Initial Study/Mitigated Negative Declaration (Draft) for the

547 Airport Boulevard Project

21 Townhomes at the Existing Monterey Bar Rebar Inc. Site

547 Airport Boulevard City of Watsonville August 2020



Prepared by: MIG Inc., Berkeley CA.



Table of Contents

1.	Proj	ect Information	5
	1.1	Project Title	5
	1.2	Lead Agency Name and Address	5
	1.3	Contact Person and Phone Number	5
	1.4	Project Sponsors Names and Addresses	5
	1.5	General Plan Designation	5
	1.6	Zoning	5
	1.7	Introduction	5
	1.8	Project Location and Context	5
	1.9	Project Description	6
2.	Sun	nmary of Findings: Impacts and Mitigations	17
3.	Env	ironmental Factors Potentially Affected	25
4.	Dete	ermination	26
5.	Eva	luation of Environmental Impacts	27
6.	Issu	es	29
	6.1	Aesthetics	29
	6.2	Agriculture and Forest Resources	32
	6.3	Air Quality	34
	6.4	Biological Resources	41
	6.5	Cultural Resources	51
	6.6	Energy Resources	56
	6.7	Geology and Soils	57
	6.8	Greenhouse Gas Emissions	62
	6.9	Hazards and Hazardous Materials	68
	6.10	Hydrology and Water Quality	73
	6.11	Land Use and Planning	77
	6.12	Mineral Resources	79
	6.13	Noise	80
	6.14	Population and Housing	96
	6.15	Public Services	98
	6.16	Recreation	103

6.17	Transportation	105
6.18	Tribal Cultural Resources	109
6.19	Utilities and Service Systems	112
6.20	Wildfire	118
6.21	Mandatory Findings of Significance	120
7. Lea	nd Agency and Consultants	122
List of	Figures	
Figure 1	: Project Vicinity Map	
Figure 2	: Project Location Map	9
Figure 3	: Site Plan	10
Figure 4	: Perspective Views (North-Facing)	11
Figure 5	: Preliminary Landscape Plan	12
Figure 6	: Preliminary Site Furnishings	13
Figure 7	: Preliminary Grading Plan	14
Figure 8	: Preliminary Utility Plan	15
Figure 9	: Site Lighting Plan	16
Figure 1	0: Land Use Compatibility for Community Noise Environments	86
List of	Tables	
Table 1.	North Central Coast Air Basin Attainment Status	36
Table 2.	Construction Activity, Duration, and Typical Equipment	36
Table 3.	Unmitigated Maximum Daily Criteria Air Pollutant Construction Emissions (lbs/day)	37
Table 4.	Unmitigated Maximum Daily Criteria Air Pollutant Operational Emissions (lbs/day)	39
Table 5.	Cultural Resources within One Mile of the Project Area	51
Table 6.	City of Watsonville Historic Register Entries	52
Table 7.	Project Construction Greenhouse Gas Emissions	65
Table 8.	Project Operational Greenhouse Gas Emissions Over 30 Years	65
Table 9.	Bioretention/Detention Pond Requirements	74
Table 10). Typical Construction Equipment Noise (dBA)	88
Table 11	. Caltrans' Vibration Threshold Criteria for Building Damage	92
Table 12	2. Caltrans Vibration Threshold Criteria for Human Response	93
Table 13	3. Potential Groundborne Vibration Levels	93

Table 14. School Capacity and Enrollment 10 Table 15. Trip Generation Summary 10					
Appendices					
A. Air Quality and Greenhouse Gas Assessment					
B. Biological Resources – Plants and Wildlife					
C. Phase 1 Environmental Site Assessment					

- D. Stormwater Control Plan
- E. Traffic Noise Modelling Data
- F. Traffic Impact Analysis

Project Information 1.

1.1 Project Title

Initial Study/Mitigated Negative Declaration for the 547 Airport Boulevard Project

1.2 Lead Agency Name and Address

City of Watsonville Community Development Department **Planning Division** 250 Main Street Watsonville, California 95076

1.3 Contact Person and Phone Number

Justin Meek, AICP Principal Planner (831)768-3050 justin.meek@cityofwatsonville.org

1.4 Project Sponsors Names and Addresses

Raoul Ortiz 547 Airport Boulevard Watsonville, CA 95076

1.5 General Plan Designation

Industrial

1.6 Zoning

IP: Industrial Park

1.7 Introduction

This Initial Study of environmental impacts has been prepared to conform to the requirements of the Public Resources Code California Environmental Quality Act (CEQA Statutes), the California Code of Regulations section 15000 et. seq. (CEQA Guidelines), and the regulations and policies of the City of Watsonville. The report is intended to inform City of Watsonville (City) decision-makers, responsible agencies, and the general public of the 547 Airport Blvd Project (project) and its environmental consequences. The City of Watsonville is the Lead Agency under CEQA and has prepared this Initial Study to address the impacts of implementing the proposed project. The primary objective of the project is to provide 21 housing units and increase housing availability in the City.

1.8 Project Location and Context

The following section describes the project site location, characteristics, surrounding land uses, and land use designations.

Location. See Figures 1 and 2. The project site (547 Airport Boulevard) is on the south side of Airport Boulevard across the street from the Watsonville Municipal Airport. The project is located east of Highway 1 and west of Freedom Blvd (Figures 1 and 2). The APN is 015-321-01.

Surrounding Land Uses. The site is located within an industrial area, bordered on the west and south by industrial properties (zoned IP: Industrial Park) and the Colonial Manor Mobile Home Park on the east side (zoned RM-3: Multiple Residential-High Density). Across Airport Boulevard is the Watsonville Municipal Airport (zoned PF: Public Facilities).

Site Characteristics. The proposed project is on a flat 1.58-acre industrial site currently used for processing rebar. The western portion of the site has a long, narrow, rectangular concrete pad on which the rebar processing equipment is located to absorb oil leaks and for a leveled surface. The southern section of the site has a row of trees on an adjacent property, and one cypress tree in the northeastern corner; no other vegetation is located onsite. On the northern end of the site is a single-family residence built around 1968. The residence is currently occupied by tenants of the applicant and would be demolished as part of project construction. The northwest corner is used for storage. There is a portable office space that serves as the business office. The western section of the site borders the Colonial Manor mobile home park. Much of the property remains undeveloped except for the perimeter areas.

1.9 Project Description

Raoul Ortiz (Owner; Applicant) is submitting an application to develop one parcel located at 547 Airport Boulevard (APN 015-321-01), totaling approximately 1.57 acres, collectively called the 547 Airport Boulevard Project (project). Ortiz currently leases the property to operate a rebar processing operation known as Monterey Bay Rebar, Inc. As part of this project, the parcel would be redeveloped into 21 townhomes including three affordable units. The proposed townhomes are grouped in four buildings with a total footprint of approximately 18,927 square feet. Each unit includes three bedrooms and would provide housing for an estimated 78 people. The project also includes development of shared spaces and an open area for recreation. The site plan is shown on Figure 3, and perspective views of project buildings (from the north-facing/public view) are shown on Figure 4.

Construction is anticipated to last about 18-24 months and start with approximately two weeks of abatement followed by two weeks of demolition. The existing residence would be demolished and hauled off with approximately 10 truck trips. Site preparation and grading would be balanced. The building construction period is anticipated to last 10-12 months.

Circulation and Parking. Parking for the homes would be accessed from a private vehicular entrance off of Airport Boulevard (Driveway 1) in the northwest corner of the site. Traffic volumes to the project site are estimated to generate 154 trips (a 99-trip increase per day). A 20-foot-wide access road including a four-foot wide sidewalk wraps around from the access off of Airport Blvd to the back row of buildings along the southern portion of the parcel. A total of 58 residential parking spaces are proposed.

Landscape and Open Space. The project includes both landscaping features as well as open space and recreational facilities. The project would create 17,196 square feet of public open space. The project will include the planting of drought tolerant plants and trees. The following recreational facilities are included with the project: (1) a 384 square-foot "tot-lot" play space; (2) a 2,870¹ square-foot open space/meadow area and bioretention area; (3) a 384 square-foot covered courtyard with tables and charcoal grills. The preliminary landscape plan is shown on Figure 5 and the preliminary site furnishings are shown on Figure 6.

Grading. The project site would be graded and the preliminary grading plan for the project is shown on Figure 7. Stormwater retention would be accomplished through a combination of underground

6 | City of Watsonville

¹ Roper Engineering, 2017

infiltration and aboveground retention. The project would create 45,584 square feet of impervious surfaces. The project would comply with stormwater treatment requirements and includes bioretention areas in excess of what is required by regulations.

Utilities and Infrastructure. The proposed project would connect to existing water, wastewater, storm drainage, electricity, and telecommunication infrastructure. Water service, wastewater treatment, stormwater management, and solid waste collection are provided by the City. Electricity and natural gas are provided by PG&E. The project proposes relocating a stormwater drainage connection. The proposed bioretention area would meter runoff and direct the water into a new proposed storm drain running north/south across Airport Blvd. The preliminary utility plan is shown on Figure 8 and the site lighting plan is included on Figure 9.

Project Construction and Excavation. Construction is anticipated to begin in June 2021 and be completed 18-24 months after.

City Actions/Approvals. The proposed project would require the following City approvals:

- Adoption of the Mitigated Negative Declaration City Planning Commission and City Council
- General Plan Map Amendment to Residential High Density City Planning Commission and City Council
- Zoning Change to Multiple Residential-High Density with a Planned Development Overlay City Planning Commission and City Council
- Special Use Permit (accompanied by a specific development plan) City Planning Commission and City Council
- Design Review City Planning Commission and City Council
- Building/Fire Permit and Plan Check City of Watsonville, Community Development Department

Figure 1: Project Vicinity Map



Figure 1 Vicinity Map 547 Airport Blvd City of Watsonville, California

Figure 2: Project Location Map

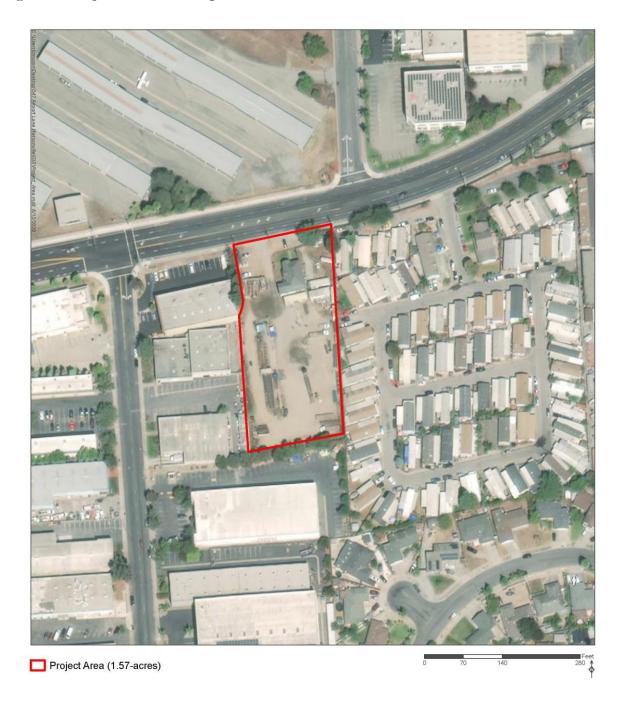


Figure 2 547 Airport Blvd

City of Watsonville, California

Figure 3: Site Plan

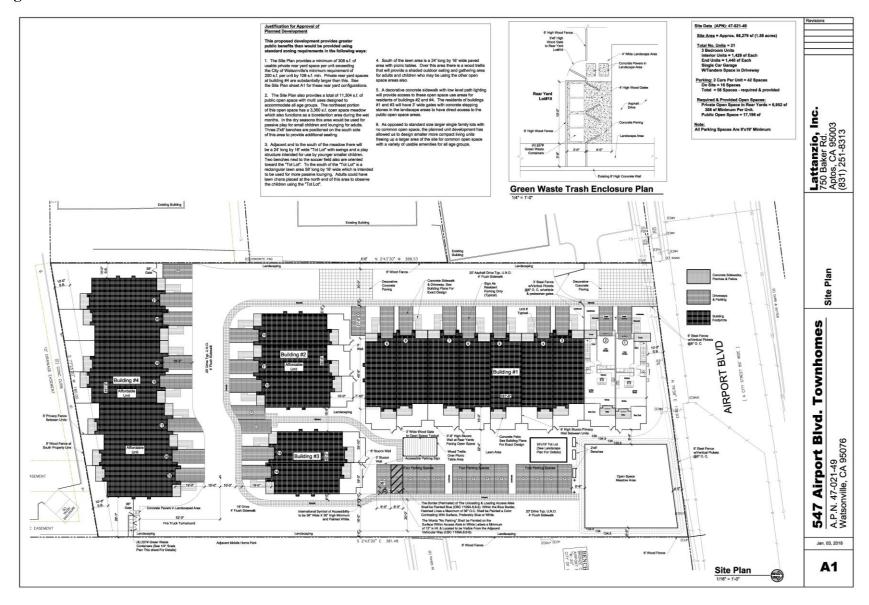


Figure 4: Perspective Views (North-Facing)

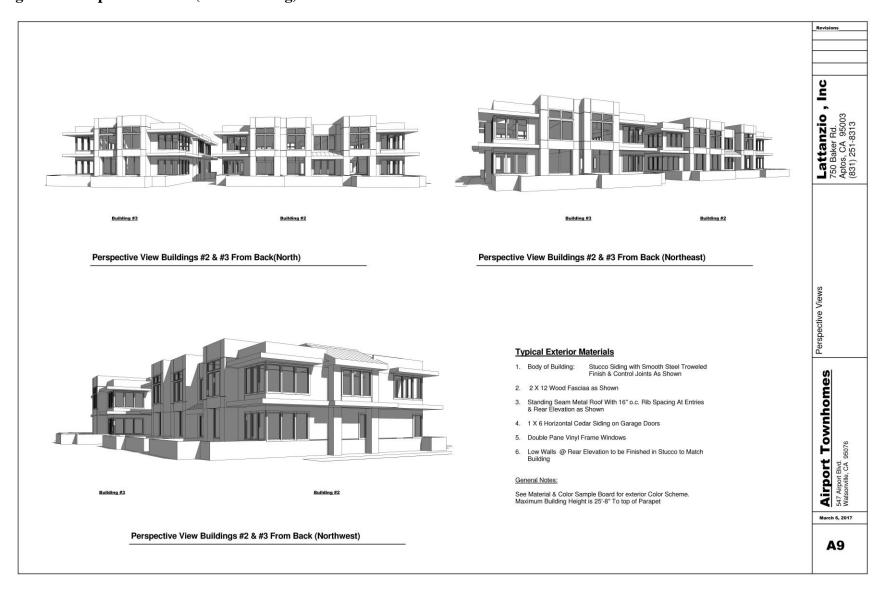


Figure 5: Preliminary Landscape Plan

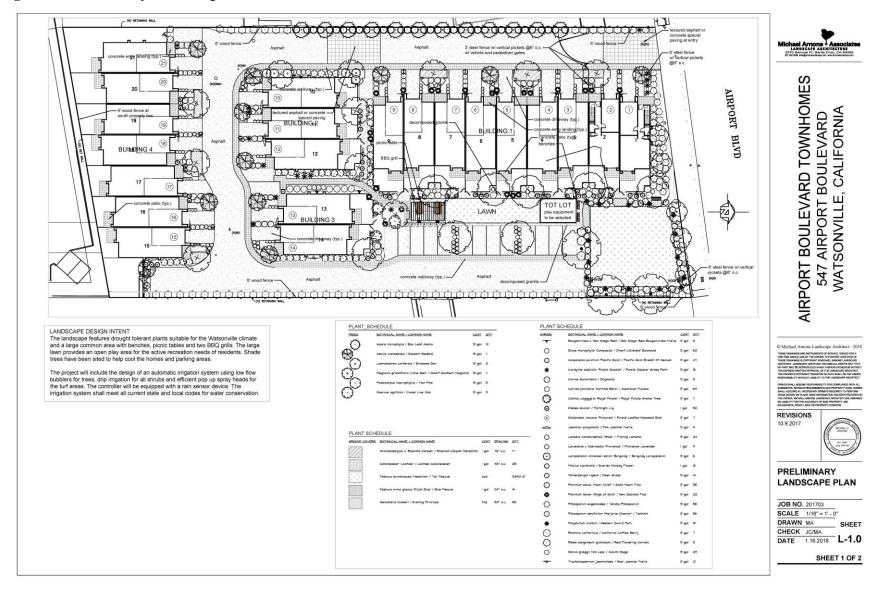


Figure 6: Preliminary Site Furnishings

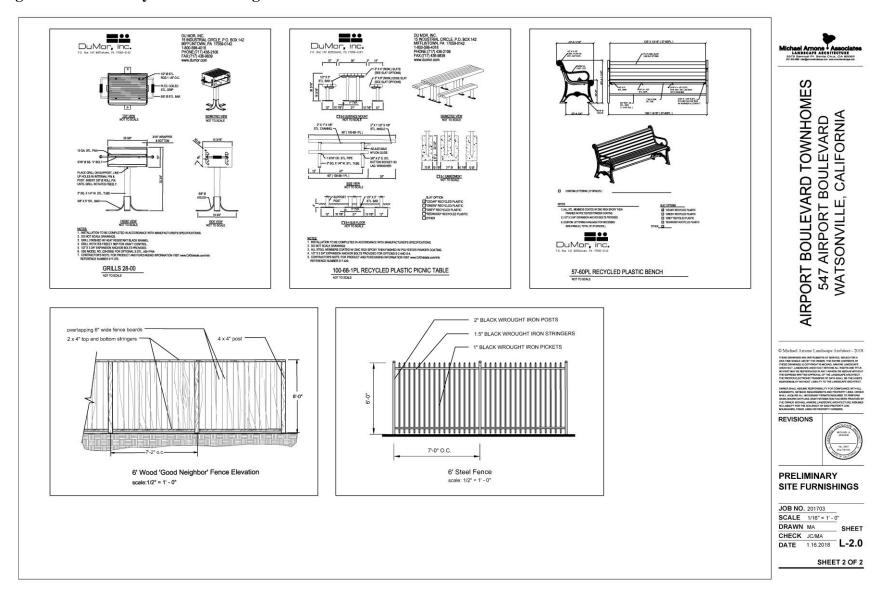


Figure 7: Preliminary Grading Plan

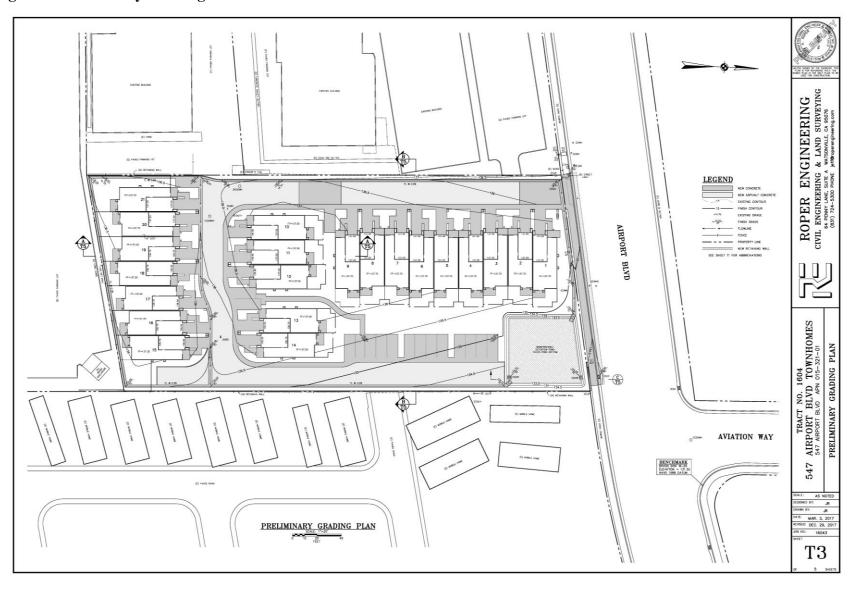


Figure 8: Preliminary Utility Plan

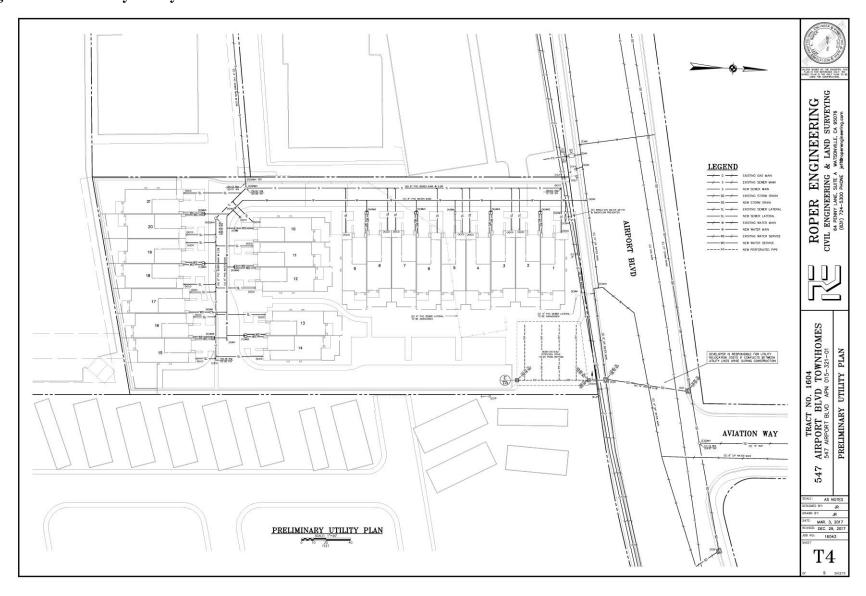
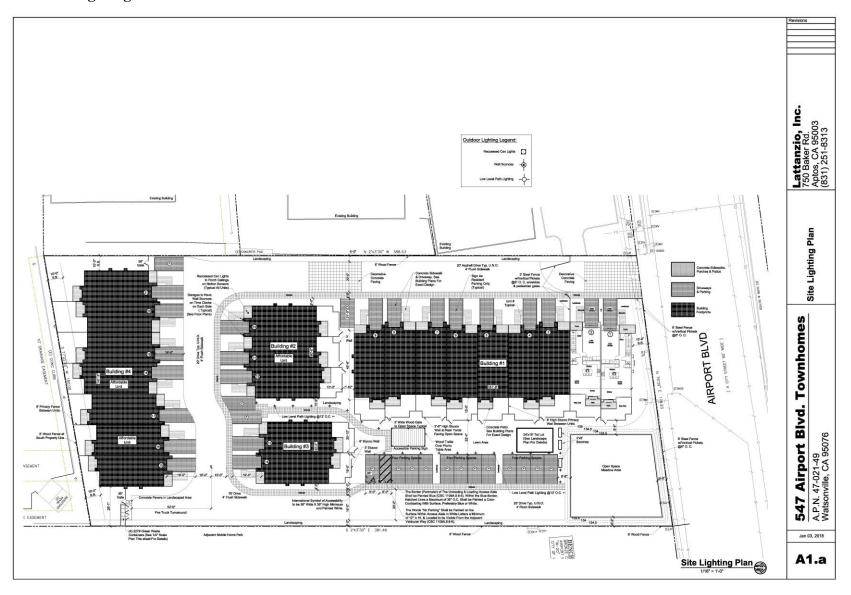


Figure 9: Site Lighting Plan



2. Summary of Findings: Impacts and Mitigations

Impact findings and mitigation measures identified in this report, the completed Initial Study checklist and narrative are summarized below. The mitigations listed below represent conditions for the Initial Study/Mitigated Negative Declaration for the proposed project.

Aesthetics

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

Agricultural and Forestry Resources

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

Air Quality

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

Biological Resources

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

Mitigation Measure BIO-1: Nesting Bird Avoidance or Conduct Preconstruction Surveys. If construction, grading, or other project-related improvements are scheduled during the nesting season of protected raptors and migratory birds, a focused survey for active nests of such birds shall be conducted by a qualified biologist within seven (7) days prior to the beginning of project-related activities. The results of the survey shall be sent to the City of Watsonville prior to the start of project activities. The minimum survey radii surrounding the work area shall be the following: i) 250 feet for passerines; ii) 500 feet for other small raptors such as accipiters; iii) 1,000 feet for larger raptors such as buteos. Nesting seasons are typically defined as follows: i) March 15 to August 30 for smaller bird species such as passerines; ii) February 15 to August 30 for raptors.

The following measures shall be taken to avoid potential inadvertent destruction or disturbance of nesting birds on and near the project site as a result of construction-related vegetation removal and site disturbance:

- a) To avoid impacts to nesting birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) shall occur outside the avian nesting season (generally prior to February 1 or after August 31). Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest.
- b) If construction-related activities are scheduled to occur during the nesting season (generally February 1 through August 31), a qualified biologist shall conduct a habitat assessment and preconstruction nesting survey for nesting bird species no more than seven (7) days prior to initiation of work. A qualified wildlife biologist is an individual who possesses, at a minimum, a bachelor's or advanced degree, from an accredited university, with a major in biology, zoology, wildlife biology, natural resources science, or a closely related scientific discipline, at least two years of field experience in the biology and natural history of local plant, fish, and wildlife resources present at the development site, and knowledge of state and federal laws regarding the protection of sensitive and endangered species. The qualified biologist conducting the surveys shall be familiar with the breeding behaviors and nest structures of birds known to nest in the project site. Surveys shall be conducted at the

- appropriate times of day during periods of peak activity (i.e., early morning or dusk) and shall be of sufficient duration to observe movement patterns. Surveys shall be conducted within the project area and 250 feet of the construction limits for nesting non-raptors and 1,000 feet for nesting raptors, as feasible. If the survey area is found to be absent of nesting birds, no further mitigation would be required. However, if project activities are delayed by more than seven (7) days, an additional nesting bird survey shall be performed.
- If pre-construction nesting bird surveys result in the location of active nests, no site disturbance (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), shall take place within the buffer zone established under BIO-2. Monitoring, by a qualified biologist, shall be required to ensure compliance with the relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented. Active nests found inside the limits of the buffer zones or nests within the vicinity of the project site showing signs of distress from Project activity, as determined by the qualified biologist, shall be monitored daily during the duration of the project for changes in breeding behavior. If changes in behavior are observed (e.g., distress, disruptions), the buffer shall be immediately adjusted by the qualified biologist until no further interruptions to breeding behavior are detected. The nest protection buffers may be reduced if the qualified biologist determines in compliance with CDFW permit requirements (if any) that construction activities would not be likely to adversely affect the nest. If buffers are reduced, twice weekly monitoring may need to be conducted to confirm that construction activity is not resulting in detectable adverse effects on nesting birds or their young. The qualified biologist may implement an alternative monitoring schedule depending on the construction activity, season, and species potentially subject to impact, subject to compliance with CDFW permits (if any). Construction shall not commence within the prescribed buffer areas until a qualified biologist has determined that the young have fledged or the nest site is otherwise no longer in use. A report of the findings will be prepared by a qualified biologist and submitted to the City prior to the initiation of construction-related activities that have the potential to disturb any active nests during the nesting season.
- d) City staff will not issue permits for ground disturbing activities until after the site has been surveyed by a qualified biologist to ensure that no active nest disturbance or destruction will occur as a result of the project. If necessary, nest protection buffers will be fenced off and active nest monitoring will be initiated prior to permit issuance.

Mitigation Monitoring BIO-1. Prior to issuance of any grading permit(s), the City shall review and approve the results of all pre-construction surveys and any measures recommended by the biologist to avoid sensitive species, which shall be noted on the final project plans. The project proponent shall not initiate any ground disturbing activity until applicant has submitted evidence to the City that Mitigation Measures BIO-1 and BIO-2, have been completed and are consistent with USFWS and/or CDFW permit requirements (if agency involvement is required). In addition, prior to ground disturbing activities, the City shall be provided with a written summary of the results of surveys by a qualified biologist to ensure that no active bird nest disturbance or destruction of breeding bat roosts will occur as a result of the project. If necessary, nest protection buffers will be fenced off and active nest monitoring will be initiated prior to permit issuance. A qualified biologist will also provide worker-awareness training prior to any work within aquatic habitats or adjacent upland habitat where California red-legged frog have potential to occur.

