Initial Study/Mitigated Negative Declaration for the

Brookside Assisted Living Project

Renovation and new addition to existing convalescent home building.

4110 Alhambra Way City of Martinez October 2021



Prepared by: MIG Inc., Berkeley CA.



Table of Contents

1.	Project Information	5
1.1	1 Project Title	5
1.2	2 Lead Agency Name and Address	5
1.3	Contact Person and Phone Number	5
1.4	4 Project Sponsors Names and Addresses	5
1.5	5 General Plan Designation	5
1.6	6 Zoning	5
1.7	7 Introduction	5
1.8	8 Project Location and Context	5
1.9	9 Project Description	6
2.	Summary of Findings: Impacts and Mitigations	20
3.	Environmental Factors Potentially Affected	22
4.	Determination	23
5.	Evaluation of Environmental Impacts	24
6.	Issues	26
6.1	1 Aesthetics	26
6.2	2 Agriculture and Forestry Resources	29
6.3	3 Air Quality Error! Bool	kmark not defined.
6.4	4 Biological Resources	40
6.5	5 Cultural Resources	50
6.6	6 Energy Resources	56
6.7	7 Geology and Soils	58
6.8	8 Greenhouse Gas Emissions	64
6.9	9 Hazards and Hazardous Materials	70
6.1	10 Hydrology and Water Quality	74
6.1	11 Land Use and Planning	80
6.1	12 Mineral Resources	82
6.1	13 Noise	83
6.1	14 Population and Housing	83
6.1		
6.1	16 Recreation	104

6.17	Transportation	105
6.18	Tribal Cultural Resources	1096
6.19	Utilities and Service Systems	11108
6.20	Wildfire	1163
6.21	Mandatory Findings of Significance	1174
7. Lea	ad Agency and Consultants	11916
List of	Figures	
Figure 1	: Project Vicinity Map	
Figure 2	: Project Location Map	10
Figure 3	: Existing Site Plan	11
Figure 4	: Proposed Site Plan	12
Figure 5	: Building Elevations – East and West	13
Figure 6	: Building Elevations – North and South	14
Figure 7	: Building Materials/ Exterior Finishes	15
Figure 8	: Fire Access and Circulation Plan	16
Figure 9	: Landscaping Plan	17
Figure 1	0: Preliminary Stormwater Control Plan Exhibit	18
Figure 1	1: Utilities Plan	19
List of	Tables	
Table 1.	San Francisco Bay Area Basin Attainment Status	38
Table 2.	BAAQMD 2017 Clean Air Plan Control Measure Sectors Error! Bookm	ark not defined.39
Table 3.	Project Consistency with BAAQMD 2017 Clean Air Plan	39
Table 4.	Project Consistency with BAAQMD Screening Criteria	41
Table 5.	Cultural Resources within 0.5 Miles of the Project Area	53
Table 6.	Bioretention Basis Sizes and Requirements	67
	Typical Construction Equipment Noise Levels (dBA)	
Table 8.	Caltrans' Vibration Threshold Criteria for Building Damage	94
	Caltrans' Vibration Criteria for Human Response Error! Book	
). Potential Groundborne Vibration Levels	
Table 11	1. Contra Costa County Fire Protection District Fire Code Regulations	99
Table 12	2. Trip Generation	107

Appendices

- A. Biological Resources Study
- B. Tree Evaluation
- C. Geotechnical Report
- D. Phase 1 Environmental Site Assessment
- E. Limited Lead-Based Paint and Asbestos Sampling and Analysis
- F. Traffic Circulation and VMT Analysis

1. Project Information

1.1 Project Title

Brookside Assisted Living Project

1.2 Lead Agency Name and Address

City of Martinez Planning Department 525 Henrietta Street Martínez, CA 94553

1.3 Contact Person and Phone Number

Hector Rojas, AICP Planning Manager (925) 372-3517 hrojas@cityofmartinez.org

1.4 Project Sponsors Names and Addresses

Dinesh Sawhney 156 Las Quebradas Alamo, California 94507

1.5 General Plan Designation

Residential, Group 1

1.6 Zoning

One-Family Residential R-6.0

1.7 Introduction

This Initial Study of environmental impacts has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA Statute, Division 13 of the California Public Resources Code, sections 21000 et seq.), the California Code of Regulations sections 15000 et seq. (CEQA Guidelines), and the regulations and policies of the City of Martinez. The report is intended to inform City of Martinez (City) decision-makers, CEQA-defined responsible agencies, and the general public of the Brookside Assisted Living Project (project) and its environmental consequences. The City of Martinez is the Lead Agency under CEQA and has prepared this Initial Study to address the impacts of implementing the proposed project. The primary objective of the project is to provide a new nursing and assisted living facility for residents of the greater Martinez area.

1.8 Project Location and Context

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

Location. The project site is located between Alhambra Way and Alhambra Avenue north of Highway 4 in the center of the city of Martinez. The site is located approximately 700 feet (0.13 miles) north of Highway 4 (see Figures 1 and 2). The project site currently consists of one parcel (APN 370-291-013).

Surrounding Land Uses. The site is bordered on all sides by one-family residential (R-6.0) zoning in a suburban neighborhood. To the east, across Alhambra Way Boulevard, the project site is surrounded by single family residential (R-40) and open space (OS). To the west, a mixed-use neighborhood commercial district (M-NC/TC) along Alhambra Avenue. South of the project is residential along Alhambra Way until Highway 4, and north of the project is single and single-family residential.

Site Characteristics. The 1.2-acre project site currently contains three buildings, including the 7,544 square-foot main building, which functions as a single-story convalescent facility since its construction in 1958; a two-story, single-family residence originally constructed in 1904 (on proposed Parcel 2); and a garage/storage building, built in 1992. The project site was historically used for agriculture and contained an orchard, prior to becoming a convalescent facility in 1958. At the existing assisted living facility, there are 36 beds. The single-family residence is eligible for listing on the National Register of Historic Places (NRHP) and the California Register of Historic Resources (CRHR) under Criterion C/3 for embodying the distinctive characteristics of the American Foursquare architectural style. The structure's character-defining features include lapped wood siding, wood-sash windows with decorative casings, medium-pitch hipped roof with flared eaves and decorative dormers, exposed ornamental rafter tails, and a wrap-around porch with Tuscan columns and classical entablature. Landscaping includes a variety of trees, shrubs, and mature palms, as well as a large lawn enclosed by a tall wooden fence in the front of the house. (See Figure 3)

The site is relatively flat, with a north/south ridgeline to the east of Alhambra Way (near the open space area west of the project site), and a flat valley floor extending to the west, which drains north via several creeks. Alhambra Creek (also called Arroyo del Hambre Creek) is located along the western boundary of the site, and a portion of the site is in a flood zone. This portion is vegetated with a mix of native and non-native ornamental trees and shrubs that provide screening and buffer the creek. At the front of the site, low shrubs surround the main building and along Alhambra Way. The entrance of the property is a large, paved area that functions as a driveway and parking lot. A wooden fence provides screening along Alhambra Way and between the main building and the residence on Parcel 2 in the northern portion of the site.

The site is improved with all utilities and is connected to underground water, wastewater, and natural gas utilities. Overhead utility poles provide electricity to the site. Water service, wastewater treatment, storm water drainage system, and solid waste collection are provided by the City or Contra Costa County. Electricity and natural gas are provided by PG&E.

1.9 Project Description

Dinesh Sawhney (applicant) is requesting approval of Parcel Map, Design Review, and Conditional Use Permit applications to develop the parcel located at 4110 Alhambra Way, totaling approximately 1.2 acres, collectively called the Brookside Assisted Living Project (project). The project includes subdividing the project site into two parcels. Parcel 1 would be approximately 47,967-square-feet (1.1 acres), and Parcel 2 would be approximately 6,030 square feet (0.1 acres). On Parcel 1, the existing convalescent facility would be renovated, the building footprint expanded, and have a second story added to increase capacity. On Parcel 2, the existing, 2,349-square-foot vacant single-family would be renovated and moved approximately 65 feet towards the eastern frontage of the site.

The assisted living facility development would occur in two phases. Phase 1 includes renovating the first floor of the main building, including adding shared bathrooms between each pair of resident suites, remodeling common areas and adding new dining spaces. Phase 1 would reduce the total number of beds to 34 (from 36 existing), due to larger and more bathrooms, and construct 17 bedrooms on the first

floor. The existing storage shed would be demolished to make room for the proposed vehicle turnaround. Phase 2 includes construction of the second story of the main building, to add approximately 24 bedrooms with 48 additional beds on the second floor. The proposed facility would have a total of approximately 82 beds. The main building's proposed height would be approximately 25 feet, and the total building area would be approximately 19,540 square feet. The proposed additions would occur on the western portion of the main building, as shown on **Figure 4.**

The first phase of construction would begin as soon as building and grading permits are approved for the main building, while the second phase is anticipated to be completed immediately after completion of the first phase. **Figures 5 through 7** illustrate the project's building elevations, colors, and materials for the assisted living facility.

Construction under Phase 1 is anticipated to last approximately six months (130 workdays) with an average of seven workers and start as soon as building and grading permits are issued. Phase 2 is anticipated to last approximately 10 months (195 workdays) with an average of 9 workers.

The existing vacant residence is proposed to be moved approximately 65 feet east, to a position where it would be set back approximately 20 feet from Alhambra Way. The relocation would provide space for the assisted living facility to be expanded. Because the residence is considered a historic resource under CEQA and eligible for listing on the CRHR, it would be relocated and rehabilitated according to the Secretary of the Interior's Standards for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings and would include the following steps:

Site preparation

- 1. Have the site recorded by a qualified Architectural Historian.
- 2. Remove and crate hanging light fixtures, wall sconces, and any other fixtures that could potentially become falling hazards during the moving process.
- 3. Proper protocols would be followed for window and door care, including opening them where
- 4. appropriate during jacking and relocation.

Hauling Path Preparation and Moving of Residence

- 1. Acquire permits from City and street conversions if needed. If necessary the move could occur in off-hours.
- 2. The residence would be jacked-up in its entirety and set on cribbing prior to being set onto dollies.
- 3. At the destination, a new foundation would be installed. Grading/leveling at the site would be necessary. The new foundation would extend roughly 30 to 60 inches into the native soil.
- 4. Once in place the residence would be set on to the new foundation, and utilities would be reconnected to new points-of-connection at the exterior.
- 5. Windows and doors would be repaired as necessary from effects of the move, and light fixtures and other fixtures would be reinstalled. Any minor damage caused by the relocation process would be repaired and noted in a report to the City.

The design of the rehabilitated house would be included as part of the project's design review approval from the Planning Commission.

Access, Circulation, and Parking. The site is accessed by an existing driveway from Alhambra Way. Project plans would keep the alignment but formalize parking on either side of the driveway. Proposed access would be provided via a two-way, 24-foot wide driveway off Alhambra Way, which would require removing existing storage shed and asphalt paving for the new vehicular access configuration,

shown on **Figure 8**. A proposed emergency access road on site has turning radii to accommodate a fire truck. Pervious pavers are proposed in the vehicle turnaround area where the shed is currently located. The shed would be demolished, and the vehicle turnaround would be constructed An additional driveway would be constructed to connect Parcel 2 containing the residence, to Alhambra Way.

The project would provide a total of 19 parking spaces, including 11 standard size spaces, six compact, and two ADA spaces. There are no pedestrian facilities, and Alhambra Way has a five-foot sidewalk on the east side of the road, across from the proposed facility.

Landscaping. The conceptual landscape plan is shown on **Figure 9**. Project landscaping would include approximately 60 new trees throughout the project site. Per a tree evaluation, two bay trees are proposed to be removed. The project site would also include approximately six bioretention areas that would be landscaped and provide onsite storm water treatment and visual screening. Two Bay Trees (*Laurus nobilis*) that are in poor health are proposed to be removed during construction. All other existing trees would remain onsite.

Grading and Storm Water Treatment. The project proposes installation of six bioretention areas throughout the site to capture and filter stormwater, as illustrated in the project's preliminary stormwater control plan exhibit, **Figure 10**. All storm water retention would be accomplished through the bioretention and drainage treatment infrastructure. The project would create approximately 17,745 square feet of new impervious surfaces, for a total of 26,505 square feet of impervious area. The project would disturb approximately 34,800 square feet (0.8 acre). Grading activities would include the following: approximately 450 cubic yards (CY) of earth would be cut, and 175 CY of earth would be filled. Approximately 60 CY would be cut for onsite wastewater treatment facilities. In total, 285 CY of earth would be graded.

Utilities and Infrastructure. The proposed project would connect to onsite existing water, wastewater, storm drainage, and electrical infrastructure. The sewer would remain near the northeast corner by the single-family residence, and the applicant would underground existing overhead utilities via trenches. See **Figure 11.**

Project Operations. Approximately ten to 12 total employees would be hired to work at the facility. Shifts would be staggered during the day. During the evening, three to four staff would stay onsite to provide evening care. The facility would be open 24 hours a day, and staff would be onsite all hours to provide care to the residents.

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

- Adoption of the Mitigated Negative Declaration City of Martinez, Planning Commission
- Issuance of Conditional Use Permits City of Martinez, Planning Commission
- Minor Subdivision City of Martinez, Planning Commission
- Design Review Approval City of Martinez, Planning Commission
- Building Permit and Plan Check City of Martinez, Building Department
- Grading Permit City of Martinez, Engineering Department

