ATTACHMENT V

Initial Study

Ersted Residential Project

Prepared by

HAYWARD

In Consultation with

DAVID J. POWERS & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

August 2018

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ACRONYMS AND ABBREVIATIONS

CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
EIR	Environmental Impact Report
MND	Mitigated Negative Declaration
NOD	Notice of Determination
RWQCB	Regional Water Quality Control Board
USFWS	United States Fish and Wildlife Service

SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of Hayward, as the Lead Agency, has prepared this Initial Study for the Ersted Residential Project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of Hayward, California.

The project proposes to construct 59 townhomes on the 17.23-acre site. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 30-day public review and comment period. During this period, the Initial Study will be available to local, state, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 30-day public review period should be sent to:

Damon Golubics
Senior Planner
City of Hayward – Department of Development Services
Damon.Golubics@hayward-ca.gov
(510) 588 – 4200

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City of Hayward will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) for the project at a regularly scheduled meeting. The City shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 NOTICE OF DETERMINATION

If the project is approved, the City of Hayward will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Ersted Residential Project

2.2 LEAD AGENCY CONTACT

Damon Golubics, Senior Planner
Department of Development Services
City of Hayward

2.3 PROJECT APPLICANT

Chris Conklin
Grupe Investment Company, Inc.
3255 West March Lane, 4th Floor
Stockton Ca, 95219

2.4 PROJECT LOCATION

No Address, south side of Tennyson Road extension, approximately 400 feet east of Mission Blvd. Hayward, CA 94544.

2.5 ASSESSOR'S PARCEL NUMBER

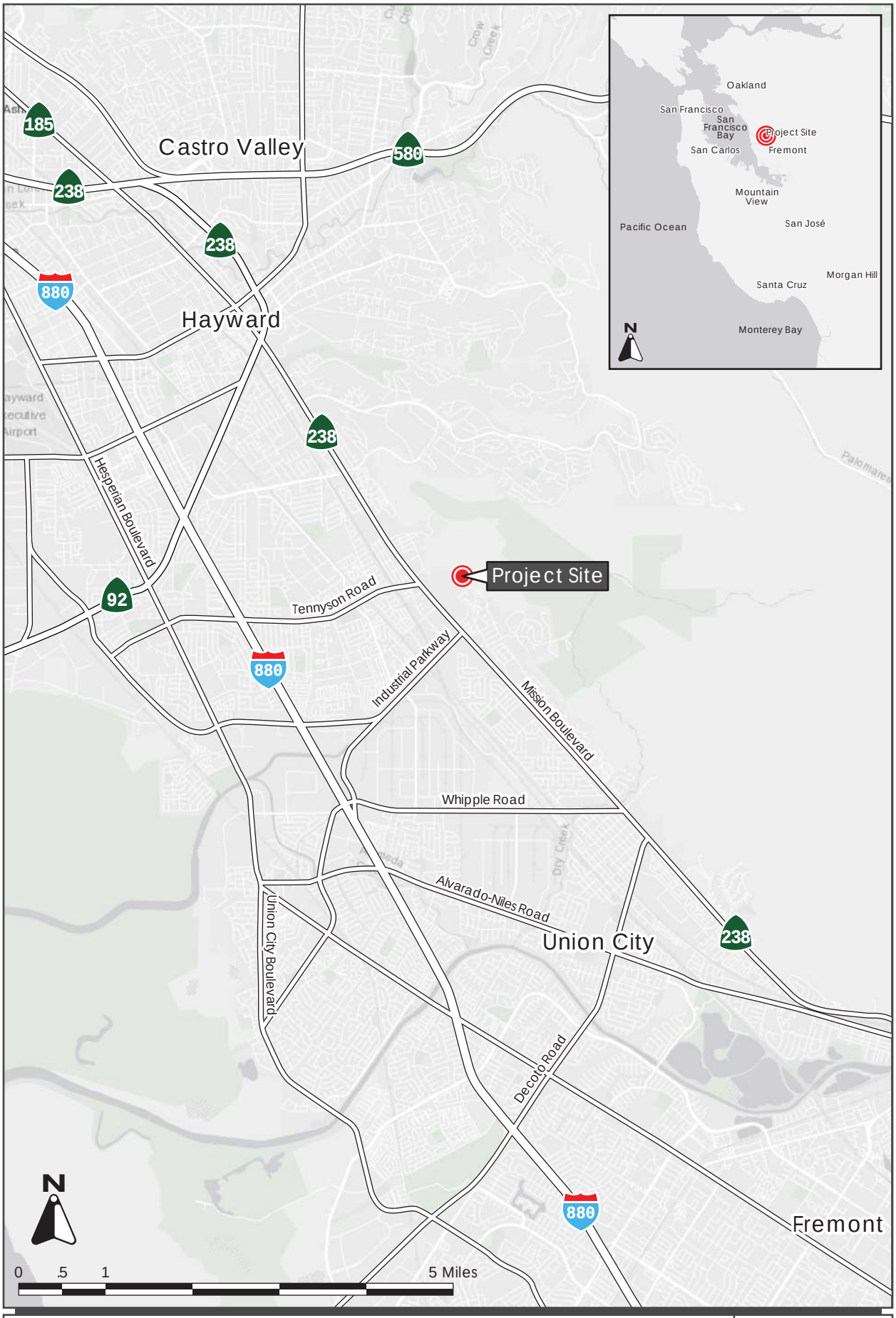
APN: 078C-0461-001, -013

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

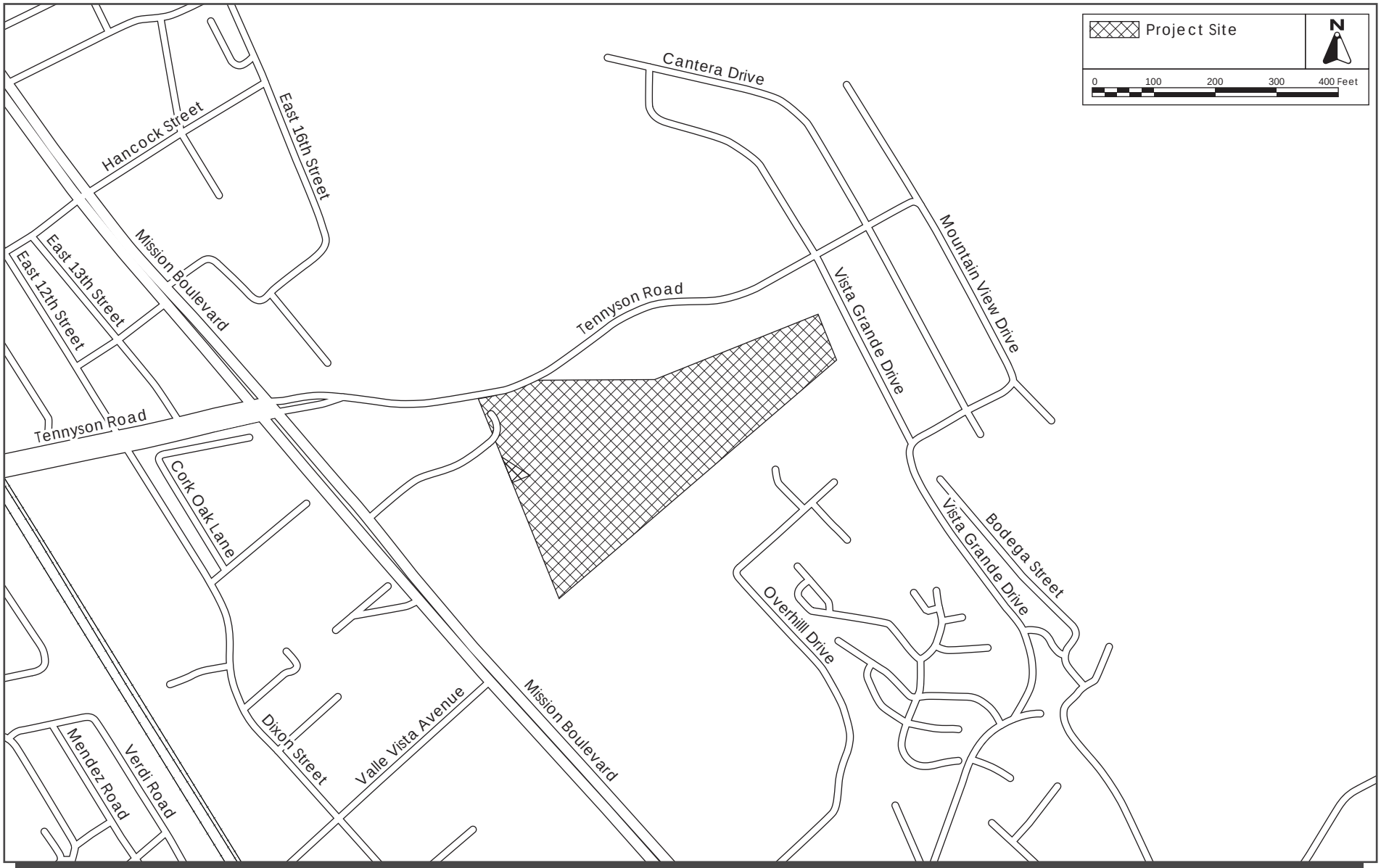
General Plan:	Medium Density Residential (RM) & Limited Open Space (LOS)
Zoning:	Planned Development (PD) & Agriculture (AB10A)

2.7 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

- Planned Development Rezoning
- Tentative Map and Final Map to subdivide the existing parcels
- Design Review
- Grading Permit
- Building Permit
- U.S. Army Corps of Engineers 404 Permit
- Regional Water Quality Control Board 401 Permit
- California Department of Fish and Wildlife Streambed Alteration Agreement



REGIONAL MAP | FIGURE 2.0-1



VICINITY MAP

FIGURE 2.0-2

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 2.0-3

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROPOSED PROJECT

The approximately 17.23-acre project site is located on the south side of the Tennyson Road extension east of Mission Boulevard in the City of Hayward, on an undeveloped hillside downslope approximately 1,000 feet from the La Vista Residential development. The project proposes to subdivide approximately 5.4 acres of the larger site into 59 single-family townhomes, associated private streets and driveways, landscaped areas, and approximately 25,339 square feet of group open space area for residents. Parcels L and M, as shown in Figure 3.0-2 (approximately 11.46 -acres in total) would be dedicated as open space and annexed into the existing Geologic Hazard Abatement District (GHAD) for ownership and long-term maintenance.[1] The area defined for Tennyson Road would be dedicated to the City of Hayward for public right of way.[2]

The proposed lots would range in size from 1,331 square feet to 2,299 square feet and residences would range in size from approximately 1,331 square feet to 2,592 square feet.

3.1.1 Building Heights and Setbacks

Conceptual elevations for the proposed residences show up to three stories in height, reaching a maximum height of 40 feet at the roof line (see Figure 3.0-3). The townhomes would be grouped in clusters of two and three attached homes. The residences would be set back approximately 0 feet on the sides and 10 feet from the backyards of abutting residences. The setbacks for residences along the outer site boundary would be much larger. Future view orientations of the townhomes would be varied, with views oriented to the west, the southernmost set of townhomes facing south or southwest, the center set of townhomes oriented northwest or southeast, and the northerly set oriented north or northeast.

3.1.2 Site Access and Parking

A private roadway, approximately 26 feet wide would provide vehicular and pedestrian access to the site from Tennyson Road. The proposed residences would be constructed with two-car garages to provide parking for residents of the site. In addition, guest parking would also be available along the private internal roadways.

The project would construct a bridge or culvert crossing of the wetland area south of the Tennyson Road extension, to provide access to the residences.[3]

3.1.3 Landscaping

Due to the slopes on the site, the lot sizes have been limited to retain the natural hillside character with smaller formal landscaping areas provided due to the slopes on the site. Landscaping areas would be installed along the private street and along the townhomes that front the street. Project

[1] Kyle Masters. *The Grupe Company.* Personal Communication. July 25, 2018.
[2] Ibid.
[3] At the time of the preparation of this Initial Study, the project design has not been finalized for construction of a bridge or a culvert spanning the wetland area by the Tennyson Road extension connection. This Initial Study evaluates impacts related to both construction of a bridge and a culvert.

implementation would not result in the removal of trees on-site. The project would install a 0.34-acre stormwater quality control basin adjacent to the project entrance on Tennyson Road.

3.1.4 Demolition and Grading

There would be no demolition on site since the area is currently undeveloped.

The project would require extensive grading for building pads, roadway constructions, and retaining walls (see Figure 3.0-4). The project would require an estimated 32,700 cubic yards of cut to be relocated uphill of the development in three separate locations, which would remain undeveloped.

Retaining walls are proposed between the eastern and western portions of the development and west of the development, ranging up to six feet tall. The use of the retaining walls is proposed to ensure slope stability for the residential development.

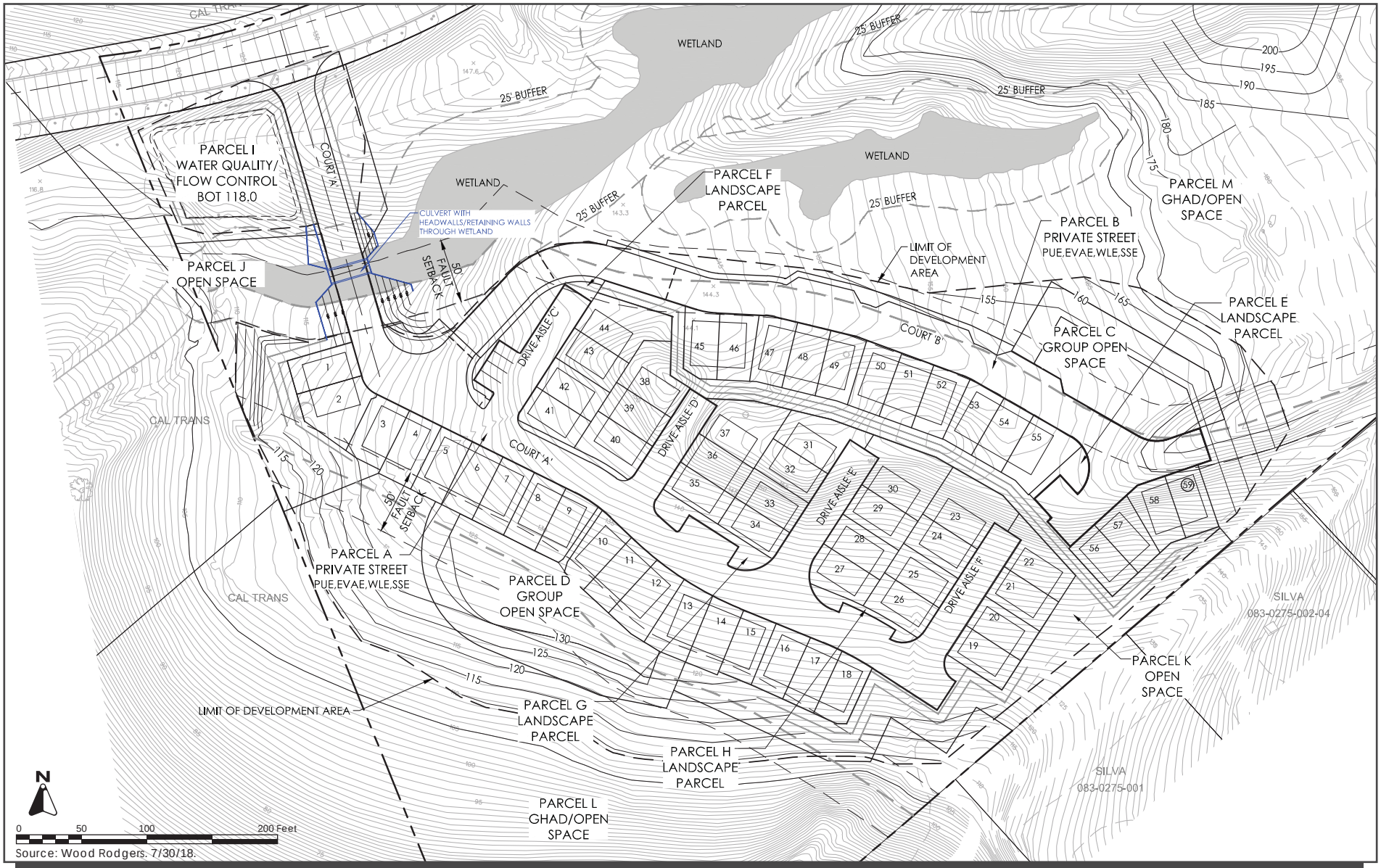
3.1.5 Utility Improvements

The project proposes to connect to existing sanitary sewer and water lines in Tennyson Road.[4] All on-site sanitary sewer and water lines will be publicly owned and maintained by the City of Hayward. A separate irrigation meter and service will be furnished for common area landscaping.

3.1.6 Drainage Improvements

The project proposes to construct common open space areas that are landscaped. Where feasible, roof impervious areas will direct stormwater flows directly to vegetated areas located on each lot. Lots and directly discharged roof leaders will drain to the private streets and be collected into inlets along the roadway. The inlets will be connected to an on-site storm drain pipe system which will convey all site drainage to a bio-retention basin to be located northwest of the proposed homes adjacent to Tennyson Road. The basin will have a discharge pipe which will connect to the existing public storm drain within Tennyson Road. The on-site storm drain shall be private, owned and maintained by the Home Owners Association.

[4] At the time of the preparation of this Initial Study, a second water line to service the project site is proposed however, the final alignment has not been confirmed. The Initial Study evaluates the worst-case scenario for the proposed water line alignment which would assume an alignment through mature trees on the adjacent property.



Source: Wood Rodgers. 7/30/18.

PARTIAL SITE PLAN

FIGURE 3.0-1

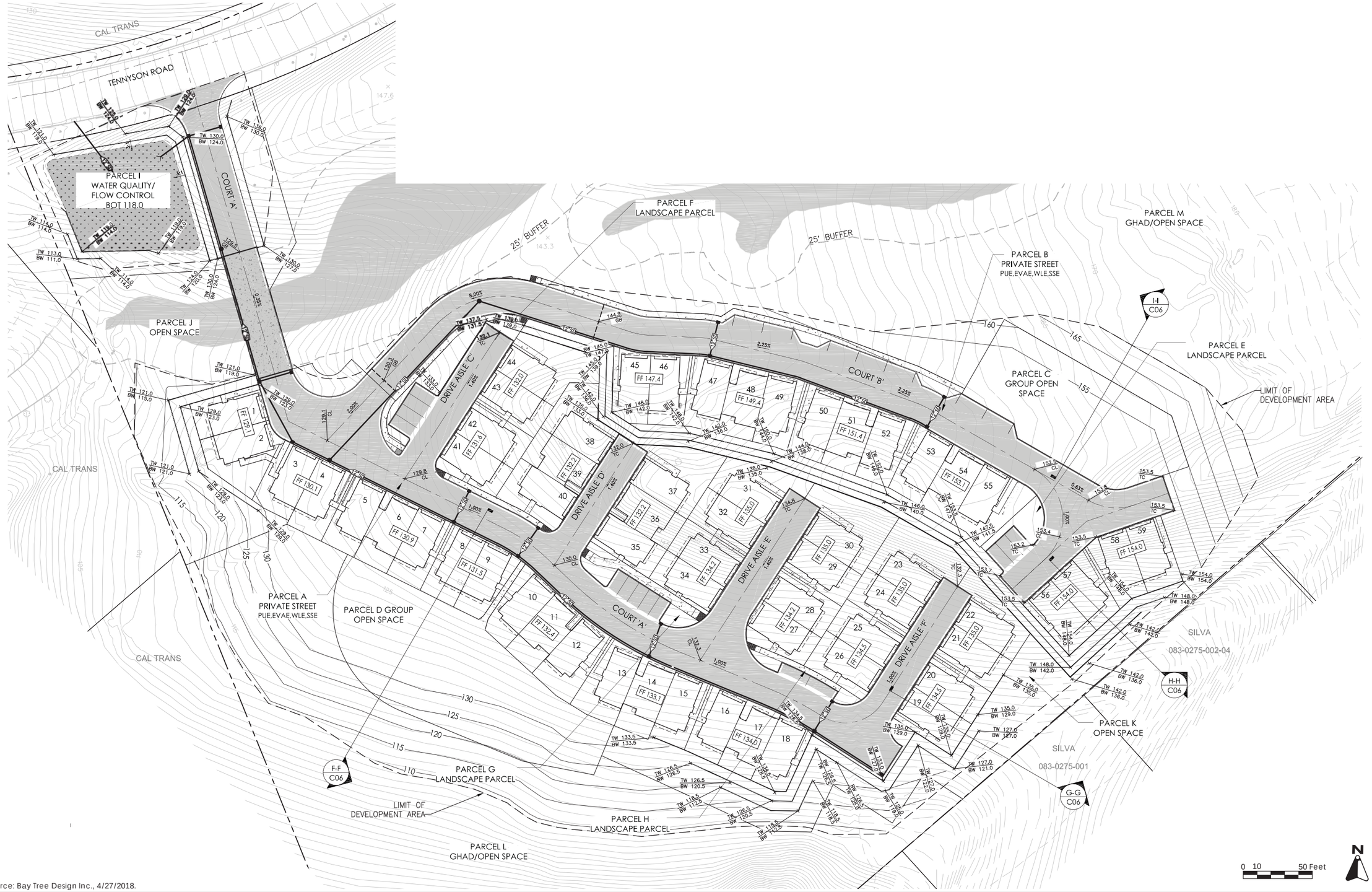
Source: Wood Rodgers. 7/30/18.

TOTAL SITE PLAN

FIGURE 3.0-2

Source: Wood Rodgers. 12/4/17.

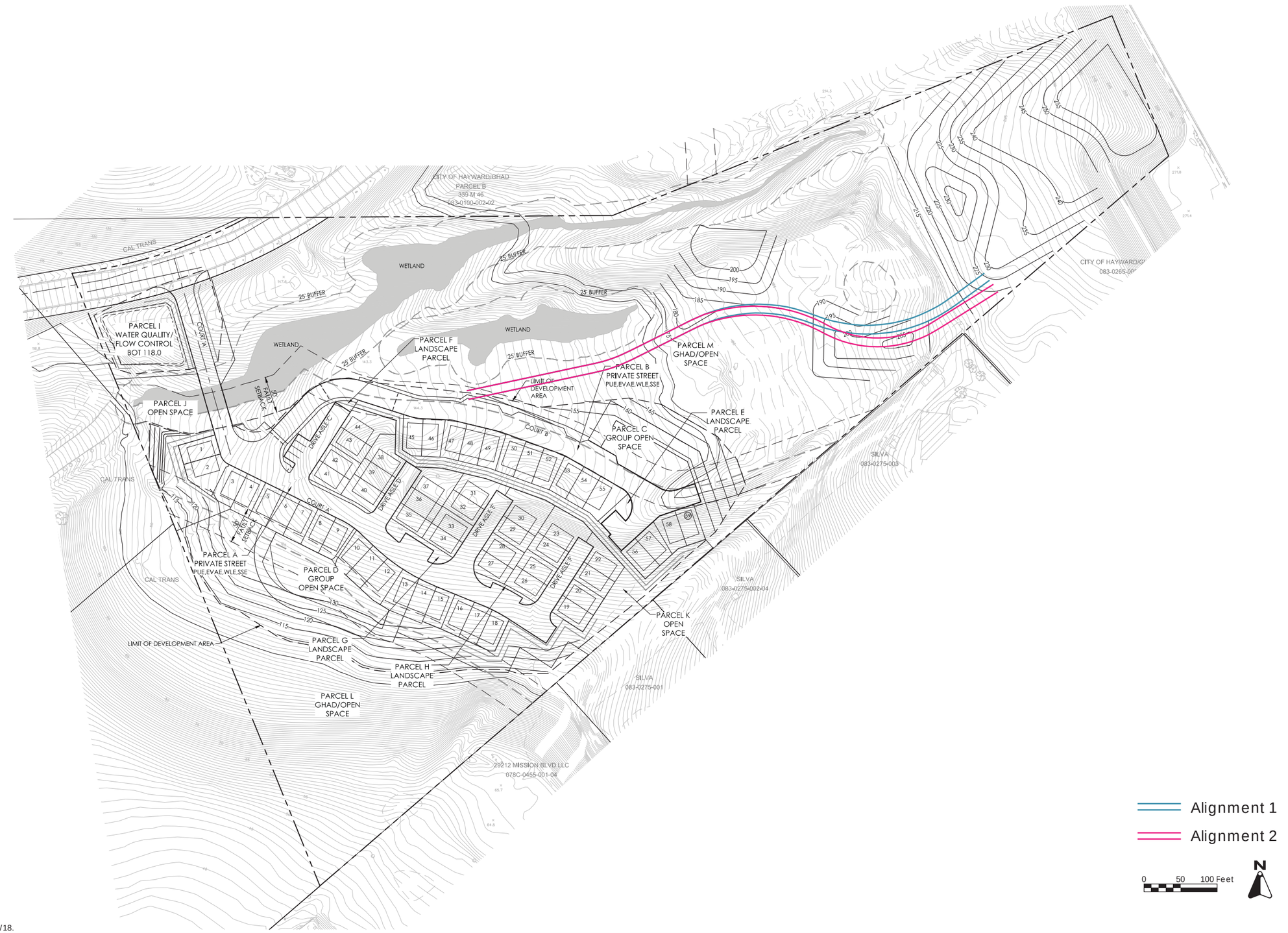
CONCEPTUAL ELEVATION (TRIPLEX) | FIGURE 3.0-3



Source: Bay Tree Design Inc., 4/27/2018.

