



# Hamilton Village Housing Project

## Initial Study – Mitigated Negative Declaration

*prepared by*

**City of Novato**

Community Development Department

922 Machin Avenue

Novato, California 94945

Contact: Steve Marshall, AICP, Planning & Environmental Services Manager

*prepared with the assistance of*

**Rincon Consultants, Inc.**

4825 J Street, Suite 200

Sacramento, California 95819

**April 2020**



**RINCON CONSULTANTS, INC.**

Environmental Scientists | Planners | Engineers

[rinconconsultants.com](http://rinconconsultants.com)



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# Table of Contents

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Initial Study .....	1
1. Project Title .....	1
2. Lead Agency Name and Address .....	1
3. Contact Person and Phone Number .....	1
4. Project Location .....	1
5. Project Sponsor’s Name and Address .....	4
6. General Plan Designation .....	4
7. Zoning .....	4
8. Description of Project .....	4
9. Surrounding Land Uses and Setting .....	5
10. Other Public Agencies Whose Approval is Required .....	8
Environmental Factors Potentially Affected .....	9
Determination .....	10
Environmental Checklist .....	11
1 Aesthetics .....	11
2 Agriculture and Forestry Resources .....	15
3 Air Quality .....	17
4 Biological Resources .....	25
5 Cultural Resources .....	31
6 Energy .....	35
7 Geology and Soils .....	41
8 Greenhouse Gas Emissions .....	45
9 Hazards and Hazardous Materials .....	51
10 Hydrology and Water Quality .....	59
11 Land Use and Planning .....	63
12 Mineral Resources .....	65
13 Noise .....	67
14 Population and Housing .....	79
15 Public Services .....	81
16 Recreation .....	85
17 Transportation .....	87
18 Tribal Cultural Resources .....	93
19 Utilities and Service Systems .....	95
20 Wildfire .....	101
21 Mandatory Findings of Significance .....	103
References .....	105
Bibliography .....	105
List of Preparers .....	109

## **Tables**

Table 1	Air Quality Thresholds of Significance .....	19
Table 2	Construction Emissions (pounds/day) .....	21
Table 3	Estimated Fuel Consumption during Construction.....	36
Table 4	Estimated Annual Operational Energy Consumption .....	37
Table 5	Project Compliance with Energy Efficiency Goals and Policies.....	38
Table 6	Project Construction Emissions of Greenhouse Gases .....	47
Table 7	Combined Annual Emissions of Greenhouse Gases .....	48
Table 8	Project Consistency with the Novato Climate Change Action Plan .....	48
Table 9	Policies in the 1996 Novato General Plan and Draft Novato General Plan 2035 Relevant to Project Impacts.....	64
Table 10	Human Response to Different Levels of Groundborne Vibration.....	69
Table 11	Noise Measurement Data .....	70
Table 12	City of Novato Municipal Code Table 3-5: Allowable Exterior Noise Levels <sup>1</sup> .....	73
Table 13	Vibration Levels at Sensitive Receptors .....	76
Table 14	Estimated Project Vehicle Trip Generation.....	88
Table 15	NMWD Water Supply and Demand in Acre-Feet for Normal, Single Dry, and Multiple Dry Year.....	98

## **Figures**

Figure 1	Regional Location .....	2
Figure 2	Project Location .....	3
Figure 3	Site and Open Space Plan .....	6
Figure 4	Site Photographs.....	7
Figure 5	Sound Level Measurement Locations.....	71

## **Appendices**

Appendix A	Geotechnical Investigation
Appendix B	CalEEMod Output
Appendix C	Health Risk Assessment
Appendix D	Species Evaluation Tables
Appendix E	Preliminary Arborist Report
Appendix F	Cultural Resources Assessment
Appendix G	Energy Calculations
Appendix H	Greenhouse Gas Calculations

Appendix I	Phase I Environmental Site Assessment
Appendix J	Phase II Environmental Site Assessment
Appendix K	Noise Measurement Data
Appendix L	Roadway Construction Noise Model Output
Appendix M	Heating, Ventilation, and Air Conditioning Noise Calculations
Appendix N	Traffic Impact Study

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# Initial Study

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## 1. Project Title

Hamilton Village Housing Project

## 2. Lead Agency Name and Address

City of Novato  
Community Development Department  
922 Machin Avenue  
Novato, California 94945

## 3. Contact Person and Phone Number

Steve Marshall, AICP  
Planning & Environmental Services Manager  
(415) 899-8942

## 4. Project Location

The project site is located at 802 State Access Road (Assessor Parcel Number 157-970-03) in the former Hamilton Army Airfield in the City of Novato, Marin County, California. The project site is approximately 4.7 acres in size. The project site is currently vacant with some soil stockpiles, a utility pole with streetlight, vegetation cover, concrete and asphalt paving, and gravel present on the site. The majority of the site is an asphalt surface parking lot. The project site also includes a shed in the northernmost portion of the site that is used by Homeward Bound of Marin. The project site is bordered by State Access Road to the south, Homeward Bound of Marin's New Beginnings Center and NextKey Center (homeless services) to the north, a large rock outcropping referred to as "Christmas Tree Hill" and beyond which is Nave Drive to the immediate west, and Novato Village, a 48-unit senior apartment community to the east. Novato is located in the greater North Bay region of the San Francisco Bay Area and is the northernmost city in Marin County. The City is located northwest of San Pablo Bay approximately 29 miles north of San Francisco, 37 miles northwest of Oakland, and approximately 35 miles north of the San Francisco International Airport.

Figure 1 shows the regional location of the project site. Figure 2 shows the proposed project site and surrounding uses.

City of Novato  
Hamilton Village Housing Project

Figure 1 Regional Location



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★ Project Location

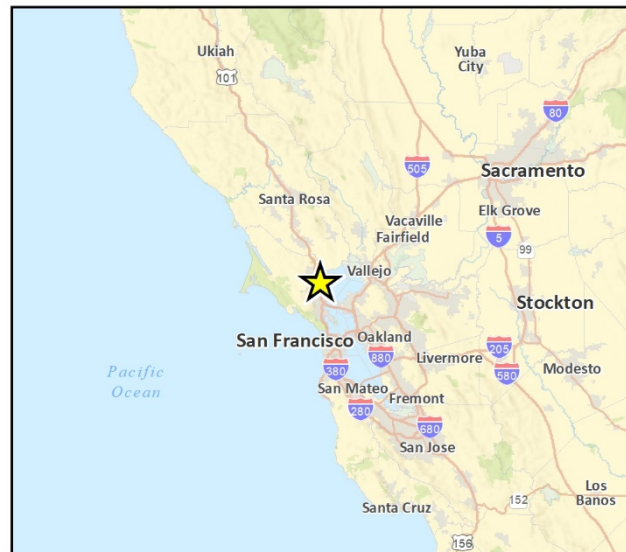


Fig 1 Regional Location 20200305

Figure 2 Project Location



Fig 2 Project Location Landscape 20200109

## 5. Project Sponsor's Name and Address

Samantha Hauser, Vice President of Development  
City Ventures  
444 Spear Street, Suite 200  
San Francisco, California 94105

## 6. General Plan Designation

The project site has a Novato General Plan designation of Community Facilities (CF).

## 7. Zoning

The project site is zoned Planned District (PD). Accordingly, the site is regulated by the Hamilton Army Airfield Reuse Plan (hereafter "Master Plan"), which serves as the adopted master plan for the Reuse Plan area. The project site is designated as Planning Area 4 (PA 4) and assigned the Community Facilities and Civic Uses– Special Uses Permitted (CFCU-SP) land use category of the Master Plan.

## 8. Description of Project

The project would develop 75 multi-family residences, including 16 two-bedroom units, with an option for a third bedroom, and 59 three-bedroom units, with an option for a fourth bedroom. Project buildings would be a maximum of 39 feet in height. In accordance with Chapter 9.24 of the Novato Municipal Code, the project will provide 15 units of affordable housing, with 8 units at low-income and 7 units at moderate income. A total of ±47,858 square feet of public open space and ±43,340 square feet of private open space are included as part of the project. Private open space areas include a small patio and balcony for individual units. Common open space consists of a large group social area with barbeques and picnic tables; a small group social area with seating and a fire table; a mini plaza with benches or other seating; a botanical garden; and a meditation garden. Public open space areas include bocce ball courts, a community garden, and a kids play area. The project would remove 25 trees along State Access Road, and plant approximately 118 new trees throughout the site. A nonlinear safety fence would be installed near the western project site boundary to restrict access to the hillside with rock outcroppings located west of the site.

The project includes 192 total vehicle parking spaces, including 150 garage spaces, 18 on-site surface spaces, and 24 public street spaces. The site would be accessed via a new main entrance driveway off of State Access Road. A secondary emergency vehicle access (EVA) easement at the northeast corner of the project site would be for emergency vehicles only.

Water for the project would be provided by the North Marin Water District via existing utilities on and adjacent to the project site. The project will include low-flow water fixtures and the use of recycled water for landscape irrigation. Sewer service would be provided by the Novato Sanitary District via existing utilities adjacent to the project site. Electricity is provided by Pacific Gas and Electric Company (PG&E). The project would not connect to or utilize natural gas as a source of energy, and includes solar panels on building roofs, capable of generating at least 2 kilowatts (kW) of energy for each home. On-site stormwater generated by the proposed 2.7 acres of impervious surfaces will drain to the southeast corner of the site and undergo mechanical stormwater filtration

prior to discharge into the existing 24-inch pipeline in State Access Road. Recycled water will be extended from its current terminus at 801 State Access Road to serve the project site. The project includes paying a fee to the Novato Sanitary District to cover the project's proportionate cost of a future off-site sewer main upgrade. The sewer upgrade would involve upsizing 1,180 feet of pipe from 15-inches in diameter to 18-inches in diameter pursuant to the District's adopted Collection System Master Plan. The sewer main segment requiring an upgrade is located off-site, generally running northwest of project site along the Sonoma-Marín Area Rail Transit District right-of-way to a point behind the Hamilton Market Place shopping center. The upgrade is necessary to accommodate wastewater flows anticipated for existing and new development in the Commissary Triangle area (Planning Area 4). See Figure 3 for the site and open space plan. The project would also include the installation of street, residential building, and security lighting.

Construction of the project would include the import of approximately 17,600 cubic yards of fill material to raise the existing grade by approximately 2 to 3 feet (Appendix A). Construction is anticipated to last approximately two years and four months.

## 9. Surrounding Land Uses and Setting

The project site is an approximately 4.7-acre site located in the southern portion of the City of Novato. The project site is partially paved with some vegetation present in the southwest corner of the site and several trees along the southern site boundary (including coast live oak, windmill palm, and Aleppo pine). A power pole is located in the central portion of the project site. The project site was formerly developed as part of the Hamilton Army Airfield with the base commissary and several shop buildings, which have since been demolished. A 15-foot easement for water utilities extends through the project site from State Access Road near the site's western boundary north through the northwestern project site boundary. Buildings and structures, including fences, garden structures, swimming pools, decks, trees, large shrubs, and rocks, are prohibited from being placed in the easement without permission from the North Marin Water District.

The project site is adjacent to a homeless services center (New Beginnings/Next Key) to the north, residential condominiums (Lanham Village) to the south, a 48-unit senior apartment building (Novato Village) to the east, and vacant land containing rock outcroppings (Christmas Tree Hill) to the west. The site is located in a generally mixed use area that includes single-family and multi-family residences, commercial buildings, and public facilities (such as the Novato Skatepark, Wonder Nook Preschool, and South Novato Library). Figure 4 provides photographs of the site and surrounding areas.

The site is located within 0.3 mile of a bus stop served by Marin Transit line 49, 58, 2511, and 257. Additionally, the Sonoma-Marín Area Rail Transit (SMART) line's Novato-Hamilton stop is located approximately 0.5 mile away.

Figure 3 Site and Open Space Plan



Source: WHA 2020

**Figure 4 Site Photographs**



**Photograph 1.** View facing west of the project site and adjacent rock outcropping.



**Photograph 2.** View facing northwest of the adjacent buildings and on-site soil stockpile.



**Photograph 3.** View facing northeast of the on-site soil stockpile and adjacent buildings.

## 10. Other Public Agencies Whose Approval is Required

The City of Novato is the sole agency with the authority to approve the proposed project's land use entitlements, including:

- **General Plan Amendment (GPA).** A GPA is required for the project to change the site's land use designation from Community Facilities (CF) to Medium Density Multiple Family Residential (R10).
- **Master Plan Amendment.** A master plan amendment is required to change the land use of the site assigned by the Hamilton Base Reuse Plan from Community Facilities – Civic Uses – Special Uses Permitted (CFCU-SP) to Medium Density Multiple Family Residential.
- **Precise Development Plan (PDP).** Adoption of a PDP is required by the PD zoning of the site and addresses the design and operational characteristics of the project. The PDP includes minimum setback requirements, height limits, site coverage requirements, and other development standards.
- **Design Review.** A recommendation from the Design Review Commission on the project's design, architecture, and landscaping is required. Final Design Review is required for new development projects proposed on parcels zoned PD.
- **Vesting Tentative Map.** Approval and recordation of a vesting tentative map for condominium purposes is required.

The following service districts require their own permits to approve the construction detail design and inspection and acceptance of various project serving improvements:

- **Novato Fire Protection District** would determine compliance with local fire code requirements for emergency access and life safety systems (e.g., fire sprinklers).
- **North Marin Water District** would determine compliance with water service (potable and reclaimed) and conservation requirements.
- **Novato Sanitary District** would determine compliance with sewer service requirements.



## Environmental Factors Potentially Affected

---

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

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

# Determination

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Based on this initial evaluation:

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

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

# Environmental Checklist

## 1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Except as provided in Public Resources Code Section 21099, would the project:

a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

A scenic vista can generally be defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. The City of Novato General Plan identifies hillsides and ridgelines surrounding Novato as scenic resources which generally enhance the community's visual character. Other scenic resources identified by the City include hillsides, Bay plains, and Bay shorelines (City of Novato 2014). The project site is not within the Area of Interest for ridgelines and other scenic resources as described in the General Plan. From the entrance to the project site looking to the west, very faint views of hills can be seen. Views of scenic areas are generally obstructed by existing buildings and trees on the project site.

The project includes the development of 75 multi-family residences, 192 parking spaces, 43,340 square feet of resident open space and 47,858 square feet of public open space. The scale and massing for the project are similar to the senior living facility being developed adjacent to the project site. The project would not have an adverse effect on an identified scenic resource, nor would the project improvements substantially block views of the surrounding hillsides and ridgelines. Therefore, impacts to scenic vistas would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

There are no officially designated State Scenic Highways in Marin County (California Department of Transportation [Caltrans 2017]). Therefore, the project would not cause substantial damage to scenic resources within a state scenic highway. There would be no impact.

**NO IMPACT**

- c. *Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a 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?*

The project site is in an urbanized area adjacent to a homeless services center to the north, residential condominiums to the south, a senior apartment complex to the east, and vacant land containing rock outcroppings to the west. The site is located in a generally mixed use area that includes single-family and multi-family residences, commercial buildings, and public facilities. The project includes a General Plan amendment from Community Facilities (CF) to Medium Density Multi Family Residential (R10) and a master plan amendment to change the land use category assigned to the site in the Hamilton Army Airfield Reuse Plan/Master Plan from Community Facilities and Civic Uses – Special Uses Permitted (CFCU-SP), to Medium Density Multiple Family Residential (MDMFR).

The project would develop 75 multi-family residences, including 16 two-bedroom units with an option for a third bedroom, and 59 three-bedroom units with an option for a fourth bedroom. A total of 47,858 square feet of public open space and 43,340 square feet of private open space are included as part of the project. The project would remove 25 trees along State Access Road, and plant 118 new trees throughout the site. A nonlinear safety fence would be installed near the western project site boundary to restrict access to the hillside with rock outcroppings located west of the site.

The Novato General Plan identifies scenic resources under EN Objective 7 and Policy 27. EN Objective 7 protects visual values on hillsides, ridgelines, and other scenic resources. The project is not located in an area of interest identified in the General Plan, and Section 19.26 of the Hillside and Ridgeline Protection ordinance found in the Novato Municipal Code does not apply. No zoning and General Plan regulations governing scenic quality apply to this project.

The project is subject to the City's Design Review process, which includes an assessment of site design, building height/massing, and landscaping to, in part, consider the project's compliance with applicable design standards. The project was presented to the Novato Design Review Commission on November 6 and December 18, 2019. The Commission recommended approval of the project's

design, including finding the project to be consistent with the design guidelines of the Reuse/Master Plan. The project design recommended by the Design Review Commission is the basis of analysis herein.

Based on the observations above, there is a less than significant impact on scenic quality.

**LESS THAN SIGNIFICANT IMPACT**

- d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

The project site is in an urban area with moderate levels of existing lighting and is currently vacant with some soil stockpiles, vegetation cover, concrete, gravel, and one streetlight present on the site. Existing light sources include lighting from adjacent residences, from the existing on-site exterior lighting, and from the homeless services center. Streetlights and vehicular lights along State Access Road and Nave Drive also contribute to the existing light environment.

The primary source of glare in the project area is the sun's reflection off of light colored and reflective building materials and finishes, and from metallic and glass surfaces of parked vehicles. The proposed residences' windows could generate glare from reflected sunlight during certain times of the day. Headlights of vehicles entering and exiting the project site at night would be downcast and shielded by both existing and proposed buildings, fencing, and vegetation. Therefore, vehicle headlights would not affect nearby light-sensitive receptors, including the senior apartment building located east, and residences located south of the project site.