Figure 1: Project Vicinity Map

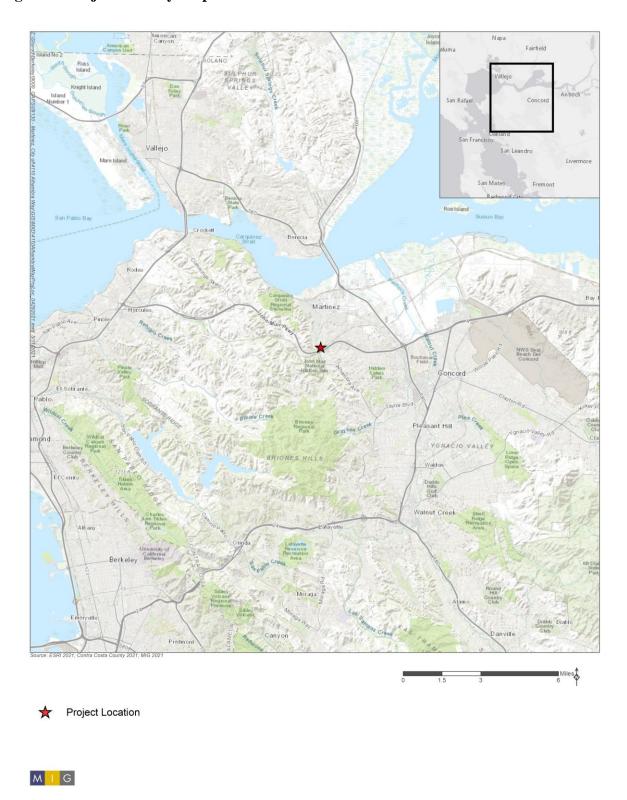


Figure 2: Project Location Map

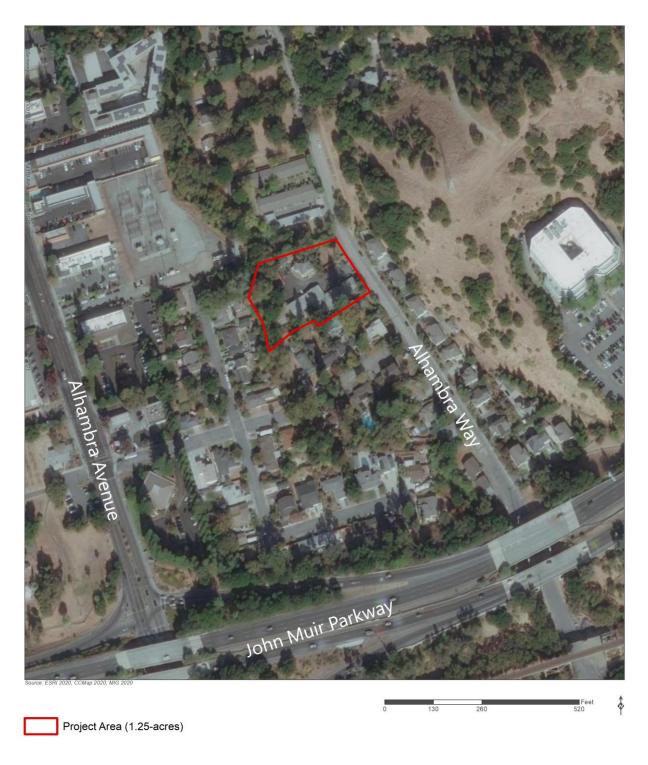


Figure 2 Project Location MIG 4110 Alhambra Way

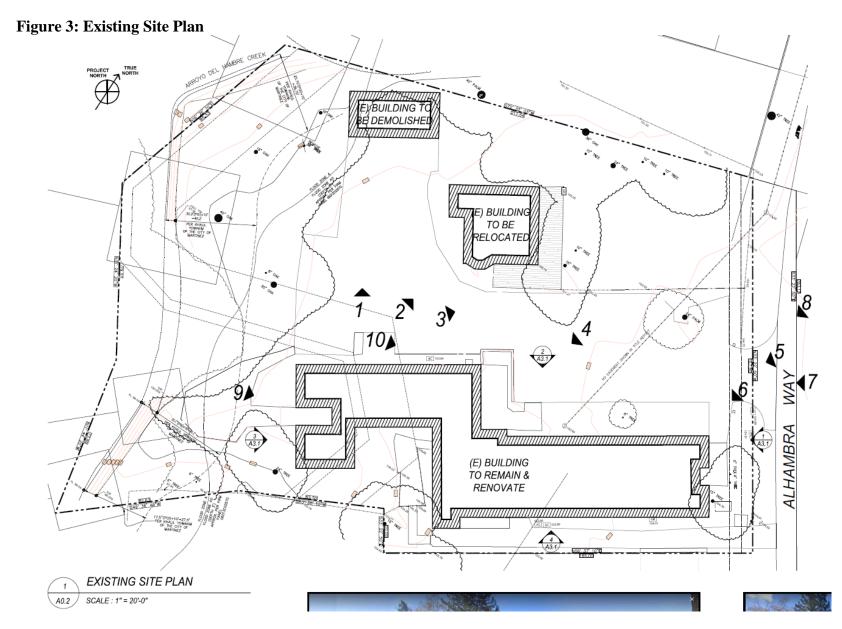




Figure 4: Proposed Site Plan

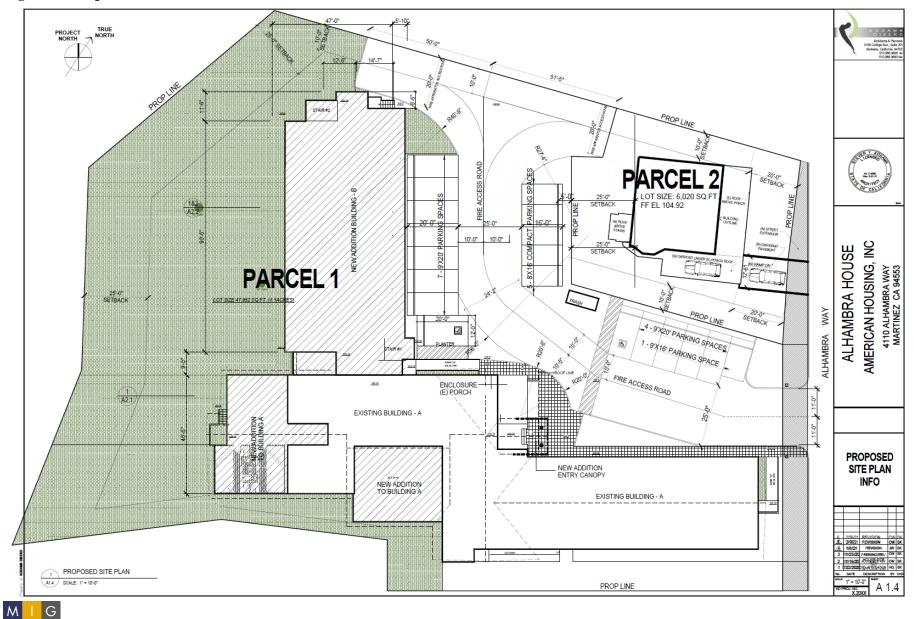


Figure 5: Building Elevations – East and West



Figure 6: Building Elevations – North and South

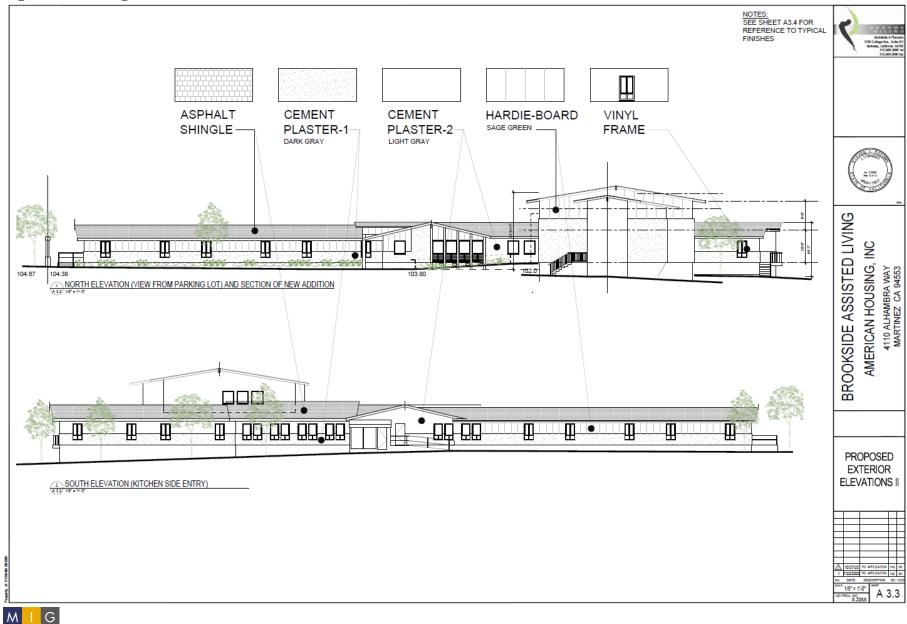
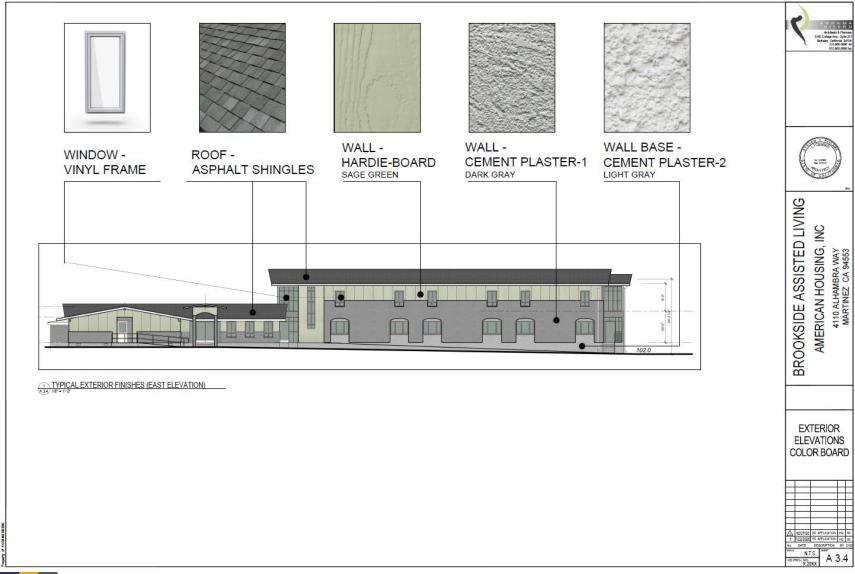


Figure 7: Building Materials/ Exterior Finishes



61'-0" 1<u>8</u>2 A2.2 NEW LOCATION OF (E) BUILDING **BROOKSIDE ASSISTED LIVING** *0-,99 LOT SIZE 6000 SQ FT. AMERICAN HOUSING, INC 4110 ALHAMBRA WAY MARTINEZ CA 94553 25'-0" SETBACK LO SIZE 47 052 SQ FT. (1.1ACRES) FIRE APPARATUS ACCESS ROAD ENCLOSURE (E) PORCH A2.1 PROPOSED NEW ADDITION ENTRY CANOPY SITE PLAN NEW ADDITION TO BUILDING A INFO EXISTING BUILDING - A , PROPOSED SITE PLAN A 1.4 I G

Figure 8: Fire Access and Circulation Plan

PRELIMINARY PLANT LIST APPROX. GICEANTHUS PHORINUM TENESK TREES 5126 SHRUBS-5GAL VARIAINTHAD AGAPANTHUS 48 TREES TO REMAIN NORTH SINGKO FRAXINU 6 GEE CIVIL PLAN) UMBELLET. ROSEPEARY D'TUSEAN RAPHIOLPIS The TRUCK Access. CELTIS SINENSIS LIGUSTRUM - ALBIZA JUL XYLOSMA PHOTINA PRINISTUM NADINA DO LAGERETROEMIA INDICA CARDUND COVAR" A" NADINA DO. AND PROPERTY AND INCOME. 5 META DOLOGROS EXC. OSTENOSPERINUM PRUTICUSUM 5 PRUNUS LUSITANICA.
55 PRITUGEL LAUREL
16 PHOTINA RESERVE
55 EVENEEN STIME 169 New Zealean ROSEMARY TUSOM BUIG MORUS ALBA 1 - PRUNUS YEROGEN P. P. INDION LAVAMOULA METROSIDEROS 20 O DENTATE . COMBLIA SA. 30 ACER PALMATUM 5 | CELTS TIROCHINA 59 CHISTE ALBIZIA JULBRI. 1 ALBIZIA JOU HYDROANAL BROOKSIDE ASSISTED LIVING GROUND COVER CEANTHUS. 6 2 PRUNUS YEDOEN. B'e 4'or NC 11 PHOTINA FRANCIS PHORITIUM TEN CEMOTHUS 4 GINGKO BILOBA VARONATED G' HORIZANTALIS AMERICAN HOUSING, 1 GALG 4'0.C. ALL SHRUES ARE 5 GAL IS MYCHORUM PARTITALISM 9 LIQUITRUM JAR 50 CAUPORPIO PAVET GINGKO BROWN E LEGERGEMEN IN XYLODANA CONGESTED SG SHING Y PURE. 11 LAVANDULA O' DENTATE 5 RHODODANISA ISG PRINCES Per Children 7 Lieusykus Jarovica 56 Caurosius Paujot Sec a myoroum Parvirous 1 JALMAN JOLI 154 SILK TREE 59 CAUPONNO PROVET GROUND 10 Liquetrum Japanica 59 Coult Phinest COVER 'C" 10 PROPENIOUPE INC. EXISTING BUILDING - A GAZANIA I GALE S'ON CAMELLA SASARUA PROPOSED EMBOO EDGING BOKENES YET VERONATES NEW ADDITION VANSAUGO, NEW ZONGONO PLAX SCHEMATIC 7 I HYDREAN BA MACROPANIA E4 IT BSOUB CALIFORNIA PHOTINA PRASERI LANDSCAPE 54 PHINISTUM SETACEUR ZO ELIONYMUS JAPONIUS EG ELIONYMUS ELIONYMUS EXISTING BUILDING A A CONT. Pascos NEW ADDITION 8 GOLDEN BANGO 10 PROTING PRASSEN 3 PHORMIUM TON 5GAL VARANATED WHITES GARDEN 9-15-36 Kenvisten Ruit GINGRO BROW ARCTOSTAPHILOS HORSEN 500 TRACHINAURVILLEANA
F PRINCESS FLOWER
SOCI TRAILING GAZATIVA GROUND COVER "D" SERVICE ROAD 3/20-10 PROPOSED SITE PLAN L 1.1 5 MORES ALBA G M

Figure 9: Landscaping Plan

Figure 10: Preliminary Stormwater Control Plan Exhibit

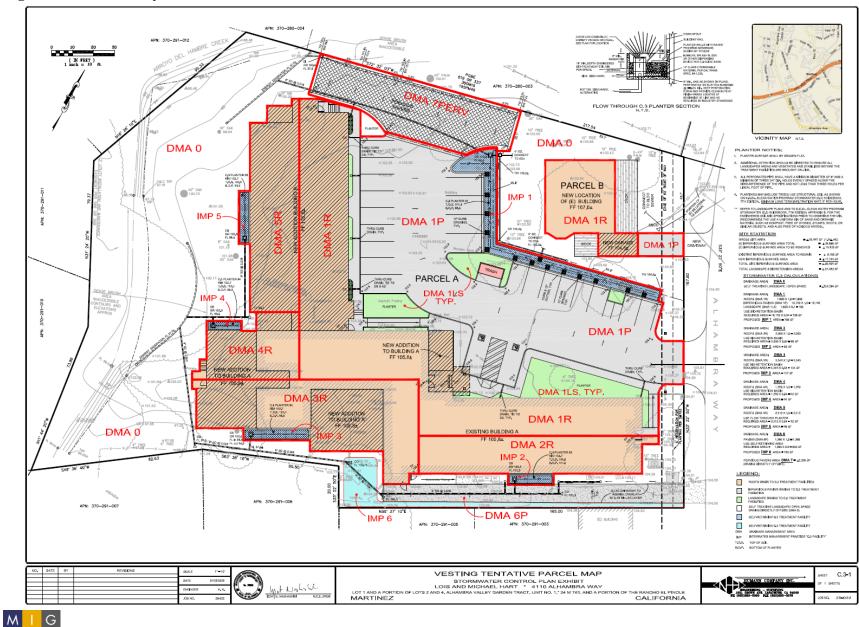
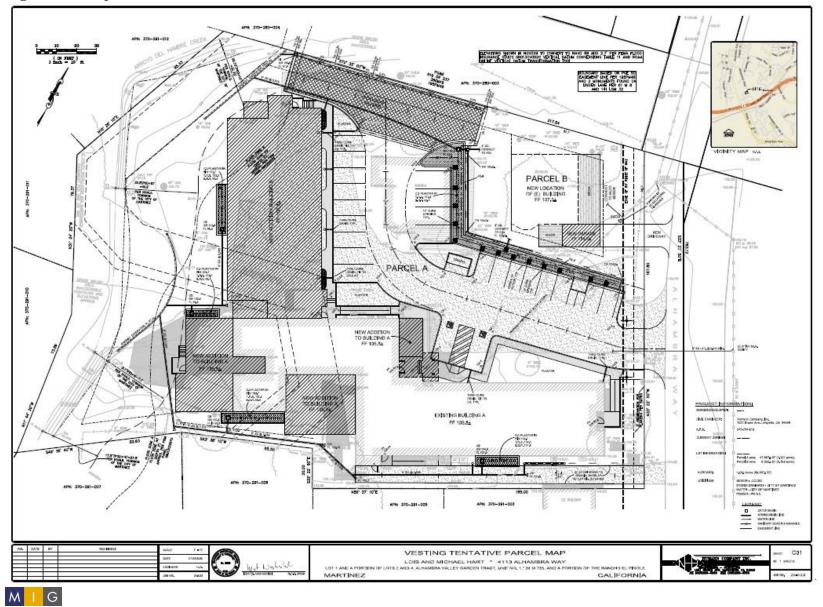


Figure 11: Project Utilities Plan



2. Summary of Findings: Impacts and Mitigations

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

Aesthetics

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

Agriculture and Forestry Resources

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

Air Quality

Implementation of the following mitigation measures would ensure impacts are less than significant: AIR-1.

Biological Resources

Implementation of the following mitigation measures would ensure impacts are less than significant: BIO-1 through BIO-7.

Cultural Resources

Implementation of the following mitigation measures would ensure impacts are less than significant: CUL-1 through CUL-5.

Energy

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

Geology and Soils

Implementation of the following mitigation measures would ensure impacts are less than significant: GEO-1 through GEO-4.

Greenhouse Gas Emissions

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

Hazards and Hazardous Materials

Implementation of the following mitigation measures would ensure impacts are less than significant: HAZ-1, HAZ-2.

Hydrology and Water Quality

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

Land Use and Planning

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

Mineral Resources

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

Noise

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

Population and Housing

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

Public Services

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

Recreation

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

Transportation

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

Tribal Cultural Resources

Implementation of the following mitigation measures would ensure impacts are less than significant: CUL-1 through CUL-5.

Utilities and Service Systems

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

Wildfire

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

3. Environmental Factors Potentially Affected

The environmental fa	ctors checked below	www.www.www.www.www.www.www.www.www.ww	y this project, involving at
least one impact that i	is a "Potentially Sig	nificant Impact" as indicated by t	the checklist on the
following pages.		-	
Aesthetics	Gre	eenhouse Gas Emissions	☐ Public Services
Agriculture and F	Forestry \square Ha	zards & Hazardous Material	Recreation
☐ Air Quality	□ Ну	drology/Water Quality	☐ Transportation/Traffic
☐ Biological Resou	rces 🔲 Lar	nd Use/Planning	☐ Tribal Cultural Resources
Cultural Resource	es	neral Resources	Utilities/Service Systems
☐ Energy Resources	s Noi	ise	Wildfire
Geology and Soil	s 🔲 Pop	oulation/Housing	Man. Findings of Sig.

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

4.

Determination

5. Evaluation of Environmental Impacts

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

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

6. Issues

6.1 Aesthetics

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

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

Documentation:

a. Less than Significant Impact. The site is bordered on all sides by one-family residential (R-6.0) zoning in a suburban neighborhood. To the west is a mixed-use neighborhood commercial district (M-NC/TC) along Alhambra Avenue. South of the project is residential along Alhambra Way until Highway 4, and north of the project is one-family residential. The City's General Plan designates specific visually sensitive lands and resources within the City. These include major visual gateways, hilltops, and ridges. Neither the project site nor surrounding properties are listed as visually sensitive lands per the City's General Plan.