Mitigation Measure BIO-2: Active Nest Buffer. The applicant shall designate active nests as "Ecologically Sensitive Areas" (ESA) and protect the nest (while occupied) during project activities with the establishment of a fence barrier surrounding the nest site.

- a) Buffer distances for bird nests should be site specific and an appropriate distance, as determined by the qualified biologist. The buffer distances should be specified to protect the bird's normal behavior to prevent nesting failure or abandonment.
- b) The qualified biologist shall have authority to order the cessation of all nearby project activities if the nesting birds exhibit abnormal behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established.
- c) Typical protective buffers between each identified nest site and construction site are as follows: 1) 300 feet for hawks, owls and eagles; 2) 50 feet for passerines.
- d) The qualified biologist shall monitor the behavior of the birds (e.g., adults and young, when present) at the nest site to ensure that they are not disturbed by project activities.
- e) Nest monitoring shall continue during project work until the young have completely left the nest site; as determined by the qualified biologist.
- f) No habitat removal or modification shall occur within the ESA-fenced nest zone until the young have fully fledged and will no longer be adversely affected by the project.

Cultural Resources

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

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

Mitigation Measure CUL-2: Cease Ground-Disturbing Activities and Implement Treatment Plan if Archaeological Resources Are Encountered. In the event archaeological resources are unearthed during ground-disturbing activities, all ground-disturbing activities within 50 feet of the find shall be halted so that the find can be evaluated. Ground moving activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. In the event that the newly discovered artifacts are determined to be prehistoric, Native American Tribes/Individuals shall be contacted and consulted, and Native American construction monitoring shall be initiated.

Because it is possible for a lead agency to determine that an artifact is considered significant to a local tribe (and thus be a significant resource under CEQA, even if it would not otherwise be considered significant under CEQA), all Native American artifacts (tribal finds) shall be considered as a significant Tribal Cultural Resource, pursuant to PRC 21074 until the lead agency has enough evidence to make a determination of significance. The City shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. The plan may include implementation of archaeological data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis. If appropriate, the archaeologist may introduce archaeological monitoring on the site. An archaeological report will be written detailing all archaeological finds and submitted to the City and the Northwest Information Center.

Energy

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

Geology and Soils

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

Mitigation Measure GEO-1: California Building Code. All construction activities shall meet the California Building Code regulations for seismic safety. Construction plans shall be subject to review and approval of the City prior to the issuance of a building permit. All work shall be subject to inspection by the City and must conform to all applicable code requirements and approved improvement plans prior to final inspection approval or the issuance of a certificate of occupancy. The Applicant shall be responsible for notifying construction contractors about California Building Code regulations for seismic safety.

Mitigation Measure GEO-2: Erosion and Sediment Control Plan or Stormwater Pollution Prevention Plan. The Applicant shall submit an Erosion and Sediment Control Plan or Stormwater Pollution Prevention Plan prepared by a registered professional engineer or qualified stormwater pollution prevention plan developer as an integral part of the grading plan. The Plan shall be subject to review and approval of the City prior to the issuance of a grading permit. The Plan shall include all erosion control measures to be used during construction, including run-on control, sediment control, and pollution control measures for the entire site to prevent discharge of sediment and contaminants into the drainage system. The Plan shall include the following measures as applicable:

- a) Throughout the construction process, ground disturbance shall be minimized, and existing vegetation shall be retained to the extent possible to reduce soil erosion. All construction and grading activities, including short-term needs (equipment staging areas, storage areas and field office locations) shall minimize the amount of land area disturbed. Whenever possible, existing disturbed areas shall be used for such purposes.
- b) All drainage ways, wetland areas and creek channels shall be protected from silt and sediment in storm runoff using appropriate BMPs such as silt fences, diversion berms and check dams. Fill slopes shall be stabilized and covered when appropriate. All exposed surface areas shall be mulched and reseeded. All cut and fill slopes shall be protected with hay mulch and/or erosion control blankets, as appropriate.
- c) All erosion control measures shall be installed according to the approved plans prior to the onset of the rainy season but no later than October 15th. Erosion control measures shall remain in place until the end of the rainy season but may not be removed before April 15th.

- The applicant shall be responsible for notifying construction contractors about erosion control requirement.
- d) Example design standards for erosion and sediment control include, but are not limited to, the following: avoiding disturbance in especially erodible areas; minimizing disturbance on slopes exceeding 30 percent; using berms, swales, ditches, vegetative filter strips, and catchbasins to prevent the escape of sediment from the site; conducting development in increments; and planting bare soils to restore vegetative cover.
- e) The applicant will also develop an inspection program to evaluate if there is any significant on-site erosion as a result of the rainfall. If there were problem areas at the site, recommendations will be made to improve methods to manage on-site erosion.

Mitigation Measure GEO-3: Conduct Paleontological Sensitivity Training for Construction Personnel. The Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology and shall conduct a paleontological sensitivity training for construction personnel prior to commencement of excavation activities. The Applicant and/or qualified professional paleontologist shall propose a date for scheduling the training at the pre-construction meeting with City staff. The Applicant shall notify the City at least 48 hours before holding the training and keep a log of all attendees. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, the duties of paleontological monitors, notification and other procedures to follow upon discovery of resources, and the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary.

Mitigation Measure GEO-4: Cease Ground-Disturbing Activities and Implement Treatment Plan if Paleontological Resources Are Encountered. If paleontological resources and or unique geological features are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing.

Greenhouse Gas Emissions

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

Hazards and Hazardous Materials

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

Mitigation Measure HAZ-1: Asbestos Containing Materials. Per recommendations in the Phase I Environmental Site Assessment (ESA) performed for the project site, prior to any redevelopment or demolition activities the Applicant shall: (1) survey the existing on-site structures for the presence of asbestos containing materials (to be conducted by an OSHA-certified inspector); and (2) if building elements containing any amount of asbestos are present, prepare a written Asbestos

Abatement Plan describing activities and procedures for removal, handling, and disposal of these building elements using EPA- and/or OSHA-approved procedures, work practices, and engineering controls.

Mitigation Measure HAZ-2: Lead-based Paints. The Applicant shall test the existing on-site structures for lead-based paint. If present, the lead-based paint shall be removed and disposed of following lead abatement performance standards included in the U.S. Department of Housing and Urban Development Guidelines for Evaluation and Control of Lead-Based Paint program, in compliance with Title 8 California Code of Regulations (including Section 1532.1).

Hydrology and Water Quality

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

Land Use and Planning

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

Mineral Resources

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

Noise

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

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

- 1) Construction work hours shall be limited to the hours of 7 AM to 7 PM.
- 2) The sign shall also provide a contact name and phone number for the job site and the project's representative for addressing noise concerns.
- 3) Heavy equipment engines shall be covered and exhaust pipes shall include a muffler in good working condition.
- 4) Stationary equipment such as compressors, generators, and welder machines shall be located as far away from surrounding residential land uses as possible. The project shall connect to existing electrical service at the site to avoid the use of stationary, diesel- or other alternatively-fueled power generators, if feasible.
- 5) Impact tools such as jack hammers shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. When use of pneumatic tools is unavoidable, it shall be ensured the tool will not exceed a decibel limit of 85 dBA at a distance of 50 feet. Pneumatic tools shall also include a noise suppression device on the compressed air exhaust.
- 6) No radios or other amplified sound devices shall be audible beyond the property line of the construction site.
- 7) Prior to the start of any construction activity, the Applicant or its contractor shall prepare a Construction Noise Complaint Plan that identifies the name and/or title and contact information (including phone number and email) of the Contractor and District-representatives responsible for addressing construction-noise related issues and details how the District and its construction contractor will receive, respond, and resolve to construction noise complaints. At a minimum, upon receipt of a noise complaint, the Applicant and/or Contractor representative identified in

the Plan shall identify the noise source generating the complaint, determine the cause of the complaint, and take steps to resolve the complaint.

Mitigation Measure NOISE-2: Reduce Residential Interior Noise Exposure. Prior to the issuance of a building permit for the proposed project, the City shall review and approve an acoustical analysis, prepared by or on behalf of the Applicant, that confirms actual noise levels for the project will not exceed:

- 1. 70 CNEL along northern portion of the site where building facades would be located, per the land use compatibility standards contained in the City's General Plan;
- 2. 45 CNEL in habitable rooms; and
- 3. 50 dBA Leq (1-hour) in other occupied rooms.

Potential noise insulation site and building design features capable of achieving this requirement may include, but are not limited to: sound barriers; enhanced exterior wall construction/noise insulation design; use of enhanced window, door, and roof assemblies with above average sound transmission class (STC) or outdoor/indoor transmission call (OITC) values; or use of mechanical, forced air ventilation systems to permit a windows closed condition in residential units.

Population and Housing

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

Public Services

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

Recreation

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

Transportation

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

Mitigation Measure TRANS-1: Construction Period Transportation Impacts. The Applicant shall submit a Construction Period Traffic Control Plan to the City for review and approval. The plan shall include traffic safety guidelines compatible with Section 12 of the Caltrans Standard Specifications ("Construction Area Traffic Control Devices") to be followed during construction. The plan shall also specify provision of adequate signing and other precautions for public safety to be provided during project construction. In particular, the plan shall include a discussion of bicycle and pedestrian safety needs due to project construction and later, project operation. In addition, the plan shall address emergency vehicle access during construction. The applicant or their general contractor for the project shall notify the Public Works & Utilities Department and local emergency services (i.e., the Police and Fire Departments) prior to construction to inform them of the proposed construction schedule and that traffic delays may occur. Prior to approval of a grading permit, the City shall review and approve the project Construction Period Traffic Control Plan. During construction, the City shall periodically verify that traffic control plan provisions are being implemented.

Tribal Cultural Resources

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

Application of **Mitigation Measures CUL-1** and **CUL-2** would result in less than significant impacts with respect to tribal cultural resources.

<u>Utilities and Service Systems</u>
No significant impacts have been identified; no mitigation is necessary.

Wildfire

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

3. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at							
lea	least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the						
fol	lowing pages.	•		•			
	Aesthetics		Greenhouse Gas Emissions		Public Services		
	Agriculture and Forestry	\boxtimes	Hazards & Hazardous Material		Recreation		
	Air Quality		Hydrology/Water Quality	\geq	Transportation/Traffic		
	Biological Resources		Land Use/Planning	\geq	Tribal Cultural Resources		
\boxtimes	Cultural Resources		Mineral Resources		Utilities/Service Systems		
	Energy Resources	\boxtimes	Noise		Wildfire		
\boxtimes	Geology and Soils		Population/Housing		Man. Findings of Sig.		

4. Determination

On the basis of this initial evaluation:	
I find that the proposed project COULD NOT NEGATIVE DECLARATION will be prepared	have a significant effect on the environment, and a
	ave a significant effect on the environment, there will visions in the project have been made by or agreed to ATIVE DECLARATION will be prepared.
I find that the proposed project MAY have ENVIRONMENTAL IMPACT REPORT is rec	a significant effect on the environment, and an juired.
unless mitigated" impact on the environment, be in an earlier document pursuant to applicable leg measures based on the earlier analysis as desc	tentially significant impact" or "potentially significant at at least one effect (1) has been adequately analyzed all standards, and (2) has been addressed by mitigation cribed on attached sheets. An ENVIRONMENTAL yze only the effects that remain to be addressed.
Signature	Date
Justin Meek, AICP, Principal	Planner
Printed Name	Date

5. Evaluation of Environmental Impacts

- (1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- (2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- (3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation incorporated, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- (4) "Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analysis," as explained in [5] below, may be cross-referenced).
 - It is noted that many potential environmental impacts can be avoided or reduced through implementation of uniformly applied development policies, standards, or regulations such as building and fire codes, design guidelines, a noise ordinance, a historic resource ordinance, a tree preservation ordinance, and other requirements that the lead agency applies uniformly toward all project proposals. Consistent with CEQA streamlining provisions (e.g., section 15183), these uniformly applied requirements are not distinguished as project-specific "mitigation measures," primarily because they have already been adopted to avoid or reduce potential environmental impacts of all future project proposals, not only the particular project being evaluated at the moment.
- (5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. (CEQA Guidelines section 15063[b][1][c]). In this case, a brief discussion should identify the following:
 - (a) Earlier Analysis Used. Identify and state where they are available for review.
 - (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

- (c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- (6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- (7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- (8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- (9) The explanation of each issue should identify:
 - (a) The significance criteria or threshold, if any, used to evaluate each question; and
 - (b) The mitigation measure identified, if any, to reduce the impact to less than significant.

6. Issues

6.1 Aesthetics

			Summary of 1	Impacts	
		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
	cept as provided in Public Resources Code Section 21099, buld the project:				
a)	Have a substantial adverse effect on a scenic vista?			✓	
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
c)	In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			✓	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ("Glare" is defined in this EIR as the reflection of harsh bright light sufficient to cause physical discomfort or loss in visual performance and visibility.)				

<u>Conclusion</u>: Regarding aesthetics, the proposed project would not result in any significant environmental impacts.

Documentation:

- a. Less than Significant Impact. The project would not have a substantial adverse effect on a scenic vista, as the site is located within an industrial area, bordered on the west and south by industrial properties (zoned IP: Industrial Park) and the Colonial Manor Mobile Home Park on the east side (zoned RM-3: Multiple Residential-High Density). Across Airport Boulevard from the project site is the Watsonville Municipal Airport (zoned PF: Public Facilities). A component of the project includes a General Plan Map Amendment to RM from IP. The project vicinity does not afford expansive scenic views and has no aesthetic features, such as prominent ridges or scenic vistas. The proposed project would create 21 townhomes including three affordable units on a former rebar processing facility. The proposed townhomes are two stories grouped in four buildings with a total footprint of approximately 18,927 square feet. The buildings proposed are contemporary in design. Since there are no officially designated scenic views in the City of Watsonville, the project would not have a substantial adverse effect on a scenic vista, and impacts resulting from the project would be less than significant.
- **b. No Impact.** State Scenic Highways are designed by the California Department of Transportation (Caltrans) to promote the protection and enhancement of the natural scenic beauty of California's highways and adjacent corridors. Three designated or eligible for designation State Scenic Highways are within City limits, the closest of which is State Route (SR) 152, which is officially designated as

a scenic highway from the Merced-Santa Clara county line, and is eligible for designation where it intersects with California State Highway 1 over 3,000 feet south/southeast of the project site. The project is not visible from any of these State Scenic Highways.

As discussed on page 70 of the General Plan in Chapter 5 (Urban Design and Scenic Resources), Airport Boulevard is a designated scenic street. Airport Boulevard provides views to the north and west of open space areas, as well as offers a route from urban commercial areas to rural agricultural areas. The General Plan states that new development along Airport Boulevard would contribute to the scenic qualities of the corridor with attractive building design and landscaping. In renderings provided by the applicant, the buildings would look contemporary and have vegetation screening.

The project site is located on a partly developed industrial site in an urbanized area and contains no scenic resources such as significant trees or unique rock outcroppings. The proposed project would not substantially degrade scenic resources because the project is not visible from a designated state scenic highway or an identified a scenic resource near the project site. As such, there would be no impact.

c. Less than Significant Impact. The project is located in an urbanized area, and public vantage points are accessed along Airport Blvd. which offers limited views to the north and east of the Santa Cruz Mountains. Project buildout would not interfere with these views. The parcel would be redeveloped into two-story townhomes with a maximum building height of 25'-8". A component of the project includes a General Plan Map Amendment to RM from IP. Assuming the amendment is approved, the project would slightly change the character of the neighborhood which is a mostly industrial area. The surrounding area is zoned RM-3: Multiple Residential-High Density, IP: Industrial Park, and PF: Public Facilities. The proposed project would contribute to more residences in the area and would be processed for Design Review with the City of Watsonville. The project includes both landscaping features as well as open space and recreational facilities. The applicant provided a landscaping plan (Figure XX) that includes the planting of drought tolerant plants, trees and shrubs that would act as natural screening of the buildings, in addition to privacy fencing.

The Watsonville General Plan has Goals which guide development.

- Goal 5.2 Community Appearance: Blend new development with recognized values of community appearance and scenic qualities, and ensure that new development enhances, rather than detracts from, its surroundings.
- Goal 5.6 Urban Design: Achieve high standards of street, site and building design that are both efficient, and aesthetically pleasing.
- Policy 5.A Project Design Review: The preservation of visual resources shall be accomplished through the design review process.
- Policy 5.B Design Consistency: The City shall review new development proposals to encourage high standards of urban design and to ensure that elements of architectural design and site orientation do not degrade or conflict with the appearance of existing structures.

The project is located in an urbanized area, has a robust landscaping plan, and is consistent with the General Plan Goals and Policies, Design Guidelines regarding landscaping and design. The project would not substantially degrade the existing visual character or quality of the site and its surroundings. The impact would be less than significant.

d. Less than Significant Impact. Excessive or inappropriately directed lighting can adversely impact night-time views by reducing the ability to see the night sky and stars. Glare can be caused from unshielded or misdirected lighting sources, or by reflective surfaces (i.e., polished metal, window treatments). The proposed lighting is adequate to illuminate the project area and is consistent with typical lighting for an urban residential setting. The parking lot lighting is sufficient for creating a fairly even distribution of light at low to moderate levels of intensity. The photometric analysis indicates the outdoor fixtures would create low and moderate light levels in and adjacent to the project location and should not create a glare nuisance. The project would not create a glare nuisance for the adjoining residential properties.

Although the project would increase the overall light in the project vicinity it would not create readily detectable glare along the adjacent roads or surrounding residential uses. In addition, the project would be required to comply with the General Plan Urban Design and Scenic Resources element Goal 5.2 "Community Appearance." Therefore, the project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The impact would be less than significant.

References:

Caltrans. Map Viewer website, "California Scenic Highways," Available at: https://www.arcgis.com/home/webmap/viewer.html?layers=f0259b1ad0fe4093a5604c9b838a486a (accessed March 3, 2020).

City of Watsonville, 2005. General Plan, Urban Design and Scenic Resources Chapter 5. Available at: https://www.cityofwatsonville.org/160/2005-General-Plan (accessed March 3, 2020).

Lattanzio, Inc., January 11, 2017. Elevations (Building #1) (sheet A-5).

Lattanzio, Inc., January 03, 2018. Site Lighting Plan (sheet A1.a).

Michael Arnone Landscape Architect, October 9, 2017. Preliminary Landscape Plan (sheet L-1.0).

6.2 Agriculture and Forest Resources

		Summary of I	mpacts	
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
In determining whether impacts to agricultural resources are si	gnificant	environmenta	l effects,	lead
agencies may refer to the California Agricultural Land Evaluat				
(1997) prepared by the California Dept. of Conservation as an	-			
impacts on agriculture and farmland. In determining whether in	_		· ·	
timberland, are significant environmental effects, lead agencies				
by the California Department of Forestry and Fire Protection re				
forest land, including the Forest and Range Assessment Projec		~ .		
project; and forest carbon measurement methodology provided	in Fores	t protocols add	opted by	the
California Air Resources Board. Would the project:	T	Γ	Ι	
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the				•
maps prepared pursuant to the Farmland Mapping and				
Monitoring Program of the California Resources Agency,				
to non-agricultural use?				
b) Conflict with existing zoning for agricultural use, or a				✓
Williamson Act contract?				
c) Conflict with existing zoning for, or cause rezoning of,				✓
forest land (as defined in Public Resources Code section				
12220(g)), timberland (as defined by Public Resources				
Code section 4526), or timberland zoned Timberland				
Production (as defined by Government Code section				
51140 (g))?				
d) Result in the loss of forest land or conversion of forest				✓
land to non-forest use?				
e) Involve other changes in the existing environment which,				✓
due to their location or nature, could result in conversion				
of Farmland, to non-agricultural use or conversion of				
forest land to non-forest use?				

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

Documentation:

a. No Impact. The project site and vicinity are located within an established, developed urban area that does not allow agriculture or forest uses per the City's General Plan. The map of Important Farmland in California (2016) prepared by the Department of Conservation does not identify the project site as being Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The site is classified as "Urban and Built-Up-Land" which is described as "occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel." Because the project site is classified as Urban and Built-Up-Land, the project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a nonagricultural use. As such, there would be no impact.

- **b. No Impact.** No land within the City limits is zoned for agricultural use. The project site is zoned for industrial usage, with the proposal to change to RM-3, intended for multi-family residential development. Lands within the project are not under Williamson Act contracts nor would the project impact any lands under Williamson Act contracts. The proposed project would not impact existing zoning for agricultural use, or a Williamson Act contract and no impact would occur.
- **c. No Impact.** The project site and vicinity are located within an urban area and there is no forest land or timberland located on or near the project site. The project site is surrounded by residential, industrial and public facilities zoned land. There would be no impact.
- **d. No Impact.** The project site does not contain any forest land onsite or nearby. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest uses. Project development would not impact forest land and there would be no impact.
- **e. No Impact.** Refer to Sections 6.2.a and 6.2.c. The project site is a currently partly developed site within an urbanized, industrial environment. None of the surrounding sites contain existing forest or agricultural uses. Development of the project would not change the existing environment in a manner that will result in the conversion of forest land to a non-forest land use or agricultural land to a non-agricultural use because the existing zoning is residential. Therefore, no impact would occur.

References:

California Department of Conservation, California Important Farmland Finder 2016. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed March 04, 2020).

6.3 Air Quality

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

<u>Conclusion</u>: Regarding air quality, the proposed project would not result in any significant environmental impacts.

Documentation:

a. No Impact. In May 2017, the Monterey Bay Air Resources District (MBARD) adopted the 2012-2015 Air Quality Management Plan (AQMP), which assesses and updates the elements of the 2008 AQMP and the Triennial Plan Revision 2009-2011, including the air quality trends analysis, emission inventory, and mobile source programs (MBARD, 2017; MBARD, 2013).

The MBARD's CEQA Air Quality Guidelines provides a list of actions that are intended to ensure consistency with the AQMP (MBARD, 2008). The most applicable actions from the CEQA Air Quality Guidelines is assessing the proposed growth assumptions associated with a proposed project with the population and dwelling unit forecasts adopted by the Association of Monterey Bay Area Governments (AMBAG), since the AMBAG population and dwelling unit forecasts are used to generate emission forecasts upon which the AQMP is based. As such, projects that are consistent with the AMBAG's regional forecasts would be considered consistent with the AQMP. Another criterion for evaluating project consistency with the AQMP, is based on the project's potential to increase criteria air pollutant emissions. Projects that result in a significant increase in emissions, defined as in excess of MBARD significance thresholds, would also be considered to potentially conflict with or obstruct implementation of the AQMP.

The project is anticipated to house 78 residents, which is within the growth forecasts developed by the AMBAG's 2010 Monterey Bay Area Metropolitan Transportation Plan (MTP), *Monterey Bay Area Mobility 2035* (AMBAG, 2010).² As such, the project would not conflict with the AQMP with

_

² Although there is a new MTP for the region, the 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy, the AQMP's air quality projections are based on the growth assumptions in the previous MTP. Therefore, consistency with regard to the AQMP is based on the previous iteration of the MTP.

regard to the first criterion. In addition, as described under response Section 6.3(b), the proposed project would not exceed the MBARD's construction or operational significance thresholds for criteria air pollutant emissions. Therefore, the project would not conflict with nor obstruct implementation of the AQMP. No impact would occur.

b. Less than Significant Impact. The project is located within the North Central Coast Air Basin (NCCAB), which encompasses Santa Cruz, San Benito, and Monterey Counties. Efforts to attain state and federal air quality standards in the NCCAB are governed by the MBARD. Both the State of California and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as *criteria pollutants*). These pollutants include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), inhalable particulate matter with a diameter of 10 microns or less (PM₁₀), fine particulate matter with a diameter of 2.5 microns or less (PM_{2.5}), and lead (Pb). The state has also established AAQS for additional pollutants. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the state and federal standards differ, California AAQS are more stringent than the national AAQS.

The United States Environmental Protection Agency (U.S. EPA), California Air Resources Board (CARB), and MBARD assess the air quality of an area by measuring and monitoring the amount of pollutants in the ambient air and comparing pollutant levels against NAAQS and CAAQS. Based on these comparisons, regions are classified into one of the following categories:

- Attainment. A region is "in attainment" if monitoring shows ambient concentrations of a specific pollutant are less than or equal to NAAQS or CAAQS. In addition, an area that has been re-designated from nonattainment to attainment is classified as a "maintenance area" for 10 years to ensure that the air quality improvements are sustained.
- Nonattainment. If the NAAQS or CAAQS are exceeded for a pollutant, the region is designated as nonattainment for that pollutant. It is important to note that some NAAQS and CAAQS require multiple exceedances of the standard in order for a region to be classified as nonattainment. Federal and state laws require nonattainment areas to develop strategies, plans, and control measures to reduce pollutant concentrations to levels that meet, or attain, standards.
- Unclassified. An area is unclassified if the ambient air monitoring data are incomplete and do not support a designation of attainment or nonattainment. Air pollution levels are measured at monitoring stations located throughout the air basin.

Error! Reference source not found., *North Central Coast Air Basin Attainment Status*, summarizes the attainment status in the NCCAB for criteria pollutants.

Table 1. North Central Coast Air Basin Attainment Status

Pollutant	Federal	State
Ozone (O ₃)	Nonattainment/Transitional	Unclassified/Attainment
PM_{10}	Nonattainment	Unclassified
PM _{2.5}	Attainment	Unclassified/Attainment
Carbon Monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen Dioxide (NO ₂)	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO ₂)	Attainment	Unclassified
Sulfates	Attainment	
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	
Visibility Reducing Particles	Unclassified	
Source: CARB, 2017		

The proposed project would generate both short-term construction emissions and long-term operational emissions. The project's potential emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. As described in more detail below, the proposed project would not generate short-term or long-term emissions that exceed MBARD-recommended criteria air pollutant thresholds.

Construction Emissions: The proposed project involves the construction of 21 new residential townhomes over an approximately 12-month period. Construction activities would disturb the entire site (approximately 1.57 acres,) and would include demolition of the existing single-family house, site preparation, grading, construction, paving, and architectural coating work. Soil and earthwork quantities are anticipated to be balanced on site during grading.

The proposed project's potential construction emissions were estimated using CalEEMod, based on default assumptions, and are shown in **Error! Reference source not found.**, Construction Activity, Duration, and Typical Equipment.

Table 2. Construction Activity, Duration, and Typical Equipment

Construction Activity	Duration (days)(A)	Typical Equipment Used ^(B)
Demolition	20	Concrete/Industrial Saw, Dozer, Backhoe
Site Preparation	2	Grader, Tractor/Loader/Backhoe
Grading	4	Grader, Dozer, Backhoe
Building Construction	200	Crane, Forklift, Generator, Backhoe,
Building Construction	200	Welder
Paving	10	Cement Mixer, Paver, Roller, Backhoe
Architectural Coating	10	Air Compressor

Source: MIG, 2020 (See Appendix A).

(A) Days refer to total active work days in the construction phase, not calendar days.

The proposed project's maximum daily unmitigated construction emissions are shown in **Error! Reference source not found.**, *Unmitigated Maximum Daily Criteria Air Pollutant Construction Emissions (lbs/day)*. Please refer to Appendix A for CalEEMod output files and detailed construction emissions assumptions.

⁽B) The typical equipment list does not reflect all equipment that would be used during the construction phase. Not all equipment would operate eight hours per day each work day.