The project site is in a generally urban environment with numerous existing sources of light and glare. The project would not substantially alter this condition. Lighting installed on the project site would comply with the City of Novato requirements, including shielding or modification on outdoor lighting to prevent emission of light or glare beyond the property line and requirements to direct light sources to prevent lighting adjacent streets and shield light sources (Novato Zoning Code Section 19.22.060). Therefore, impacts related to light and glare would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*This page intentionally left blank.*

## 2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 
- a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
  - b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*
  - c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
  - d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

**Hamilton Village Housing Project**

- e. *Would the project 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?*

There are no areas of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within Novato (California Department of Conservation 2016a), and the project site is not under a Williamson Act contract (California Department of Conservation 2016b). The site is designated as Community Facilities in the Novato General Plan and zoned Planned Development (Novato 2001). The site does not contain forestland or timberland. Therefore, the proposed project would not result in the conversion of agriculture use to non-agriculture uses, conflict with a Williamson Act contract, or existing zoning for agriculture, forest or timberland or result in the loss of such lands and there would be no impact on agricultural and forestry resources.

**NO IMPACT**



### 3 Air Quality

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

#### Air Quality Standards and Attainment

Novato is located in Marin County, which is a subregion of the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The SFBAAB includes the counties of San Francisco, Santa Clara, San Mateo, Marin, Napa, Contra Costa, and Alameda, along with the southeast portion of Sonoma County and the southwest portion of Solano County. Marin County is bounded on the west by the Pacific Ocean, on the east by the San Pablo Bay, on the south by the Golden Gate Bridge, and on the north by the Petaluma Gap.

As the local air quality management agency, the BAAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet them. Depending on whether or not standards are met or exceeded, a local air basin is classified as in “attainment” or “non-attainment.” The SFBAAB is in non-attainment for the national standards for ozone (O<sub>3</sub>) and particulate matter smaller than 2.5 microns in diameter (PM<sub>2.5</sub>) and in non-attainment for the state standard for O<sub>3</sub>, PM<sub>2.5</sub>, and particulate matter smaller than 10 microns in diameter (PM<sub>10</sub>) (BAAQMD 2017c).

#### Air Quality Management

The BAAQMD is primarily responsible for assuring national and state ambient air quality standards are attained and maintained in the Bay Area. The BAAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, as well as many other

activities. The BAAQMD has jurisdiction over much of the nine-county Bay Area, including Marin County.

The BAAQMD adopted the 2017 Clean Air Plan (2017 Plan) as an update to the 2010 Clean Air Plan. The 2017 Plan provides a regional strategy to protect public health and the climate. Consistent with the greenhouse gas (GHG) reduction targets adopted by the state, the 2017 Plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. To fulfill state O<sub>3</sub> planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of O<sub>3</sub> precursors—reactive organic gases (ROG) and nitrogen oxides (NO<sub>x</sub>)—and reduce transport of ozone and its precursors to neighboring air basins. In addition, the 2017 Plan builds upon and enhances the BAAQMD's efforts to reduce emissions of fine particulate matter and toxic air contaminants (BAAQMD 2017a).

### **BAAQMD Screening Criteria**

The BAAQMD recommends that lead agencies determine appropriate air quality emissions thresholds of significance based on substantial evidence in the record. The BAAQMD's significance thresholds in the updated May 2017 CEQA Air Quality Guidelines for project operations within the SFBAAB are the most appropriate thresholds for use in determining air quality impacts of the proposed project. The BAAQMD developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether a project could result in potentially significant air quality impacts. If a project meets all of the screening criteria, then the lead agency or applicant would not need to perform a detailed air quality assessment of their project's air pollutant emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration (BAAQMD 2017b).

The screening criteria for operational criteria pollutant emissions of residential townhome developments (which is the category most applicable for the proposed project) is 451 dwelling units. For construction-related emissions, the screening criteria is 240 dwelling units. As provided by the BAAQMD's CEQA Air Quality Guidelines, if a project meets the screening criteria for an impact category, and is consistent with the methodology used to develop the screening criteria, then its air quality impact for that category may be considered less than significant.

For a project to meet the screening criteria for construction, it cannot include any of the following activities during construction:

- Demolition;
- Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously);
- Simultaneous construction of more than one land use type (e.g., project would develop residential and commercial uses on the same site) (not applicable to high density infill development);
- Extensive site preparation (i.e., greater than default assumptions used by the Urban Land Use Emissions Model [URBEMIS] for grading, cut/fill, or earth movement); or
- Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

BAAQMD also provides a preliminary screening methodology to conservatively determine whether a proposed project would exceed CO thresholds. If the following criteria are met, a project would result in a less than significant impact related to local CO concentrations:

- Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Due to extensive grading required on-site, the project does not meet the screening criteria, and therefore emissions must be quantified.

### **BAAQMD Air Emission Thresholds**

Table 1 presents the significance thresholds for construction/demolition and operational-related criteria air pollutant and precursor emissions used for the purposes of this analysis. These represent the levels at which a projects individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB’s existing air quality conditions. For the purposes of this analysis, the proposed project would result in a significant impact if construction or operational emissions would exceed any of the thresholds shown in Table 1.

**Table 1 Air Quality Thresholds of Significance**

<b>Pollutant/Precursor</b>	<b>Construction: Average Daily Emissions (lbs/day)</b>	<b>Operation: Maximum Annual Emissions (tpy)</b>	<b>Operation: Average Daily Emissions (lbs/day)</b>
ROG	54	10	54
NO <sub>x</sub>	54	10	54
PM <sub>10</sub>	82 (exhaust)	15	82
PM <sub>2.5</sub>	54 (exhaust)	10	54

Notes: lbs/day = pounds per day; tpy = tons per year; ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; PM<sub>10</sub> = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less.; PM<sub>2.5</sub> = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less

Source: BAAQMD 2017a: Table 2-1.

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

Vehicle use, energy consumption, and associated air pollutant emissions are directly related to population and housing growth. A project would generally conflict with or potentially obstruct implementation of an air quality management plan, if it would contribute to population growth in excess of that forecast in the plan. Such growth would generate emissions not accounted for in the applicable air quality plan emissions budget. Therefore, projects need to be evaluated to determine whether they would generate population, housing, or employment growth and, if so, whether that growth would exceed the growth rates included in the applicable air quality plan. The most recent

and applicable adopted air quality plan is the 2017 Clean Air Plan. Therefore, the proposed project would result in a significant impact if it would conflict with or obstruct implementation of the 2017 Plan.

BAAQMD uses the Association of Bay Area Government's (ABAG) growth forecast. The latest ABAG projections include both a population forecast and a housing forecast. The ABAG estimates that the City of Novato's population will be 56,295 in 2040 and the number of housing units in the City will be 21,195 in 2040 (ABAG 2020). The population and housing estimates in the City for 2020 show a population of 53,325 and 20,695 total housing units (ABAG 2020). The addition of 75 housing units associated with the proposed project would bring the City's total housing units to 20,770. The housing growth associated with the project is within ABAG projections and therefore also within the 2017 Plan projections.

Furthermore, as discussed under criterion (b) below, the project not would exceed BAAQMD significance thresholds related to air quality emissions. Therefore, the project would not conflict with or obstruct the implementation of an applicable air quality plan. This impact would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- b. Would the project 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?*

### **Construction**

Project construction would result in temporary construction emissions and long-term operational emissions. Construction activities such as the operation of construction vehicles and equipment over unpaved areas, grading, trenching, and disturbance of stockpiled soils have the potential to generate fugitive dust (PM<sub>10</sub>) through the exposure of soil to wind erosion and dust entrainment. In addition, exhaust emissions associated with heavy-duty construction equipment would potentially degrade regional air quality.

Project construction would require more than 10,000 cubic yards of imported fill material; therefore, project construction is not consistent with the methodology used to develop the BAAQMD screening criteria, and construction emissions must be quantified. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. Operation of the project meets the BAAQMD screening criteria of fewer than 451 dwelling units (the proposed project would include 75 total units) and is therefore reasonably considered to result in less than significant air quality emissions during operation.

The CalEEMod calculated outputs are shown in Table 2. As shown therein, the proposed project would not exceed the BAAQMD short-term construction thresholds. Impacts from construction emissions would therefore be less than significant.

### **Operation**

Long-term emissions associated with operational impacts would include emissions from vehicle trips (mobile sources), natural gas and electricity use (energy sources), and landscape maintenance equipment, consumer products, and architectural coating associated with on-site development (area sources). However, as described above, the project meets the BAAQMD screening criteria for operation, and therefore air quality impacts would be less than significant.

**Table 2 Construction Emissions (pounds/day)**

Pollutant	Maximum Daily Emissions (Unmitigated) <sup>1</sup>	Significance Threshold	Significant Impact?
ROG	5.1	54	No
NO <sub>x</sub>	51.7	54	No
CO	30.8	N/A	N/A
PM <sub>10</sub> (exhaust)	2.6	82	No
PM <sub>2.5</sub> (exhaust)	2.4	54	No

<sup>1</sup> The BAAQMD threshold is for the average daily emissions, but the maximum daily emissions are provided here for a conservative analysis.

Source: Appendix C, CalEEMod worksheet Table 2.1 "Overall construction-unmitigated" emissions

### LESS THAN SIGNIFICANT IMPACT

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

The California Air Resources Board (CARB) has identified diesel particulate matter as the primary airborne carcinogen in the state (CARB 2014). In addition, Toxic Air Contaminants (TAC) are a defined set of air pollutants that may pose a present or potential hazard to human health. Common sources of TACs and PM<sub>2.5</sub> include gasoline stations, dry cleaners, diesel backup generators, truck distribution centers, freeways, and other major roadways (BAAQMD 2017a). The project does not propose construction of gas stations, dry cleaners, highways, roadways, or other sources that could be considered permitted or non-permitted source of TAC or PM<sub>2.5</sub> in proximity to sensitive receptors. In addition, the project would not introduce a new stationary source of emissions and would not result in particulate matter greater than BAAQMD thresholds. Moreover, as described above under criterion (b), the proposed project would not exceed emissions thresholds during construction or operation. Impacts would be less than significant.

### Health Risk Assessment of TAC Impacts to Project Residents

A Health Risk Assessment (HRA) was prepared for the project site and analyzed the possible health effects associated with toxic air contaminant (TAC) emissions from U.S. Route 101 (U.S. 101), stationary sources within 1,000 feet of the project site, and the nearby major streets and the Sonoma Marin Area Rail Transit (SMART) line (Appendix C).

The HRA conducts site-specific air dispersion modeling to determine whether health risks to future residents from U.S. 101 exceed the BAAQMD health risk criteria for residences. BAAQMD has health risk criteria for cancer risk, non-cancer risk (i.e., chronic and acute), and annual average PM<sub>2.5</sub> concentration. Cancer risk is expressed as the maximum number of new cancer cases projected to occur in a population of one million people due to exposure to a cancer-causing substance. Typically, cancer risk is analyzed over a specific exposure duration, such as the average residency. Thirty years is the exposure duration scenario recommended by BAAQMD for residential receptors in the *Air Toxics NSR Program Health Risk Assessment Guidelines* (BAAQMD 2016). Potential acute health risks include severe symptoms that develop rapidly and lead quickly to a health issue due to exposure to a harmful substance, whereas chronic health risks include health crises, such as lung

inflammation, immune suppression, and immune sensitization, which develop due to exposure to low levels of a harmful substance over a long period of time.

The HRA analyzed the primary source of TACs near the project site, which is diesel exhaust particulates from heavy duty traffic traveling on U.S. 101. In addition to diesel exhaust particulates from U.S. 101, this analysis also examined five other vehicle exhaust pollutants of concern that are emitted from both diesel and gasoline-fueled vehicles: acrolein, acetaldehyde, formaldehyde, benzene, and 1,3-butadiene (Appendix C).

A screening-level health risk assessment in accordance with BAAQMD guidelines was conducted to identify major sources within 1,000 feet of the project site. The BAAQMD's Screening Analysis for the project resulted in a cancer risk that exceeds the 10 in one million threshold of significance included in the BAAQMD May 2017 *CEQA Air Quality Guidelines* (BAAQMD 2017). Therefore, a refined analysis using air dispersion modeling was completed using the U.S. Environmental Protection Agency's (USEPA) AERMOD dispersion model and CARB's Hotspots Analysis and Reporting Program Version (HARP) risk analysis tool, as described further in Appendix C. The analysis in Appendix C determined that, without accounting for health risk reductions achieved through regulatory compliance measures, the maximum exposed individual receptor (MEIR) on the project site would be exposed to a high end (95-percentile), 30-year excess cancer risk of approximately 16.42 in one million, which exceeds the BAAQMD recommended health risk criteria of 10 excess cases of cancer in one million individuals (BAAQMD 2017). However, the proposed project would include Minimum Efficiency Reporting Value (MERV) 13 filters for each unit's heating, ventilation, and cooling system pursuant to 2019 California Energy Code requirements. Accordingly, air entering each unit would be filtered for particulate matter. With inclusion of MERV 13 filters and factoring for hours spent outside using U.S. EPA activity patterns, the 30-year excess cancer risk, would be approximately 5.27 in one million, which is below the BAAQMD recommended health risk criteria. Potential acute and chronic health risks for on-site residential units were determined to be below the BAAQMD hazard index of 1.0 and the annual average concentration of particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) would be below the BAAQMD threshold of 0.3 µg/m<sup>3</sup>. Furthermore, the aggregate total of all sources, including nearby major streets, rail, and stationary sources, would not exceed BAAQMD cumulative thresholds. Therefore, this impact would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

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

Table 3-3 in the BAAQMD's 2017 CEQA Guidelines provides odor screening distances for land uses that have the potential to generate substantial odor complaints. These uses include wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, and chemical plants (BAAQMD 2017b). None of these identified uses would occur within or in the vicinity the project site. The proposed project would not generate objectionable odors affecting a substantial number of people during operation.

During construction activities, heavy equipment and vehicles would emit odors associated with vehicle and engine exhaust both during normal use and when idling. However, such emissions would be intermittent in nature and would dissipate rapidly with increasing distance from the source. Furthermore, Mitigation Measure HAZ-3 (discussed in Section 9, *Hazards and Hazardous Materials*) would ensure reduced construction vehicle idling time. Therefore, the proposed project would not generate objectionable odors affecting a substantial number of people. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 4 Biological Resources

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

## Existing Setting

Ruderal/ornamental vegetation occurs at the northeast corner of the site and there are several trees along the southern site boundary (including coast live oak, windmill palm, and Aleppo pine). The rest of the site is either paved or gravel. No wetlands or potentially jurisdictional features are present on-site.

## Methods

A literature review was conducted, as described in Appendix D. A preliminary arborist report prepared on July 19, 2019 by Horticultural Associates evaluated all 25 on-site trees, including one ornamental windmill palm (*Tracycarpus fortunei*), eight ornamental Aleppo pines (*Pinus halepensis*) and 16 coast live oaks (*Quercus agrifolia*) along the southern edge of the property (Horticultural Associates 2019; Appendix E). This report evaluates and documents species, size, health and structural condition of all onsite trees. Additionally, a preliminary biological resources survey was performed on January 17, 2020.

## Project Impacts

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

The project site is a vacant lot that is primarily paved or gravel, and there are no native vegetation communities or habitats on-site. The ruderal vegetation at the northeast corner of the site is not suitable habitat for any species listed under the Federal Endangered Species Act or California Endangered Species Act. There is low potential for some special status species to occur in ruderal vegetation or the rock outcropping onsite. During the preliminary reconnaissance survey, no special status species were observed.

### *Special Status Plants*

A review of resource agency databases and lists for known special status plant species occurrences in the nine United States Geological Survey (USGS) quadrangles containing and surrounding the project site identified 65 special status plant species (Appendix D). Based on the disturbed nature of the site and each species' specific habitat requirements, 64 of these species were eliminated from the evaluation. The project site contains potentially suitable habitat for one special status plant, Congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*), which was determined to have a low potential to occur on the project site. Congested-headed hayfield tarplant typically occurs in areas with valley and foothill grassland vegetation communities but has been documented along roadsides in ruderal vegetation. Congested-headed hayfield tarplant has a California Rare Plant Rank (CRPR) of 1B.2. It was not observed on-site during the site visit. Impacts to 1B.1 or 1B.2 species would only be considered significant under CEQA if the loss of individuals on the project site represented a population-level impact that resulted in a loss of or risk to the entire regional population. Given the small size of the project area and ruderal habitat, as well as the low potential to occur, impacts on congested-headed hayfield tarplant would be less than significant, as even if the tarplant did occur on-site, the project would not create a population-level impact.

### *Special Status Wildlife and Nesting Birds*

A review of resource agency databases for known special status wildlife species occurrences in the nine USGS quadrangles containing and surrounding the project site identified 38 special status wildlife species (Appendix D). Based on the disturbed nature of the site and species-specific habitat requirements, all 38 of these species could be eliminated from the evaluation. Special status species in the vicinity are associated generally with oak woodlands, riparian and aquatic habitats. The site is largely surrounded by development including housing, a road, and parcels under construction immediately to the east, which pose a substantial barrier for wildlife movement from these habitats.

