project is conservatively assumed to be 4,162,568 gallons per year—90 percent of indoor water use. The proposed project would generate an increase of 325,664 gallons per year (or 892 gallons per day) of wastewater compared to the previous on-site uses project. The City's WWTF has a residual capacity of 5 million gallons per day. The additional amount of wastewater generated by the proposed project is well within the WWTF's total remaining daily treatment capacity. Therefore, project development would not require the construction of new or expanded wastewater treatment facilities and impacts would be *less than significant*.

Stormwater Drainage Facilities

See response to criterion (c) under Section IX, Hydrology and Water Quality. As substantiated in that discussion, impacts would be *less than significant*.

Electricity and Natural Gas Facilities

The proposed buildings would have a reduced square footage compared to the previous on-site buildings and would be more energy-efficient, resulting in a decrease in electricity and natural gas consumption during the operational phase. Electricity and natural gas would be supplied by PG&E.

Furthermore, total electricity consumption in PG&E's service area is forecast to increase from 104,868 gigawatt-hours (GWh) in 2015 to 119,633 GWh in 2027.¹¹³ PG&E forecasts that it will have sufficient electricity supplies to meet demands in its service area; and the electricity demand due to the project is within the forecast increase in PG&E's electricity demands.

PG&E's 2018 California Gas Report (CGR) projects total system demand to decline at an annual average rate of 0.4 percent between 2018 and 2035. PG&E anticipates that sufficient supplies will be available from a variety of sources at market-competitive prices to meet existing and projected market demands in its service area.¹¹⁴

Project development would not require PG&E to obtain new or expanded electricity or natural gas supplies and impacts would be *less than significant*.

¹¹² City of Watsonville, 2016, 2015 Urban Water Management Plan, <https://www.cityofwatsonville.org/DocumentCenter/View/2046/2015-Urban-Water-Management-Plan-Chapters-1-10-PDF>, accessed September 13, 2019.

¹¹³ California Energy Commission, 2017, California Energy Demand Updated Forecast, 2017-2027, <https://efiling.energy.ca.gov/getdocument.aspx?tn=214635>, accessed December 28, 2018.

¹¹⁴ California Gas and Electric Utilities, 2018, 2018 California Gas Report, https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf, accessed September 13, 2019.

ENVIRONMENTAL ANALYSIS

Telecommunication Facilities

The proposed project would include on-site connections to telecommunication services. The construction-related impacts associated with the improvements included in the construction of the proposed project are analyzed throughout this Initial Study as part of project development and impacts would be *less than significant*.

- b) *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?*

The City has adequate water supplies to meet project water demands, as substantiated above under criterion (a).

Furthermore, the proposed project would be designed to include a number of green building practices/features (listed in Section 3.2.7 in the Project Description) that would help reduce water usage and demand, including drought-tolerant landscaping with a water conservation irrigation system compliant with the 2015 updated Model Water Efficient Landscape Ordinance. The proposed project would also be required to comply with the provisions of the 2019 CALGreen, which contains requirements for indoor water use reduction and site irrigation conservation.

Based on the preceding, there are adequate water supplies to meet the water demands of the proposed project and project development would not require the City to obtain new or expanded water supplies. Therefore, impacts on water supplies due to project development would be *less than significant*.

- c) *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

As substantiated above under criterion (a), there is existing wastewater treatment capacity in the region for estimated project wastewater generation. Project development would not require construction of new or expanded wastewater treatment facilities. Therefore, impacts would be *less than significant*.

- d) *Would the project 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?*

The City of Watsonville would provide solid waste services to the project site. In 2018, approximately 61 percent of the municipal solid waste landfilled from the City was disposed of at the Monterey Peninsula Landfill.¹¹⁵ Capacity and disposal data for the landfill is shown in Table 4-16; the landfill has a residual capacity of 1,489 tons per day.

¹¹⁵ California Department of Resources Recycling and Recovery, 2019, Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility, <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility>.