Table 3. Unmitigated Maximum Daily Criteria Air Pollutant Construction Emissions (lbs/day)

Source	ROG	NO _X	СО	SO ₂	PM ₁₀	PM _{2.5}
Summer						
2020 ^(A)	55.4	21.2	15.2	$<0.0^{(B)}$	6.7	3.7
Winter						
2020 ^(A)	55.4	21.2	15.2	<0.0 ^(B)	6.7	3.7
Threshold					82	
Substantial?					No	

Source: MIG, 2019 (See Appendix A).

The proposed project would not result in construction emissions that exceed the MBARD's only established construction criteria air pollutant emission threshold of 82 lbs/day for PM₁₀. As stated in the 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., volatile organic compounds [VOC] or oxides of nitrogen [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" (MBARD, 2008; pg. 5-3). The project would utilize usual construction equipment, and therefore emissions of VOC/ROG and NOx would not hinder attainment of ozone standards in the NCCAB. In addition, compliance with existing MBARD rules and regulations, such as Rule 426 (Architectural Coatings) and Rule 425 (Use of Cutback Asphalt) would further minimize potential short-term criteria air pollutant emissions.

Although the proposed project would not exceed the MBARD's only established construction criteria air pollutant emission threshold, construction activities still have the potential to conflict with MBARD Rule 402 (Nuisances). Accordingly, the City would implement the following air quality Best Management Practices (BMPs) to reduce fugitive dust emissions and potential nearby sensitive receptor exposure to exhaust emissions.

Construction Air Quality Best Management Practices: The City shall require the Applicant to incorporate the following construction air quality best management practices into all applicable project bid, design, and engineering documents:

- 1) All exposed surfaces (e.g., parking areas, staging area, soil piles, graded areas, and unpaved access roads) shall be watered at once per day, at a minimum.
- 2) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 3) All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- 4) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used
- 5) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

⁽A) As a conservative approach, all construction emissions were assumed to occur in 2020. In actuality, construction emissions may occur in 2021, too. Construction equipment in anticipated to become cleaner over time as older, dirtier, construction equipment is phased out and replaced with newer, cleaner burning pieces of equipment.

⁽B) <0.0 does not mean emissions are zero; rather, it means emissions are greater than 0.00, but less than 0.1.

- 6) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- 7) Stage construction equipment and materials as far away from residential land uses to the extent feasible.

Operational Emissions: Upon completion of construction activities, the proposed project would operate as 21, new townhomes. The operation of this land use would generate emissions of regulated air pollutants from:

- "Area" Sources. The proposed land use would generate emissions from small area sources, including landscaping equipment, and the use of consumer products (e.g., paints, cleaners, and fertilizers) that result in the evaporation of chemicals into the atmosphere during product use.
- **Energy Use and Consumption.** The proposed land uses would generate emissions from the combustion of natural gas in water and space heating equipment.
- **Mobile Sources.** The proposed project site would generate emissions from vehicles traveling to and from the project site.

The proposed project's operational emissions were estimated using CalEEMod. The operational emissions generated in CalEEMod are based on the project's full first year of operation (presumed to be 2021) using default data assumptions provided by CalEEMod, with the following project-specific modification:

• The default weekday trip generation rate for the townhomes was replaced with the trip generation rates contained in the Transportation Memorandum prepared for the project by W-Trans. The weekend trip generation rates were left as model defaults. According to the Traffic Memorandum, the proposed project would generate an increase of approximately 3 AM peak hour, 5 PM peak hour, and 99 net, new, daily trips on average weekdays. As such, the mobile source emissions reflect the net change in trip generation between the existing and proposed land uses.

The proposed project's maximum daily unmitigated operational emissions are shown in **Error!** Reference source not found., Unmitigated Maximum Daily Criteria Air Pollutant Operational Emissions (lbs/day).

Table 4. Unmitigated Maximum Daily Criteria Air Pollutant Operational Emissions (lbs/day)

Tuble ii Cillingatea Waximani Ban					S, 6266 _J)
ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
8.0	<0.0 ^(A)	1.7	<0.0 ^(A)	<0.0 ^(A)	<0.0 ^(A)
$< 0.0^{(A)}$	0.1	<0.0 ^(A)	<0.0 ^(A)	<0.0 ^(A)	<0.0 ^(A)
0.3	1.0	3.5	<0.0 ^(A)	0.8	0.2
1.1	1.1	5.3	$< 0.0^{(A)}$	0.8	0.2
0.8	< 0.0 ^(A)	1.7	<0.0 ^(A)	<0.0 ^(A)	<0.0 ^(A)
$< 0.0^{(A)}$	0.1	<0.0 ^(A)	<0.0 ^(A)	<0.0 ^(A)	<0.0 ^(A)
1.0	5.6	12.6	<0.0 ^(A)	2.9	0.8
0.3	1.1	3.7	$< 0.0^{(A)}$	0.8	0.2
137	137	500	150	82	
No	No		No	No	
	0.8 <0.0 ^(A) 0.3 1.1 0.8 <0.0 ^(A) 1.0 0.3 137	ROG NOx 0.8 $<0.0^{(A)}$ $<0.0^{(A)}$ 0.1 0.3 1.0 1.1 1.1 0.8 $<0.0^{(A)}$ $<0.0^{(A)}$ 0.1 1.0 5.6 0.3 1.1 137 137	ROG NOx CO 0.8 $<0.0^{(A)}$ 1.7 $<0.0^{(A)}$ 0.1 $<0.0^{(A)}$ 0.3 1.0 3.5 1.1 1.1 5.3 0.8 $<0.0^{(A)}$ 1.7 $<0.0^{(A)}$ 0.1 $<0.0^{(A)}$ 1.0 5.6 12.6 0.3 1.1 3.7 137 137 500	ROG NOx CO SO2 0.8 $<0.0^{(A)}$ 1.7 $<0.0^{(A)}$ $<0.0^{(A)}$ 0.1 $<0.0^{(A)}$ $<0.0^{(A)}$ 0.3 1.0 3.5 $<0.0^{(A)}$ 1.1 1.1 5.3 $<0.0^{(A)}$ 0.8 $<0.0^{(A)}$ 1.7 $<0.0^{(A)}$ $<0.0^{(A)}$ $<0.0^{(A)}$ $<0.0^{(A)}$ $<0.0^{(A)}$ $<0.0^{(A)}$ $<0.0^{(A)}$ <0.3 1.1 $<0.0^{(A)}$ $<0.0^{(A)$	ROG NOx CO SO2 PM ₁₀ 0.8 $<0.0^{(A)}$ 1.7 $<0.0^{(A)}$ $<0.0^{(A)}$ $<0.0^{(A)}$ 0.1 $<0.0^{(A)}$ $<0.0^{(A)}$ $<0.0^{(A)}$ 0.3 1.0 3.5 $<0.0^{(A)}$ <0.8 1.1 1.1 5.3 $<0.0^{(A)}$ <0.8 0.8 $<0.0^{(A)}$

Source: MIG, 2019 (See Appendix A).

The proposed maximum daily unmitigated operational emissions would be below the MBARD's operational criteria air pollutant emissions thresholds. Therefore, operation of the proposed project would not generate operational-related emissions that exceed MBARD thresholds, and impacts would be less than significant.

- c. Less than Significant Impact. Some populations are more susceptible to the effects of air pollution than the population at large; these populations are defined as sensitive air quality receptors. Sensitive receptors include children, the elderly, the sick, and the athletic. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The sensitive air quality receptors adjacent or in close proximity to the perimeter of the project include:
 - The Colonial Manor Mobile Home Park, immediately east of the project site; and
 - Single-family homes along Jeanette Way, San Tomas Way, and San Tomas Court, south / south-east of the project site. The closest of these receptors are approximately 185 feet from the project site.

In addition to criteria air pollutants such as NOx (an ozone precursor), CO, PM₁₀, and PM_{2.5}, the U.S. EPA and CARB have classified certain pollutants as hazardous air pollutants (HAPs) and toxic air contaminants (TACs), respectively. These pollutants can cause severe health effects at very low concentrations, and many are suspected or confirmed carcinogens. The U.S. EPA has identified 187 HAPs, including such substances as arsenic and chlorine; CARB considers all U.S. EPA designated HAPS, as well as diesel particulate matter (DPM) emissions from diesel-fueled engines and other substances, to be a TAC.

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

⁽A) <0.0 does not mean emissions are zero; rather, it means emissions are greater than 0.00, but less than 0.1.

⁽B) Totals may not equal the sum of aggregate emissions due to rounding.

First, as shown in Table 3, the proposed project's emissions would be below all MBARD construction emissions thresholds. Second, project construction emission activities would only occur intermittently, between the hours of 7 AM and 7 PM, Monday through Friday, and between the hours of 8 AM and 5 PM on Saturday, in accordance with a standard condition of project approval for all development projects. The intermittent nature of project construction activities would provide time for emitted pollutants to disperse on an hourly and daily basis according to the prevailing wind in the area. Finally, the project site is large, and the equipment used for project construction would be mobile – meaning that emission sources would move around the site and not expose the same receptor to pollutant concentrations continuously throughout the day, week, or construction-period as a whole. Furthermore, the proposed project would be required to comply with applicable MBARD rules and regulations, such as Rule 402 (Nuisances) and Rule 424 (National Emission Standards for Hazardous Air Pollutants (NESHAPS)), which covers the handling of potential existing asbestos-containing building materials that could be present at the project site. Furthermore, the proposed project would implement BMPs for air quality, which would help reduce fugitive dust emissions, and would require construction equipment be staged as far away from residential receptors, as possible, thus reducing the quantity of exhaust emitted in proximity to sensitive receptors.

In summary, the proposed project would not expose sensitive receptors to substantial pollutant concentrations because the proposed project consists of short-term construction activities; emission sources would be temporary, intermittent, and move throughout the approximately 1.57-acre project site; and the project Applicant would comply with applicable MBARD rules and regulations. This impact would be less than significant.

d. Less than Significant Impact. Construction of the project would generate typical odors associated with construction activities, such fuel and oil odors, asphalt paving odors and painting/coating odors. The odors generated by the project would be intermittent and localized in nature and would disperse quickly. Therefore, the project would not create objectionable odors affecting a substantial number of people. This impact would be less than significant.

References:

Association of Monterey Bay Area Governments (AMBAG), 2010. *Monterey Bay Area Mobility 2035*. Available at: https://ambag.org/pdf/MTP%202010%20-%20Monterey%20Bay%20Area%20Mobility%202035.pdf (accessed October 4, 2019).

California Air Resources Board (CARB), 2017. Area Designations Map/State and National. Available at: http://www.arb.ca.gov/desig/adm/adm.htm (accessed December 28, 2018).

City of Watsonville, 2020. Watsonville Municipal Code. Available at: https://www.codepublishing.com/CA/Watsonville (accessed March 25, 2020).

Monterey Bay Air Resources District (MBARD), 2008. CEQA Air Quality Guidelines. Available at: https://www.mbard.org/files/f665829d1/CEQA_full+%281%29.pdf (accessed October 4, 2019).

MBARD, 2017. 2012-2015 Air Quality Management Plan. Available at: https://www.mbard.org/files/6632732f5/2012-2015-AQMP_FINAL.pdf (accessed October 4, 2019).

6.4 Biological Resources

			Summary of Impacts			
		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact	
Wo	ould the project:			-		
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		>			
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				~	
c)	Have a substantial adverse effect on federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓	
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				✓	
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓	
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				√	

<u>Conclusion</u>: The project would not result in any significant environmental impacts to biological resources. The project site is a mixture of ruderal, disturbed and developed habitat. Implementation of Mitigation Measures BIO-1 and BIO-2 would reduce potential impacts to less than significant levels.

<u>Regulatory Environment</u>: The following describes the regulatory environment that supports the conclusions to the impact questions.

Special-Status Species Regulatory Framework

<u>Federal Endangered Species Act (FESA):</u> The FESA establishes a broad public and federal interest in identifying, protecting, and providing for the recovery of threatened or endangered species. The Secretary of the Interior and the Secretary of Commerce are designated in FESA as responsible for identifying endangered and threatened species and their critical habitat, carrying out programs for the conservation of these species, and rendering opinions regarding the impact of proposed federal actions on listed species. The USFWS and the National Oceanic and Atmospheric Administration's National

Marine Fisheries Service (NOAA Fisheries) are charged with implementing and enforcing the FESA. USFWS has authority over terrestrial and continental aquatic species, and NOAA Fisheries has authority over species that spend all or part of their life cycle at sea, such as salmonids. Section 9 of FESA prohibits the unlawful "take" of any listed fish or wildlife species. Take, as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such action." USFWS's regulations define harm to mean "an act which actually kills or injures wildlife." Such an act "may include "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR § 17.3). Take can be permitted under FESA pursuant to sections 7 and 10. Section 7 provides a process for take permits for federal projects or projects subject to a federal permit, and Section 10 provides a process for incidental take permits for projects without a federal nexus. FESA does not extend the take prohibition to federally listed plants on private land, other than prohibiting the removal, damage, or destruction of such species in violation of state law.

Critical Habitat: Critical habitat is a term defined in the ESA as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. The ESA requires federal agencies to consult with the USFWS to conserve listed species on their lands and to ensure that any activities or projects they fund, authorize, or carry out will not jeopardize the survival of a threatened or endangered species. In consultation for those species with critical habitat, federal agencies must also ensure that their activities or projects do not adversely modify critical habitat to the point that it will no longer aid in the species' recovery. In many cases, this level of protection is similar to that already provided to species by the ESA jeopardy standard. However, areas that are currently unoccupied by the species but which are needed for the species' recovery are protected by the prohibition against adverse modification of critical habitat.

Migratory Bird Treaty Act of 1918 (MBTA): The Federal Migratory Bird Treaty Act (MBTA) (16 USC. 703 et seq.), Title 50 Code of Federal Regulations (CFR) Part 10, prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." With a few exceptions, most birds are considered migratory under the MBTA. Disturbances that cause nest abandonment and/or loss of reproductive effort or loss of habitat upon which these birds depend would be in violation of the MBTA.

<u>California Endangered Species Act (CESA)</u>: Provisions of CESA protect state-listed threatened and endangered species. The California Department of Fish and Wildlife (CDFW) is charged with establishing a list of endangered and threatened species. CDFW regulates activities that may result in "take" of individuals (i.e., "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill"). Habitat degradation or modification is not expressly included in the definition of "take" under the California Fish and Game Code, but CDFW has interpreted "take" to include the killing of a member of a species which is the proximate result of habitat modification.

California Fully Protected Species and Species of Special Concern: The classification of California "fully protected" (CFP) was the CDFW's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The Fish and Game Code sections (fish at §5515, amphibians and reptiles at §5050, birds at §3503 and §3511, and mammals at §4150 and §4700) dealing with "fully protected" species state that these species "...may not be taken or possessed at any time and no provision of this code or

any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species," although take may be authorized for necessary scientific research. This language makes the "fully protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with "fully protected" species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

California Species of Special Concern (CSC) are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing or because they historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologist, and others, and is intended to focus attention on the species to help avert the need for listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required.

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

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

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

Habitat-Level Regulatory Framework

Removal of Trees and Other Vegetation: Construction grading and drainage shall not remove or disturb trees and other vegetation except in compliance with the City's best management practices for

construction grading and drainage and the approved plans and specifications. Construction grading and drainage shall be conducted in compliance with the following requirements.

- a) The limits of work-related ground disturbance shall be clearly identified and delineated on the approved plans and specifications and defined and marked on the site to prevent damage to surrounding trees and other vegetation.
- b) Trees and other vegetation within the limits of work-related ground disturbance that are to be retained shall be identified and protected from damage by marking, fencing, or other measures.

Sensitive Natural Vegetation Community Regulatory Framework

California Fish and Game Code Section 1600-1603: Streams, lakes, and riparian vegetation, as habitat for fish and other wildlife species, are subject to jurisdiction by the CDFW under Sections 1600-1616 of the California Fish and Game Code. Any activity that will do one or more of the following: (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake generally require a 1602 Lake and Streambed Alteration Agreement. The term "stream", which includes creeks and rivers, is defined in the California Code of Regulations ("CCR") as follows: "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life". This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFW 1994). Riparian vegetation is defined as, "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFW 1994). In addition to impacts to jurisdictional streambeds, removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from the CDFW.

Sensitive Natural Communities: Sensitive natural communities are vegetation communities and habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies or regulations, or by the CDFW (i.e., CNDDB) or the USFWS. The CNDDB identifies a number of natural communities as rare, which are given the highest inventory priority. Impacts to sensitive natural communities and habitats must be considered and evaluated under the CEQA California Code of Regulations (CCR): Title 14, Div. 6, Chap. 3, Appendix G.

Documentation:

a. No Impact to Special Status Plants. No special-status plant species were determined to have the potential to occur onsite due to the lack of onsite habitat. A site visit was conducted to confirm absence of special-status plant species in May 2020 by an MIG, Inc. biologist during the blooming period for potentially present species. None were observed during the visit; therefore, no rare plants were determined to be present on site.

Less than Significant with Mitigation Incorporated to Special Status Wildlife. No special-status bird species were determined to have potential to nest in the project area due to the lack of habitat on site. However, there is potential for non-status species to forage on the ruderal edges of the project site. Implementation of **Mitigation Measure BIO-1 and BIO-2** would be required to reduce

potential impacts to nesting and foraging birds to a less than significant level. A description of onsite resources and mitigation measures follows.

Project Site Plant Communities and Associated Wildlife Habitats:

The project site contains two (2) habitat types, described below. A list of plant and wildlife species observed within the study area and their native or non-native status are provided in Appendix B.

Developed Land (1.25-acres). The project site is composed primarily of disturbed and developed habitat. Developed areas include one permanent home and multiple RVs, an office, gravel lot, dirt driveway, and ornamental landscaping. Landscaping is limited to a small area of turf adjacent to the permanent house.

Ruderal (0.32-acres). A disturbed portion of the site is occupied primarily by ruderal species, containing non-native annual grasses including wild oats (*Avena fatua*), slim oat (*Avena barbata*), meadow barley (*Hordeum brachyantherum*), foxtail barley (*Hordeum marinum*), Italian ryegrass (*Festuca perennis*), and ripgut brome (*Bromus diandrus*). Other species observed include: cheese weed (*Malva parviflora*), bristly ox-tongue (*Helminthotheca echioides*), common dandelion (*Taraxacum officinale*), rabbits foot grass (*Polypogon monspeliensis*), wild radish (*Raphanus sativus*), Himalayan blackberry (*Rubus armeniacus*), English Ivy (*Hedera helix*), bedstraw (*Gallium angustifolium*), cranes bill (*Geranium dissectum*), Italian thistle (*Carduus pycnocephalus*), and scarlet pimpernel (*Lysimachia arvensis*).

This habitat occurs on the borders of the project site, primarily in the northern portion adjacent to the onsite housing and around the perimeters of the dirt parking and gravel lots. These portions of the site are continuously disturbed by machinery and trucks entering and exiting the project site.

There is one ornamental pine tree species (Pinus sp.) on site, but it will not be impacted by project activities.

Special-Status Species with Potential to Occur on Project Site:

A search of current resource agency database records (e.g., CNDDB, CNPS Electronic Inventory, and USFWS Information for Planning and Consultation (IPaC) databases) within the Watsonville West and eight surrounding USGS 7.5-minute quadrangles. The potential occurrence of these species was then evaluated based on the habitat requirements of each species relative to the conditions observed during the general botanical survey and habitat evaluation conducted by MIG, Inc. biologists. The following species do not have potential to occur on site but occur in nearby habitats. Species were eliminated based on habitats found within the project site, CNDBB occurrences within a ten-mile radius of the project area, and observations of site conditions made during the biological surveys.

Potential impacts and associated impact avoidance, minimization, and mitigation measures are discussed below.

<u>Special-Status Plant Species:</u> Special-status plants are defined here to include: (1) plants that are federal- or state-listed as rare, threatened or endangered, (2) federal and state candidates for listing,

(3) plants assigned a Rank of 1 through 4 by the CNPS Inventory, and (4) plants that qualify under the definition of "rare" in the California Environmental Quality Act, section 15380.

A table of special-status plant species with the potential to occur on the project site is provided in Appendix B. The project area was determined to provide no suitable habitat for all special-status plant species that were evaluated for their potential occurrence, based on the distance of the project area to previously recorded occurrences in the region, lack of typical vegetation types, disturbed habitat conditions, topography, elevation, soil types, and other species-specific habitat requirements. The project site consists of disturbed and developed land including a dirt parking lot, temporary and permanent housing, a gravel lot with ruderal species along the borders and landscaped turf. The closest recorded CNDDB special status plant species is the San Francisco popcorn flower (Plagiobothrys diffusus) which occurs approximately 0.5 miles north of the project site adjacent to the Watsonville Municipal Airport. This species occurs in valley and foothill grassland and coastal prairie habitats. Historically, the project site would likely have provided suitable habitat for this species, however, due to the urbanization of the area the project site no contains suitable habitat. The project site is disturbed and partially developed with a mix of ruderal and landscaped vegetation. The project site visit was conducted during this species blooming period and was not observed. This project site contains no suitable habitat for San Francisco popcorn flower and therefore has no potential to occur.

<u>Special-Status Wildlife Species</u>: Special-status wildlife species include those species listed as endangered or threatened under the FESA or CESA; candidates for listing by the USFWS or CDFW; California fully protected and species of special concern; non-game mammals protected by Sections 4150-4155 of the CFGC; and nesting birds protected by the CDFW under CFGC Sections 3503 and 3513.

Special-status wildlife species are considered absent within the project area based on a review of the USFWS, CNDDB, CNPS, NOAA Fisheries, and University of California databases, the biologist's knowledge of sensitive species within the City of Watsonville, and an assessment of the types of habitats within the project site. This determination was made due to the absence of essential habitat requirements for these species. The areas surrounding the project site consist mostly of urban development or parcels that are frequently disked. Both of these factors limit wildlife movement in the area. The project site itself is a mixture of disturbed, developed and ruderal habitat. No resources to support special-status species are available on site. In addition, the project site is fenced in on all sides, limiting wildlife access. Two special-status bird species had recorded CNDDB occurrences within approximately 2-miles of the project site: Cooper's hawk (*Accipiter cooperii*) and Tricolored blackbird (*Agelaius tricolor*). Neither of these species have potential to occur on site due to the absence of suitable habitat. In addition, no resources (i.e. food or water) for these species occur within the project site. Therefore, Cooper's hawk and tricolored blackbird do not have to potential to occur in the project area.

It should be noted that there are two CNDDB-documented occurrences of special-status amphibian and reptile species within a two-mile radius of the project area. These species include California redlegged frog (*Rana draytonii*) and Western pond turtle (*Emys marmorata*). These species have low potential to occur within the study area due to habitat suitability as well as distance and connectivity to other occupied waterbodies. The project area does not contain any aquatic features or suitable habitat for these species.

There is a California red-legged frog occurrence approximately 1-mile from the project site. With multiple other occurrences within 5-miles of the site. The closest occurrence for western pond turtle is approximately 1.2-miles from the project site. However, it is very unlikely that either CRLF or WPT will occur on site due to the lack of aquatic habitat, high level of development and frequently disked parcels in between the occurrence and the project site.

Other Protected Nesting Birds. Vegetation communities within the study area provide suitable nesting habitat for common, as well as special-status resident and passerine and raptor species. Nesting birds may nest within trees, shrubs, shallow scrapes on bare ground, and man-made structures within the study area. Numerous passerines were noted during the field survey. If construction activities occur during the avian breeding season (generally February to August), injury to individuals or nest abandonment could occur. In addition, noise and increased construction activity could temporarily disturb nesting or foraging activities, potentially resulting in the abandonment of nest sites. The loss of an active nest of common or special-status bird species would be considered a violation of Fish and Game Code sections 3503, 3503.5, and 3513.

Mitigation Measure BIO-1: Nesting Bird Avoidance or Conduct Preconstruction Surveys. If construction, grading, or other project-related improvements are scheduled during the nesting season of protected raptors and migratory birds, a focused survey for active nests of such birds shall be conducted by a qualified biologist within seven (7) days prior to the beginning of project-related activities. The results of the survey shall be sent to the City of Watsonville prior to the start of project activities. The minimum survey radii surrounding the work area shall be the following: i) 250 feet for passerines; ii) 500 feet for other small raptors such as accipiters; iii) 1,000 feet for larger raptors such as buteos. Nesting seasons are typically defined as follows: i) March 15 to August 30 for smaller bird species such as passerines; ii) February 15 to August 30 for raptors.

The following measures shall be taken to avoid potential inadvertent destruction or disturbance of nesting birds on and near the project site as a result of construction-related vegetation removal and site disturbance:

- a) To avoid impacts to nesting birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) shall occur outside the avian nesting season (generally prior to February 1 or after August 31). Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest.
- b) If construction-related activities are scheduled to occur during the nesting season (generally February 1 through August 31), a qualified biologist shall conduct a habitat assessment and preconstruction nesting survey for nesting bird species no more than seven (7) days prior to initiation of work. A qualified wildlife biologist is an individual who possesses, at a minimum, a bachelor's or advanced degree, from an accredited university, with a major in biology, zoology, wildlife biology, natural resources science, or a closely related scientific discipline, at least two years of field experience in the biology and natural history of local plant, fish, and wildlife resources present at the development site, and knowledge of state and federal laws regarding the protection of sensitive and endangered species. The qualified biologist conducting the surveys shall be familiar with the breeding behaviors and nest structures of birds known to nest in the project site. Surveys shall be conducted at the appropriate times of day during periods of peak activity (i.e., early morning or dusk) and shall be of sufficient duration to observe movement patterns. Surveys shall be conducted within the project area and 250 feet of the construction limits for nesting non-raptors and

- 1,000 feet for nesting raptors, as feasible. If the survey area is found to be absent of nesting birds, no further mitigation would be required. However, if project activities are delayed by more than seven (7) days, an additional nesting bird survey shall be performed.
- c) If pre-construction nesting bird surveys result in the location of active nests, no site disturbance (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), shall take place within the buffer zone established under BIO-2. Monitoring, by a qualified biologist, shall be required to ensure compliance with the relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented. Active nests found inside the limits of the buffer zones or nests within the vicinity of the project site showing signs of distress from Project activity, as determined by the qualified biologist, shall be monitored daily during the duration of the project for changes in breeding behavior. If changes in behavior are observed (e.g., distress, disruptions), the buffer shall be immediately adjusted by the qualified biologist until no further interruptions to breeding behavior are detected. The nest protection buffers may be reduced if the qualified biologist determines in compliance with CDFW permit requirements (if any) that construction activities would not be likely to adversely affect the nest. If buffers are reduced, twice weekly monitoring may need to be conducted to confirm that construction activity is not resulting in detectable adverse effects on nesting birds or their young. The qualified biologist may implement an alternative monitoring schedule depending on the construction activity, season, and species potentially subject to impact, subject to compliance with CDFW permits (if any). Construction shall not commence within the prescribed buffer areas until a qualified biologist has determined that the young have fledged or the nest site is otherwise no longer in use. A report of the findings will be prepared by a qualified biologist and submitted to the City prior to the initiation of construction-related activities that have the potential to disturb any active nests during the nesting season.
- d) City staff will not issue permits for ground disturbing activities until after the site has been surveyed by a qualified biologist to ensure that no active nest disturbance or destruction will occur as a result of the project. If necessary, nest protection buffers will be fenced off and active nest monitoring will be initiated prior to permit issuance.

Mitigation Monitoring BIO-1. Prior to issuance of any grading permit(s), the City shall review and approve the results of all pre-construction surveys and any measures recommended by the biologist to avoid sensitive species, which shall be noted on the final project plans. The project proponent shall not initiate any ground disturbing activity until applicant has submitted evidence to the City that Mitigation Measures BIO-1 and BIO-2, have been completed and are consistent with USFWS and/or CDFW permit requirements (if agency involvement is required). In addition, prior to ground disturbing activities, the City shall be provided with a written summary of the results of surveys by a qualified biologist to ensure that no active bird nest disturbance or destruction of breeding bat roosts will occur as a result of the project. If necessary, nest protection buffers will be fenced off and active nest monitoring will be initiated prior to permit issuance. A qualified biologist will also provide worker-awareness training prior to any work within aquatic habitats or adjacent upland habitat where California red-legged frog have potential to occur.