DEVELOPMENT AREA GRADING PLAN

FIGURE 3.0-4



Source: Wood Rodgers. 4/27/18.

TOTAL AREA GRADING PLAN | FIGURE 3.0-5

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

4.1	Aesthetics	4.10	Land Use and Planning
4.2	Agricultural and Forestry Resources	4.11	Mineral Resources
4.3	Air Quality	4.12	Noise and Vibration
4.4	Biological Resources	4.13	Population and Housing
4.5	Cultural Resources	4.14	Public Services
4.6	Geology and Soils	4.15	Recreation
4.7	Greenhouse Gas Emissions	4.16	Transportation/Traffic
4.8	Hazards and Hazardous Materials	4.17	Utilities and Service Systems
4.9	Hydrology and Water Quality	4.18	Mandatory Findings of Significance

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Checklist and Discussion of Impacts** – This subsection includes a checklist for determining potential impacts and discusses the project's environmental impact as it relates to the checklist questions. For significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered using an alphanumeric system that identifies the environmental issue. For example, **Impact HAZ-1** denotes the first potentially significant impact discussed in the Hazards and Hazardous Materials section. Mitigation measures are also numbered to correspond to the impact they address. For example, **MM NOI-2.3** refers to the third mitigation measure for the second impact in the Noise section.
- **Conclusion** – This subsection provides a summary of the project's impacts on the resource.

Important Note to the Reader

The California Supreme Court in a December 2015 opinion [*California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal. 4th 369 (No. S 213478)] confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. Therefore, the evaluation of the significance of project impacts under CEQA in the following sections focuses on impacts of the project on the environment, including whether a project may exacerbate existing environmental hazards.

The City of Hayward currently has policies that address existing conditions (e.g., air quality, noise, and hazards) affecting a proposed project, which are also addressed in this section. This is consistent

with one of the primary objectives of CEQA and this document, which is to provide objective information to decision-makers and the public regarding a project as a whole. The CEQA Guidelines and the courts are clear that a CEQA document (e.g., EIR or Initial Study) can include information of interest even if such information is not an "environmental impact" as defined by CEQA.

Therefore, where applicable, in addition to describing the impacts of the project on the environment, this chapter will discuss Planning Considerations that relate to policies pertaining to existing conditions. Such examples include, but are not limited to, locating a project near sources of air emissions that can pose a health risk, in a floodplain, in a geologic hazard zone, in a high noise environment, or on/adjacent to sites involving hazardous substances.

4.1 AESTHETICS

The following discussion is based, in part, on photo simulations provided by *Bassenian Lagoni* in May 2018. The photo simulations prepared for the project are included in this Initial Study as Figures 4.1-1 – 4.

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

City of Hayward General Plan

The Land Use and Community Character Element contains policies to preserve scenic views of the City. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

Policies	Description
Policy LU-1.2	The City shall maintain and implement commercial, residential, industrial, and hillside design guidelines to ensure that future development complies with General Plan goals and policies.
Policy LU-7.2	The City shall discourage the placement of homes and structures near ridgelines to maintain natural open space and preserve views. If ridgeline development cannot be avoided, the City shall require grading, building, and landscaping designs that mitigate visual impacts and blend the development with the natural features of the hillside.
Policy LU-7.3	The City shall require curvilinear street patterns in hillside areas to respect natural topography and minimize site grading.
Policy LU-7.4	The City shall encourage narrow streets in hillside areas. Streets should be designed with soft shoulders and drainage swales (rather than sidewalks with curbs and gutters) to maintain the rural character of hillside areas and minimize grading impacts. The City shall prohibit parking along narrow street shoulders to provide space for residents to walk and ride horses.
Policy LU-7.5	The City shall encourage the clustering of residential units on hillsides to preserve sensitive habitats and scenic resources as natural open space. Sensitive areas and scenic resources include woodlands, streams and riparian corridors, mature trees, ridgelines, and rock outcroppings.
Policy NR-8.1	The City shall regulate the design of streets, sidewalks, cluster home development, architecture, site design, grading, landscaping, utilities, and signage in hillside areas to protect aesthetics, natural topography, and views of surrounding open space through the continued Hillside Design and Urban/Wildland Interface Guidelines.
Policy NR-8.2	The City shall require low-impact site grading, soils repair, foundation design, and other construction methods to be used on new residential structures and roadways above 250 feet in elevation to protect aesthetics, natural topography, and views of hillsides and surrounding open space.
Policy NR-8.4	The City shall maintain and implement residential and non-residential design guidelines in order to protect existing views of the Bay shoreline.

4.1.1.2 *Existing Conditions*

The project site is a grassy, undeveloped hillside downslope of the La Vista residential development currently under construction west of Garin Regional Park. The site was formerly used as a source of

soil for the La Vista Quarry. A former quarry access road lies near the site's westerly edge. Single-family homes are located south and southeast of the site's southeasterly border, and are set back from the large mature trees.

4.1.1.3 *Surrounding Visual Character*

The project site is bordered by Tennyson Road to the north, vacant Caltrans right of way downslope to the west between the site and Mission Boulevard, and existing residences to the south. Single-family homes in the La Vista development, as part of the full build-out of the Garin District Planning Area, are in the process of being constructed east of the site. The Garin Regional Space is east of the La Vista development. The approximately 50 acres of undeveloped hillside north of the Tennyson Road extension is the site of the future La Vista Quarry Park. For views of the project site and surrounding area, refer to Photos 1 – 7.

4.1.1.4 *Scenic Views*

The hillside of the project site rises above the surrounding development to the west and can be seen from various locations in the surrounding neighborhoods and future neighborhoods, as planned for in the Garin District Planning Area. Views of the San Francisco Bay and the East Bay Hills are present from the project site. Numerous mature trees are located along the site's southern border, adjacent to the rural development of three single family homes. The site has limited visibility from Garin Regional Park, located east and northeast of the site.

Photo 1: View from southern portion of the project site, facing west.

Photo 2: View of future La Vista regional park, adjacent to the site across Tennyson Road extension.

PHOTOS	1 AND 2

Photo 3: View of proposed grading area from La Vista development.

Photo 4: View of Tennyson Road extension, adjacent to project site. Project site not visible.

PHOTOS	3 AND 4

Photo 5: View of project site facing south.

4.1.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	1,2
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒	1,2
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐	1,2
d) Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	☐	☐	☒	☐	1,2

4.1.3 Impact Discussion

a) Have a substantial adverse effect on a scenic vista?

According to the Hayward General Plan, there are no designated scenic vistas in the vicinity of the project and the project is not located within or visible from a designated scenic vista. Due to intervening topography and the new La Vista residential development, the site is not prominently visible from Garin Park. Therefore, the project would not have an impact on scenic vistas. **(No Impact)**

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The project site is not located within a state scenic highway, nor does it contribute to views visible from a state scenic highway. Therefore, the construction of the project would not have impacts on state scenic highways.

There are no rock outcrops or historic buildings on-site. Therefore, the construction of the project would not have impacts on rock outcroppings or historic buildings.

The mature Eucalyptus trees on the southern project boundary would be retained as part of site development. Project implementation therefore, would not damage scenic resources on-site. **(No Impact)**

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

The project would place attached single-family development in clusters of two and three unit townhomes on an undeveloped site consisting mainly of gently sloping grasslands. Properties to the east, west, and south of the site are already developed or are under construction with commercial and residential uses, respectively. Photo renderings of the proposed project are provided in Figure 4.4-1, -2, -3, and -4. Figure 4.4-1 illustrates the project site from the Mission Boulevard and Valle Vista intersection. Figure 4.4-2 illustrates the site from a birds-eye view facing west, including the site with the cut and fill proposed. Figure 4.1-3 illustrates the site from a birds-eye view facing east, including views of the site with the cut and fill proposed. Figure 4.1-4 illustrates the site from the Mission Boulevard and Tennyson Road intersection.

The project includes certain structures, some of which would be visible from nearby existing neighborhoods and roads. Although the proposed development would convert 5.4-acres of the 17-acre undeveloped hillside site to single-family residences, grading of the site would be such that residences of the La Vista project under construction east of the site would not have obstructed views of the area, including views of the San Francisco Bay. The aesthetic character of the proposed development would be in keeping with the surrounding area and, therefore, would result in a less than significant impact. **(Less Than Significant Impact)**

d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

The project would introduce development including street lights and private residential lighting to a mostly undeveloped site which would create new sources of light and glare

VIEW OF SITE FROM MISSION BOULEVARD AND VALLEY VISTA INTERSECTION | FIGURE 4.1-1

BIRDS-EYE VIEW OF SITE FACING WEST | FIGURE 4.1-2

BIRDS-EYE VIEW OF SITE FACING EAST

FIGURE 4.1-3

VIEW OF SITE FROM MISSION BOULEVARD AND TENNYSON ROAD INTERSECTION | FIGURE 4.1-4

compared to the project site's existing condition. The project will comply with the City's Municipal Code and design requirements relating to aesthetics, light and glare, which are intended to prevent spillover light and minimize impacts related to the introduction of new light sources as a standard condition of approval (Hayward Municipal Code (HMC) Section 10-1.445(j)). Therefore, the additional light and glare created by the project would be in keeping with that produced by surrounding residential development and a less than significant impact. **(Less Than Significant Impact)**

4.1.4 Conclusion

Implementation of the proposed project would not result in significant adverse visual or aesthetic impacts. **(Less Than Significant Impact)**

4.2 AGRICULTURAL AND FORESTRY RESOURCES

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Resources Agency's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called *Prime Farmland*. In CEQA analyses, the FMMP classifications and published County maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.

The project site is identified as *Other Land* on the *Alameda County Important Farmland 2014* map. *Other Land* identifies those lands that are not included in any other mapping category. Common examples include low density rural developments, brush, timber, wetlands etc.

4.2.1.2 *Existing Conditions*

The project site is designated *Medium Density Residential (MDR)* and *Limited Open Space (LOS)*, and zoned *Medium Density Residential* and *Agriculture (AB10A)*. There are no lands designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland on or near the project site.[5]

4.2.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐	1-4
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐	1-4

[5] California Department of Conservation. "Farmland Mapping and Monitoring Program". Available at: http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx. Date accessed: April 17, 2018.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
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))?	☐	☐	☐	☒	1-4
d) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	1-4
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?	☐	☐	☐	☒	1-4

4.2.3 Impacts Discussion

a – b) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use? Conflict with existing zoning for agricultural use, or Williamson Act contract?

The project site is identified as *Other Land* on the Alameda County Important Farmland 2014 map. Although the project would rezone approximately 8.6-acres of the site from *Agricultural* to *PD Zoning*, the project would have minimal impact on agricultural resources or operations due to the size of the site and lack of agricultural use of the site or surrounding area. **(Less Than Significant Impact)**

c – d) Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production? Result in a loss of forest land or conversion of forest land to non-forest use?

"Forest land" is defined as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. "Timberland" means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees.

While the site does contain numerous mature trees, the site and surrounding area is not used or zoned for timberland or forest land. Therefore, the project would not impact timberland or forest land. **(No Impact)**

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?

According to the *Alameda County Important Farmland 2014* map, the project site and surrounding area are designated as *Other Land*. The project site lies west of the new La Vista development. La Vista's easterly open space borders the Garin Regional Park, which is primarily designated as *Grazing Land*. The development of the project site would not result in conversion of any forest or farmlands. **(Less Than Significant Impact)**

4.2.4 Conclusion

The project would not result in significant impacts to agriculture or forestry resources. **(Less Than Significant Impact)**

4.3 AIR QUALITY

The following discussion is based in part on a Construction TAC Analysis prepared by *Illingworth & Rodkin, Inc.* in June 2018. A copy of this report is attached as Appendix A.

4.3.1 Environmental Setting

Air quality and the amount of a given pollutant in the atmosphere are determined by the amount of a pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and for photochemical pollutants, sunshine.

The U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for what are commonly referred to as "criteria pollutants," because they set the criteria for attainment of good air quality. Criteria pollutants include carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, and particulate matter (PM).

4.3.1.1 *Climate and Topography*

The project site is located in Alameda County, which is part of the San Francisco Bay Area Air Basin. The project area's proximity to both the Pacific Ocean and the San Francisco Bay has a moderating influence on its climate.

4.3.1.2 *Regional and Local Criteria Pollutants*

Major criteria pollutants, listed in "criteria" documents by the USEPA and CARB include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and suspended particulate matter. These pollutants can have health effects such as respiratory impairment and heart/lung disease symptoms. Ambient air quality standards have been established at both the state and federal level. Violations of ambient air quality standards are based on air pollutant monitoring data and are judged for each air pollutant. Areas with air quality that exceed adopted air quality standards are designated as "nonattainment" areas for the relevant air pollutants. Nonattainment areas are sometimes further classified by degree (marginal, moderate, serious, severe, and extreme for ozone, and moderate and serious for carbon monoxide and PM_{10}) or status ("nonattainment-transitional"). Areas that comply with air quality standards are designated as "attainment" areas for the relevant air pollutants. "Unclassified" areas are those with insufficient air quality monitoring data to support a designation of attainment or nonattainment, but are generally presumed to comply with the ambient air quality standard. State Implementation Plans must be prepared by states for areas designated as federal ambient air quality standard.

The Bay Area is considered a non-attainment area for ground-level ozone and fine particulate matter ($PM_{2.5}$) under both the federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for respirable particulates or particulate matter with a diameter of less than 10 micrometers (PM_{10}) under the California Clean Air Act, but not the federal act. High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO_x). These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. High ozone levels aggravate respiratory and cardiovascular diseases, reduced

lung function, and increase coughing and chest discomfort. Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide (i.e. cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

4.3.1.3 *BAAQMD Guidelines*

The Bay Area Air Quality Management District (BAAQMD) is the regional agency tasked with managing air quality in the region. The BAAQMD is primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Air quality standards are set by the federal government (the 1970 Clean Air Act and its subsequent amendments) and the state (California Clean Air Act and its subsequent amendments). Regional air quality management districts such as BAAQMD must prepare air quality plans specifying how state standards would be met. BAAQMD's most recently adopted Clean Air Plan is the 2017Clean Air Plan (2017 CAP). The 2017 CAP provides an updated comprehensive plan to improve the Bay Area's air quality and protect public health, taking into account future growth projections to 2050. BAAQMD has published CEQA Air Quality Guidelines that are used in this assessment to evaluate air quality impacts of projects. The thresholds of significance for construction- and operation-related pollutant emissions are shown in Table 4.3-1.

Table 4.3-1:
Thresholds of Significance Used in Air Quality Analyses

Pollutant	Construction	Operation-Related	
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Maximum Annual Emissions (tons/year)
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
Fugitive Dust (PM_{10}/$PM_{2.5}$)	Best Management Practices	None	None
Risk and Hazards for New Sources and Receptors (Project)	Same as Operational Threshold	• Increased cancer risk of >10.0 in one million • Increased non-cancer risk of > 1.0 Hazard Index (chronic or acute) • Ambient $PM_{2.5}$ increase: > 0.3 µ/m^3 [Zone of influence: 1,000-foot radius from property line of source or receptor]	
Risk and Hazards for New Sources and Receptors (Cumulative)	Same as Operational Threshold	• Increased cancer risk of >100 in one million • Increased non-cancer risk of > 10.0 Hazard Index (chronic or acute) • Ambient $PM_{2.5}$ increase: > 0.8 µ/m^3 [Zone of influence: 1,000-foot radius from property line of source or receptor]	

Sources: *BAAQMD Thresholds Options and Justification Report (2009)* and *BAAQMD CEQA Air Quality Guidelines* (dated May 2011).

4.3.1.4 *City of Hayward General Plan*

City of Hayward General Plan

The Natural Resources Element contains policies related to protecting air quality within the City. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

Policies	Description
Policy NR-2.15	The City shall maintain and implement the General Plan as Hayward's community risk reduction strategy to reduce health risks associated with toxic air contaminants (TACs) and fine particulate matter (PM2.5) in both existing and new development.
Policy NR-2.16	The City shall minimize exposure of sensitive receptors to toxic air contaminants (TAC), fine particulate matter (PM2.5), and odors to the extent possible, and consider distance, orientation, and wind direction when siting sensitive land uses in proximity to TAC- and PM2.5-emitting sources and odor sources in order to minimize health risk.
Policy NR-2.17	The City shall coordinate with and support the efforts of the Bay Area Air Quality Management District, the California Air Resources Board, the U.S. Environmental Protection Agency, and other agencies as appropriate to implement source reduction measures and best management practices that address both existing and new sources of toxic air contaminants (TAC), fine particulate matter (PM2.5), and odors.

4.3.1.5 *Local Community Risks/Toxic Air Contaminants and Fine Particulate Matter*

Besides criteria air pollutants, there is another group of substances found in ambient air referred to as Toxic Air Contaminants (TACs). These contaminants tend to be localized and are found in relatively low concentrations in ambient air. Exposure to low concentrations over long periods, however, can result in adverse chronic health effects. Diesel exhaust is a predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average).

Fine Particulate Matter ($PM_{2.5}$) is a complex mixture of substances that includes elements such as carbon and metals; compounds such as nitrates, organics, and sulfates; and complex mixtures such as diesel exhaust and wood smoke. Long-term and short-term exposure to $PM_{2.5}$ can cause a wide range of health effects. Common stationary sources of TACs and $PM_{2.5}$ include gasoline stations, dry cleaners, diesel backup generators, and motor vehicles. The other, more significant, common source is motor vehicles on roadways and freeways.

4.3.1.6 *Sensitive Receptors*

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. For cancer risk assessments, children are the most sensitive receptors, since they are more susceptible to cancer causing TACs. Residential locations are assumed to include infants and small children.

The nearest sensitive receptors to the project site are residences located approximately 265 feet southeast of the property line on Overhill Drive, and residences on Vista Grande, approximately 150 feet east of the site's easterly property line.

4.3.1.7 *Construction TAC and $PM_{2.5}$ Health Risks*

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust known as diesel particulate matter (DPM), which is a known TAC. These exhaust air pollutant emissions would not be considered to contribute substantially to existing or projected air quality violations. Construction exhaust emissions may still pose health risks for sensitive receptors such as surrounding residents and school children. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to $PM_{2.5}$. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. The closest sensitive receptors to the project site are the new single-family dwellings to the east on the La Vista site and the three (3) existing single-family detached residences to the east and southeast of the project.'

4.3.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	1,5-7
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐	1,5-7
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	☐	☐	☒	☐	1,5-7
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐	1,5-7
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒	1,5-7

4.3.3 Impact Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

The proposed project will not conflict with the latest Clean Air planning efforts given; (1) the project's operational emissions would be well below the BAAQMD thresholds of significance for air pollutants as discussed below in Section 4.3.3(b) and (2) the project's small size (59 units). **(Less Than Significant Impact)**

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The 2011 BAAQMD *CEQA Air Quality Guidelines* contain a screening table that lists the minimum unit count for single-family residential projects, below which the project would not result in the generation of operational or construction criteria air pollutants, or greenhouse gas emissions, that exceed the threshold of significance. The project proposes 59 residences on the site and, as summarized in Table 4.3-2 below, the screening threshold for operational criteria pollutants is 325 units; for operational greenhouse gas emissions is 56 units; and for construction criteria pollutants is 114 units. The proposed residential development would not exceed the screening level for operational and construction criteria pollutants or greenhouse gas emissions and, therefore, the project would not result in significant air quality impacts. **(Less Than Significant Impact)**

Table 4.3-2:
Criteria Air Pollutants and Precursors and GHG Screening Level Size

Land Use Type	Operational Criteria Pollutant Screening Size	Operational GHG Screening Size	Construction Criteria Pollutant Screening Size
Single-family Residences	325 units	56 units	114 units
Below screening threshold?	Yes	No	Yes

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?

Non-attainment pollutants of concern for the San Francisco Bay Air Basin are ozone, PM_{10} and $PM_{2.5}$. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. As discussed in impact (b) above, the project size is below the BAAQMD's screening thresholds, therefore, the project's operational and construction emissions would be less than significant. In addition, construction on the site will be required to implement BAAQMD's Best Management Practices for dust control in accordance with the City's General Plan policies. **(Less Than Significant Impact)**

d) Expose sensitive receptors to substantial pollutant concentrations?

Construction Dust Emissions

The project is expected to take approximately 13 months to complete. Construction dust could affect local air quality at various times during construction of the project. The dry,

windy climate of the area during the summer months creates a high potential for dust generation when and if underlying soils are exposed to the atmosphere. Construction activities would increase dustfall and locally elevated levels of particulate matter (PM_{10}) downwind. Implementation of the following standard measures recommended by the BAAQMD would reduce dust emissions on-site:

Standard Measures:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two 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 five (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 telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Construction TAC and $PM_{2.5}$ Health Risks

Construction activity is anticipated to include grading and site preparation, trenching, building construction, and paving. Construction period emissions were computed using CalEEMod along with project construction activity. The CalEEMod model provided total annual PM_{10} exhaust emissions for the off-road construction equipment and for the exhaust emissions from on-road vehicles of 0.2055 tons (411 pounds) over the 13-month construction period. Construction would generate approximately 0.1069 tons (214 pounds) of on-site fugitive $PM_{2.5}$.

Using the maximum annual modeled DPM concentrations, the maximum increased cancer risk at the location of the maximally exposed individual (MEI), the receptor most affected by project construction activities, was calculated. The MEI would be located at the nearest single-family residence at the La Vista residential neighborhood. Results of the modeling indicate that the maximum increased residential cancer risks would be 5.5 in one million for an infant exposure and 0.1 in one million for an adult exposure. The maximum residential

excess cancer risk would be below the BAAQMD significance threshold of 10.0 in one million.

The maximum-modeled annual $PM_{2.5}$ concentration, which is based on combined exhaust and fugitive dust emissions, was 0.12 $\mu g/m^3$, which is less than the BAAQMD significance threshold of 0.3 $\mu g/m^3$.

The maximum modeled annual residential DPM concentration (i.e., from construction exhaust) was 0.0332 $\mu g/m^3$. The maximum computed Hazard Index (HI) based on this DPM concentration is 0.007, which is lower than the BAAQMD significance criterion of a HI greater than 1.0

Combined Community Risk Impacts

Community health risks include substantial sources of TACs that can affect sensitive receptors that are located within 1,000 feet of a project site. Sources include freeways or highways, busy surface streets and stationary sources identified by BAAQMD. Within the project area, the only substantial source of TAC and PM2.5 emissions is Mission Boulevard, a state highway (Highway 238).

Roadway TAC Health Risks

Mission Boulevard lies over 1,000 feet southwest of the MEI at the project site. The risk levels associated with the roadway are shown in Table 4.3-3, below.

Table 4.3-3:
Cumulative Construction Risk Assessment

Source	Maximum Cancer Risk (per million)	Maximum Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)	Maximum Hazard Index
Unmitigated project construction	5.5 (infant)	0.12	<0.01
Mission Boulevard – Link 452 (20ft elevation) at 1,000 feet southwest	2.0	0.01	<0.01
Cumulative Total	7.5	0.13	<0.02
BAAQMD Threshold – Cumulative Sources	***>100***	***>0.8***	***>10.0***
Significant?	***No***	***No***	***No***

Based on the BAAQMD thresholds and the distance of the MEI to Mission Boulevard, the project would have a less than significant community health risk impact. **(Less Than Significant Impact)**

e) Create objectionable odors affecting a substantial number of people?

Implementation of the proposed project would not create objectionable odors affecting a substantial number of people near the site. No new stationary odor sources are anticipated as

part of the project and there are no odor sources in the vicinity of the site that would emit substantial odors with the potential to impact future project residents. **(Less Than Significant Impact)**

4.3.4 Conclusion

The proposed project would have a less than significant impact on air quality. **(Less Than Significant Impact)**

4.4 BIOLOGICAL RESOURCES

The following discussion is based, in part, on an Arborist Report prepared by *HortScience, Inc.* (March 2017), an Aquatic Resource Delineation Report prepared by *Coast Range Biological, LLC* (March 2017), a Biological Impacts Assessment prepared by *Mosaic Associates, LLC* (May 2018), and an updated Arborist Report prepared by *HortScience, Inc.* in August 2018. These reports are attached as Appendices B-1, B-2, B-3, and B-4 respectively.