There is suitable habitat for nesting birds protected under Section 3503 of the California Fish and Game Code (CFGC). Ruderal vegetation and the existing trees along the southern project boundary provide nesting habitat for common species such as mourning dove (*Zenaida doves*), house finch, and Brewer's blackbird. Ground nesting birds such as killdeer (*Charadrius vociferus*) may also use graveled areas of the site.

Development of the site could indirectly impact nesting birds by noise generated through general construction activity on-site. Direct impacts on nesting birds could occur if construction activities take place during the nesting season (February 1st through August 31st) and could include the destruction of active bird nests if they occur on the project site or forced abandonment of nests due to construction-related noise. To avoid or reduce potential adverse impacts on nesting birds, implementation of Mitigation Measure BIO-1 would be required. Impacts on nesting birds would be less than significant with implementation of this measure.

### **Mitigation Measures**

The following mitigation measure would be required to avoid or reduce the project's potentially significant impacts on nesting birds and special status wildlife.

#### *BIO-1 Nesting Bird Surveys and Avoidance*

To avoid impacts to nesting birds and other special-status bird species, ground disturbing activities during construction of the project shall be limited to the period between September 1 and January 31 (i.e., outside the nesting season), if feasible. If initial site disturbance, grading, and vegetation removal cannot be conducted during this period, a qualified biologist shall conduct a pre-construction survey for active nests in and around the project site, no more than two weeks prior to any construction activities. The survey shall include the project site and other such habitat within 500 feet of the project site.

If active nests are identified, the extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect impacts to nesting birds are avoided.

If active nests are identified, species-specific exclusion buffers shall be determined by the biologist (i.e., 500 feet for raptor nests), and construction timing and location adjusted accordingly. The buffer shall be adhered to until the adults and young no longer rely on the nest site, as determined by the biologist. Limits of construction to avoid a nest should be established in the field with flagging and stakes or construction fencing. Construction personnel shall be instructed on the sensitivity of the area. An on-site biological monitor shall be present during all grubbing and clearing of vegetation to ensure that these activities remain within the project footprint (i.e., outside the demarcated buffer) and that the flagging/stakes/fencing is being

maintained, and to minimize the likelihood that active nests are abandoned or fail due to project activities.

Implementation of Mitigation Measure BIO-1 would reduce impacts on special status species to a less than significant level.

Less than Significant with Mitigation Incorporated

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

No sensitive natural communities defined by CDFW on their Natural Communities list and Vegetation Alliances and Associations lists occur on the project site. No riparian habitat occurs on site and riparian habitat occurring off site to the east would not be directly or indirectly altered by the project. No impacts on sensitive natural communities would occur as a result of the project.

**NO IMPACT**

- c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

No wetlands occur on the site (USFWS 2020c). The closest identified wetland feature to the project site is an intermittent riverine feature located approximately 300 feet east of the project site on the eastern side of the SMART tracks (USFWS 2020c). The proposed project would take place entirely outside of the riverine feature, and would not involve direct or cause indirect removal, filling, or hydrological interruption of this feature. No impacts to jurisdictional wetlands or waters would occur.

**NO IMPACT**

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

Wildlife movement includes migration (i.e., usually one way per season), inter-population movement (i.e., long-term genetic flow) and small travel pathways (i.e., daily movement corridors within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities such as foraging or escape from predators, they also provide connection between outlying populations and the main corridor, permitting an increase in gene flow among populations. The project site is surrounded by existing development, ongoing construction, and roads. The site is not part of an established wildlife corridor, as it is surrounded by developed areas and not open space. The site is located on a disturbed and mostly paved lot that is between US-101 to the east and the SMART tracks to the west. These busy transportation corridors limit wildlife movement in the immediate vicinity of the project site. The impact on the movement of native resident or migratory species would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The Novato Municipal Code Chapter XVII (Trees and Shrubs), Section 17-1.3 makes it unlawful for any person or group of persons to alter or remove or cause to be altered or removed, any heritage tree on any parcel in the City of Novato without a permit from the City. A heritage tree is defined as any native or non-native woody plant with a diameter of 24 inches or more measured at 24 inches above existing grade, or any tree designated as such by the city council. A tree is defined as any woody native or non-native plant with a diameter of six inches. Additionally, Novato Municipal Code Section 19.39 (Woodland and Tree Preservation) includes regulations and guidelines regarding the preservation of native trees and forest and woodland resources associated with proposed development.

A preliminary arborist report was prepared on July 19, 2019 by Horticultural Associates to evaluate and document species, size, health and structural condition of all onsite trees. Of the 25 trees assessed in the report, four of the trees qualified as heritage trees. The project would involve the removal of all 25 on-site trees, including the four heritage trees. Since the project includes the approval of a Precise Development Plan, a separate tree removal permit is not required. Removal of these trees, including those classified as heritage trees, would be considered as part of the Precise Development Plan. The conceptual landscape plan for the project depicts approximately 118 new trees to be planted throughout the project site and along State Access Road at the southern project boundary. Novato Municipal Code Section 19.39.040.G requires a tree mitigation/replacement ratio of not less than 3:1. The project significantly exceeds the 3:1 replacement ratio; therefore, the project would not conflict with local policies and ordinances and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The project site is not located within the boundaries of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. As such, the project would not conflict with the provisions of an applicable plan, and no impact would occur.

**NO IMPACT**

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# 5 Cultural Resources

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

This section provides an analysis of the project’s impacts on cultural resources, including historical and archaeological resources, as well as human remains, and is based on the cultural resource assessment attached as Appendix F.

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1) and tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b]).

PRC, Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

**Hamilton Village Housing Project**

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Rincon completed a search of the California Historical Resources Information System (CHRIS) at the Northwestern Information Center (NWIC) located at Sonoma State University on January 3, 2020. The search was performed to identify all previously conducted cultural resources studies, as well as previously recorded cultural resources within the project site and a 0.5-mile radius. The CHRIS search included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, and the Archaeological Determinations of Eligibility list.

The NWIC records search identified that 54 previously conducted cultural resources studies have been performed within a 0.5-mile radius of the project site (Attachment B). Four studies have been completed within the current project site. Additionally, five cultural resources are recorded within a 0.5-mile radius of the project site). The project site previously contained the commissary building for the Hamilton Army Airfield. The Hamilton Army Airfield Discontiguous Historic District, located 0.5 mile east of the project site, is recorded as an NRHP-listed historic district (P-21-001962) and includes officer housing and operational buildings such as hangars; however, the district boundary does not include the project site or immediately adjacent areas and the commissary building was demolished in 2010.

A Sacred Lands File (SLF) search was completed by the Native American Heritage Commission (NAHC) with positive results for the project vicinity and recommended contacting the Federated Indians of Graton Rancheria (FIGR) for additional detail. Rincon Consultants, Inc. provided project details to the FIGR, and the FIGR did not indicate the presence of any Native American resources within the project site. SLF results do not provide specific details on the nature or precise location of Sacred Lands or whether they are related to any cultural resources recorded by the California Historical Resources Information System at NWIC, thus additional detail cannot be provided. No cultural resources are recorded on the site according to NWIC.

Rincon Archaeologist Hannah Haas, MA, Registered Professional Archaeologist (RPA) conducted a pedestrian field survey of the project site on January 17, 2020. Most of the project site has been previously disturbed by the construction of the paved parking area. Surrounding areas of exposed ground were inspected for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Ground disturbances such as burrows and drainages were also visually inspected. Vegetation and the existing pavement reduced visibility to less than ten percent of the accessible project site.

Ground visibility was limited (less than 10 percent) due to the presence of gravel, pavement, and a large area covered entirely by artificial fill where the commissary building once stood. No cultural resources were identified on the project site during the pedestrian survey.



- a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*
- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

Based on the results of the cultural resources records search, Native American scoping, and pedestrian field survey, no cultural resources were identified within the project site. Although the Sacred Lands File search returned with positive results, the Federated Indians of Graton Rancheria did not indicate the presence of any Native American resources within the project site. Additionally, the project site has been heavily disturbed by the construction of the Hamilton Commissary, parking lot, and adjacent roadways. Additionally, it is located 0.5 mile outside the bounds of the NRHP-listed Hamilton Army Airfield Discontiguous Historic District. However, the unanticipated discovery of archaeological resources, that may also be considered historical resources, during construction of the project remains a possibility and impacts to unanticipated resources are potentially significant. The following mitigation would reduce archaeological impacts to less than significant levels by requiring halting construction in the vicinity of any cultural resources found during construction and requiring evaluation and treatment of any resources evaluated as significant.

## **Mitigation Measure**

### *CUL-1 Inadvertent Discoveries*

If cultural resources are encountered during ground-disturbing activities associated with construction of the project, work within 50 feet of the find shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) be contacted immediately to evaluate the find. If no additional work to evaluate the find is necessary, the archaeologist shall evaluate the find for listing in the NRHP and CRHR. If the find requires excavation, the archaeologist shall prepare a work plan and implement a Phase II excavation to evaluate the find. If the discovery proves to be eligible for listing in the NRHP and/or CRHR, the archaeologist shall make recommendations for further treatment such as data or heritage recovery or capping. If the find is of Native American origin, appropriate treatment shall be determined in consultation with local Native Americans. Implementation of Mitigation Measures CUL-1 would reduce potential impacts to unanticipated archeological resources to less than significant.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

No human remains have been identified within the project site; however, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission, which would determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the

City of Novato

**Hamilton Village Housing Project**

property secure from subsequent disturbance. With adherence to State law and incorporation of Mitigation Measure CUL-1, impacts related to the discovery of human remains would be less than significant.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

# 6 Energy

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

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

## Construction

During project construction, petroleum-based fuels would be used for construction vehicles and equipment on the project site, travel by construction workers to and from the project site, and vehicles used to deliver materials to the site. The project would involve demolition of existing asphalt; utilities trenching and grading; pavement and asphalt installation; building construction; architectural coating; and installation of landscaping and hardscaping.

The total consumption of gasoline and diesel fuel during project construction was estimated using the assumptions and factors from CalEEMod used to estimate construction air emissions in the air quality analysis (Appendix B). Table 3 presents the estimated construction phase energy consumption, indicating construction equipment, vendor trips, and worker trips would consume approximately 147,967 gallons of fuel over the project construction period.

**Table 3 Estimated Fuel Consumption during Construction**

<b>Fuel Type</b>	<b>Gallons of Fuel</b>	<b>MMBtu<sup>4</sup></b>
Diesel Fuel (Construction Equipment) <sup>1,2</sup>	131,073.5	16,706.6
Other Petroleum Fuel (Worker Trips) <sup>3</sup>	16,893.5	1,854.7
<b>Total</b>	<b>147,967.0</b>	<b>18,561.3</b>

<sup>1</sup> Fuel demand rate for construction equipment is derived from the total hours of operation, the equipment’s horsepower, and the equipment’s fuel usage per horsepower per hour of operation, which are taken from CalEEMod outputs (see Appendix B). Fuel consumed for construction equipment is assumed to be diesel fuel.

<sup>2</sup> Fuel demand rates for hauling and vendor trips (cut material imports) are derived from hauling and vendor trip number, hauling and vendor trip length, and hauling and vendor vehicle class from “Trips and VMT” Table contained in Section 3.0, *Construction Detail*, of the CalEEMod results (see Appendix B). The fuel economy for hauling and vendor trip vehicles is derived from the United States Department of Transportation (United States Department of Transportation 2019). Fuel consumed for hauling trucks is assumed to be diesel fuel.

<sup>3</sup> The fuel economy for worker trip vehicles is derived from derived from U.S. Department of Transportation National Transportation Statistics (24 mpg) (United States Department of Transportation 2098). Fuel consumed for worker trips is assumed to be gasoline fuel.

<sup>4</sup> CaRFG CA-GREET 3.0 fuel specification of 109,786 Btu/gallon used to identify conversion rate for fuel energy consumption for worker trips specified above (California Air Resources Board [CARB] 2018). Low-sulfur Diesel CA-GREET 3.0 fuel specification of 127,464 Btu/gallon used to identify conversion rate for fuel energy consumption for construction equipment specified above (CARB 2018). Due to rounding, numbers may not add up precisely to the totals indicated.

Source: Appendix G

Construction activity and associated fuel consumption and energy use would be temporary and typical for a new housing development of the size of the project. Additionally, the NMC incorporates the California Green Building Standards Code (refer to Section 4-17). This code includes specific requirements related to recycling, construction materials, and energy efficiency standards that would apply to project construction to minimize wasteful, inefficient, and unnecessary energy consumption. Therefore, the project would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and the construction-phase impact related to energy consumption would be less than significant.

## Operation

Operation of the project would result in energy demand from electricity consumption for heating and cooling systems, lighting, appliances, water use, and energy demand from gasoline consumption attributed to the daily trips from the future residents. The estimated number of daily trips is used to determine the energy consumption associated with fuel use from the operation of the project. Table 4 shows the estimated total annual energy consumption associated with operation of the project.

**Table 4 Estimated Annual Operational Energy Consumption**

Energy Source	Consumption	Consumption in MMBtu
Gasoline Fuel	56,657.4 gallons	6,220.2
Diesel Fuel	8,504.5 gallons	1,084.0
Natural Gas <sup>1</sup>	0 kBtu	0.0
Electricity <sup>2</sup>	725,835 kilowatt-hours	2,476.6
<b>Total</b>	--	<b>9,780.8</b>

<sup>1</sup> The project does not include the use of natural gas appliances, as all installed appliance would be powered by electricity provided by PG&E.

<sup>2</sup> The project includes solar panels on proposed roofs, which have been accounted for in this energy consumption calculation. This estimate represents the electricity that will be required from PG&E.

Notes: Totals may not add up due to rounding.

Source: Appendix G

As shown in Table 4, vehicles associated with the operation of the project would consume approximately 56,658 gallons of gasoline and 8,505 gallons of diesel fuel, or approximately 7,304 MMBtu, each year under the most conservative estimate. The fuel consumed by the project would be typical of multi-family residential projects, without factoring for potential fuel savings based on resident use of nearby (less than 0.5 mile) transit facilities (SMART, Marin Transit, and Golden Gate Transit).

In addition to transportation energy use, project operation would require permanent grid connections for electricity. Electricity calculations have taken into consideration the amount of electricity generated by the proposed solar arrays (approximately 148,605 kilowatt-hours per year). Approximately 725,835 kilowatt-hours of electricity per year, or 2,477 MMBtu, would be required from PG&E and would be used for lighting, large appliances, and heating and cooling within the residential units. The proposed residential structures would total approximately 82,135 square feet, which is an average energy use intensity (EUI) of 0.0302 MMBtu per square foot<sup>1</sup>. According to the U.S. Energy Information Administration (EIA), average EUI for residences in the Pacific region of the United States is 0.0314 MMBtu per square foot (EIA 2018a; EIA 2018b). Therefore, the project’s EUI for residential buildings would be below the average EUI in the Pacific region of the U.S.; project operation would not result in significant impacts due to the wasteful, inefficient, or unnecessary consumption of energy, and impacts would be less than significant.

The project would comply with standards set in California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. California’s Green Building Standards Code (CALGreen; California Code of Regulations, Title 24, Part 11) requires implementation of energy efficient light fixtures and building materials into the design of new construction projects. Furthermore, the 2019 Building Energy Efficiency Standards (CBC Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the Energy Commission. As the name implies, these standards are specifically crafted for new buildings to result in energy efficient performance, so the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy. The standards are updated every three years and each iteration is more energy efficient than the previous standards.

<sup>1</sup> Calculation: 2,477 MMBtu divided by 82,135 square feet = 0.0302 MMBtu per square foot.

Due to the large number of materials and manufacturers involved in the production of construction materials, including manufacturers in other states and countries, upstream energy use cannot be estimated reasonably or accurately.

Overall, project operation would result in consumption of fuels from vehicle trips and electricity from proposed buildings. Project energy consumed would represent an incremental increase in energy usage compared to existing conditions, but the proposed project would implement energy-efficient components to reduce energy demand, including the installation of solar panels on rooftops, as described in Section 8, *Description of Project*. Therefore, impacts would be less than significant.

## Conclusion

Construction of the project would be temporary and typical of similar projects, and not result in wasteful energy use. Project operation would increase energy use on the site compared to existing conditions. However, the energy use would be in conformance with the latest version of California’s Green Building Standards Code and the Building Energy Efficiency Standards. Therefore, the project would not result in wasteful or unnecessary energy consumption, and impacts would be less than significant.

### LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Table 5 provides Novato Climate Change Action Plan energy efficiency goals and policies and summarizes the project’s compliance with these policies.