The project does not involve development of the hillside or ridgeline. The main building is proposed to reach a height of approximately 25 feet high and have a total building area of approximately 19,540 square feet. The proposed additions would occur on the western portion of the existing main building, as shown on **Figure 4**. The buildings proposed are contemporary in design and would be built with a range of different materials to provide visual variation. Building design is shown in **Figure 7**. Design Review approval is required to ensure compliance with Sections 22.34.04 through 22.34.070 of the City's Municipal Code regulating building design and development guidelines.

The proposed project structures would be partially screened by existing vegetation from residences along Alhambra Way. The Planning Commission, through Design Review, would evaluate the proposed building elevations, colors, materials, landscaping, lighting, and grading for the project. Since there are no officially designated scenic views in the City of Martinez and the proposed building design would be subject to the City's Design Review and approval, the project would not have a substantial adverse effect on a scenic vista, and the impact would be less than significant.

b. No Impact. State Scenic Highways are designed by the California Department of Transportation (Caltrans) to promote the protection and enhancement of the natural scenic beauty of California's highways and adjacent corridors. The Martinez General Plan identifies State Highway 4 and Alhambra Avenue as scenic roadways. There are no State Scenic Highways within city limits.

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

c. Less than Significant Impact. The project is located in a suburban area, and public vantage points are accessed along Alhambra Way along the project site frontage. Components of the proposed project include Design Review approval to ensure the project is compatible with visual characteristics of the vicinity.

Per **Figure 9**, the project would include new landscaping features, and be set back at least 25 feet from Alhambra Creek. The Martinez General Plan has criteria that guide development, and the proposed project would not conflict with the following criteria:

- Goal 2: Develop a planting program along the riparian corridor that will support wildlife and fish habitat restoration.
- Goal 3: Preserve the existing healthy riparian habitat.
 - o Buffer fish and wildlife habitat from public use and other urban adverse impacts.
 - o Improve water quality, minimize water quality hazards and protect public safety.

The proposed project is located in a suburban residential area, has a landscaping plan (for City review), and is considered consistent with Martinez General Plan open space policies. The project would not interfere with views of skylines or major open space features and would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Also see items 6.1.a and 6.1.b, above. The impact would be less than significant.

d. Less than Significant Impact. Excessive or inappropriately directed lighting can adversely impact night-time views by reducing the ability to see the night sky and stars. Glare can be caused from unshielded or misdirected lighting sources, or by reflective surfaces (i.e., polished metal, window treatments).

Although the project would increase the overall light in the project vicinity, it is not anticipated to create readily detectable glare along the adjacent roads or surrounding residential uses because the site is screened by intervening vegetation and fences along Alhambra Way. Additionally, the project would be subject to Design Review, a City process established to evaluate the visual and aesthetic compatibility of projects, including project lighting, with the surrounding environment. Specifically, Martinez Municipal Code Section 22.34.045 requires projects to be found to have "...exterior

lighting appropriately designed with respect to convenience, safety, and effect on occupants as well as neighbors...." The Planning Commission will review project lighting components in conjunction with the City's Design Review procedures and standards. Design Review will ensure: (1) exterior lighting will be low mounted, downward casting, and shielded to prevent glare; lighting shall not visually wash out structures or any portions of the site; and (2) all parking lot lights will be full cut off fixtures. With the site conditions and the Design Review requirements established by Martinez Municipal Code, the project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The impact would be less than significant.

See also Mitigation measures BIO-6 and BIO-7, related to nighttime light, glare, and impacts on biological resources.

References:

Caltrans. Map Viewer website, "California Scenic Highways," Available at: https://www.arcgis.com/home/webmap/viewer.html?layers=f0259b1ad0fe4093a5604c9b838a486a (accessed July 26, 2021)

City of Martinez, 1973. General Plan. Available at: https://www.cityofmartinez.org/civicax/filebank/blobdload.aspx?BlobID=17257 (accessed July 20, 2021)

City of Martinez, 2011. General Plan, Housing Element 2015-2023. Available at: https://www.cityofmartinez.org/civicax/filebank/blobdload.aspx?BlobID=12231 (accessed July 28, 2021)

Kodamadiseño Architects, October 27, 2020. Exterior Elevations Color Board (sheet A.3.4)

Robert La Rocca and Associates, September 15, 2020. Proposed Schematic Landscape Plan (sheet L-1.1)

6.2 Agriculture and Forestry Resources

			Summary of I	mpacts	
		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
In	determining whether impacts to agricultural resources are sign	gnificant	environmenta	l effects,	lead
age	encies may refer to the California Agricultural Land Evaluati	ion and S	Site Assessmei	nt Model	
(19)	997) prepared by the California Dept. of Conservation as an o	optional	model to use i	n assess	in
	pacts on agriculture and farmland. In determining whether in	-			_
	aberland, are significant environmental effects, lead agencies	•		-	
•	the California Department of Forestry and Fire Protection re			•	
	est land, including the Forest and Range Assessment Project				
_	oject; and forest carbon measurement methodology provided	in Fores	st protocols add	opted by	the
	lifornia Air Resources Board. Would the project:	I		Γ	
a)	, <u>1</u>				✓
	of Statewide Importance (Farmland), as shown on the				
	maps prepared pursuant to the Farmland Mapping and				
	Monitoring Program of the California Resources Agency,				
1 \	to non-agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a				•
	Williamson Act contract?				
c)	Conflict with existing zoning for, or cause rezoning of,				✓
	forest land (as defined in Public Resources Code section				
	12220(g)), timberland (as defined by Public Resources				
	Code section 4526), or timberland zoned Timberland				
	Production (as defined by Government Code section				
1\	51140 (g))?				
(d)	Result in the loss of forest land or conversion of forest				✓
	land to non-forest use?				
e)	Involve other changes in the existing environment which,				✓
	due to their location or nature, could result in conversion				
	of Farmland, to non-agricultural use or conversion of				
	forest land to non-forest use?				

Conclusion: Regarding agriculture and forestry resources, the proposed project would have no impacts.

Documentation:

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

- **b. No Impact.** No land within the City limits is zoned for agricultural use. Section 22.32.050 of the Martinez Municipal Code allows the City to enter into agricultural land conservation agreements under the California Land Conservation Act for lands zoned RF (Recreational Facilities District), OS (Open Space District), or U (Undesignated District). Because the project site is zoned for One-Family Residential R-6.0, it would not be eligible for an agricultural land conservation agreement. Furthermore, the project site is not under a Williamson Act contract, nor would the project impact any lands under Williamson Act contracts. The proposed project would not impact existing zoning for agricultural use, or a Williamson Act contract, and no impact would occur.
- **c. No Impact.** The project site and vicinity are located within an urban area, and there is no forest land or timberland located on or near the project site. The project site is surrounded by residential uses. There would be no impact.
- **d. No Impact.** The project site does not contain any forest land on site or nearby. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest uses. Project development would not impact forest land, and there would be no impact.
- **e. No Impact.** Refer to Sections 6.2.a and 6.2.c. The project site is currently developed within an urban environment. None of the surrounding sites contain existing forest or agricultural uses. Development of the project would not change the existing environment in a manner that will result in the conversion of forest land to a non-forest land use or agricultural land to a non-agricultural use. Therefore, no impact would occur.

References:

California Department of Conservation, California Important Farmland Finder 2016. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed July 20, 2021)

6.3 Air Quality

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

<u>Conclusion:</u> Regarding air quality, the proposed project would result in less than significant impacts with the implementation of **Mitigation Measure AIR-1.** Potential air quality resource impacts of project activities would be mitigated to less-than-significant levels.

Environmental and Regulatory Setting: Air quality is a function of pollutant emissions, and topographic and meteorological influences. The physical features and atmospheric conditions of a landscape interact to affect the movement and dispersion of pollutants and determine its air quality.

The proposed project is located within the San Francisco Bay Area Air Basin (Basin or SFAAB), where efforts to attain state and federal air quality standards are governed by the Bay Area Air Quality Management District (BAAQMD). Both the State of California and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as criteria pollutants). These pollutants include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), inhalable particulate matter with a diameter of 10 microns or less (PM₁₀), fine particulate matter with a diameter of 2.5 microns or less (PM_{2.5}), and lead (Pb). The state has also established AAQS for additional pollutants. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the state and federal standards differ, California AAQS (CAAQS) are more stringent than the national AAQS (NAAQS). The U.S. Environmental Protection Agency (U.S. EPA), California Air Resources Board (CARB), and BAAQMD assess the air quality of an area by measuring and monitoring the amount of pollutants in the ambient air and comparing pollutant levels against NAAQS and CAAQS. Based on these comparisons, regions are classified into one of the following categories:

• **Attainment.** A region is "in attainment" if monitoring shows ambient concentrations of a specific pollutant are less than or equal to NAAQS or CAAQS. In addition, an area that has been re-designated from nonattainment to attainment is classified as a "maintenance area" for 10 years to ensure that the air quality improvements are sustained.

- Nonattainment. If the NAAQS or CAAQS are exceeded for a pollutant, the region is designated as nonattainment for that pollutant. It is important to note that some NAAQS and CAAQS require multiple exceedances of the standard in order for a region to be classified as nonattainment. Federal and state laws require nonattainment areas to develop strategies, plans, and control measures to reduce pollutant concentrations to levels that meet, or attain, standards.
- Unclassified. An area is unclassified if the ambient air monitoring data are incomplete and do not support a designation of attainment or nonattainment. Air pollution levels are measured at monitoring stations located throughout the air basin.

Air pollution levels are measured at monitoring stations located throughout the air basin. Table 1, San Francisco Bay Area Air Basin Attainment Status, summarizes the Basin's attainment status for the CAAQS and NAAQS.

Table 1 San Francisco Bay Area Air Basin Attainment Status

Dollarto at	A wave since Times	Attainment Status ^(A)		
Pollutant	Averaging Time	CAAQS	NAAQS	
0	1-Hour	N		
O_3	8-Hour	N	N	
DM	24-Hour	N	U	
PM_{10}	Annual Average	N		
DM.	24-Hour		N	
$PM_{2.5}$	Annual Average	N	A	
CO	1-Hour	A	A	
CO	8-Hour	A	A	
NO.	1-Hour	A	U	
NO_2	Annual Average		A	
SO_2	1-Hour	A	U	
$\mathbf{3O}_2$	24-Hour	A		
Sulfates	24-Hour	A		
Lead	1-Hour	U		
Visibility Reducing Particles	24-Hour			

Source: BAAQMD, 2017a. U.S. EPA, 2021

(A) A= Attainment, N= Nonattainment, U=Unclassified.

Sensitive Receptors

A sensitive receptor is generally defined as a location where human populations, especially children, seniors, and sick persons, are located where there is reasonable expectation of continuous human exposure to air pollutants. These typically include residences, hospitals, and schools. Sensitive air quality receptors in the project vicinity include:

- The multi-family residences (4032 Alhambra Way) that border the project area to the north.
- The single-family residences located east of the project area, across Alhambra Way.
- The single-family residences that border the project area to the south (addressed on Alhambra Way and Walnut Street) and west (addressed on Castro Street).

• The John Muir National Historic Site, the entrance to which is located approximately 600 feet west of the project area boundary on Alhambra Avenue.

Bay Area Air Quality Management District

The BAAQMD is responsible for maintaining air quality and regulating emissions of criteria and toxic air pollutants within the SFBAAB. The BAAQMD carries out this responsibility by preparing, adopting, and implementing plans, regulations, and rules that are designed to achieve attainment of state and national air quality standards. The BAAQMD currently has 14 regulations containing more than 100 rules that control and limit emissions from sources of pollutants.

On April 29, 2017, the BAAQMD adopted its Spare the Air - Cool the Climate 2017 Clean Air Plan (2017 Clean Air Plan). The 2017 Clean Air Plan updates the most recent Bay Area multi-pollutant clean air plan, the 2010 Clean Air Plan, to fulfill state planning requirements. The Clean Air Plan focuses on the three following goals:

- Attain all state and national quality standards;
- Eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and
- Reduce Bay Area GHG Emissions 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050.

The 2017 Clean Air Plan includes 85 distinct control measures to help the region reduce air pollutants and has a long-term strategic vision which forecasts what a clean air Bay Area will look like in the year 2050. The control measures aggressively target the largest source of GHG, ozone pollutants, and particulate matter emissions – transportation (BAAQMD 2017b).

Discussion

a. No Impact. The proposed project would not conflict with nor obstruct implementation of the BAAQMD Clean Air Plan. The Clean Air Plan includes increases in regional construction, area, mobile, and stationary source activities, and operations in its emission inventories and plans for achieving attainment of air quality standards. Chapter 5 of the Clean Air Plan contains the BAAQMD's strategy for achieving the plan's climate and air quality goals. This control strategy is the backbone of the Clean Air Plan.

The proposed project consists of the renovation and expansion of an existing convalescent facility. In total, the project would add 46 beds and 11,996 square feet, so that the project would have a total of 82 beds. Increasing the capacity of this assisted living facility may increase the number of people residing on the property but would not likely add new population to the area (i.e., residents of the assisted living facility are likely to come from the Martinez area). The project, therefore, would not substantially increase population, employment, or housing in the City. The proposed project is consistent with the residential land use designation in the City of Martinez General Plan and would not conflict with the local planning efforts that informed the projections in the Clean Air Plan. Furthermore, as described below, the proposed project would not conflict with the 2017 Clean Air Plan emissions control strategies.

The 85 control strategies identified in the 2017 Clean Air plan are grouped by nine economic based "sectors" as shown in Table 2.1

Table 2: BAAQMD 2017 Clean Air Plan Control Measure Sectors				
Sector	No. of Measures	General Description of Sector Applicability		
Agriculture (AG)	4	Applies to sources of air pollution from agricultural operations include on and off-road trucks and farming equipment, aircraft for crop spraying, animal waste, pesticide and fertilizer use, crop residue burning, travel on unpaved roads, and soil tillage.		
Buildings (BL)	4	Applies to residential, commercial, governmental, and institutional buildings, which generate emissions through energy use for heating, cooling, and operating the building, and from the materials used in building construction and maintenance		
Energy (EN)	2	Applies to emissions of criteria pollutants, TACs, and GHGs from electricity generated and used within the Bay area, as well as GHG emissions from electricity generated outside the Bay area that is imported and used within the region		
Natural and Working Lands (NW)	3	Applies to emissions from natural and working lands, including forests, woodlands, shrub lands, grasslands, rangelands, and wetlands.		
Stationary Sources (SS)	40	Applies to stationary sources generally used in commercial and industrial facilities. Such sources are typically regulated through BAAQMD rulemaking, permitting, and enforcement programs		
Super GHGs (SL)	3	Applies to emissions of methane, black carbon, and fluorinated gases		
Transportation (TR)	23	Applies to on-road motor vehicles such as light-duty automobiles or heavy-duty trucks, as well as off-road vehicles, including airplanes, locomotives, ships and boats, and off-road equipment such as airport ground-support equipment, construction equipment and farm equipment.		
Waste (WA)	4	Applies to emissions from landfills and composting activities.		

-

¹ The BAAQMD 2017 Clean Air Plan use the same economic sectors contained in CARB's Scoping Plan.

Table 2: BAAQMD 2017 Clean Air Plan Control Measure Sectors				
Sector	No. of Measures	General Description of Sector Applicability		
Water (WR)	2	Applies to direct emissions from the treatment of water and wastewater at publicly owned treatment works and indirect emissions associated with the energy used to pump, convey, recycle, and treat water and wastewater throughout the Bay		

Of the nine economic sectors, only five contain control measures that could be relevant to the proposed project; most of the Clean Air Plan's control strategies either do not directly apply to the project (e.g., agriculture control measures) or are implemented at the local and regional level by municipal government and the BAAQMD. Table 3 lists the measures from the 2017 Clean Air Plan which may be relevant to the proposed project.

Table 3 Project Consistency with BAAQMD 2017 Clean Air Plan					
2017 Clean Air Plan Control Strategy	Project Consistency				
Stationary Source Measures					
38 – Fugitive Dust	The Applicant would implement BAAQMD-recommended fugitive dust control measures to abate dust from project construction activities.				
Transportation Control Measures					
2- Trip Reduction Program	The applicant will encourage Brookside Assisted Living staff to walk, bicycle, or take public transit to work. The project is located in an area with infrastructure that supports pedestrian, bicycle, and transit trips. This includes a Class I Bike Path, a Class II Bike Lane, and a Class III Bike Route, pedestrian facilities including sidewalks and marked crosswalks, and two major transit stops.				
Natural and Working Land Measure					
2 – Urban Tree Planting	Project landscaping would add approximately 60 new trees to the project site.				
Buildings Control Measures					
1-Green Buildings	The project will meet or exceed the electrical and natural gas energy efficiency standards in Title 24 (2019).				

Table 3 Project Consistency with BAAQMD 2017 Clean Air Plan			
2017 Clean Air Plan Control Strategy	Project Consistency		
2- Support Water Conservation	The applicant will follow Chapter 22.35 of the Martinez Municipal Code, which promotes water conservation in landscaping and irrigation in new development projects.		