4.4.1 Environmental Setting

4.4.1.1 *Existing Conditions*

The project site occurs on a largely undeveloped hillside, with a gently sloped terrace occurring on the central and eastern portions of the site. Steeper slopes occur in the western portion. While the site is undeveloped, there are small areas of ground disturbance from vehicle activity and minor earthwork associated with geotechnical borings. Most of the site is disked annually to reduce the risk of fire.

There are two drainages present on-site. The larger of the two drainage features is located along the northern boundary of the project site and originates on the former quarry property north of the site and discharges to a culvert and offsite ditch at the northwestern corner of the site. The second drainage feature is south of an earthen berm between the two drainages and is isolated from visible surface sources of hydrology.

Vegetation

There are five habitats occurring on the project site. Table 4.4-1 displays the acreages associated with each of the identified habitats.

Table 4.4-1:
Habitat Types Occurring on Site

Habitat	Area (acres)
Non-Native Grassland	14.82
Developed/Ruderal	0.10
Freshwater Emergent Wetland*	0.92
Seasonal Wetland*	0.01
Eucalyptus Forest	1.35
Total	**17.20**

* Based on Aquatic Resource Delineation Report (*Coast Range Biological* February 2018)

Approximately 14.82 acres of the site is non-native grassland, native trees and shrubs, including coast live oak (*Quercus agrifolia*). Coyote brush is occasionally scattered throughout the grassland. Non-native grasslands are not considered to be a sensitive biological community due to the absence of habitats that fulfill special functions or have special values such as wetlands, stream or riparian habitats.

Mature Trees

The City's Municipal Code Chapter 10, Article 15 Tree Preservation Ordinance states that "no person shall remove, destroy, perform cutting of branches over one inch in diameter, or disfigure or cause to be removed or destroyed or disfigured any Protected Tree without having first obtained a permit to do so."

Hayward Municipal Code Chapter 10-15.13 defines a protected tree as: any tree having a minimum trunk diameter of eight inches measured at 54 inches above the ground. When measuring a multi-trunk tree, the diameters of the largest three trunks shall be added together; street trees or other trees such as those required as a condition of approval, Use Permit, or other Zoning requirement, regardless of size; all memorial trees dedicated by an entity recognized by the City, and all specimen trees that define a neighborhood or community; trees of the following species that have reached a minimum of four inches in diameter trunk size: big leaf maple (*Acer macrophyllum*), California buckeye (*Aesculus californica*), Pacific madrone (*Arbutus menziesii*), western dogwood (*Cornus nuttallii*), Western sycamore (*Platanus racemosa*), coast live oak (*Quercus agrifolia*), canyon live oak (*Quercus chrysolepis*), blue oak (*Quercus douglasii*), Oregon white oak (*Quercus garryana*), California black oak (*Quercus kelloggii*), valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*), California bay (*Umbellularia californica*); and any tree or trees of any size planted as replacement for a protected tree.

Table 4.4-2 below displays the trees currently on the project site and their condition as of March 2017.

Table 4.4-2:
Trees On-site

Common Name	Scientific Name	Poor (1-2)	Fair (3)	Good (4-5)	Total
Blue gum	*Eucalyptus globulus*	15	70	-	**85**
California buckeye	Aesculus californica	-	7	-	**7**
Coast live oak	*Quercus agrifolia*	-	1	2	**3**
Willow	*Salix* sp.	1	1	-	**2**
	Total	**16**	**79**	**2**	**97**

Wildlife

Wildlife expected to use non-native grassland include a variety of species common to the East Bay that are generally considered to be tolerant to human disturbances, including western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis catenifer*), California slender salamander (*Batrachoseps attenuatus*), California towhee (*Pipilo crissalis*), lesser goldfinch (*Carduelis psaltria*), western bluebird (*Sialia mexicana*), house finch (*Carpodacus mexicanus*), and mule deer (*Odocoileus hemionus*), among others. Ground squirrel (*Spermophilus beecheyi*) burrows were observed scattered throughout the grassland.

Regulated Waters and Wetlands

According to a wetland delineation prepared by *Coast Range Biological* in March 2017, there are two freshwater emergent wetlands and one seasonal wetland on-site. The U.S. Army Corps of Engineers (Corps) is responsible under Section 404 of the Clean Water Act to regulate the discharge of fill material into Waters of the U.S, including wetlands.

The two freshwater emergent wetlands are 30,262 square feet and 9,893 square feet, located in the northern portion of the site. The larger of the two wetlands (Wetland 1) drains toward the southwest and into a culvert under the road at the western portion of the project site. It is assumed that the culvert connects to a storm drain system that discharges into San Francisco Bay via Alameda Creek. The other freshwater wetland (Wetland 2) ends in a shallow basin and does not discharge directly into the larger wetland. These two freshwater emergent wetlands are considered jurisdictional waters of the U.S.

A seasonal wetland, approximately 269 square feet, is in the eastern portion of the project site. Seasonal wetland habitat is found in a small seep at the toe of a slope in the eastern portion of the project site. Vegetation is dominated by Mexican rush (*Juncus mexicanus*), with an overstory of blue gum eucalyptus. The seasonal wetland is a small (0.01 acre) isolated feature. Pacific treefrog and other wildlife common to the project site may be expected to use the seasonal wetland, which would be considered a sensitive biological community. Based on the field observation in the *Aquatic Resources Delineation Study,* it is unclear whether there is a nexus between the seasonal wetland and the freshwater emergent wetlands. The wetland receives surface runoff and/or near-surface seepage from adjacent slopes

Special-Status Species

State and federal "endangered species" legislation has provided the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the CDFW and USFWS if activities associated with a proposed project would result in the take of a species that is listed as endangered or threatened. To "take" a listed species, as defined by the state of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" said species (California Fish and Wildlife Code, Section 86).

Plant Species

Habitats that once supported special-status species in the vicinity of the project site have been replaced by development including the La Vista quarry, while others remain, but are isolated from the project site by extensive development. Due to the documented presence of special-status plants in the region surrounding the project site and the presence of suitable habitat, focused botanical surveys were conducted on March 28 and May 12, 2017 and May 7, 2018 by *Mosaic Associates.* The surveys were timed to coincide with the flowering period of target species with potential to occur in the project area. No special-status species were observed during the surveys.

Animal Species

The California Natural Diversity Database (CNDDB) compiles records for species designated by the California Department of Fish and Wildlife as Fully Protected or on their Watch List, bat species that the Western Bat Working Group (WBWG) has classified as Low, Medium or High priority for conservation concern and those with state and global threat rankings. The CNDDB lists 45 special-status and other species of conservation concern as occurring within the nine-quad search area surrounding the project site. The locations of the 12 special-status and other conservation concern species with records within 3.1 miles of the project site are shown on Figure 4.4-1, and include crotch bumble bee (*Bombus crotchii*), sharpshinned hawk (*Accipiter striatus*), tricolored blackbird (*Agelaius tricolor*), pallid bat (*Antrozous pallidus*), golden eagle (*Aquila chrysaetos*), burrowing owl (*Athene cunicularia*), western snowy plover (*Charadrius alexandrines nivosus*), western mastiff bat (*Eumops perotis californicus*), saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*), hoary bat (*Lasiurus cinereus*), California red-legged frog (*Rana draytonii*) and Alameda whipsnake (*Masticophis lateralis euryxanthus*).

Eight special-status animal species have the potential to occur in the vicinity of the project site. For three of these species, there is little or no potential for them to occur on the property due to habitat degradation or lack of suitable habitat on the site. There are no special-status species with a high potential to occur on the site. Special-status species with a low potential to occur on the site include the sharp-shinned hawk (*Accipiter striatus*), golden eagle (*Aquila chrysaetos*), burrowing owl (*Athene cunicularia*), white-tailed kite (*Elanus leucurus*), and hoary bat (*Lasiurus cinereus*).

The following special-status animal species are identified as potentially occurring within the project area:

Cooper's Hawk

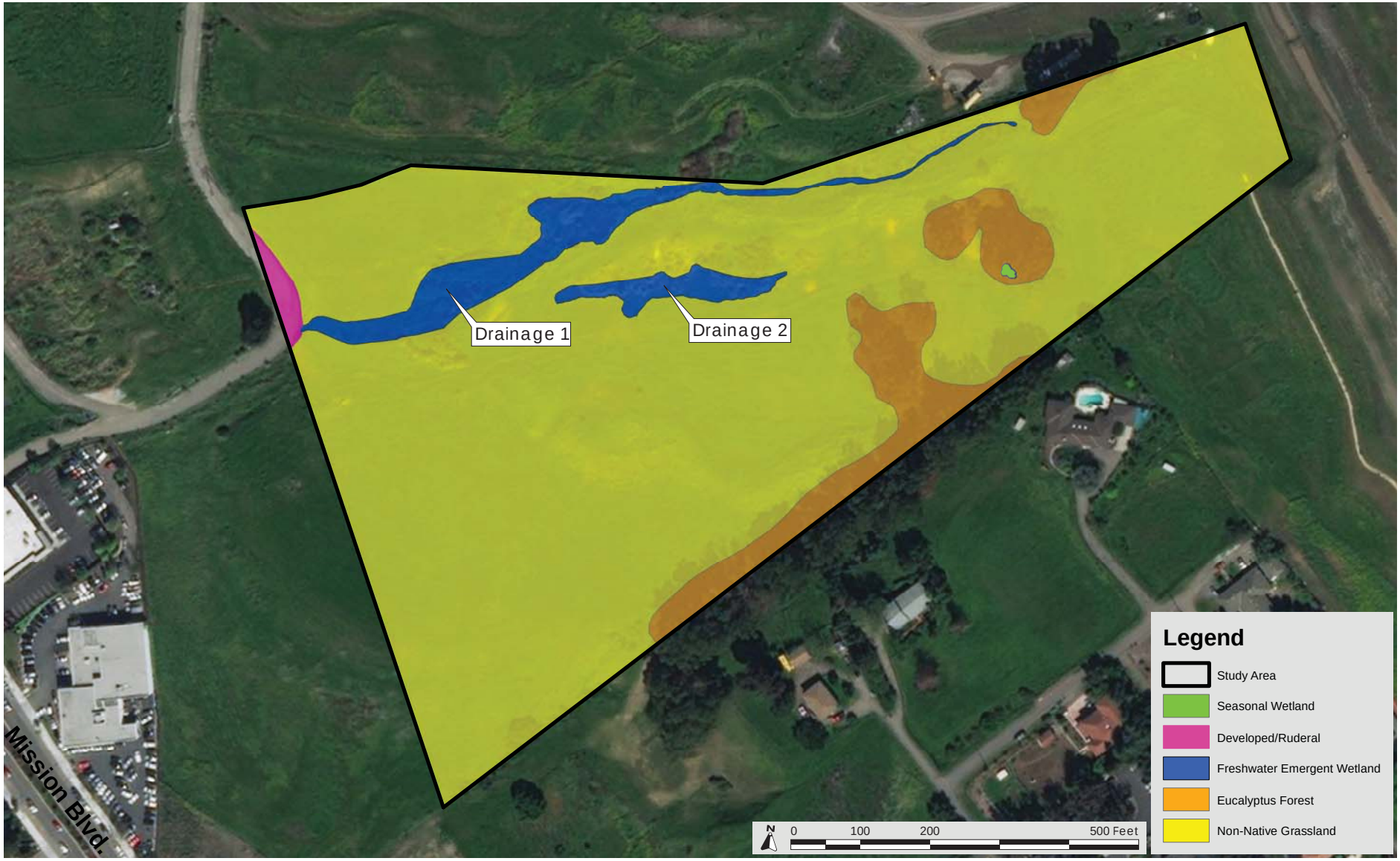
The Cooper's hawk is a crow-sized woodland raptor that breeds throughout much of the United States, southern Canada, and northern Mexico. The Cooper's hawk breeds in extensive forests and smaller woodlots of deciduous, coniferous, and mixed pine-hardwoods, as well as in pine plantations, in both suburban and urban habitats. It captures a variety of prey, mainly medium-sized birds and mammals such as doves, jays, robins, and rodents.

While the CDFW has placed the Cooper's hawk on its statewide Watch List, this species is relatively common in the Bay Area, and is known to nest in urban neighborhoods in numerous East Bay cities. Suitable nesting and foraging habitat is present in the eucalyptus woodland within the project site area. There is a moderate potential for Cooper's hawk to nest within the project site.

Sharp-shinned Hawk

The sharp-shinned hawk is a small, slender accipiter with short, rounded wings and a long, narrow tail that feeds almost entirely on small birds.

Suitable nesting habitat is present, but limited due to the small area of riparian habitat, westfacing aspect of the project site (north-facing slopes preferred) and rarity of documented nests in the nine-quad search area. The potential for sharp-shinned hawks to nest in the project site area is low.



Source: Coast Range Biological, LLC. 5/12/17.

LAND COVER TYPES

FIGURE 4.4-1

White-tailed Kite

The white-tailed kite is a classified as a Fully Protected species by CDFW. It inhabits open grasslands and savannah-like habitats. Suitable nesting habitat is present in the trees within the project area although the potential for nesting is low given the proximity to development.

Burrowing Owl

Burrowing owl is a California Species of Special Concern. They require habitat with open, well-drained terrain, sparse vegetation, and underground burrows available for use throughout their entire life cycle. The birds most commonly live in burrows created by California ground squirrels.

4.4.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
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 (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☒	☐	☐	1-2, 8-11
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	☐	☒	☐	☐	1-2, 8-11
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐	1-2, 8-11
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, impede the use of native wildlife nursery sites?	☐	☐	☒	☐	1-2, 8-11
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐	1-2, 8-11

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
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?	☐	☐	☐	☒	1,2,11

4.4.3 Impact Discussion

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 (CDFW) or United States Fish and Wildlife Service (USFWS)?

Special- Status Plants

As noted above, no special-status species were observed during the surveys. The project would have no impacts on special-status plants and no mitigation is warranted.

Special-Status Wildlife

As noted above, the project site provides suitable nesting and foraging habitat for burrowing owls due to the presence of California ground squirrel burrows within the non-native grassland.

Impact BIO-1: Project construction activities during the active nesting season (February 1 through August 31), may result in a take of an active burrowing owl nest or may create a disturbance that could result in nest abandonment. **(Significant Impact)**

Mitigation Measures: Implementation of the following mitigation measures would reduce impacts to burrowing owls to a less than significant level:

MM BIO-1.1: Prior to any ground disturbance related to the proposed project, a qualified biologist will conduct a preconstruction survey for burrowing owls. The surveys will establish the presence or absence of burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFG survey guidelines (CDFG 2012).

The biologist will survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Surveys shall take place near sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls will be identified and mapped. Surveys will take

place no more than 14 days prior to construction. During the breeding season (February 1-August 31), surveys will document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results will be valid only for the season (breeding or nonbreeding) during which the survey is conducted.

If burrowing owls or sign (whitewash, pellets, feathers, prey remains, egg shell fragments, nest burrow decoration or other items) are found during the breeding season, the project proponent will avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance will include establishment of a 250-foot non-disturbance buffer zone surrounding the nest burrow(s). If site-specific conditions or the nature of the construction activity (e.g. steep topography, dense vegetation, limited activities) indicate that a smaller buffer could be used, the project proponent will coordinate with the CDFW to determine the appropriate buffer size. Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the nest has failed or that the juveniles from the occupied burrows have fledged. During the nonbreeding season (September 1-January 31), the project proponent should avoid the owls and the burrows they are using, by establishing a 160-foot non-disturbance buffer zone surrounding the active burrow(s).

If occupied burrows for burrowing owls cannot be not avoided, a burrowing owl exclusion plan prepared by a qualified biologist in a manner consistent with the CDFW 2012 guidelines, and approved by CDFW will be implemented by a qualified biologist outside the breeding season and only after the occupied burrow has been confirmed empty by site surveillance and/or scoping. Owls should be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing 1-way doors in burrow entrances. These doors should be in place for no less than 48 hours prior to excavation. The project area shall be monitored by a qualified biologist twice daily to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation. Plastic tubing or a similar structure should be inserted in the burrows during excavation to maintain an escape route for any owls inside the burrow.

MM BIO-1.2: If the proposed project will result in permanent impacts to occupied and satellite burrows and/or burrowing owl habitat, the project proponent shall mitigate for permanent impacts with permanent conservation of suitable burrowing owl habitat to provide nesting, foraging, wintering, and dispersal habitat comparable or better than that of the impact area. Mitigation may be accomplished through a)

the purchase of credit at an approved conservation bank, b) on-site or c) off-site. Mitigation at any site other than an approved bank would require preparation and implementation of a CDFW-approved mitigation land management plan consistent with the CDFW 2012 Mitigation Guidelines, permanent protection of mitigation land through a conservation easement deeded to a non-profit conservation organization, and funding the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment.

Implementation of MM BIO-1.1 – 1.2 would reduce potential impacts to burrowing owls to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

Hoary Bat

The hoary bat does not have a state or federal designation however, it is classified by the Western Bat Working Group (WBWG 2015) as a Medium Priority species for conservation concern. It is the most widespread of all North American bats and is highly associated with forested habitats in the west. The project does not require the removal of any trees that could serve as potential roosting habitat for hoary bat. The project therefore, would not impact on hoary bats or their roosting habitat and no mitigation would be required.

Nesting Migratory Birds

The trees, wetlands, shrubs and non-native grassland within the project area provide suitable nesting habitat for migratory birds whose nests are afforded protection under the Migratory Bird Treaty Act.

Impact BIO-2: Construction of the proposed project during the nesting season (generally February 1 through August 31) may result in a take of tree- or ground-nesting migratory birds and/or birds of prey or create disturbance that could result in nest abandonment. **(Significant Impact)**

Mitigation Measures: Implementation of the following mitigation measures would reduce impacts to migratory nesting birds to a less than significant level:

MM BIO-2.1: If site disturbance commences between February 15 and August 31, a qualified biologist shall conduct a preconstruction bird nesting survey. If nests of either migratory birds or raptors are detected on or adjacent to the site, a no-disturbance buffer (generally 50 feet for passerines and 300 feet for most raptors; 0.5 mile for golden eagle) in which no new site disturbance is permitted shall be observed until August 31, or the qualified biologist determines that the young are foraging independently. The size of the no-disturbance buffer shall be determined by a qualified biologist and shall take into account local site features and existing sources of potential disturbance. If more

than 14 days elapses between the survey and the start of construction, the survey shall be repeated.

Implementation of MM BIO-2.1 would reduce potential impacts to migratory nesting birds to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

b,c) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS? Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The project proposes to construct a bridge or a culvert for the private street crossing from Tennyson Road that would result in direct impacts to Wetland 1. A bridge would span Wetland 1 with bridge abutments located above top of bank. Wetland impacts resulting from a bridge would be limited to shading and a reduction in the cover of approximately 0.02 acres of wetland vegetation beneath the bridge. A culvert would require the permanent fill and loss of approximately 0.04 acre of Wetland 1.

Impact BIO-3: Construction of the bridge or culvert across Wetland 1 would shade approximately 0.02 acres of wetland vegetation, resulting in the reduction of wetland cover beneath the bridge. The alternative of constructing a culvert to cross the wetland would require the permanent fill and loss of approximately 0.04 acres of wetland habitat. **(Significant Impact)**

Mitigation Measures:

MM BIO-3.1: Prior to the start of construction, a qualified biologist will conduct training on the presence of sensitive biological resources within the project area for all construction personnel. Construction personnel shall be given instruction on project-specific requirements to avoid, minimize and mitigate impacts on sensitive resources. Following the training, exclusionary fencing shall be installed around wetlands prior to the start of construction to prevent the movement of construction equipment into sensitive wetland habitat.

MM BIO-3.2: If a culvert is constructed to cross the wetland, authorization for the discharge of fill of into waters of the U.S. and state shall be obtained by the project proponent prior to the start of construction. Mitigation for the fill of wetlands shall be accomplished through a) the purchase of credit at an approved wetland mitigation bank, b) the creation of freshwater wetland habitat at a 2:1 replacement ratio within the project Area, or c) at another location approved of by the USACE, RWQCB and CDFW. The mitigation goal shall be to create and

enhance aquatic habitats with habitat functions and values greater than or equal to those that will be impacted by the proposed project.

If a bridge is constructed to cross the wetland, mitigation for the reduction in vegetative cover in Wetland 1 due to shading from a bridge may be accomplished through the a) purchase of credit at an approved wetland mitigation bank, b) the enhancement of freshwater wetland habitat at a 1:1 replacement ratio within the project area, or c) at another location approved of by the CDFW. See MM BIO-3.4 for a description of Wetland 1 mitigation.

MM BIO-3.4: Wetland mitigation within the project area or at another location would be described in a wetland mitigation plan that would:

- Be prepared consistent with the *Final Regional Compensatory Mitigation and Monitoring Guidelines* (USACE 2015) and the *Compensatory Mitigation for Losses of Aquatic Resources: Final Rule* (USACE 2008);
- Define the location of all restoration and creation activities; Describe measures that would ensure that adjacent land uses would not adversely affect the ecological functions and values of the wetland mitigation area, so as to ensure consistency with the foregoing federal guidelines and rules. Such measures may include the use of appropriately-sized buffers between the wetland mitigation area and any adjacent development, the use of fencing or walls to prevent unauthorized access, lighting in adjacent development designed to avoid light spillage into the wetland mitigation area, landscape-based Best Management Practices for adjacent development prior to discharge into the wetland mitigation area, and signage describing the sensitive nature of the wetland mitigation area.
- Provide evidence of a suitable water budget to support restored and created wetland habitats;
- Identify the species, quantity, and location of plants to be installed in the wetland habitats;
- Identify the time of year for planting and method for supplemental watering during the establishment period;
- Identify the monitoring so as to ensure consistency with the foregoing federal guidelines and rules, which shall be not less than five years for wetland restoration;
- Define success criteria that will be required for restoration efforts to be deemed a success;
- Identify adaptive management procedures that may be employed as needed to ensure the success of the mitigation project and its consistency with the foregoing federal guidelines and rules. These include, but are not limited to, remedial measures to address exotic invasive species, insufficient hydrology to support the attainment of performance standards, and wildlife harm;

- Define management and maintenance activities, including weeding, supplemental irrigation, and site protection; and
- Define responsibility for maintaining, monitoring and ensuring the preservation of the mitigation site in perpetuity.

MM BIO-3.3: The project applicant shall comply with all terms of the permits issued by these agencies, including mitigation requirements, and shall provide proof of compliance to the City prior to issuance of a grading permit.

With implementation of MM BIO-3.1 – 3.3, the project would have a less than significant impact to wetlands. **(Less Than Significant Impact with Mitigation Incorporated)**

e) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?

The project site is surrounded by existing development and the former La Vista Quarry. It is not linked to any open space areas through which wildlife movement would occur. The proposed project would not impact wildlife movement corridors. **(Less Than Significant Impact)**

f) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

A preliminary arborist report and appraisal was completed for the project site by *HortScience, Inc.* in March 2017 and August 2018, respectively. The tree survey evaluated 98 trees in total, with 42 of the trees located off-site. Ten of the trees on-site are considered protected under the City of Hayward Tree Preservation Ordinance. The City of Hayward protects trees that have a minimum trunk diameter of eight inches or more (measured 54 inches above the ground), street trees, memorial trees, trees that were planted as replacements for protected trees, and trees of certain species.[6] Seventeen off-site trees are identified as "Protected".

The project would be required to comply with the Tree Preservation Ordinance, which includes submittal of an application for a Protected Tree Removal or Cutting permit. The ordinance also requires replacement of removed or disfigured trees with like-size, like-kind trees or an equal value tree or trees as determined by the City's Landscape Architect. The replacement trees shall be located on site wherever possible. Where there is not sufficient room on-site for the replacement trees in the judgment of the City Landscape Architect or his or her designated representative, another site may be designated that is mutually agreeable. The Ordinance also includes protection measures for trees that would be retained to ensure they are not impacted during construction activities.

[6] The following tree species with a trunk diameter of four inches or more are protected under the City of Hayward Tree Preservation Ordinance: Big Leaf Maple, California Buckeye, Madrone, Western Dogwood, California Sycamore, Coast Live Oak, Canyon Live Oak, Blue Oak, Oregon White Oak, California Black Oak, Valley Oak, Interior Live Oak, and California Bay.