**Table 5 Project Compliance with Energy Efficiency Goals and Policies**

Energy Efficiency Goal or Policy	Project Consistency
<p><b>Goal 2 Measure 7. Community Renewable Energy Facilitation:</b> Identify and remove barriers to small-scale, distributed renewable energy production within the community.</p>	<p><b>Consistent.</b> The project would include roof-mounted solar arrays on each unit, capable of generating at least 2 kW of energy for each unit. Natural gas would not be used a source of energy, and all appliances would be electric.</p>
<p><b>Goal 3, Measure 10. Increase Tree Cover:</b> Increase tree cover of structures and other improvements in the City through implementation of the City’s Urban Forestry Plan, including updated landscaping requirements to ensure strategic placement of plantings to shade east and west walls of structures.</p>	<p><b>Consistent.</b> While the project will remove 25 existing trees, a total of approximately 118 would be planted as part of the project’s landscaping plan. New trees are proposed throughout the site, including in locations that shade proposed buildings.</p>
<p><b>Goal 4, Measure 11. Water Conservation:</b> Conserve water through improved efficiency.</p>	<p><b>Consistent.</b> The project includes low-flow water fixtures and would connect to recycled water lines, for use on landscaping. Landscaping would meet the water efficiency requirements of Regulation 15 of the North Marin Water District, emphasizing low water use plant species.</p>
<p><b>Goal 6, Measure 20. Pedestrian Convenience:</b> Promote walking through design standards and amenities that concentrate uses, reduce the need for vehicular travel, and enhance the pedestrian experience.</p>	<p><b>Consistent.</b> The site plan includes pedestrian walkways throughout the site that provide pedestrian access to each unit and amenity and provides connectivity to off-site pedestrian sidewalks.</p>

Energy Efficiency Goal or Policy	Project Consistency
<p><b>Goal 7, Measure 22. Multi-Family Bicycle Parking:</b> Increase bicycle-parking requirements for new multi-family residential construction. Short-term facilities shall be provided at a minimum rate equal to 10% of vehicle spaces. Long-term facilities shall be provided at a ratio of one long-term bicycle parking space for every unit. Long-term facilities shall consist of one of the following: a bicycle locker, a locked room with standard racks and access limited to bicyclists only, a standard rack in a location that is protected from the elements and monitored by video surveillance 24 hours per day. Alternatively, spaces may be provided in designated space within the units' garage/carport.</p>	<p><b>Consistent.</b> The proposed project includes bike racks located throughout the site. New bike paths are proposed on both sides of State Access Road and the project proposes guest bicycle parking as well as one dedicated bicycle parking space per unit (within each garage). The project is within walking and biking distance from many different amenities, including less than 0.5 mile from the SMART station and Hamilton Square shopping center.</p>
<hr/> <p>Source: City of Novato 2009</p> <hr/>	

As shown in Table 5, the project would be compliant with applicable energy efficiency goals and policies. Therefore, potential impacts associated with renewable energy and energy efficiency would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Hamilton Village Housing Project**

- a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*
- a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

The project site is located in a seismically active region due to its proximity to the active margin of the North American and Pacific Plates. The nearest fault is the Burdell Mountain fault, located approximately 2.5 miles northeast of the project site (USGS 2019). No known active faults run through the project site; therefore, the potential for surface rupture resulting from the movement of nearby major faults is considered low.

Ground shaking refers to movement of the Earth's surface during a seismic event. Ground shaking is normally the major cause of damage in earthquakes. To address the threat from earthquakes and ground shaking, all new developments must conform to current City and State seismic and geotechnical codes. The California Building Code (CBC), which the City of Novato has adopted, includes seismic regulations that would be enforced during the design and construction phases of the project. Adherence to these requirements during development would ensure integrity and safety during seismic activity. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

Liquefaction is the process by which soil is temporarily transformed to fluid form during intense and prolonged ground shaking or because of a sudden shock or strain. Liquefaction typically occurs in areas where the groundwater is less than 30 feet from the surface and where the soils are composed of poorly consolidated fine to medium sand. A Geotechnical Investigation prepared for the project by Quantum Geotechnical, Inc. detected groundwater on the project site between 5 to 10 feet depth, and generally corresponded with the surface of the Bay Mud deposits. Layers of potentially liquefiable soils were also detected on the project site (Appendix A). As a result, impacts regarding liquefaction hazards would be potentially significant. The following mitigation would reduce impacts to a less than significant level by ensuring the use of proper construction techniques to address shallow groundwater levels and liquefaction-induced differential settlement.

*GEO-1 Geotechnical Recommendations*

The Geotechnical Investigation produced by Quantum Geotechnical, Inc. (attached as Appendix A) provides recommendations that would ensure the project is suitable from a geotechnical standpoint and would increase the safety and integrity of the project. All recommendations in the Geotechnical Investigation as described in Items 1-57 of the Discussions, Conclusions and Recommendations of the Report shall be included as conditions of approval and shall be implemented during construction and prior to occupancy of the project. The recommendations address but are not limited to: Grading, Surface and Subsurface Drainage, Bio-filtration Facilities, Foundations, Miscellaneous Concrete Flatwork, Retaining Walls and Foundations, Pavement Areas, Utility Trenches, and project review and construction monitoring.

Implementation of Mitigation Measure GEO-1 would reduce potential liquefaction impacts to less than significant; in particular Item 6 includes requirements to address differential settlements in the

design of gravity utilities and foundation, and Item 21 includes ensuring that the foundation can tolerate soil criteria, including liquefaction effects.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

The project site is relatively flat apart from an area on the western portion of the site underlain by an east-northeast facing slope rising roughly 60 feet above the flatter portions of the site. The site is not located in an identified landslide hazard zone (City of Novato 2016). The Geotechnical Investigation indicated rock fall potential along the western portion of the site which may be triggered during a rainy or seismic event, or a combination of both (Appendix A). Incorporation of Mitigation Measure GEO-1 as described above, including in particular Item 7, removing precarious boulders at the top of the east-facing slope and installation of a chain link fence to absorb the impact of any boulders, would reduce impacts to less than significant.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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

Implementation of the proposed project includes grading and drainage improvements, including bioretention basins, and associated hardscaping. The project site is relatively flat across the majority of the site with 10 to greater than 25 percent slopes along the west and southwest corner. Roughly 81.3 percent of the project site has no slope or less than 10 percent slope. Grading plans for the project site anticipate roughly 150 cubic yards of cut and 17,750 cubic yards of fill. Proposed construction activities would be required to comply with Novato Municipal Code 7-4.10(c), which requires construction plans to include erosion control BMPs, such as silt fences, straw wattles, and hydroseeding. Based upon site topography and compliance with existing Municipal Code requirements, there would be less than significant impacts regarding soil erosion or loss of topsoil.

**LESS THAN SIGNIFICANT IMPACT**

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

As discussed under threshold *a.3* and *a.4* of this section, the project is located in a known liquefaction zone and has the potential for rock fall. Lateral spreading is a phenomenon in which soils move laterally during seismic shaking and is often associated with liquefaction. The amount of movement depends on the soil strength, duration and intensity of seismic shaking, topography, and free face geometry. Rock fall potential along the western portion of the site has the potential to occur. Impacts would be less than significant with incorporation of Mitigation Measure GEO-1 as described above, including Item 7, removing precarious boulders at the top of the east-facing slope and installation of a chain link fence to absorb the impact of any boulders; Item 6, requiring addressing differential settlements in the design of gravity utilities and foundation; Item 21, ensuring that the foundation can tolerate soil criteria, including liquefaction effects.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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

Expansive soils are soils that due to their composition and moisture content have a potential to undergo significant changes in volume, in the form of either shrinking or swelling. Periodic shrinking and swelling of expansive soils can cause extensive damage to buildings, other structures and roads. Based on information provided in the City of Novato Existing Conditions Report, the project site is located in an area with no potential for soil expansion (City of Novato 2014). The project's geotechnical report did not indicate the presence of expansive soils at the project site. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

No septic tanks or alternative wastewater disposal systems are proposed as part of the Project. No impact would occur.

**NO IMPACT**

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

The project site is in an area of low paleontological sensitivity (Graymer et al. 2006, Rice et al. 2002). As the project would not involve substantial excavation and is located in a low sensitivity geologic unit, the project is unlikely to encounter paleontological resources. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

## 8 Greenhouse Gas Emissions

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

### Climate Change and Greenhouse Gases

Project implementation would generate greenhouse gas (GHG) emissions through the burning of fossil fuels or other emissions of GHGs, thus potentially contributing to cumulative impacts related to climate change. In response to an increase in man-made GHG concentrations over the past 150 years, California has implemented AB 32, the “California Global Warming Solutions Act of 2006.” AB 32 codifies the Statewide goal of reducing emissions to 1990 levels by 2020 (essentially a 15% reduction below 2005 emission levels) and the adoption of regulations to require reporting and verification of statewide GHG emissions. Furthermore, on September 8, 2016, the governor signed Senate Bill 32 (SB 32) into law, which requires the State to further reduce GHGs to 40 percent below 1990 levels by 2030. SB 32 extends AB 32, directing the California Air Resources Board (ARB) to ensure that GHGs are reduced to 40 percent below the 1990 level by 2030.

On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) CO<sub>2</sub>e by 2030 and two MT CO<sub>2</sub>e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project’s contribution towards an impact would be cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

## City of Novato Climate Change Action Plan

The City of Novato's Climate Change Action Plan (CCAP) provides goals and associated measures, also referred to as climate change mitigation measures, in the sectors of energy use, transportation, land use, and solid waste. In addition, this Plan provides goals and measures for climate change adaptation and plan implementation. The intent of the CCAP is to guide Novato towards achieving or exceeding the City's greenhouse gas emissions reductions target. The CCAP documents the various existing programs Novato implemented prior to publication of the CCAP, the City's 2005 GHG emissions inventory, and 2020 and 2035 GHG emission forecasts; and provides mitigation goals, GHG reduction goals, and implementation measures (City of Novato 2009).

### Thresholds

Pursuant to the requirements of SB 97, the California Natural Resources Agency adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions and analysis of the effects of GHG emissions. The adopted CEQA Guidelines provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

To evaluate whether a project may generate a quantity of GHG emissions that may have a significant impact on the environment, state agencies have developed a number of operational bright-line significance thresholds. Significance thresholds are numeric mass emissions thresholds that identify the level at which additional analysis of project GHG emissions is necessary. Projects that attain the significance target, with or without mitigation, would result in less than significant GHG emissions.

In the 2017 BAAQMD *CEQA Air Quality Guidelines*, the BAAQMD outlines an approach to determine the significance of projects. For residential, commercial, industrial, and public land use development projects, the thresholds of significance for operational-related GHG emissions are as follows:

- Compliance with a qualified GHG reduction strategy
- Annual emissions less than 1,100 metric tons (MT) of carbon dioxide equivalent (CO<sub>2</sub>e) per year (MT CO<sub>2</sub>e/yr)
- Service person threshold of 4.6 MT CO<sub>2</sub>e/service person/year (residents + employees)

For this analysis, the GHG emissions thresholds contained in the BAAQMD's May 2017 *CEQA Air Quality Guidelines* are the appropriate thresholds to use, specifically the annual emissions of 1,100 MT CO<sub>2</sub>e/yr. This threshold has been reduced by 40 percent, to 660 MT CO<sub>2</sub>e/yr, for consistency with the SB 32 goal of a 40 percent reduction in GHG emissions from 1990 levels by 2030. BAAQMD guidelines have set this threshold as a numeric emissions level below which a project's contribution to global climate change would be less than significant.

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

Project construction would generate temporary short-term GHG emissions through travel to and from the worksite and from the operation of construction equipment such as graders, backhoes, and generators. Excavation, grading, and trenching typically generate the greatest amount of emissions due to the use of grading equipment and soil hauling. Construction activity would generate approximately 1,081 MT CO<sub>2</sub>e over the entire construction period. As there is no applicable construction GHG threshold, this calculation is included for informational purposes. Nonetheless, the project developer would be required to comply with all BAAQMD rules and regulations regarding emission control measures, including the Basic Construction Measures, which include reducing idling time and imposing speed limit for construction equipment, and Regulation 8, Rule 3, which requires the use of low volatile organic compound containing paints, which reduces GHG emissions during the architectural coating phase. In addition, the construction contractor is required to use of off-road construction equipment with CARB compliant engines and emissions systems.

Table 6 provides the estimated GHG construction emissions resulting from the project, and Table 7 provides the project’s estimated operational GHG emissions. Because CalEEMod does not calculate N<sub>2</sub>O emissions from mobile sources, N<sub>2</sub>O emissions were quantified using guidance from CARB and the EMFAC2017 Emissions Inventory for the Marin County region for the year 2023 (the project operational year) using the EMFAC2011 categories (CARB 2018b and 2019; see Appendix H for calculations). Estimated GHG emissions would be approximately 530 MT CO<sub>2</sub>e per year with the primary source of emissions from mobile sources and energy use (Appendix H). This is below the BAAQMD significance threshold of 660 MT CO<sub>2</sub>e per year; therefore, GHG impacts would be less than significant.

**Table 6 Project Construction Emissions of Greenhouse Gases**

Year	Project Emissions (MT/yr CO <sub>2</sub> e)
2020	305.7
2021	426.7
2022	348.7
<b>Total</b>	<b>1,081.1</b>
<b>Total Amortized over 30 Years</b>	<b>36.0</b>

Source: Appendix H

**Table 7 Combined Annual Emissions of Greenhouse Gases**

<b>Emission Source</b>	<b>Annual Emissions (CO<sub>2</sub>e in metric tons)</b>
Construction	36.0
<b>Operational</b>	
Area	0.9
Energy	98.7
Solid Waste	17.4
Water	8.0
<b>Mobile</b>	
CO <sub>2</sub> and CH <sub>4</sub>	360.9
N <sub>2</sub> O	7.6
<b>Total</b>	<b>529.5</b>

Source: Appendix H

**LESS THAN SIGNIFICANT IMPACT**

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

Table 8 evaluates the project’s consistency with the applicable GHG reduction measures outlined in the CCAP and shows the proposed project would be consistent with those measures. The CCAP includes specific goals and measures to meet estimated reductions for compliance with state GHG reduction goals, and the project complies with these goals and measures.

**Table 8 Project Consistency with the Novato Climate Change Action Plan**

<b>Novato CCAP Goal</b>	<b>Project Consistency</b>
<p><b>Goal 1:</b> Reduce emissions from the energy sector through energy efficiency and conservation efforts within municipal and community operations.</p> <p><b>Goal 2:</b> Reduce emissions associated with energy generation through promotion and support of renewable energy generation and use.</p>	<p><b>Consistent.</b> The project includes roof-mounted solar arrays on each unit, capable of generating at least 2 kW of energy for each unit. Natural gas will not be used a source of energy, and all appliances will be electric.</p>
<p><b>Goal 3:</b> Reduce emissions from the built environment through “green building” and urban design principles that minimize the urban heat island effect and reduce energy consumption.</p>	<p><b>Consistent.</b> While the project will remove 25 existing trees, a total of approximately 118 will be planted as part of the project’s landscaping plan. New trees are proposed throughout the site, including in locations that shade proposed buildings.</p>
<p><b>Goal 4:</b> Reduce emissions from water and wastewater sources by increasing water conservation.</p>	<p><b>Consistent.</b> The project includes low-flow water fixtures and will connect to recycled water lines, for use on landscaping. The project’s landscape plan predominantly specifies very low, low, and moderate water use plants.</p>



Novato CCAP Goal	Project Consistency
<p><b>Goal 7:</b> Reduce emissions from transportation sources through promotion of non-vehicular modes of travel</p>	<p><b>Consistent.</b> The proposed project includes bike racks located throughout the site. New bike paths are proposed on both sides of State Access Road and the project proposes guest bicycle parking as well as one dedicated bicycle parking space per unit (within each garage). The project is walking and biking distance from many different amenities, including less than 0.5 mile from the SMART station and Hamilton Square shopping center.</p>

Source: City of Novato 2009

The project would be required to comply with the NMC, which requires recyclable material storage to be provided as part of development of multi-family residences. Additionally, the NMC incorporates the California Green Building Standards Code (refer to Section 4-17). This code includes specific requirements related to recycling, construction materials, and energy efficiency standards that would apply to project construction to minimize wasteful, inefficient, and unnecessary energy consumption.

The project would also comply with the City’s 1996 General Plan goals and policies. For example, it would comply with EN Policy 39 by providing recycling services to the future residents, PF Policy 6 which encourages water-saving landscaping and related water conservation measures, and TR Policy 2 by providing access to alternate modes of transportation, including transit (SMART station and bus stops within 0.5 mile), bicycling (parking provided on site), and pedestrian facilities (walkways provided on site).

Therefore, the proposed project would not conflict with state regulations intended to reduce GHG emissions statewide and would be consistent with applicable GHG reduction plans. Impacts related to GHG emissions would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in 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 or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Hamilton Village Housing Project**

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

### Construction

Project construction may include the temporary transport, storage, and use of potentially hazardous materials including fuels, lubricating fluids, cleaners, or solvents. As the proposed project may involve the disturbance of soil, grading and excavation could also result in the upset of hazardous materials at the site. Project construction would also require heavy construction equipment, the operation of which could result in a spill or accidental release of hazardous materials, including fuel, engine oil, engine coolant, and lubricants.

A Phase I Environmental Site Assessment (ESA), conducted by Stantec Consulting Services, Inc. and dated March 21, 2019 (Appendix I), recommended further assessment of historical operations at adjacent buildings and underground storage tanks (UST). The Phase I also identified a landfill within 1,000 feet of the site and recommended an assessment of methane be conducted, and recommended assessment of asphalt surfaces for asbestos containing materials (ACM) in the tack coating (Petromat®) used in the original construction of the asphalt. This is a potentially significant impact. Mitigation Measure HAZ-1 would require this survey and ensure that, if found, any ACM is disposed of properly to avoid impacts to creating a hazard for construction workers and the public.