As shown in **Table 3**, the project would be consistent with applicable control measures contained in the Clean Air Plan. The project would also be consistent with the primary goals of the Clean Air Plan, because it would not exceed the BAAQMD thresholds for construction or operational air pollutant emissions, impede attainment of state and national air quality standards in the SFBAAB, or increase disparities among Bay Area communities in cancer health risk from TACs; see responses under b) and c) below, respectively. The project, therefore, would not result in a significant impact related to consistency with the 2017 Clean Air Plan.

b. Less than Significant Impact with Mitigation. The proposed project would generate short-term construction and long-term operational emissions from construction equipment operations, vehicle trips, landscaping equipment, and other minor sources. The BAAQMD's CEQA Air Quality Guidelines contain screening criteria to provide lead agencies with a conservative indication of whether a proposed project could result in potentially significant air quality impacts. Consistent with the BAAQMD's guidance, if a project meets all the screening criteria, then the project would result in a less than significant air quality impact and a detailed air quality assessment is not required for the project.

Table 4 compares the proposed project against the BAAQMD's construction and operational screening criteria for a "congregate care facility" land use.

Table 4 Project Consistency with BAAQMD Screening Criteria(A)						
Criterion	Requirement	Project Consistency				
1) Land Use Type and Size	Project is below the applicable construction screening level size for "Congregate Care Facility" of 240 dwelling units and the operational criteria pollutant screening level size of 657 dwelling units shown in Table 3-1 of the BAAQMD CEQA Air Quality Guidelines. (B)	The proposed project will have a total of 82 beds, which is under the screening size thresholds.				
2) Basic Construction Measures	Project design and implementation includes all BAAQMD "Basic Construction Mitigation Measures"	The applicant will include all BAAQMD "Basic Construction Mitigation Measures" into all project-related bid, contract, engineering, and site plan documents.				

Table 4 Project	Consistency with BAAQMD Screen	ning Criteria ^(A)
Criterion	Requirement	Project Consistency
3) Demolition	Construction activities would not involve demolition that is in conflict with District Regulation 11, Rule 2: Asbestos Demolition, Renovation and Manufacturing.	Project Consistency During the construction process, demolition of the existing shed in the northwest corner of the site is proposed, and the renovation of the existing facility could lead to exposure to asbestos or lead-based paint. A lead-based paint and asbestos sampling analysis was prepared that found asbestos and lead based paint in existing building materials. Removal and disposal of asbestos would follow all federal, state, and local requirements and standards. See Mitigation Measures HAZ-1 and HAZ-2. The project does not include simultaneous occurrence of more than two construction phases. The project would only involve the construction of one land use type. The project would disturb a total area of less than one acre (0.8 acres).
4) Construction Phases	Construction does not include simultaneous occurrence of more than two construction phases (e.g., grading, paving, and building construction would occur simultaneously)	occurrence of more than two construction
5) Multiple Land Uses	Construction does not include simultaneous construction of more than one land use type	
6) Site Preparation	Construction does not require extensive site preparation	1 5
7) Material Transport	Construction does not require extensive material transport and considerable haul truck activity (greater than 10,000 cubic yards)	Approximately 285 CY of grading is proposed. The project would not result in the transport of greater than 10,000 cubic yards of material.

Source: BAAQMD, 2017c.

(A) BAAQMD Screening Criteria from pg. 3-5 of BAAQMD CEQA Guidelines (BAAQMD 2017c)

(B) Construction screening level size from Table 3-1 of BAAQMD CEQA Guidelines (BAAQMD 2017c)

As noted in **Table 4**, for all projects, the BAAQMD recommends implementation of eight "Basic Construction Mitigation Measures" to reduce construction fugitive dust emissions levels; these basic measures are also used to meet the BAAQMD's best management practices (BMPs) threshold of significance for construction fugitive dust emissions (i.e., the implementation of all basic construction measures renders fugitive dust impacts a less than significant impact). The City would implement these BMPs through Mitigation Measure AIR-1.

Impact AIR-1: The Brookside Assisted Living Project has the potential to emit fugitive dust during construction activities.

Mitigation Measure AIR-1: To reduce potential fugitive dust that may be generated by project construction activities, the Applicant shall implement the following BAAQMD basic construction measures when they are appropriate:

- Water all exposed surfaces (e.g., staging areas, soil piles, graded areas, and unpaved access roads) during construction as necessary and adequately wet demolition surfaces to limit visible dust emissions.
- Cover all haul trucks transporting soil, sand, or other loose materials off the project site.
- Use a wet power vacuum street sweeper as necessary to remove all visible mud or dirt track-out onto adjacent public roads (dry power sweeping is prohibited) during construction of the proposed project.
- Vehicle speeds on unpaved roads/areas shall not exceed 15 miles per hour.
- Complete all areas to be paved as soon as possible and lay building pads as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time of diesel-powered construction equipment to five minutes and post signs reminding workers of this idling restriction at access points and equipment staging areas during construction of the proposed project.
- Maintain and properly tune all construction equipment in accordance with manufacturer's specifications and have a CARB-certified visible emissions evaluator check equipment prior to use at the site.
- Post a publicly visible sign with the name and telephone number of the construction contractor and City-staff person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The publicly visible sign shall also include the contact phone number for the Bay Area Air Quality Management District to ensure compliance with applicable regulations.

As shown in **Table 4**, the proposed project is consistent with all screening criteria after implementation of Mitigation Measure AIR-1 and, therefore, would not result in the emission of construction nor operational criteria air pollutants that would exceed BAAQMD CEQA thresholds of significance. Therefore, this impact would be less than significant with mitigation incorporated.

Carbon Monoxide Screening Criteria

The BAAQMD maintains separate screening criteria for carbon monoxide. The BAAQMD's carbon monoxide screening criteria are also intended to provide a Lead Agency with a conservative indication of whether the implementation of the proposed project would result in CO emissions that exceed BAAQMD CEQA thresholds. These criteria are:

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

As explained in more detail in Section 6.17, Transportation, the proposed project would add 103 daily trips to the local roadway system, with only 7 added trips during AM peak hours and 15 trips during PM peak hours. The project is consistent with the Contra Costa Transportation Authority's 2019 Congestion Management Program and would not increase traffic volumes at any intersection

used to access the project area to more than 44,000 vehicles per hour where air mixing is not limited or more than 24,000 vehicles per hour where vertical mixing is limited.

c. Less Than Significant Impact. Sensitive residential receptors are located approximately 50 feet from the project site. During Project construction, the heavy-duty, diesel-powered, off-road construction equipment, as well as diesel-powered vendor and haul tucks, would emit DPM as part of their exhaust emissions; however, these emissions would not result in pollutant concentrations that could generate substantial adverse health risks to adjacent sensitive receptors for several reasons. First, as shown in **Table 4**, the proposed project is consistent with all BAAQMD construction screening criteria and, therefore, would result in emission that would be well below all BAAQMD construction emissions thresholds. Second, project construction emission activities would only occur intermittently, between the hours of 7 AM and 7 PM, Monday through Friday, and between the hours of 9 AM and 5 PM on Saturdays, Sundays, and holidays in accordance with Municipal Code Section 8.34.030(B)(6). The intermittent nature of Project construction activities would provide time for emitted pollutants to disperse on an hourly and daily basis according to the prevailing wind in the area. Given the mobile nature of construction equipment, and the distance from where emissions would be emitted in relation to sensitive receptors, emissions would not expose the same receptor to pollutant concentrations continuously throughout the day, week, or construction-period as a whole. Finally, the proposed project would implement Mitigation Measure AIR-1, which would help reduce fugitive dust emissions. For these reasons, emission sources would be temporary, intermittent, and move throughout the project site, and pollutants would have time and space to disperse before potentially reaching receptor locations. This impact would be less than significant.

The proposed project would not result in long-term increases in operational emissions that have the potential to expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant.

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

References:

Bay Area Air Quality Management District (BAAQMD). 2017a. "Air Quality Standards and Attainment Status". BAAQMD, Research & Data, Air Quality Standards & Attainment Status. January 5, 2017. Accessed on September 10, 2021 at http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status

Bay Area Air Quality Management District (BAAQMD) 2017b. 2017 Clean Air Plan: Spare the Air, Cool the Climate. BAAQMD, Planning, Rules, and Research Division. September 10, 2017.

BAAQMD. 2017c. *California Environmental Quality Act Air Quality Guidelines*. San Francisco, CA. June 2010, updated May 2017.

TJKM, 2021. Traffic Circulation and VMT Analysis for Brookside Assisted Living, March 4, 2021.

United States Environmental Protection Agency (U.S. EPA) 2021. *Green Book.* "PM-2.5 (2012) Designated Area / State Information.". Current as of August 31, 2021. Accessed September 10, 2021. https://www3.epa.gov/airquality/greenbook/kbtc.html

6.4 Biological Resources

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

<u>Conclusion</u>: The project would not result in any significant environmental impacts to biological resources with implementation of **Mitigation Measures BIO-1** and **BIO-7**. Potential biological resource impacts of project activities would be mitigated to less-than-significant levels.

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

Special-Status Species Regulatory Framework

<u>Federal Endangered Species Act (FESA)</u>: The FESA establishes a broad public and federal interest in identifying, protecting, and providing for the recovery of threatened or endangered species. The Secretary of the Interior and the Secretary of Commerce are designated in FESA as responsible for

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

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

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

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

<u>California Fully Protected Species and Species of Special Concern</u>: The classification of California "fully protected" (CFP) was the CDFW's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under

CESA and/or FESA. The Fish and Game Code sections (fish at §5515, amphibians and reptiles at §5050, birds at §3503 and §3511, and mammals at §4150 and §4700) dealing with "fully protected" species state that these species "...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species," although take may be authorized for necessary scientific research. This language makes the "fully protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with "fully protected" species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

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

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

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

<u>Native Plant Protection Act</u>: The Native Plant Protection Act (NPPA) was created in 1977 with the intent to preserve, protect, and enhance rare and endangered plants in California (California Fish and Game Code sections 1900 to 1913). The NPPA is administered by CDFW, which has the authority to designate native plants as endangered or rare and to protect them from "take." CDFW maintains a list of plant species that have been officially classified as endangered, threatened or rare. These special-status plants

have special protection under California law and projects that directly impact them may not qualify for a categorical exemption under CEQA guidelines.

Sensitive Natural Vegetation Community Regulatory Framework

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

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

Documentation:

A Biological Resources Report was prepared by LSA on March 5, 2021. The report is included as Appendix A)

a. No Impact to Special-Status Plants. Special-status plants are defined here to include: (1) plants that are federal- or state-listed as rare, threatened or endangered, (2) federal and state candidates for listing, (3) plants assigned a Rank of 1 through 4 by the CNPS Inventory, and (4) plants that qualify under the definition of "rare" in the California Environmental Quality Act, section 15380. No special-status plant species occur or have the potential to occur in the project area. Although several special-status plants have been recorded within 5 miles of the project site (Table A of Appendix A), the project site is developed and currently contains an unoccupied convalescent facility, unoccupied house, parking lots, native and non-native trees, landscaping, and lawns, which do not provide suitable habitat for any special-status plant species. Alhambra Creek and its associated riparian woodland occurs immediately west of the project site. Special-status plants could occur within the adjacent creek and riparian woodland, but the proposed project would not affect these features, since project activities would be setback from the creek and riparian woodland by 25 feet (see Figure 4 for the Proposed Site Plan, and Figure 9 for the Landscape Plan). Project activities are not anticipated to impact special-status plant species.

Less than Significant with Mitigation Incorporated to Special-Status and Other Protected Wildlife. Special-status wildlife species include those species listed as endangered or threatened under the FESA or CESA; candidates for listing by the USFWS or CDFW; California fully protected and species of special concern; non-game mammals protected by Sections 4150-4155 of the CFGC; and nesting birds protected by the CDFW under CFGC Sections 3503 and 3513. Several special-status animal species are known to occur in the vicinity and could occur at or near the project site, related to Alhambra Creek. Alhambra Creek may provide suitable aquatic habitat for the following species:

- California red-legged frog (*Rana draytonii*). The likely presence of introduced predators (i.e., western mosquitofish [*Gambusia affinis*] and American bullfrog [*Rana catesbeianus*]), the developed nature of the area, the creek's isolation from larger natural areas, and the absence of recorded observations in the proximity likely make the creek unsuitable for this species. The closest CNDDB occurrence is approximately 3.2 miles from the project site.
- Western pond turtle (*Emys marmorata*). Suitable basking sites and deeper pools were observed in the creek channel adjacent to the project site and pond turtles could nest along the banks of the creek.
- The Central California Coast Distinct Population Segment of steelhead trout (*Oncorhynchus mykiss irideus*) historically occurred in Alhambra Creek (Leidy 2005). In-migrating steelhead may continue to occur in the creek in years with high flows, but barriers in the lower watershed and siltation may degrade salmonid habitat remaining in the Alhambra Creek watershed (Leidy 2005).
- White-tailed kite (*Elanus leucurus*) could nest in the trees or large shrubs on or adjacent to the proposed project site. No white-tailed kites or large stick nests were observed during the field survey, but this species could nest on or adjacent to the project site in the future.
- Western red bat (*Lasiurus blossevillii*) and pallid bat (*Antrozous pallidus*) may roost and/or forage within the riparian woodland adjacent to the project site, while other bat species, such as the Townsend's western big-eared bat (*Corynorhinus townsendii*), could roost in the unoccupied house. No evidence of roosting bats was observed during the survey, but trees suitable for western red bat and trees with cavities potentially suitable for cavity-roosting bats were observed on or adjacent to the project site development footprint and suitable openings for bats were observed below the eaves of the unoccupied house.

Nesting Birds. Nesting birds within and near the project site may be directly and indirectly impacted by construction activities, including vegetation grubbing, human disturbance, and equipment noise. Most actively nesting birds are protected under the CFGC, MBTA, and MBPA; eagles are protected under the Bald and Golden Eagle Protection Act. Construction activities, including vegetation clearing, and noise and vibration have a potential to result in direct (i.e., loss of viable eggs and death or injury of young) and indirect (i.e., nest abandonment) impacts to nesting songbirds and raptors. The loss of an active nest of common or special-status bird species would be considered a violation of CFGC Sections 3503, 3503.5, 3513.

Project construction includes grading and ground clearing throughout the project site. The project applicant proposes to remove two Bay Trees (*Laurus nobilis*) that are in poor health (BrightView, 2020), and retain all other existing trees onsite. An assessment of biological resources within the project site involved a review of available background information pertaining to sensitive species and habitats on the site and in the nearby vicinity, and a field survey. The methods of the background review and field survey are summarized within the biological resources report (LSA, 2021), and

included as Appendix A. Potential impacts and associated impact avoidance, minimization, and mitigation measures are discussed below. Implementation of **Mitigation Measures BIO-1 through BIO-7** would be required to reduce potential impacts to a less than significant level.

Mitigation Measure BIO-1: Employee Education Program. Prior to issuance of grading permits, the applicant must provide evidence to the City of Martinez that an employee education program was conducted, consisting of a brief presentation to explain biological resources concerns to contractors, their employees, and any other personnel involved in construction of the project. The program shall include the following: a description of relevant special-status species and nesting birds along with their habitat needs as they pertain to the project; a report of the occurrence of these species in the vicinity of the project site, as applicable; an explanation of the status of these species and their protection under the federal and state regulations; a list of measures being taken to reduce potential impacts to natural resources, including environmentally sensitive habitats, during project construction and implementation; and instructions if a special-status species is found onsite. A fact sheet conveying this information shall be prepared for distribution to the above-mentioned people and anyone else who may enter the project site. Upon completion of training, employees shall sign a form stating that they attended the training and agree to the conservation and protection measures.

Mitigation Measure BIO-2: Nesting Bird Avoidance or Conduct Preconstruction Surveys. If construction, grading, or other project-related improvements are scheduled during the nesting season of protected raptors and migratory birds, a focused survey for active nests of such birds shall be conducted by a qualified biologist within seven (7) days prior to the beginning of project-related activities. The results of the survey shall be sent to the City of Martinez prior to the start of project activities. The minimum survey radii surrounding the work area shall be the following: 1) 250 feet for passerines; 2) 500 feet for other small raptors such as accipiters (small, short-winged hawks); and 3) 1,000 feet for larger raptors such as buteos (large, broad-winged hawks). Nesting seasons are typically defined as follows: 1) March 15 to August 30 for smaller bird species such as passerines; and 2) February 15 to August 30 for raptors.

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

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

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

Mitigation Measure BIO-3: Active Nest Buffer. The applicant shall designate active nests as "Ecologically Sensitive Areas" (ESA) and protect the nest (while occupied) during project activities with the establishment of a fence barrier surrounding the nest site.

- a) Buffer distances for bird nests should be site specific and an appropriate distance, as determined by the qualified biologist. The buffer distances should be specified to protect the bird's normal behavior to prevent nesting failure or abandonment.
- b) The qualified biologist shall have authority to order the cessation of all nearby project activities if the nesting birds exhibit abnormal behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established.
- c) Typical protective buffers between each identified nest site and construction site are as follows: 1) 300 feet for hawks, owls and eagles; 2) 50 feet for passerines.
- d) The qualified biologist shall monitor the behavior of the birds (e.g., adults and young, when present) at the nest site to ensure that they are not disturbed by project activities.