At the time of the preparation of this Initial Study, the final alignment for a second water line proposed to serve the project site has not been determined. For a reference to the currently proposed second water alignment, see Figure 4.4-2. Conservatively, the analysis assumes that the alignment of the water line would result in the removal of 15 blue gum eucalyptus trees off-site. Removal of the trees would result in a significant impact. **(Significant Impact)**

Impact BIO – 4: Development of the proposed project would result in significant impacts to protected trees. **(Significant Impact)**

Mitigation Measures: Implementation of the following mitigation measures would reduce impacts to protected trees to a less than significant level.

MM BIO – 4.1: All applicable requirements shall be followed and all permits obtained as required by the City's Tree Ordinance (HMC Chapter 10, Article 15). Per that ordinance, every effort shall be made to preserve the character of the area and the more valuable tree specimens on site to the greatest extent practicable. Final landscape plans shall be reviewed and approved by the City of Hayward Landscape Architect prior to issuance of any grading, trenching, encroachment, demolition, or building permit for development. Final landscape plans shall clearly identify all "protected trees," as defined in the Tree Preservation Ordinance, and all trees to be removed from the project site and the size, location, type, value of trees and specify the species of all replacement trees.

MM BIO-4.2: The project applicant shall implement all tree protection measures as described below:

Design Recommendations

1. A Tree Protection Zone (TPZ) shall be established around each tree to be preserved. All trees not listed below shall have the TPZ established at the dripline in all directions. No grading, excavation, construction or storage of material shall occur within that zone.
2. Include trees to be preserved and TPZs on all construction plans.
3. Project plans affecting the trees shall be reviewed by the Consulting Arborist with regard to tree impacts. These include, but are not limited to, demolition plans, site plans, improvement plans, utility and drainage plans, grading plans, and landscape and irrigation plans.
4. No underground services including utilities, sub-drains, water or sewer shall be placed in the Tree Protection Zone.
5. Irrigation systems must be designed so that no trenching will occur within the Tree Protection Zone.
6. As trees withdraw water from the soil, expansive soils may shrink within the root area. Therefore, foundations, footings

PROPOSED SECOND WATER ALIGNMENT | FIGURE 4.4-2

and pavements on expansive soils near trees should be designed to withstand differential displacement.

Pre-construction Treatments & Recommendations

1. Fence all trees to be retained prior to demolition, grubbing or grading. Tree protection fencing should be placed at the edge of the TPZ. Fences shall be 6 ft. chain link or equivalent as approved by the Consulting Arborist. Fences are to remain until all grading and construction is completed.
2. Prune trees to be preserved to clean the crown of dead branches 1" and larger in diameter, raise canopies as needed for construction activities. All pruning shall be done by a State of California Licensed Tree Contractor (C61/D49). All pruning shall be done by Certified Arborist or Certified Tree Worker in accordance with the Best Management Practices for Pruning (International Society of Arboriculture, 2002) and adhere to the most recent editions of the American National Standard for Tree Care Operations (Z133.1) and Pruning (A300). The Consulting Arborist will provide pruning specifications prior to site demolition. Branches extending into the work area that can remain following demolition shall be tied back and protected from damage.
3. Tree(s) to be removed that have branches extending into the canopy of tree(s) to remain must be removed by a qualified arborist and not by construction contractors. The qualified arborist shall remove the tree in a manner that causes no damage to the tree(s) and understory to remain. Tree stumps shall be ground 12" below ground surface.
4. All tree work shall comply with the Migratory Bird Treaty Act as well as California Fish and Wildlife code 3503-3513 to not disturb nesting birds. Tree pruning and removal should be scheduled outside of the breeding season to avoid scheduling delays. Breeding bird surveys should be conducted prior to tree work. Qualified biologists should be involved in establishing work buffers for active nests.

Recommendations for Tree Protection during Construction

1. Prior to beginning work, the contractors working in the vicinity of trees to be preserved are required to meet with the Consulting Arborist at the site to review all work procedures, access routes, storage areas and tree protection measures.
2. All contractors shall conduct operations in a manner that will prevent damage to trees to be preserved.
3. Any grading, construction, demolition or other work that is expected to encounter tree roots should be monitored by the Consulting Arborist.
4. Tree protection fences are to remain until all site work has been completed. Fences may not be relocated or removed without permission of the Consulting Arborist.
5. Construction trailers, traffic and storage areas must remain outside fenced areas at all times.

6. Any root pruning required for construction purposes shall receive the prior approval of and be supervised by the Consulting Arborist.
7. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.
8. No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the TPZ.
9. Any additional tree pruning needed for clearance during construction must be performed by a Certified Arborist and not by construction personnel.
10. All trees shall be irrigated on a schedule to be determined by the Consulting Arborist (every 3 to 6 weeks April through October is typical). Each irrigation shall wet the soil within the TPZ to a depth of 24".

With implementation of MM 4.1 – 4.2, the project would not conflict with any local policies or ordinances protecting biological resources. The proposed project is overall consistent with the goals and policies of the Natural Resources Element of the City of Hayward's General Plan. **(Less Than Significant With Mitigation)**

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?

The project site is not located within a Habitat Conservation Plan or Natural Community Conservation Plan. **(No Impact)**

4.4.4 Conclusion

The proposed project, with the implementation of MM BIO – 1.1 through MM BIO – 4.2, would have a less than significant impact on biological resources. **(Less Than Significant Impact With Mitigation)**

4.5 CULTURAL RESOURCES

The following discussion is based, in part, on an Archaeological Literature Search and Field Survey prepared by *Holman & Associates, Inc.* in June and July 2018, respectively. The reports are attached as Appendix C-1 and C-2 of this Initial Study.

4.5.1 Environmental Setting

Cultural resources are evidence of past human occupation and activity and include both historical and archaeological resources. These resources may be located above ground or underground and have significance in the history, prehistory, architecture, or culture of the nation, State of California, or local or tribal communities.

Paleontological resources are fossils, the remains or traces of prehistoric life preserved in the geologic record. They range from the well-known and well publicized (such as mammoth and dinosaur bones) to scientifically important fossils.

4.5.1.1 *Regulatory Framework*

Assembly Bill (AB) 52

Assembly Bill (AB) 52 was approved by the Governor September 25, 2014. It adds a new category of resources to CEQA that must be considered during project planning – Tribal Cultural Resources. It also establishes a framework and timeline for consultation. AB 52 applies to projects that have a notice of preparation or a notice of negative declaration or mitigated negative declaration filed on or after July 1, 2015.

AB 52 requires lead agencies to conduct formal consultations with California Native American tribes during the CEQA process to identify tribal cultural resources that may be subject to significant impacts by a project. Where a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact.

City of Hayward General Plan

The Natural Resources Element contains policies related to protecting cultural resources within the City. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

Policies	Description
Policy NR-7.1	The City shall prohibit any new public or private development that damages or destroys a historically- or prehistorically-significant fossil, ruin, or monument, or any object of antiquity.
Policy NR-7.2	The City shall develop or ensure compliance with protocols that protect or mitigate impacts to paleontological resources, including requiring grading and construction projects to cease activity when a paleontological resource is discovered so it can be safely removed.

4.5.1.2 *Historic Resources*

The period of initial historic exploration of the project area started in 1769. Between 1769 and 1776, a number of Spanish expeditions went through Ohlone territory, including those led by Portola, Fages, Fages and Crespi, Anza, Rivera, and Moraga. Even though the routes of the early explorers cannot be determined with total accuracy, a number are known to have traveled near the project area. San Lorenzo Creek was viewed by Father Juan Crespi during the Pedro Fages expedition in 1772 and later in 1775/1776 by Father Pedro Font of the Juan Bautista de Anza expedition. The 1776 Juan Bautista de Anza National Historic Trail places the historic route along the foothills and would have proceeded through present-day Hayward.

Hispanic Era

During the Spanish Period, the project was within the lands of Mission San Jose, established in 1797, the 14th of the 21 missions founded in California. This mission, located in the southeast area of present-day Fremont, had jurisdiction over southern Alameda County. As one of seven missions in Ohlone territory, Mission San Jose had the greatest impact on the aboriginal population living in the project area. Settlement was concentrated around the Vallejo Mills (present day Niles in the City of Fremont) as well as Mission San Jose.

American Era

In the mid-19th century, most of the rancho and pueblo lands in California were subdivided as the result of population growth and the American takeover. The initial explosion in population was associated with the Gold Rush (1848), followed later by the construction of the transcontinental railroad (1869). The growth of the general project area was dependent on transportation— first by water and roads and later, by rail and then by air.

The modern City of Hayward had its origins in the 1850s, during the Gold Rush, when squatters and settlers began to appear in the area. The City lay within the boundaries of *Rancho San Lorenzo*, a 17,000-acre estate granted in 1821 to the Mexican colonist Guillermo Castro. William Hayward occupied a tent in 1851 in Palomares Canyon. In 1854, Castro had a map surveyed for a town covering 28 blocks in the vicinity of his adobe and began selling land to settlers.

4.5.1.3 *Archaeological Resources*

In this portion of the Bay Area, archaeological sites have been recorded adjacent to creeks, springs, wetlands, and the original Bay shoreline are often near the base of the hills. The project site is situated at the start of the rolling hills in eastern Hayward with a drainage branching near the eastern boundary and then defining both the southern and northern boundaries. There is a moderate potential for pre-historic archaeological sites within the project site area.

Historic-era maps for the project site and the surrounding area do not identify resources that might contribute to the historical understanding of the site. Based on the historical land use of the area, there is a low potential for historic archaeological deposits within the project site area.

4.5.1.4 *Paleontological Resources*

As noted above, paleontological resources are the fossilized remains of organisms from prehistoric environments ground in geologic strata. Most of the city of Hayward is located on Quaternary sedimentary deposits which are from the most recent geologic periods (i.e., Holocene, Pleistocene) dating back to 1.6 million years ago. Some of eastern Hayward is located on Mesozoic sedimentary rocks from the Mesozoic period dating back to 245 million years ago, when dinosaurs roamed the earth. Both types of geologic rocks may contain fossils of flora and fauna, particularly marine species.

According to the General Plan Background Report, five paleontological resources have previously been discovered in the City of Hayward, including four mammalian fossils (e.g., bison, prehistoric horse) and one gastropod fossil (i.e., marine snail) from the Quaternary period. The Bison fossil was discovered near Interstate 880 (I-880), the two prehistoric horse fossils were discovered in the Hayward gravel pit, the marine snail was discovered at Hayward Landing, and an additional unidentified mammalian fossil was discovered near the Hayward Motel.[7]

4.5.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5?	☐	☐	☐	☒	1-2,12-13
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5?	☐	☒	☐	☐	1-2,12-13
c) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☒	☐	☐	1-2,12-13
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐	1-2,12-13
e) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					

[7] General Plan Background Report. 2014.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
1. 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	☐	☐	☐	☒	1-2,12-13
2. 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 this criteria, the significance of the resource to a California Native American tribe shall be considered.	☐	☐	☐	☒	1-2,12-13

a) Cause a substantial adverse change in the significance of an historical resource?

The project site is an undeveloped hillside that was once developed with access roads for trucks transporting materials to and from the La Vista Quarry, formerly northeast of the site. There are no structures on-site, therefore, the project would not result in an impact to an historic resource on-site. There are no historic structures in the vicinity of the site. **(No Impact)**.

b – d) Cause a substantial adverse change in the significance of an archaeological resource? Would the project disturb any human remains, including those interred outside of formal cemeteries? Would the project directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?

An Archaeological Literature Review was prepared by *Holman & Associates* for the site as part of the Cultural Resources Assessment. No recorded archaeological sites are located within a half mile of the site and the project site has not been previously studied for cultural resources.

Holman & Associates completed a subsequent field survey to determine if the project site has a potential likelihood for prehistoric or historic-era cultural materials. Results of the survey indicate the site is not likely to contain prehistoric or historic-era cultural materials, nor did the survey identify any indication of a paleosol (buried surface).

During excavation and grading activities associated with construction of the project, a remote possibility exists that buried archaeological resources may be discovered. If that should occur, standard measures would be taken to stop all work adjacent to the find, an archaeologist would be brought on site to investigate the find and contact the City of

Hayward Development Services Department to determine how to preserve and record the uncovered materials.

Impact CUL-1: Construction of the proposed project could result in significant impacts to unknown archaeological resources, unique paleontological resources/sites, unique geologic features, or human remains, if present on-site. **(Significant Impact)**

Mitigation Measure: Implementation of the following mitigation measures would ensure that potential impacts to buried cultural resources remain at a less than significant level.

MM CUL – 1.1: *Unique Paleontological and/or Geologic Features and Reporting*. Should a unique paleontological resource or site or unique geological feature be identified at the project site during any phase of construction, all ground disturbing activities within 25 feet shall cease and the City's Planning Manager notified immediately. A qualified paleontologist shall evaluate the find and prescribe mitigation measures to reduce impacts to a less than significant level. Work may proceed on other parts of the project site while mitigation for paleontological resources or geologic features is implemented. Upon completion of the paleontological assessment, a report shall be submitted to the City and, if paleontological materials are recovered, a paleontological repository, such as the University of California Museum of Paleontology shall also be submitted to the City.

MM CUL – 1.2: *Undiscovered Archaeological Resources.* If evidence of an archaeological site or other suspected cultural resource as defined by CEQA Guideline Section 15064.5, including darkened soil representing past human activity ("midden"), that could conceal material remains (e.g., worked stone, worked bone, fired clay vessels, faunal bone, hearths, storage pits, or burials) is discovered during construction related earth-moving activities, all ground-disturbing activity within 100 feet of the resources shall be halted and the City Planning Manager shall be notified. The project sponsor shall hire a qualified archaeologist to conduct a field investigation. The City's Planning Manager shall consult with the archaeologist to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by a qualified archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-J) form and filed with the NWIC.

MM CUL – 1.3: *Human Remains.* If human remains are discovered at any project construction site during any phase of construction, all ground-

disturbing activity within 100 feet of the resources shall be halted and the City's Planning Manager and the Alameda County coroner shall be notified immediately, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The project sponsor shall also retain a professional archaeologist with Native American burial experience to conduct a field investigation of the specific site and consult with the Most Likely Descendant, if any, identified by the NAHC. As necessary, the archaeologist may provide professional assistance to the Most Likely Descendant, including the excavation and removal of the human remains. The City of Hayward shall be responsible for approval of recommended mitigation as it deems appropriate, taking account of the provisions of State law, as set forth in CEQA Guidelines section 15064.5(e) and Public Resources Code section 5097.98. The project sponsor shall implement approved mitigation, to be verified by the City of Hayward, before the resumption of ground-disturbing activities within 100 feet of where the remains were discovered.

With the implementation of the above Mitigation Measures CUL-1.1 – 1.3, impacts to buried cultural resources would be less than significant. **(Less Than Significant Impact With Mitigation)**

e) *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: (1) 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 (2) 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.*

No tribal cultural resources are located at the project site. However, in the unlikely event an accidental discovery of tribal cultural resources occurs during construction, Standard Measures CUL –1.1 to CUL – 1.3 would be implemented. For these reasons, the project would result in no impact to tribal cultural resources. **(No Impact)**

4.5.3 Conclusion

Construction of the proposed development, with the implementation of mitigation measures CUL – 1.1 to CUL – 1.3, would not result in a significant impact to buried cultural resources. **(Less Than Significant Impact With Mitigation)**

The project would not result in a significant impact to historic resources. **(Less Than Significant Impact)**

The project would not impact tribal cultural resources. **(No Impact)**

4.6 GEOLOGY AND SOILS

The following discussion is based, in part, on a Geotechnical Report prepared by Louis A. Richard, P.G., C.E.G. (October 2017), a Peer Review by the City of Hayward (January 2017), and a Supplemental Fault Ground-Rupture Investigation prepared by *Berlogar Stevens & Associates* (January 2017). The reports are attached as Appendices D-1, D-2, and D-3 respectively.

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

City of Hayward General Plan

The Hazards Element contains policies to ensure seismically safe development within the City. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

Policies	Description
Policy LU-7.1	The City shall prohibit the construction of buildings on unstable and steep slopes (slopes greater than 25 percent).
Policy LU-7.2	The City shall discourage the placement of homes and structures near ridgelines to maintain natural open space and preserve views. If ridgeline development cannot be avoided, the City shall require grading, building, and landscaping designs that mitigate visual impacts and blend the development with the natural features of the hillside.
Policy LU-7.3	The City shall require curvilinear street patterns in hillside areas to respect natural topography and minimize site grading.
Policy LU-7.4	The City shall encourage narrow streets in hillside areas. Streets should be designed with soft shoulders and drainage swales (rather than sidewalks with curbs and gutters) to maintain the rural character of hillside areas and minimize grading impacts. The City shall prohibit parking along narrow street shoulders to provide space for residents to walk and ride horses.
Policy LU-7.5	The City shall encourage the clustering of residential units on hillsides to preserve sensitive habitats and scenic resources as natural open space. Sensitive areas and scenic resources include woodlands, streams and riparian corridors, mature trees, ridgelines, and rock outcroppings.
Policy LU-7.6	The City shall require new hillside developments to provide public trail access (as appropriate) to adjacent greenways, open space corridors, and regional parks.
Policy LU-7.7	The City shall consider de-annexing properties outside of the City's sphere of influence (e.g., Pleasanton Ridgeline) if cooperative agreements with Alameda County, Pleasanton, and the East Bay Regional Park District are in place to permanently preserve the properties as open space or regional parkland.

4.6.1.2 *Existing Conditions*

Regional Geology

The City of Hayward is located within the Coast Ranges geologic province of California, which is dominated by a series of northwest-trending ridges and valleys. Bedrock in the province has been folded and faulted during regional uplift beginning in the Pliocene, roughly four million years before

present. Regional geologic mapping indicates that the site is underlain by an unnamed sandstone, conglomerate, and shale formation of the late Cretaceous period.

4.6.1.3 *On-Site Geologic Conditions*

Soils and Groundwater

The project site ranges in elevation from approximately 50 feet above mean sea level (msl) in its southern corner and 265 feet in its northwestern corner.[8] A portion of the central area of the property has been extensively modified by grading or quarrying prior to 1971, which has removed a broad expanse of the natural soil cover. Various amounts of artificial fill are also present at the site. The western portion of the project site is underlain by faulted rocks of the Knoxville Formation within the lowest sequence of the Great Valley group. This bedrock is primarily composed of shale, claystone and conglomerate with sandstone and siltstone interbeds.

Artificial fill is present along and upslope of a ridge that crosses the proposed development area, approximately one to three feet below the existing surfaces. The fill generally consists of clay soils that likely were removed from the area to the east during previous grading or quarry activities.

Groundwater on-site was encountered at as shallow as four feet below the ground surface (bgs) in the north and northeast areas of the proposed residential area, and is expected to reach 30 feet bgs.[9] Fluctuations in groundwater levels may occur seasonally and over a period of years due to variations in precipitation, temperature, irrigation, and other factors. As noted in *Section 4.3 Biological Resources*, there is a wetland feature on the site that received runoff from the adjoining quarry, beyond the wetland areas, there are no surface water features on the property.

Expansive Soils

Expansive soils are susceptible to shrink and swell resulting from variations in moisture content, especially seasonally. Expansive soils and bedrock may cause heaving and cracking of slabs-on-grade, pavements and foundations. The near-surface residual soils and underlying highly to completely weathered bedrock is moderately to highly expansive

The soils are predominately moderately to highly expansive clays with varying amounts of sand and some gravel.

Seismicity and Seismic Hazards

The San Francisco Bay Area is one of the most seismically active regions in the United States. The significant earthquakes that occur in the Bay Area are generally associated with the crustal movements along well-defined active fault zones of the San Andreas Fault system, which regionally trend in the northwesterly direction.

[8] Advanced GeoEnvironmental Inc. *Phase I Environmental Site Assessment – Ersted Property, Mission Boulevard, Hayward, California.* October 25, 2016.
[9] Advanced GeoEnvironmental, Inc. *Phase I Environmental Site Assessment.* October 25, 2016.

A portion of the northeastern part of the project site located within a State of California Earthquake Fault Hazard Zone for the Hayward fault. The Hayward fault is mapped as crossing the site near the eastern property line. Additionally, several unnamed fault traces, or fault splays, are south of the hazard zone as well as active aseismic slip (fault creep), in vicinities north and south of the site. A portion of the site is located within a designated Alquist-Priolo Earthquake Fault Zone of a City of Hayward Fault Hazard Zone. Because of the presence of nearby active or potentially active faults, ground shaking, ground failure, or liquefaction due to an earthquake could cause damage to structures.

Fault Rupture

The potential for ground-rupture to occur with activity on a fault is one of the hazards associated with faulting. The geotech report identified the potential for fault rupture to occur along the Hayward Fault trace at the eastern portion of the site, as well as along two faults splays that occur on either side of the area proposed for development (see Figure 4.6-1).

Liquefaction

Liquefaction is the result of seismic activity and is characterized as the transformation of loosely water-saturated soils from a solid state to a liquid state after ground shaking. There are many variables that contribute to liquefaction, including the age of the soil, soil type, soil cohesion, soil density, and groundwater level.

The site is not located within the zone of required investigation for liquefaction potential, as identified by the California Geologic Survey on the State of California Seismic Hazard Zones map for the Hayward Quadrangle, issued 2003.

Seismically-Induced Differential Settlements

If near-surface soils vary in composition both vertically and laterally, strong earthquake shaking can cause non-uniform densification of loose to medium dense cohesionless soil layers. This results in movement of the near surface soils. Loose cohesionless soils are not likely to occur on site, therefore, there is a low probability of significant settlement of non-saturated sand layers on the site.

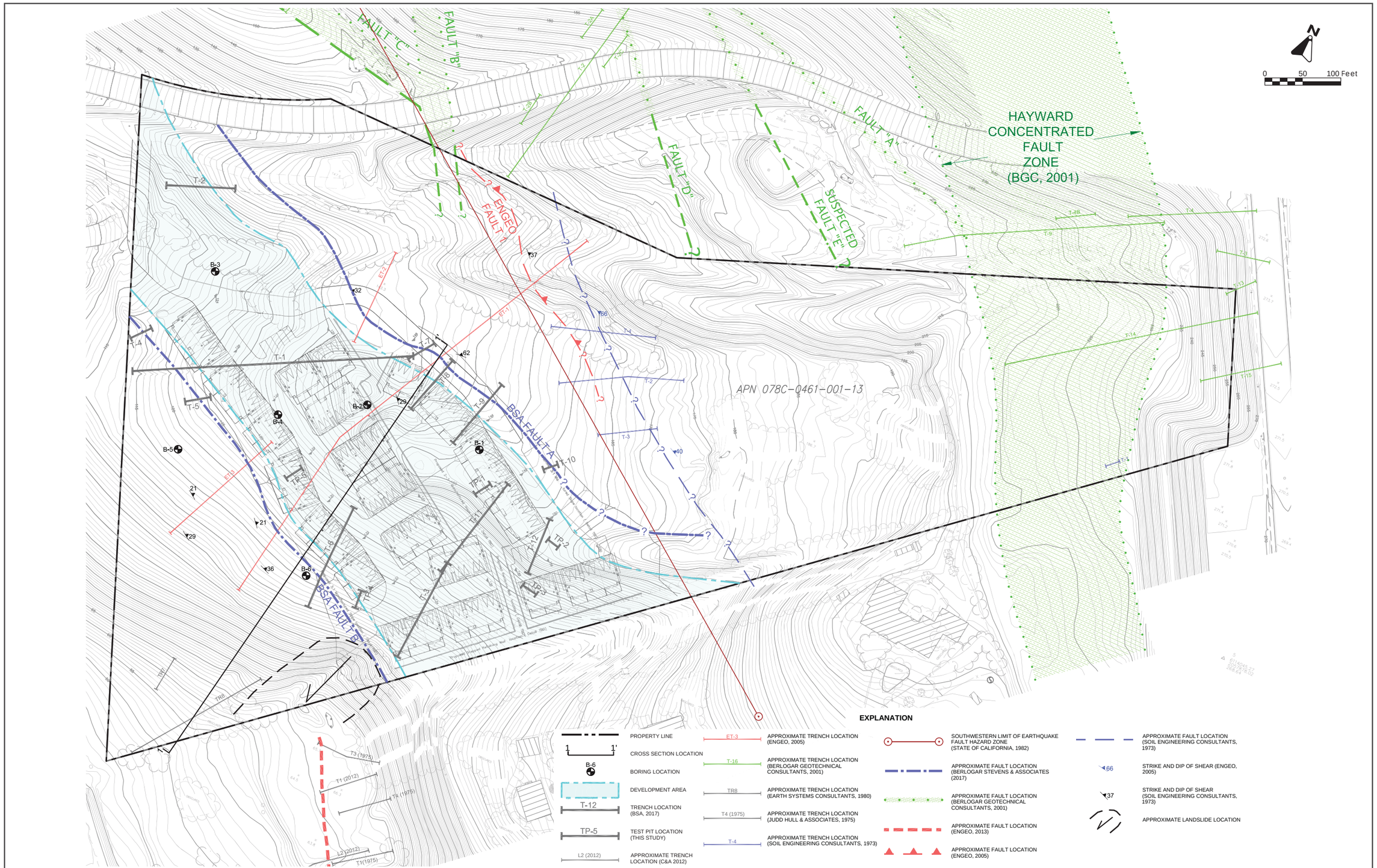
Lateral Spreading

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or "free" face such as an open body of water, channel, or excavation. In soils, this movement is generally due to failure along a weak plane and may often be associated with liquefaction. The geotechnical report found there is no apparent risk of lateral spreading throughout the project site.[10]

Landslides

There is an inactive landslide in the vicinity of the south corner of the project site, located approximately near the proposed fill area of the project site (see Figure 4.6-1).