Mitigation Measure BIO-2: Active Nest Buffer. The applicant shall designate active nests as "Ecologically Sensitive Areas" (ESA) and protect the nest (while occupied) during project activities with the establishment of a fence barrier surrounding the nest site.

- a) Buffer distances for bird nests should be site specific and an appropriate distance, as determined by the qualified biologist. The buffer distances should be specified to protect the bird's normal behavior to prevent nesting failure or abandonment.
- b) The qualified biologist shall have authority to order the cessation of all nearby project activities if the nesting birds exhibit abnormal behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established.
- c) Typical protective buffers between each identified nest site and construction site are as follows: 1) 300 feet for hawks, owls and eagles; 2) 50 feet for passerines.
- d) The qualified biologist shall monitor the behavior of the birds (e.g., adults and young, when present) at the nest site to ensure that they are not disturbed by project activities.
- e) Nest monitoring shall continue during project work until the young have completely left the nest site; as determined by the qualified biologist.
- f) No habitat removal or modification shall occur within the ESA-fenced nest zone until the young have fully fledged and will no longer be adversely affected by the project.
- **b.** No Impact. No riparian habitat or other sensitive natural vegetation communities occur onsite.
- **c. No Impact.** The proposed project does not contain any state or federally jurisdictional features or protected wetlands.
- d. No Impact. No designated wildlife migration corridors are present on the project site. The project site is a rectangular parcel enclosed by fencing on all sides. Localized movements of common, non-status wildlife may occur through the project site and neighboring habitats, but no major migrations are expected to occur across the project site. Surrounding uses are primarily developed with major roads and highways, commercial and industrial development and residential housing. The project location is separated by approximately 0.6 miles from the nearest undeveloped open space area, the Harkin Slough. Two barriers to species include Highway 1 and the Watsonville Municipal Airport. The high level of development and frequent disking of the surrounding parcels makes it very unlikely option for wildlife migrations.

The project site does not function as a wildlife habitat linkage or movement corridor, nor would project implementation adversely affect any offsite designated wildlife habitat linkage or movement corridor. Regional movement of common wildlife species through the project site is limited due to surrounding development. In addition, the project site does not support any native wildlife nursery sites. Thus, the project would not interfere 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. As a result, construction and operation of the project is not expected to substantially affect breeding productivity or population viability of any common species or cause a change in species diversity locally or regionally.

- **e. No Impact.** No trees are proposed to be removed as part of the project activities and no special status species have potential to occur on site.
- **f. No Impact**. The project site is not located within the plan area of any adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state Habitat Conservation Plan.

References:

[CDFG] California Department of Fish and Game. 2007b. Vegetation Classification and Mapping Program List of California Vegetation Alliances and Rarity Ranking.

[CDFW] California Department of Fish and Wildlife. 2019. VegCAMP Natural Communities Lists. https://www.wildlife.ca.gov/data/vegcamp/natural-communities (accessed April 26, 2020)

[CDFW] California Department of Fish and Wildlife. 2019. Special Animals List: August 2019. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline (accessed May 2020).

[CNDDB] California Natural Diversity Data Base. 2019. Results of electronic records search. Rarefind 5. California Department of Fish and Wildlife, Biogeographic Data Branch. http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp. (Accessed April 2019)

[CNPS] California Native Plant Society. 2019. Inventory of Rare, Threatened, and Endangered Plants of California. Version 8-02. http://www.rareplants.cnps.org/advanced.html. (Accessed March 2019)

City of Watsonville, 2005. General Plan. Available at: https://www.cityofwatsonville.org/160/2005-General-Plan (accessed May 18, 2020)

Cornell Lab of Ornithology. 2019. eBird. http://www.ebird.org/ (accessed May 18, 2020)

Google Inc. 2019. Google Earth Pro (Version 7.1.5.1557). earth.google.com (accessed May 18, 2020)

[NRCS] Natural Resources Conservation Service. 2018a. Web Soil Survey. U.S. Department of Agriculture. Accessed April 2019 from http://websoilsurvey.nrcs.usda.gov. (accessed May 20, 2020)

[USFWS] United States Fish and Wildlife Service. 2019. National Wetlands Inventory. Available at: https://www.fws.gov/wetlands/data/Mapper.html (accessed May 20, 2020).

6.5 Cultural Resources

			Summary of Impacts		
		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
	al adverse change in the significance of ce as defined in CEQA Guidelines				~
′	al adverse change in the significance of resource as defined in CEQA 4.5?		~		
c) Disturb any huma outside of formal	an remains, including those interred cemeteries?			~	

<u>Conclusion:</u> Implementation of Mitigation Measures CUL-1 through CUL-2 would reduce potential impacts to less than significant levels. Regarding cultural resources, the proposed project would not result in any significant environmental impacts.

Documentation:

a) No Impact. The cultural resources records search results from the California Historical Resources Information System (CHRIS) search at the Northwest Information Center (NWIC) indicate there are 12 historic buildings/structures located within a one-mile radius of the project site. These resources are summarized in Table 5 below:

Table 5. Cultural Resources within One Mile of the Project Area

Resource Number	Resource Name	Resource Type	Age
P-44-000406	Highway 1 (Santa Cruz County)	Structure	Historic
P-44-000408	OC-152, MC-152	Structure, Other	Historic
P-44-000410	Converted Barn Structure in Vista Verde	Building	Historic
	Townhomes Project Area		
P-44-000643	Plowing Golf Balls	Site	Historic
P-44-000644	Historic Golf Fence	Structure	Historic
P-44-000774	Cracker Barrel Antiques	Building	Historic
P-44-000775	Vista Verde Townhomes Project	Building	Historic
P-44-000776	The Monument	Object	Historic
P-44-000777	2013 Freedom Blvd	Building	Historic
P-44-000778	2141 Freedom Blvd	Building	Historic
P-44-000779	2313 Freedom Blvd	Building	Historic
P-44-001084	1934 Freedom Boulevard	Building	Historic

The 12 historic buildings/structures identified by the NWIC will not be impacted by the proposed project, as these historic resources are located outside of the project's boundary.

The City of Watsonville keeps its own historic register which contains 14 structures, 6 of which are on the National Register of Historic Places (NRHP). These are shown in Table 6, below:

Table 6. City of Watsonville Historic Register Entries

Address	Resource Name	National Register Eligible
261–261A East Beach Street	Richard Pearson Home	No
332 East Beach Street	Bockius-Orr House	Yes
128 East Beach Street	Julius Lee Home	Yes
12 Brennan Street	Watsonville Women's Club	No
225 East Lake Ave	N/A	No
305 East Lake Ave	Mitchell Resetar Home	No
335 East Lake Ave	Madison House	Yes
280 Main Street	Porter Building	No
406 Main Street	Lettunich Building	Yes
418–428 Main Street	Mansion House	Yes
426–434 Main Street	Kalich Building	No
Main/Beach/Peck/Union	Watsonville City Plaza	Yes
139 Maple Street	Horgan House	No
37 Sudden Street	Pajaro Valley Arts Council	No

All of the resources on the City's historic register are outside the project boundary and are not within line of sight of the project boundary.

The project site does not contain historic buildings or structures identified on the CHRIS search, or on a local, State or national register of historic resources. Therefore, there are no impacts to known historic resources or built environments included on a historic register as a result of the proposed project.

Archival research suggests that there was a property was on this site built in or around 1906. Early aerial photography confirms there was a property on the project site in 1952. However, this building was removed, and a new building was placed on approximately the same location sometime prior to 1981, and after 1968. A rear addition was made to this property in the late 1990's or early 2000's.

The building does not display any unusual or distinctive architectural features and research does not suggest that the building was designed or built by an architect of significance. Additionally, there is no evidence to show that the building is connected with famous historic people or events in history. Therefore, the building is not considered eligible for inclusion in the California Register of Historic Resources (CRHR), as it does not meet any of the relevant criteria for inclusion. As such, the building is not considered a historic resource under CEQA, and demolition and removal of the building would not result in an impact.

b) Less than Significant with Mitigation Incorporated. The cultural resources records search results conducted by the NWIC indicate there are no archaeological resources (prehistoric and historic) located within the project's boundaries. There is one historic period archaeological resource located within one mile of the project boundary. The resource is an archaeological site (P44-000643) that includes a small collection of historic debris, concentrated around a broken iron plow. The site is over 0.5 miles to the south-west of the project site.

A Sacred Lands File (SLF) search was conducted through the Native American Heritage Commission (NAHC), which was returned with a positive result, indicating that the Costanoan

Ohlone Rumsen-Mutsen Tribe had more information on potential resources in the project vicinity. It was also recommended that the *Amah Mutsun Tribal Band*, *Amah Mutsun Tribal Band of Mission San Juan Bautista*, *Indian Canyon Mutsun Band of Costanoan*, and the *Muwekma Ohlone Indian Tribe of the SF Bay Area* were contacted as an extension of the SLF. Emails were sent to the tribes, which included a topographic map of the project area and details of the proposed project undertaking.

After contacting the Costanoan Ohlone Rumsen-Mutsen Tribe, the tribe requested additional information on the project, which was sent to the tribe. After sending the information, MIG requested that the tribe indicate if the project could impact the resource. Despite several attempts at further communication, no response was received, and it is understood by MIG, that the tribe do not believe the project could impact the Native American archaeological resource(s) they have specific knowledge of.

The remaining tribes were also contacted, as recommended by the NAHC. The initial contact was made by email. All of the tribes who did not respond were then contacted by follow-up phone calls. The only tribe who did not provide a response was the *Muwekma Ohlone Indian Tribe of the SF Bay Area*, who received an email and two voicemails. No specific information on tribal resources was provided by the tribes. However, all these tribes indicated the area was considered sensitive.

Based on the results of the SLF search and Native American outreach, although no specific resources were discovered, cultural resources could be present and project excavation could result in the discovery of prehistoric archaeological resources. In the event that project ground-disturbing activities disturb, damage, or destroy previously unknown buried prehistoric features, sites or artifacts, a significant impact could occur. Implementation of Mitigation Measure CUL-1 and CUL-2 would reduce potential impacts to undiscovered archeological resources to a less than significant level.

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

Mitigation Measure CUL-2: Cease Ground-Disturbing Activities and Implement Treatment Plan if Archaeological Resources Are Encountered. In the event archaeological resources are unearthed during ground-disturbing activities, all ground-disturbing activities within 50 feet of the find shall be halted so that the find can be evaluated. Ground moving activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. All archaeological resources unearthed by project construction activities shall be evaluated by a

qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. In the event that the newly discovered artifacts are determined to be prehistoric, Native American Tribes/Individuals shall be contacted and consulted, and Native American construction monitoring shall be initiated.

Because it is possible for a lead agency to determine that an artifact is considered significant to a local tribe (and thus be a significant resource under CEQA, even if it would not otherwise be considered significant under CEQA), all Native American artifacts (tribal finds) shall be considered as a significant Tribal Cultural Resource, pursuant to PRC 21074 until the lead agency has enough evidence to make a determination of significance. The City shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. The plan may include implementation of archaeological data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis. If appropriate, the archaeologist may introduce archaeological monitoring on the site. An archaeological report will be written detailing all archaeological finds and submitted to the City and the Northwest Information Center.

c. Less than Significant Impact. No burial sites are known in the vicinity of the project site. Background research failed to show any evidence for the presence of burials, either historic or prehistoric. In the event of accidental discovery, adherence to existing laws and regulations (California Health and Safety Code, Sections 7050 and 7052; Chapter 10 of Part 3 of Division 2 of Title 3 of the California Government Code; and Section 5097.98 of the California Public Resources Code) would ensure that any human remains would be protected. The impact is less than significant.

References:

Arellano, M. Personal Communication, Muwekma Ohlone Indian Tribe of the SF Bay Area, 4/14/2020 - 5/14/2020. Email and telephone communication. Unpublished record on conversation kept on file by MIG.

City of Watsonville, 2012. Historic Register. Available at:

https://cityofwatsonville.org/DocumentCenter/View/3954/City-of-Watsonville-Historic-Register (accessed on May 28, 2020).

County of Santa Cruz, 2020. Assessor's Office: Search. Available at: https://sccounty01.co.santa-cruz.ca.us/ASR/ (accessed on May 28, 2020).

Historic Aerials, 2020. Topographic maps and aerial photographs 1914 – 2018 of 547 Airport Blvd. Available at: https://www.historicaerials.com/viewer (accessed on May 28, 2020).

Lopez, V., 2020. Personal Communication, Amah Mutsun Tribal Band, 4/14/2020 - 5/14/2020. Email and telephone communication. Unpublished record on conversation kept on file by MIG.

Native American Heritage Commission, 2020. Scared Lands File Search Prepared in Support of the 547 Airport Blvd Project, Santa Cruz County. March 6, 2020. Unpublished document kept on file with the NAHC and MIG, Inc.

Northwest Information Center, 2020. Cultural Resources Records Search in Support of the 547 Airport Blvd Project (No. File No. 19-1531). Unpublished document kept on file with the NWIC and MIG, Inc.

Orozco, P. 2020. Personal Communication, Costanoan Ohlone Rumsen-Mutsun Tribe, 4/14/2020 - 5/14/2020. Email and telephone communication. Unpublished record on conversation kept on file by MIG.

Sayers, A.M. 2020. Personal Communication, Indian Canyon Mutsun Band of Costanoan, 4/14/2020 - 5/14/2020. Email and telephone communication. Unpublished record on conversation kept on file by MIG.

Zwierlein, I. 2020. Personal Communication, Amah Mutsun Tribal Band of Mission San Juan Bautista, 4/14/2020 - 5/14/2020. Email and telephone communication. Unpublished record on conversation kept on file by MIG.

6.6 Energy Resources

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

<u>Conclusion</u>: Regarding energy resources, the proposed project would not result in any significant environmental impacts.

Documentation:

- a. Less than Significant Impact. Construction activities associated with the proposed project would require the use of heavy-duty, off-road equipment and construction-related vehicle trips that would combust fuel, primarily diesel and gasoline. Heavy-duty construction equipment would be required to comply with CARB's airborne toxic control measures, which restrict heavy-duty diesel vehicle idling to five minutes. Since petroleum use during construction would be temporary and needed to conduct development activities, it would not be wasteful or inefficient. Due to energy efficiency standards being improved over time, the new structures erected at the project site would be far more efficient than the existing structures at the site. The improvements to energy efficiency are in large part related to updates to the California Green Building Standards Code (2019). As estimated in CalEEMod, the proposed project is estimated to consume approximately 105,954 kWh of electricity and 393,183 kBTU on an annual basis. Although more electricity and natural gas would be consumed on an annual basis compared to the existing land use (e.g., single family residential development), the structures would use the energy in a more efficient manner and would serve a larger subset of the population in Watsonville. As such, the proposed project's energy consumption would not be wasteful, inefficient, or unnecessary. This impact would be less than significant.
- **b.** Less than Significant Impact. The proposed project would not conflict with nor obstruct a state or local plan adopted for the purposes of increasing the amount of renewable energy or energy efficiency. As discussed under response a), the proposed 21 townhomes would be constructed to the latest CALGreen Code, which would make them more energy efficient than the existing structure at the project site. Furthermore, the proposed project would not conflict with the City's Climate Action Plan, since many of the actions in the CAP consist of items the City will pursue (see Section 6.8, Greenhouse Gas Emissions) and do not apply to the project. This impact would be less than significant.

References:

California Green Building Standards Commission (CalGreen), 2019. Section 4.201. Available at: https://up.codes/viewer/california/ca-green-code-2019/chapter/4/residential-mandatory-measures#4.201 (accessed April 28, 2020).

6.7 Geology and Soils

			Summary of Impacts			
		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact	
Wo	ould the project:					
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				>	
	ii) Strong seismic ground shaking?			✓		
	iii) Seismic-related ground failure, including liquefaction?			~		
	iv) Landslides?			✓		
b)	Result in substantial soil erosion or the loss of topsoil?		✓			
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?		√			
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?		√			
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓	
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?					

Conclusion: Regarding geology and soils, the proposed project would not result in any significant environmental impacts.

Documentation:

- ai. No Impact. The proposed project site is not located in an Alquist-Priolo fault zone, and thus there would be no impact.
- aii. Less than Significant Impact. Much of the region is subject to seismic shaking that results from earthquakes along the San Andreas Fault Zone System. Predicting seismic events is not possible, nor is providing mitigation that can entirely reduce the potential for injury and damage that could occur

during a seismic event. However, by applying geotechnical evaluation techniques and appropriate engineering practices, potential injury and damage from seismic activity can be diminished by exposing fewer people and less property to the effects of a major earthquake. The design and construction of new structures are subject to engineering standards of the California Building Code (CBC), which consider soil properties, seismic shaking, and foundation type.

All construction activities must meet the California Building Code regulations for seismic safety. Construction plans will be subject to review and approval of the City prior to the issuance of a building permit, and the project site would be subject to inspection by the City. Standard conditions of approval require that building permits be obtained for all construction and that the project meet all standard seismic and soil test/compaction requirements. Therefore, the potential impact from strong seismic ground shaking would be less than significant.

- **aiii.** Less than Significant Impact. Strong ground shaking can result in liquefaction, the sudden loss of sheer strength in saturated sandy material, resulting in ground failure and displacement. The project site is located in a region that has low liquefaction potential (City of Watsonville, 2012) and impacts from liquefaction and ground failure would be less than significant.
- **aiv.** Less than Significant Impact. The urban and developed areas of Watsonville are primarily characterized by gradual to moderate slopes. In areas underlain by weak or unconsolidated earth materials, landslides are a hazard. The project is located on a relatively flat site, with minimal elevation change. According to the Landslide Hazard Mapping for Selected California Highway Corridors (Wills et al, 2019), the proposed project site is not located in an area susceptible to landslides. The impact would be less than significant.
 - **b.** Less than Significant Impact with Mitigation. The project includes limited grading occurring on a heavily impacted site. It is anticipated that grading would be balanced. The grading, cuts, and fills require the issuance of a grading permit. Improper grading, both during and post-construction, has the potential to increase the volume of runoff from a site and subsequently increased erosion. Increased runoff and soil erosion on- and off-site could adversely impact downstream water quality. The potential soil erosion impact of the project would be less than significant with incorporation of Mitigation Measures GEO-1.

Mitigation Measure GEO-1: Finalize the Stormwater Pollution Control Plan. The Applicant shall submit a finalized Stormwater Pollution Control Plan prepared by a registered professional engineer or qualified stormwater pollution prevention plan developer as an integral part of the grading plan. The Plan shall be subject to review and approval of the City prior to the issuance of a grading permit. The Plan shall include all erosion control measures to be used during construction, including run-on control, sediment control, and pollution control measures for the entire site to prevent discharge of sediment and contaminants into the drainage system. The Plan shall include the following measures as applicable:

- a) Throughout the construction process, ground disturbance shall be minimized, and existing vegetation shall be retained to the extent possible to reduce soil erosion. All construction and grading activities, including short-term needs (equipment staging areas, storage areas and field office locations) shall minimize the amount of land area disturbed. Whenever possible, existing disturbed areas shall be used for such purposes.
- b) All drainage ways shall be protected from silt and sediment in storm runoff using appropriate BMPs such as silt fences, diversion berms and check dams. Fill slopes shall be stabilized

- and covered when appropriate. All exposed surface areas shall be mulched and reseeded. All cut and fill slopes shall be protected with hay mulch and/or erosion control blankets, as appropriate.
- c) All erosion control measures shall be installed according to the approved plans prior to the onset of the rainy season but no later than October 15th. Erosion control measures shall remain in place until the end of the rainy season but may not be removed before April 15th. The applicant shall be responsible for notifying construction contractors about erosion control requirement.
- d) Example design standards for erosion and sediment control include, but are not limited to, the following: avoiding disturbance in especially erodible areas; minimizing disturbance on slopes exceeding 30 percent; using berms, swales, ditches, vegetative filter strips, and catch basins to prevent the escape of sediment from the site; conducting development in increments; and planting bare soils to restore vegetative cover.
- e) The applicant will also develop an inspection program to evaluate if there is any significant on-site erosion as a result of the rainfall. If there were problem areas at the site, recommendations will be made to improve methods to manage on-site erosion.
- c. Less than Significant with Mitigation Incorporated. The parcel is subject to seismic shaking, and a discussion of impacts related to landslides and liquefaction is in Section 6.7 (aii, aiv). Lateral spreading occurs when soils liquefy during an earthquake event and the liquefied soils along with the overlying soils move laterally to unconfined spaces causing horizontal ground displacements. In the low probability event that on-site soil is saturated at the time of a fault rupture, the isolated layer of sand has a high potential of liquefying which could potentially result in significant lateral spreading.

The parcel is flat and would not use a well, reducing the probability of on-site subsidence. Incorporation of the following Mitigation Measures in addition to compliance with CBC and OSHA regulations would reduce impacts to less than significant. Implement **Mitigation Measure GEO-1.**

d. Less than Significant with Mitigation Incorporated. The project parcel has shallow soils consist of silty clays. No bedrock was encountered. Onsite soil types are categorized as Hydrologic Soil Group C by the USDA Natural Resource Conservation Service (NRCS). The NRCS (2020) maps the project's soils as Pinto loam (0 to 2 percent slopes) with trace Watsonville and Elkhorn sandy loam. Group C soils typically have slow infiltration rates and consist mostly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Project construction and grading activities must be conducted in compliance with the California Building Code and City Code Chapter 13-7 (Construction Grading and Drainage Ordinance). Compliance will all applicable construction and grading regulations and the implementation of **Mitigation Measure GEO-1** would reduce impacts to life and property created from soil expansion to less than significant levels.

- **e. No Impact.** The proposed project is within City boundaries and would be served by a public sewer system. The project does not include installation of septic tanks or alternate wastewater disposal systems.
- **f.** Less than Significant Impact. The site is in a developed area, and geological analysis does not reveal the presence of, or potential for, unique geological features. There would be no impact to

unique geologic features. The USDA Web Soil Survey indicates the surficial soils are comprised of Pinto loam. This is a very deep, moderately well drained soil that typically occurs on coastal terraces and old alluvial fans.

Within the City limits, the geology is composed of Paleozoic to Cretaceous age granitic and metamorphic rocks, that form the basement rock. More recent non-marine terrace and alluvial deposits derived from the Santa Cruz Mountains (north and east of the City) comprise the surface sedimentary materials in the City.

The geology for the project area, according to a geological map showing the Pajaro Valley, consist of Quaternary alluvium and marine deposits ranging in age from the Holocene to Pleistocene (California Division of Mines and Geology, Geologic Map of California, 1977). The project area is within the geological area floodplain of the Pajero River and the geology of the project area is comprised of alluvial fan deposits (Pajaro Valley Water Management Agency, 2020). Based on the pinto loam soil present at the site, this is likely to be at least older Holocene or younger Pleistocene in age.

Although the underlying geology of granitic and metamorphic rocks do not normally yield fossilized material, older alluvial deposits have the potential to contain fossils, especially at depths. Development of the site would encounter previously undisturbed soils. However, as alluvial material is deposited slowly over time, the depths of excavation required for the project are not anticipated to be of a depth where fossilized material is likely to be discovered.

The following BMP safeguards potential paleontological resources: If paleontological resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Paleontological monitoring may be required and will be outlined in the treatment plan. The inclusion of Best Management Practices (BMPs) as part of the project ensures that impacts to paleontological resources are less than significant.

References:

California Department of Conservation, 2010. Geologic Map of California. Available at: http://maps.conservation.ca.gov/cgs/gmc/ (accessed March 12, 2020).

California Division of Mines and Geology, 1977. Jennings, C.W., Strand, R.G., and Rogers, T.H., Geologic map of California: scale 1:750,000., available at: https://mrdata.usgs.gov/geology/state/state.php?state=CA (Accessed May 7, 2020)

City of Watsonville, 2012. General Plan. Liquefaction Potential Map Figure 13.2. Available at: <a href="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter-View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter-View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter-View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter-View/2564/Liquefaction-Potential-Map?bidId="https://www.cityofwatsonville.org/DocumentCenter-View/2564/Liquefaction-Potential-Potential-Potential-Potential-Potential-Potential-Potential-Potential-Potential-Potential-Pot

City of Watsonville, 2012. General Plan 2030 Public Draft EIR. Health and Safety Element. Available at https://www.cityofwatsonville.org/DocumentCenter/View/1150/7-Health-and-Safety-PDF (accessed May 7, 2020)

Pajaro Valley Water Management Agency, 2020. Geology. Available at: https://www.pvwater.org/geology (accessed May 7, 2020)

Stanford University, 2015. Liquefaction Zones in Santa Cruz County. https://earthworks.stanford.edu/catalog/stanford-js718bt6856 (accessed June 25, 2020)

U.S. Department of Agriculture (USDA). Natural Resource Conservation Service (NRCS), Web Soil Survey. https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (accessed April 23, 2020)

USDA, 2020. Web Soil Survey., Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx (accessed May 7, 2020)

Wills et al, 2019. Landslide Hazard Mapping for Selected California Highway Corridors Phase 2-Special Report 243, California Geological Survey Department of Conservation Sacramento, California. Available online:

https://www.arcgis.com/home/webmap/viewer.html?layers=b6cf689f727340d6b3f8cd869e69c729 (Accessed March 12, 2020)

6.8 Greenhouse Gas Emissions

		Summary of Impacts			
		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	uld the project:	_		_	
a)	Generate greenhouse gas emissions, either directly or			✓	
	indirectly, that may have a significant impact on the				
	environment?				
b)	Conflict with an applicable plan, policy or regulation			✓	
	adopted for the purpose of reducing the emissions of				
	greenhouse gases?				

<u>Conclusion</u>: Regarding greenhouse gas emissions, the proposed project would not result in any significant environmental impacts.

Documentation:

- **a.** Less than Significant Impact. Gases that trap heat in the atmosphere and affect regulation of the Earth's temperature are known as greenhouse gases (GHGs). The six most common GHGs are listed below.
 - Carbon dioxide (CO₂)
 - Methane (CH₄)
 - Nitrous oxide (N₂O)

- Sulfur hexafluoride (SF₆)
- Hydrofluorocarbon (HFCs)
- Perfluorocarbons (PFCs)

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

GHGs can remain in the atmosphere long after they are emitted. The potential for a GHG to absorb and trap heat in the atmosphere is considered its global warming potential (GWP). The reference gas for measuring GWP is CO₂, which has a GWP of one. By comparison, CH₄ has a GWP of 25, which means that one molecule of CH₄ has 25 times the effect on global warming as one molecule of CO₂. Multiplying the estimated emissions for non-CO₂ GHGs by their GWP determines their carbon dioxide equivalent (CO₂e), which enables a project's combined global warming potential to be expressed in terms of mass CO₂ emissions. Most often, GHG emissions associated with projects are referred to in terms of metric tons of CO₂e, or MTCO₂e.

In 1997, the United Nations' Kyoto Protocol was adopted in Kyoto, Japan, establishing an international treaty that set targets for reductions in emissions of four specific GHGs - CO₂, CH₄, N₂O, and SF₆ - and two groups of gases - HFCs and PFCs. As previously mentioned, these GHGs are the primary GHGs emitted into the atmosphere by human activities. The United States is, and has been, a participant in the United Nations Framework Convention on Climate Change.

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

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

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

On December 14, 2017 CARB adopted the second update to the Scoping Plan, the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan Update; CARB 2017). The primary objective of the 2017 Scoping Plan Update is to identify the measures needed to achieve the mid-term GHG reduction target for 2030 (i.e., reduce emissions by 40 percent below 1990 levels by 2030), as established under Executive Order B-30-15 and SB 32. The 2017 Scoping Plan Update identifies an increasing need for coordination among state, regional, and local governments to achieve the GHG emissions reductions that can be gained from local land use planning and decisions. It notes emission reduction targets set by more than one hundred local jurisdictions in the state could result in emissions reductions of up to 45 million MTCO₂e and 83 million MTCO₂e by 2020 and 2050, respectively. To achieve these goals, the 2017 Scoping Plan Update includes a recommended planlevel efficiency threshold of six metric tons or less per capita by 2030 and no more than two metric tons by 2050.