### Mitigation Measure

#### *HAZ-1 Petromat® Survey*

Prior to the beginning of construction, a survey to determine the presence or absence of Petromat® shall be conducted on the paved asphalt area of the site. If Petromat® is present, the tack coating shall be tested for asbestos. If detected, ACM shall be removed from the site by a licensed asbestos abatement contractor in accordance with all applicable regulations (such as BAAQMD Regulation 11, Rule 2: Asbestos Demolition, Renovation and Manufacturing) prior to site preparation and grading activities. BAAQMD Regulation 11, Rule 2 includes provisions such as requiring the use of wetting or exhaust and collection methods to prevent the emissions of particulate asbestos-containing material.

A Phase II Environmental Site Assessment (ESA), completed on July 17, 2019, by Stantec Consulting Services, Inc. (Appendix J), investigated the potential hazardous materials concerns identified in the Phase I described above, including historical operations of adjacent buildings, USTs, and methane from the nearby landfill. The Phase II ESA involved the collection of soil vapor samples, which found no methane gas above background levels, and low levels of volatile organic compounds (VOC), including benzene, ethyl benzene, and tetrachloroethene (PCE). The Phase II also involved the collection of soil boring samples, which found low levels of petroleum hydrocarbons; no VOCs; and levels of antimony, lead, and vanadium above the respective environmental screening levels (ESL) in the northeast leg of the project site; however, it was determined that these may be naturally occurring (Appendix J). However, due to the identified environmental concerns and potential for undiscovered contamination, this is a potentially significant impact. Mitigation Measure HAZ-2, which would ensure a soil and groundwater management plan protective of public and construction worker safety is prepared, and

Mitigation Measure HAZ-3, which would ensure airborne particles would not pose a safety risk, would reduce this impact to a less than significant level.

## **Mitigation Measures**

### *HAZ-2 Soil and Groundwater Management Plan*

Prior to issuance of a building, grading, or demolition permit, the developer shall prepare a soil and groundwater management plan for all site preparation, grading or excavation activity conducted on the Project site, to be implemented for soil disturbances occurring in areas documented to contain contaminants and for situations when potential contaminants not previously identified are suspected or discovered.

The plan shall:

- Provide that the construction contractors shall be made aware of the possibility of encountering known and unknown hazardous materials, during grading, excavation, demolition and construction activities. If during such activities the contractor discovers an unknown waste or debris that is believed to involve hazardous waste and/or materials, the contractor shall immediately stop work in the vicinity of the suspected contaminant and remove workers and any members of the public at the project site from the immediate area of the discovery;
- Describe the monitoring protocols to be implemented during grading and excavation activities to observe any potential indicators of soil contamination, such as soil staining and odors;
- Identify appropriate measures to be followed if contaminants or unknown underground environmental features (e.g., storage tank) or debris are encountered during grading, excavation, and site demolition work to protect workers and the public;
- Prescribe sampling protocols to properly characterize suspected contaminants;
- Specify contaminant thresholds at which regulatory agency (e.g., Marin County Certified Uniform Program Agency, Regional Water Quality Control Board, California Department of Toxic Substances Control) notification is required;
- Incorporate all mitigation measures/conditions of approval addressing dust control;
- Identify personnel to be notified and provide emergency contact information; and
- Prescribe handling protocols for suspected contaminants and appropriate disposal procedures.

The plan shall be prepared by a qualified professional (e.g., geologist, engineer, etc.) and submitted to the Novato Community Development Department for review and approval. The plan shall be peer reviewed by a third-party contractor hired by the City at the developer's expense to confirm the plan is acceptable.

### *HAZ-3 Dust Mitigation*

During construction, the developer shall ensure the construction contractor complies with the BAAQMD's Basic and Additional Construction Mitigation Measures as modified for the project. Basic measures shall include, at a minimum:

**Hamilton Village Housing Project**

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered three times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- 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.
- 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.
- 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.
- Post a publicly visible sign with the name and telephone number of the contractor's representative to contact regarding dust complaints. This person shall respond and take corrective action within two hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Additional measures shall include, at a minimum:

- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- Wind breaks (e.g., fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.

The transport of any hazardous materials would be subject to federal, state, and local regulations, which would minimize risks associated with the transport hazardous materials. Construction activities that involve hazardous materials would be required to transport such materials along roadways designated for that purpose in the County, thereby limiting risk of upset during transportation. Therefore, impacts would be less than significant.

### *Operation*

Residential uses such as those proposed typically do not use or store large quantities of hazardous materials other than those typically used for household cleaning, maintenance, and landscaping. Therefore, the proposed project would not involve the use, storage, transportation, or disposal of hazardous materials in significant quantities. The detected concentrations of VOCs could result in vapor intrusion into the proposed residential structures.

As noted in the Phase II ESA, soil vapor barriers with passive vents would be sufficient (a passive sub-slab ventilation system) when installed below the proposed structures at the project site to prevent hazardous soil vapors originating from off-site contamination from entering proposed residences. Mitigation Measure HAZ-4, provided below, requires prevention of soil vapor intrusion, consistent with the recommendations in the Phase II ESA, to ensure the on-site residences are not affected by vapor intrusion.

## **Mitigation Measure**

### *HAZ-4 Soil Vapor Barrier Installation*

The developer shall design and implement engineering measures or institutional controls (e.g., soil vapor barrier) to prevent potential soil vapor intrusion into new residences in accordance with the measures included in the Department of Toxic Substances Control's (DTSC's) Vapor Intrusion Guidance Document – Final (October 2011) and Vapor Intrusion Mitigation Advisory (2010). Engineering measures or institutional controls shall be submitted to the City's Building Division and Planning Division prior to the issuance of any grading or building permits. Said engineering measures and institutional controls shall be peer reviewed by a qualified third-party contractor hired by the City at the developer's expense to confirm such measures and controls comply with applicable regulations. Consultation with Department of Toxic Substances Control may be required to confirm the appropriateness of the measures and controls.

The developer and/or contractor shall retain a qualified professional to certify that the accepted measures and controls are properly constructed and functioning at each residence. Written verification shall be submitted to the Novato Community Development Department.

The efficacy of the measures and controls shall be confirmed and certified by a qualified professional pursuant to the construction quality assurance/quality control testing guidance of the Department of Toxic Substances Control's (DTSC's) Vapor Intrusion Guidance Document – Final (October 2011).

With implementation of Mitigation Measures HAZ-1 through HAZ-4, impacts related to hazards would be less than significant.

### **LESS THAN SIGNIFICANT IMPACT**

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The proposed project is located within 0.25 mile of the Novato Charter School, Wonder Nook Preschool, North Bay Children's Center, and Hamilton Meadow Park School. However, as discussed under criteria a and b, project operation would not produce hazardous emissions or require the handling of hazardous materials, substances, or wastes. If construction did encounter ACM or other environmental contamination, Mitigation Measure HAZ-1 requiring ACM handling procedures, HAZ-2 requiring a soil and groundwater management plan, and HAZ-3 requiring dust control would protect the safety of construction workers and the public. The project would not affect off-site schools, nor would the project exacerbate the soil vapor present on-site, nor cause it to migrate off-site. Therefore, the proposed project would have less than significant impact with Mitigation Measures HAZ-1, HAZ-2, and HAZ-3 from criteria (a) and (b) above.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

**Hamilton Village Housing Project**

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

The following databases and listings compiled pursuant to Government Code Section 65962.5 were queried on January 24, 2020, for known hazardous materials contamination at the project site:

- **United States Environmental Protection Agency (USEPA)**
  - Envirofacts database (2020)
- **State Water Resources Control Board (SWRCB)**
  - GeoTracker database (2020)
- **California Department of Toxic Substances Control (DTSC)**
  - EnviroStor database (2020a)
  - Cortese Hazardous Waste and Substances Site List (2020b)

The project site does not appear on any of these databases, and there are no sites listed within 0.25 mile of the project site on the Cortese List (DTSC 2020b). The USEPA Envirofacts database found two sites within 0.25 mile of the project site, a large quantity hazardous waste generator and a fuel transporter (USEPA 2020). The GeoTracker database revealed two former underground storage tank (UST) sites south of the project site, associated with Department of Defense housing sites located at 957 C Street and 970 C Street (cases open and eligible for closure), and two military UST sites located at military housing buildings that are both closed cases of diesel contamination (SWRCB 2020). The Envirostor database identified one school cleanup site and three state response sites, several of which overlap with the GeoTracker database results (DTSC 2020a). These nearby sites include reported the following contaminants: benzene, 1,3-butadiene, DDT, diesel, lead, methyl tert-butyl ether (MTBE)/tertiary butyl alcohol (TBA)/other fuel oxygenates, metals, petroleum, polynuclear aromatic hydrocarbons, toluene, total petroleum hydrocarbons (diesel and gas), VOCs, and xylene.

As described under items (a) and (b) above, the Phase II ESA found no methane gas above background levels; low levels of VOCs, including benzene, ethyl benzene, and tetrachloroethene (PCE); low levels of petroleum hydrocarbons; and levels of antimony, lead, and vanadium above the respective ESL in the northeast leg of the project site. Other constituents listed on nearby sites not found in the Phase II ESA are not expected to have affected project site soils as they were not found during soil vapor or soil boring testing. Constituents above the respective ESLs are addressed above under items (a) and (b). Due to the closed or eligible for closure status of these sites and their distance from the project site, they are unlikely to affect the project site. Therefore, the proposed project would not create a significant hazard to the public or environment and there would be a less than significant impact.

**LESS THAN SIGNIFICANT IMPACT**



- 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 or excessive noise for people residing or working in the project area?*

The project site is not located within two miles of an airport and is not in an airport land use plan area. Therefore, the proposed project would have no impact related to safety hazards or excessive noise from a nearby airport.

**NO IMPACT**

- f. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The project would not involve the development of structures that could potentially impair implementation of or physically interfere with the City of Novato Emergency Operations Plan and Marin County Emergency Operations Plan. The project would not result in closure, rerouting or substantial alteration of streets or property access points during or after construction. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

As noted in Section 20, *Wildfire*, below, the project site is adjacent to existing urban development. No wildlands or densely vegetated areas are adjacent to the project site that would represent a significant fire hazard. The steeply sloped parcel to the west of the site is isolated from areas of wildlands by adjacent development and is not anticipated to constitute a wildland fire risk to the project site itself. The project site is not located in a State Responsibility Area or Very High Hazard Severity Zone for wildland fires (California Department of Forestry and Fire Protection [CALFIRE] 2007). The project site is not located within the Wildland Urban Interface (WUI), an area of high fire hazard, as mapped by the Novato Fire Protection District (NFPD). Therefore, the project would not expose people or structures to significant risk of loss, injury, or death involving wildland fires, and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 10 Hydrology and Water Quality

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Temporary site preparation, grading, and paving activities associated with construction of the project could result in limited soil erosion that may degrade water quality. However, on-site construction activities would be required to comply with the requirements of the City of Novato Municipal Code Chapter 7-4 (the City's Urban Runoff Pollution Prevention Ordinance) and National Pollutant Discharge Elimination System (NPDES) permit requirements. In addition, all of Marin County, including Novato, is under the jurisdiction of the Marin County Flood Control and Water Conservation District, which is responsible for managing stormwater and flooding problems in the County. The City adheres to the Marin County Stormwater Pollution Prevention Program (MCSTOPPP) to minimize the negative impacts of storm runoff. Specifically, proposed construction activities would be required to comply with Novato Municipal Code 7-4.10(c), which requires construction plans to include construction, erosion, and sediment control BMPs. Because the project would disturb more than one acre of area, the applicant would be required to obtain coverage under the NPDES Construction General Permit and prepare a Stormwater Pollution Prevention Plan (SWPPP), which includes BMPs for erosion control. The project would also be subject to the City's Urban Runoff Pollution Prevention Ordinance.

The project would increase the amount of impervious surface on the site, as the project would develop 75 multi-family residences, including 16 two-bedroom units with a third bedroom option, and 59 three-bedroom units with a fourth bedroom option. A total of 47,858 square feet of public open space and 43,340 square feet of private open space are included as part of the project. The proposed project anticipates developing roughly 28.5 percent of the project site. Although the project would introduce new impervious surfaces, a grass swale for stormwater management would be constructed at center of the project site, and proposed grading would drain stormwater to proposed storm drainage systems to undergo mechanical filtration prior to connecting to existing stormwater drain systems along the east side of the property. Additionally, the project would be required to comply with the City of Novato Municipal Code 7-4.6 and 7-4.10(d), which require the project site to be designed to control pollutants, pollutant loads, and runoff volume to the maximum extent feasible by minimizing impervious surface area and controlling runoff from impervious surfaces through infiltration, evapotranspiration, bioretention, and/or rainfall harvest and use. Adherence to these regulations would ensure that pollutants do not affect water quality. Therefore, impacts to water quality would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The North Marin Water District (NMWD) supplies water to the City of Novato from the Russian River, Stafford Lake and recycled water (NMWD 2017). The NMWD has no local, developed groundwater supply source (NMWD 2016). The project does not propose the use of groundwater, and as discussed in Section 18, *Utilities and Service Systems*, the NMWD has an existing water supply available to serve the proposed project. Additionally, while the project involves the addition of 31,589 square feet of impervious surface (an increase of 28 percent), use of flow-through planters and bioretention basins would allow groundwater recharge. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- c.(i) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*
- c.(ii) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*
- c.(iv) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*

The project would not alter the course of a stream or river as no such water bodies exist on the project site. The addition of impervious surface area and the development on the existing site lot would not substantially alter the drainage pattern of the area, and the project includes a grass swale in the center of the site. The proposed project would include the development of storm drainage systems throughout the project site to connect to the existing storm drain along the east side of the property. The project would have a 25-year floor rate of 5.93 cubic feet per second (cfs), which is well below the remaining capacity of the existing storm drain of 11.9 cfs<sup>2</sup> (CSW/Struber-Stroeh Engineering Group, Inc. 2020). In addition to compliance with the City's urban runoff programs, implementation of these project design features would capture and treat stormwater runoff, reduce the quantity and level of pollutants in runoff leaving the site, and would ensure project runoff does not exceed the capacity of stormwater drainage systems. The project would not increase the rate or amount of surface runoff in a manner that would result in on- or off-site flooding or exceed the capacity of the stormwater drainage system, nor that would impede or redirect flood flows. This impact would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- d. *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The project site is located approximately 1.5 miles from Bayfront lands and 10 miles (driving distance) from Stafford Lake, the nearest large bodies of water. Although a seiche could form on Stafford Lake during a seismic event, there would be no risk of inundation from seiche at the project site due to the relatively small size of Stafford Lake and distance of over 10 miles from Stafford Lake to the project site. Although an earthquake on the Hayward and Rodgers Creek fault complex, which runs under the bay, could create a tsunami, the potential for a tsunami to impact the City of Novato and the project site is low (City of Novato 2016), and the project site is not located within a tsunami zone (California Geologic Survey 2009). The project site is located in Flood Zone X, an area of

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<sup>2</sup> Total capacity of the storm drain pipeline (26.9 cfs) minus existing peak flow into the storm drain system (15 cfs).

minimal flood hazard (FEMA 2016). Therefore, impacts resulting in flood hazard, tsunami, or seiche release of pollutants due to project inundation would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The project site is located within the Novato Valley Groundwater Basin, which is a low priority basin according to the Department of Water Resources (DWR) Sustainable Groundwater Management Act Basin Prioritization dashboard (DWR 2020). Low priority basins are not required to adopt a groundwater sustainability plan.

As discussed in Section 7, *Utilities and Service Systems*, the City of Novato is serviced by the NMWD which provides potable and recycled water service to the City, surrounding unincorporated areas, and portions of West Marin. Approximately 80 percent of the Novato water supply comes from the Russian River through the NMWD wholesale water supplier, the Sonoma County Water Agency. The remaining 20 percent comes from local runoff into Stafford Lake. The District has no local, developed groundwater sources (NMWD 2016).

Additionally, as discussed under criteria (a), the project would be required to comply with the City of Novato Municipal Code Sections 7-4.6 and 7-4.10(d), which require the project site to be designed to control pollutants, pollutant loads, and runoff volume to the maximum extent feasible by minimizing impervious surface area and controlling runoff from impervious surfaces through infiltration, evapotranspiration, bioretention, and/or rainfall harvest and use, which would decrease and amount of runoff from the site, allowing for more infiltration. The project would not use groundwater and would not conflict with a sustainable groundwater management plan. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 11 Land Use and Planning

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

*a. Would the project physically divide an established community?*

The site is located in an area that includes both developed and undeveloped land, with small residential communities located south of the site, across Highway 101 to the west and across the railroad tracks to the east. The project would not result in the removal of any existing roadways or the construction of barriers that could prevent access within an established community. Therefore, development of the site would not physically divide an established community and no impact would occur.

**NO IMPACT**

*b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

The project site has a Novato General Plan designation of Community Facilities (CF). The project would include approval of a General Plan Amendment to modify the site’s land use designation from CF to Medium Density Multiple Family Residential (R10). The City of Novato zones the project site as Planned District (PD) and the site is subject to the provisions of the Hamilton Army Airfield Reuse Plan (Reuse Plan) which serves as the Master Plan for the site. The Reuse Plan assigns the site a land use category of Community Facilities and Civic Uses – Special Uses Permitted (CFCU-SP). The project includes a request for a Master Plan Amendment to change the land use designation for the site assigned by the Reuse Plan from CFCU-SP to Medium Density Multiple Family Residential (MDMFR).