[10] Gregory J. Ruf, PE,GE. *Berlogar, Stevens & Associates.* Personal communication. June 25, 2018.



FAULT LOCATIONS WITHIN PROJECT VICINITY

FIGURE 4.6-1

Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
1. Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42.)?	☐	☐	☒	☐	1-2,14-16
2. Strong seismic ground shaking?	☐	☐	☒	☐	1-2,14-16
3. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	1-2,14-16
4. Landslides?	☐	☐	☒	☐	1-2,14-16
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐	1-2,14-16
c) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐	1-2,14-16
d) Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2016), creating substantial risks to life or property?	☐	☒	☐	☐	1-2,14-16
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?	☐	☐	☐	☒	1-2,14-16

4.6.2 Impacts Discussion

a, c) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) rupture of a known earthquake fault, ii) strong seismic ground shaking, iii) seismic-related ground failure, or iv) landslides? Would the project be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Fault Rupture

The geotech report recommends minimum 25-foot building setbacks from the fault splays. Given the maturity of the shear zone at the Hayward fault, the corresponding low probability that ground rupture will occur at locations not previously ruptured, the secondary nature of the splay faults exposed in trenches, and the direct method of fault location, the geotechnical report concludes that the potential for ground-rupture to occur within the area proposed for development is low, provided the project adheres to the recommended setbacks.

Seismic Shaking, Liquefaction, and Lateral Spreading

Seismic Shaking

The project site is located in a seismically active region and strong ground shaking would likely occur at the project site during seismic activity throughout the life of the project. Approximately half of the project site is located within a State of California Earthquake Fault Hazard Zone for the Hayward fault, and previous geologic investigations suggest that several fault traces are present south of the hazard zone. The area proposed for development however, is not within the state designated Fault Hazard Zone.

The project would conform to the standard engineering and building practices and techniques specified in the California Building Code (CBC). The proposed residences would be designed and constructed in accordance with the recommendations of a geotechnical report prepared for the site (refer to Appendix C), which identifies the specific design features related to geologic and seismic conditions. The buildings would meet the requirements of appropriate Building and Fire Codes, as adopted by the City of Hayward.

Liquefaction

The site is not located within the zone of required investigation for liquefaction potential as identified by the California Geologic Survey on the State of California Seismic Hazard Zones map for the Hayward Quadrangle, issued 2003.

Lateral Spreading

Loose soils on the surface of the slopes would be removed as a part of the grading operations. Engineered fill would replace the loose soils and extend to bedrock. Therefore, the grading measures would minimize the potential for lateral spreading to occur during a seismic event.

The project, in conformance to applicable regulations and with the implementation of the recommendations in the geotechnical report, would not result in significant impacts from seismicity and seismic-related hazards including ground shaking, liquefaction, and lateral spreading. **(Less Than Significant Impact)**

Landslides

As with most of the surrounding hillside developments, landslides and slope stability are important issues for the project. Evidence of a previous landslide is present at the southernmost tip of the project site (see Figure 4.6-1).

The design-level geotechnical report prepared for the project includes a slope stability analysis to evaluate the stability of the existing hillside slope below the proposed project site with a 15-foot high fill slope at the southwest side of the site and a 20-foot high cut slope between the lower and upper terraces. Although seismically induced landsliding can be a significant hazard, it can generally be mitigated through proper grading procedures. As conditioned by the project upon project approval, the project's Geotechnical Engineer would develop specific remedial alternatives as cut slope conditions are exposed during grading, and would perform annual review of the cut slopes in perpetuity. Uncontrolled fill located in the northeastern area of the site would be removed and replaced with engineered fill to prevent landslides from occurring on-site. Additionally, the project would be required to repair the landslide concurrent with grading for the fill slope portions of the project, as described in the project-specific Geotech report. **(Less Than Significant Impact)**

b, d) Result in substantial soil erosion or the loss of topsoil? Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?

Soil Impacts

Soil Erosion

The tops of fill or cut slopes should be graded in such a way as to prevent water from flowing freely down the slopes. Due to the nature of the site soil and bedrock, graded slopes may e experience severe erosion during construction when grading is halted by heavy rain, which would result in a significant impact. **(Significant Impact)**.

Impact GEO – 1: Cut and fill slopes on the project site would be subject to soil erosion.

Mitigation Measures: In conformance with standard practices in the City of Hayward, the proposed project shall implement the following measure to reduce adverse effects associated with soil conditions.

MM GEO – 1.1: Buildings shall be designed and constructed in accordance with a final design-level geotechnical investigation to be completed for the project by a qualified professional and submitted to the Department of

Community and Economic Development. The final design-level geotechnical investigation shall identify requirement for the placement of fill on the project site and building foundations.

MM GEO – 1.2: All cut and fill slopes shall be planted with deep-rooted, fast growing grasses before the first winter to reduce erosion. Specific details regarding irrigation systems, locations and discharge shall be reviewed by the geotechnical consultant to prevent erosion.

MM GEO-1.3: The civil engineer and the project landscape contractor shall implement a comprehensive erosion control plan to account for seasonal rainfall during and following construction. The project engineering geologist shall make periodic inspections of the site drainage and erosion control features for a period of two years.

Proposed fill slopes would be constructed per recommendations of the design-level geotechnical report, which include installation of geogrid reinforced keyways to prevent erosion issues. With the implementation of MM GEO – 2.1 and MM GEO – 2.2, impacts related to soil erosion would be reduced to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

Expansive Soils

The near-surface residual soils and underlying highly to completely weathered bedrock is moderately to highly expansive. Expansive soils shrink and swell with changes in moisture content, especially seasonally. During the summer months, expansive soils can dry out and desiccate, with shrinkage cracks extending several feet deep. During the winter months, expansive soils can absorb excessive moisture and swell. **(Significant Impact)**

Impact GEO-2: Expansive soils on-site may compromise structure stability.

Mitigation Measures:

MM GEO-2.1: Buildings shall be designed and constructed in accordance with a final design-level geotechnical investigation to be completed for the project by a qualified professional and submitted to the Department of Community and Economic Development. The final design-level geotechnical investigation shall identify requirements for remedial activities and site preparation and grading.

Implementation of GEO-2.1 would result in a less than significant impact related to expansive soils on-site. **(Less Than Significant Impact with Mitigation Incorporated)**

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?

The project would connect to the municipal wastewater conveyance and treatment system, and does not propose the use of septic tanks or alternative wastewater disposal systems. Therefore, there would be no impact. **(No Impact)**

4.6.3 Conclusion

The project, in conformance to applicable regulations and with the implementation of the recommendations in the geotechnical report, would not result in significant impacts related to geology or soils. **(Less Than Significant Impact with Mitigation)**

4.7 GREENHOUSE GAS EMISSIONS

The following discussion is based, in part, on a Greenhouse Gas Assessment prepared by *Illingworth & Rodkin, Inc.* in June 2018. The report is attached as Appendix A.

4.7.1 Environmental Setting

Unlike emissions of criteria and toxic air pollutants, which are discussed in *Section 4.3 Air Quality* and have local or regional impacts, emissions of Greenhouse Gases (GHGs) have a broader, global impact. Global warming associated with the "greenhouse effect" is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere over time. The principal GHGs contributing to global warming and associated climate change are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and fluorinated compounds. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors.

The San Francisco Bay Area Air Basin (SFBAAB) is currently designated as a nonattainment area for state and national ozone standards and national particulate matter ambient air quality standards. SFBAAB's nonattainment status is attributed to the region's development history. Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant. The Bay Area Air Quality Management District's (BAAQMD) approach to developing a Threshold of Significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move us towards climate stabilization. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact and would be considered significant.

The Thresholds of Significance for operational-related GHG emissions are:

- For land use development projects, the threshold is compliance with a qualified GHG Reduction Strategy; or annual emissions less than 1,100 metric tons per year (MT/yr) of CO_2e; or 4.6 MT CO_2e/SP/yr (residents + employees). Land use development projects include residential, commercial, industrial, and public land uses and facilities.

- For stationary-source projects, the threshold is 10,000 metric tons per year (MT/yr) of CO_2e. Stationary source projects include land uses that would accommodate processes and equipment that emit GHG emissions and would require an Air District permit to operate. If annual emissions of operational-related GHGs exceed these levels, the proposed project would result in a cumulatively considerable contribution of GHG emissions and a cumulatively significant impact to global climate change.

The BAAQMD has established project level screening criteria to assist in the evaluation of impacts. If a project meets the screening criteria and is consistent with the methodology used to develop the screening criteria, then the project's air quality impacts may be considered less than significant. For single-family residences, the BAAQMD *CEQA Air Quality Guidelines* set a screening threshold of 56 dwelling units.

4.7.1.1 *Existing Conditions*

The project site is currently undeveloped and devoid of structures. The site does not generate vehicle trips.

4.7.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	1-2,7
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	1-2,7

4.7.3 Impacts Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The project proposes 59 single-family residences which is above the 56 single-family residences screening level (i.e. the minimum residential project expected to emit 1,100 MT CO_2e/year), as specified in BAAQMD's CEQA Air Quality Guidelines for 2020.

GHG emissions were computed for the construction period and the build out (or operational) scenario of the proposed project. Specifically, emissions were computed for both construction and operation of the project using the CalEEMod model in the same manner as used to predict construction air pollutants. The project land uses were input to CalEEMod for the construction period modeling. Assumptions made for modeling the project include: project would be fully operational prior to 2021[11], default energy assumptions for residential land use, and vehicle trip generation.

Construction-Related Emissions

GHG emissions associated with construction were computed to be 527 metric tons (MT) of CO2e for the construction period. These emissions are from on-site operation of construction

[11]Assuming a construction start date of January 2019 and a construction period over 13 months.

equipment, vendor and hauling truck trips, and worker trips. Neither the City nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions, though BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. BAAQMD also encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable. Best management practices assumed to be incorporated into construction of the proposed project include but are not limited to: using local building materials made of at least 10 percent recycled materials or reusing at least 50 percent of construction waste or demolition materials.

Operational Emissions

The CalEEMod model along with the project vehicle trip generation rates and estimates were used to predict operational period GHG emissions associated with operation of a fully developed site under the proposed project. To reduce GHG emissions, the proposed project includes several features, as listed in Table 4.7-3 on the next page.

The project service population efficiency rate is based on the number of future residences. The number of future residences and service population is estimated at 191 based on the latest US Census data of 3.24 average persons per household for the City of Hayward.

Table 4.7-1 presents the results of the CalEEMod model analysis in terms of annual MT of CO2e/yr. These emissions are based on the output of CalEEMod for the proposed project. The proposed project would generate 837 MT CO2e/yr.

Table 4.7-1:
Annual Project GHG Emissions in Metric Tons

Source Category	Proposed Project 2020 CO_{2e} Emissions in Metric Tons (MT)
Area	6
Energy Consumption	197
Mobile	592
Solid Waste Generation	36
Water Usage	6
Total	837 MT
Net Emissions	837 MT
2020 Per Capita	4.38
Significance Threshold	1,100 MT CO_2e/yr
Exceed Threshold?	No

Consistency with Adopted Climate Action Plan

Hayward's Climate Action Plan (CAP) was adopted by the City Council on July 28, 2009. The 2009 CAP was designed to reduce communitywide emissions 12.5 percent below 2005

levels by the year 2020, and to set the City on a course to achieve a long-term emission reduction goal of 82.5 percent below 2005 levels by the year 2050.

Operational emissions from existing development in Hayward in the years 2005 and 2010, as well as projected "Business As Usual" GHG emissions associated with forecasted growth in the City's population and employment in 2020, 2040, and 2050, were forecasted and summaries in Table 4.7-2, as provided in the Hayward 2040 Draft EIR.[12] The 2020, 2040, and 2050 projections reflect both existing and proposed land uses and population and employment growth assumed in the proposed General Plan, but did not take into account any specific GHG reduction measures associated with State or federal legislative actions or the City's 2009 CAP. Projected future emissions with the General Plan are also shown in Table 4.7-2.

The recently adopted General Plan integrates and updates the comprehensive, communitywide GHG emission reduction strategy contained in the City's 2009 CAP to achieve a GHG emission reduction target of 20 percent below 2005 levels by the year 2020. The General Plan also recommends longer-term goals for GHG reductions of 61.7 percent below 2005 levels by the year 2040 and 82.5 percent below 2005 levels by the year 2050.

The Hayward 2040 General Plan Draft EIR contains a comprehensive list of specific General Plan policies and programs that constitute the City's updated GHG emission reduction strategy. These policies and programs contain GHG emission reduction measures that apply to both existing and new development. Implementation of these measures would reduce GHG emissions by more than 20 percent below 2005 levels by the year 2020 when combined with State and federal programs. The City of Hayward considers the City's 2009 CAP combined with the Hayward 2040 General Plan to be a Qualified Greenhouse Gas Reduction Strategy.

Table 4.7-2:
Hayward Communitywide GHG Emissions Baseline Inventories and Projections

Sector	GHG Emissions (MT CO2e/year)				
	Inventories		Projections ("Business as Usual")		
	2005	2010	2020	2040	2050
Residential Energy	158,528	154,424	169,696	200,241	215,514
Commercial/Industrial Energy	238,226	231,719	254,969	301,469	324,720
Transportation	734,087	702,552	748,550	982,017	1,086,054
Solid Waste	52,438	24,048	26,235	30,610	32,798
Water/Wastewater Treatment[1]	-	8,061	8,794	10,261	10,994
Total	**1,183,279**	**1,120,803**	**1,208,245**	**1,670,080**	**1,524,599**
Projected Emissions with 2040 General Plan			**934,845**	**1,087,601**	**1,185,781**

[12] Note the 2005 projections were contained in the 2009 CAP, but were updated for 2010 for the 2040 General Plan.

Note:
Water and Wastewater Treatment GHG emissions were not accounted for in the 2005 baseline GHG inventory as part of the 2009 Climate Action Plan.
Source: City of Hayward 2009; StopWaste.org 2013; Data adjusted and modeled by Ascent Environmental, Inc. in 2013, as reported in the Hayward 2040 General Plan Draft EIR.

The proposed project would not require a General Plan Amendment that would alter GHG emissions in the city, and thus the project's consistency with relevant CAP measures and actions has been used to evaluate the significance of this impact. As part of the evaluation of the project's consistency with the CAP, the project's incorporation of applicable strategies and measures from the plan are binding and enforceable components of the project. Projects that show consistency with the plan forecasts and implement applicable strategies included in the plan are considered to have less-than-significant GHG emissions. The consistency of the project with the City GHG reduction strategies is shown in Table 4.7-3.

Table 4.7-3:
Applicable City of Hayward GHG Reduction Strategies

Applicable Policy or Implementing Program	Goal/Policy/Implementation Program	Project Applicability
Policy NR-2.10 Zero-Emission and Low-Emission Vehicle Use	The City shall encourage the use of zero-emission vehicles, low-emission vehicles, bicycles and other non-motorized vehicles, and car-sharing programs by requiring sufficient and convenient infrastructure and parking facilities throughout the City.	Project would construct sidewalks connecting the project site to sidewalk facilities.
Policy NR-4.1 Energy Efficiency Measures	The City shall promote the efficient use of energy in the design, construction, maintenance, and operation of public and private facilities, infrastructure, and equipment.	City Green Building Ordinance for Private Development would apply.
Policy NR-4.11 Green Building Standards	The City shall require newly constructed or renovated public and private buildings and structures to meet energy efficiency design and operations standards with the intent of meeting or exceeding the State's zero net energy goals by 2020.	City Green Building Ordinance for Private Development would apply. The project would be subject to local and state building codes that regulate energy efficiency.
Policy NR-4.13 Energy Use Data	The City shall consider requiring disclosure of energy use and/or an energy rating for single family homes, multifamily properties, and commercial buildings at certain points or thresholds.	The project would make energy consumption data available upon request.
Policy NR-6.9 Water Conservation	The City shall require water customers to actively conserve water year-round, and especially during drought years.	The project would utilize drought resistant landscaping and efficient drip irrigation systems.
Policy M-1.6 Bicycling, Walking, and Transit Amenities	The City shall encourage the development of facilities and services, (e.g., secure term bicycle parking, street lights, street furniture and trees, transit stop benches and shelters, and street sweeping of bike lanes) that enable bicycling, walking, and transit use to become more widely used modes of transportation and recreation.	The project would include bicycle and pedestrian amenities to encourage these modes of transportation. The project site is located approximately 0.5 miles to the South Hayward BART station.

Table 4.7-3: Applicable City of Hayward GHG Reduction Strategies		
Applicable Policy or Implementing Program	**Goal/Policy/Implementation Program**	**Project Applicability**
Goal M-5 Pedestrian Facilities	Provide a universally accessible, safe, convenient, and integrated pedestrian system that promotes walking.	See above
Policy M-6.5 Connections between New Development and Bikeways	The City shall ensure that new commercial and residential development projects provide frequent and direct connections to the nearest bikeways and do not interfere with existing and proposed bicycle facilities.	The project would implement bicycle access and amenities per City requirements.
Policy M-9.9 Alternative Fuel Vehicle Parking	The City shall require new private parking lots to grant low-carbon vehicles access to preferred parking spaces, and shall require new private parking lots to provide electric vehicle charging facilities.	The project would pre-wire the townhouses for electric vehicle charging stations.
NR-2.4 Community Greenhouse Gas Reduction	The City shall work with the community to reduce community-based GHG emissions by 20 percent below 2005 baseline levels by 2020, and strive to reduce community emissions by 61.7 percent and 82.5 percent by 2040 and 2050, respectively.	See NR-2.6 below for project GHG reduction elements.
NR-2.6 Greenhouse Gas Reduction in New Development	The City shall reduce potential greenhouse gas emissions by discouraging new development that is primarily dependent on the private automobile; promoting infill development and/or new development that is compact, mixed use, pedestrian friendly, and transit oriented; promoting energy-efficient building design and site planning; and improving the regional jobs/housing balance ratio.	The project would: - create specific truck routes to minimize drive times and impacts on surrounding areas. - include energy efficiency measures: tenant specific requirements per NR-4.1 above. - achieve reductions in passenger traffic trips. - reduce water usage: drought tolerant landscaping, drip irrigation, efficient plumbing fixture required per NR-6.9 below.

Table 4.7-3: Applicable City of Hayward GHG Reduction Strategies		
Applicable Policy or Implementing Program	**Goal/Policy/Implementation Program**	**Project Applicability**
NR-4.3 Efficient Construction and Development Practices	The City shall encourage construction and building development practices that maximize the use of renewable resources and minimize the use of non-renewable resources throughout the life-cycle of a structure.	During construction, the following practices would occur: - reuse on site dirt and asphalt/concrete/debris. - locally sourced material selected. - implement construction BMPs (water site daily, speed limits on unpaved sections, etc.). - divert construction and demolition debris from disposal in landfills and incineration facilities for recycling or reuse. - utilize low-emitting materials whenever feasible. - develop tenant design and construction guidelines to assist with implementing sustainable design and construction features in their build-out.
NR-4.6 Renewable Energy	The City shall encourage and support the generation, transmission, use, and storage of locally distributed renewable energy in order to promote energy independence, efficiency, and sustainability. The City shall consider various incentives to encourage the installation of renewable energy projects (i.e. reduced permit fees and permit streamlining).	All townhomes would be solar-ready.
NR-4.11 Green Building Standards	The City shall require newly constructed or renovated public and private buildings and structures to meet energy efficiency design and operations standards with the intent of meeting or exceeding the State's zero net energy goals by 2020.	See NR-2.6 and NR-4.3 above for specific measures.
NR-4.12 Urban Forestry	The City shall encourage the planting of native and diverse tree species to reduce heat island effect, reduce energy consumption, and contribute to carbon mitigation.	The project would include drought resistant and native landscaping.
NR-6.12 Dual Plumbing Systems	The City shall encourage the installation and use of dual plumbing systems in new buildings to recycle greywater	The project would install dual plumbing system to allow for purple pipe hook up when delivered to site.
Policy PFS-7.12 Construction and Demolition Waste Recycling	The City shall require demolition, remodeling and major new development projects to salvage or recycle asphalt and concrete and all other non-hazardous construction and demolition materials to the maximum extent practicable.	The project proposes to divert 50 percent of construction waste from landfills.

With implementation of the GHG reduction measures, as identified in Table 4.7-3, the project would have a less than significant GHG impacts. **(Less Than Significant Impact)**

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As described above, the project would not result in GHG emissions above thresholds that were established by BAAQMD to identify projects that require additional mitigation measures to achieve statewide GHG targets contained in Assembly Bill (AB) 32.

The project would be subject to new requirements under rule making developed at the State and local level regarding greenhouse gas emissions and be subject to local policies, such as the City Climate Action Plan, that may affect emissions of greenhouse gases. As described in response a), the project would not conflict with the state's Climate Change Scoping Plan developed per AB 32 for 2020 or per SB 32 for 2030, the land use assumptions in Plan Bay Area, or regulations adopted by the City of Hayward to reduce greenhouse gas emissions. Thus, there will be a less than significant impact. **(Less Than Significant Impact)**

4.7.4 Conclusion

The proposed project would result in a less than significant impact from GHG emissions. **(Less Than Significant Impact)**

4.8 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based, in part, on a Phase I and a Limited Phase II prepared by prepared by *Advanced GeoEnvironmental, Inc.* in October 2016 and January 2017, respectively. The reports are attached as Appendices E-1 and E-2, respectively.

4.8.1 Environmental Setting

4.8.1.1 *Regulatory Framework*

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), initially authorized in 1976, gives the U.S. EPA the authority to control hazardous waste from "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled the U.S. EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Department of Toxic Substances Control

The Department of Toxic Substances Control (DTSC) regulates hazardous waste, remediation of existing contamination, and evaluates procedures to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of the federal RCRA and the California Health and Safety Code. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning. From these laws and regulations, DTSC develops guidelines and regulations that define what those who handle hazardous waste must do to comply with the laws. These rulemakings are subject to public review and comment.

Government Code §65962.5 (Cortese List)

Section 65962.5 of the Government Code requires the California Environmental Protection Agency (Cal EPA) to develop and update (at least annually) a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by the State, local agencies, and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC), State Water Resources Control Board (SWRCB), and the Department of Resources Recycling and Recovery (CalRecycle). The subject property is not listed on the Cortese List.

City of Hayward General Plan

The Safety Element, as well as the Natural Resources Element of the City's General Plan contains policies, recommendations, and actions to avoid or mitigate hazards and hazardous material impacts resulting from development within the City. The proposed project would be subject to conformance with applicable General Plan policies, including those listed below.

Policies	Description
Policy NR-6.15	The City shall encourage private property owners to plant native or drought-tolerant vegetation in order to preserve the visual character of the area and reduce the need for toxic sprays and groundwater supplements.
Policy HAZ-6.1	The City shall maintain its status as a Certified Unified Program Agency and implement the City's Unified Hazardous Materials and Hazardous Waste Management Program, which includes: • Hazardous Materials Release Response Plans and Inventories (Hazardous Materials Business Plans - HMBP); • California Accidental Release Prevention (CalARP) Program; • Underground Storage Tank (UST) Program; • Above-ground Petroleum Storage Act (APSA) Program, including Spill Prevention, Control, and Countermeasure (SPCC) Plans; • Hazardous Waste Generator Program; • On-site Hazardous Waste Treatment (Tiered Permit) Program; and • California Fire Code Hazardous Material Management Plans (HMMP) and Hazardous Materials Inventory Statements (HMIS).

4.8.1.2 *Existing Conditions*

Background

Hazardous materials encompass a wide range of substances, some of which are naturally-occurring and some of which are man-made. Examples include motor oil and fuel, metals (e.g., lead, mercury, arsenic), asbestos, pesticides, herbicides, and chemical compounds used in manufacturing and other activities. A substance may be considered hazardous if, due to its chemical and/or physical properties, it poses a substantial hazard when it is improperly treated, stored, transported, disposed of, or released into the atmosphere in the event of an accident. Determining if such substances are present on or near project sites is important because exposure to hazardous materials above regulatory thresholds can result in adverse health effects on humans, as well as harm to plant and wildlife ecology.