ENVIRONMENTAL ANALYSIS

TABLE 4-16 LANDFILL CAPACITY

Landfill	Current Remaining Capacity (Tons) ^a	Maximum Daily Disposal Capacity (Tons)	Average Daily Disposal, 2017 (Tons) ^b	Residual Daily Disposal Capacity (Tons)	Estimated Close Date
Monterey Peninsula Landfill	48,560,000	3,500	2,011	1,489	2107

a. A Volume-to-Weight conversion rate of 2,000 lbs/cubic yard (1 ton/cubic yard) for "Compacted - MSW Large Landfill with Best Management Practices" is used as per CalRecycle's 2016 Volume-to-Weight Conversion Factors.

https://www.epa.gov/sites/production/files/201604/documents/volume_to_weight_conversion_factors_memorandum_04192016_508fml.pdf.

b. Average daily disposal is calculated based on 300 operating days per year. The facility is open six days per week, Monday through Saturday, except certain holidays.

Sources: California Department of Resources Recycling and Recovery, 2019, SWIS Facility Detail, <https://www2.calrecycle.ca.gov/swsfacilities/Directory/27-AA-0010/>. CalRecycle, 2019, Landfill Tonnage Reports, <https://www2.calrecycle.ca.gov/LandfillTipFees/>.

The proposed project is estimated to generate about 167.7 tons of solid waste per year (or 0.45 tons per day), as shown in Table 4-17. As shown in Table 4-17, the proposed project will generate approximately 40 tons of solid waste per year (or 31 percent more) compared to existing conditions. This increase represents 2.7 percent of the residual capacity at the Monterey Peninsula Landfill.

TABLE 4-17 SOLID WASTE GENERATION, BASELINE VS. PROPOSED PROJECT

Land Use	Square Feet	Generation Rate (Ton/Square Feet/Year)	Total (Tons/Year)
Existing Condition			
Automobile Care Center	6,342	0.00382	24.2
High Turnover (Sit Down Restaurant)	5,982	0.0119	71.2
Supermarket	5,711	0.00564	32.2
<i>Total</i>	<i>18,035</i>	—	<i>127.6</i>
Proposed Project			
Fast Food Restaurant With Drive Through	5,000	0.01152	57.6
High Turnover (Sit Down Restaurant)	8,700	0.0119	103.5
Strip Mall	6,300	0.00105	6.6
<i>Total</i>	<i>20,000</i>	—	<i>167.7</i>
Difference	—	—	40.1

Notes: ppd = pounds per day

Sources: CalRecycle, 2019, Estimated Solid Waste Generation Rates, <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>.

ENVIRONMENTAL ANALYSIS

Substantial reductions in solid waste from construction materials can be achieved through recycling, reuse, and diversion programs. The City requires that the applicant provide a construction waste management plan during the plan review pursuant to the CalGreen Code, Sections 4.408, 5.408. As currently codified, this section requires diversion of 50 percent of nonhazardous construction and demolition waste through recycling, reuse, and diversion programs. The waste management plan must demonstrate compliance with the City's goal of reusing or recycling at least 50 percent of project construction waste. Based on the preceding, impacts on landfill capacity would be *less than significant*.

e) *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

See the discussion under criterion (d), above.

Additionally, the following federal, State, and local laws and regulations govern solid waste disposal, including:

- The USEPA administers the Resource Conservation and Recovery Act of 1976 and the Solid Waste Disposal Act of 1965, which govern solid waste disposal.
- AB 341 (Chapter 476, Statutes of 2011) increases the statewide waste diversion goal to 75 percent by 2020, and mandates recycling for commercial and multi-family residential land uses.
- AB 939 (Integrated Solid Waste Management Act of 1989; Public Resources Code 40050 et seq.) required every California city and county to divert 50 percent of its waste from landfills by the year 2000 by such means as recycling, source reduction, and composting. In addition, AB 939 requires each county to prepare a countywide siting element specifying areas for transformation or disposal sites to provide capacity for solid waste generated in the county that cannot be reduced or recycled for a 15-year period.
- AB 1327 (California Solid Waste Reuse and Recycling Access Act of 1991) requires local agencies to adopt ordinances mandating the use of recyclable materials in development projects.