The project would also include adoption of a tentative subdivision map, precise development plan, and would go through the City’s design review process, including a required plan consistency review.

As discussed throughout this Initial Study, the project includes features, is subject to regulatory requirements, and is assigned mitigation measures that avoid or reduce potential impacts to a less than significant level. Given this circumstance, the project does not result in significant impacts that would conflict with local land use and policy programs or regulations adopted to avoid such effects,

including those listed in the table below that are relevant to the potentially significant, but mitigated impacts discussed in this Initial Study:

**Table 9 Policies in the 1996 Novato General Plan and Draft Novato General Plan 2035 Relevant to Project Impacts**

1996 Novato General Plan	Draft Novato General Plan 2035
Policy 30 <u>Archaeological Resources Protection</u> : <u>Continue to protect archaeological resources.</u>	CC 2 Archaeological Resources Protection. Recognize the importance of protecting significant archaeological resources and implement measures to preserve such resources.
Policy 1 <u>Seismic Hazards</u> . Reduce the risk of loss of life, personal injury and damage to property resulting from seismic hazards.	SH 1 Seismic and Geologic Hazards. Reduce the risk of loss of life, personal injury and property damage resulting from seismic and geologic hazards including ground shaking, land sliding, liquefaction and slope failure.
Policy 34 <u>Local Efforts</u> . Encourage local efforts to improve air quality.	ES 17 Clean Air. Work to protect and improve air quality.
Policy 28 Measures to Reduce Hazards. Consider measures to protect the public health from the hazards associated with the transportation, storage and disposal of hazardous wastes (TSD Facilities).	SH 5 Hazardous Materials. Minimize risks and health impacts from environmental and human-induced disasters.
Objective 4 Preserve and protect native plant and animal species and their habitat.	ES 11 Species Diversity and Habitat. Protect biological resources, including migratory birds, anadromous fish, and threatened and endangered species, that are necessary to maintain a diversity of plant and animal species.

The proposed project would be consistent with applicable City land use plans, policies, and regulations. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**



# 12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project 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. *Would the project 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?*

The project would occur in an urbanized area of Novato where there are no active mining operations or known mineral resources present. The project site does not fall within a Mineral Resource Zone (Stinson et al. 1982). In addition, the General Plan does not identify mineral resources within the vicinity of the project area (City of Novato 1996). No mineral resources would be altered or displaced by the project. There would be no impact.

**NO IMPACT**

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# 13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Noise Setting

The unit of measurement used to describe a noise level is the decibel (dB). However, the human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, a method called “A-weighting” is used to filter noise frequencies that are not audible to the human ear. A-weighting approximates the frequency response of the average young ear when listening to most ordinary everyday sounds. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the “A-weighted” levels of those sounds. Therefore, the A-weighted noise scale is used for measurements and standards involving the human perception of noise. In this analysis, all noise levels are A-weighted, and the abbreviation “dBA” is understood to identify the A weighted decibel.

Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. A 10 dB increase represents a 10-fold increase in sound intensity, a 20 dB increase is a 100-fold intensity increase, a 30 dB increase is a 1,000-fold intensity increase, etc. Similarly, a doubling of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the noise source would result in a 3 dB decrease.

Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two equivalent noise sources combined do not sound twice as loud as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA (increase or decrease); that a change of 5 dBA is readily

perceptible; and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (California Department of Transportation [Caltrans] 2013a).

### *Descriptors*

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this analysis are the one-hour equivalent noise level ( $L_{eq}$ ) and the community noise equivalent level (CNEL).

The  $L_{eq}$  is the level of a steady sound that, in a specific time period and at a specific location, has the same A-weighted sound energy as the time-varying sound. For example,  $L_{eq(1h)}$  is the equivalent noise level over a 1-hour period and  $L_{eq(8h)}$  is the equivalent noise level over an 8-hour period.  $L_{eq(1h)}$  is a common metric for limiting nuisance noise, whereas  $L_{eq(8h)}$  is a common metric for evaluating construction noise.

The CNEL is a 24-hour equivalent sound level. The CNEL calculation applies an additional 5 dBA penalty to noise occurring during evening hours (between 7:00 p.m. and 10:00 p.m.) and an additional 10 dBA penalty to noise occurring during the night (between 10:00 p.m. and 7:00 a.m.). These increases for certain times are intended to account for the added sensitivity of humans to noise during the evening and night.

### *Propagation*

Sound from a small, localized source (approximating a “point” source) radiates uniformly outward as it travels away from the source in a spherical pattern, known as geometric spreading. The sound level decreases or drops off at a rate of 6 dBA for each doubling of distance.

Traffic noise is not a single, stationary point source of sound. Over some time interval, the movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point. The drop-off rate for a line source is 3 dBA for each doubling of distance.

## **Vibration**

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of hertz (Hz). The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body is from a low of less than 1 Hz up to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise may result in adverse effects, such as building damage, when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz). Vibration may also damage infrastructure when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost

never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

*Descriptors*

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. Particle velocity is the velocity at which the ground moves. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the greatest magnitude of particle velocity associated with a vibration event. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2013b).

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. It takes some time for the human body to respond to vibration signals. As with airborne sound, the RMS velocity is often expressed in decibel notation as vibration decibels (VdB), which serves to compress the range of numbers required to describe vibration (FTA 2018). Vibration significance ranges from approximately 50 VdB (the typical background vibration-velocity level) to 100 VdB, the general threshold where minor damage can occur in fragile buildings (FTA 2018). The general human response to different levels of groundborne vibration velocity levels is described in Table 10.

**Table 10 Human Response to Different Levels of Groundborne Vibration**

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable
85 VdB	Vibration acceptable only if there are an infrequent number of events per day

Source: FTA 2018

Damage to structures occurs when vibration levels range from 2 to 6 in/sec PPV. One half this minimum threshold, or 1 in/sec PPV is considered a safe criterion that would protect against structural damage (Caltrans 2013b).

*Propagation*

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. Variability in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances (Caltrans 2013b). When a building is impacted by vibration, a ground-to-foundation coupling loss (the loss that occurs when energy is transferred from one medium to another) will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may actually amplify the vibration level due to structural resonances of the floors and walls.

**Ambient Noise Levels**

Veneklasen Associates measured the ambient noise level on Monday, July 9, 2019, at the southern site boundary and in the central portion of the site, in addition to one long-term noise measurement location near a telephone pole in the center of the site. These measurements found that the ambient noise was 58 dBA  $L_{eq}$  at NM 1, 52 dBA  $L_{eq}$  at NM 2, and 57 dBA  $L_{eq}$  or 54 dBA DNL at the long-term noise measurement site (Veneklasen Associates 2019).

On January 17, 2020, between 10:40 and 11:20 a.m., two additional short-term (15-minute) noise measurements were recorded using an ANSI Type II integrating sound level meter at the southern site boundary and in the central portion of the site, in two of the same locations as measured by Veneklasen Associates in 2019. Table 11 includes the noise measurement results, which are consistent with the results obtained by Veneklasen Associates in 2019. Noise measurement data is provided in Appendix K. Figure 5 shows the noise measurement locations.

**Table 11 Noise Measurement Data**

<b>Number</b>	<b>Location</b>	<b>Distance to Primary Noise Source</b>	<b>Time</b>	<b>Result (L<sub>eq</sub>)</b>
NM 1	Southern project site boundary adjacent to State Access Road	25 feet to the centerline of State Access Road	10:44 to 10:59 a.m.	60.9
NM 2	Interior of the project site, at the paved and unpaved north-south boundary	165 feet to the centerline State Access Road	11:05 to 11:20 a.m.	52.3

L<sub>eq</sub> = equivalent noise level; dBA = A-weighted decibels

Source: Appendix K

Figure 5 Sound Level Measurement Locations



The primary off-site noise sources in the project site vicinity are motor vehicles (e.g., automobiles, buses, and trucks) along State Access Road, Nave Drive, and Highway 101. Motor vehicle noise is of concern because it is characterized by a high number of individual events, which often create sustained noise levels. Ambient noise is also generated by the Sonoma-Marín Area Rail Transit (SMART), located approximately 170 feet east of the project site. Ambient noise levels are generally highest during the daytime and rush hour unless congestion slows traffic speeds substantially. Other sources of noise in the project vicinity include general conversations from passersby activities associated with adjacent residential, senior apartments, and homeless service center developments.

### **Sensitive Receivers**

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise-sensitive receivers generally include hospitals, convalescent homes, schools, and libraries (City of Novato 1996). For the purposes of this analysis, single- and multi-family residences are also considered to be noise sensitive. The predominant noise-sensitive land uses in the area of the project site are residences over 70 feet to the south, the senior apartment building 25 feet to the east of the project site, and the proposed Homeward Bound buildings 25 feet to the north. The proposed Homeward Bound project would likely be constructed after completion of the proposed project; therefore, construction of the proposed project would not affect new receptors to the north as they would not be residing on the parcel at the time of project construction.

### **Regulatory Setting**

Chapter V, *Safety & Noise*, of the Novato 1996 General Plan addresses noise. The General Plan names a maximum normally acceptable exterior sound level of 60 dBA CNEL for residential areas, and 65 dBA CNEL for outdoor recreation areas. The maximum allowable interior noise level is 45 dBA CNEL.

Novato Municipal Code Section 19.22.070 prohibits exterior noise that exceeds 45 dBA between 10:00 p.m. and 6:00 a.m. and exterior noise that exceeds 60 dBA between 6:00 a.m. and 10:00 p.m. at residential land uses. These maximum noise levels shall not be exceeded for an aggregate period of more than three minutes within a one-hour time period or by more than 20 dBA at any time. Section 19.22.070(B) exempts authorized construction activities from these noise level requirements. Table 3-5 of the Novato Municipal Code (Table 12 below) establishes allowable exterior noise levels for residential and school land uses of 60 dBA during daytime hours (6:00 a.m. to 10:00 p.m.).



**Table 12 City of Novato Municipal Code Table 3-5: Allowable Exterior Noise Levels<sup>1</sup>**

Type of Land Use	Time Interval	Maximum Noise Level (dBA) <sup>2</sup>
Residential <sup>3</sup>	10:00 p.m. to 6:00 a.m.	45
	6:00 a.m. to 10:00 p.m.	60
Commercial <sup>4</sup>	10:00 p.m. to 6:00 a.m.	60
	6:00 a.m. to 10:00 p.m.	70
Industrial or Manufacturing	Any time	70

<sup>1</sup> Each of the noise limits specified shall be reduced by 5 dBA for impulse or simple tone noises. If the ambient noise exceeds the resulting standard, the ambient shall be the standard.

<sup>2</sup> Maximum noise levels shall not be exceeded for an aggregate period of more than three minutes within a one-hour time period or by more than 20 dBA at any time.

<sup>3</sup> Residential standards apply to sensitive receivers such as schools, hospitals, libraries, group care facilities, and convalescent homes. These uses may require special mitigation.

<sup>4</sup> Commercial standards apply to Mixed Use Districts

Source: City of Novato Municipal Code Section 19.22.070, Table 3-5

Novato Municipal Code Section 19.22.090 prohibits groundborne vibration that is perceptible without instruments to the average person along or beyond the property line of a subject parcel, and exempts vibrations from temporary construction, demolition, and vehicles that enter or leave the parcel.

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

## Construction

### Methodology

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) (2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise-sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation of 6 dBA per doubling of distance for stationary equipment.

For construction noise assessment, construction equipment can be considered to operate in two modes: stationary and mobile. As a rule, stationary equipment operates in a single location for one or more days at a time, with either fixed-power operation (e.g., pumps, generators, and compressors) or variable-power operation (e.g., pile drivers, rock drills, and pavement breakers). Mobile equipment moves around the construction site with power applied in cyclic fashion, such as bulldozers, graders, and loaders (FTA 2018). Noise impacts from stationary equipment are assessed from the center of the equipment, while noise impacts from mobile construction equipment are assessed from the center of the equipment activity area (e.g., construction site).

Variation in power imposes additional complexity in characterizing the noise source level from construction equipment. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle, or percent of operational time, of the activity to determine the  $L_{eq}$  of the operation (FTA 2018).

Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some may have high-impact noise levels. The maximum hourly  $L_{eq}$  of each phase is determined by combining the  $L_{eq}$  contributions from each piece of equipment used in that phase (FTA 2018). In typical construction projects, grading activities generate the highest noise levels because grading involves the largest equipment and covers the greatest area.

Project construction is estimated to occur over approximately 2 years 5 months. Construction phases would include excavation and grading, trenching and utilities, building construction, architectural coating, and paving of the project site. Construction would not require any blasting or pile driving. It is assumed that diesel engines would power all construction equipment. For assessment purposes, and to be conservative, the loudest hour has been used for assessment. Noise levels are based on a potential construction scenario of one bulldozer and one excavator operating simultaneously during the excavation and grading phase. At a distance of 190 feet (distance from the center of the construction area to the nearest receptor) one bulldozer and one excavator would generate a noise level of approximately 68.7 dBA  $L_{eq}$  (RCNM Calculations are included in Appendix L). The excavation and grading phase was the only phase modeled in RCNM because it would be the loudest construction phase.

### *Analysis*

The residential development located south of the project site is considered to be the nearest noise sensitive receiver to the project site for construction activities. The distance to the center of the construction area was used to determine construction noise levels, as throughout a typical construction day, equipment would operate in various locations on the site, averaging approximately 190 feet from the nearest residential property lines.

Construction activity would result in temporary increases in ambient noise levels in the project area on an intermittent basis and, as such, would expose surrounding sensitive receivers to increased noise levels. Increase in noise levels at off-site receivers during construction of the proposed project would be temporary in nature and would not generate continuously high noise levels, although occasional single-event disturbances from construction would be possible. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers.

As described above, at a distance of 190 feet, one bulldozer and one excavator would generate a noise level of approximately 68.7 dBA  $L_{eq}$ . Additional factors to consider are that the estimated construction noise level does not take into account that equipment would be dispersed in various areas of the site in both time and space. Therefore, the noise levels of 68.7 dBA  $L_{eq}$  at 190 feet represents a conservative estimate of construction noise.

The estimated construction noise of approximately 68.7 dBA  $L_{eq}$  at the nearest residential receivers would exceed the exterior noise level thresholds for residential land uses provided in the Novato Municipal Code (refer to Table 12). However, as stated in Section 19.22.070(B) of the Novato Municipal Code, authorized construction activities are exempt when construction occurs between 7:00 a.m. and 6:00 p.m. on weekdays, 10:00 a.m. and 5:00 p.m. on Saturdays. Construction is not permitted anytime on Sundays or federal holidays. As a standard condition of approval, project construction would occur within the allowed construction hours per the Novato Municipal Code Section 19.22.070. Therefore, construction noise would be compliant with the regulations in the Novato Municipal Code and impacts would be less than significant.

## Operation

The project would generate operational noise that would be typical of residential uses, including heating, ventilation, and air conditioning equipment, parking lot activities, and solid waste collection and recycling operations. Noises produced by the project would be similar in character to the existing noise environment associated with surrounding residential uses.

### *Off-site Traffic Noise*

The proposed project would generate new vehicle trips and increase traffic on area roadways. As noted in Section 17, *Transportation*, the project would add approximately 549 average daily trips (ADT) to nearby roadways. One main project entrance is proposed along State Access Road; therefore all of these new trips were added to State Access Road. The daily traffic volume along State Access Road is estimated at approximately 3,050 ADT.<sup>3</sup>

The project's contribution to roadway noise was evaluated through a calculation by comparing existing traffic noise levels to traffic noise levels with operation of the project. Generally, a doubling of traffic (i.e., 100 percent traffic increase) would increase noise levels by approximately 3 dBA, which is the human level of perception for an increase in noise (FTA 2018). Therefore, a 10 percent increase in the number of vehicles on a roadway would result in a noise increase of approximately 0.4 dBA. The 549 daily trips added by the project would constitute an approximately 18 percent increase in traffic volume along State Access Road, resulting in a noise increase of less than 0.8 dBA. Such an increase would be imperceptible and would not result in a substantial permanent increase in ambient noise levels.

### *On-site Parking Lot and Conversational Noise*

The project would include a small parking area along the northern project site boundary, comprising 15 parking spaces. The remainder of project site parking spaces are included in private garages throughout the site, and street parking along State Access Road. Noise associated with parking lot use would include vehicle circulation, engines, car alarms, door slams, and human voices. The maximum sound of a passing car at 15 miles per hour (mph) typically ranges from 52 to 62 dBA  $L_{max}$  at 50 feet (City of Novato 2018b). The noise generated during an engine start is similar. Door slams create lower noise levels.

The nearest noise sensitive receiver to the proposed on-site surface parking area is the proposed homeless service center located approximately 25 feet north, and the senior apartment building located approximately 140 feet southeast. Maximum instantaneous noise levels from parking lot noise would be approximately 62 dBA  $L_{max}$  at 50 feet and 68 at 25 feet, which would be below the City's 75 dBA  $L_{max}$  threshold for instantaneous noise. Parking lot noise would be less than significant.

### *On-site Mechanical Equipment Noise*

The project would include the addition of new rooftop HVAC equipment. HVAC equipment is a continuous noise source, and noise levels can reach up to 70 dBA  $L_{eq}$  at a distance of 15 feet from the source (Illingworth & Rodkin 2009). Rooftop equipment would be located as close as 30 feet from the project site's eastern property line.<sup>4</sup> One new HVAC unit per proposed dwelling unit would be constructed for a total of 75 HVAC units, with Building 301, located adjacent to the eastern

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<sup>3</sup> Calculated based on existing AM peak hour volumes provided in the TIS.