- e) Nest monitoring shall continue during project work until the young have completely left the nest site, as determined by the qualified biologist.
- f) No habitat removal or modification shall occur within the ESA-fenced nest zone until the young have fully fledged and shall no longer be adversely affected by the project.

Mitigation Measure BIO-4: Pre-Construction Survey for Bat Roosts. Within 14 days before the start of construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, tree removal, vegetation removal, fence installation, demolition, and grading), the applicant must provide evidence to the City of Martinez that a survey for tree cavities suitable for roosting bats has been conducted within the project site, including a 50-foot buffer, as feasible. There should also be a five-day window for consultation with CDFW prior to the start of construction within the 14-day period. If suitable tree cavities are found, the applicant must submit evidence to the City that an emergence survey of the cavities has been conducted by a qualified biologist for colony bat roosts before the onset of construction-related activities. If an occupied maternity or colony roost is detected, CDFW shall be consulted to determine appropriate measures, such as bat exclusion methods, if the roost cannot be avoided. The results of the surveys shall be documented.

Mitigation Measure BIO-5: Pre-Construction Survey for Special-Status Herptile Species (California Red-Legged Frog, Western Pond Turtle). Due to the riparian woodland habitat along Alhambra Creek adjacent to the project site, the project site contains dispersal habitat for special-status herptile species (amphibians and reptiles), especially following precipitation for California red-legged frog and western pond turtle. To avoid impacting these species, the following measures shall be followed:

- Within 3–5 days prior to initiating work at the project site (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), a qualified biologist shall perform a pre-construction survey for CRLF, and WPT individuals within the boundaries of the project site plus a 500-foot buffer zone downstream of the project site along Alhambra Creek where access permission is granted from the landowner. To communicate due diligence, any non-access issues will be clearly communicated in report notes and provided to the client, CDFW, and/or USFWS if requested.
- If CRLF are found during the pre-construction survey, the qualified biologist shall immediately inform the construction manager that work may not be initiated until they have dispersed from the work area. The qualified biologist shall then consult with USFWS and CDFW immediately and provide a short description of observations, including a count of individuals and the life stage(s), condition at the site, and other aquatic species observed (if applicable). Unless explicitly authorized by these agencies, CRLF shall not be relocated if encountered in the project site. If the animals do not disperse of their own volition, the qualified biologist shall monitor the frog and consult with CDFW to determine the appropriate course of action.
- In the event WPT are found in the project area during pre-construction surveys, it shall be left alone to move out of the area on its own. If it does not move on its own, the qualified biologist shall notify CDFW and relocate the individuals(s) to a reach of Alhambra Creek at least 250 feet away from the project location. Relocation areas shall be of suitable habitat, on shallow banks with slow moving water, and shall be far enough away so as not to be affected by project activities.
- The applicant shall not resume project activities until CDFW and USFWS have provided written approval of the proposed avoidance measures or actions.
- Work shall be avoided if precipitation (defined as the National Weather Service 24-hour weather forecast indicating a 40 percent chance or higher of precipitation of at least 0.10 inch of

precipitation) is forecasted or has been recorded at the project site within a 24-hour window. An NWS forecast may be utilized to plan project work accordingly.

Mitigation Measure BIO-6: Direct Exterior Lighting Away from Alhambra Creek. Prior to issuance of building permits, applicant shall submit a lighting plan that demonstrates that all outdoor lighting is downward-directed and is directed away from Alhambra Creek and away from the riparian corridor to avoid impacts to wildlife inhabiting the riparian corridor.

Mitigation Measure BIO-7: Use of Non-Reflective Glass. The new assisted living facility shall be designed to avoid potential strikes by birds. Non-reflective window glass shall be installed to deter birds from accidentally striking the windows.

- b. Less than Significant Impact. No sensitive natural vegetation communities occur on site, however a riparian woodland that is associated with Alhambra Creek is situated immediately west of the project site (LSA, 2021). The riparian woodland contains native coast live oak, California buckeye (Aesculus californica), willow (Salix sp.), and invasive giant reed (Arundo donax). Understory vegetation is dominated by non-native English ivy, but native common snowberry (Symphoricarpos albus), wild cucumber (Marah macrocarpa), and stinging nettle (Urtica dioica) were also observed within the riparian woodland. The project includes a 25-foot setback from the creek to the development footprint would not impact any riparian habitat. No other sensitive natural plant communities or sensitive habitat are present on or near the project site. The impact would be less than significant.
- c. No Impact. The proposed project does not contain any state or federally jurisdictional features or protected wetlands (USFWS 2020). Alhambra Creek, which is likely jurisdictional under Section 404 of the Clean Water Act, occurs west of the project site. The proposed project includes a 25-foot setback from the creek to the project site and will not impact the creek (see Site Plan). The proposed project does not include any new stormwater outfalls that would drain into the creek. No other wetlands or waters of the United States/State that are potentially jurisdictional under Section 404 of the Clean Water Act were observed on or adjacent to the project site during the field survey.
- d. No Impact. No designated wildlife migration corridors are present on the project site. Localized movements of common, non-status wildlife may occur through the project site and neighboring habitats, but no major migrations are expected to occur across the project site. The project site is developed with buildings and parking lots and is surrounded to the north, south, and east by urban development. Alhambra Creek and its associated riparian woodland provide a wildlife movement corridor, but this corridor would be protected by the 25-foot setback. Existing wildlife that currently move through the project site are urban-adapted species that would likely continue to move through the project site and the riparian woodland after the new facility is renovated, the second story built, and the residence relocated. Typical urban wildlife that may move through the site include various native and non-native birds, raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), Virginia opossum (*Didelphis virginiana*), fox squirrel (*Sciurus niger*), house mouse (*Mus musculus*), and black rat (*Rattus rattus*). The high level of development and limited open space area on surrounding parcels makes the project site an unlikely option for wildlife migrations.

The project site does not function as a wildlife habitat linkage or movement corridor, nor would project implementation adversely affect any offsite designated wildlife habitat linkage or movement corridor. Regional movement of common wildlife species through the project site is limited due to surrounding development. In addition, the project site does not support any native wildlife nursery

sites. As a result, construction and operation of the project is not expected to substantially affect breeding productivity or population viability of any common species or cause a change in species diversity locally or regionally.

- e. No Impact. The City of Martinez protects all oak trees and indigenous trees measuring 20 inches or larger in circumference (approximately 6.5 inches in diameter) measured 4.5 feet from ground level (Martinez Municipal Code Chapter 8.12 Trees on Private Property—Preservation, Protection and Removal, Section 8.12.020). The applicant proposes removal of two non-native sweet bay (*Laurus nobilis*) trees, which are not protected by the City's ordinance. The on-site coast live oak and valley oak trees qualify as ordinance-protected trees, but construction and operation of the project would not impact these trees. The off-site native trees within the riparian corridor, such as the California buckeye and willow, may also qualify as ordinance-protected trees, but these trees would be protected by a creek setback and would not be impacted by project activities. The project does not propose the removal of any trees protected under the City's tree preservation policies.
- **f. No Impact**. The project site is not located within the plan area of any adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state Habitat Conservation Plan.

References:

BrightView Tree Care Services, 2020. *Tree Evaluation for Proposed Project at 4110 Alhambra Way – Martinez*, July 21, 2020. (Included as Appendix B)

City of Martinez. 2018. "Existing General Plan Land Use Map." Available at: https://www.cityofmartinez.org/civicax/filebank/blobdload.aspx?BlobID=17139 (accessed July 23, 2021).

LSA, 2021. *Biological Resources Study for Proposed Alhambra House Project*, July 23, 2021. (Included as Appendix A)

United States Fish and Wildlife Service. 2020. "National Wetlands Inventory." Available at: https://www.fws.gov/wetlands/data/Mapper.html (accessed July 23, 2021).

6.5 Cultural Resources

		Summary of Impacts		
	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines \$15064.5?		~		
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines §15064.5?		~		
c) Disturb any human remains, including those interred outside of formal cemeteries?			~	

<u>Conclusion:</u> Regarding cultural resources, the proposed project would not result in any significant environmental impacts with the incorporation of Mitigation Measures CUL-1 through CUL-4, which addresses archaeological resources.

Documentation:

a. Less than Significant with Mitigation Incorporated. Origer and Associates requested a cultural resources records search through the California Historical Resources Information System (CHRIS) at the Northwest Information Center (NWIC). The NWIC, an affiliate of the State of California Office of Historic Preservation (OHP), is the official State repository of cultural resource records and reports for Contra Costa County. Results were returned to MIG in April 2021.

Per the Origer archival review, no previously identified cultural resources were identified in the CHRIS search as being within the project site. However, a total of 13 studies have been conducted within a quarter-mile of the project site, which resulted in the finding of 24 resources. The 24 cultural resources are summarized in the table below:

Table 5. Cultural Resources within 0.25 Miles of the Project Area

CHRIS Number	Site Name	Site Type	Period of Significance
P-07-001024	John Muir National Historic Site	Building, Site, District	Historic
P-07-001815	John Muir House	Building, Element of District	Historic
P-07-001816	Carriage House	Building, Element of District	Historic
P-07-001817	Bridge	Building, Element of District	Historic
P-07-001818	Windmill	Building, Element of District	Historic
P-07-001820	Visitor Center	Building, Element of District	Historic

P-07-004539	Alhambra 1	Site	Historic
P-07-004540	MS-1	Site, Structure	Historic
P-07-004541	MS-2	Site, Structure	Historic
P-07-004642	John Muir NHS Carriage Drive Loop	Structure, Element of District	Historic
P-07-004643	John Muir NHS East Driveway	Structure, Element of District	Historic
P-07-004644	John Muir National Historic Site Main Farm Road	Building, Element of District	Historic
P-07-004646	John Muir NHS Triangle Intersection	Building, Element of District	Historic
P-07-004647	John Muir NHS Woodshed Road	Building, Element of District	Historic
P-07-004648	John Muir NHS Muir House Perimeter Sidewalk and Front Steps	Structure, Element of District	Historic
P-07-004649	John Muir NHS Stone/Brick Wall and Stone Steps	Structure, Element of District	Historic
P-07-004650	John Muir NHS Alhambra Well	Structure, Element of District	Historic
P-07-004655	John Muir NHS Stabilization Structures along Franklin Creek	Structure, Element of District	Historic
P-07-004659	Easy Access Trail	Structure, Element of District	Historic
P-07-004660	Fire Lane House Unit	Structure, Element of District	Historic
P-07-004661	NPS Sidewalks and Patio	Structure, Element of District	Historic
P-07-004665	Visitor Center Parking Lot	Structure, Element of District	Historic
P-07-004666	Walkway Incense Cedars	Site, Element of District	Historic
P-07-004672	John Muir Home Site	Site, Element of District	Historic

These 24 resources are all elements of the John Muir National Historic Site District. All these resources date to the historic period and none have the potential to extend onto the property. Origer's report concludes that because of the residence has been on the property since 1904 and the number of historic-era resources nearby, there is a moderate potential for resources on the property.

A supplemental report by Brunzell Historical updated the historic resource evaluation prepared by Origer to include a review of the proposed residence relocation for conformance to the Secretary of the Interior's Standards for rehabilitation. Brunzell Historical personnel conducted a site visit on February 16, 2021.

The Brunzell report found that the existing residence was built in 1904, and the detached garage (now demolished) was built in 1992, replacing an older barn in roughly the same location. The original Martinez Convalescent Hospital operated out of the house prior to the construction of the extant assisted living facility building in 1958. While the Martinez Convalescent Hospital building and the garage are not eligible for National Register of Historic Places (NRHP) or the California Register of Historic Resources (CRHR), the house is eligible for both the NRHP and CRHR under Criterion C/3 for its architecture. The residence falls under Criterion C/3 because it "...embodies the distinctive characteristics of a type, period, region, or method or construction, or represents the work of a master, or possesses high artistic values." (California Office of Historic Preservation 2021). Per the Brunzell Report, the residence is an "excellent example of an American Foursquare residence, which during the early twentieth century presaged the popular craftsman style of architecture." The historic residence is not part of any local register of historic properties for the City of Martinez.

The project would involve relocating the historic residence approximately 65 feet to the northwest corner of the lot with 10-foot setbacks on the north and south sides, and a 20-foot setback on the Alhambra Way frontage. On the west side, the setback would be 25 feet. As proposed, the residence would have a smaller front lawn compared to existing conditions.

Historic materials that have fallen away or are damaged (such as windows, some porch balusters, and some decorative rafter tails), would be replaced. The small, enclosed porch at the west side of the house is severely deteriorated, has been heavily altered, and would be demolished. In addition to these restoration and rehabilitation activities, a small (11'3" x 26'6") one-car garage is proposed to be added to the southeast elevation of the house beneath the wrap-around porch. The siding would be compatible to the original house, and it would be fitted with a carriage house-style garage door at its northeast elevation, compatible with the original architecture of the house. A new rear entrance would be constructed on the southwestern corner featuring a sliding glass door to access the back yard and a simple entry porch with shed roof and wooden steps.

The project would remove non-historic features of the historic structure and rehabilitate and/or replace deteriorated features. Original chimneys, which are seismically unstable, would be removed for relocation of the building, and would not be restored. The chimneys on the residence are not considered a character defining feature of the American Foursquare architectural style. Therefore, removal of the chimney would not remove a character-defining feature. However, integrity of materials and design would be affected as a result of chimney removal.

Although the building would be restored and rehabilitated, the historic residence's integrity of location, design, feeling, and association would be diminished as a result of the relocation and proposed improvements. However, because the residence would remain on the same property and character defining features would remain mostly unchanged, some integrity of location and design would remain. In addition, the building would continue to retain integrity of workmanship.

With the relocation and rehabilitation, the currently vacant residence would become a restored single-family residence. As proposed, these project elements would allow the property to return to its original residential use.

The relocation would include the site preparation, bracing and removal of the building from its current location, and the proper installation of the building at the proposed new location. Due to the proximity of the new location (65 feet from the original location), this would not be considered a substantial adverse change. No features would be removed from the house for relocation purposes,

except for the chimneys and deteriorated rear enclosed porch. The characteristics that convey its historical significance would not be impaired by the relocation. The integrity of the house would be affected by the relocation operation, as discussed above.

The building would be moved in its entirety, with no change to the design, materials, and workmanship, save for removal of the chimneys and rear enclosed porch, which are not character defining features and in poor condition. A rehabilitation process would begin after the building is relocated, which would be done in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

The residence would have the same orientation to Alhambra Way. The residence would be more visible from Alhambra Way, due to its closer location to the street frontage. **Mitigation Measure CUL-1** would be required to help preserve the integrity of the building, ensuring that the residence is sufficiently protected as a historic resource and that no effect occurs affecting the significance of the residence as a historic resource. Included in the mitigation measure is the requirement to follow the Secretary of the Interior's Standards for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. CEQA guidelines state that in general terms, a project that follows those Standards and Guidelines would be considered mitigated to a less-than-significant level. Based on expert review and the provision of protective measures as identified in **Mitigation Measure CUL-1**, the impact to historic resources from moving the residence would be less than significant with mitigation incorporated.

Mitigation Measure CUL-1: All work to be carried out on the residence shall conform to the Secretary of the Interior's Standards for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. Prior to the house relocation, doors and windows are to be braced open or closed at the discretion of the engineer in charge of moving operations. Detailed photographs shall be taken by a state qualified historian or architectural historian of all aspects of the house prior to the move to ensure that any damage sustained can be repaired in keeping with the current existing conditions and as a historic record of the house in its current position. Any damage sustained during moving operations shall be fixed according to the Secretary of the Interior's Standards for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. All repairs shall be approved by a state qualified historian or architectural historian. A state qualified historian or architectural historian shall catalog all material removed from and remaining in the house. A report of repairs shall be submitted to the City upon completion.

b. Less than Significant with Mitigation Incorporated. The cultural resources records search results conducted by the NWIC indicate there are no archaeological resources (prehistoric or historic) located within the project's boundaries. A Sacred Lands File (SLF) Search was requested for the project and was returned by the NAHC on March 9, 2021, which was negative, indicating that the SLF has no information about the presence of Native American cultural resources in the immediate project area.

The Native American Heritage Commission (NAHC) provided contact information for tribal representatives and recommended that Origer contact the representatives for any additional information they may have regarding the project area. The following tribes received letters describing the proposed project: *The Amah Mutsun Tribal Band of Mission San Juan Bautista, The Confederated Villages of Lisjan, Guidiville Indian Rancheria, Indian Canyon Mutsun Band of Costanoan, Muwekma Ohlone Indian Tribe of the San Francisco Bay Area, North Valley Yokuts,*

Rumsen Am:a Tur:ataj Ohlone, The Ohlone Indian Tribe. None of the tribes replied to the scoping letters.

Based on the results of the SLF search and Native American outreach, although no specific resources were discovered, cultural resources could be present and project excavation could result in the discovery of prehistoric archaeological resources. In the event that project ground-disturbing activities disturb, damage, or destroy previously unknown buried prehistoric features, sites or artifacts, a significant impact could occur. Implementation of **Mitigation Measure CUL-1 through CUL-4** would reduce potential impacts to undiscovered archeological resources to a less than significant level.