Project-related construction and operation phases would be implemented in accordance with all applicable federal, state, and local laws and regulations govern solid waste disposal. Therefore, impacts would be *less than significant*.

ENVIRONMENTAL ANALYSIS

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

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

DISCUSSION

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

The project site is in an urbanized and developed area of Watsonville, which is almost entirely built out with commercial and residential development, and associated surface parking. There are no identified sensitive natural communities, no areas of sensitive habitat, and no areas of critical habitat on the project site, however the Watsonville Slough is located along the western, southern, and eastern site boundary. Additionally, there are no buildings currently listed or eligible for listing on the California Register of Historical Resources, no recorded archaeological sites, and no known paleontological resources located on the project site. The implementation of Mitigation Measures BIO-1a, BIO-1b, BIO-2, CULT-1, GEO-1, GEO-2, GEO-3, GEO-4, HAZ-1, TR-1, TR-2, and TCR-1 would serve to address biological resources, unknown cultural and tribal resources, site stability, hazardous materials release, traffic operations, as well as ensure adequate services are provided and that no additional physical impacts would occur elsewhere. Therefore, implementation of the proposed project would result in a *less-than-significant* impact to the quality of the environment, wildlife, and major periods of California history or prehistory.

ENVIRONMENTAL ANALYSIS

- 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)?*

As described in the environmental checklist, the impacts of the proposed project would be mitigated to less-than-significant levels. Most of the project impacts would be site-specific and would not contribute to potential off-site impacts in the cumulative setting. Therefore, the proposed project would not be expected to contribute to significant cumulative impacts when considered along with other projects in the site vicinity and the impact would be *less than significant*.

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

As discussed previously, the proposed project would not result in a significant impact that could not be mitigated to a less-than-significant level, thus the proposed project’s environmental effects would be *less than significant*.

ENVIRONMENTAL ANALYSIS

This page intentionally left blank

5. Mitigation Monitoring and Reporting Program

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the proposed project. The purpose of the MMRP is to ensure the implementation of project-specific mitigation measures identified as part of the environmental review for the proposed project. The MMRP in Table 5-1 includes the following information:

- The full text of the mitigation measures;
- The party responsible for implementing the mitigation measures;
- The timing for implementation of the mitigation measure;
- The agency responsible for monitoring the implementation; and
- The monitoring action and frequency.

The City of Watsonville must adopt this MMRP, or an equally effective program, if it approves the proposed project with the mitigation measures that were adopted or made conditions of project approval.

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 5-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
BIOLOGICAL RESOURCES					
<p>BIO-1a: Ensure Avoidance of California Red-legged Frog and Western Pond Turtle. The following measures shall be implemented to ensure avoidance of individual California red-legged frog (CRLF) and western pond turtle (WPT) in the remote instance individuals were to disperse onto the site in the future in advance of or during construction:</p> <ul style="list-style-type: none"> ▪ <i>Pre-construction survey:</i> Pre-construction surveys for CRLF shall be conducted prior to initiation of project activities (including fence installation) and within 48 hours of the start of ground disturbance activities following completion of exclusion fence installation. Surveys are to be conducted by qualified biologists with experience surveying for CRLF. <p>If project activities are stopped for greater than 14 days, a follow-up pre-construction survey may be required within 48 hours prior to reinitiating project activities.</p> <ul style="list-style-type: none"> ▪ <i>Worker Training:</i> All workers shall be trained by a qualified biologist to understand the remote potential for occurrence of CRLF and WPT, need to avoid any potential inadvertent take, and process to follow if a frog or turtle is encountered. If a frog is encountered in the construction zone, all work must stop and the qualified biologist must determine whether it is CRLF before work proceeds. If a CRLF is encountered in the work zone, no work can proceed until the USFWS and CDFW have been consulted and an appropriate avoidance and mitigation program developed. If WPT is encountered within the work zone, the individual shall be relocated to the closest suitable natural habitat by the qualified biologist or designated foreman trained by the qualified biologist. ▪ <i>Wildlife exclusion fence:</i> Wildlife exclusion fencing shall be installed prior to the start of construction and maintained until construction of the proposed project is complete. All work installing exclusion fencing shall be conducted under the supervision of a qualified wildlife biologist with experience in surveying for CRLF and WPT. Exclusion fencing shall, at a 	Project Applicant	Prior to and during construction	City of Watsonville Planning Division	Confirm fencing, training, biological monitoring, and erosion control measures; review surveys	Ongoing