MBARD, as the regional air agency for the Basin, has air-permitting authority in Santa Cruz County. As of March 2020, MBARD has not adopted recommended GHG significance thresholds applicable to development projects, and instead recommends the use of GHG thresholds adopted by other air districts in California, such as the Sacramento Metropolitan Air Quality Management District (SMAQMD) and the Bay Area Air Quality Management District (BAAQMD). Both the SMAQMD and BAAQMD have adopted GHG mass-emission thresholds of 1,100 MTCO₂e for new

development projects. These adopted thresholds, however, were developed by the SMAQMD and BAAQMD to meet State-GHG emissions reductions for 2020 established under AB 32 (i.e., to reduce GHG emissions to 1990 levels by 2020). Since the proposed project is scheduled to become operational in 2021, the 1,100 MTCO₂e threshold does not directly address the next GHG reduction target identified under SB 32 (i.e., to reduce GHG emissions 40 percent below 1990 levels by 2030). At the time of this writing, no air district within the State has released updated thresholds, including SMAQMD and BAAQMD, or provided guidance to lead agencies for how to address post-2020 emissions.

To evaluate the significance of the proposed project's GHG emissions, this analysis compares the proposed project's estimated emissions against a 1,100 MTCO₂e SMAQMD and BAAQMD threshold, as well as a project specific GHG reduction target of 660 MTCO₂e/yr³ to meet the State's 2030 reduction goal required under SB 32. This allows the City to demonstrate compliance with currently adopted thresholds by the SMAQMD and BAAQMD, as well as future GHG reduction goals.

The proposed project would generate GHG emissions from both short-term construction and long-term operational activities. Construction activities would generate GHG emissions primarily from equipment fuel combustion as well as worker, vendor, and haul trips to and from the project site during demolition, site preparation, grading, building construction, paving, and architectural coating activities. Construction activities would cease to emit GHGs upon completion, unlike operational emissions that continue year after year until the commercial buildings constructed as part of building of the project close or cease operation. Since neither the SMAQMD nor BAAQMD have an adopted construction GHG-emission threshold, construction related-GHG emissions are amortized over the lifetime of the proposed project (presumed to be a minimum of 30 years). This normalizes construction emissions so they can be grouped with operational emissions and compared to appropriate thresholds, plans, etc. GHG emissions from construction the proposed project were estimated using CalEEMod, version 2016.3.2, based on the anticipated construction schedule, activities, and equipment, described in Section 6.3, Air Quality. The proposed project's total construction emissions, as estimated in CalEEMod, are shown in Table 7, *Project Construction Greenhouse Gas Emissions*.

^{*} The 660 MTCO2e/yr goal was developed by taking the 1,100 MTCO₂e/yr threshold, which was the threshold to reduce emissions back to 1990 level and reducing it by 40 percent (1,100 MTCO₂e/yr * (1 - 0.4) = 660 MTCO₂e/yr). This demonstrates the progress required under SB 32. This linear reduction approach oversimplifies the threshold development process. The City is not adopting nor proposing to use 660 MTCO₂e as a CEQA GHG threshold for general use; rather, it is only intended for use on this project.

Table 7. Project Construction Greenhouse Gas Emissions

Construction	GHG Emissions (MT/YR)					
Year	CO ₂	CH ₄	N ₂ O	TOTAL ^(A)		
2020	232.0	$< 0.0^{(B)}$	0.0	233.1		
Total	232.0	$< 0.0^{(B)}$	0.0	233.1		
Amortized (C)	7.7	$< 0.0^{(B)}$	0.0	7.8		

Source: MIG 2019 (see Appendix A)

Note:

- (A) MTCO₂e
- (B) <0.0 does not mean emissions are zero; rather, it means emissions are greater than zero, but less than 0.05.
- (C) Amortized over 30-years. Slight variations may occur due to rounding.

Once operational, the proposed project would generate GHG emissions from area, mobile, water/wastewater, and solid waste sources. The proposed project's operational GHG emissions, combined with the amortized construction emissions are shown in Table 8, *Project Operational Greenhouse Gas Emissions Over 30 Years*, the proposed project's potential gross increase in GHG emissions would be below the BAAQMD and SMAQMD's established 2020 GHG emissions threshold, as well as the 2030 derived GHG emission goal. Therefore, this impact would be less than significant.

Table 8. Project Operational Greenhouse Gas Emissions Over 30 Years

G G	GHG Emissions (MT/YR)				
Source	CO ₂	CH ₄	N ₂ O	TOTAL ^(A)	
Area	0.4	<0.0 ^(B)	0.0	0.4	
Energy	51.8	<0.0 ^(B)	$<0.0^{(B)}$	52.1	
Mobile	119.1	$< 0.0^{(B)}$	0.0	119.3	
Solid Waste	2.0	0.1	0.0	4.9	
Water/Wastewater	3.5	$< 0.0^{(B)}$	$<0.0^{(B)}$	4.9	
Amortized Construction	7.7	$< 0.0^{(B)}$	0.0	7.8	
Total Project Emissions ^(C)	184.4	0.2	$< 0.0^{(B)}$	189.5	
BAAQMD/SMAQMD 2020 Threshold			1	1,100	
Derived 2030 Emission Goal			1	660	
Exceeds Goals?			1	No	

Source: MIG 2019 (see Appendix A)

Note:

- (A) MTCO₂e
- (B) <0.0 does not mean emissions are zero; rather, it means emissions are greater than zero, but less than 0.05.
- (C) Slight variations may occur due to rounding.

b. Less than Significant Impact. The proposed project would not conflict with CARB's Scoping Plan, AMBAG's 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy, or the City of Watsonville's Climate Action Plan. The project's consistency with these plans is described in more detail below.

CARB Scoping Plan

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

- Continued implementation of SB 375.
- Implementing and/or increase the standards of the Mobile Source Strategy, which include increasing zero emission vehicle (ZEV) buses and trucks.
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewable Portfolio Standard (RPS) to 50 percent and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy, which focuses on reducing CH₄ and hydrocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20 percent reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Nearly all of the specific measures identified in the 2017 Climate Change Scoping Plan would be implemented at the state level, with CARB and/or another state or regional agency having the primary responsibility for achieving required GHG reductions. The proposed project, therefore, would not directly conflict with any of the specific measures identified in the 2017 Climate Change Scoping Plan. The project is consistent with vehicle miles traveled (VMT) guidelines outlined in Senate Bill (SB) 743, and discussed in Transportation section 6.17. According to the guidelines, the screening threshold for small projects that do not require a quantitative VMT analysis and implementation of mitigation measures 110 or fewer trips per day. For the project, the daily traffic was 99 trips, which is less than 110 trips screening criteria.

2040 Metropolitan Transportation Plan/Sustainable Communities Strategy

AMBAG is the Metropolitan Planning Organization responsible for preparing the region's Sustainable Communities Strategy (SCS), in compliance with SB 375. The SCS is developed as part of regional transportation planning and is incorporated in the Metropolitan Transportation Plan prepared for the AMBAG region. The most recent plan adopted by AMBAG is the 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) (AMBAG, 2018). The 2040 MTP/SCS sets forth a forecasted development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, is intended to reduce GHG emissions from passenger vehicles and light duty trucks to achieve the regional GHG reduction targets set by CARB.

CARB set targets for the AMBAG region as "not to exceed 2005 per capita levels of GHGs" by 2020 and a five percent reduction from 2005 levels by 2035 (CAP). These targets applied to the AMBAG region as a whole for all on-road light duty trucks and passenger vehicles emissions, and not to individual cities or sub-regions. Therefore, AMBAG, through the 2040 MTP/SCS, must maintain or reduce these levels to meet the 2020 target and reduce these levels to meet the 2035 targets.

As described under Section 6.14, Population and Housing, the proposed project is within the growth forecasts of the 2040 MTP/SCS. Therefore, the growth (and associated traffic) facilitated under implementation of the proposed project has been accounted for in the 2040 MTP/SCS's growth projections, and the project would be consistent with the 2040 MTP/SCS.

Watsonville Climate Action Plan

On April 9, 2015, the City of Watsonville released its final version of the City's Climate Action Plan (CAP). The CAP sets forth 13 actions to help reduce GHG emissions in 2020 and 2030. Many of the actions identified in the CAP consist of items the City will pursue, such as reducing or removing permit fees for solar PV and solar water heaters, promoting infill development along transportation corridors, promoting traffic signal synchronization, and implementing formal bike lanes and infrastructure programs. The proposed project would not conflict with the City's implementation of these actions. In addition, as described under response a), the project's emissions would be consistent with the State's 2030 reduction goals. Therefore, the proposed project would not conflict with or obstruct the implementation of a plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions. This impact would be less than significant.

References:

Association of Monterey Bay Area Governments (AMBAG), 2018. 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy.

Bay Area Air Quality Management District (BAAQMD), 2017. CEQA Air Quality Guidelines. Available at: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en (accessed October 6, 2019).

California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. Available at: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf (accessed October 6, 2019).

California Environmental Protection Agency (CalEPA). 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature. Available at: https://www.climatechange.ca.gov/climate_action_team/reports/2006report/2006-04-03_FINAL_CAT_REPORT.PDF (accessed October 6, 2019).

City of Watsonville, 2015. City of Watsonville Climate Action Plan (CAP). Sacramento Metro Air Quality Management District (SMAQMD), 2018. CEQA Guidance & Tools. Chapter 6: Greenhouse Gases. Available at:

http://www.airquality.org/LandUseTransportation/Documents/Ch6GHGFinal5-2018.pdf (accessed October 6, 2019).

6.9 Hazards and Hazardous Materials

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

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

Documentation:

a. Less than Significant Impact. Construction of the proposed project, as well as ongoing maintenance, may involve the intermittent transport, use and disposal of potentially hazardous materials, including fuels and lubricants, paints, solvents, and other common materials. To maintain the health and safety of the public and environment during construction, any on-site hazardous materials that may be used, stored, or transported would be required to follow protocols determined by the U.S. EPA, California Department of Health and Safety, and City of Watsonville.

The Watsonville General Plan has Goals which guide development in compliance with hazardous material management:

- Goal 12.1 Land Use Safety Plan for and regulate the uses of land in order to provide a pattern of
 urban development which will minimize exposure to hazards from either natural or human
 related causes.
- Goal 12.5 Hazardous Materials: Reduce the potential danger related to the use, storage, transport, and disposal of hazardous materials to an acceptable level of risk for city residents.
- Goal 12.A.5 Risk Reduction: The City shall identify avoid, and or minimize natural and human caused hazards in the development of property and the regulation of land use.
- Goal 12.7 Emergency Preparedness. Anticipate the potential for disasters, maintain continuity or life support functions during an emergency, and maximize efforts for post-emergency recovery.

Buildout of the project includes a General Plan Map Amendment and zoning change to Residential High Density (RM-3). To manage hazardous waste associated with residential use, free household hazardous waste disposal is available to Watsonville residents at the City's designated waste and recycle drop-off location (Watsonville Public Works).

Project construction may also involve short-term transport, storage, and use of hazardous materials. Any hazardous substances generated, stored, transported, used, or disposed during construction would be subject to applicable federal, State, and local regulations. Given the existing General Plan goals, Federal, State, and local regulation and oversight of hazardous materials, the threat to public health and safety and the environment would be less-than-significant.

b. Less than Significant Impact with Mitigation Incorporated. An Environmental Site Assessments (ESA) was performed for the project covering the entire parcel. The Phase I ESA was prepared for the project site by AEI Consultants on March 18, 2020 (Appendix C). Construction of the proposed project would require the use and possible release of hazardous materials, such as paints and other solvents. However, the project would be required to comply with construction practices and mitigation measures to prevent, contain and/or clean-up potential spills and contamination from fuels, solvents, concrete wastes, and other potentially hazardous materials, such as asbestoscontaining materials and lead-based paint. Because the use and transport of hazardous materials would be required to follow Federal, State, and local regulations, the risk of releasing hazardous materials form accidents would be less than significant with mitigation incorporated.

Asbestos-containing Materials

The Phase I ESA determined that, due to the age of the existing residence, asbestos-containing materials (AMCs) could be present. ACMs were commonly used in building construction until the 1980s. Asbestos generally does not pose a threat when it remains intact. However, when asbestos is disturbed and becomes airborne during demolition activities, significant impacts to human health could occur. Construction workers completing demolition activities, as well as surrounding uses, have the potential to be exposed to airborne asbestos emissions due to the potential presence of ACM. EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) are stationary source standards for hazardous air pollutants requires that a thorough asbestos survey be performed prior to demolition or renovation activities that may disturb ACMs. This requirement may be enforced by federal, state and local regulatory agencies, and specifies that all suspect ACMs be sampled to determine the presence or absence of asbestos prior to any renovation or demolition activities which may disturb them to prevent potential exposure to workers, building occupants, and the environment.

Mitigation Measure HAZ-1: Asbestos Containing Materials. Per recommendations in the Phase I ESA performed for the project site, prior to any redevelopment or demolition activities the Applicant shall: (1) survey the existing on-site structures for the presence of asbestos containing

materials (to be conducted by an OSHA-certified inspector); and (2) if building elements containing any amount of asbestos are present, prepare a written Asbestos Abatement Plan describing activities and procedures for removal, handling, and disposal of these building elements using EPA- and/or OSHA-approved procedures, work practices, and engineering controls.

Lead-based Paints

The Phase I ESA determined that, due to the age of the existing residence, lead-based paints (LBPs) could be present. AEI recommended that the applicant consult with a certified Lead Risk Assessor to determine options for control of possible LBP hazards (see **Mitigation Measure HAZ-2**). Stringent local and State regulations ay apply to LBP in association with building demolition/renovations and worker/occupant protection. Construction activities that disturb materials or paints containing any amount of lead may be subject to certain requirements of the OSHA lead standard contained in 29 CFR 1910.1025 and 1926.62

Mitigation Measure HAZ-2: Consult with a Lead Risk Assessor. The Applicant shall consult with a lead risk assessor to determine the options for control of possible LBP hazards. If present, the lead-based paint shall be removed and disposed of following lead abatement performance standards included in the U.S. Department of Housing and Urban Development Guidelines for Evaluation and Control of Lead-Based Paint program, in compliance with Title 8 California Code of Regulations (including Section 1532.1).

- c. Less than Significant Impact. The closest schools are more than one-quarter mile from the project site. The schools are Freedom Elementary (0.47 miles east of the project site) and Rolling Hills Middle (0.34 miles to the southeast of the project site). As discussed in Section 6.9.a, construction and operation of the project would not generate hazardous emissions, nor result in the storage, handling, production, or disposal of acutely hazardous materials. Therefore, the impacts to schools from the project's production or emission of hazardous materials or substances would be less than significant.
- **d.** Less than Significant Impact. The project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code 65962.5 (Cortese List). The Phase I ESA performed a regulatory database search and found the project property has been listed as a FINDS site since 2018. FINDS is a Facility Index System/Facility Registry System designation of a site that contains both facility information and directs to other sources that contain more detail. No violations or releases were identified at the site. The EPA Facility Registry Service website indicated the listing was associated with the property due to the presence of an OSHA facility, which means the business is subject to OSHA requirements and regulations. The project site is not expected to represent a significant environmental concern.

Adjacent to the parcel on the west side, the following two sites were listed on regulatory databases.

- Shasta Scientific Glass, Inc., and Laser Devices Inc. The facility is listed as a small quantity
 generator and a handler of hazardous waste. No violations were found in association with
 this facility. In 1995, 0.36 tons of unspecified solvent mixture was generated and recycled.
 Based on a lack of violations and lack of a documented release, a review of regulatory agency
 files for this site was deemed unnecessary and is not expected to represent a significant
 environmental concern.
- NUSAN Corporation. This facility is listed as a small quantity generator since at least 1996.
 This property is listed as a RCRA, FINDS and ECHO site in association with the above RCRA listing. No violations or enforcement actions were identified on the EPA websites

- Envirofacts and ECHO. Based on the nature of this listing, lack of violations, and lack of a documented release, a review of regulatory agency files for this site was deemed unnecessary, and is not expected to represent a significant environmental concern.
- North of the project, across Airport Boulevard, is the Watsonville Municipal Airport and Watsonville Diesel. The airport is listed on regulatory databases as a hazardous waste generator, a handler, and a chemical storage facility with a Hazardous Materials Business Plan. Most recently, no onsite violations were found in 2019 after inspection. In 2014, several administrative violations were found, but the facility became compliant in 2015. The facility had a LUST case that was closed in 2005. There were two 12,000-gallon tanks containing aviation gasoline that were leaking in 1994 due to corrosion of the piping and removed in 1996. Remedial action included excavating the tank and contaminated soil, then treating the area. Completion of remedial actions and the case closure status rendered the review of regulatory files unnecessary. This facility is not expected to represent a significant environmental concern.

While there are open and closed status Cortese List sites in the general area of the project, the project site is not located on a hazardous materials site pursuant to Government Code 65962.5 (Cortese List). Therefore, this impact would be less than significant.

e. Less than Significant Impact. The project is within two miles of the Watsonville Municipal Airport, which is a public airport and is located across the street from the project site. Santa Cruz County has been identified as a "no procedures county" as there is only one public use airport—the Watsonville Municipal Airport. In accordance with Public Utilities Code (PUC) Section 21670.1(e), the preparation of an airport land use compatibility plan is not required; however, the City must submit future general and specific plans for review by the Caltrans Division of Aeronautics."

The California Airport Land Use Planning Handbook (CalTrans, 2011) provides guidance for airport land use compatibility planning, as required by PUC 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. 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 percentage of near-runway accidents in this zone. For Zone 6, the handbook does not recommend prohibiting any residential or nonresidential uses and recommends avoiding "outdoor stadiums and similar uses with very high intensities." The risk level is "low" for Zone 6. While the site is geographically close to the airport, the site is located in Zone 6, the Traffic Pattern Zone, which is the furthest zone from the airport's runways. Therefore, the project would not result in a safety hazard for people residing or working in the project area and the impact would be less than significant.

f. No Impact. The City of Watsonville does not have an adopted emergency response plan or emergency evacuation plan. A Local Hazard Mitigation Plan is under development (and not yet adopted) in Santa Cruz County. There is a proposed intersection improvement east of the project site at the intersection of Airport Boulevard and Holm Road, but project buildout would not create, interrupt, or otherwise reduce the ability of streets to circulate traffic. Any need for construction-related traffic partial street closures would be temporary, intermittent, localized, and subject to standard City traffic management practices. The project would not result in significant change in existing circulation patterns and would have no effect on emergency response routes.

g. Less Than Significant Impact. The project site is urban and located in a local responsibility area according to the CalFire FRAP Map. The City's General Plan maps a high fire hazard zone in Watsonville west of the project site in a wildland-dominated area. The project is not within the high fire hazard severity zone and impacts to people or structures involving wildland fires would be less than significant (see Section 6.20 Wildfire for further discussion).

References:

AEI Consultants. Phase I Environmental Site Assessment. March 18, 2020

CalFire, 2019. Santa Cruz County Fire Hazard Severity Zones. https://osfm.fire.ca.gov/media/6768/fhszs_map44.pdf (accessed April 28, 2020)

CalTrans, 2011. *California Airport Land Use Planning Handbook*. https://dot.ca.gov/-/media/dot-media/programs/aeronautics/documents/californiaairportlanduseplanninghandbook-a11y.pdf (accessed June 11, 2020)

City of Watsonville, 2003. Watsonville Municipal Airport Master Plan 2001-2020. Available at: https://www.cityofwatsonville.org/DocumentCenter/View/987/CM-Resolution-179-03-Airport-Master-Plan-PDF (accessed May 4, 2020).

City of Watsonville: Department of Public Works and Utilities, 2019. Household Hazardous Waste Disposal. Available at: https://www.cityofwatsonville.org/781/Household-Hazardous-Waste-Disposal (accessed May 4, 2020).

County of Santa Cruz, 2015. Local Hazard Mitigation Plan. Available at: http://www.co.santa-cruz.ca.us/Portals/0/Local%20Hazard%20Mitigation%20Plan%202015-2020.pdf (accessed May 4, 2020)

Kimley Horn, January 2020. Airport Blvd and Holm Road Intersection Improvement Project.

WJV Acoustics, for the City of Watsonville, 2018. Aircraft Noise Monitoring Report, Watsonville Municipal Airport. Available online:

https://cityofwatsonville.org/DocumentCenter/View/12654/Watsonville-Airport-Noise-Report-8-29-18 (accessed May 8, 2020)

6.10 **Hydrology and Water Quality**

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

Conclusion: Regarding hydrology and water quality, the proposed project would not result in any significant environmental impacts.

Documentation:

This hydrology analysis references the Stormwater Control Plan developed by Roper Engineering (Appendix D).

a. Less than significant. Violations of water quality standards due to urban runoff can be prevented through implementation of existing regional water quality regulations and plans, including compliance with the City of Watsonville Stormwater post-Construction Standards (Resolution No. 4-14, Adopted January 14, 2014, WMC Section 6-3.535), and the City's Sewer Services (WMC Section 6-3.501 et seq.). The proposed project is subject to the following post-construction requirements: No. 1 Site Design and Runoff, Reduction, No. 2 Water Quality Treatment, No. 3

Runoff Retention and No. 4 Peak Management. All runoff from new impervious surfaces would be directed to the onsite bioretention facility in the northeast corner of the site.

The preliminary design of stormwater treatment facilities and other stormwater pollution control measures in this plan are in accordance with the City of Watsonville Stormwater post-Construction Standards. The Water Quality Treatment and Peak Management Requirements have been met onsite by the proposed measures (Table 9).

Table 9. Bioretention/Detention Pond Requirements

		1 -			
Bioretention	Required Size	Provided Size			
	1,823 square feet	2,870 sf			
Retention	Required Depth	Provided Depth			
	3.2 inches	3.2 inches			
Runoff Retention	Required Volume	Provided Volume			
	2,605 cubic feet	2,953 cf			
Detention	Required Volume	Provided Volume			
	1,664 cubic feet	1,722 cf			
Source: Roper Engineering, 2	Source: Roper Engineering, 2019 Stormwater Control Plan for 547 Airport Blvd.				

The City has a Small Municipal Separate Storm Sewer Systems (MS4) National Pollutant Discharge Elimination System (NPDES) permit (WQ Order No. 2013-0001-DWQ, General Permit CAS000004) and is required to implement all pertinent regulations of the program to control pollution discharges from new development. These regulations reduce non-point source pollutants through the implementation of Best Management Practices (BMPs) and other control measures that minimize or eliminate pollutants from urban runoff, thereby protecting downstream water sources. BMPs implemented to address commercial pollutant sources generally involve maintenance of storm drain facilities, parking lots, vegetated areas, and dissemination of educational materials. Project construction would be subject to City's NPDES permit requirements during construction activities in addition to standard NPDES operational requirements.

The City also has a Low Impact Development Ordinance which are also known at the City's Post Construction Ordinance. In the project design, the applicant has included a drainage system consisting of an onsite collection basin and landscaped areas to collect and filter on-site stormwater and irrigation run-off. The impact would be less than significant.

b. Less than significant. The project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The project does not include the installation of a well, rather the project would use water provided by the City's water distribution system. The estimated amount of water that would be used by the project is provided in the Utilities and Service Systems section (6.19).

Further, and all runoff from the site would be metered out into the storm drainpipe underneath Airport Blvd. An impermeable liner would be placed along the east side of the pond to minimize infiltration onto the neighboring property. There are no riparian areas nor sensitive habitats onsite. Additional BMPs would be implemented and are discussed in Section 6.10(ci-ciii). The retention basins included as a part of the project would, in fact, result in an increase in groundwater recharge. Impacts would be less than significant.

- ci. Less than Significant. The proposed project would result in an increase of impervious area, resulting in approximately 40,276 square feet of new coverage, totaling 47,945 square feet of impervious surfaces. Currently onsite there is a residence, office trailer and large concrete slab that will be removed. Runoff from all proposed impervious surfaces will be directed to the bioretention facilities where water quality treatment will begin. The project must comply with post construction requirements including performance requirement No. 2, which requires the project to treat stormwater runoff to reduce pollutant loads and concentrations using physical, biological, and chemical removal. Runoff treatment is flow-based using a minimum four percent bioretention ratio to new or replaced impervious area. The project's 47,945 square feet of impervious area x 0.04 = 1,918 square feet of required bioretention, but onsite there is 2,870 square feet of bioretention area provided. The impact would be less than significant.
- **cii.** Less than Significant. The project design incorporates several strategies to reduce runoff. At the parcel, there are no natural drainage features and no native vegetation exists on the site, except for four trees at the site's southern border. Impervious surfaces will cover most of the site, with recreation areas designed to capture runoff with large open space areas that will take runoff safely away from building foundations and footings, consistent with California building code.

All runoff from new impervious surfaces is to be directed to the bioretention facility, and the project would comply with the following site design measures:

- Direct roof runoff onto vegetated areas safely away from building foundations and footings, consistent with California building code.
- o Direct runoff form sidewalks, walkways, and/or patios onto vegetated areas safely away from building foundations and footings, consistent with California Building Code
- o Direct runoff from driveways and/or uncovered parking lots onto vegetated areas safely away from building foundations and footings, consistent with California Building Code.

BMPs are in place to prevent surface runoff and flooding on- and offsite. The City will require the project's use of BMPs, as listed in the post-construction requirements. BMPs preventing flooding and runoff include protection of storm drains through vegetated filter traps and/or catch basins. With these BMPs in place, the impact would be less than significant.

ciii. Less than significant. The proposed project would not create or contribute runoff water that would exceed capacity of existing or planned stormwater drainage systems. In order to satisfy water quality requirements, runoff from events up to the 95th percentile 24-hour rainfall event (1.3 inches) shall be retained on site. Per the Stormwater Control Plan, the project's total required stormwater capacity is 1,664 cubic feet (cf); the project includes bioretention pond with 1,722 cf capacity, which is in excess of the required amount as shown in Table 9 above.

Discharge generated from project development is less than the existing discharge for the site [See answers c.ii and c.iii. The proposed basin has adequate capacity for the proposed development. Drainage patterns would not be altered, and the impact would be less than significant.

d. No impact. The project is not located in a tsunami zone, nor seiche zone. The project is not is located within a 100- or 500-year floodplain, as mapped by the Federal Emergency Management Agency (FEMA). The parcel is rated by FEMA as Zone X, defined as an "area of minimal flood hazard."

e. Less than significant. As a result of planned treatment features, impacts related to violation of water quality standards would be less than significant. A Storm Water Control Plan was prepared by Roper Engineering, in accordance to Watsonville Municipal Code Section 6-3.535 Post-construction requirements. The stormwater control measures proposed for this development are the bioretention facilities for Stormwater Quality and Runoff Retention. The bioretention facility will comply with the City of Watsonville's Standard Bioretention Facility LID-001. This bioretention facility specification is used by the Central Coast Regional Water Quality Control Board (RWQCB).

The 2015 adoption of the State's Model Water Efficient Landscape Ordinance (MWELO) applies to projects requiring a planning-level permit that contains over 500 square feet of new or rehabilitated landscape areas. The new MWELO reduces the size of turf areas in residential projects and prohibits turf in commercial projects. It also requires the use of highly efficient irrigation methods and is predicted to reduce landscape water use in new projects by 30 percent or more. During construction, temporary BMPs and erosion control measures would be put in place to reduce construction and post-construction siltation. For more information on BMPs, see Section 6.10(ci-ciii). Once developed, the project site would have no exposed soils and would not provide for any erosion potential.