Mitigation Measure CUL-2: Conduct Subsurface Archaeological Investigation. Prior to ground disturbing activities, the applicant shall retain a qualified professional archaeologist or archaeological firm to conduct a series of subsurface investigations in the proposed area of disturbance, where the project has the potential of encountering subsurface resources or would come within two vertical feet of encountering subsurface resources, i.e., any excavation into or close to the existing ground level of the project area where excavation or over excavation may disturb subsurface archaeological resources. The methodology of the subsurface investigation shall be determined by the investigating archaeologist and shall use archaeological augering, shovel test pits, or a combination of the two. The investigations shall be used to determine if archaeological resources are present in areas where native soils could be encountered and the edges and depths of archaeological resources. No more than the minimum level of physical disturbance into a cultural resource shall be permitted, to ensure the integrity of the resource is retained, while being able to definitively establish the presence of a cultural resource. Investigation to depths beyond the maximum depth of disturbance plus a two-foot buffer shall not be required, as cultural resources present below that horizon would be protected from construction activity. The archaeologist/firm shall write a report of their findings, documenting if the proposed project would impact archaeological resources based on the depth and features identified by the subsurface research. In the event that the area of disturbance changes to include areas not investigated by this method, additional investigation shall be required using the criteria contained in this mitigation measure.

Mitigation Measure CUL-3: Avoid Archaeological Resources. After the archaeological investigations are complete, an avoidance strategy shall be determined in consultation with both the applicant, the City, and a qualified professional archaeologist or archaeological firm. The avoidance strategy shall ensure that proposed ground-disturbing activities shall either avoid the archaeological resource entirely by ensuring that either a ten-foot minimum buffer surrounds the resource in which no ground moving activity shall be permitted or have at least two feet of clearance between the depth of the excavation, and the depth of the resource, or both. Fill may be used to raise the ground height to a point where there will be two feet between the excavation and the resource. Excavation shall not be permitted if there is the possibility of excavation being closer than either two feet vertically or ten feet horizontally to the edges/depth of the resource. An archaeologist shall map and stake out the edge of known and newly discovered resources to ensure construction workers know where sensitive locations are.

Mitigation Measure CUL-4: Conduct Archaeological Monitoring. The applicant shall retain a qualified professional archaeologist or archaeological firm to conduct archaeological monitoring during project construction within 50 feet of a previously known or newly identified archaeological resource during project construction. In the event archaeological resources are

unearthed during ground-disturbing activities, all ground-disturbing activities within 50 feet of the find shall be halted so that the find can be evaluated, and the qualified archaeologist can determine the appropriate action, which may include development of a treatment plan. In the event that the construction workers discover archaeological resources determined to be prehistoric, Native American tribes/individuals shall be contacted and consulted, and Native American construction monitoring shall be initiated. A monitoring report shall be written detailing all archaeological finds and submitted to the City and the NWIC.

Mitigation Measure CUL-5: Conduct Archaeological Sensitivity Training for Construction Personnel. The applicant shall retain a qualified professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards to conduct an archaeological sensitivity training for construction personnel prior to commencement of excavation activities. The training session shall include a handout and a log of all attendees and shall focus on how to identify archaeological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event.

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

References:

Brunzell Historical, 2021. Subject: Historical Resource Evaluation and Review of Proposed Project for Conformance to Secretary of the Interior's Standards, 4110 Alhambra Way, Martinez, Contra Costa County. July 29, 2021.

California Office of Historic Preservation, 2021. California Register of Historical Resources (CRHR) Available at: https://ohp.parks.ca.gov/?page_id=21238 (accessed September 14, 2021)

National Park Service, 2020. National Register of Historic Places Digital Archive on NPGallery. Available at: https://npgallery.nps.gov/NRHP/AdvancedSearch/ (accessed August 26, 2020)

Origer and Associates, 2021. Re: Archival Search Results of the Property at 4110 Alhambra Way, Martinez, Contra Costa County. April 13, 2021. Unpublished document not available for public release; on file with NWIC and MIG, Inc.

6.6 Energy Resources

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

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

Documentation:

a. Less than Significant Impact. Construction activities associated with the proposed project would require the use of heavy-duty, off-road equipment and construction-related vehicle trips that would combust fuel, primarily diesel and gasoline. Heavy-duty construction equipment would be required to comply with the California Air Resources Board's (CARB's) airborne toxic control measures, which restrict heavy-duty diesel vehicle idling to five minutes. Since petroleum use during construction would be temporary and needed to conduct development activities, it would not be wasteful or inefficient.

After construction, the proposed project would operate as an assisted living facility on Parcel 1 and a single-family residence on Parcel 2. The project is an expansion of an existing building and does not change the existing land use type. Although the project would consume more total electricity and natural gas due to the expanded facilities, the project would use the energy in a more efficient manner than the existing conditions while serving a larger population. Due to energy efficiency standards being improved over time, the remodeled, relocated, and proposed structures at the project site would need to comply with current building/energy code standards. The 2019 building code was estimated to result in approximately a 78% reduction in electricity and a 5% reduction in natural gas for energy systems in multi-family residential type buildings (CAPCOA, 2021). Thus, building energy consumption would not wasteful, inefficient, or unnecessary. The project would also involve the consumption of gasoline and diesel from the estimated 103 additional vehicle trips to or from the site. This trip generation was low enough to meet the criteria for Contra Costa County's screening criteria for VMT, and would not create wasteful, inefficient, or unnecessary consumption of gasoline and diesel.

For the reasons described above, the proposed project's energy consumption would not be wasteful, inefficient, or unnecessary. This impact would be less than significant.

b. No Impact. The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As discussed in response a), the project would comply with the 2019 California Building Standards Code, which would result in the expanded and relocated buildings being more

energy efficient than the existing building. In addition, the project does not conflict with the City of Martinez Climate Action Plan. The Climate Action Plan contains energy strategies such as implementing green building standards, promoting energy efficiency and rebate programs, streamlining the permit process for green buildings, installing energy efficient systems for municipal buildings, and considering renewable energy for municipal operations. The energy strategies in the Climate Action Plan are items for the City to enact and do not apply to the project.

References:

California Green Building Standards Commission (CalGreen), 2019. Section 5.201. Available at: https://up.codes/viewer/california/ca-green-code-2019/chapter/5/nonresidential-mandatory-measures#5.201 (accessed September 10, 2021).

CAPCOA, 2021. California Emissions Estimator Model (CalEEMod) User's Manual, Appendix E5 - Analysis of Building Energy Use Data, 2021. Available at: http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-e2020-4-0.pdf?sfvrsn=6 (accessed September 10, 2021).

6.7 Geology and Soils

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

<u>Conclusion:</u> Regarding geology and soils, the proposed project would not result in any significant environmental impacts with the incorporation of **Mitigation Measures GEO-1 through GEO-3**.

Documentation:

- **ai. No Impact.** According to the California Geologic Survey's (CGS), the proposed project site is not located in an Alquist-Priolo fault zone (CGS 2020a). There would be no impact.
- **aii.** Less than Significant Impact. Much of the region is subject to seismic shaking that results from earthquakes along the San Andreas Fault Zone System. Predicting seismic events is not possible, nor is providing mitigation that can entirely reduce the potential for injury and damage that could occur during a seismic event. However, by applying geotechnical evaluation techniques and appropriate

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

A Geotechnical Report was completed by Gray Geotech, on November 2, 2020. All construction activities must meet the California Building Code regulations for seismic safety. Construction plans would be subject to review and approval of the City prior to the issuance of a building permit, and the project would be subject to inspection by the City throughout construction and prior to the issuance of an occupancy permit. Standard conditions of approval require that building permits be obtained for all construction and that the project meet all standard seismic and soil test/compaction requirements. Therefore, the potential impact from strong seismic ground shaking would be less than significant.

aiii. Less than Significant Impact. Strong ground shaking can result in liquefaction, the sudden loss of sheer strength in saturated sandy material, resulting in ground failure and displacement. According to the Geotechnical Report, the project site is located in an area that has high liquefaction potential (Gray Geotech, 2020). Gray Geotech performed a limit equilibrium slope stability analysis, which found the site has a low risk of liquefaction and impacts from liquefaction and ground failure would be less than significant.

See Section 6.7 (aii) above. The design and construction of new structures are subject to engineering standards of the California Building Code (CBC), which consider soil properties, seismic shaking, and foundation type. Construction plans would be subject to review and approval of the City prior to the issuance of a building permit, and the project would be subject to inspection by the City throughout construction and prior to the issuance of a certificate of occupancy. Standard conditions of approval require that building permits be obtained for all construction and that the project meet all standard seismic and soil test/compaction requirements.

- **aiv.** Less than Significant Impact. The urban and developed areas of Martinez are characterized by flat land and land with gradual to moderate slopes. In areas underlain by weak or unconsolidated earth materials, landslides are a hazard. The existing facility is located on flat land with gradual east to west downwards slope. According to the Geotechnical Report, the project site is not mapped as an area susceptible to landslides. Adherence to CBC standards and standard conditions of approval would reduce potential injury and damage to people and property from seismic activity. Therefore, the potential impact from landslides would be less than significant.
 - **b.** Less than Significant with Mitigation Incorporated. The project includes grading consisting of approximately 450 cubic yards (CY) of cut and 175 CY of fill. Approximately 60 CY would be cut for onsite wastewater treatment facilities. In total, 285 CY of earth would be graded, on a previously disturbed site. Project grading activities require the issuance of a grading permit. Improper grading, both during and post-construction, has the potential to increase the volume of runoff from a site and subsequently increase erosion. Increased runoff and soil erosion on site and off site could adversely impact downslope water quality. The potential soil erosion impact of the project would be less than significant with incorporation of Mitigation Measure GEO-1.

Mitigation Measure GEO-1: Finalize the Storm Water Control Plan. The applicant shall submit a finalized Storm Water Control Plan prepared by a qualified registered professional engineer or a storm water pollution prevention plan developed as an integral part of the grading plan. The Plan

shall be subject to review and approval of the City prior to the issuance of a grading permit. The Plan shall include all erosion control measures to be used during construction, including run-off control, sediment control, and pollution control measures for the entire site to prevent discharge of sediment and contaminants into the drainage system. The Plan shall include the following measures as applicable:

- a) Throughout the construction process, ground disturbance shall be minimized, and existing vegetation shall be retained to the extent possible to reduce soil erosion. All construction and grading activities, including short-term needs (equipment staging areas, storage areas, and field office locations) shall minimize the amount of land area disturbed. Whenever possible, existing disturbed areas shall be used for such purposes.
- b) All drainage ways shall be protected from silt and sediment in storm runoff using appropriate best management practices (BMPs) such as silt fences, diversion berms, and check dams. Fill slopes shall be stabilized and covered. All exposed surface areas shall be mulched and reseeded. All cut and fill slopes shall be protected with hay mulch and/or erosion control blankets.
- c) All erosion control measures shall be installed according to the approved plans prior to the onset of the rainy season but no later than October 15th. Erosion control measures shall remain in place until the end of the rainy season but may not be removed before April 15th. The applicant shall be responsible for notifying construction contractors about erosion control requirement.
- d) Example design standards for erosion and sediment control include, but are not limited to, the following: avoiding disturbance in especially erodible areas; using berms, swales, ditches, vegetative filter strips, and catch basins to prevent the escape of sediment from the site; conducting development in increments; and planting bare soils to restore vegetative cover.
- e) The applicant shall also develop an inspection program to evaluate if there is any significant onsite erosion as a result of the rainfall. If there are problem areas at the site, recommendations shall be made to improve methods to manage onsite erosion.
- c. Less than Significant with Mitigation Incorporated. The parcel is subject to seismic shaking, and a discussion of impacts related to landslides and liquefaction is in Section 6.7 (aii, aiv). Lateral spreading occurs when soils liquefy during an earthquake event and the liquefied soils along with the overlying soils move laterally to unconfined spaces causing horizontal ground displacements. In the low probability event that onsite soil is saturated at the time of a fault rupture, there is low potential for the isolated layer of overlying soils on site to liquefy and result in lateral spreading.

The project site contains gradually sloping terrain in its western portion close to the creek. This terrain may increase the potential for onsite subsidence; however, the probability of onsite subsidence is reduced because the project would not use a well. Incorporation of **Mitigation Measure GEO-1**, in addition to compliance with CBC and Occupational Safety and Health Administration (OSHA) regulations, would reduce the impact to a less than significant level.

d. Less than Significant with Mitigation Incorporated. The project site has soil that is typical of flood plains and alluvial fans, as well as moderately deep soils consisting of loam and clay loam. The onsite soil type is mapped as Botella clay loam, 0 to 2 percent slopes, Soil Group C by the USDA Natural Resource Conservation Service (NRCS). Group C soils typically are moderately well drained with low runoff potential. The Contra Costa General Plan maps the project area as Quaternary Alluvium, which is comprised of consolidated and unconsolidated sediments, which could create localized problems for building include expansive clays, hillside earthflows and unstable cut slopes

(Contra Costa County, 2004). Project construction and grading activities must be conducted in compliance with the California Building Code and Municipal Code Section 15.04.050 (Appendix Chapter J Amended – Excavation and Grading). Compliance with all applicable construction and grading regulations and the implementation of **Mitigation Measure GEO-2** would reduce the impact to life and property created from soil expansion to a less-than-significant level.

Mitigation Measure GEO-2: Expansive Soils. Prior to building permit issuance, the applicant shall submit building plans that address expansive soils onsite. One or more of the below measures may be used to mitigate expansive soils found onsite, as approved by the City.

- Design of the structure with sufficient rigidity to distribute differential movement over a longer span or minimize curving of the slab (hogging or dishing) of the slab or foundations. This is often used in combination with design of the superstructure, plumbing and vertical elements to allow differential movement, such as with the use of control joints in slabs or hardscape, impervious flexible joints between floors and footings/walls, cladding with articulated joints or panels, and modular construction so walls, floors or portions of the building can move as a unit.
- Since shrink/swell behavior typically occurs as a result of seasonal moisture variation; certain construction and maintenance practices may be used to promote constant moisture in the foundation soils, such as surface drainage to eliminate ponded water, protecting excavations from drying, and construction of the foundation should be in the period following the wet season or use of soakage hoses to saturate the subgrade. Avoid curbs or depressed flower beds that allow for ponding of water near the structure, avoid or remove trees and heavy vegetation within 10 to 15 feet of the foundation or 1 to 1.5 times the tree height, and maintain gutters, spouts and drains to convey runoff away from the structure. Plumbing or utility trenches may contribute to soil moisture beneath the foundation. Use a plug of non-permeable material (such as controlled density fill or certain clays) at the point where trenches enter the building footprint to prevent infiltration of groundwater through the pipe bedding or backfill.
- Full or partial removal of the expansive material and replacement with non-expansive material or in-situ lime/cement mixing of limited depth. This typically requires excavation to below the active zone or to a non-expansive layer to create a more uniform condition for shallow foundations and slabs with different embedment depths and confining loads.
- **e. No Impact.** The proposed project is within City boundaries and would be served by a public sewer system. The project does not include installation of septic tanks or alternate wastewater disposal systems.
- f. Less than Significant with Mitigation Incorporated. The site is developed with an existing convalescent facility and the presence of, or potential for, unique geological features is unlikely. There would likely be no impact to unique geologic features. The U.S. Department of Agriculture (USDA) NRCS Web Soil Survey indicates the soil on the project site is Botella clay loam which is moderately well-drained and typically occur on floodplains and alluvial fans (NRCS 2021),

An examination of the Geologic Map of California indicates that the project area is comprised of marine sedimentary rocks, including Paleocene marine sandstone, shale and conglomerate materials that are mostly well consolidated (CGS 2020b). Development of the project site would disturb previously undisturbed soils as part of the residence relocation. While the likelihood of paleontological resources to be located on the project site is currently unknown, fossilized materials are often located in sedimentary rock. A cultural resources archival report completed by Origer and Associates concluded that there is a high potential for prehistoric resources on the surface of the property despite the development that has taken place over the last 117 years. Per the Geologic Map

of California, the underlying geology of hard sandstone and shale at the project site has a high potential to yield fossilized material. Potential impacts to paleontological resources from project ground-disturbing activities would be less than significant with the incorporation of **Mitigation Measure GEO-3** and GEO-4.

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

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

References:

Association of Bay Area Governments. 2020. "MTC/ABAG Hazard Viewer Map." Available at: https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8 (accessed July 21, 2021).

California Geological Survey. 2020a. "Earthquake Zones of Required Investigation." Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed July 21, 2021).

California Geologic Survey. 2020b. "Geologic Map of California." Available at: http://maps.conservation.ca.gov/cgs/gmc/ (accessed July 21, 2021).