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 5-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
<p>minimum, run along the edge of grading along the southeastern, southern and southwestern project boundaries where the site borders riparian habitat. The exclusion fencing shall be inspected on a daily basis by a designated foreman trained by the qualified biologist, and repaired immediately if any openings are detected to prevent opportunities for CRLF and WPT to enter the site. Per CRLF standards, fencing must be at least 42 inches in height (at least 36 inches above ground and buried at least 6 inches below the ground) and stakes must be placed on the inside of the project (side on which work will take place).</p> <p>Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure amphibians do not get trapped. Plastic mono-filament netting (erosion control matting), rolled erosion control products, or similar material shall not be used.</p> <ul style="list-style-type: none"> ▪ <i>Earth-disturbing activities only during dry weather:</i> No earth disturbing activities shall take place during rain events when there is potential for accumulation greater than 0.25-inch in a 24-hour period. In addition, no earth disturbing activities shall occur for 48 hours following rain events in which 0.25-inch of rain accumulation within 24 hours. 					
<p>BIO-1b: Ensure Avoidance of Bird Nests in Active Use. Tree removal, landscape grubbing, and building pad and retaining wall demolition shall be performed in compliance with the Migratory Bird Treaty Act and relevant sections of the California Fish and Game Code to avoid loss of nests in active use. This shall be accomplished by scheduling tree removal and landscape grubbing outside of the bird nesting season (which occurs from February 1 to August 31) to avoid possible impacts on nesting birds if new nests are established in the future. Alternatively, if demolition, tree removal and landscape grubbing cannot be scheduled during the non-nesting season (September 1 to January 31), a pre-construction nesting survey shall be conducted. The pre-construction nesting survey shall include the following:</p>	Project Applicant	Prior to construction	City of Watsonville Planning Division	Review survey, confirm buffer zones (if required)	Once for survey/ Ongoing if nesting birds identified and until they have left the nest

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 5-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
<ul style="list-style-type: none"> A qualified biologist shall conduct a pre-construction nesting bird (both passerine and raptor) survey within seven calendar days prior to tree removal, landscape grubbing, and/or demolition. If no nesting birds or active nests are observed, no further action is required and tree removal, landscape grubbing, and demolition shall occur within seven calendar days of the survey. Another nest survey shall be conducted if more than seven calendar days elapse between the initial nest search and the beginning of tree removal, landscape grubbing, and demolition. If any active nests are encountered, the Biologist shall determine an appropriate disturbance-free buffer zone to be established around the nest location(s) until the young have fledged. Buffer zones vary depending on the species (i.e., typically 50 to 100 feet for passerines and 300 feet for raptors) and other factors such as ongoing disturbance in the vicinity of the nest location. If necessary, the dimensions of the buffer zone shall be determined in consultation with the CDFW. Orange construction fencing, flagging, or other marking system shall be installed to delineate the buffer zone around the nest location(s) within which no construction-related equipment or operations shall be permitted. Continued use of existing facilities such as surface parking and site maintenance may continue within this buffer zone. No restrictions on grading or construction activities outside the prescribed buffer zone are required once the zone has been identified and delineated in the field and workers have been properly trained to avoid the buffer zone area. Construction activities shall be restricted from the buffer zone until the Biologist has determined that young birds have fledged and the buffer zone is no longer needed. A survey report of findings verifying that any young have fledged shall be submitted by the Biologist for review and approval by the City prior to initiation of any tree removal, landscape grubbing, demolition, and other construction 					