Historical Uses of the Project Site

The site was historically rural agricultural land until approximately the early 1950s. At around this time, the project site became undeveloped until it was later associated with the La Vista Quarry via dirt roadways for vehicle access until approximately 2005.

Existing Uses and Known Contamination

The project site is an undeveloped hillside property with no structures on-site.

On-Site Hazardous Materials

As noted above, the project site was historically used for agricultural purposes which could have resulted in elevated levels of pesticide residues in the near-surface soils on the project site.

Off-Site Hazardous Materials

The surrounding area of the project was historically agricultural land, with the exception of the quarry located to the north, since at least the early 1900s. Between 1960s and 1990s, there was scattered industrial development to the southeast, southwest, and northwest.

Historical uses of adjoining properties do not pose an environmental concern to the project site.

Wildland Fire Hazards

The project is located approximately 1,000 feet west of Garin Regional Park which is designated as a high fire hazard severity zone.

Hayward has adopted ABAG's 2010 Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) which would maintain and enhance a disaster-resistant region by reducing the potential for loss of life, property damage, and environmental degradation from natural disasters, while accelerating economic recovery from those disasters. The LHMP identifies future mitigation actions and priorities for achieving this goal, discussed below in Section 4.8.3.

4.8.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐	1-2
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?	☐	☐	☒	☐	1-2
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐	1-2,17-18

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:						
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment?	☐	☐	☒	☐	1-2,17-18
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, will the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1-2,19
f)	For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1-2,19
g)	Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐	1-2
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☒	☐	☐	1-2

4.8.3 Impacts Discussion

a, b) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? 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?

The proposed single-family attached residential development would not involve the transport, use, storage or disposal of reportable quantities of hazardous materials. Residents would likely use and store small quantities of household hazardous wastes (i.e., ammonia, paints, oils) which would not be considered significant. During construction, the project may store fuels and chemicals used in the construction of the proposed residential buildings.

Development of the site will require a significant amount of grading. As described above, the project site had historical agriculture uses which could have resulted in elevated levels of pesticide residues in the near-surface soils on the project site. The Limited Phase II - Soil Sampling and Analysis Report prepared for the project analyzed soils on-site to determine if any recognized environmental conditions were present. Results of the Phase II indicated that

concentrations of CAM 17 metals were detected in soil samples, however, the concentrations of the metals were not in excess of the California State hazardous waste characterization thresholds. Soils on-site were also tested for arsenic. Soil concentrations of arsenic were found to be above laboratory detection limits, however, the Department of Toxic Substance Control (DTSC) has determined that background concentrations of arsenic in California soils are commonly high. Additionally, the arsenic concentrations were well below California's background concentrations. Soils on-site would not pose a hazardous threat to future site users or construction workers. **(Less Than Significant Impact)**

c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

The nearest school to the project site is Cesar Chavez Middle School, located at 27845 Whitman Street, approximately one mile from the project site.

Future residents on-site would likely use and store small quantities of household hazardous wastes (i.e., ammonia, paints, oils) which would not be considered significant. Since the nearest school is over one-quarter mile away from the project site and the hazardous waste generated from project operations would be minimal, the project would not use or emit significant quantities of hazardous materials. (**Less Than Significant Impact)**

d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment?*

The project site is not listed on the Cortese List and, therefore, is not anticipated to have any impact on adjacent uses from existing conditions on the site. **(Less Than Significant Impact)**

e, f) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

Hayward Executive Airport is a general aviation airport serving local private pilots and houses over 400 aircraft including business jets.[13] The airport is located approximately seven miles northwest of the project site. The project site is not located within the Airport Influence Area (AIA) for Hayward Executive Airport. **(No Impact)**

g, h) *Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan? Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

[13] City of Hayward. "Hayward Executive Airport". 2016. Accessed April 13, 2017. Available at: <https://www.hayward-ca.gov/airport>

The project would not interfere with an adopted emergency response plan or emergency evacuation plan. The project is served by a single private roadway from the Tennyson Road extension.

As shown in the General Plan EIR, the project site is located within a high fire hazard severity zone at the City's Wildland Urban Interface. Hayward adopted ABAG's 2010 Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) which would maintain and enhance a disaster-resistant region by reducing the potential for loss of life, property damage, and environmental degradation from natural disasters, while accelerating economic recovery from those disasters. The LHMP identifies future mitigation actions and priorities for achieving this goal. Specifically, requiring that new homes in wildland-urban-interface fire-threatened communities or in areas exposed to high-to-extreme fire threat be constructed of fire-resistant building materials and incorporate fire-resistant design features (to increase structural survivability and reduce ignitability). The project would also be required to adhere to the City's Urban/Wildland Interface Guidelines including the incorporation of a fuel management program in the covenants, conditions, and regulations (CC&Rs) to be implemented by the Homeowners' Association. The project would require appropriate fire safe design measures be incorporated into the project design to avoid contributing to wildland fire hazards in the surrounding neighborhoods.

Impact HAZ – 1: The proposed project is located in a high fire hazard severity zone and therefore may contribute to adverse impacts from wildfires. **(Significant Impact)**

Mitigation Measures: The following mitigation measures would reduce impacts induced by wildland fire hazards to a less than significant level:

MM HAZ – 1.1: The project would be designed, constructed, and maintained consistent with the City's Urban/Wildland Interface Guidelines including the incorporation of fire-resistant building materials, fire-resistant design features, and a fuel management program in the CC&Rs of the Homeowners' Association. The final measures to be incorporated in the project would be reviewed and approved by the Fire Marshall prior to the issuance of a building permit.

Implementation of the Urban/Wildland Interface Guidelines would reduce the impact of the project on wildland fire hazards to a less than significant level. The project, therefore, would not significantly increase hazards related to the implementation of evacuation plans or the potential for wildland fires. **(Less Than Significant Impact with Mitigation)**

4.8.4 Conclusion

The project is not proposing new hazardous materials uses and is not located on a site contaminated with hazardous materials. The proposed project would also not represent a hazard to airport operations. The project would comply with all Fire, Building, and Municipal Code requirements,

including implementation of the Urban/Wildland Interface Guidelines to minimize the potential for increased fire risks to result from the project. **(Less Than Significant Impact with Mitigation)**

4.9 HYDROLOGY AND WATER QUALITY

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

National Flood Insurance Program

In 1968, Congress created the National Flood Insurance Program (NFIP) in response to the rising cost of taxpayer funded disaster relief for flood victims and the increasing amount of damage caused by floods. The NFIP makes federally-backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. The Federal Emergency Management Agency (FEMA) manages the NFIP and creates Flood Insurance Rate Maps (FIRMs) that designate 100-year floodplain zones and delineate other flood hazard areas. A 100-year floodplain zone is the area that has a one percent chance of being flooded in any one year based on historical data. As discussed in more detail in *Section 4.9.2.2* below, the project site is not located in a 100-year floodplain.

City of Hayward Municipal Code

City of Hayward Municipal Code Chapter 9, Article 4, implements building standards to comply with the Cobey-Alquist Flood Plain Management Act (Water Code sections 8400 set seq.) and National Flood Insurance Program established pursuant to Federal law (42 U.S.C. section 4001 et seq.).

City of Hayward Municipal Code Chapter 10, Article 8, requires a permit for grading or clearing activities. Applicants must submit a description of the grading or clearing activities to take place, a site map or grading plan, an erosion or sediment plan, a work schedule, and other applicable materials.

City of Hayward Municipal Code, Chapter 11, Article 5, protects water quality by eliminating non-stormwater discharges, controlling illicit discharges, minimizing industrial and commercial pollutants, reducing municipal pollutants, improving construction site controls, and improving erosion control.

City of Hayward Flood Plain Management Ordinance

The City Flood Plain Management Ordinance is intended to establish regulations consistent with Federal and State requirements and set development standards and restrictions for publicly and privately owned land within flood-prone, mudslide, or flood-related erosion areas. The Ordinance requires the City to participate in the NFIP.

The Flood Plain Administrator for the City of Hayward, the City Engineer, is responsible for making determinations in accordance with the Flood Plain Management Ordinance. Responsibilities include ensuring that development applications comply with ordinance requirements, that required State and Federal permits have been obtained, that a proposed development site is reasonably safe from flooding, that the proposed development does not adversely affect area carrying capacity, and that building permits for flood control projects meet requirements.

City of Hayward General Plan

The City of Hayward General Plan includes policies applicable to all development projects in Hayward. The proposed project would be subject to conformance with the following General Plan policies, including the ones listed below.

Policies	Description
Policy NR-6.4	The City shall minimize grading and, where appropriate, consider requiring on-site retention and settling basins.
Policy NR-6.5	The City shall concentrate new urban development in areas that are the least susceptible to soil erosion into water bodies in order to reduce water pollution.
Policy NR-6.6	The City shall promote stormwater management techniques that minimize surface water runoff and impervious ground surfaces in public and private developments, including requiring the use of Low-Impact Development (LID) techniques to best manage stormwater through conservation, onsite filtration, and water recycling.
Policy NR-6.15	The City shall encourage private property owners to plant native or drought-tolerant vegetation in order to preserve the visual character of the area and reduce the need for toxic sprays and groundwater supplements.

4.9.1.2 *Existing Conditions*

Hydrology and Water Quality

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as non-point source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Urban stormwater runoff often contains contaminants such as oil and grease, plant and animal debris (e.g., leaves, dust, animal feces, etc.), pesticides, litter, and heavy metals. In sufficient concentration, these pollutants have been found to adversely affect the aquatic habitats to which they drain.

Under existing conditions, the project site primarily contains grasslands, California buckeyes, Blue gums, Willows and Coast Live Oak. Runoff from the site could contain sediment, fertilizers, and pesticides from landscaped areas, and metals, trash, oils and grease from the paved areas.

Surface Water

The principal sources of water on-site are direct precipitation, surface and subsurface runoff from surrounding uplands, and drainage through two unnamed tributaries on the project site.[14] Runoff from the upland areas to the east is primarily concentrated in a deeply incised drainage course along the southern border of the project site.

As described in *Section 4.4 Biological Resources*, there are two wetland areas on-site that are believed to have developed from water diverted to the site during past quarry operations upslope,

[14] Coast Range Biological, LLC. *Aquatic Resource Delineation Report.* March 2017.

from water currently directed towards the site from subdrains installed during grading of development upslope, and from current construction of the Tennyson Road extension.[15]

Groundwater

The City of Hayward is situated over portions of two medium priority groundwater basins: the East Bay Plain Subbasin and the Niles Cones Subbasin. The Niles Cone Subbasin corresponds with southern portions of Hayward, and is bisected by the Hayward fault. The Hayward Fault is relatively impermeable and impedes groundwater flow, as demonstrated by the varying groundwater levels on either side.

Groundwater on-site was encountered at as shallow as four feet below the ground surface (bgs) in the north and northeast areas of the proposed residential area, and is expected to reach 30 feet bgs. Groundwater flows west-southwest.[16]

Flooding

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map, the site is located within Zone X, which is an area determined to be outside the 500-year floodplain and outside the 1% and 0.2% annual chance floodplains.

Other Inundation Hazards

Dam Failure

The Association of Bay Area Governments (ABAG) compiles the dam failure inundation hazard maps submitted to the State Office of Emergency Services by dam owners throughout the Bay Area. The City of Hayward also maintains dam inundation maps of their dam facilities. The Hayward Dam Inundation Area map shows that the project site is not located within a dam failure inundation zone.[17]

Sea Level Rise

The project site ranges in elevation from approximately 50 feet above mean sea level (msl) in its southern corner and 265 feet in its northwestern corner.[18] The project site is not within a shoreline area vulnerable to projected sea level rise from global climate change of up to 55 inches.

Earthquake-Induced Waves and Mudflow Hazards

The site is not located near a large body of water, near the ocean, or in a landslide hazard zone, and therefore, is not subject to inundation by seiche, tsunami, or mudflow.

[15] Berlogar Stevens & Associates. *Design Level Geotechnical Investigation*. October 17, 2017.
[16] Advanced GeoEnvironmental, Inc. *Phase I Environmental Site Assessment.* October 25, 2016.
[17] City of Hayward General Plan Background Report, Figure 9-5 Hayward Dam Inundation Areas. January 2013.
[18] Advanced GeoEnvironmental Inc. *Phase I Environmental Site Assessment – Ersted Property, Mission Boulevard, Hayward, California.* October 25, 2016.

4.9.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐	1-2
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐	1-2
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial erosion or siltation on-or off-site?	☐	☐	☒	☐	1-2,10
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in flooding on-or off-site?	☐	☐	☒	☐	1-2,10
e) Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐	1-2
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐	1-2
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒	1-2,20
h) Place within a 100-year flood hazard area structures which will impede or redirect flood flows?	☐	☐	☐	☒	1-2,20
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒	1-2,20
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒	1-2

4.9.3 Impacts Discussion

a, f) Violate any water quality standards or waste discharge requirements? Otherwise substantially degrade water quality?

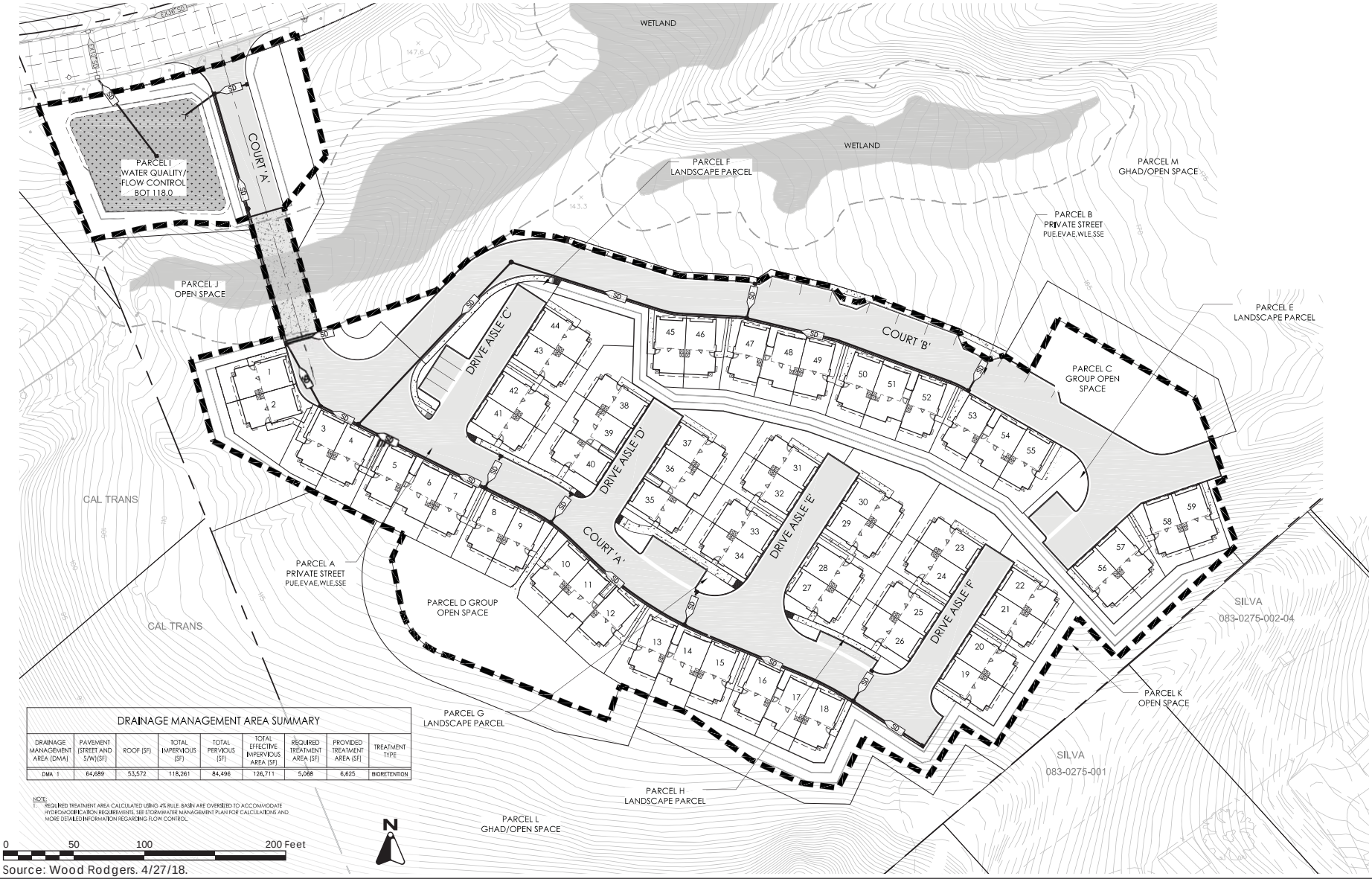
The project would result in the disturbance of more than one acre of soil; therefore, prior to commencement of construction the applicant is required to obtain permit coverage under the Construction General Permit by filing a Notice of Intent (NOI) and a Storm Water Pollution Prevention Plan (SWPPP) with the State Water Resources Control Board (SWRCB). The proposed project would also be subject to the San Francisco Bay Area-wide Municipal Regional Permit (MRP) because it would add or replace more than 10,000 square feet of impervious surfaces. The MRP requires post-construction storm water runoff to be managed with Low Impact Development methods such as infiltration and/or bio retention.

According to the Hydromodification Susceptibility Map[19], the project site is located in a hill or high slope region meaning that it is subject to hydromodification[20]. The project proposes to construct a single bioretention basin which is sized to meet both water quality and hydromodification requirements. The basin will be located adjacent to the street extension from Tennyson Road to the west (see Figure 4.9-1). With construction of the proposed bio-retention basin, the project would have a less than significant impact on water quality and hydromodification. **(Less Than Significant Impact)**

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?

The project will be connected to the existing City of Hayward water mains supply and will not involve the use of on-site water wells and will not deplete groundwater supplies. Although the project would increase the amount of impervious surfaces on the site, most of the hillside site is underlain by bedrock such that site runoff does not substantially contribute to groundwater recharge, and the increased impervious surface area would not be great enough to substantially interfere with groundwater recharge of water supply aquifers in that nearly 14 acres will remain pervious; thus, there would be a less than significant impact. **(Less Than Significant Impact)**

[19] C.3 Stormwater Technical Guidance. May 2, 2016.
[20] Hydromodification is the alteration of the natural flow of water and often takes the form of channel modification or channelization.



DRAINAGE MANAGEMENT AREA SUMMARY

DRAINAGE MANAGEMENT AREA (DMA)	PAVEMENT (STREET AND S/W)(SF)	ROOF (SF)	TOTAL IMPERVIOUS (SF)	TOTAL PERVIOUS (SF)	TOTAL EFFECTIVE IMPERVIOUS AREA (SF)	REQUIRED TREATMENT AREA (SF)	PROVIDED TREATMENT AREA (SF)	TREATMENT TYPE
DMA 1	64,689	53,572	118,261	84,496	126,711	5,068	6,625	BIORETENTION

NOTE:
1. REQUIRED TREATMENT AREA CALCULATED USING 4% RULE. BASIN ARE OVERSIZED TO ACCOMMODATE HYDROMODIFICATION REQUIREMENTS. SEE STORMWATER MANAGEMENT PLAN FOR CALCULATIONS AND MORE DETAILED INFORMATION REGARDING FLOW CONTROL.

Source: Wood Rodgers. 4/27/18.

STORMWATER CONTROL PLAN

FIGURE 4.9-1

c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial erosion or siltation on-or off-site?*

The portion of the site to be left as an undeveloped open-space area to the east would drain towards the proposed residences. The project would collect stormwater in drains in the private streets and driveways and convey runoff to the bioretention basin at the private street connection to Tennyson Road. Per building recommendations of the geotechnical report, surface water would not collect on or adjacent to structures or pavements anywhere on the site during or after construction. While there are several small drainages with wetlands on the site, the project would not alter the course of a nearby stream or river and modifications to the on-site drainage patterns would not result in substantial erosion or siltation on or off site. Thus, there would be a less than significant impact. **(Less Than Significant Impact)**

d) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in flooding on-or off-site?*

The project site is undeveloped and devoid of structures on-site. The entire 17.2-acre project site is currently pervious. Project implementation would add a total 118,261 square feet of impervious surface, equivalent to 2.7-acres. The majority of the site, approximately 13.7 acres, would remain undeveloped. Although the project would increase the amount of site surface flows due to substantially increasing the amount of impervious surface area, the increased volume and flow rates would be managed by directing runoff into the proposed bioretention basin, in conformance with pollutant removal and hydromodification requirements of the Municipal Regional Permit (MRP), reducing potential impacts to San Francisco Bay.

Stormwater runoff from the project would be directed to the bioretention area adjacent to the private street entrance on Tennyson Road. This bioretention area is designed to provide on-site treatment of contaminated runoff by filtering contaminants through the soil layers within the bioretention cell. To meet hydromodification requirements, the basin has been sized to release flows at a reduced flow rate to the existing off-site storm drain system in Tennyson Road, which eventually flows to drainage improvements maintained by the Alameda County Flood Control and Water Conservation District, with storm water eventually discharging into San Francisco Bay.

Because the project would create more than one acre of impervious surface area and is located in a subwatershed that is less than 65 percent impervious, it is subject to the hydromodification management (HM) requirements of Provision C.3.g of the MRP. Provision C.3.g stipulates that stormwater discharges from HM projects shall not cause an increase in the erosion potential of the receiving stream over the pre-project (existing) condition. Increases in runoff flow and volume are required to be managed so that post-construction runoff does not exceed pre-project rates and durations. The HM controls used to manage post-construction runoff flows must be designed such that post-project stormwater discharge rates and durations match pre-project discharge rates and durations ranging from

ten percent of the pre-project two-year storm up to the pre-project ten-year peak flow. The proposed bio retention area has been sized in accordance with this standard.

As a result of the use of a properly sized bioretention basin for treatment and hydromodification, the project would not result in significant pollution or erosion impacts to local receiving waters and would not alter the course of a stream or river nor increase the rate of surface runoff such that downstream flooding would result. **(Less Than Significant Impact)**

e) Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

A portion of the project site is designated as *Medium Density Residential* (RM) in the General Plan, which allows for development between 8.7 and 17.4 dwelling units per acre. All drainage from the impervious surfaces on the site is required to be treated before it enters the storm drain system and flows are to be metered by the bio retention basin Stormwater from the project site would be conveyed to the City's storm drain system which is designed to accommodate up to a 10-year storm. Because the project will employ a stormwater control plan with the use of a bioretention area for water quality and hydromodification to manage the runoff rate, the project would not exceed the capacity of the local storm drainage system nor contribute substantial amounts of polluted runoff. **(Less Than Significant Impact)**

g, h) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? Place within a 100-year flood hazard area structures which will impede or redirect flood flows?

The project site is not located within a 100-year flood hazard area and; therefore, would not affect flood hazard areas in the City of Hayward. **(No Impact)**

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

According to the City's General Plan, the project site is not located in an area subject to inundation resulting from dam failure. **(No Impact)**

j) Result in inundation by seiche, tsunami, or mudflow?

The project site is not located in a tsunami inundation area, an area subject to mudflow, nor would it be vulnerable to seiche because there are no nearby enclosed water bodies. **(No Impact)**

4.9.4 Conclusion

The proposed project would not have significant impacts on hydrology and water quality. **(Less Than Significant Impact)**

4.10 LAND USE AND PLANNING

4.10.1 Environmental Setting

4.10.1.1 *Existing Conditions*

The project site is located in a suburban area of Hayward with single-family residential uses to the northeast and south. Commercial uses are west of the site along Mission Boulevard. An approximately 50-acre regional park is to be constructed north of the project site across the Tennyson Road extension.

The project site is currently undeveloped hillside. The site is not used for agricultural or forestry uses. The site is not located within an adopted habitat conservation plan or natural community conservation plan.

General Plan Designation and Zoning

The project site is designated in the General Plan as *Medium Density Residential* (MDR) and *Limited Open Space* (LOS). The *Medium Density Residential* designation generally suburban and urban areas that contain a mix of housing types. Typical building types include single-family homes, second units, duplexes, triplexes, fourplexes, townhomes, multi-story apartment and condominium buildings, and ancillary structures. Development in *Medium Density Residential* land is limited to densities of between 8.7 to 17.4 dwelling units per net acre.

The *Limited Open Space* designation generally applies to established cemeteries and hillside areas that are largely undevelopable due to natural resources, slopes, or other hazards. Allowed uses for *Limited Open Space* include permanent open space and grazing lands. Support uses include detached single-family homes (on large lots), agriculture, cemeteries, hiking and biking trails. A maximum of 0.2 dwelling units per acre is allowed.