The Pajaro Valley Water Management Agency is responsible for sustainable groundwater management in the region. The City of Watsonville does obtain potable water from groundwater resources in the basin. However, the project would not conflict with sustainable groundwater management in the area as the project is consistent with the City's Urban Water Management Plan. Compliance with the existing plans reduces the project's impacts to less than significant.

References:

City of Watsonville, 2016. Urban Water Management Plan. Available at: https://www.cityofwatsonville.org/DocumentCenter/View/2046/2015-Urban-Water-Management-Plan-Chapters-1-10-PDF (accessed April 30, 2020).

City of Watsonville, 2014. Watsonville Municipal Code, Post-construction Requirements. Available at: https://www.codepublishing.com/CA/Watsonville/#!/Watsonville06/Watsonville0603.html#6-3.535 (accessed March 6, 2020)

Federal Emergency Management Administration (FEMA). 100 and 500 Year Flood Zones for the City of Watsonville. Available at: <a href="https://www.cityofwatsonville.org/DocumentCenter/View/1088/Federal-Emergency-Management-Administration-FEMA-100--500-Year-Flood-Zones-A?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/1088/Federal-Emergency-Management-Administration-FEMA-100--500-Year-Flood-Zones-A?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/1088/Federal-Emergency-Management-Administration-FEMA-100--500-Year-Flood-Zones-A?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/1088/Federal-Emergency-Management-Administration-FEMA-100--500-Year-Flood-Zones-A?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/1088/Federal-Emergency-Management-Administration-FEMA-100--500-Year-Flood-Zones-A?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/1088/Federal-Emergency-Management-Administration-FEMA-100--500-Year-Flood-Zones-A?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/1088/Federal-Emergency-Management-Administration-FEMA-100--500-Year-Flood-Zones-A?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/1088/Federal-Emergency-Management-Administration-FEMA-100--500-Year-Flood-Zones-A?bidId="https://www.cityofwatsonville.org/DocumentCenter/View/1088/Federal-Emergency-Management-Administration-FEMA-100--500-Year-Flood-Zones-A?bidId="https://www.cityofwatsonville.org/Document-Center/View/1088/Federal-Emergency-Management-Administration-FEMA-100--500-Year-Flood-Zones-A?bidId="https://www.cityofwatsonville.org/Document-Center/View/1088/Federal-Emergency-Management-Administration-FEMA-100--500-Year-Flood-Zones-A?bidId="https://www.cityofwatsonville.org/Document-Center/View/1088/Federal-Emergency-Management-Administration-FEMA-100--500-Year-Flood-Zones-A?bidId="https://www.cityofwatsonville.org/Document-Center-Year-Pood-Zones-A?bidId="https://www.cityofwatsonville.org/Document-Center-Year-Pood-Zones-A?bidId="https://www.cityofwatsonville.org/Document-C

State of California Department of Conservation, 2009. Tsunami Inundation Map for Emergency Planning. Available at:

https://www.conservation.ca.gov/cgs/Documents/Tsunami/Maps/Tsunami_Inundation_WatsonvilleWe st Quad SantaCruz.pdf (accessed March 6, 2020).

Roper Engineering, June 20, 2019 "Preliminary Stormwater Control Plan for Tract No. 1604 547 Airport Blvd. Townhomes."

6.11 Land Use and Planning

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

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

Documentation:

- **a. No Impact.** The project represents infill development on property with existing access that would remain unchanged. The project would not physically divide an established community. While it does involve the construction of four residential buildings and demolition of an existing residence, the project does not include the construction of a physical structure or removal of a primary access route that would limit mobility within an established community or between a community and outlying areas. There would be no impact.
- **b.** Less than Significant Impact. The proposed project requires approval from the City Planning Commission and City Council for a General Plan Map Amendment and rezoning from current zoning of Industrial Park (IP) to Multiple Residential-High Density (RM-3). Assuming adoption of the General Plan amendment, the project would not cause a significant environmental impact due to conflict with any applicable land use plan adopted for the purpose of avoiding or mitigating an environmental effect, including the City's 2005 General Plan and Zoning Ordinance. The project is not located within an adopted specific plan area.

The project is not consistent with the General Plan's Land Use and Community Development Policy 4.D to promote modernization and protection of industrial lands for future industry. While the project is not consistent with this policy, it is consistent with Chapter 6 of the General Plan, which covers Housing and is consistent with providing housing (Goal 1.1) and evaluation of land that is suitable for residential development (Policy A). The project would be consistent with all relevant Goals and Policies including the policies below concerning water quality resources and preservation, including the following:

- Goal 9.5 Water Quality Ensure that surface and groundwater resources are protected.
- Policy 9.D Water Quality The City shall provide for the protection of water quality to meet all beneficial uses, including domestic, agricultural, industrial, recreational, and ecological uses.

The project would be required to comply with regional waste discharge requirements and the City's regulations to minimize stormwater, surface water, and groundwater pollution, including utilization of BMPs.

The project is generally consistent with the purpose of the RM-3 Zoning District, because the development would "...provide for the development of areas for greater residential density; to stabilize and protect residential characteristics of the district; and to promote a suitable environment for the lives of families and single persons living in the district." WMC § 14-16.400. While townhouse projects involving 10 or fewer dwelling units are principally permit, projects involving 11 or more units are allowed conditionally with approval of a Special Use Permit. WMC § 14-16.403. Allowed residential densities for land designated high density are between 14 and 36.99 units per net acre. The project is proposing 21 units on 1.57 acres. The project's residential density is based on the net developable acreage (i.e., the portion of a site remaining after public or private rights-of-way and land not developable are subtracted from the total acreage, used for density calculations). As the private drives represent 0.27± acres, the project would result in a density of 16.2 units per net acre, and is within the permitted range for land designated high density.

The site is already heavily impacted as it is currently used for industrial processing of rebar, and the current zoning is not designed to mitigate environmental impacts. The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The impact is less than significant.

References:

City of Watsonville, 2005. General Plan. Available at: https://www.cityofwatsonville.org/160/2005-General-Plan (accessed May 7, 2020).

City of Watsonville, 2019. Zoning Ordinance. Available at: https://www.codepublishing.com/CA/Watsonville/ (accessed May 7, 2020).

6.12 Mineral Resources

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?				\
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				\

<u>Conclusion</u>: Regarding mineral resources, the proposed project would not result in any significant environmental impacts.

Documentation:

a. No Impact. The State Board of Mining and Geology has adopted regulations to protect lands classified as MRZ-2 (i.e., lands where information indicates that significant stone, sand, and/or gravel deposits are present, or where a high likelihood for their presence exists; and lands otherwise designated as areas of statewide or regional significance relative to mineral resources). Mapping conducted in 1986 and 1987 of the project site area by the State Division of Mines and Geology did not indicate that the City of Watsonville contained any MRZ-2 designated resource zones.

The General Plan designates a Regionally Significant Construction Aggregate Resources site along the south side of Buena Vista Drive and southwest of Harkins Slough Road, over one mile east of the proposed project but the project would have no impact on this resource. The proposed project would not result in the loss of availability of a known mineral resource of value to the region and the residents of the State and no impact would occur.

b. No Impact. Refer to Section 6.12.a, above. The project would have no impact in mineral availability.

References:

City of Watsonville, 2005. General Plan, Chapter 9, Environmental Resources page 118. Available at: https://www.cityofwatsonville.org/160/2005-General-Plan (accessed March 5, 2020).

State of California Department of Conservation, 1987. Division of Mines and Geology Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area. Page 49.

State of California Department of Conservation, 1987. Division of Mines and Geology Mineral Land Classification: Report No.7, Designation of Regionally Significant Construction Aggregate Resource Areas in the South San Francisco Bay, North San Francisco Bay, Monterey Bay Production-Consumption Regions.

6.13 Noise

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

<u>Conclusion</u>: Regarding potential noise and vibration impacts, the proposed project would not result in any significant environmental impacts after the incorporation of mitigation. In addition, best management practices (BMPs) for the control of temporary construction noise levels are identified and incorporated into the project below.

Documentation:

a. Less than significant with mitigation incorporated. As described below, the proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project site. This impact would be less than significant.

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

Sound has three properties: frequency (or pitch), amplitude (or intensity or loudness), and duration. Pitch is the height or depth of a tone or sound and depends on the frequency of the vibrations by which it is produced. Sound frequency is expressed in terms of cycles per second, or Hertz (Hz). Humans generally hear sounds with frequencies between 20 and 20,000 Hz and perceive higher frequency sounds, or high pitch noise, as louder than low-frequency sound or sounds low in pitch. Sound intensity or loudness is a function of the amplitude of the pressure wave generated by a noise source combined with the reception characteristics of the human ear. Atmospheric factors and obstructions between the noise source and receptor also affect the loudness perceived by the receptor. The frequency, amplitude, and duration of a sound all contribute to the effect on a listener, or receptor, and whether or not the receptor perceives the sound as "noisy" or annoying. Despite the ability to measure sound, human perceptibility is subjective, and the physical response to sound

complicates the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms, such as "noisiness" or "loudness."

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

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

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

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

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

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

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

When considering environmental noise, it is important to account for the different responses people have to daytime and nighttime noise. In general, during the nighttime, background noise levels are generally quieter than during the daytime but also more noticeable due to the fact that household noise has decreased as people begin to retire and sleep. Accordingly, a variety of methods for measuring and normalizing community environmental noise have been developed. The California

Office of Planning and Research's General Plan Noise Element Guidelines identifies the following common metrics for measuring noise (OPR, 2017):

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

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

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

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

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

Noise effects on human beings are generally categorized as:

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

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

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

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

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

Existing Noise and Vibration Environment: Located on the border between an industrial portion of the City and residential land uses, the approximately 1.57-acre project area is generally configured in a north-south orientation and bounded by Airport Blvd to the north, industrial land uses to the west and south, and residential properties to the east. The Watsonville Municipal Airport is across Airport Blvd.

The General Plan Public Safety Element identifies that transportation noise is the predominant source of noise in the City. Highway 1 and State Route 129 are specifically identified as major sources of noise in the city due to their high traffic volumes and high vehicle travel speed (City of Watsonville, 1990 pgs. 185 and 191); however, the project area is located approximately 0.5 miles from Highway 1 and more than a mile from State Route 129. The northern end of the project site is located approximately 40 feet from the centerline of Airport Boulevard, a two-way, undivided, five-to-six lane roadway with a posted speed limit of 45 miles per hour (mph).

The existing traffic noise level for Airport Boulevard was computed using the U.S. Department of Transportation Federal Highway Administration's Traffic Noise Model (TNM), Version 2.5. The model uses traffic volume, vehicle mix, vehicle speed, roadway geometry, and other variables to compute 24-hour traffic noise levels at user-defined receptor distances from the roadway center. The TNM modeling conducted for the project incorporates worst-case assumptions about motor vehicle traffic and noise levels; specifically, calculations are based on "hard" site conditions and do not incorporate any natural or artificial shielding.

Information on existing average daily traffic volumes was obtained from a Focused Traffic Analysis prepared by W-Trans for the project (W-Trans, 2020). Traffic noise levels were estimated on a 24-hour, CNEL exposure basis assuming equal hourly distribution of vehicle traffic. The mix of automobiles (94%), medium (2%) and heavy-duty trucks (1%), and motorcycles (3%) assigned to the roadway system was generated using the CARB EMFAC2017 model, which contains vehicle population data by different geographic regions. Vehicles were assumed to travel 45 miles per hour. The results of the modeling indicate existing traffic noise levels at the site are approximately 74.8 CNEL at the northern property line. Please refer to Appendix E for detailed information on existing traffic noise modeling assumptions.

The General Plan Public Safety Element also identifies portions of the City are affected by airport and railroad noise sources. The project area is approximately 90 feet from the southern border of the Watsonville Municipal Airport and does not have any rail lines in proximity. Based on an Aircraft Noise Monitoring Report prepared by WJV acoustics in 2018 it is anticipated the site is also exposed to aircraft noise levels of approximately 46.5 CNEL (WVJ Acoustics, 2018).

Non-transportation sources also contribute to the City's existing noise environment. Residential and commercial land uses located near the project area generate noise from daily operations of landscaping equipment, stationary sources such as heating, ventilation, and air conditioning (HVAC) equipment, business deliveries, solid waste pickup services, etc. Such sources are considered local source of noise that only influence the immediate surroundings.

Based on the above information, it is anticipated traffic on Airport Boulevard is the primary source of ambient noise in the project vicinity and that 24-hour noise level is approximately 74.8 CNEL along the project site's northern property line.

Noise Sensitive Receptors

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

- The Colonial Manor Mobile Home Park, immediately east of the project site; and
- Single-family homes along Jeanette Way, south / south-east of the project site. At the closest, these receptors are approximately 185 feet from the project site.

Applicable Noise Standards: **The California Building Standards Code** is contained in Title 24 of the California Code of Regulations and consists of 11 different parts that set various construction and building requirements. Part 2, California Building Code, Section 1207, Sound Transmission, establishes sound transmission standards for interior walls, partitions, and floor/ceiling assemblies. Specifically, Section 1207.4 establishes that interior noise levels attributable to exterior noise sources shall not exceed 45 dBA DNL or CNEL (as set by the local General Plan) in any habitable room.

The California Green Building Standards Code is Part 11 to the California Building Standards Code. Chapter 5, Nonresidential Mandatory Standards, Section 5.507 establishes the following requirements for non-residential development that may be applicable to the proposed project.

- 5.507.4.1.1 sets forth that buildings exposed to a noise level of 65 dB Leq (1-hour) during any hour of operation shall have exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composting sound transmission class (STC) rating of at least 45 (or an outdoor indoor transmission class (OITC) of 35), with exterior windows of a minimum STC of 40.
- Section 5.507.4.2 sets forth that wall and roof assemblies for buildings exposed to a 65 dBA Leq pursuant to Section 5.507.4.1.1, shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed 50 dBA Leq in occupied areas during any hour of operation. This requirement shall be documented by preparing an acoustical analysis documenting interior sound levels prepared by personnel approved by the architect or engineer of record.

Watsonville General Plan Chapter 12, Public Safety, of the Watsonville General Plan includes the following goals and policies relevant to the proposed project:

- Goal 12.8 Noise Hazard Control. 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.** 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, the normally acceptable noise limit for multifamily residential land uses is 70 CNEL and the conditionally acceptable noise limit is 75 CNEL (Watsonville, 2005; Figure 12-6).

COMMUNITY NOISE INTERPRETATION Ldn or CNEL, dB LAND USE CATEGORY NORMALLY **ACCEPTABLE** 55 60 65 70 75 80 Specified land use is satisfactory, based Residential - Single Family upon the assumption that any buildings in-Duplex, Mobile Home volved are of normal conventional construction, without any special noise insula-Residential - Multi-Family tion requirements. CONDITIONALLY Transient Lodging -**ACCEPTABLE** Motel, Hotel New construction or development should be undertaken only after a detailed analysis of School, Library, Church, the noise reduction requirements is made Hospital, Nursing Home and needed noise insulation features included in the design. Conventional construc-Auditorium, Concert Hall. tion, but with closed windows and fresh air Amphitheatre supply systems or air conditioning will normally suffice. Sports Arena, Outdoor Spectator Sports 888 NORMALLY UNACCEPTABLE Playground, Neighborhood New construction or development should Park generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction require-Golf Course, Stable, Water ments must be made and needed noise insu-Recreation, Cemetery lation features included in the design. Office Building, Business, Commercial & Professional CLEARLY UNACCEPTABLE Industrial, Manufacturing, New construction or development should

Figure 10. Land Use Compatibility for Community Noise Environments

Noise Source Characteristics

Utilities, Agriculture

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.

generally not be undertaken

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. Watsonville Municipal Code To implement the City's noise policies, the City adopted Chapter 8, Noise, in Title 5, Public Welfare, Morals, and Conduct, of the Watsonville Municipal Code (WMC). WMC Chapter 5-8 prohibits specific types of noises, such as continuous or unusually loud noise which 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 7 PM and 7 AM 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 signing 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)).

Noise Impact Analysis

Temporary Construction Noise: As described in Section 6.3, Air Quality, the proposed project involves the construction of a 21-unit townhouse development on an existing rebar processing facility over an approximately 12-month period. Construction activities would disturb approximately 1.57 acres, and would include demolition, site preparation, grading, construction, paving, and architectural coating work. Project construction activities, duration, and typical equipment usage are shown in Table 2, Construction Activity, Duration, and Typical Equipment.

Project construction would require the use of heavy-duty construction equipment that could temporarily increase noise levels at adjacent property lines near work areas. The type of equipment used would include bulldozers, backhoes, a grader, a scraper, compactors/rollers, small cranes, and material handlers, lifts, and trucks. Table, *Typical Construction Equipment Noise Levels (dBA)*, presents the estimated, worst-case noise levels that could occur from operation of typical construction equipment used to develop the project. Given the site is narrow and construction would be taking place along the peripherals of the site, potential construction noise levels are estimated for worst-case equipment operations at a distance of 50-feet (from a property line) for all project phasing.

Table 10. Typical Construction Equipment Noise Levels (dBA)

Equipment	Reference Noise Level at 50 Feet (Lmax) ^(A)	Percent Usage Factor ^(B)	Predicted Noise Levels (Leq) at 50 Feet
Bulldozer	85	40	81
Backhoe	80	40	76
Compact Roller	80	20	73
Concrete Mixer	85	40	81
Crane	85	16	77
Excavator	85	40	81
Generator	82	50	79
Pneumatic tools	85	50	82
Scraper	85	40	82
Delivery Truck	85	40	81

Sources: Caltrans, 2013 and FHWA, 2010.

The worst-case Leq noise levels associated with the operation of a bulldozer and scraper are predicted to be approximately 81 and 82 dBA, respectively, at a distance of 50 feet from the equipment operating area. At an active construction site, it is not uncommon for two or more pieces of construction equipment to operate at the same time and in close proximity. A single bulldozer provides a sound level of 81 dBA Leq at a distance of 50 feet; when two identical sound levels are combined, the noise level increases to 84 dBA Leq and when three identical sound levels are combined, the noise level increases to 86 dBA Leq. These estimates assume no shielding or other noise control measures are in place at or near the work areas. These maximum noise levels would occur for a short period time; as demolition (20 days), site preparation (2 days) and grading (4 days) is completed. The majority of activities at the site (i.e., building construction; 200 days) would likely involve less operation of heavy-duty off-road equipment and, as the townhomes are developed, they would provide shielding from on-site noise levels at nearby sensitive receptor locations.

The noise generated from project construction would be temporary and would not produce the same sound levels every day. In addition, the City does not maintain numeric thresholds for the purposes of evaluating construction noise level. Neither the General Plan nor the Watsonville Municipal Code specify a noise level for construction activities. Project construction noise, therefore, would not exceed an applicable standard and would not result in a significant impact. Nonetheless, noise levels of 85 dBA Leq on an hourly basis are typically considered intrusive and would have the potential to interfere with the quiet, comfort, and use of adjacent, exterior residential areas, particularly the residential areas east of the site (Colonial Manor) and southeast of the site (along Jeanette Way). The City will require the implementation of BMPs as conditions of project approval to reduce the potential for construction noise levels to annoy and intrude upon adjacent residential areas. These BMPs outlined in **Mitigation Measure NOISE-1** would reduce construction noise levels and provide a mechanism for responding to construction noise complaints, thereby ensuring project construction would not result in a substantial, temporary increase in noise levels.

 $⁽A)L_{\text{max}}$ noise levels based on manufacturer's specifications.

⁽B) Usage factor refers to the amount of time the equipment produces noise over the time period.

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

- 8) Construction work hours shall be limited to the hours of 7 AM to 7 PM.
- 9) The sign shall also provide a contact name and phone number for the job site and the project's representative for addressing noise concerns.
- 10) Heavy equipment engines shall be covered and exhaust pipes shall include a muffler in good working condition.
- 11) Stationary equipment such as compressors, generators, and welder machines shall be located as far away from surrounding residential land uses as possible. The project shall connect to existing electrical service at the site to avoid the use of stationary, diesel- or other alternatively-fueled power generators, if feasible.
- 12) Impact tools such as jack hammers shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. When use of pneumatic tools is unavoidable, it shall be ensured the tool will not exceed a decibel limit of 85 dBA at a distance of 50 feet. Pneumatic tools shall also include a noise suppression device on the compressed air exhaust.
- 13) No radios or other amplified sound devices shall be audible beyond the property line of the construction site.
- 14) Prior to the start of any construction activity, the Applicant or its contractor shall prepare a Construction Noise Complaint Plan that identifies the name and/or title and contact information (including phone number and email) of the Contractor and District-representatives responsible for addressing construction-noise related issues and details how the District and its construction contractor will receive, respond, and resolve to construction noise complaints. At a minimum, upon receipt of a noise complaint, the Applicant and/or Contractor representative identified in the Plan shall identify the noise source generating the complaint, determine the cause of the complaint, and take steps to resolve the complaint.

Exterior Noise / Land Use Compatibility: The proposed project consists of a 21-unit townhouse development. According to the City's General Plan land use and noise compatibility guidelines, the normally acceptable and conditionally acceptable noise limit for multi-family residential land uses, such as the proposed project, is 70 and 75 CNEL, respectively. The predominant noise source in the vicinity of the project site is vehicle traffic on Airport Boulevard, which results in an ambient noise level of 74.8 CNEL based on the TNM2.5 traffic noise modeling conducted for the proposed project. As such, consistent with City's General Plan Noise Element, development should only be undertaken after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. The project's consistency with interior noise standards is identified below under "Interior Noise Level Compatibility."

Interior Noise Level Compatibility: Part 2, California Building Code, Section 1207.4 establishes that interior noise levels attributable to exterior noise sources shall not exceed 45 dBA DNL or CNEL (as set by the local General Plan) in any habitable room. In addition, Chapter 5 of the California Green Building Standards Code sets forth that buildings exposed to a noise level of 65 CNEL (where noise contours are available) or 65 dBA Leq (1-hour where noise levels are not available) shall:

1) have exterior wall and roof-ceiling assemblies exposed to the noise source that meeting a composite sound transmission class (STC) rating of at least 50 (or a composite outdoor indoor transmission class (OITC) rating no less than 40), with exterior windows of a minimum STC of 40 or OITC 30 (Section 5.507.4.1); or

2) provide an interior noise environment attributable to exterior sources that does not exceed 50 dBA Leq in occupied areas during any hour of operation.

As described above, traffic noise modeling indicates ambient noise levels at the site would be approximately 74.8 CNEL along the northern property line, where Building 1 is proposed to be constructed. Standard construction techniques and materials for new residential buildings are commonly accepted to provide a minimum exterior to interior noise attenuation (i.e., reduction) of 20 to 30 dBA with windows and doors closed, which would result in an interior noise level of approximately 45-55 CNEL for habitable rooms fronting Airport Boulevard.⁴ To comply with the City's General Plan Noise Element's Land Use Compatibility Guidelines, as well as the California Building Code, the City would implement **Mitigation Measure NOISE-2**.

Mitigation Measure NOISE-2: Reduce Residential Interior Noise Exposure. Prior to approval of the design review application for the proposed project, the City shall review and approve an acoustical analysis, prepared by or on behalf of the Applicant, that confirms actual noise levels for the project will not exceed:

- 1. 70 CNEL along northern portion of the site where building facades would be located, per the land use compatibility standards contained in the City's General Plan;
- 2. 45 CNEL in habitable rooms; and
- 3. 50 dBA Leg (1-hour) in other occupied rooms.

As part of the acoustical analysis, ambient sound measurements may be conducted at the project site to confirm the sound level reductions that will need to be achieved to comply with the afore mentioned requirements. Potential noise insulation site and building design features capable of achieving this requirement may include, but are not limited to: sound barriers; enhanced exterior wall construction/noise insulation design; use of enhanced window, door, and roof assemblies with above average sound transmission class (STC) or outdoor/indoor transmission call (OITC) values; or use of mechanical, forced air ventilation systems to permit a windows closed condition in residential units. Any additional, exterior structure(s) identified in the acoustical report (e.g., sound barriers) shall be incorporated into, and clearly depicted on, site plans for the proposed project.

After the implementation of Mitigation Measure NOISE-2, the proposed project would be consistent with the City's General Plan Noise Element Land Use Compatibility Standards and requirements identified in the California Building Code.

Potential On-Site Operational Noise Levels: Once constructed, the proposed project would generate noise from daily activities typical of residential-type facilities, including on-site vehicle trips, operation of HVAC units, landscaping and maintenance activities, waste-disposal truck traffic, etc. Specifically, the proposed project's on-site noise sources would include:

• Automobile travel along on-site roads, automobile parking, and other miscellaneous automobile noise sources such as doors closing and engine start-up and revving. The project's potential

_

⁴ NOTE: The U.S. Department of Housing and Urban Development (HUD) Noise Guidebook and supplement (2009a, 2009b) includes information on noise attenuation provided by building materials and different construction techniques. As a reference, a standard exterior wall consisting of 2"x4" studs spaced 16" on center and ½" gypsum wall board screwed to studs provides an approximate 34 dBA reduction between exterior and interior noise levels. Incorporation of windows occupying approximately 30% of the exterior wall façade could reduce attenuation by approximately 10 dBA. Attenuation provided may be slightly lower yet (2-3 dBs) for traffic noise due to the specific frequencies associated with traffic noise. It is conservatively assumed standard building construction would provide an exterior to interior noise reduction of approximately 21 to 22 dBA.

mobile noise sources would not operate continuously. Once parked and engines shut off, noise would cease to be generated.

- Waste collection services, which would occur toward the southern portion of the site.
- Human use of common areas, such as the "tot-lot" play space, open space/meadow area and bioretention area, and courtyard with tables and charcoal grills.

The project noise sources described above would not have the potential to generate substantial noise levels that could exceed the City's noise compatibility guidelines for adjacent residential areas (60 CNEL for single family, duplex, and mobile home land use). The project site plan shows buildings would be located throughout the site and thus potential noise generating activities would be distributed throughout the site and would not affect any one receptor. Furthermore, the proposed project would be replacing a site previously used for rebar processing, which likely produces different (e.g., forklift operation, clanging or rebar, material deliveries) and much higher noise levels than those that would be produced by new tenants associated with the proposed project. The project's potential on-site noise levels would, therefore, be less than significant.

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

The TIA prepared for the proposed project indicates that the project would result in 99 new, net trips per day, including 3 and 5 new trips during the AM and PM peak hours, respectively. All these trips would be added to Airport Boulevard before dispersing to their final destinations. These additional trips, when added to the existing ADT along Airport Boulevard (19,600 ADT), represents less than a one percent increase in traffic along Airport Boulevard. Furthermore, modeling conducted for the existing plus project scenario (19,699 ADT) indicates the additional trips would not increase traffic noise levels along Airport Boulevard (i.e., the ambient noise level would remain at 74.8 CNEL).

The proposed project would result in substantially less than a doubling of peak hour and daily traffic volumes on Airport Boulevard and, therefore, would not result in a substantial, permanent increase in noise levels along the roadways used to access the project.

b. Less than Significant Impact. As described further below, the proposed project would not generate excessive groundborne vibration or groundborne noise levels. This impact would be less than significant.

Vibration Background Information: Vibration is the movement of particles within a medium or object such as the ground or a building. Vibration may be caused by natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or humans (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources are usually characterized as continuous, such as factory machinery, or transient, such as explosions.

As is the case with airborne sound, groundborne vibrations may be described by amplitude and frequency; however, unlike airborne sound, there is no standard way of measuring and reporting amplitude. Vibration amplitudes can be expressed in terms of velocity (inches per second) or

discussed in dB units in order to compress the range of numbers required to describe vibration. As with airborne sound, the groundborne velocity can also be expressed in decibel notation as velocity decibels, or dBV (FTA, 2018). The vibration of floors and walls may cause perceptible vibration, rattling of items such as windows or dishes on shelves, or a low-frequency rumble noise, referred to as groundborne noise. This report uses peak particle velocity (PPV) to describe vibration effects. Vibration impacts to buildings are usually discussed in terms of PPV in inches per second (in/sec). PPV represents the maximum instantaneous positive or negative peak of a vibration signal and is most appropriate for evaluating the potential for building damage. Vibration can impact people, structures, and sensitive equipment. The primary concern related to vibration and people is the potential to annoy those working and residing in the area. Vibration with high enough amplitudes can damage structures (e.g., crack plaster or destroy windows). Groundborne vibration can also disrupt the use of sensitive medical and scientific instruments, such as an electron microscope.

Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities. Next to pile driving, grading activity has the greatest potential for vibration impacts if large bulldozers, large trucks, or other heavy equipment are used.

Caltrans' *Transportation and Construction Vibration Guidance Manual* provides a summary of vibration criteria that have been reported by researchers, organizations, and governmental agencies (Caltrans, 2013a). Chapter six of this manual provides Caltrans' guidelines and thresholds for evaluation potential vibration impacts on buildings and humans from transportation and construction projects. These thresholds are summarized in Table 11, *Caltrans' Vibration Threshold Criteria for Building Damage*, and Table 12, *Caltrans' Vibration Threshold for Human Response*.

Table 11. Caltrans' Vibration Threshold Criteria for Building Damage

Standard Integrity	Maximum PPV (in/sec)		
Structural Integrity	Transient	Continuous	
Historic and some older buildings	0.50	0.25	
Older residential structures	0.50	0.30	
New residential structures	1.00	0.50	
Modern industrial and commercial structures	2.00	0.50	
Source: Caltrans, 2013a			

Table 12. Caltrans' Vibration Threshold Criteria for Human Response

Hamon Dognongo	Maximum PPV (in/sec)			
Human Response	Transient	Continuous		
Barely perceptible	0.035	0.012		
Distinctly perceptible	0.24	0.035		
Strongly perceptible	0.90	0.10		
Severely perceptible	2.00	0.40		
Source: Caltrans, 2013a				

Vibration Impact Analysis: The potential for groundborne vibration is typically greatest when vibratory or large equipment such as rollers, impact drivers, or bulldozers are in operation. For the proposed project, the largest earthmoving equipment would primarily operate during demolition, site preparation, grading, and paving work. This equipment would, at worst-case and for limited periods of time (e.g., 20 days for demolition, see Error! Reference source not found., Construction Activity, Duration, and Typical Equipment), operate adjacent to the site's property lines and within approximately 25 feet of the residences located adjacent to the project site on in Colonial Manor; however, most site work would occur at least 50 feet or more from project property lines. Table 13, Potential Groundborne Vibration Levels, lists the typical vibration levels generated by the type of heavy-duty construction equipment most likely to be used during project construction, as well as the estimated vibration levels at distances of 25 feet (the closest residences to potential work areas), 50 feet, 100 feet, and 400 feet from the project site.

Table 13. Potential Groundborne Vibration Levels

	Peak Particle Velocity ^(A) (Inches/Second) at Distance					
Equipment	25 Feet	50 Feet	100 Feet	400 Feet		
Vibratory Roller	0.21	0.085	0.035	0.006		
Large Bulldozer	0.089	0.036	0.015	0.002		
Small Bulldozer	0.03	0.012	0.005	0.001		
Loaded Truck	0.076	0.031	0.013	0.002		
Jackhammer	0.035	0.014	0.006	0.001		

Sources: Caltrans, 2013a and FTA 2018.

As shown in Table 3, construction equipment vibration levels from a roller, large bulldozer, or small bulldozer, could exceed Caltrans vibration detection thresholds (see Table) for "barely perceptible" (0.035 inches/second) and approach thresholds for "distinctly perceptible" (0.24 inches/second) when operating in close proximity (within 25 feet) to adjacent residences and would, therefore, likely be perceptible at these building locations. This, however, is not considered to be excessive, because any equipment operation near property lines would be short in duration and intermittent (lasting only a few hours or days in work areas closest to building locations). As construction equipment moves around the site and operates at distances of 50 feet or more from nearby residences, vibration levels would begin to drop to levels that would not be perceptible according to Caltrans' thresholds.

⁽A) Estimated PPV calculated as: PPV(D)=PPV(ref*(25/D^1.3 where PPV(D)= Estimated PPV at distance; PPVref= Reference PPV at 25 ft; D= Distance from equipment to receiver; and n= ground attenuation rate (1.3 for competent sands, sandy clays, silty clays, and silts).

Additionally, potential construction vibration levels would not result in structural damage because the estimated vibration levels are substantially below Caltrans' thresholds for potential damage to even the most sensitive of residential buildings (0.50 inches/second for older, un-reinforced concrete masonry buildings or historic buildings). Thus, short-term, intermittent construction equipment vibration levels would not be excessive.

Once operational, the proposed project would not result in the operation of sources that would generate substantial groundborne vibration levels.

c. Less than Significant. The proposed project area is located across the street from Watsonville Municipal Airport, but is not located in an area recognized "noise sensitive area" according Watsonville Municipal Airport Noise Abatement Map, which are areas where the Airport specifies the use of best practices and noise abatement procedures to control airport-related noise levels (City of Watsonville, 2019). In addition, based on an Aircraft Noise Monitoring Report prepared by WJV acoustics in 2018 it is anticipated the site is also exposed to aircraft noise levels of approximately 46.5 CNEL (WJV Acoustics, 2018). As discussed under response a), the ambient noise environment is predominantly influenced by traffic noise and an acoustical report would be prepared pursuant to Mitigation Measure NOI-1, which would identify additional building design features to comply with California Building Code standards for interior noise levels. For these reasons, the proposed project would not expose people residing or working in the project area to excessive public or private airport-related noise levels and the impact is less than significant.

References:

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

Caltrans, 2013. Peak Hours Volume Data: Technical Noise Supplement to the Traffic Noise Analysis Protocol. Sacramento, CA. Sacramento, CA.

Caltrans, 2013. Transportation and Construction Vibration Guidance Manual. Sacramento, CA.

City of Watsonville, 2005. General Plan. Available at: https://www.cityofwatsonville.org/160/2005-General-Plan (accessed October 6, 2019).

City of Watsonville, 2019. Flying Quietly. Available at: https://www.cityofwatsonville.org/332/Flying-Quietly (accessed October 6, 2019).

W-Trans, April 21, 2020. Focused Traffic Analysis for the 547 Airport Boulevard Project.

WJV Acoustics, August 29, 2018. Aircraft Noise Monitoring Report Watsonville Municipal Airport.

U.S. Department of Housing and Urban Development, 2009. Noise Guidebook. Prepared by the Environmental Planning Division, Office of Environment and Energy.

U.S. Department of Housing and Urban Development, 2009. Noise Guidebook, Chapter 4 Supplement: Sound Transmission Class Guidance. Prepared by the Environmental Planning Division, Office of Environment and Energy.

U.S. Department of Transportation, Federal Highway Administration (FHWA), 2017. "Construction Noise Handbook, Chapter 9 Construction Equipment Noise Levels and Ranges." Available at: http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook/9.cfm (accessed August 1, 2019).

6.14 Population and Housing

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

<u>Conclusion</u>: Regarding population and housing, the proposed project would not result in any significant environmental impacts.

Documentation:

a. Less than Significant Impact. New homes are proposed in the project, which would result in direct population growth. According to the U.S. Census Bureau, the estimated 2018 population of Watsonville was approximately 53,616. The 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (2040 MTP/SCS), developed by the Association of Monterey Bay Area Governments (AMBAG) contains growth projections for the City. According to AMBAG, the population of Watsonville is anticipated to grow to 59,743 in 2040, adding 5,823 new residents between 2018 and 2040. The population of Santa Cruz County is expected to increase to 306,881 residents by 2040, adding approximately 32,626 residents to the U.S. Census Bureau's 2018 population estimates for the County (Bureau Quick Facts). The project is estimated to add 78 residents,⁵ which represents 1.34% of the projected 5,823 new residents citywide.⁶ It is likely that the population increase may be less than 78, as some of the residents of the new development may already live in Watsonville.

During construction there would be a short-term increase in construction jobs. It is anticipated that the majority of the workers live within Watsonville or in nearby towns and/or adjacent counties. Construction impacts would be short-term and less than significant. The applicant is considering employing residences for onsite services after the property is opened.

The project does not include any major infrastructure expansion including new roads or utilities and would not result in any indirect population growth. As a result, impacts on City population growth from employment and residential population growth would be less than significant.

b. Less than Significant Impact. There is one existing single-family residence onsite. This residence is proposed to be demolished as part of the project, which would displace the current residents. However, the new housing development would have capacity to house those displaced by project build-out. The new residential units would provide housing at market rate in addition to three low-

96 | City of Watsonville

-

⁵ Calculation: 21 units x 3.68 persons per household = 78 residents (rounded up from 77.28)

⁶ Calculation: 78 residents / 5,823 anticipated new residents citywide = 1.34%

income units. Because the project could feasibly accommodate the current residents that would be displaced by the proposed project, impacts would be less than significant.

References:

Association of Monterey Bay Area Governments (AMBAG), 2018. 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy. Available at:

https://ambag.org/programs/met_transp_plann/documents/Final_2040_MTP_SCS/AMBAG_MTP-SCS_Final_EntireDocument.pdf (accessed March 17, 2020).

City of Watsonville, 1994. 2005 General Plan, Land Use Diagram. Available at: https://www.cityofwatsonville.org/DocumentCenter/View/106/2005-General-Plan-Land-Use-Diagram- (accessed March 17, 2020).

City of Watsonville, 2012. Draft 2030 General Plan Update, Land Use and Community Development Element. Available at: https://www.cityofwatsonville.org/DocumentCenter/View/139/03-Land-Use----June-2012-PDF (accessed March 17, 2020).

United States Census Bureau, 2019. Quick Facts for Santa Cruz County, California Available at: https://www.census.gov/quickfacts/santacruzcountycalifornia (accessed March 16, 2020).

United States Census Bureau, 2019. City of Watsonville, California. Available at: https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml (accessed March 5, 2020).

6.15 Public Services

	Summary of Impacts			
	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:	_	-	_	
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection			✓	
b) Police protection			✓	
c) Schools			✓	
d) Parks			✓	
e) Other Public Facilities			✓	

<u>Conclusion</u>: Regarding public services, the proposed project would not result in any significant environmental impacts.

Documentation:

a. Less than Significant Impact. Project buildout would result in an increase of development fees for the City. Using FY19-20 fees, the applicant would pay \$6,938 per unit for 21 units. This totals approximately \$145,698.

The City of Watsonville is served by the Watsonville Fire Department. The Department includes Fire Suppression, Emergency Medical Services, Fire Training and Fire Prevention Divisions. The Department provides services related to fire prevention, training and safety, which includes public education and inspection services, and standard fire department operations, which includes emergency response and development of hazard pre-incident plans. The Department protects the 6.6 square miles of the City and its 53,920 residents. In addition to the City, the Department provides service to unincorporated areas around the City of Watsonville, which increases the service area to approximately 14 square miles and a population of 60,000.

The Watsonville Fire Department currently operates two open fire stations, Station 1 and Station 2. Station 1 is staffed with 6-7 rotating fire fighters with one engine. Station 2 is staffed with 3-4 rotating fire fighters and one engine. All stations are staffed with paramedics on call.

The closest fire station to the project site is Station 2, located at 370 Airport Boulevard approximately 1,600 feet east of the project site. This station would likely be the first to respond to calls from the project site. The proposed project is anticipated to marginally increase demand for fire protection services, but it is not expected to compromise response times, exceed planned staffing levels or equipment, nor require the construction of additional fire facilities. Additionally, the Watsonville

Fire Department and Fire Inspector would review the design of project structures prior to the issuance of a building permit to ensure incorporation of adequate fire and life safety features in the project.

The proposed project will comply with the City 2005 General Plan Safety Element policies related to fire protection. These policies listed below help ensure the increases in population do not impact fire services to a degree that new or expanded facilities would be required.

The following Standards come from the 2005 General Plan Public Safety Element Policy 12.F Fire Safety Standards:

- 12.F.1 Access
- 12.F.2 Cul-de-Sacs
- 12.F.3 Private Access Roads
- 12.F.4 Road Construction
- 12.F.5 Width & Vertical Clearance
- 12.F.6 Alleys
- 12.F.7 Emergency Access

- 12.F.8 Fire Flow
- 12.F.9 Open Area
- 12.F.10 Building Safety
- 12.F.11 Built-In Fire Protection
- 12.F.12 Street Name & Numbering
- 12.F.13 Fire Cause Investigation

The City has also adopted the California Fire Code (Chapter 9 of Title 8 of the municipal code) with modifications for local conditions. Applicable policies from the code include:

- 8-9.304 Combustible waste material: Including weeds, grass, vines or other growth capable of being ignited and endangering property, will be removed by the owner or occupant.
- 8.9-903 Automatic sprinkler systems: All buildings will be required to have approved automatic sprinkler systems in new buildings and structure.

The project increases demand for fire services but is located very close to Station 2. Compliance with the California Fire Code, and additional project review by the Fire Department would result in less than significant impacts related to fire protection.

b. Less than Significant Impact. The City of Watsonville is under the jurisdiction of the City of Watsonville Police Department (WPD). WPD provides police protection services throughout the City. WPD headquarters are located at 215 Union Street, approximately 2.5 miles southeast of the proposed project and roughly 10-15 minutes away driving. The WPD offers police services including an abandoned vehicle program, alarm system registration, dispatch, garage sale permits, live scans, and educational opportunities.

The proposed project would create 21 units of housing in a formerly industrial area. The proposed project is anticipated to increase demand for police protection services but is not expected to compromise response times or exceed planned staffing levels/equipment nor directly require the construction of additional police facilities. The project site is located next to existing residential uses and would not result in substantial adverse physical impacts to police service facilities. The impact would be less than significant.

c. Less than Significant Impact. The project site is served by the Pajaro Valley Unified School District (PVUSD); the district operates seven alternative and charter schools, 16 elementary schools, nine secondary schools, and one adult education school. According to the PVUSD school district locator tool, the project site would be served by Freedom Elementary School (grades K-5) located at 25 Holly

Drive, Rolling Hills Middle School (grades 6-8) located at 130 Herman Ave, and Pajaro Valley High School (grades 9-12) located at 500 Harkins Slough. School capacity and average enrollments between 2014 to 2019 and for the 2018-2019 academic year are summarized in Table 14 below.

Table 14: School Capacity and Enrollment

School	Capacity (2011) ¹	Enrollment (5-year average) ³	Enrollment (2018-2019) ³
Freedom Elementary School	878	648	635
Rolling Hills Middle School	918	646	652
Pajaro Valley High School	$2,200^2$	1,442	1,466

Sources:

The proposed project would result in a minimal increase in school-age children who would attend PVUSD schools. The U.S. Census Bureau estimates that 21.43% of the population in Watsonville is between the ages of five and 18 (roughly the ages of K-12 population) in 2018. Using this percentage, the project would house about 17 (rounded from 16.7) youth in the K-12 age range, which is conservatively two students per grade. Project buildout could result in 12 additional students at Freedom Elementary School, six at Rolling Hills Middle School, and eight students at Pajaro Valley High School. Using the five-year average, all schools have capacity for the new students generated by project buildout. This a conservative estimation because some parents or guardians may elect to send their children to private schools, charter schools, or home-school.

In accordance with California Government Code and the PVUSD, the Applicant would be required to pay standard school facilities impact fees, which would offset costs incurred by PVUSD for providing facilities for the additional students. The fees are currently \$5.02 per residential square foot and \$0.07 per square foot for parking lots/structures. Payment of developer fees is considered adequate mitigation for any project-related impacts to school facilities resulting in a less than significant impact.

d. Less than Significant Impact. The proposed project includes residence that would result in population growth and would incrementally increase demand on local and regional recreation facilities. The City operates 26 parks (see Section 6.16 Recreation) totaling 143 acres. Parks managed by Santa Cruz County, Monterey County, Santa Clara County, and the State are located within 20 miles of the project. While there are opportunities to recreate nearby, the project proposes development of 17,196 square feet of public recreational amenities that would reduce project-generated demand on existing parks and recreational facilities.

The project developer is also required to pay the City Recreation & Parks Facilities fee for new development. Currently, the 3-bedroom dwelling unit fee is \$1,667.00 per bedroom, and 1-2-bedroom unit fees are \$1,500.00 per bedroom. Given existing recreational facilities, along with proposed onsite recreational facilities, impacts to new or existing recreational facilities would be less than significant.

e. Less than Significant Impact. The project would result in population growth that would incrementally affect other public services such as libraries, public transit, public meeting places. In

100 | City of Watsonville

_

¹As of 2011. Source: PVSUD Comprehensive Facilities Master Plan 2012-2022.

² Enrollment capacity is limited to 2,200 students under the Coastal Development Permit.

³EdData (Education Data Partnership) data regarding PVUSD.

⁷ Calculation: 17 students / 13 grades (K-12) = 2 (rounded up from 1.3)

the past several years, the City has increased and expanded library facilities and funding to accommodate increased demand and a growing population.

The City of Watsonville Public Library system includes the Main Library, the Freedom Branch Library, and the Adult Literacy program adjacent to the Main Library. The nearest branch of the library system is the Freedom Branch located at 2021 Freedom Blvd, about two minutes driving from the project site. In 1991 the Watsonville Public Library Building Program called for providing 0.6 square foot of library space per resident. The draft 2030 General Plan Update mentions that between the two libraries and future expansion space, the City has a total of 54,000 square feet of space for future development. The library would experience a small increase in public use generated by the project but would not trigger needs for new or expanded library facilities. The overall increase in demand would not require the construction of new or physical alteration of public facilities that could result in environmental impacts.

The additional 78 residents generated by the project would not be significant enough to warrant new or physically altered public transit (see section 6.17 Transportation), or other public facilities. Impacts would be less than significant.

References:

City of Watsonville, 2019. Development Fees. 2019-2020 Fee Schedule. Available at: https://www.cityofwatsonville.org/DocumentCenter/View/9186/Planning-and-Building-Permit-Fee-Schedule-2019-20-PDF (accessed June 25, 2020)

City of Watsonville, 2005. Draft Environmental Impact Report, General Plan and Sphere of Influence Amendment. December 1992. Page 3-83. https://cityofwatsonville.org/DocumentCenter/View/1154/6-Pubhttps://cityofwatsonville.org/DocumentCenter/View/7078/2005-General-Plan-EIR-1-of-3 (accessed June 11, 2020)

City of Watsonville, 2005. General Plan: Public Safety Element. Available at: https://www.cityofwatsonville.org/160/2005-General-Plan (accessed March 16, 2020).

City of Watsonville, 2005. General Plan: Public Services Element. Available at: https://www.cityofwatsonville.org/160/2005-General-Plan (accessed March 16, 2020).

City of Watsonville, 2019. Development Fee Summary 2019-2020. Available at: https://www.cityofwatsonville.org/DocumentCenter/View/9187/Impact-Fees-2019-20-PDF (accessed March 16, 2020).

City of Watsonville, 2019 6c. Watsonville Fire Department. Available at: https://www.cityofwatsonville.org/430/Fire (accessed March 16, 2020).

City of Watsonville, 2019 6d. Watsonville Police Department. Available at: https://www.cityofwatsonville.org/197/Police (accessed March 16, 2020).

City of Watsonville. Recirculated Draft EIR 2030 General Plan, Public Facilities and Services. https://cityofwatsonville.org/DocumentCenter/View/1154/6-Public-Facilities-PDF (accessed June 11, 2020)

Education Data Partnership (EdData), 2019. Pajaro Valley Unified. Available at: https://www.ed-data.org/district/Santa-Cruz/Pajaro-Valley-Unified (accessed March 16, 2020).

My School Locator, 2019. Pajaro Valley Unified School District. Available at: https://betalocator.decisioninsite.com/?StudyID=136986 (accessed March 5, 2020).

Total School Solutions, 2012. Pajaro Valley Unified School District: Comprehensive Facilities Master Plan 2012-2022. Available at: http://pps-pajaro-ca.schoolloop.com/file/1310009033866/1309101273857/1514939043896199031.pdf (accessed March 16, 2020).

United States Census Bureau, 2019. City of Watsonville, California. Available at: https://www.census.gov/quickfacts/fact/table/watsonvillecitycalifornia/PST045218 (Accessed March 16, 2020).

6.16 Recreation

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

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

Documentation:

a. Less than Significant Impact. The project proposes housing which would increase population growth, with the estimated 78 potential residents using the surrounding public recreation facilities (see section 6.14, Population and Housing). The applicant would pay development fees totaling approximately \$145,698 (see section 6.15 Public Services). The project includes several onsite recreational amenities, consisting of a grill area with picnic tables, a tot lot, and an open meadow space (doubling as the bioretention basin) with park benches. While these amenities would reduce the need for use of off-site recreational facilities, it is anticipated that a minor increase in the use of off-site recreational facilities by residents of the project would occur. Residents are anticipated to use local and regional park facilities listed below as well as onsite amenities.

The City offers 143 acres of park land in the form of 26 parks open to the community:

- Pinto Lake (78 acres)
- Ramsay Park (25.91 acres)
- Arista Park (0.27 acres)
- Atri Park (0.32 acres)
- Brentwood park (0.41 acres)
- Bronte Park (0.28 acres)
- Callaghan Park (2.64 acres)
- Cherry Blossom Park (0.15 acres)
- City Plaza Park (1.4 acres)
- Crestview Park (2.01 acres)
- Emmett Court (0.15 acres)
- Flodberg Park (1.07 acres)
- Franich Park (14.02 acres)

- Hazelwood Park (1.07 acres)
- Hope Drive Park (2.46 acres)
- Joyce-Mckenzie Park (1.72 acres)
- Kearney Park (0.29 acres)
- Las Brisas Park (1.00 acres)
- Marinovich Park (1.03 acres)
- Memorial Park (0.22 acres)
- Muzzio Park (1.12 acres)
- Peace Drive Park (1.4 acres)
- River Park (1.43 acres)
- Riverside Mini Park (0.34 acres)
- Seaview Ranch Park (14 acres)
- Victorian Park (0.13 acres)

The closest park to the project site is Cherry Blossom Park (0.15 acres) which has a tot lot. Project residents are not likely to use this park because of the onsite tot lot. The next two closest parks are Hope Drive Park (2.46 acres) with trail access and picnic tables, and Peace Drive Park (1.4 acres) which has basketball courts and play area. Both parks are about a five-minute drive from the project site. Within a 20-minute driving radius, Watsonville residents can access numerous state and county parks, including:

- Sunset and New Brighton State Beach and Campground,
- Manresa, Seacliff, Zmudowski, Moss Landing, and Salinas River State Beaches,
- Pinto Lake County Park,
- Nisene Marks State Park,
- Mount Madonna County Park, and
- Bike trails next to the Watsonville slough system and along the Pajaro River.

The City's 2005 General Plan, although not providing specific locations, discusses future park acquisitions to provide parks in neighborhoods experiencing population growth, and discusses development of park facilities within one-half mile of all residential areas. Although there is likely to be an increase in park use with the increased population in the planning area, the project would not increase the use such that substantial physical deterioration of the facility would occur or be accelerated. The project would generate property taxes that would go into the City's General Fund to help finance park maintenance and future park production. Project buildout would not significantly increase the use of existing parks and recreational facilities, and the impact would be less than significant.

b. Less than Significant Impact. The proposed project includes on-site recreational amenities including a tot lot playground area, an open space meadow and a grill area. The project does not propose off-site recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Impacts would be less than significant.

References:

City of Watsonville, 2019. Development Fees. 2019-2020 Fee Schedule. Available at: https://www.cityofwatsonville.org/DocumentCenter/View/9186/Planning-and-Building-Permit-Fee-Schedule-2019-20-PDF (accessed June 25, 2020)

City of Watsonville, 2005. General Plan: Recreation Element. Available at: https://www.cityofwatsonville.org/160/2005-General-Plan (accessed October 6, 2019).

City of Watsonville, 2019. Watsonville Parks & Community Services. Available at: https://www.cityofwatsonville.org/1207/City-Parks (accessed March 17, 2020).

City of Watsonville, 2019. Park Amenities Chart. Available at: https://www.cityofwatsonville.org/DocumentCenter/View/3362/Park-Amenities-Chart-PDF?bidId=(accessed March 17, 2020)

6.17 **Transportation**

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

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

Documentation:

a. Less than Significant with Mitigation Incorporated. The project would have an impact if proposed improvements reduce the availability or efficiency of facilities providing alternative transportation, including bus systems, bicycle routes, and pedestrian walkways.

W-Trans prepared a Focused Traffic Analysis for the project (Appendix F). This section summarizes and assesses the calculations made and the conclusions reached in the analysis. The analysis compared the traffic generation from the existing manufacturing use with the proposed project. Table 15 summarizes the results of the trip generation analysis. The proposed project is estimated to generate 154 trips (a 99-trip increase per day). The project is anticipated to increase AM peak hour trips by three and PM peak hour trips by five.

Table 15. Trip Generation Summary

	Existing Rebar Facility	Proposed Project	Net Traffic		
Daily Trip Generation	55	154	+99		
AM Peak Hour Trips*	7	10	+3		
PM Peak Hour Trips*	7	12	+5		
* Includes traffic in and out of property					

Transit Facilities

Santa Cruz Metro provides transit service throughout the county and within the City of Watsonville. There are four stops within one-quarter mile of the project, serving Routes 69A and 74S. Route 69A provides service between Santa Cruz Metro Center and the Watsonville Transit Center. Service operates Monday through Friday with approximately 30-minute headways between 6:20 a.m. and 10:50 p.m. Saturday and Sunday service operates with 30-minute headways between 7:50 a.m. and 8:10 p.m. Route 74S provides loop service between the Watsonville Transit Center and the Watsonville Community Hospital. Service is provided Monday through Friday with one trip between 7:00 a.m. and 8:00 a.m. and another between 3:00 p.m. and 4:00 p.m.

According to the Focused Traffic Analysis, the existing transit routes are adequate to accommodate the number of transit trips generated by the proposed project. The existing bus stops are within an acceptable walking distance of the project site and would be accessible via the current sidewalk facilities nearby upon completion of the frontage improvements necessary to comply with City design standards (see pedestrian facilities below). The impact to transit facilities would be less than significant.

Roadway Facilities

The Project would create incrementally more demand and subsequent impact on the City's roadways as traffic is expected to increase as a result of the Project. However, this is likely to be at least partially offset by a likely reduction in the number of trucks (which are currently serving the existing re-bar facility). Overall, the existing roadway infrastructure in the City is adequate to meet the needs of the project. Furthermore, the residents of the project will contribute to roadway maintenance through the payment of local taxes. The impact to roadway facilities would be less than significant.

Bicycle Facilities

There are existing bicycle lanes along Airport Boulevard for approximately two miles between Larkin Valley Road and Green Valley Road. Bicyclists ride in the roadway and/or on sidewalks along all other streets within the project study area. These bicycle facilities are adequate to connect the project site to nearby residential and commercial areas (Appendix F). The impact to bicycle facilities would be less than significant.

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. Overall, a network of sidewalks, crosswalks, and curb ramps provide access for pedestrians on both sides of Airport Boulevard. There is, however, no existing sidewalks along the project frontage.