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 5-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
activities within the buffer zone. Following written approval by the City, tree removal, and construction within the nest-buffer zone may proceed.					
BIO-2: Appropriate controls shall be incorporated into the project to prevent nuisance conditions in the adjacent riparian habitat of the Watsonville Slough floodplain. These shall include controls on all exterior lighting to ensure that is be directed downward and screened to minimize spill-over off the site and developing a monitoring program to be implemented by future tenants to ensure trash areas are routinely cleaned and secured at night.	Project Applicant	During construction	City of Watsonville Planning Division	Confirm lighting installation	During regularly scheduled site inspections
CULTURAL RESOURCES					
CULT-1: If any prehistoric or historic subsurface cultural resources, including tribal cultural resources, are discovered during ground-disturbing (including grading, demolition and/or construction) activities:	Project Applicant	During construction	Consulting archaeologist and City of Watsonville Public Works Department	Review and confirm recommendations	As needed if resources are unearthed
<ul style="list-style-type: none"> ▪ All work within 50 feet of the resources shall be halted and a qualified archaeologist shall be consulted to assess the significance of the find according to CEQA Guidelines Section 15064.5. ▪ If any find is determined to be significant, representatives from the City of Watsonville Building Department and the archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation. ▪ All significant cultural materials recovered shall be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards. ▪ In considering any suggested mitigation proposed by the consulting archaeologist to mitigate impacts to historical resources or unique archaeological resources, the City shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, proposed project design, costs, and other considerations. ▪ If avoidance is infeasible, other appropriate measures (e.g., data recovery) would be implemented. 					

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 5-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
<ul style="list-style-type: none"> Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is being carried out. 					
GEOLOGY AND SOILS					
GEO-1: Project construction shall adhere to the recommendations of the October 9, 2018 Krazan & Associates <i>Geotechnical Engineering Investigation for the Proposed Commercial Development on Main Street at Auto Centre Drive</i> , which provides recommendations for excavation under and near building areas, fill removal and recompaction, engineered fill preparation, soil moisture content, and other construction details relevant to building design and site stability. As recommended in the Geotechnical Engineering Investigation, a licensed geotechnical engineer, or his/her representative, shall be present during all site clearing and grading operations to observe earthwork construction, and the consulting engineer's recommendations shall be followed.	Project Applicant	Prior to issuance of grading and construction permits	City of Watsonville Planning Division	Review grading and construction plans	Once
GEO-2: Implement Mitigation Measure GEO-1.		<i>See Mitigation Measure GEO-1.</i>			
GEO-3: Implement Mitigation Measure GEO-1.		<i>See Mitigation Measure GEO-1.</i>			
GEO-4: The construction contractor shall incorporate the following in all grading, demolition, and construction plans: <ul style="list-style-type: none"> In the event that fossils or fossil-bearing deposits are discovered during grading, demolition, or building, excavations within 50 feet of the find shall be temporarily halted or diverted. The contractor shall notify the City of Watsonville Building Department and a City-approved qualified paleontologist to examine the discovery. The paleontologist shall document the discovery as needed, in accordance with Society of Vertebrate Paleontology standards, evaluate the potential resource, and assess the significance of the finding under the criteria set forth in CEQA Guidelines Section 15064.5. 	Project Applicant	During construction	Consulting archaeologist and City of Watsonville Public Works Department	Review and confirm recommendations	As needed if resources are unearthed