The project site is zoned *Medium Density Residential* and *Agriculture (AB10A)* and is located within the *Mission-Garin Area Special Design District*. All permitted uses in *Medium Density Residential* districts are primarily to intended for residential uses, including condominiums and townhomes, single—family dwelling, group homes (six or fewer residents), and multi-family dwellings. Minimum interior lot size is 5,000 square feet. Building heights are limited to 40 feet in height.

All uses permitted in *Agricultural* districts include single-family dwellings or group homes for six or fewer residents. Agricultural uses such as crop and tree farming or selling fruits, vegetables, and flowers grown on the premises are also permitted. Other permitted uses include a Christmas tree or pumpkin patch lot, a day care home, or a public agency facility. Building heights are limited to 40 feet in height. The project proposes to rezone the site to Planned Development zoning district to allow the proposed clustering of units.

The project site is located within the *Mission-Garin Area Special Design District*, a 363-acre special district created to ensure the orderly development of the Mission-Garin Area, consistent with the policies and strategies contained in the General Plan and the provisions of the Hillside Design Guidelines.

4.10.1.2 *Regulatory Framework*

City of Hayward General Plan

Policies	Description
Policy LU-7.2	The City shall discourage the placement of homes and structures near ridgelines to maintain natural open space and preserve views. If ridgeline development cannot be avoided, the City shall require grading, building, and landscaping designs that mitigate visual impacts and blend the development with the natural features of the hillside.

Mission-Garin Special Design District

The following development standards are applicable to the Mission-Garin zoning district:

1. In order to promote the preservation of natural features while achieving the development potential established for this District, Planned Development applications may be required.
2. Development is not permitted within areas where natural slopes are generally greater than 25 percent.
3. Grading will be consistent with the Hillside Design Guidelines. For developments on slopes greater than 15 percent, at least 50 percent of the dwelling units will feature a stepped design.
4. The slope of streets will not exceed 12 percent unless necessary to minimize significant grading.
5. Pedestrian movement will be encouraged through the provision of pathways on at least one side of the street. On longer streets, pedestrian links between streets will be provided at a minimum of 750-foot intervals.
6. New construction, including new roadways, will be set back at least 100 feet from the top of any creek bank.
7. Exposed drainage systems will be constructed of materials that blend with the natural environment (e.g., grassy swales or river rock).
8. Development plans will feature the preservation of the greatest possible number of native trees, consistent with provisions of the Tree Preservation Ordinance.
9. Structures will be of high quality design, compatible with the natural surroundings and will feature darker earth-tone colors.
10. Lower portions of homes will be screened through the plantings of native trees and shrubs.
11. Preservation of views toward the bay in the hillsides will be incorporated into the design and layout of developments.
12. Detached single-family residential development projects will include at least 10% one story units. A lesser amount may be considered based on topographic conditions.
13. Architectural plans should utilize stepped or transitional front elevations, with the entries and windows visible from the street. The plans should feature alternating roof lines and forms, and incorporate decorative siding materials, entry doors and windows.
14. Densities shall be developed to no less than the midpoint for the assigned density range.
15. Computer visual simulations are required as part of application submittals for any new development. Vantage points are to be approved by staff.

4.10.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Physically divide an established community?	☐	☐	☒	☐	1-3
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐	1-3
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒	1-3

4.10.3 Impact Discussion

a) Physically divide an established community?

The project site is located in a developed suburban area with residential uses to the northeast and to the south. Commercial uses are to the west of the site, along Mission Boulevard. An approximately 50-acre regional park is planned for north of the site, across the Tennyson Road extension. Implementation of the project would not result in the displacement of people or homes. The layout and design of the project does not include any features that would physically divide the community (e.g., impeding roadways or sidewalks). The project would construct trails to connect the residential portion of the site to the open space area uphill of the site. The project, therefore, would not physically divide an established community. **(Less Than Significant Impact)**

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?

According to the City's General Plan, the project site is designated *Medium Density Residential* (MDR) and *Limited Open Space* (LOS) and is zoned *Medium Density Residential* and *Agriculture (AB10A).*

A rezoning and General Plan Amendment to *Planned Development* are proposed to permit construction of 59 residential units on lands partially dedicated as *Limited Open Space* and *Agriculture.* The project would dedicate 11.46-acres as open space to the City of Hayward.

The project would not result in a fundamental conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. Thus, the project would result in a less than significant land use impact. (**Less Than Significant Impact)**

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

As described in *Section 4.4,* the project site is not located within an adopted habitat conservation plan or natural community conservation plan. **(No Impact)**

4.10.4 Conclusion

The proposed project would not conflict with land use plans or policies and therefore would have a less than significant impact on land use. **(Less Than Significant Impact)**

4.11 MINERAL RESOURCES

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

City of Hayward General Plan

The City of Hayward General Plan includes policies applicable to all development projects in Hayward. The proposed project would be subject to conformance with the following General Plan policies, including the ones listed below.

Policies	Description
Policy NR-5.1	The City shall protect mineral resources in undeveloped areas that have been classified by the State Mining and Geology Board as having statewide or regional significance for possible future extraction by limiting new residential or urban uses that would be incompatible with mining and mineral extraction operations.

4.11.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	☐	☐	☐	☒	1-3
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?	☐	☐	☐	☒	1-3

4.11.3 Impact Discussion

a, b) Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state? 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 site is adjacent to the closed La Vista Quarry which has since been developed with residences. The Hayward General Plan allowed for closure of the quarry and cessation of mining activities on the basis that alternative sources of aggregate material were available and that a reduction in future demand for aggregate materials resources was anticipated. The Ersted property (project site) is adjacent to the (now closed) La Vista Quarry. Residential development of the project site would not result in the loss of availability of an important mineral resource. **(No Impact)**

4.11.4 Conclusion

There are no known mineral resources on the project site, and the project site is not identified as a site known to have mineral resources. Therefore, there would be no impact on mineral resources. **(No Impact)**

4.12 NOISE AND VIBRATION

The following discussion is based, in part, on a construction noise assessment prepared by *Illingworth & Rodkin, Inc.* in June 2018. A copy of the report is attached as Appendix G.

4.12.1 Environmental Setting

4.12.1.1 *Background*

Noise may be defined as unwanted sound. Acceptable levels of noise vary from land use to land use. In any one location, the noise level will vary over time, from the lowest background or ambient noise level to temporary increases caused by traffic or other sources. State and federal standards have been established as guidelines for determining the compatibility of a particular use with its noise environment.

There are several methods of characterizing sound. The most common in California is the A-weighted sound level or dBA.[21] This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, different types of noise descriptors are used to account for this variability. Typical noise descriptors include maximum noise level (L_{max}), the energy-equivalent noise level (L_{eq}), and the day-night average noise level (L_{dn}). The L_{dn} noise descriptor is commonly used in establishing noise exposure guidelines for specific land uses. For the energy-equivalent sound/noise descriptor called L_{eq} the most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources which create a relatively steady background noise in which no particular source is identifiable.

Since the sensitivity to noise increases during the evening hours, 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Day/Night Average Sound Level, L_{dn} (sometimes also referred to as DNL), is the average A-weighted noise level during a 24-hour day, obtained after the addition of 10 dB to noise levels measured in the nighttime between 10:00 p.m. and 7:00 a.m. The Community Noise Equivalent Level (CNEL) is a 24-hour A-weighted noise level from midnight to midnight after the addition of five dBA to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 dBA to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.

Construction Noise

Construction is a temporary source of noise impacting residences and businesses located near construction sites. Construction noise can be significant for short periods of time at any particular location and generates the highest noise levels during grading and excavation, with lower noise levels occurring during building construction. Large pieces of earth-moving equipment, such as graders, scrapers, and bulldozers, generate maximum noise levels of 90 to 95 dBA L_{max} at a distance of 50

[21] The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. All sound levels in this discussion are A-weighted, unless otherwise stated.

feet. Typical hourly average construction-generated noise levels are approximately 81 to 88 dBA L_{eq} measured at a distance of 50 feet from the site during busy construction periods. Construction generated noise levels drop off at a rate of about six dBA per doubling of distance between the source and receptor. Shielding by buildings or terrain often result in lower construction noise levels at distant receptors.

4.12.1.2 *Regulatory Framework*

City of Hayward General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development projects with the City. The following policies are specific to noise and vibration and are applicable to the proposed project.

City of Hayward Relevant Noise and Vibration Policies

Policies	Description
Policy HAZ-8.1	The City shall strive to locate noise sensitive uses, (e.g., residences, schools, hospitals, libraries, religious institutions, and convalescent homes) away from major sources of noise.
Policy HAZ-8.4	The City shall consider the visual impact of noise mitigation measures and shall require solutions that do not conflict with urban design goals and standards.
Policy HAZ-8.5	The City shall require the design of new residential development to comply with the following noise standards: • The maximum acceptable interior noise level for all new residential units (single-family, duplex, mobile home, multi-family, and mixed use units) shall be an Ldn of 45 dB with windows closed. • The maximum acceptable exterior noise level for the primary open space area of a detached single-family home, duplex or mobile home, which is typically the backyard or a fenced side yard, shall be an Ldn of 60 dB. This standard shall be measured at the approximate center of the primary open space area. This standard does not apply to secondary open space areas, such as front yards, balconies, stoops, and porches.
Policy HAZ-8.20	The City may require development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on those uses, to the extent feasible.
Policy HAZ-8.21	The City shall limit the hours of construction and maintenance activities to the less sensitive hours of the day (7:00am to 7:00pm Monday through Saturday and 10:00am to 6:00 pm on Sundays and holidays).
Policy HAZ-8.22	The City shall require a vibration impact assessment for proposed projects in which heavy-duty construction equipment would be used (e.g. pile driving, bulldozing) within 200 feet of an existing structure or sensitive receptor. If applicable, the City shall require all feasible mitigation measures to be implemented to ensure that no damage or disturbance to structures or sensitive receptors would occur.

City of Hayward Municipal Code

Hayward Municipal Code, Chapter 4, Article 1 (Public Nuisances) contains the City's Noise Regulations (as amended by Ordinance 11-03, adopted March 22, 2011). The Regulations are applicable to all noise sources in the city limits, with the exception of Hayward Executive Airport, which is regulated separately under the City's Airport Noise Ordinance (addressed separately in this section below); and from animals, which are administered under the City's Animal Control Ordinance. The Regulations establish quantitative noise limits based on measured dBA for activities occurring on residential, commercial and industrial, and public property; noise from vehicles; construction, alteration of structures and landscaping activities. The Regulations also establish a separate and independent qualitative method of determining "unreasonable noise" emanating from private property. Categorical Exemptions to the Regulations are specified for certain activities or source categories, including Alarms and Warning Devices, Emergency Response Activities, Special Events, Generators Required for Medical Purposes and Power Outages, and so forth. In some cases, a permit from the City is required to qualify for an exemption.

4.12.1.3 *Existing Conditions*

The project site is bounded by the Tennyson Road extension to the north, the La Vista residential development to the east, three detached single-family residences to the south, and Caltrans right of way to the west. The noise environment of the project site results primarily from vehicular traffic along Mission Boulevard, over 1,000 feet west of the site. The noise levels along Mission Boulevard are approximately 75 dBA.[22] Construction activity at the La Vista residential area is currently ongoing. The nearest airport to the project site, Hayward Executive Airport, is located approximately four miles northwest of the project site.

4.12.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project result in:					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐	1-3,21
b) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	1-3,21
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	1-3,21
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐	1-3,21

[22] City of Hayward. *General Plan 2040 Draft Environmental Impact Report*. September 2013.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project result in:					
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, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐	1-3,19
f) For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	1-3,19

4.12.3 Impact Discussion

a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The Noise Element of the General Plan establishes 60 dBA CNEL as the maximum suggested exterior noise level for land uses that include single-family residences. Based on the General Plan noise contours, noise levels on the portion of the project site where residences are proposed are expected to be at the 65 CNEL due to traffic levels along Mission Boulevard.

Assuming typical construction methods, interior noise levels are approximately 15 dBA lower than exterior levels within residential units with the windows partially open and approximately 20 to 25 decibels lower than exterior noise levels with the windows closed. Based on the General Plan noise contours for Mission Boulevard and the City's noise compatibility standards, in addition to typical construction methods, the project would need to include mechanical ventilation to allow windows to be kept closed to ensure interior noise levels in the proposed residences would be maintained at or below 45 dBA DNL, consistent with the City's General Plan. **(Less Than Significant Impact)**

b) Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?

Construction Noise

Construction of the proposed single-family attached development would involve grading, excavation to lay foundations, trenching, building erection, and paving. The hauling of imported and exported soil and materials would also generate truck trips on local roadways. Project implementation would result in intermittent short-term noise impacts resulting from construction-related activities, which are expected to last approximately 13 months. Construction noise levels at the nearest residential land uses would be expected to exceed 60

dBA L_{eq} and the ambient noise environment by at least 5 dBA L_{eq} for a period exceeding one year, as shown in Table 4.12-1.

Table 4.12-1:
Hourly Average Noise Levels Due to Construction (dBA, L_{eq})

Primary Construction Area	Overhill Drive	Vista Grande	Mission Heights
Residential Area	67-74 at 265 feet	54-61 at 1,090 feet	54-61 at 1,165 feet
Fill Area	65-72 at 300 feet	71-78 at 150 feet	49-56 at 1,885 feet

Impact NOI-1: Project construction would expose nearby sensitive receptors to noise levels in excess of City standards.

Mitigation Measures:

The following measures will be implemented by the project, in addition to Municipal Code limits on hours of construction, to ensure impacts from construction noise are reduced to a less than significant level:

MM NOI-1.1: The applicant shall develop a construction noise plan, including, but not limited to the following available controls:

- In accordance with the Municipal Code, utilize the best commercially-reasonable available noise suppression devices and techniques during construction activities to reduce noise levels from individual devices or pieces of equipment to 83 dBA or less at a distance of 25 feet and 86 dBA at the property plane.

- Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment. Temporary noise barrier fences would provide a 5 dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receiver and if the barrier is constructed in a manner that eliminates any cracks or gaps.

- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

- Unnecessary idling of internal combustion engines should be strictly prohibited.

- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used reduce noise levels at the adjacent

sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.

- Utilize "quiet" air compressors and other stationary noise sources where technology exists.

- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.

- A temporary noise control blanket barrier could be erected, if necessary, along residential property lines facing the primary construction sites. Noise control blanket barriers can be rented and quickly erected.

- Locate temporary material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors.

- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.

- Notify in writing all adjacent business, residences, and other noise-sensitive land uses of the construction schedule.

- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

The construction noise control plan will be implemented during all phases of construction activity to reduce the noise exposure of neighboring properties. With implementation of the above-listed noise control measures and compliance with limitations on hours and construction equipment noise level emissions set forth in the Municipal Code, the project would have a less than significant construction-noise impact. **(Less Than Significant Impact with Mitigation Incorporated)**

Construction Vibration

The City of Hayward has not established quantitative vibration limits to regulate construction-related vibration. However, for structural damage, the California Department of Transportation recommends a vibration limit of 0.5 in/sec PPV for buildings structurally sound and designed to modern engineering standards, 0.3 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern, and a conservative limit of 0.08 in/sec PPV for ancient buildings or buildings that are documented to be structurally weakened. The buildings within the project vicinity are assumed to be structurally sound, but may or may not have been designed to modern engineering standards. Groundborne vibration levels exceeding 0.3 in/sec PPV would result in a significant vibration impact at residential structures in the project vicinity.

Construction equipment and techniques would have the potential to generate perceptible vibration when heavy equipment or impact tools are used near the perimeter of the project site and in the vicinity of receptors. Vibration levels would vary depending on soil conditions, construction methods, and equipment used. Table 4.12-2 below displays the typical vibration levels that are expected from construction equipment at distances ranging from 25 to 150 feet, which represents the nearest sensitive residences in the project vicinity.

Table 4.12-2:
Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft. (in/sec)	PPV at 100 ft. (in/sec)	PPV at 150 ft. (in/sec)
Clam shovel drop		0.202	0.044	0.028
Hydromill (slurry wall)	in soil	0.008	0.002	0.001
	in rock	0.017	0.004	0.002
Vibratory Roller		0.210	0.046	0.029
Hoe Ram		0.089	0.019	0.012
Large bulldozer		0.089	0.019	0.012
Caisson drilling		0.089	0.019	0.012
Loaded trucks		0.076	0.017	0.011
Jackhammer		0.035	0.008	0.005
Small bulldozer		0.003	0.001	0.000

Source:
Transit Noise and Vibration Impact Assessment, United States Department of Transportation, Office of Planning and Environment, Federal Transit Administration, May 2006, as modified by Illingworth & Rodkin, Inc., June 2018.

The potential for the highest vibration levels would occur during construction at Parcel L (see Figure 3.0-3), located at the northeast portion of the project site, when construction activities occur at distances ranging from about 25 to 100 feet from the nearest residences. At these residences, there could be a risk of damage to plastered walls or ceilings if vibration levels were to exceed 0.3 in/sec PPV. At 25 feet, vibratory rolling would typically produce vibration levels of 0.210 in/sec PPV and would not exceed the 0.3 in/sec PPV threshold. Vibration levels from all other likely construction equipment not listed in Table 4.12-2, including large bulldozers, would be well below the 0.3 in/sec PPV impact threshold

for sound structures. All other structures within the project vicinity are setback more than 100 feet from the proposed construction area. Groundborne vibration from project construction activities would not exceed the 0.3 in/sec PPV limit at the nearest sensitive receptors and would therefore, be a less than significant impact. **(Less Than Significant Impact)**

c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The proposed single-family attached residential structures will include air conditioning units generating noise, and project residents would generate approximately 45 additional trips in the AM peak hour and approximately 58 additional trips in the PM peak hour in the project area. Increased vehicle trips would not result in a significant increase in ambient noise levels as new traffic volumes from 59 dwelling units would be low compared to existing traffic volumes on Mission Boulevard and Tennyson Road. The proposed project air conditioning units will be designed to meet the City's 60 dBA L_{eq} noise levels at adjacent residential property lines. **(Less Than Significant Impact)**

`

d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

As described in response b) above, project construction would temporarily increase noise in the project vicinity. The project would implement MM NOI-1.1 which includes the creation and implementation of a noise control plan to reduce potential noise impacts to nearby sensitive receptors to a less than significant level. Construction hours would be limited to 7:00 AM – 7:00 PM Monday through Saturday, and 10:00 AM and 6:00 PM on Sundays and holidays, per General Plan Policy HAZ-8.21. With implementation of MM NOI-1.1 and adherence to the City's General Plan construction hour limitation, the project would not result in a temporary or periodic increase in ambient noise levels. **(Less Than Significant Impact)**

e, f) For a project located within an airport land use plan or, where such a plan has not yet been adopted, within 2 miles of a public use airport, would the project expose people residing or working in the project area to excessive noise levels? For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Hayward Executive Airport is located approximately four miles northwest of the project site. The project site is not located within the Airport Influence Area (AIA) for Hayward Executive Airport. Therefore, any overhead aircraft noise would not be significant in relation to the existing, local traffic noise. **(Less Than Significant Impact)**

The project is not within the vicinity of a private airport. **(No Impact)**

4.12.4 Conclusion

The proposed project, with the implementation of Mitigation Measures NOI-1.1, would ensure that construction noise impacts would be less than significant. **(Less Than Significant Impact With Mitigation)**

4.13 POPULATION AND HOUSING

4.13.1 Environmental Setting

4.13.1.1 *Existing Conditions*

According to USGS Census data, Hayward's population for 2015 was 158,289 persons.[23] From 2010 to 2014, there were 45,972 households with an average of 3.24 persons per household.[24] According to the City's General Plan, the projected population in 2040 at full build-out will be 265,962 persons occupying 85,794 households.

The jobs/housing balance is the relationship between the number of housing units required as a result of local jobs and the number of residential units available in the City. This relationship is quantified by the jobs/employed resident ratio. When the ratio reaches 1.0, a balance is struck between the supply of local housing and local jobs. The jobs/employed resident ratio is determined by dividing the number of local jobs by the number of employed residents that can be housed in local housing. The jobs/employed residents' ratio for Hayward in 2010 was 1.06, which means that there were 1.06 jobs for every employed resident in the City.[25]

4.13.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Induce substantial 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)?	☐	☐	☒	☐	1-2
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1-2
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1-2

[23] State of California, Department of Finance. E-1 Population Estimates for Cities, Counties, and the State—January 1, 2014 and 2015. May 2015. Available at: http://www.dof.ca.gov/research/demographic/reports/estimates/e-1/view.php.
[24] U.S. Census Bureau. "American Fact Finder." Profile of General Population and Housing Characteristics: 2014, for the City of Hayward. Available at: http://www.census.gov/quickfacts/table/PST045215/0633000.
[25] General Plan Draft Environmental Impact Report, page 385. February 2014.

4.13.3 Impact Discussion

a) Induce substantial 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)?

Implementation of the project will construct 59 single-family homes in a suburban area. This increase in housing would result in a net increase in local population by approximately 189 residents.[26] The number of additional residents will be part of the planned growth in the planning area of the City as envisioned in the General Plan. The population increase would not induce substantial additional growth in the City of Hayward, nor would the project include construction of new infrastructures (roads, utilities, etc.) capable of accommodating growth beyond the project itself. The impact would be less than significant. **(Less Than Significant Impact)**

b, c) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

The project site is currently undeveloped and devoid of any structures. Project implementation, therefore, would not displace people or existing housing. **(No Impact)**

4.13.4 Conclusion

Implementation of the proposed project would result in a less than significant impact on the City's population and housing supply. **(Less Than Significant Impact)**

[26] Based on the latest US Census data for the City, the average residents per household is 3.24. 3.24 residents per household x 59 new units = 189 residents.

4.14 PUBLIC SERVICES

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

Government Code Section 65996

State law (Government Code Section 65996) specifies an acceptable method of offsetting a project's effect on the adequacy of school facilities as the payment of a school impact fee prior to issuance of a building permit. California Government Code Sections 65995-65998, sets forth provisions for the payment of school impact fees by new development as exclusive means of "considering and mitigating impacts on school facilities that occur or might occur as a result of any legislative or adjudicative act, or both, by any state or local agency involving, but not limited to, the planning, use, or development of real property" [§65996(a)]. The legislation goes on to say that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA [§65996(b)]. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code. The school impact fees and the school districts' methods of implementing measures specified by Government Code 65996 would mitigate project-related increases in student enrollment.

Quimby Act

The 1975 Quimby Act (California Government Code section 66477) authorized cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. The Act states that the dedication requirement of parkland can be a minimum of three acres per thousand residents or more, up to 5 acres per thousand residents if the existing ratio is greater than the minimum standard. Revenues generated through in lieu fees collected and the Quimby Act cannot be used for the operation and maintenance of park facilities. In 1982, the Act was substantially amended. The amendments further defined acceptable uses of or restrictions on Quimby funds, provided acreage/population standards and formulas for determining the exaction, and indicated that the exactions must be closely tied (nexus) to a project's impacts as identified through studies required by CEQA.

City of Hayward General Plan

The Land Use and Community Character Element of the City's General Plan contain policies, recommendations, and actions to protect and enhance existing and future open space areas within the City. All future development allowed by the project would be subject to conformance with applicable General Plan policies, including those listed below.

Policy	Description
Policy LU-1.3	The City shall direct local population and employment growth toward infill development sites within the City, especially the catalyst and opportunity sites identified in the Economic Development Strategic Plan.
Policy LU-3.1	The City shall promote efforts to make neighborhoods more complete by encouraging the development of a mix of complementary uses and amenities that meet the daily needs of residents. Such uses and amenities may include parks, community centers, religious

	institutions, daycare centers, libraries, schools, community gardens, and neighborhood commercial and mixed-use developments.
Policy LU-9.1	The City shall require new hillside developments to provide public trail access (as appropriate) to adjacent greenways, open space corridors, and regional parks.
Policy LU-9.2	The City shall coordinate with school districts, park districts, utility providers, and other government agencies that are exempt from local land use controls to encourage facility designs that are compatible in scale, mass, and character with the neighborhood, district, or corridor in which they are located.
Policy LU-7.6	The City shall require new hillside developments to provide public trail access (as appropriate) to adjacent greenways, open space corridors, and regional parks.

4.14.1.2 *Existing Conditions*

Fire Service

The City of Hayward Fire Department (HFD) provides fire, paramedic advanced life support (ALS)/emergency medical (EMS), and emergency services to all areas within the City limits, and to the Fairview Fire Protection District (FFPD) on a contract basis. The closest station to the project site is Station 4, located at 28270 Huntwood Avenue, approximately one mile west of the site.