<sup>4</sup> Linear distance between rooftop HVAC units and the eastern property line. The senior apartment building is an additional approximately 25 feet from the project site's eastern property line.

project boundary, constructed with four rooftop HVAC units. The building design incorporates a 30-inch parapet on all rooftops, capable of reducing HVAC noise by at least 10 dBA. Assuming maximum exposure of noise from all four HVAC units on the proposed building along the eastern boundary, noise levels generated by HVAC equipment would be approximately 60.7 dBA  $L_{eq}$  at 30 feet. This analysis conservatively did not account for shielding of the new HVAC units. As a result, HVAC equipment noise would increase the existing ambient noise level of 52.3 dBA  $L_{eq}$  (NM 2, see Table 11) to approximately 60.7 dBA  $L_{eq}$ , or 57.7 dBA DNL, which is below the City’s 60 dBA DNL for residential areas (see Appendix M for summed noise calculations). Therefore, impacts related to HVAC equipment noise would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

The project does not include substantial vibration sources associated with operation. Thus, construction activities have the greatest potential to generate ground-borne vibration affecting nearby receivers, especially during grading of the project site.

Certain types of construction equipment can generate high levels of groundborne vibration. The FTA recommends vibration impact thresholds to determine whether groundborne vibration would be “excessive.” According to the FTA, groundborne vibration criteria for residential receptors are 72 VdB for frequent events, 75 VdB for occasional events, and 80 VdB for infrequent events (FTA 2018). In the absence of locally-established thresholds, these thresholds were used for this analysis. As construction activities would constitute a frequent event (during the construction phase), the 72 VdB threshold is the applicable standard used to assess groundborne vibration impacts to nearby residential receptors.

Construction of the proposed project would potentially utilize vibratory equipment including loaded trucks, bulldozers, and rollers throughout the duration of project construction. The nearest structure to the project site is the senior apartment building located approximately 25 feet to the east from project construction. As shown in Table 13, groundborne vibration from construction equipment would not exceed the 100 VdB threshold for fragile buildings. Additionally, because the senior apartment building to the east of the project site is a new building, it is not considered to be fragile.

**Table 13 Vibration Levels at Sensitive Receptors**

Equipment	VdB at 25 feet
Large bulldozer	87
Loaded trucks	86
Jackhammer	79
Vibratory Roller	94
Small bulldozer	58

Source: FTA 2018

The City of Novato Municipal Code, Section 19.22.090, states that vibration from temporary construction, demolition, and vehicles that enter and leave the subject parcel for construction are exempt from NMC requirements regarding perceptible groundborne vibration. The nearest sensitive

receivers would be approximately 190 feet on average from construction equipment. Vibration from equipment, such as the backhoe, would occur between 7:00 a.m. and 6:00 p.m. on weekdays, 10:00 a.m. and 5:00 p.m. on Saturdays, and at no time on Sundays or federal holidays (per standard conditions of approval limiting construction hours to those provided in Novato Municipal Code Section 19.22.070) and would not substantially disturb nearby residents or interfere with typical sleeping patterns. Therefore, vibration impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 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?*

San Rafael Airport, the nearest airport, is located approximately 3.0 miles south of the project site. Therefore, the project site is not located within two miles of a public airport, public use airport, or private airstrip. Therefore, the project would not expose people residing or working in the project area to excessive noise levels generated by aircraft activities. There would be no impact.

**NO IMPACT**

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# 14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project 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)?*

The proposed project would directly induce population growth in the area through the proposed construction of 75 dwelling units, which would result in approximately 197 new residents.<sup>5</sup> The City of Novato’s current population is approximately 54,115 people (DOF 2019). Plan Bay Area anticipates that the population of the City will grow to 56,295 by 2040 (ABAG 2020). The project’s increase falls within the growth projected by Plan Bay Area. Therefore, the proposed project would not induce directly nor indirectly substantial, unplanned population growth.

**LESS THAN SIGNIFICANT IMPACT**

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

The project site does not currently contain housing or habitable structures, and the project would not result in the removal of housing from the City. Therefore, the project would not displace existing people or housing and there would be no impact.

**NO IMPACT**

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<sup>5</sup> 75 units multiplied by 2.62 persons per unit (DOF 2019).

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# 15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. 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:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The City of Novato is served by the Novato Fire Protection District (NFPD). The NFPD provides fire protection services, emergency medical services, and fire and rescue response for vehicle and hazardous materials incidents. The City of Novato and the NFPD operate a joint Emergency Operations Center located in the NFPD Administrative office at 95 Rowland Way (City of Novato 2016).

The nearest fire station to the project site is located approximately 3 miles to the south, at Station 65 located at 5 Bolling Drive. Based on the 2009/2013 NFPD Strategic Plan, the district provides emergency services to the district from five stations, comprising 88 personnel (66 firefighters, 9 command staff and 13 administrative staff (NFPD 2009). Station 65 accommodates a 3-person fire district paramedic engine company and the 15-person Tam fire crew (Part of Marin County Fire Department) during wildland fire season. This location also provides office space for Novato Police, Marin County Sheriff, and California Highway Patrol. Per the City of Novato Emergency Operations Plan, the NFPD's goal is to maintain overall total response time of 8 minutes or less 90 percent of the time for all dispatch emergencies and have five fire stations with adequate equipment to meet

local needs (City of Novato 2019a). No future plans for expansion or renovation of NFPD facilities exist.

As discussed in Section 13, *Population and Housing*, the proposed project would involve the construction of new housing to accommodate 197 persons in 75 multi-family units (DOF 2019). Service demands associated with the project would be within the current service area and would be adequately served by NFPD. It is not anticipated that the project would increase response times for the NFPD, and would meet NFPD standards. The project would not require the construction of additional fire protection facilities, and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The City of Novato is served by the Novato Police Department (NPD), which provides professional and proactive street patrol, investigative services, traffic enforcement, narcotics enforcement, a 911 dispatch center, and emergency and preparedness services. The police department is staffed by approximately 84 staff, including 60 sworn personnel and a volunteer program (City of Novato 2019b).

The project site would be served by the NPD and receive auxiliary services from the Marin County Sheriff's Office and California Highway Patrol (City of Novato 2019). The nearest police station is located approximately 4.5 miles north of the project site at 909 Machin Avenue.

The project would add approximately 197 new residents at the project site, which would increase demand for police protection services. The Novato Police Department currently maintains a ratio of 1.10 sworn officers per 1,000 residents and does not have a standard for staffing levels (City of Novato 2013). Despite the addition of 197 new residents to the City of Novato's existing population of 55,655, this ratio would remain at 1.10 officers per 1,000 residents with the addition of the proposed project. Existing police service would not result in the need for new or expanded police facilities. Therefore, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

Public schools nearest the project site include Loma Verde Elementary School, 1.5 miles northwest of the project site; Novato Charter School and North Bay Children's Center, 0.5 mile southeast of the project site; and Hamilton Meadow Park School, 0.4 mile south of the project site. Wondernook Preschool (private) is approximately 0.2 mile south of the project site.

The project's additional residents would increase the number of students attending schools operated by the Novato Unified School District. The project would generate approximately 31 new students, per a generation rate of 0.41 students per housing unit (Schreder 2014). The applicant for the proposed project would be required to pay school development fees, as dictated by state law,

prior to the issuance of building permits. According to Government Code Section 65996 (3)(h), payment of such fees constitutes full mitigation of any school impacts under CEQA. Therefore, any impacts from the increase in school enrollment would be offset by the required payment of development fees. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

Project-related impacts to parks are discussed in Section 16, *Recreation*. The project would not require the construction of a new park or require the physical altering of an existing park or public facility. The project includes an area that will be improved as a park available for public use. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

Libraries for the City of Novato are provided by the Marin County Free Library District. The Marin County Free Library (MCFL) District also services unincorporated areas of Marin County as well as the Cities of Corte Madera, Ross, and Fairfax. There are a total of 11 facilities and one bookmobile in the District.

The project would add 197 new residents to the City of Novato, thereby increasing demand for library services. Plan Bay Area anticipates that the population of the City will grow to 56,295 by 2040. The 2007 Marin County Free Library Vision Plan identified the South Novato Branch as in need of additional space to accommodate its service population (City of Novato 2014). The number of residents introduced by the project is not a substantial percentage of the growth anticipated in Plan Bay Area and would not constitute significant or unplanned growth. Therefore, the impact related to the provision of library services under the proposed project would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- 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?*

Within one mile of the project site there are three parks: the Novato Skatepark, Loma Verde Preserve, South Hamilton Park, Hamilton Pool, Thigpen Sports Court, and Hamilton Wetlands. The project includes several on-site recreational facilities, including a family and large group social area with barbeques, counters, and picnic tables; a small group social area with barbeques, counters, picnic tables, social seating, and fire tables; an open lawn; a mini plaza with bench seating; and a botanical garden. These facilities are expected to satisfy the local recreational needs of the 197 new residents on the project site. The project also includes an on-site park which will be open to the general public as well as the residents, consisting of a community garden, bocce ball courts, kid’s play area, and meditation garden. Additionally, the City of Novato requires new residential developments to pay development fees for the purpose of maintaining existing parks and developing new parks to serve increased demand for recreational land, though it is not anticipated that new recreational facilities or parks would be required to satisfy increased demand from new residents. Therefore, the project would have a less than significant impact related to recreational facilities.

**LESS THAN SIGNIFICANT IMPACT**

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# 17 Transportation

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The road network surrounding the project site includes the following intersections:

- *Bel Marin Keys Boulevard/Nave Drive-US 101 North On-Ramp* is signalized with protected left-turn phasing on westbound Bel Marin Keys Boulevard and right-turn overlap phasing on the northbound and eastbound approaches. The US 101 northbound on-ramp forms the north leg of the intersection. The south leg of Nave Drive includes local traffic as well as traffic oriented to a set of northbound US 101 “hook ramps” to the south. Crosswalks with pedestrian signal heads are located on the north, south, and east intersection legs.
- *Nave Drive/North Hamilton Parkway* is a signalized “tee” intersection with protected left-turn phasing on the southbound approach. A bus pullout is located on southbound Nave Drive just to the south of the intersection, and crosswalks with pedestrian signal phasing exist on the east and south intersection legs.
- *Nave Drive/State Access Road* is stop-controlled on the westbound State Access Road approach. A crosswalk is provided on the north leg.
- *Nave Drive/Main Gate Road* is a signalized “tee” intersection with protected left-turn phasing on the southbound approach and a right-turn overlap phase on the westbound approach. A bus pullout is located on northbound Nave Drive just to the south of the intersection, and yellow school crosswalks with pedestrian signal phasing exist on the east and south intersection legs. Hamilton Elementary School is located on the southeast intersection corner.

Additionally, the following streets provide alternative modes of transportation in the form of pedestrian and bicycle facilities:

- *State Access Road.* Continuous sidewalk or path coverage exists on the north side of State Access Road between Nave Drive and the SMART pedestrian crossing. There is currently no

street lighting. Class II bike lanes (striped and signed lane for bicycle use only) are located along this roadway between Nave Drive and C Street.

- *Nave Drive.* Continuous sidewalks are provided on the east side of Nave Drive between Ignacio Boulevard and Alameda Del Prado (note that the US 101 freeway runs along much of the west side of Nave Drive). Class II bike lanes are located along this roadway between Ignacio Boulevard and the US 101 northbound ramp.
  - *SMART At-Grade Crossing.* An existing at-grade pedestrian and bicycle crossing links the west side of the SMART train tracks to the east side, connecting to the SMART multi-use pathway that runs along the east side of the rail corridor. The crossing includes railroad safety gates and is located at the transition between State Access Road and C Street.
  - *Hamilton Parkway.* Class II bike lanes are located on this roadway between Nave Drive and San Pablo Avenue.
  - *Main Gate Road.* Class III bike lanes (signing for shared use of travel lanes with motor vehicles and bicycles) are located on this roadway between Nave Drive and Palm Drive.
- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

### Level of Service

The City of Novato strives to maintain a level of service (LOS) D for signalized and four-way stop intersections, and LOS E for intersections with stop signs on side streets only. The project is anticipated to result in an estimated 549 daily trips, as shown in Table 14. As discussed in the Traffic Impact Study prepared by W-Trans (Appendix N), all study intersections for the project currently operate at LOS C or better under existing conditions, and LOS D or better under baseline and future conditions. The addition of 549 daily trips and up to 42 peak hour trips to study intersections would not cause local intersections to exceed the LOS standards set by the City under existing, baseline, or future conditions (refer to Tables 10, 11, and 12 in Appendix N for detailed information). The project’s trip generation would not substantially impact or decrease the existing LOS of nearby intersections.

**Table 14 Estimated Project Vehicle Trip Generation**

ITE Land Use	Daily Trips	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
220: Multi-family Housing (Low-Rise)	549	8	27	35	26	16	42

Source: Appendix N

### Pedestrian Facilities

Given that the site is located within approximately one-half mile of the Hamilton Marketplace shopping center, the South Novato Library, multiple schools, the Novato Skatepark, and the Novato Hamilton SMART Station, it is reasonable to assume that some project residents would want to walk and/or bike to reach their destinations. The existing continuous sidewalk on Nave Drive and the SMART multi-use path on the east side of the rail corridor connect to these key generators. The project’s site plan identifies sidewalks and pathways along the project frontage and within the project site, connecting the residences to each other and to the street, including an off-site sidewalk connection to existing facilities on Nave Drive. Additionally, street lighting would be installed along



the project frontage as part of the project. The Novato Village Senior Apartments project under construction immediately to the east of the proposed project has constructed sidewalks on the north side of State Access Road as well as a short asphalt pathway and dike segment connecting the State Access Road sidewalk to the SMART pedestrian crossing.

With the recently-completed pedestrian facilities and new facilities to be constructed by the project, continuous pedestrian facilities would link the project site with Nave Drive and existing bus stops, as well as the SMART station and surrounding areas accessed by the SMART path (Appendix N). The proposed project sidewalk would adequately connect to the existing pedestrian and transit facilities. The proposed streetlighting together with that currently under construction would adequately serve the surrounding area.

### **Bicycle Facilities**

In the project area, Class II bike lanes exist on State Access Road between Nave Drive and C Street. A segment of the SMART multi-use pathway exists along the east side of the rail corridor between North Hamilton Parkway and Main Gate Road, providing bicycle and pedestrian access to the Hamilton SMART station. The SMART multi-use path will ultimately run the length of the rail corridor on a combination of off- and on-street facilities. Existing bicycle facilities on Nave Drive and State Access Road, along with the planned future SMART Multi-Use Path, provide adequate access for bicyclists (Appendix N). Bicycle facilities serving the site are adequate to serve the project.

### **Transit Facilities**

Golden Gate Transit and Marin Transit provide fixed route bus service between Novato and neighboring communities to the north and south along US 101. Marin Transit Route 49 provides service within Novato and connects to the Marin Civic Center and downtown San Rafael Transit Center. Marin Transit Route 251 provides service to destinations throughout the City and has stops at Nave Drive/Main Gate Road and Nave Drive/Hamilton Parkway. Dial-a-ride, also known as paratransit, or door-to-door service, is available for those who are unable to independently use the transit system due to a physical or mental disability. Marin Access is designed to serve the needs of individuals with disabilities within Novato and the greater Marin County area (Appendix N).

The project site is located approximately 0.4-mile northwest of the Novato Hamilton SMART train station. The SMART commuter rail system currently includes 45 miles of rail corridor and twelve stations from the Sonoma County Airport to Larkspur. Upon completion, the passenger rail service will extend 70 miles from Cloverdale, at the north end of Sonoma County, to Larkspur where the Golden Gate Ferry connects Marin County with San Francisco. Along with commuter rail service, portions of a multi-use pathway have been constructed parallel to the rail corridor (Appendix N).

Existing transit routes are adequate to accommodate project-generated transit trips. Existing bus and SMART rail stops are within an acceptable walking distance of the site. Transit facilities serving the project site are adequate.

Development of the site would not impair roadways or conflict with planned pedestrian, bicycle, and transit facilities in the vicinity. This impact would be less than significant.

### **LESS THAN SIGNIFICANT IMPACT**

- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The City of Novato has not yet adopted a standard of significance for evaluating VMT; therefore, guidance provided by the California Governor’s Office of Planning and Research (OPR) in the publication Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory, 2018, was used. This guidance provides a VMT threshold of at least 15 percent below the existing citywide residential VMT per capita for residential projects.

OPR’s guidance and CEQA Guidelines Section 15064.3(b) also indicate:

Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact.

The proposed project is approximately 0.4 miles from the Hamilton SMART commuter rail station and would be accessible to the station by both walking and bicycling, so could reasonably be presumed to have a less than significant VMT impact per the above guidance.

Furthermore, the City of Novato has a baseline residential VMT of 17.0 miles per resident. Based on OPR guidance, a project generating a VMT that is 15 percent or more below this value, or 14.5 miles per resident, would have a less than significant VMT impact. The Transportation Authority of Marin Demand Model includes traffic analysis zones (TAZ) covering geographic areas throughout Marin County, including 1,400 Micro Analysis Zones (MAZ) within which VMT characteristics are estimated. The Hamilton Village project site is located within MAZ 5007, which has a projected VMT per capita of 13.7 miles. Because this per capita VMT ratio is below the OPR-based significance threshold of 14.5 miles, the project would be considered to have a less-than-significant VMT impact.