The closest crosswalk to cross Airport Boulevard is about 1/4-mile northeast of the project site at the intersection of Airport Boulevard and Holm Road. At this crossing, there is an existing rectangular rapid flash beacon (RRFB); however, the RRFB will be removed with completion of an upcoming improvement project at this intersection. A signal is planned to be constructed at this intersection and will include pedestrian phasing. The proposed site plan identifies sidewalks within the project, connecting the residences to each other. However, the site plan does not identify sidewalk improvements along the project frontage, and such improvements would be required to meet City design standards. It is recommended that the site plan be modified to include sidewalk on the project's frontage to close the existing gap in sidewalk connectivity on Airport Boulevard. Overall, the internal proposed pedestrian connections for the site would be adequate; however, the external street side pedestrian facilities are inadequate. Consistent with City design standards, a sidewalk should be constructed along the site frontage as part of the proposed project to close the existing sidewalk gap on Airport Boulevard and enable better pedestrian access. The impact to pedestrian facilities would be less than significant with compliance to City design standards.

b. Less than Significant Impact. Per CEQA Guidelines section 15064.3(c) (Applicability), the provisions of section 15064.3 are applicable as of July 1, 2020. The City currently does not have an

adopted VMT management plan nor a congestion management plan. The City is working on developing local standards for future VMT analyses. In the interim, OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA Guidelines* is relied upon to determine whether or not the project's VMT may result in a potentially significant transportation impact. According to the guidelines, the screening threshold for small projects that do not require a quantitative VMT analysis and implementation of mitigation measures 110 or fewer trips per day.

The Focused Traffic Analysis (Appendix F), completed by W-Trans, evaluated VMT for the proposed project. The analysis considered the difference in traffic from the existing manufacturing use and the proposed residential use. The net daily traffic was 99 trips which is less than 110 trips screening criteria. As such, transportation-related impacts, per CEQA Guidelines section 15064.3(c), would be less than significant.

c. Less Than Significant Impact with Mitigation Incorporated. A significant impact would occur if the proposed project considerably increased hazards due to a design feature or introduced incompatible uses to the existing circulation system. The project does not include any feature that would create a roadway or traffic hazard.

The proposed project's driveway is on Airport Blvd. between Hangar Way and Aviation Way. Along the project frontage there is a two-way left-turn lane for inbound and outbound drivers to use. Sight distance was evaluated in the Focused Traffic Analysis (Appendix F). The analysis concluded that there is adequate sight distance for the posted 45-mile per hour speed limit (360 foot stopping distance). Sight lines extend greater than 400-feet in both directions. Although the report notes that only low-lying vegetation or trees that branches are trimmed below seven feet are recommended along the driveway. It is further recommended that no signing be installed that would obscure sight lines. The design of the driveways would comply will all applicable City regulations, including sight distances, line-of-sight triangles, and curb design. Therefore, project driveways would not increase hazards in the area.

The project would generate residential traffic which is consistent with much of the traffic in the area, which is a combination of industrial, commercial, and residential. The project would not result in incompatible uses as it relates to transportation and traffic.

Construction activities may create temporary hazardous conditions for pedestrians, bikers, and drivers. Construction-related impacts would cease upon project completion. **Mitigation Measure TRANS-1** would reduce impacts of temporary construction activities to less than significant levels.

Mitigation Measure TRANS-1: Construction Period Transportation Impacts. The Applicant shall submit a Construction Period Traffic Control Plan to the City for review and approval. The plan shall include traffic safety guidelines compatible with Section 12 of the Caltrans Standard Specifications ("Construction Area Traffic Control Devices") to be followed during construction. The plan shall also specify provision of adequate signing and other precautions for public safety to be provided during project construction. In particular, the plan shall include a discussion of bicycle and pedestrian safety needs, including ADA accessibility standards, due to project construction and later, project operation. In addition, the plan shall address emergency vehicle access during construction. The applicant or their general contractor for the project shall notify the Public Works & Utilities Department and local emergency services (i.e., the Police and Fire Departments) prior to

construction to inform them of the proposed construction schedule and that traffic delays may occur. Prior to approval of a grading permit, the City shall review and approve the project Construction Period Traffic Control Plan. During construction, the City shall periodically verify that traffic control plan provisions are being implemented.

d. Less than Significant Impact. A significant impact would occur if the proposed project would not satisfy emergency design and access requirements of the City of Watsonville Fire Department. A significant impact would also occur if the project would inhibit the ability of emergency vehicles to serve the project site or adjacent uses. Emergency access to the Project would occur through the existing road network and emergency services would enter the property along Airport Blvd. The proposed project would not result in inadequate emergency access because all access features will satisfy City of Watsonville design requirements, including Fire Department requirements, prior to project approval. Therefore, the proposed project would result in less than significant impacts related to emergency access.

References:

W-Trans, April 21, 2020. Focused Traffic Analysis for the 547 Airport Boulevard Project. Included as Appendix F.

Kimley Horn, January 2020. Airport Blvd and Holm Road Intersection Improvement Project.

6.18 Tribal Cultural Resources

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

<u>Conclusion:</u> Implementation of Mitigation Measures CUL-1 through CUL-2 would reduce potential impacts to less than significant levels. Regarding tribal cultural resources, the proposed project would not result in any significant environmental impacts.

Documentation:

ai. Less Than Significant with Mitigation Incorporated. As detailed in Section 6.5 Cultural Resources, the California Historical Resources Information System (CHRIS) search at the Northwest Information Center (NWIC) failed to show any known archaeological resources in the project boundary, and no prehistoric archaeological resources within one mile of the project.

A Sacred Lands File (SLF) search was conducted through the Native American Heritage Commission (NAHC), which was returned with a positive result, indicating that the Costanoan Ohlone Rumsen-Mutsen Tribe had more information on potential resources in the project vicinity. None of the tribes contacted as an extension of the SLF indicated a specific resource or site within the vicinity but confirmed that the area was sensitive (See Section 6.5 for a more in-depth discussion on tribal responses).

The cultural resources records search results conducted by the NWIC indicate that there are no Tribal Cultural Resources (TCR) or archaeological resources relating to TCRs located within the project's boundaries. The nearest archaeological site (P19-000396: shell midden) is located within a one halfmile radius of the project site and will not be impacted by the proposed project, as the resource is

located outside of the project boundary (Northwest Information Center 2019). Additionally, a Sacred Lands File Search through the Native American Heritage Commission (NAHC), Native American Scoping (MIG), and an archaeological pedestrian field survey, all failed to indicate TCR's or archaeological (prehistoric and historic) resources relating to TCRs within the project site. Therefore, the proposed project would result in no substantial adverse change in the significance of TCRs as defined in CEQA Guidelines section 15064.5.

Based on the results of the SLF search and Native American outreach, although no specific resources were discovered, cultural resources could be present and project excavation could result in the discovery of prehistoric archaeological resources. In the event that project ground-disturbing activities disturb, damage, or destroy previously unknown buried prehistoric features, sites or artifacts, a significant impact could occur. Implementation of Mitigation Measure CUL-1 and CUL-2 would reduce potential impacts to undiscovered archeological resources to a less than significant level.

aii. Less Than Significant with Mitigation Incorporated. Some Native American artifacts may not be considered unique archaeological resources under the CEQA guidelines (i.e., if there is not a demonstrable public interest in that information, it does not possess a special and particular quality such as being the oldest of its type or the best available example of its type, and it is not directly associated with a scientifically recognized important prehistoric event or person). However, it is possible for a lead agency to determine that an artifact is considered significant to a local tribe, and therefore be considered a significant resource under CEQA. Mitigation measures included in Section 6.5 Cultural Resources of this document include language that all Native American artifacts are to be considered significant until the lead agency has enough evidence to determine an artifact not significant. This ensures that the default assumption is that all Native American artifacts are significant resources under CEQA.

Implementation of Mitigation Measure CUL-2 (See Section 6.5) would reduce impacts to TCRs to less than significant.

References:

Arellano, M. Personal Communication, Muwekma Ohlone Indian Tribe of the SF Bay Area, 4/14/2020 - 5/14/2020. Email and telephone communication. Unpublished record on conversation kept on file by MIG.

Lopez, V., 2020. Personal Communication, Amah Mutsun Tribal Band, 4/14/2020 - 5/14/2020. Email and telephone communication. Unpublished record on conversation kept on file by MIG.

Native American Heritage Commission, 2020. Scared Lands File Search Prepared in Support of the 547 Airport Blvd Project, Santa Cruz County. March 6, 2020. Unpublished document kept on file with the NAHC and MIG, Inc.

Northwest Information Center, 2020. Cultural Resources Records Search in Support of the 547 Airport Blvd Project (No. File No. 19-1531). Unpublished document kept on file with the NWIC and MIG, Inc.

Orozco, P. 2020. Personal Communication, Costanoan Ohlone Rumsen-Mutsun Tribe, 4/14/2020 - 5/14/2020. Email and telephone communication. Unpublished record on conversation kept on file by MIG.

Sayers, A.M. 2020. Personal Communication, Indian Canyon Mutsun Band of Costanoan, 4/14/2020 - 5/14/2020. Email and telephone communication. Unpublished record on conversation kept on file by MIG.

Zwierlein, I. 2020. Personal Communication, Amah Mutsun Tribal Band of Mission San Juan Bautista, 4/14/2020 - 5/14/2020. Email and telephone communication. Unpublished record on conversation kept on file by MIG.

6.19 Utilities and Service Systems

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

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

Documentation:

a. Less than Significant Impact. The proposed project would not result in the relocation or construction of new or expanded water supply, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities that would cause a significant environmental effect. The proposed project includes relocation of a stormwater drainage connection.

Water:

According to the Watsonville 2015 UWMP, the City owns, operates, and maintains 190 miles of water supply pipelines and, as of 2015, has 14,782 public water connections. Construction of water supply infrastructure is required for new residential development, and the project would connect to the existing water main underneath Airport Boulevard. Prior to issuance of building permits, the developer would be required to provide the City with a detailed study indicating specifications of the new water infrastructure and any minor modifications needed to the existing municipal conveyance system to accommodate project needs. Construction of new water supply infrastructure would be conducted in compliance with the City's Public Improvement Standards and City-approved utilities construction BMPs. Construction would not likely cause significant environmental effects. No new

public water supply facilities would be needed to serve the proposed project. Impacts would be less than significant.

Wastewater

The City owns, operates, and maintains a sanitary sewer system of approximately 170 miles of pipelines that collect and transfer wastewater to the City's Wastewater Treatment Facility (WWTF). According to the 2015 UWMP, the WWTF is permitted to treat a maximum of 12 million gallons per day and, on average, treats six to seven million gallons of wastewater per day from the City of Watsonville, Pajaro, Freedom, and Salsipuedes sanitary districts.

The project would connect to an existing onsite public sewer main on the west side of the property under the adjacent industrial properties. The sewer main enters the property between buildings #2 and #4 and would extend below the onsite access road. Completion of the proposed project would require new wastewater infrastructure to convey wastewater from the project's facilities to existing City sewer mains. Prior to issuance of building permits, the developer would be required to provide the City with a detailed study indicating specifications of the new wastewater infrastructure and any minor modifications needed to the existing municipal conveyance system to accommodate projectgenerated wastewater.

Anticipated project wastewater generation was calculated using a conservative industry standard in which wastewater generated equals 95 percent of water use. See section 6.19.b below for projected project water demand; Using the 2015 UWMP per-capita consumption, the project is expected to use 2,306,070 gallons per year, or 7.07 AF annually (see 6.19.b). As a result, the project would produce approximately 2,190,766.5 gallons (6.7 AF) of wastewater per year. 8 This equates to 6,002.1 gallons of wastewater (0.02 AF) generated per day. At 6,002.1 gallons of wastewater per day, the project would contribute an additional 0.1 percent of the WWTF's daily wastewater intake. 10 The WWTF would have adequate capacity to treat project wastewater in addition to its existing commitments.

No new public wastewater conveyance or treatment facilities would be needed to serve the proposed project. Construction impacts would be less than significant.

Stormwater

Existing structures onsite include a single-family residence, concrete slab, and mobile office. Most of the site is undeveloped and pervious. The proposed project would generate stormwater runoff from new impervious surfaces, which would total 47,945 square feet. Stormwater retention would be accomplished through a combination of underground filtration and above-ground retention infrastructure. Runoff would be diverted by drainage channels into a drain below the bioretention pond, which would double as open space and park area. All runoff would be routed through media filters for water quality and then to underground infiltration facilities for quantity. Refer to Section 6.10, Hydrology and Water Quality for a discussion of project stormwater infrastructure and runoff treatment.

⁸ Calculation: 2,306,070 gallons of water annually $\times 0.95 = 2,190,766.5$ gallons wastewater annually.

 $^{^{9}}$ Calculation: 2,190,766.5 gallons wastewater annually /365 = 6002.1 gallons of wastewater per day.

 $^{^{10}}$ Calculation: 6,002.1 / 6,000,000 gallons wastewater per day = 0.001, or 0.1% of WWTF daily intake

The project's Preliminary Stormwater Control Plan was created and designed in accordance with the Stormwater Post-Construction Standards incorporated into the City of Watsonville Public Improvement Standards through passage of Resolution No. 4-14. Stormwater runoff would be treated to City standards before being diverted offsite. Construction of the stormwater improvements discussed above is not expected to cause significant environmental effects. Construction would be conducted in compliance with the City Public Works & Utilities Department Engineering Division's prescribed BMPs for utilities infrastructure improvements. The project proposes relocating a stormwater drainage connection. The proposed bioretention area would provide peak management and runoff would be metered into a new proposed storm drain running north/south across Airport Blvd. Impacts from relocation would be less than significant.

Electric Power

The proposed project would generate demand for electric power. The project would connect to and be served by existing electricity infrastructure owned and operated by PG&E. Multiple PG&E transmission poles and power lines are located adjacent to the project site running parallel to Airport Boulevard. The process of connecting the project to existing infrastructure is expected to be standard for conveying electrical power to a residential development. Construction would be conducted in compliance with City-approved best management practices for utilities infrastructure improvements. No new electric power generation facilities would be built to serve the project. Impacts would be less than significant.

Natural Gas

The proposed project would generate demand for natural gas. The project would connect to and be served by existing natural gas infrastructure owned and operated by PG&E. Several PG&E natural gas pipelines run through the City to the west of the project site (PG&E Pipe Locator). Though no new natural gas facilities would be needed to serve the proposed project, natural gas improvements would be required to connect project components to existing natural gas pipelines. The process of connecting the project to existing infrastructure is expected to be standard for conveying natural gas to a mixed-use development. Construction would be conducted in compliance with City-approved best management practices for utilities infrastructure improvements. No new natural gas facilities would be needed to serve the project. Impacts would be less than significant.

Telecommunications

The proposed project would connect to existing telecommunications infrastructure. A telecommunications provider for the project has not yet been selected. Telecommunications infrastructure is often grouped with electric power infrastructure on utility poles and transmission towers; therefore, it can be reasonably assumed the project would connect to telecommunications infrastructure on existing utility poles. The process of connecting the project to existing infrastructure is standard for transmitting internet and other telecommunications services to a residential development. Construction would be conducted in compliance with City-approved BMPs for utilities infrastructure improvements. An existing utility pole is located along the northern boundary of the property along Airport Boulevard and would serve the project. Connection to existing telecommunications infrastructure would not cause significant environmental effects. Impacts would be less than significant.

In summary, the project would not require or result in the construction of new public or private utilities and service facilities. However, project completion would require a relocation of stormwater drainage below airport boulevard. Other infrastructure improvements would occur to connect project components to existing public and private utilities infrastructure. City standards include

undergrounding all new connections to overhead facilities, including electric, telephone and television lines. Construction of new or expanded utilities infrastructure would comply with City standards, and impacts would be less than significant.

b. Less than Significant Impact. The City of Watsonville's primary source of potable water is groundwater from the Pajaro Valley Groundwater Basin. The City's water supply and distribution system is composed of nine hydraulic pressure zones, fourteen groundwater wells, eight reservoirs and water storage facilities, nine booster stations, 190 miles of pipelines, and the Corralitos Filter Plant (CFP), a slow sand filtration plant. The City's Water Service Area (WSA) includes the City limits and several unincorporated areas of Santa Cruz County. Potable water is provided to the service population by the City of Watsonville Public Works & Utilities Department. The City works cooperatively with the Pajaro Valley Water Management Agency (PVWMA), the administrative boundaries of which overlay the City's WSA.

According to the City's 2015 UWMP, the City supplied approximately 6,870-acre feet (AF) of potable water to 65,966 customers in 2016. The City projects potable water demand will increase to 7,934 AF in 2020, 8,132 AF in 2025, 8,340 AF in 2030, and 8,560 AF in 2035. The City's WSA population is expected to rise to 68,957 in 2020, 72,093 in 2025, 75,382 in 2030, and 78,833 in 2035. In 2015, the City consumed 81 gallons per capita per day (GCPD); the UWMP sets a 2020 goal to limit per-capita consumption to 117 GPCD.

The project would generate residential use water demand for an estimated 78 people. Using the 2015 UWMP per-capita consumption of 81 GPCD for 78 people results in approximately 6,318 gallons of water per day. Annually, this equals 2,306,070 gallons per year, or 7.07 AF.¹¹

Project water consumption is expected to be approximately 7.07AF per year. The 2015 UWMP concludes the City will continue to be able to provide water to customers in normal, dry, and multiple dry years. Considering existing and future projected groundwater supplies and City groundwater consumption, the City has adequate water supplies to serve the proposed project. No new water supply source or entitlements would be necessary, and impacts would be less than significant.

- c. Less than Significant Impact. The WWTF would have adequate capacity to treat project wastewater in addition to existing commitments. No new public wastewater conveyance or treatment facilities would be needed to serve the proposed project. See wastewater discussion in section 19.a.
- d. Less than Significant Impact. According to CalRecycle's Disposal Reporting System (DRS), the City produced 42,533 tons of disposed solid waste in 2018; for an average of 4.3 pounds per person per day, or 1,575 pounds per person per year. According to the DRS, waste generated in the City was sent to the Monterey Peninsula Landfill (25,745 tons), the City of Watsonville Landfill (12,109 tons), the Buena Vista Drive Sanitary Landfill (2,457 tons), the Fink Road Landfill (1,074 tons), the Kirby Canyon Recycling and Disposal Facility (596 tons), the Johnson Canyon Sanitary Landfill (434 tons), Altamont Landfill & Resource Recovery (65 tons), the John Smith Road Landfill (24 tons), the Portero Hills Landfill (16 tons), the Guadalupe Sanitary Landfill (7 tons), Recology Hay Road (3 tons), and the Newby Island Sanitary Landfill (2 tons). Four landfills listed above accepted 97.3 percent (41,385 tons) of the City's solid waste in 2018, and a multi-facility estimate of landfill

¹¹ Calculation: 81 GPCD x 78 residents = 6,318 gallons per day x 365 = 2,306,070 gallons per year = 7.07 AF annually.

capacity is used in this analysis. Monterey Peninsula Landfill, the City of Watsonville Landfill, the Buena Vista Sanitary Landfill, and the Fink Road Landfill were chosen for analysis of landfill capacity relative to the proposed project's estimated solid waste generation rate.

According to CalRecycle's SWIS Facility Detail, Monterey Peninsula Landfill, as of 2004, had remaining capacity for 48,560,000 cubic yards and is permitted to intake a maximum of 3,500 tons of solid waste per day. The City of Watsonville Landfill, as of 2018, had remaining capacity for 1,417,561 cubic yards of waste and can intake 275 tons of solid waste per day. The Buena Vista Drive Sanitary Landfill, as of 2018, had remaining capacity for 2,206,541 cubic yards of waste and is permitted to intake 838 tons per day. The Fink Road Landfill, as of 2017, had a remaining capacity of 7,184,701 cubic yards and can intake 2,400 tons per day (CalRecycle SWIS).

The project's 78 residents, assuming the per capita per year rate of 1,575 pounds would generate approximately 122,850 pounds (61.43 tons)¹² of solid waste annually. If project solid waste was diverted to only the four study landfills at a rate of 0.17 tons per day,¹³, the project would increase daily landfill throughput to each of the four study landfills by less than on tenth of a percent.¹⁴ Project solid waste may be diverted to any of the other additional disposal facilities listed above, and it is likely these facilities would receive less waste than this calculation estimates. The proposed project would not result in a substantial increase in solid waste generation nor generate solid waste in excess of the capacity of local infrastructure; impacts would be less than significant.

e. Less than Significant Impact. The primary State legislation regarding solid waste is AB939, the Integrated Waste Management Act, adopted in 1989. AB939 requires local jurisdictions to achieve a minimum 50 percent solid waste diversion rate. A minimum 50 percent diversion rate for construction demolition and debris is also required. The project would not conflict with State laws governing construction or operational solid waste diversion and would comply with local implementation requirements.

The project would include construction and demolition as well as materials disposal and recycling. The City requires all projects that include demolition and/or construction of structures to submit a Construction Waste Management Plan (Watsonville Construction and Demolition Recycling). The diversion requirements for all projects is 65 percent of the materials generated by a Construction and Demolition project. When the project is completed, the applicant must submit quantities of recycled or diverted materials and all weight receipts to the City Community Development Department. Compliance with existing solid waste regulations would render impacts less than significant.

References:

Roper Engineering. June 20, 2019. Preliminary Stormwater Control Plan for Tract No. 1604. 547 Airport Blvd. Townhomes, 547 Airport Blvd. Watsonville, CA APN 015-321-01

California Department of Resources Recycling and Recovery (CalRecycle), 2019. Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility. Available at: https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility (accessed March 17, 2020).

 $^{^{12}}$ Calculation: 78 x 1,575 = 122,850 pounds of annual solid waste generated

¹³ Calculation: 61.43 tons / 365 days = 0.17 tons/day

 $^{^{14}}$ Calculation: Monterey Peninsula Landfill: $(0.17 / 3,500) \times 100 = 0.004\%$ City of Watsonville Landfill: $(0.17 / 275) \times 100 = 0.06\%$ Buena Vista: $(0.17 / 838) \times 100 = 0.02\%$ Fink Road: $(0.17 / 2,400) \times 100 = 0.007\%$

California Department of Resources Recycling and Recovery (CalRecycle), 2019. Estimated Solid Waste Generation Rates. Available at:

https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates (accessed on April 28, 2020).

California Department of Resources Recycling and Recovery (CalRecycle), 2019. SWIS Facility Detail (Monterey Peninsula Landfill, City of Watsonville Landfill, Buena Vista Drive Sanitary Landfill, and Fink Road Landfill). Available at:

https://www2.calrecycle.ca.gov/swfacilities/Directory/27-AA-0010/Index (accessed March 17, 2020).

City of Watsonville, 2013. Public Improvement Standards. Available at: https://www.cityofwatsonville.org/DocumentCenter/View/2152/All-Public-Improvement-Standards-PDF (accessed April 29, 2020).

City of Watsonville, 2016._2015 Urban Water Management Plan. Available at: https://www.cityofwatsonville.org/DocumentCenter/View/2046/2015-Urban-Water-Management-Plan-Chapters-1-10-PDF (accessed April 29, 2020).

City of Watsonville, 2019. Public Works & Utilities, Construction and Demolition Recycling. Available at: https://www.cityofwatsonville.org/1490/Construction-Demolition-Recycling (accessed on April 29, 2020).

City of Watsonville, 2019. Public Works & Utilities, Engineering Division. Available at: https://www.cityofwatsonville.org/821/Public-Improvement-Standards (accessed on April 29, 2020).

City of Watsonville, 2019. Public Works & Utilities, Wastewater Division. Available at: https://www.cityofwatsonville.org/812/Wastewater-Division (accessed on April 29, 2020).

City of Watsonville, 2019. Public Works & Utilities, Water Division. Available at: https://cityofwatsonville.org/714/Water-Division (accessed on April 29, 2020).

6.20 Wildfire

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

<u>Conclusion:</u> Regarding wildfire, the proposed project would not result in any significant environmental impacts.

Documentation:

- a. **No Impact.** The proposed project would not impair the emergency response or emergency evacuation plan for the County. The proposed project would not result in a significant change in existing circulation patterns and would have no effect on emergency response routes. See section 6.9 Hazards and Hazardous Materials for information on the emergency response plan.
- b. **Less than Significant Impact.** The project site is flat and located in a local responsibility area according to the CalFire FRAP Map. According to the City's General Plan, a high fire hazard zone occurs in Watsonville approximately five miles west of the project site in a wildland-dominated area. The project area is industrial and urban, and the impact would be less than significant.
- c. Less than Significant Impact. The project site is located in an already heavily impacted industrial area that is equipped with emergency water sources and power lines that conform with City standards. The proposed project involves the installation of driveway approaches and internal roadways for ingress and egress to and from existing public rights-of-way. The existing transmission lines located along publicly accessible roads would continue to be maintained by PG&E.

While the use of construction equipment for installation, maintenance, and improvements could temporarily increase fire risk on the property, compliance with all applicable Code standards,

including but not limited to City Construction Grading and Drainage Ordinance and City Fire Safety Ordinance requirements would reduce the effects of temporary impacts to less than significant levels.

d. Less than Significant Impact. The project is flat and not located in a high fire severity zone. It is highly unlikely that the project would expose people or structures to significant risks as a result of runoff, post-fire slope instability. The impact would be less than significant.

References:

CalFire, 2019. Santa Cruz County Fire Hazard Severity Zones. Available at: https://osfm.fire.ca.gov/media/6768/fhszs_map44.pdf (Accessed April 28, 2020)

Watsonville Fire Safety Code. Title 8, Chapter 9. Available at: https://www.codepublishing.com/CA/Watsonville/html/Watsonville08/Watsonville0809.html (Accessed July 28, 2020)

Watsonville Construction Grading and Drainage Ordinance. January 14, 2014. Available at: https://www.cityofwatsonville.org/DocumentCenter/View/2684/Stormwater-Post-Construction-Standards-PDF?bidId= (Accessed July 28, 2020)

6.21 **Mandatory Findings of Significance**

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

Conclusion: The proposed project would not result in any significant environmental impacts, as related to mandatory findings of significance.

Documentation:

a. Less than significant with mitigation incorporated. The project would be built on an area that is already heavily impacted by development. Potential cumulative impacts to fish and wildlife species are less than significant with incorporation of Mitigation Measures BIO-1 and BIO-2.

The project site is not known to have any association with an important example of California's history or prehistory. Adverse impacts to archaeological and paleontological resources would not occur. Construction-phase procedures would be implemented in the event any archaeological or paleontological resources are discovered during grading and excavation, consistent with Mitigation Measures CUL-1 and CUL-2. Implementation of these Mitigation Measures would ensure that impacts related to cultural resources would be less than significant.

b. Less than Significant Impact. Cumulative impacts can result from the interactions of environmental changes resulting from one proposed project with changes resulting from other past, present, and future projects that affect the same resources, utilities and infrastructure systems, public services, transportation network elements, air basin, watershed, or other physical conditions. Such impacts could be short-term and temporary, usually consisting of overlapping construction impacts, as well as long term, due to the permanent land use changes involved in the project. The traffic analysis estimated that the project would generate 154 trips (a 99-trip increase per day).

Short-term impacts related to noise and pollutant emissions would be at less than significant levels and therefore would not contribute substantially to any other concurrent construction programs that may be occurring in the vicinity, and with the incorporation of NOISE-1. The project's contribution to long-term, cumulative impacts would not be significant. In particular, the project is subject to development impact fees and property taxes to offset project related impacts to public services and utility systems such as fire protection services, traffic control and roadways, storm drain facilities, water and wastewater facilities, and other public facilities and equipment. The impacts would be less than significant. not substantially impact any scenic vistas, scenic resources, or the visual character of the area, as discussed in section 6.1, and would not result in excessive light or glare.

c. Less than Significant Impact. Potential impacts were analyzed in sections 6.1 thru 6.20, and no evidence is presented that this project would degrade the quality of the environment. The City hereby finds that, with implementation of the incorporated Mitigation Measures listed in this IS/MND, there would be no substantial, adverse impacts on human beings, directly, or indirectly, with mitigation incorporated.

References:

None.

7. Lead Agency and Consultants

Lead Agency:

City of Watsonville Community Development Department Planning Division 250 Main Street Watsonville, California 95076

Justin Meek, AICP, Principal Planner

Consultants:

MIG, Inc. 800 Hearst Avenue Berkeley, California 94710

AEI Consultants 2500 Camino Diablo, Suite 100 Walnut Creek, California 94597

Roper Engineering 64 Penny Lane, Suite A Watsonville, California 95076

W-Trans 505 17th Street, 2nd Floor Oakland, California, 94612