County of Contra Costa. 2004. *Contra Costa County General Plan* 2005 – 2020. "Safety Element, Figure 10-1." Available at: https://www.contracosta.ca.gov/4732/General-Plan (accessed July 20, 2021)

Gray Geotech, 2020. Geotechnical Report: Proposed Building Additions and Relocation

4110 Alhambra Way, Martinez, CA. November 2, 2020. (Included as Appendix C)

U.S. Department of Agriculture, Natural Resource Conservation Service. 2020. "Web Soil Survey." Available at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (accessed July 21, 2021)

6.8 Greenhouse Gas Emissions

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

<u>Conclusion:</u> Regarding greenhouse gas emissions, the proposed project would result in less than significant impacts.

Environmental and Regulatory Setting

Gases that trap heat in the atmosphere and affect regulation of the Earth's temperature are known as greenhouse gases (GHGs). GHGs that contribute to climate regulation are a different type of pollutant than criteria or hazardous air pollutants because climate regulation is global in scale, both in terms of causes and effects. Some GHGs are emitted to the atmosphere naturally by biological and geological processes, such as evaporation (water vapor), aerobic respiration (carbon dioxide), and off-gassing from low oxygen environments including swamps or exposed permafrost (methane); however, GHG emissions from human activities, such as fuel combustion (carbon dioxide) and refrigerants (hydrofluorocarbons), are primarily responsible for the significant contribution to overall GHG concentrations in the atmosphere, climate regulation, and global climate change.

Human production of GHGs has increased steadily since pre-industrial times (approximately pre-1880) and atmospheric carbon dioxide concentrations in the atmospheric carbon dioxide concentrations have increased from a pre-industrial value of 280 ppm in the early 1800's to 408 ppm in January 2018 (NOAA 2018). The effects of increased GHG concentrations in the atmosphere include climate change (increasing temperature and shifts in precipitation patterns and amounts), reduced ice and snow cover, sea level rise, and acidification of oceans. These effects in turn will impact food and water supplies, infrastructure, ecosystems, and overall public health and welfare.

The 1997 United Nations' Kyoto Protocol international treaty set targets for reductions in emissions of four specific GHGs – carbon dioxide, methane, nitrous oxide, and sulfur hexafluoride – and two groups of gases – hydrofluorocarbons and perfluorocarbons. These GHG are the primary GHG emitted into the atmosphere by human activities. The six common GHG's are described below.

<u>Carbon Dioxide (CO₂)</u>. CO₂ is released to the atmosphere when fossil fuels (oil, gasoline, diesel, natural gas, and coal), solid waste, and wood or wood products are burned.

<u>Methane (CH₄)</u>. CH₄ is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from the decomposition of organic waste in municipal solid waste landfills and the raising of livestock.

Nitrous oxide (N_2O). N_2O is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels.

<u>Sulfur hexafluoride (SF₆)</u>. SF₆ is commonly used as an electrical insulator in high voltage electrical transmission and distribution equipment such as circuit breakers, substations, and transmission switchgear. Releases of SF₆ occur during maintenance and servicing as well as from leaks of electrical equipment.

<u>Hydrofluorocarbons (HFCs)</u> and <u>perfluorocarbons (PFCs)</u>. HFCs and PFCs are generated in a variety of industrial processes.

GHG emissions from human activities contribute to overall GHG concentrations in the atmosphere and the corresponding effects of global climate change (e.g., rising temperatures, increased severe weather events such as drought and flooding). GHGs can remain in the atmosphere long after they are emitted. The potential for a GHG to absorb and trap heat in the atmosphere is considered its global warming potential (GWP). The reference gas for measuring GWP is CO₂, which has a GWP of one. By comparison, CH₄ has a GWP of 21, which means that one molecule of CH₄ has 21 times the effect on global warming as one molecule of CO₂. Multiplying the estimated emissions for non-CO₂ GHGs by their GWP determines their carbon dioxide equivalent (CO₂e), which enables a project's combined global warming potential to be expressed in terms of mass CO₂ emissions.

CARB is the lead agency for implementing Assembly Bill (AB) 32, the California Global Warming Solutions Act adopted by the Legislature in 2006. AB 32 requires the CARB to prepare a Scoping Plan containing the main strategies that will be used to achieve reductions in GHG emissions in California. In 2007, CARB approved a statewide 1990 emissions level and corresponding 2020 GHG emissions limit of 427 million metric tons of carbon dioxide equivalents (MTCO₂e) (CARB, 2007). In 2008, CARB adopted its *Climate Change Scoping Plan*, which projects, absent regulation or under a "business as usual" (BAU) scenario, 2020 statewide GHG emissions levels of 596 million MTCO₂e and identifies the numerous measures (i.e., mandatory rules and regulations and voluntary measures) that will achieve at least 174 million MTCO₂e of reductions and reduce statewide GHG emissions to 1990 levels by 2020 (CARB, 2009). In 2011, CARB released a supplement to the 2008 *Scoping Plan Functional Equivalent Document* (FED) that included an updated 2020 BAU statewide GHG emissions level projection of 507 million MTCO₂e (CARB, 2011), and in 2014 CARB adopted its First Update to the Climate Change Scoping Plan (CARB, 2014).

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

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

On December 14, 2017 CARB adopted the second update to the Scoping Plan, the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan Update). The primary objective of the 2017 Scoping Plan Update is to identify the measures needed to achieve the mid-term GHG reduction target for 2030 (i.e., reduce emissions by 40 percent below 1990 levels by 2030), as established under Executive Order B-30-15 and SB 32. The 2017 Scoping Plan Update identifies an increasing need for coordination among state, regional, and local governments to achieve the GHG emissions reductions that can be gained from local land use planning and decisions. It notes emission reduction targets set by more than one hundred local jurisdictions in the state could result in emissions reductions of up to 45 MMTCO₂E and 83 MMTCO₂E by 2020 and 2050, respectively. To achieve these goals, the 2017 Scoping Plan Update includes a recommended plan-level efficiency threshold of six metric tons or less per capita by 2030 and no more than two metric tons by 2050. The major elements of the 2017 Scoping Plan Update framework include:

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

In June 2009, the City of Martinez adopted the final version of the City's Climate Action Plan (CAP). The CAP sets forth three primary goals – 1) To reduce GHG emissions from sources within the City of Martinez; 2) To shift to renewable energy resources; and 3) To prepare for a changing climate – through the implementation of 30 strategies targeting Transportation, Energy, Solid Waste, Water, and Adaptation and Carbon Sequestration.

The Sustainable Communities and Climate Protection Act of 2008 (SB 375) was adopted to connect the GHG emissions reductions targets established in the Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional longrange transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles travelled (VMT) and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 regions in California managed by a metropolitan planning organization (MPO). On July 18, 2013, the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) adopted Plan Bay Area 2013. The Plan includes two main elements; the Sustainable Communities Strategy (SCS) and the Regional Transportation Plan (RTP). An update to the plan, Plan Bay Area 2040, was jointly approved by the ABAG Executive Board and by MTC on July 26, 2017. As an update to the region's long-range RTP and SCS, Plan Bay Area 2040 projects household and employment growth in the Bay Area over the next 24 years, provides a roadmap for accommodating expected growth, and connects it all to a transportation investment strategy

focused on moving the Bay Area toward key regional goals for the environment (e.g., state GHG reduction goals), economy, and social equity (ABAG/MTC, 2017).

Documentation:

Global climate change is the result of GHG emissions worldwide; individual projects do not generate enough GHG emissions to influence global climate change. Thus, the analysis of GHG emissions is by nature a cumulative analysis focused on whether an individual project's contribution to global climate change is cumulatively considerable.

a. Less Than Significant Impact. The proposed project involves a renovation and expansion that would add 11,996 square feet and 46 beds to an existing convalescent facility building. The proposed project would generate GHG emissions from both short-term construction and long-term operational activities. Construction activities would generate GHG emissions primarily from equipment fuel combustion as well as worker, vendor, and haul trips to and from the project site during demolition, site preparation, grading, building construction, paving, and architectural coating activities. Construction activities would cease to emit GHGs upon completion, unlike operational emissions that continue year after year until the non-residential facilities constructed as part of the project close or cease operation. Once operational, the proposed project would generate GHG emissions from area, mobile, water/wastewater, and solid waste sources.

As discussed in the Air Quality Section, the BAAQMD's CEQA Air Quality Guidelines contain screening criteria to provide lead agencies with a conservative indication of whether a proposed project could result in potentially significant air quality and GHG impacts. Consistent with the BAAQMD's guidance, if a project meets all the screening criteria, then the project would result in a less than significant GHG impact and a detailed GHG assessment is not required for the project. The BAAQMD operational GHG screening size for a congregate care facility is 143 dwelling units, which is more than the proposed building total of 82 beds. All other screening criteria are met (see **Table 4** for details). Since the proposed project would be smaller than the screening size established by the BAAQMD, the project would not exceed operational GHG threshold and, therefore, would have a less than significant impact.²

It is also noted the BAAQMD's screening size for a congregate care facility was developed using GHG emission factors for indirect energy consumption from before 2015, when state-wide renewable energy power generation was lower. The project site is in a location that can be served by either PG&E or Marin Clean Energy (MCE). PG&E's carbon intensity factor from 2018 was 206 lbs CO₂ per megawatt-hour (MWh; PG&E 2019). MCE provides customers with supply choices that have different levels of renewable energy. MCE's carbon intensity factor from 2019 was 197 lbs CO₂/MWh for its Light Green retail supply option and 0 lbs CO₂/MWh for its other retail supply

_

² The BAAQMD's GHG screening criteria are intended to provide a lead agency with a conservative indication of whether the BAAQMD's CEQA significance threshold for GHG emissions could be exceeded. The BAAQMD's GHG threshold against which the screening criteria were developed is 1,100 metric tons of carbon dioxide equivalents (MTCO₂e). The 1,100 MTCO₂e GHG threshold was established by the BAAQMD to align a project's GHG emissions with state-wide goals for 2020. Since the proposed project will be fully operational after 2020, the 1,100 MTCO₂e threshold may not be directly applicable to the proposed project. Rather, an interpolated project-specific threshold of 660 MTCO₂e may be provide better context for the project. This level of emissions was developed by taking the BAAQMD's 1,100 MTCO₂e/yr threshold and reducing it by 40 percent (1,100 MTCO₂e/yr * (1 - 0.4) = 660 MTCO₂e/yr). This linear reduction approach oversimplifies, but demonstrates the progress required to meet 2030 GHG reduction requirements under SB 32. A corresponding 40% reduction in the BAAQMD's GHG screening criteria land use size for congregate care facilities would be 86 dwelling units (143 units * (1-.4) = 85.8 dwelling units. The proposed project size (adding 46 beds) would still be below this adjusted screening criterion.

options (MCE 2020). Given these utility choices, the assisted living facility could operate using energy with a carbon intensity in the range of 0 to 206 lbs CO₂/MWh. This GHG emission factor would serve to lower the project's GHG emissions as compared to the default project modeled and used by the BAAQMD to develop its 143-dwellig unit screening size for congregate care facilities.

b. Less Than Significant Impact. The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, including the BAAQMD 2017 Clean Air Plan. The proposed project would comply with all green building policies (e.g., Title 24 Building Code) that is designed to increase the energy efficiency in new structures.

In addition, the project would comply with the City of Martinez Climate Action Plan. Many of the actions identified in the CAP consist of items the City would pursue - such as instituting a "Safe Route to Schools" program (Strategy T1), upgrading signal timers to improve traffic flow and reduce congestion (Strategy T9), considering onsite renewable energy for municipal operations (Strategy E5) – and are not directly applicable to individual development projects, such as the proposed project. The proposed project would not conflict with the City's implementation of these actions. Furthermore, the City's CAP was designed to address GHG emissions in the city through the year 2020, consistent with the State's GHG emission reduction goal for 2020. Although the project would become fully operational after the CAP's final planning year, and many of the strategies identified in the CAP are not directly applicable to the proposed project, the project would nonetheless support the overarching goals and themes of the CAP by being constructed to the latest CalGreen Code (CAP Strategy E1).

The proposed project would also be consistent with *Plan Bay Area 2040*. The overarching goal of *Plan Bay Area 2040* is to concentrate development in areas where there are existing services and infrastructure rather than locate new growth in outlying areas where substantial transportation investments would be necessary to achieve the per capita passenger vehicle, vehicle miles traveled (VMT), and associated GHG emissions reductions (ABAG/MTC 2017). The proposed project would add capacity to an existing assisted living facility. It is likely that the proposed project would serve the City's population in proximity of the project site and help reduce VMT by providing an assisted living facility that is closer than other existing options.

Therefore, the proposed project would not conflict with or obstruct the implementation of a plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions. This impact would be less than significant.

References:

Association of Bay Area Governments / Municipal Transit Commission (ABAG/MTC). 2017. *Plan Bay Area 2040*. Approved July 26, 2017.

Bay Area Air Quality Management District (BAAQMD), 2017. *CEQA Air Quality Guidelines*. Available at: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en (accessed September 10, 2021)

CalEEMod Version 2020.4.0 Appendix E5 - Analysis of Building Energy Use Data, 2021. Available at: http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-e2020-4-0.pdf?sfvrsn=6 (accessed September 10, 2021)

California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. Available at: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf (accessed September 10, 2021)

City of Martinez. 2009. *City of Martinez Climate Action Plan*. June 2009. Available online: https://www.cityofmartinez.org/civicax/filebank/blobdload.aspx?BlobID=6332 (accessed September 10, 2021)

Marin Clean Energy (MCE) 2020. *MCE 2019 Emission Factor Certification Template, as provided by the Climate Registry*. October 2020. https://www.mcecleanenergy.org/wp-content/uploads/2020/11/MCE-2019-Emission-Factor-Certification-Template-CY_2019.pdf (accessed September 10, 2021)

PG&E Corporation CDP Climate Change Questionnaire 2019. Available online: PG&E_CDP_Climate_Change_Questionnaire_2019.pdf (pgecorp.com) (accessed September 10, 2021)

6.9 Hazards and Hazardous Materials

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

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

Documentation:

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

Any hazardous substances generated, stored, transported, used, or disposed during construction would be subject to applicable federal, State, and local regulations. Given the existing Federal, State,

and local regulation and oversight of hazardous materials, the threat to public health and safety and the environment would be less-than-significant.

b. Less than Significant Impact. A lead-based paint and asbestos sampling analysis was completed for the assisted living facility and the residence by Sol Environmental on March 8, 2021. This study found asbestos in various material in the assisted living facility and residence. Additionally, an Environmental Site Assessment (ESA) was performed for the project covering the two proposed project parcels. The Phase I ESA was prepared for the project site by AEI Consultants on March 1, 2021. The project site was historically used for agriculture prior to its current use as a convalescent facility. The Phase I ESA evaluated current and past uses of the project site, including regulatory agency records of chemical spills, releases, and environmental cleanups, and concluded there is no evidence of Recognized Environmental Conditions, Historical Recognized Environmental Conditions, or Controlled Recognized Environmental Conditions in connection with the project site. No additional environmental assessment work was recommended.

Asbestos-Containing Materials

Due to the age of the facility, Asbestos Containing Materials (ACMs) may be found onsite. EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) are stationary source standards for hazardous air pollutants that require a thorough asbestos survey be performed prior to demolition or renovation activities that may disturb ACMs. This requirement may be enforced by federal, state, and local regulatory agencies, and specifies that all suspect materials be sampled to determine the presence or absence of asbestos prior to any renovation or demolition activities which may disturb them, to prevent potential exposure to workers, building occupants, and the environment.

Mitigation Measure HAZ-1: Asbestos-Containing Materials (ACMs). Prior to any renovation activities, the applicant shall submit to the City a written Asbestos Abatement Plan describing activities and procedures for removal, handling, and disposal of these ACMs using EPA- and OSHA-approved procedures, work practices, and engineering controls. The plan shall be subject to review and approval by the City.

Lead-Based Paints

During the Phase I ESA site reconnaissance, damaged paint surfaces were observed on the exterior walls of the house, the porch of the house, and on the fascia boards of the assisted living facility. Based on the potential presence of lead-based paints (LBPs), AEI recommended that the applicant consult with a certified Lead Risk Assessor to determine options for control of possible LBP hazards (see **Mitigation Measure HAZ-2**). Stringent local and State regulations may apply to LBP in association with building demolition/renovations and worker/occupant protection. Construction activities that disturb materials or paints containing any amount of lead may be subject to certain requirements of the OSHA lead standard contained in 29 CFR 1910.1025 and 1926.62

Mitigation Measure HAZ-2: Consult with a Lead Risk Assessor. Prior to any renovation activities, the Applicant shall submit to the City a Lead Risk Assessment that outlines control measures for LBP hazards. If the Assessment determines lead is present, the lead-based paint shall be removed and disposed of following lead abatement performance standards included in the U.S. Department of Housing and Urban Development Guidelines for Evaluation and Control of Lead-Based Paint program, in compliance with Title 8 California Code of Regulations (including Section 1532.1).