#### **LESS THAN SIGNIFICANT IMPACT**

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

Changes to the geometric design of the project site would be to improve efficiency, safety, and access. The project would be accessed by vehicles via one new private street connection on State Access Road, and the existing lane configuration on State Access Road would be modified to eliminate the existing center turn lane in order to allow for the installation of 24 parallel on-street parking spaces on the north side of the street. Sight distance along State Access Road was evaluated in Appendix N and was determined to be adequate per the Caltrans *Highway Design Manual* standards. However, if trees or large shrubs are planted at the bulb-outs along the project driveway to State Access Road, these features could block sight line views of oncoming vehicles. Mitigation Measure TRA-1, described below, would ensure that landscaping at the project driveway does not block sight lines, and reduces impact to a less than significant level.

#### **Mitigation Measure**

##### *TRA-1 Landscaping at Project Driveway*

The applicant shall ensure that landscaping within the bulb-outs at the project driveway shall consist of low-profile shrubs not exceeding three feet in height at maturity or trees with branches trimmed to a minimum of seven feet above the roadway surface. Prior to landscaping approval and installation, the applicant shall submit to the City Planning Division plans showing

this design and prior to occupancy, the City Planning Division shall check to ensure installation of landscaping adheres to these requirements.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

d. *Would the project result in inadequate emergency access?*

The project would be accessed by vehicles via one new private street connection on State Access Road. The street connection would be located approximately 500 feet east of the intersection of Nave Drive/State Access Road. The proposed access point would not conflict with any existing street connections on the opposite side of State Access Road. This driveway would be 24 feet in width, which is not adequate for the provision of street parking. As such, Mitigation Measure TRA-2 is provided below to ensure no vehicles use the driveway for parking. An emergency vehicle access road would be located at the northeast corner of the project site to Homeward Bound of Marin site, adjacent to the north, which would allow emergency vehicles to travel between the project site and Homeward Bound of Marin site. Emergency vehicle access would be adequate since fire trucks would be able to enter, exit, and maneuver through the site. Impacts would be less than significant with mitigation incorporated.

**Mitigation Measure**

*TRA-2 Project Driveway Curbs*

The applicant shall ensure that on-street parking within the project site driveway shall be prohibited and marked by red curbs. Prior to project construction, the applicant shall submit to the City Planning Division plans showing this design.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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# 18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or 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:

- |   |                          |                                     |                          |                          |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| <p>a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or</p>   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

California Government Code Section 65352.3 (adopted pursuant to the requirements of SB 18) also requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan and prior to making any decisions on zoning changes related to open space. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005), "*The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places.*"

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

The City of Novato prepared and mailed a notification letter to the NAHC-recommended list of tribes on November 11, 2019 pursuant to AB 52 and SB 18. A response was received from the Federated Indians of Graton Rancheria, requesting the inclusion of a mitigation measure to address the inadvertent discovery of cultural resources. As discussed in Section 5, *Cultural Resources*, there are no identified cultural resources on-site. However, because the project involves ground disturbance, there is the possibility of encountering undisturbed subsurface tribal cultural resources during construction of the project. Therefore, the project could result in potentially significant impacts to tribal cultural resources. Mitigation Measure TCR-1 is required to reduce impacts to a less than significant level.

## **Mitigation Measure**

### *TCR-1 Unanticipated Discovery of Tribal Cultural Resources*

If cultural resources of Native American origin are identified during construction of the project all earth-disturbing work in the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and an appropriate Native American representative, based on the nature of the find, is consulted. If the City determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the archeologist and the appropriate Native American tribal representative.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

# 19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

## Water

Water for the project would be provided by the North Marin Water District via existing utilities on and adjacent to the project site. Approximately 80 percent of the Novato water supply is sourced from the Russian River, and the remaining 20 percent comes from local runoff into Stafford Lake

that is treated at the North Marin Water District (NMWD) Stafford Water Treatment Plant (City of Novato 2014). Water supply is discussed further under criterion (b) below.

Novato's water supply system includes roughly 6,034 AF (acre feet) of imported water, a storage capacity of 37 million gallons and two water rights permits for diversion of surface water from Stafford Lake for the annual diversion of 8,400 AF (acre feet), bringing the total to 8,461 AF per year in 2015. The NMWD projects that future supplies would be sufficient to meet forecasted demand under normal year and multiple-dry year scenarios. The proposed project would increase demand for water above existing conditions on the project site. The project's estimated water demand would be approximately 3.12 million gallons per year for indoor use and 3.08 million gallons per year for outdoor use (Appendix B), or approximately 16,986 gallons per day, which is approximately 0.158 percent of Novato's water supply during a normal year and approximately 4.09 percent of Novato's water supply system surplus capacity by 2040. Existing supplies may be insufficient to meet forecasted demand for a single dry year scenario, however the NMWD contingency plan would allow for the reduction of water supplied by up to 50 percent if needed (NMWD 2014). New development would offset new water demand through the City's water connection rate structure, which funds the reclaimed water infrastructure. In addition, the project will include low-flow water fixtures and the use of recycled water, and would comply with the City's 1996 General Plan PF Policy 6 and NMWD Regulation No. 15, which require water-saving landscaping and related water conservation measures. Therefore, impacts would be less than significant.

## **Wastewater**

The Novato Sanitary District (NSD) provides wastewater collection, treatment, and disposal services for the Novato Community (NSD 2016). Wastewater is transported to the Novato Treatment Plant (NTP) where most of the water undergoes primary and secondary treatment and is either discharged to San Pablo Bay or used for pasture irrigation. The NTP underwent significant upgrades in 2010 and is designed for an average dry weather flow of 7.05 million gallons per day (MGD) and peak wet weather flow of 30.7 MGD. The NTP has remaining processing capacity of approximately 3.8 MGD for dry weather flow and 16.5 MGD for peak wet weather flow. The project's estimated wastewater generation would be approximately 2.6 million gallons per year (assuming water use is approximately 120 percent of wastewater generation), or approximately 7,140 gallons per day. This would represent approximately 0.18 percent of the NTP wastewater treatment plant remaining capacity for average dry weather flow and 0.04 percent remaining capacity for peak wet weather flow. Therefore, the NTP has capacity to meet the wastewater treatment demands that would be generated from the proposed project. However, NSD has indicated that the existing sewer trunk main, located within a sanitary sewer easement downstream from the project's proposed connection point, must be increased in size to support development in the project area according to the District's Collection System Master Plan. Accordingly, the project developer will pay a fee to the NSD to cover its proportionate share of this future upgrade project. Mitigation Measure USS-1 is recommended to ensure that impacts associated with project's incremental demand for increased sewer main capacity be reduced to a less than significant level.

## **Stormwater**

The project would be designed and engineered with drainage features appropriate to accommodate the needs of the proposed project. On-site stormwater generated by the proposed 3.3 acres of impervious surfaces will drain to the bioretention areas or the southeast corner of the site and undergo mechanical filtration at the connection to the existing 24-inch pipeline in State Access



Road. As discussed in Section 10, *Hydrology and Water Quality*, the project would not require an expansion of existing or new stormwater infrastructure aside from those features proposed within the project area. Pursuant to Novato Municipal Code Section 7-5, owners of real property in the City are required to pay an annual fee to the City for clean stormwater activities, which include capital improvements to the City's storm drainage system. The proposed project would not require the construction of new off-site stormwater drainage facilities or expansion of existing facilities. Impacts would be less than significant.

### **Electricity, Natural Gas, and Telecommunications**

The project would not connect to or utilize natural gas as a source of energy and includes solar panels on building roofs. A significant impact to electricity and telecommunications facilities may occur if a project's demand for these services exceeds the capacity of local providers. PG&E provides electric utilities to the project site, and Comcast and AT&T provide telecommunications services at the discretion of the project residents. Telecommunications are generally available in the project area, and facility upgrades would not likely be necessary.

As described in Section 6, *Energy*, the project would require approximately 0.08 MW of electricity. The project does not include the use of natural gas appliances, as all installed appliances would be powered by electricity provided by PG&E. PG&E maintains power lines along the eastern portion of the project site. The substation that powers lines in the vicinity of the project site has a capacity of 29.7 megawatts (MW) and a peak load of 12.3 MW, with a remaining capacity of 17.4 MW (PG&E 2020). The project would require approximately 0.08 MW, approximately 0.4 percent of the remaining capacity of the PG&E substation that serves the project site. Accordingly, the project would be accommodated adequately by existing electricity and telecommunication facilities and would not require improvements to existing facilities, or the provision of new facilities, that would cause significant environmental effects. This impact would be less than significant.

### **Mitigation Measure**

#### *USS-1 Payment of Assessment Fee and Connection Charges*

Prior to construction activities commencing, the applicant shall pay a fair share fee to the NSD for the necessary capacity improvement of upsizing 1,180 feet of pipe from 15-inches in diameter to 18-inches in diameter pursuant to the District's adopted Collection System Master Plan.

With incorporation of Mitigation Measure USS-1, impacts would be less than significant.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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

As described above under criterion (a), the City of Novato is serviced by the NMWD, which provides potable and recycled water service to the City, the surrounding unincorporated areas. Approximately 80 percent of the Novato water supply comes from the Russian River through the NMWD wholesale water supplier, the Sonoma County Water Agency. The remaining 20 percent comes from local runoff into Stafford Lake. The District has no local, developed groundwater sources (NMWD 2016).

The NMWD’s 2015 Urban Water Management Plan (UWMP) addresses the District’s water system and includes descriptions of water supply sources, water use, comparisons of supply and demand during dry years, etc. Per the UWMP, normal year, single dry year, and multiple dry year supply and demand comparisons are shown below in Table 15.

**Table 15 NMWD Water Supply and Demand in Acre-Feet for Normal, Single Dry, and Multiple Dry Year**

	Year				
	2020	2025	2030	2035	2040 (Opt)
<b>Normal Year</b>					
Supply Totals	12,067	11,828	11,531	11,271	11,046
Demand Totals	10,662	10,708	10,713	10,805	10,930
Difference	1,405	1,120	818	466	116
<b>Single Dry Year</b>					
Supply Totals	12,067	10,459	10,034	9,647	9,339
Demand Totals	10,662	10,708	10,713	10,805	10,930
Difference	1,405	(249)	(679)	(1,158)	(1,591)
<b>Multiple Dry Years</b>					
	Year				
	2020	2025	2030	2035	2040 (Opt)
<b>First Year</b>					
Supply Totals	12,067	11,828	11,531	11,271	11,046
Demand Totals	10,662	10,708	10,713	10,805	10,930
Difference	1,405	1,120	818	466	116
<b>Second Year</b>					
Supply Totals	12,067	11,828	11,531	11,271	11,046
Demand Totals	10,662	10,708	10,713	10,805	10,930
Difference	1,405	1,120	818	466	116
<b>Third Year</b>					
Supply Totals	12,067	11,828	11,531	11,271	11,046
Demand Totals	10,662	10,708	10,713	10,805	10,930
Difference	1,405	1,120	818	466	116

Notes: Parentheses denote a negative number  
 Source: NMWD 2016

Table 15 shows that the District’s projected water supplies are sufficient to meet projected demands during normal and multiple dry year conditions. During a single dry year scenario, the District would not have adequate supplies and would need to impose mandatory water use restrictions (NMWD 2016).

NMWD currently serves the project site through existing utilities and services would continue during project operation. The project would include 75 multi-family units and applicable landscaping on the project site including a small community garden. The project’s estimated water demand would be approximately 16,986 gallons per day, or 6.2 million gallons per year (Appendix B).

The project's water demand would represent less than 0.16 percent of projected available NMWD supply. Based on the project's incremental contribution to future demand, new sources of water supply would not be required to meet project water needs. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

As described in response to question (a), above, the project's estimated wastewater generation would be approximately 2.6 million gallons per year (assuming water use is approximately 120 percent of wastewater generation), or approximately 7,140 gallons per day. This would represent approximately 0.21 percent of the NTP wastewater treatment plant remaining capacity for average dry weather flow and 0.04 percent remaining capacity for peak wet weather flow. Therefore, the NTP has capacity to meet the wastewater treatment demands that would be generated from the proposed project.

As discussed under criterion (a), NSD has indicated that the existing sewer trunk main, located within a sanitary sewer easement downstream from the project's proposed connection point, has insufficient capacity to serve the proposed project, which would be potentially significant. Mitigation USS-1, noted above, would reduce impacts to a less than significant level by requiring the project developer to pay a fee to NSD to cover the project's proportionate share of this future upgrade project as listed in the District's Collection System Master Plan.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Solid waste from the City of Novato is taken to the Redwood Landfill and Recycling Center located north of the Novato city limit. The landfill is permitted to accept 2,310 tons of material per day and has a design capacity of about 26 million cubic yards. The estimated closure date of the landfill is 2036 (City of Novato 2016).

The Novato Sanitary District and its franchise service provider Recology provide solid waste and recycling disposal services in the project vicinity for the provision of trash, recycling and organics services to the proposed project. In 2011, NSD amended its franchise agreement to make major progress toward achieving zero waste goals. The contract requires Recology (the recycling, composting, and garbage collection provider) to achieve an 80 percent diversion of waste to recycling by 2025 (NSD 2020).

Assuming 2.62 residents per dwelling unit (DOF 2019), the proposed project would add an estimated 197 residents. Using an estimated solid waste generation rate provided by CalRecycle for residential land uses, the proposed project would result in an increase of approximately 917 pounds of solid waste per day, or 167 tons per year (using a rate of 12.23 pounds per household per day) (CalRecycle 2020c). This represents approximately 0.02 percent of the permitted daily throughput of

**Hamilton Village Housing Project**

the Redwood Landfill and Recycling Center. This does not represent a substantial increase in waste and the project would not be served by a landfill without sufficient capacity. The project would comply with state and local statues and regulations related to solid waste regarding increased recycling efforts per Assembly Bill 341 and the City's 1996 General Plan EN Policy 39 by providing recycling services to residents. Therefore, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

## 20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

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

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?*

**Hamilton Village Housing Project**

- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project site is adjacent to existing urban development in Novato and it is classified as a Local Responsibility Area, where responsibility for fire protection falls on the NFPD, rather than the state or federal government. The project site does not fall within in a very high fire hazard severity zone (VHFHSZ). The nearest VHFHSZ is located approximately seven miles southwest of the site (CAL FIRE 2007). The project site is not located in the WUI, an area subject to high fire hazard, as mapped by the NFPD. Furthermore, the proposed building area of project site is generally flat and its topography would not enhance the spread of wildfire. The project would not involve the construction of new utility infrastructure that could exacerbate fire risk, such as overhead power lines, or roadways. Emergency vehicle access would be provided through gates located on the north, east and south boundaries of the project site. Therefore, the project would not expose people or structures to a significant risk involving wildfire, nor would it exacerbate the risk of wildfire. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Does the project:

- |  |                          |                                     |                          |                          |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|
| <p>a. 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?</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p>   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p>  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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?*

As discussed in this Initial Study, the project would have no impact, a less than significant impact, or a less than significant impact after mitigation with respect to all environmental issues. Regarding biological resources, the project site has been disturbed by previous development. Therefore, there is low potential for special-status species to occur, except for nesting birds. Implementation of Mitigation Measures BIO-1 would reduce potential impacts to nesting birds to a less-than-significant level by requiring pre-construction surveys to determine the presence of nesting birds and implementing necessary avoidance measures if they are found. No historical or archeological

resources are known to occur at the project site, as stated in Section 5, *Cultural Resources*. Potential impacts to unknown prehistoric archeological sites in the vicinity of the project site would be reduced to a less-than-significant level with implementation of Mitigation Measure CUL-1, which would require notification and appropriate protective measures in the event of an unanticipated discovery of cultural resources.

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- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

The proposed project was determined to have no impact in comparison to existing conditions for Agriculture and Forestry Resources and Mineral Resources. Therefore, as there would be no direct or indirect impacts, the proposed project would not contribute to cumulative impacts to these issue areas.

For all other issue areas, the proposed project would have either direct or indirect impacts that have been determined to be less than significant, or less than significant with mitigation incorporated. The project would involve the construction of residential development on a site that is currently vacant. The project would not adversely affect biological, cultural, or other physical resources outside of the project site. Other impacts, such as air quality, noise, transportation, GHG emissions, and utilities impacts would be minor and would not be cumulatively considerable. Construction of the project is not anticipated to overlap with nearby proposed projects, including the senior apartment buildings to the east, for which construction has been completed, and the Homeward Bound project to the north, which is anticipated to start construction after the project is operational. Therefore, construction equipment exhaust emissions, GHG emissions, noise would not overlap during construction. The effects of the project would not combine with impacts from other projects in the vicinity to result in a significant cumulative impact.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Effects on human beings are generally associated with impacts related to issue areas such as air quality, geology and soils, hazards and hazardous materials, noise, and transportation. As discussed in this Initial Study, the project would have a less than significant impact or a less than significant impact with mitigation in each of these resource areas. Therefore, the project would not cause substantial adverse effects on human beings, either directly or indirectly and impacts associated with the project would be less than significant with mitigation incorporated.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**



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