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 5-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
<ul style="list-style-type: none"> The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the project applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project based on the qualities that make the resource important. The excavation plan shall be submitted to the City for review and approval prior to implementation. 					
TRANSPORTATION					
TR-1: The signal system along Main Street should be retimed to reach acceptable levels of service. The following changes should be considered: <ul style="list-style-type: none"> During the AM peak hour, the signal system along Main Street should be modified to a 110-second cycle between Green Valley Road and Ohlone Parkway – Clifford Drive with a half cycle at the Watsonville Square intersection. The segment from Pennsylvania Drive to Freedom Boulevard should be modified to a 116-second cycle with a half cycle at Rodriguez Street During the PM peak hour, the signal system along Main Street should be modified from the current 135-second cycle between Green Valley Road and Ohlone Parkway – Clifford Drive and 120-second cycle from Pennsylvania Drive to Freedom Boulevard. The proposed signal cycle length would be 116 seconds for the entire network. An eastbound to southbound right turn overlap should be installed at the Main Street/Ohlone Parkway – Clifford Drive intersection. This is consistent with the Sunshine Vista Phased Development Project FEIR, May 2018. 	Caltrans; City of Watsonville Public Works & Utilities	Prior to issuance of occupancy permit	Caltrans; City of Watsonville Public Works & Utilities	Confirm retiming completed	Once
TR-2: The project applicant shall obtain an encroachment permit from Caltrans to implement the following changes to the signal operations and lane configuration at the Main Street/Green Valley Drive:	Project Applicant	Prior to issuance of occupancy permit	Caltrans; City of Watsonville Public Works & Utilities	Implement changes to Main Street/Green Valley Drive intersection signal operations and lane configuration	Once

MITIGATION MONITORING AND REPORTING PROGRAM

TABLE 5-1 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency
<ul style="list-style-type: none"> ▪ During the PM peak hour, the signal system along Main Street should be modified from the current 135 second cycle between Green Valley Road and Ohlone Parkway – Clifford Drive and 120 second cycle from Pennsylvania Drive to Freedom Boulevard. The proposed signal cycle length would be 116 seconds for the entire network. ▪ The intersection of Main Street/Green Valley Drive approaches should be reconfigured as follows: <ul style="list-style-type: none"> • Northbound approach: two left turn lanes, one through lane, and one right turn lane. • Southbound approach: one left turn lane, one through lane, and one right turn lane. ▪ Modify the signal phasing for the eastbound and westbound approaches on Green Valley Road from split phase to protected left turns. The intersection is part of a coordinated system along Main Street and the corridor should be retimed to a 110 second cycle as a result of the geometry modifications. 					
TRIBAL CULTURAL RESOURCES					
TCR-1: Implement Mitigation Measure CULT-1.		<i>See Mitigation Measure CULT-1</i>			

6. Organizations and Persons Consulted

This Initial Study was prepared by the following consultants and individuals:

LEAD AGENCY

CITY OF WATSONVILLE

Justin Meek, AICP
Principal Planner/Zoning Administrator

Maria Esther Rodriguez
Assist. Public Works Director/City Engineer

REPORT PREPARERS

LEAD EIR CONSULTANT

PlaceWorks

Steve Noack, AICP,
Principal, Principal-in-Charge

Alexis Mena
Senior Associate, Project Manager

Jacqueline Protsman
Project Planner

Torina Wilson
Project Planner

Nicole Vermilion
Associate Principal, Air Quality and Greenhouse Gas

Josh Carman
Senior Associate, Noise Specialist

ORGANIZATIONS AND PERSONS CONSULTED

Dina El Chammas
Associate Engineer, Environmental Services

Fernando Sotelo
Senior Planner, Transportation

BIOLOGICAL RESOURCES

Environmental Collaborative

James Martin
Principal



1625 Shattuck Ave, Suite 300
Berkeley, California 94709
510.848.3815

www.placeworks.com