Police Protection Service

Police protection services for the project site are provided by the City of Hayward Police Department (HPD), which is headquartered at 300 West Winton Avenue, approximately 3.5 miles north of the site. The Hayward Police Department employs over 190 sworn officers in a staff of approximately 300.

Schools

The project site is located within the Hayward Unified School District. Students in the project area would attend Bowman Elementary School, Cesar Chavez Middle School, and Tennyson High School. Bowman Elementary School is located approximately 1.3 miles northwest of the site. Cesar Chavez Middle School is located 1.1 miles west of the site. Tennyson High School is located 1.6 miles northwest of the site.

Parks

The Hayward Area Recreation and Park District (HARD) and the East Bay Regional Park District (EBRPD) provide parks and recreation services in the City. HARD operates 57 parks within the City and provides 159.85 acres of local parkland, 36.71 acres of school parks, 91.74 acres of community parkland, 271.29 acres of districtwide parkland, 1,627 acres of regional parkland, and 145.7 acres of open space, trails, and linear parkland.

An approximately 50-acre regional park is planned for development adjacent to the project site, across Tennyson Road. The nearest existing park to the project site is Stony Brook Park 0.8 miles

south of the site at 620 Woodland Drive. Garin Regional Park is approximately 0.5 miles east of the site.

Libraries

The City of Hayward library system includes the Main Library at 835 C Street (approximately 3.2 miles north of the site) and Weekes Branch Library (approximately 1.8 miles swest of the site) at 27300 Patrick Avenue.

The City's General Plan does not identify a service ratio goal, or other performance standard for library services.

4.14.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project					
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:					
- Fire Protection?	☐	☐	☒	☐	1-2
- Police Protection?	☐	☐	☒	☐	1-2
- Schools?	☐	☐	☒	☐	1-2
- Parks?	☐	☐	☒	☐	1-2
- Other Public Facilities?	☐	☐	☒	☐	1-2

4.14.3 Impacts Discussion

4.14.3.1 *Fire Protection Service*

Station No. 7 is closest to the project site, located approximately one mile to the west. Although construction of the proposed project may incrementally increase the demand for fire and medical services, the project would not require the construction or expansion of fire protection facilities as the proposed project site lies within City limits and was envisioned for residential development in the City's General Plan. The proposed project would be designed to comply with City requirements for fire access and onsite fire prevention facilities (e.g. fire hydrants and/or sprinkler systems) as well as the City's Hillside Design and Urban/Wildland Interface Guidelines. For these reasons, the project will have less than a significant impact and not require new or physically altered fire station facilities. **(Less Than Significant Impact)**

4.14.3.2 *Police Protection Service*

The police headquarters are located at 300 West Winton Avenue, approximately 3.5 miles north of the project site. The proposed project would not result in an increased demand for police services or require the expansion or construction of police facilities. The project's potential impact on police services would be less than significant and not require new or physically altered police facilities. **(Less Than Significant Impact)**

4.14.3.3 *Schools*

The proposed project would add 59 single-family residential units thereby increasing the potential number of school-aged children. According to a Demographic Report on Student Population Projections estimated between the Fall of 2015 to 2021 for Hayward Unified School District, single-family detached homes yield approximately 0.143 elementary school students, 0.033 middle school students, and 0.050 high school students. Using the student yield rates mentioned, the proposed residential development would yield approximately eight (8) elementary school students, two (2) middle school student, and three (3) high school student.[27]

The students would attend Bowman Elementary School, Cesar Chavez Middle School, and Tennyson High School. It is not anticipated that small number of new students generated by the project would require the physical alteration of any existing school facilities. Under Section 65996 of the State Government Code, payment of school impact fees established by SB 50 is deemed to constitute full and complete mitigation for school impacts from development. Developer(s) of new housing units would be required to pay these school impact fees at the time of building permit issuance. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code. Fulfillment of this requirement would mitigate the development of residential uses' impacts to schools to a less than significant level. **(Less Than Significant Impact)**

4.14.3.4 *Park Impacts*

The City of Hayward provides and maintains parkland and open space within the City for residents and visitors to enjoy. Based on the latest US Census data for the City, it is estimated that the project would generate approximately 189 net new residents. The project residents would be served by existing parks in the project area and other open space and recreational facilities in the region, including the adjacent Garin Regional Park managed by the East Bay Regional Park District.

It is not anticipated that the project's incremental demand for park and recreational facilities in the area would result in the substantial, physical deterioration of existing park and recreational facilities or require the expansion or construction of new facilities. The

[27] 0.143 (Elementary School Student Yield Factor) x 28 (Total number of dwelling units) = 8 students.
0.033 (Middle School Student Yield Factor) x 28 (Total number of dwelling units) = 2 student.
0.050 (High School Student Yield Factor) x 28 (Total number of dwelling units) = 3 student.

developer will be required to pay applicable park in-lieu fees; thus the impact is considered less than significant. **(Less Than Significant Impact)**

4.14.4 Conclusion

The proposed project would result in a less than significant impact to public services. **(Less Than Significant Impact)**

4.15 RECREATION

4.15.1 Environmental Setting

4.15.1.1 *Existing Conditions*

The Hayward Area Recreation and Park District (HARD) and the East Bay Regional Park District (EBRPD) provide parks and recreation services in the City. HARD operates 57 parks within the City and provides 159.85 acres of local parkland, 36.71 acres of school parks, 91.74 acres of community parkland, 271.29 acres of districtwide parkland, 1,627 acres of regional parkland, and 145.7 acres of open space, trails, and linear parkland. Within the City of Hayward, there are currently (2012) 1.02 acres of local parkland per 1,000 residents, which is just above HARD's minimum standard for local parks (1.0 acres per 1,000 residents).

An approximately 50-acre regional park is planned for development adjacent to the project site, across Tennyson Road. The nearest existing park to the project site is Stony Brook Park 0.8 miles south of the site at 620 Woodland Drive. Garin Regional Park is approximately 0.5 miles east of the site.

4.15.2 Checklist and Discussion of Impacts

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
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 will occur or be accelerated?	☐	☐	☒	☐	1-2
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?	☐	☐	☒	☐	1-2

4.15.3 Impact Discussion

a, b) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated? 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?

The City of Hayward provides and maintains parkland and open space within the City for residents and visitors to enjoy. Based on the latest US Census data for the City, it is estimated that the project would generate approximately 189 net new residents. The project residents would be served by existing parks in the project area and other open space and recreational facilities in the region, including the adjacent Garin Regional Park managed by the East Bay Regional Park District.

It is not anticipated that the project's incremental demand for park and recreational facilities in the area would result in the substantial, physical deterioration of existing park and recreational facilities or require the expansion or construction of new facilities. The developer will be required to pay applicable park in-lieu fees; thus the impact is considered less than significant. **(Less Than Significant Impact)**

4.15.4 Conclusion

The proposed project would not substantially deteriorate existing park facilities or expand recreational facilities that would adversely affect the existing environment. **(Less Than Significant Impact)**

4.16 TRANSPORTATION/TRAFFIC

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

City of Hayward General Plan

The Mobility Element of the City's General Plan contain policies, recommendations, and actions to improve traffic and circulation throughout City. All future development allowed by the project would be subject to conformance with applicable General Plan policies, including those listed below.

Policy	Description
Policy M-1.1	The City shall provide a safe and efficient transportation system for the movement of people, goods, and services through, and within Hayward.
Policy M-4.5	The City shall develop a roadway system that is redundant (i.e., includes multiple alternative routes) to the extent feasible to ensure mobility in the event of emergencies.
Policy M-4.7	The City shall continue to evaluate circulation patterns and implement appropriate traffic-calming measures to prevent speeding in neighborhoods.

4.16.1.2 *Existing Conditions*

Roadway Network

Regional Access

Interstate 880 (I-880) is a north-south interstate highway connecting San José and Oakland. The project site is accessible from I-880 via Tennyson Road.

State Route 92 (SR 92) is an east-west highway between Half Moon Bay and downtown Hayward. The project site is accessible from SR 92 via Mission Boulevard.

Local Access

Mission Boulevard is a north-south spanning from San José to Oakland. The project site is accessible from Mission Boulevard via the Tennyson Road extension.

Tennyson Road is an east-west road spanning Hayward. The project site is accessible from Tennyson Road via a recent extension. The extension provides direct access to the project site.

4.16.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐	1-2
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐	1-2
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒	1-2
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☐	☒	☐	1-2
e) Result in inadequate emergency access?	☐	☐	☒	☐	1-2
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒	1-2

4.16.3 Impacts Discussion

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Project Trip Generation Estimates

Project trip estimates for the proposed project are based on trip generation rates obtained from the *Institute of Transportation Engineers' (ITE's) Trip Generation Manual, Tenth*

Edition, 2017. Based on the recommended ITE trip generation rates for single-family atached housing (Land Use Code 210), the proposed 59-unit development would result in approximately 45 new A.M. peak hour trips, and approximately 58 new P.M. peak hour trips.[28]

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

The Congestion Management Program requires a traffic impact analysis when a project would result in 100 or more peak hour trips. The project, which would generate approximately 45 A.M. and 58 P.M. peak hour trips, does not require a detailed traffic impact analysis to show conformity to the CMP. The project would not result in a conflict with any other adopted plan, ordinance, or policy related to the effectiveness of the circulation system. **(Less Than Significant Impact)**

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The project would not affect air traffic patterns in the vicinity of the site. **(No Impact)**

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?

Development in accordance with City design standards will ensure that hazards due to a design feature would be avoided. **(Less Than Significant Impact)**

e) Result in inadequate emergency access?

The project would be served by one private street extending from Tennyson Road which would also serve as the Emergency Vehicle Access (EVA) for the project. The project's site plans showing the single project entrance were approved by the City of Hayward Fire Department and determined to be a less than significant impact with respect to emergency access. **(Less Than Significant Impact)**

4.16.4 Conclusion

The proposed project would not generate a substantial amount of new vehicle trips that would exceed the capacity of the street system serving the site, nor would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. The project would not result in inadequate emergency access, nor a change in air traffic patterns. **(Less Than Significant Impact)**

[28] Institute of Transportation Engineers. *Trip Generation Manual*, 10th Edition – Volume 2. 2017

4.17 UTILITIES AND SERVICE SYSTEMS

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

Assembly Bill 939

Assembly Bill 939 (AB 939) established the California Integrated Waste Management Board (now CalRecycle) and required all California counties to prepare integrated waste management plans. AB 939 required all municipalities to divert 50 percent of the waste stream by the year 2000.

California Green Building Standards Code

In January 2010, the State of California adopted the California Green Building Standards Code that establishes mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. These standards include a mandatory set of guidelines, as well as more rigorous voluntary measures, for new construction projects to achieve specific green building performance levels:

- Reducing indoor water use by 20 percent;
- Reducing wastewater by 20 percent;
- Recycling and/or salvaging 50 percent of nonhazardous construction and demolition debris; and
- Providing readily accessible areas for recycling by occupant.

City of Hayward General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development projects with the City. The following policies are specific to utilities and service systems and are applicable to the proposed project.

Policies	Description
Policy PFS-1.2	The City shall annually review and update the Capital Improvement Program to ensure adequate and timely provision of public facility and municipal utility provisions.
Policy PFS-1.4	The City shall, through a combination of improvement fees and other funding mechanisms, ensure that new development pays its fair share of providing new public facilities and services and/or the costs of expanding/upgrading existing facilities and services impacted by new development (e.g., water, wastewater, stormwater drainage).
Policy PFS-4.6	The City shall strive to adopt innovative and efficient wastewater treatment technologies that are environmentally-sound.
Policy NR-6.9	The City shall require water customers to actively conserve water year-round, and especially during drought years.
Policy NR-6.10	The City shall support efforts by the regional water provider to increase water recycling by residents, businesses, non-profits, industries, and developers, including identifying methods for water recycling and rainwater catchment for indoor and landscape uses in new development.

Policy NR-6.15	The City shall encourage private property owners to plant native or drought-tolerant vegetation in order to preserve the visual character of the area and reduce the need for toxic sprays and groundwater supplements.
Policy PFS-4.9	The City shall ensure the provision of adequate wastewater service to all new development, before new developments are approved, and support the extension of wastewater service to existing developed areas where this service is lacking.

4.17.1.2 *Existing Conditions*

Water

Water service to the project site is provided by City of Hayward. The City receives water through two aqueducts along Mission Boulevard and Hesperian Boulevard that have a total capacity of 32 million gallons per day (mgd). The aqueducts deliver potable water through a pressurized distribution system with over 360 miles of pipelines, 14 water storage reservoirs, seven pump stations, transmission system pressure regulating valves, numerous zonal pressure reducing valves, and two booster pump stations.

The water supplied to Hayward is predominantly from the Sierra Nevada, delivered through the Hetch-Hetchy aqueducts, but also includes treated water produced by the SFPUC from its local watershed and facilities in Alameda County.

The project would connect to an existing 8-inch water line in the Tennyson Road extension.

Storm Drainage

As discussed in *Section 4.9 Hydrology and Water Quality*, storm drain lines that range between 12 inches to 36 inches are located in Tennyson Road. Storm drain lines in the project area are provided and maintained by the City of Hayward. Runoff from these lines discharges to the Old Alameda Creek watershed.

Wastewater/Sanitary Sewer System

The City of Hayward owns and operates the wastewater collection and treatment system that serves almost all of the residential, commercial, and industrial users within the incorporated City limits, and limited portions of the adjacent unincorporated areas of Alameda County by contract. The City of Hayward Water Pollution Control Facility (WPCF) treats municipal wastewater and conveys it to the East Bay Dischargers Authority disposal facility. The East Bay Dischargers Authority disposes of the treated wastewater in San Francisco Bay.

The City of Hayward 2015 Urban Water Management Plan estimates that Hayward collected and treated 10.1 mgd of wastewater.[29] The Hayward WPCF is permitted to provide treatment for up to 18.5 million gallons per day (mgd), which is anticipated to be reached by 2035.

[29] City of Hayward Urban Water Management Plan. *Table 6-3: Wastewater Treatment and Discharge Within Service Area in 2015*. June 2016.

Solid Waste

The City of Hayward Department of Public Works, Utilities and Environmental Services Division, provides weekly garbage collection and disposal services through a Franchise Agreement with Waste Management, Inc. (WMI), a private company. WMI subcontracts with a local non-profit, Tri-CED Community Recycling, for residential collection of recyclables.

Altamont Landfill is the designated disposal site in the City's Franchise Agreement with Waste Management, Inc. (WMI). In 2001 Altamont Landfill received County approval to increase capacity, adding 25 years to the life of the landfill and extending the expected closure date to the year 2040.

Hayward has exceeded the State population and employee per capita solid waste diversion targets of 50 percent established by Senate Bill (SB) 1016. Additionally, the City has recorded diversion rates of 67 to 71 percent for each of the past four years in an effort to achieve the countywide goal of diverting 75 percent of all generated waste from landfills.

4.17.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐	1-2
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	1-2
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	1-2
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐	1-2
e) 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?	☐	☐	☒	☐	1-2
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐	1-2

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
g) Comply with federal, state, and local statutes and regulations related to solid waste.	☐	☐	☒	☐	1-2

4.17.3 Impacts Discussion

a, b, e) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? Result in a determination by the wastewater treatment provider which serves or may serve the project that is has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Pursuant to the Federal Clean Water Act and California's Porter-Cologne Water Quality Control Act, the RWQCB regulates wastewater discharges to surface waters, such as San Francisco Bay, through the NPDES program. Wastewater permits contain specific requirements that limit the pollutants it discharges. As required by the RWQCB, the WPFC monitors its wastewater to ensure that it meets all requirements. The RWQCB routinely inspects treatment facilities to ensure permit requirements are met.

Sewage from development on the project site would be treated at the WPFC in accordance with the existing NPDES permit. The approximately 189 new project residents would contribute an estimated additional average base wastewater flow of approximately 14,297 gallons per day (GPD).[30]

The flow from the proposed project would be conveyed in 8-inch sanitary sewer lines within the proposed private streets and driveways to the existing 8-inch sanitary sewer line in Tennyson Road. The Hayward WPFC currently treats 10.1 mgd of wastewater and is permitted to provide treatment for up to 18.5 million gallons per day (mgd), which is anticipated to be reached by 2035. Therefore, the Hayward WPFC has adequate capacity to serve the project site. **(Less Than Significant Impact)**

c) Require or result in the construction of stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Under existing conditions, the 17.2-acre project site is entirely undeveloped. The project site would develop approximately 5.4-acres of the site with residences, and would leave the remaining area undeveloped.

[30] 85% of gross water demand. Gross water demand calculated to be 16,287 gal/day for all 59 dwelling units.

All drainage from the developed portion of the site is required to be treated before it enters the storm drain system. To ensure there is sufficient capacity to handle increased drainage from the property, the project would be required to limit the runoff from the site so that runoff would be comparable, if not less than pre-development levels. The project will employ a stormwater control plan, as discussed in *Section 4.9 Hydrology and Water Quality*, with the use of the bio-retention area and hydromodification vault to all site drainage to meter runoff leaving the site before being discharged into the storm drain system to ensure sufficient capacity, therefore the project will have a less than significant impact. **(Less Than Significant Impact)**

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The water supplied to Hayward is predominantly from the Sierra Nevada, delivered through the Hetch-Hetchy aqueducts, but also includes treated water produced by the San Francisco Public Utilities Commission (SFPUC) from its local watershed and facilities in Alameda County. The City receives water through two aqueducts along Mission Boulevard and Hesperian Boulevard that have a total capacity of 32 million gallons per day (mgd). The aqueducts deliver potable water through a pressurized distribution system with over 360 miles of pipelines, 14 water storage reservoirs, seven pump stations, transmission system pressure regulating valves, numerous zonal pressure reducing valves, and two booster pump stations.

Although the project proposes an increased population on the project site, the project water demand has been accounted for in the City's Urban Water Management Plan. Based on water usage rates of approximately 89 gallons per capita per day (GPCD) for 189 new residents as defined in the Urban Water Management Plan, the project would require approximately 16,821 GPD which can be conveyed in existing water lines available to the site and by existing supplies.[31] In addition to the water line in Tennyson Road the project proposes to connect to, the project would connect to an 8-inch water line that services the residents to the south of the site along Overhill Drive. With connections to both the Tennyson Road water line and the water line to the south, the project would be adequately served by existing water supply entitlements. **(Less Than Significant Impact)**

f, g) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? Comply with federal, state, and local statues and regulations related to solid waste?

Waste generation and disposal data for Hayward is maintained by CalRecycle. According to the CalRecycle, the total amount of solid waste landfilled in 2015 was 100,123 tons, which equals a solid waste generation rate of approximately 3.5 pounds per resident per day. Assuming this rate remains stable, the additional 189 residents projected under the proposed project would generate approximately 640.5 pounds (0.32 tons) of landfilled solid waste per

[31] 89 gallons per capita per day x 189 new residents (3.2 persons/household x 59 residences) = 16,821 gallons per day

day.[32] The project would increase solid waste generation in the City by well less than one percent and therefore would not significantly impact landfill capacity. **(Less Than Significant Impact)**

4.17.4 Conclusion

The proposed project would have a less than significant impact on utilities and service systems. **(Less Than Significant Impact)**

[32] CalRecycle Disposal Reporting System. Available at <www.calrecycle.ca.gov/LGCentral/Reports/DRS/Destination/JurDspFa.aspx>. Accessed April 5, 2017.

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐	1-21
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)?	☐	☐	☒	☐	1-21
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐	1-21

4.18.1 Project Impacts

As discussed in the individual sections, the proposed project would not degrade the quality of the environment with the implementation of identified standard permit conditions and mitigation measures. The project includes mitigation measures to avoid or reduce biological resources, cultural resources, geology and soils, and noise impacts to a less than significant level.

As discussed in *Section 4.4 Biological Resources*, the project may impact burrowing owls and nesting birds protected under the Migratory Bird Treaty Act and therefore requires implementation of mitigation measures MM BIO-1.1through MM BIO-3.3. These measures would require pre-construction surveys and implementation of avoidance measures of take of individuals. The project would also be required to replace trees proposed for removal at a ratio per the City of Hayward Municipal Code.

There are no historic buildings on-site or in the immediate project vicinity as discussed in *Section 2.5 Cultural Resources*. However, the project requires implementation of appropriate mitigation measures if project construction encounters unknown buried archaeological resources.

As discussed in *Section 4.12 Noise*, project construction may result in significant noise impacts to nearby sensitive receptors. Implementation of NOI-1.1, which would require the applicant to prepare

and implement a noise control plan, would reduce potential construction noise related impacts to a less than significant level. **(Less Than Significant Impact with Mitigation)**

4.18.2 Cumulative Impacts

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects "that are individually limited, but cumulatively considerable." As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

Because criteria air pollutant and GHG emissions would contribute to regional and global emissions of such pollutants, the identified thresholds developed by BAAQMD and used by the City of Hayward were developed such that a project-level impact would also be a cumulatively considerable impact. The project would not result in a significant emissions of criteria air pollutants or GHG emissions and, therefore, would not make a substantial contribution to cumulative air quality or GHG emissions impacts.

With the implementation of mitigation measures and standard permit conditions, residential development on the site would not result in significant geology and soils or hydrology and water quality impacts and would not contribute to cumulative impacts to these resources as they are specific to the site and immediate surroundings. Also, the project would not impact agricultural and forest resources or mineral resources and, therefore, the project would not contribute to a significant cumulative impact on these resources.

The project site is located adjacent to the La Vista Residential development, a residential project of 179 homes, currently under construction uphill and east of the project site. Since the project is 59 units, it would incrementally contribute to the increased traffic, air quality, and noise impacts previously disclosed in connection with implementation of La Vista development because the number of single-family residences for both sites were evaluated as part of the City's General Plan.

The project site is across the street from the planned La Vista Park. The park, approximately 50-acre in size, is part of the planned La Vista residential development. Planned amenities for the park include an amphitheater, yoga lawn, soccer field, wedding/events lawn, children's play structures, picnic area and a promenade plaza with space for organized events.

4.18.2.1 *Biology*

The proposed project, in conjunction with the La Vista Residential development, would not result in the significant loss of sensitive habitat or special-status species. The project would be required to purchase credits of wetland habitat from an approved wetland mitigation bank or would create freshwater habitat at a 2:1 ratio or at another location approved by the US Army Corps of Engineers. Pre-construction nesting bird and burrowing owl surveys are required as mitigation, therefore, the project would have a less than significant cumulative impact on nesting migratory birds and burrowing owls. **(Less Than Significant Cumulative Impact)**

4.18.2.2 *Noise*

Typically, a three (3) dBA noise increase would be perceivable by sensitive receptors. In order for traffic noise to increase by 3 dBA, traffic volumes would need to double along a local roadway. Under the cumulative condition, the proposed project would not double existing daily traffic volumes along Mission Boulevard or the Tennyson Road extension such that sensitive receptors would be affected by significant traffic related noise from cumulative projects. **(Less Than Significant Cumulative Impact)**

4.18.2.3 *Public Services*

As described in *Section 4.14.3.1*, the project is served by the Hayward Fire Department (HFD) which provides fire service to Hayward's residents. Since the project would be contributing an incremental increase in the population and is surrounded by the La Vista development, the fire services have been adequately sized to meet the needs of the La Vista development and therefore, the project would not result in the need for additional fire facilities.

As described in *Section 4.14.3.2*, the project is located within the service area of the Hayward Police Department. None of the cumulative projects served by Hayward would result in the expansion of the service area and, therefore, the incremental increase in demand would not result in the need for additional police facilities. The proposed project units are consistent with the development assumptions for the site in the General Plan, and its incremental increase in demand for utilities and public services has been accounted for in the General Plan EIR's cumulative analysis. **(Less Than Significant Cumulative Impact)**

4.18.2.4 *Traffic*

The Mission Garin EIR analyzed impacts for the greater project vicinity for a greater number of residential units than what is proposed and what is under construction. The EIR evaluated impact of 321 residential units for the La Vista residential site, which would construct 179 units at full build-out. The proposed La Vista regional park would not be likely to generate significant traffic during peak-hours, instead, it would be expected to contribute the most traffic during evening and weekend hours.

The proposed project, in combination with the La Vista residential development, would result in a less than significant cumulative impact with respect to traffic and circulation in the area. **(Less Than Significant Cumulative Impact)**

4.18.3 Direct or Indirect Adverse Effects on Human Beings

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include construction

TACs, wildfire hazards, and noise. However, implementation of mitigation measures and General Plan policies would reduce these impacts to a less than significant level. No other direct or indirect adverse effects on human beings have been identified. **(Less Than Significant Cumulative Impact).**

4.18.4 Conclusion

With the implementation of the proposed mitigation measures identified in this Initial Study, the impacts disclosed would not be significant or cumulatively considerable. **(Less Than Significant Cumulative Impact)**

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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

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