- c. Less than Significant Impact. There are no schools within one-quarter mile from the project site. The closest schools are John Muir Elementary School, located approximately 3,500 feet (0.66 mile) northeast of the project site, and Alhambra High School, located approximately 3,500 feet north of the project site. As discussed in Section 6.9.a, construction and operation of the project would not generate hazardous emissions in the long-term, nor result in the storage, handling, production, or disposal of acutely hazardous materials. Therefore, the impacts to schools from the project's production or emission of hazardous materials or substances would be less than significant.
- **d.** Less than Significant Impact. The project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code 65962.5 (Cortese List). The Phase I ESA included a regulatory database search that found three adjacent sites located to the southeast, southwest and northwest of the project site that were listed in regulatory databases:
 - PG&E Alhambra Substation. This site is listed in the Contra Costa County Site List (a list of sites from Contra Costa County's Underground Tank Program, Hazardous Waste Generator Program, and Business Plan 12185 Program) as a Chemical Storage Facility that is subject to a Hazardous Materials Business Plan (HMBP). Based on the non-release nature of these listings and the inferred direction of groundwater flow, the review of regulatory files for this adjoining site was not deemed necessary and this listing is not expected to represent a significant environmental concern.
 - Bishop Wholesale. This facility is listed in the CERS, LUST, Contra Costa County Site List, Cortese. According to information provided in the EDR Radius Report and on Geotracker, in 1988 a release of gasoline was discovered that affected the soil. In 1990, the leak was reported. In 1994, a site assessment was conducted, and in 1997, case closure was issued to this site. Based on the regulatory status, and the lack of a documented impact to the groundwater, this facility is not expected to represent a significant environmental concern to the project site. Additional listings appear to not pose a significant environmental concern in connection with the project sire.
 - Valero Corner Store 3812 / 7-Eeven 37952. This facility is listed in the RCRA, UST, LUST, Cortese, CERS, CERS Haz Waste, and Contra Costa County Site List databases. This site is currently a 7-Eleven convenience store with a Union 76 gas station. The gas station was previously occupied by Exxon. According to information provided in the EDR Radius Report and on the State Water Resources Control Board's Geotracker website, in 1986 a release of gasoline was discovered at the Exxon gas station that affected the soil and groundwater. From 1986 to 1990, site assessments were conducted. In 2002, groundwater monitoring was conducted. On July 3, 2002, case closure was issued to this site. Based on the regulatory status, this facility is not expected to represent a significant environmental concern to the project site.

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

e. Less than Significant Impact. The project site is approximately 3.5 miles west of the Buchanan Field Airport (Airport), which is a public airport. The project is not located within the Airport's designated composite noise contour areas or safety zones, and therefore is not subject to land use restrictions related to acceptable noise levels and safety in the Airport vicinity. The project would not result in a safety hazard for residents and employees at the site, and the impact would be less than significant.

- **f. Less than Significant Impact.** The City of Martinez has an *Emergency Operations Plan* that identifies the City's emergency planning, organization, and response policies and procedures (City of Martinez, 2009). The project would not impair the implementation of, or physically interfere with, the Emergency Operations Plan. The project would not create, interrupt, or otherwise reduce the ability of streets to accommodate traffic. Any need for construction-related traffic partial street closures would be temporary, intermittent, localized, and subject to standard City traffic management practices. The project would not result in significant change in existing circulation patterns and would have a less than significant impact on emergency response and evacuation.
- g. Less than Significant Impact. The project site is not located in a fire hazard severity zone according to the CAL FIRE FRAP Map (CAL FIRE 2009). According to the FRAP Map, the project is located in a local responsibility area (LRA). The nearest very high fire hazard zone occurs in Martinez approximately 600 feet southwest of the project site in an urban area close to the intersection of Alhambra Avenue at Highway 4. The project site is not within a high fire hazard severity zone and impacts to people or structures involving wildland fires would be less than significant (see Section 6.20, Wildfire, for further discussion).

References:

AEI Consultants, 2021. *Phase 1 Environmental Site Assessment*, March 1, 20219 (Included as Appendix D)

California Environmental Protection Agency. 2020. "Cortese List Data Resources." Available at: https://calepa.ca.gov/sitecleanup/corteselist/ (accessed July 21, 2021)

CAL FIRE. 2009. "Martinez Very High Fire Hazard Severity Zones in LRA." https://osfm.fire.ca.gov/media/5780/martinez.pdf (accessed July 20, 2021)

City of Martinez. 2009. *Emergency Operations Plan*. Available at: https://www.cityofmartinez.org/civicax/filebank/blobdload.aspx?blobid=6127 (accessed July 22, 2021)

County of Contra Costa. 2000. *Contra Costa County Airport Land Use Compatibility Plan*. Available at: https://www.contracosta.ca.gov/4307/Airport-Land-Use-Commission-ALUC (accessed July 21, 2021)

Sol Environmental, 2021. *Limited Lead-Based Paint and Asbestos Sampling and Analysis – Preparation for Renovation*. March 8, 2021. (Included as Appendix E)

6.10 Hydrology and Water Quality

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

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

Documentation:

This hydrology analysis references the Storm Water Control Plan developed by Humann Company Inc.

a. Less than Significant Impact. The project site is currently developed with the assisted living facility, a single-family residence, and an equipment shed that is proposed to be demolished. Project construction would involve grading to accommodate new project facilities. The project would add approximately 17,745 square feet of new impervious surfaces, for a total of 26,505 square feet of impervious area. The project would disturb approximately 34,800 square feet (0.8 acre). Grading activities would include the following: approximately 450 cubic yards (CY) of earth would be cut,

and 175 CY of earth would be filled. Approximately 60 CY would be cut for onsite wastewater treatment facilities. In total, 285 CY of earth would be graded. After grading activities are complete, there would be the potential for wind and water erosion to discharge construction contaminants, sediment, and/or other urban pollutants into storm water runoff. However, violations of water quality standards due to urban runoff can be prevented through implementation of existing regional water quality regulations and plans, including compliance with the City's 2015 Urban Water Management Plan (UWMP) and the City's Sewage Disposal and Sewer Use standards (Chapters 13.08 and 13.20 of the Municipal Code). As currently designed, project runoff from impervious surfaces (totaling approximately 26,505 square feet) would be directed to new onsite bioretention areas (totaling approximately 27,492 square feet) throughout the site.

The State Water Resources Control Board (SWRCB) is responsible for regulating storm water discharge associated with project construction activities such as clearing, grading, and excavation, should they result in land disturbance of one or more acres. The City also has an MS4 National Pollutant Discharge Elimination System (NPDES) permit and is required to implement all pertinent regulations of the program to control pollution discharges from new development. These regulations reduce non-point source pollutants through the implementation of BMPs and other control measures that minimize or eliminate pollutants from urban runoff, thereby protecting downstream water sources. BMPs implemented to address commercial pollutant sources generally involve maintenance of storm drain facilities, parking lots, and vegetated areas, and dissemination of educational materials. Construction of the proposed project would be subject to City's NPDES permit requirements during construction activities in addition to standard NPDES operational requirements.

A preliminary Storm Water Control Plan Exhibit has been prepared for the applicant by Humann Company Inc, dated July 22, 2020. The plan proposes onsite storm drainage improvements, and low impact development (LID) design strategies. Project-specific components would include the construction of bioretention areas with appropriately sized filters, plant selection to minimize the use of fertilizers and pesticides, and project design so that storm water drains from impervious surfaces to integrated management practices (IMPs). The preliminary Storm Water Control Plan prescribes six IMPs and seven Demand Management Areas (DMAs).

In general, storm water runoff may degrade surface or groundwater quality and may transport pollutants into streams or creeks. Other pollutants suspended in runoff, if not controlled, could be carried from the project site or accumulate downstream and potentially degrade existing surface water quality.

Prior to issuance of the grading permit, the applicant is required to prepare a Storm Water Pollution Prevention Plan (SWPPP). The applicant shall also file a Notice of Intent (NOI) and associated fee to the State Water Resources Control Board (SWRCB). The project SWPPP shall be utilized as a framework to prescribe and implement BMPs. Construction and project operations shall implement BMPs to reduce pollutants within storm water discharges to the maximum extent possible. The applicant shall submit the project SWPPP for review and approval by the City Engineer. The approved SWPPP shall be maintained throughout the construction period. The City shall verify that all post-construction BMPs are installed and functioning properly prior to issuing a certificate of occupancy. As a uniformly applied standard regulation, the project applicant would be required to prepare a final SWPPP that would control and minimize pollutants from construction and operation of the project. This requirement would mitigate project impacts to surface and groundwater quality to a less than significant level.

b. Less than Significant Impact. The project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The project does not include the installation of a well, rather the project would use water provided by the City's water distribution system. The City is provided water by the Contra Costa Water District (CCWD), which is supplied water from the San Joaquin River Delta. The City of Martinez does not obtain potable water from groundwater resources. The project would not require groundwater and would not conflict with sustainable groundwater management in the area. The project is estimated to use approximately 117,929 gallons of water for landscaping and has a Maximum Allowed Water Allowance of 181,715 gallons (La Rocca, 2020). The assisted living facility would use approximately 879,300 gallons of water per year during site operation.³ The single-family residence is estimated to use 31,025 gallons per year (City of Martinez, 2016). In total, the project would use 910,325 gallons per year, or 2.79 acre-feet per year (AFY). See Section 6.19 (Utilities and Service Systems) for more detail.

The project site is currently connected to existing storm water infrastructure, and the project is not anticipated to contribute significantly to groundwater recharge. Furthermore, although the project would increase impervious surface on site, the proposed installation and implementation of bioretention areas would allow for percolation of water into the underlying soils, which would contribute to groundwater recharge. Because the project does not involve the extraction of groundwater and does not substantially interfere with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the local groundwater table, the impact would be less than significant.

ci. Less than Significant Impact. The proposed project would result in an increase of impervious area of approximately 17,745 square-feet of new coverage. Runoff from proposed impervious surfaces would be directed to one of several bioretention areas, where a water quality treatment process would begin. Bioretention areas remove pollutants by filtering runoff slowly through an active layer of soil. The project must comply with UWMP and City requirements to treat storm water runoff and reduce pollutants. In addition, all cities within Contra Costa County are required to implement surface water control standards for projects that comply with Provision C.3 of the Regional Water Quality Control Board (RWCB) Municipal Regional Storm Water NPDES Permit No. R2-201500049. The Contra Costa County Clean Water Program created a C.3 guidebook for the implementation of C.3 requirements. Because this project involves the creation of more than 10,000 square feet of net new impervious surface, it is required that storm water be contained and treated. Containment and treatment of storm water is currently proposed via new bioretention areas.

Improper project grading activities, both during and post-construction, have the potential to increase the volume of runoff from a site and subsequently increase erosion. Increased runoff and soil erosion on and off site could adversely impact downslope water quality. However, as discussed in Section 6.7.b, the potential soil erosion impact of the project would be less than significant through implementation of **Mitigation Measure GEO-1** that would require the applicant to finalize and implement the project Storm Water Control Plan. Because of these regulatory and mitigation measures, substantial siltation and erosion is not anticipated; the impact would be less than significant.

³ This amount is calculated by adding the estimated total water use reported in the project's landscaping plans (117,929 gallons per year) to the estimated water needed to support the 19,540 square foot assisted living facility space (879,300 gallons per year). The amount of water needed to support the facility was calculated by multiplying an estimated water consumption rate (45 gallons per square foot per year) for inpatient healthcare buildings according to the U.S. Energy Information Administration (USEIA) by the project's square footage (19,540 square feet).

cii. Less than Significant Impact. The project design incorporates strategies to reduce and manage runoff. The project site has ornamental vegetation throughout, and the site slightly slopes west towards Alhambra Creek. As proposed, impervious surfaces would cover most of the site, which is currently developed with a storage shed, assisted living facility, and single-family residence on an adjacent parcel. Pervious pavers are proposed in the vehicle turnaround area where the shed is currently located. The shed would be demolished and the vehicle turnaround would be constructed. The project would have bioretention areas and landscaping throughout, which would be designed to carry runoff safely away from building foundations and footings, consistent with the California Building Code.

Design measures would be implemented to prevent surface runoff and flooding on and off site (see section 6.10.civ below). Furthermore, the City would require the project's use of BMPs, as listed in the post-construction requirements. BMPs preventing flooding and runoff include protection of storm drains through vegetated filter traps and/or catch basins. With design measures and BMPs in place, the impact would be less than significant.

ciii. Less than Significant Impact. See Sections 6.10.cii and 6.10.ciii above. The proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems. Discharge generated from project development would be managed and treated with design measure improvements and BMPs. The proposed bioretention areas have adequate capacity to capture stormwater exceeding the required amount, as shown in Table 6 below.

Table 6. Bioretention Basis Sizes and Requirements

Bioretention Area	Required Size in square feet	Provided Size in square feet
DMA 1	726	768
DMA 2	80	82
DMA 3	134	137
DMA 4	52	54
DMA 5	92	96
DMA 6	630	700
DMA 7	Drains offsite	2,200
TOTAL	1,714 SF	4,037 SF
Source: Humann Compa	any, Inc. Sheet C.3-1	

The proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems. Discharge generated from project development would be managed and treated with design improvements and BMPs. Drainage patterns would not be altered, and the impact would be less than significant.

civ. Less than Significant Impact. The project site is within a Federal Emergency Management Agency (FEMA) 100-year flood zone or Special Flood Hazard Area (SFHA) (i.e., area that would be inundated by the flood event having a one percent chance of being equaled or exceeded in any given year). The subject properties are rated by FEMA as Zone A and AO, which is defined as a SFHA "where average depths are between one and three feet." (FEMA, 2021)

The City of Martinez has Provisions for Flood Hazard Reduction (MMC 15.30.050), which include the following standards for building in a flood zone:

- Anchoring buildings to prevent flotation, collapse or lateral movement;
- Ensuring there are adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures;
- All new construction requires flood-resistant materials, and utility equipment resistant to flood damage;
- Using methods and practices which minimize flood damage;
- Design to prevent water from entering or accumulating in electrical, heating, ventilation, plumbing and air conditioning equipment during of flooding;

As proposed, the northwest corner of the expanded assisted living facility would be located within Flood Zone A and has the potential to alter flood flows. Compliance with the flood hazard standards would result in less-than-significant impacts related to impediment or redirection of flood flows.

- **d.** Less than Significant Impact. While the project is not located in a tsunami zone, nor in a seiche zone, the project is not is located within a regulatory floodway, as mapped by FEMA. Compliance with development standards in the flood hazard areas requires the project to locate onsite waste disposal systems to avoid impairment or contamination during flooding. The impact would be less than significant.
- e. Less than Significant Impact. As a result of planned treatment features, impacts related to violation of water quality standards would be less than significant. A preliminary Storm Water Control Plan was prepared by Humann Company Inc., pursuant to Section 15.06.050 of the Martinez Municipal Code, that assesses the project in terms of Low Impact Development (LID) and drainage design measures. Storm water would be controlled through Integrated Management Practices Areas (C3 Facilities) that retain stormwater onsite and that are connected to the City storm water system. The bioretention facilities would comply with the City of Martinez's Municipal Building Code. For more information on BMPs, see Section 6.10(ci-ciii). Once developed, the project site would have no exposed soils and would not contribute to erosion.

The State's 2015 Model Water Efficient Landscape Ordinance (MWELO) applies to projects requiring a planning-level permit that contain over 500 square feet of new or rehabilitated landscape areas. MWELO requires the use of highly efficient irrigation methods and is predicted to reduce landscape water use in new projects by 30 percent or more. During construction, temporary BMPs and erosion control measures would be implemented to reduce construction and post-construction siltation.

In 2000, the Contra Costa Water District entered an agreement with the East Contra Costa Irrigation District to purchase irrigation water for up to 8,200 acre-feet per year. The City of Martinez does not obtain potable water from groundwater resources. The project would not require groundwater and would not conflict with sustainable groundwater management in the area. The proposed project is consistent with the City's Urban Water Management Plan (UWMP) (see Section 6.19.b for further discussion) and other applicable water-related ordinances. The impact would be less than significant.

References:

City of Martinez, 2016. Urban Water Management Plan. Available at: https://www.cityofmartinez.org/civicax/filebank/blobdload.aspx?BlobID=16263 (accessed July 28, 2021)

City of Martinez, 2020. Martinez Municipal Code, Stormwater Management and Discharge. Available at:

https://library.municode.com/ca/martinez/codes/code_of_ordinances?nodeId=CD_ORD_TIT15BUCO_CH15.06STMADICO_15.06.050STCOPLRE (accessed July 29, 2021)

City of Martinez, 2020. Martinez Municipal Code, Provisions for Flood Hazard Reduction. Available at:

https://library.municode.com/ca/martinez/codes/code_of_ordinances?nodeId=CD_ORD_TIT15BUCO _CH15.30FLMA_15.30.050PRFLHARE (accessed July 29, 2021)

Federal Emergency Management Administration (FEMA). FEMA Flood Map Service Center. Available at: https://msc.fema.gov/portal/search#searchresultsanchor (accessed August 4, 2021).

Humann Company Inc, July 22, 2020. Vesting Tentative Parcel Map, Stormwater Control Plan Exhibit

Robert La Rocca and Associates, September 15, 2020. Proposed Schematic Landscape Plan (sheet L-1.1, L-1.4)

United State Energy Information Administration, February 9, 2017. "2012 Commercial Buildings Energy Consumption Survey: Water Consumption in Large Buildings Summary." Available at: https://www.eia.gov/consumption/commercial/reports/2012/water/#:~:text=On%20average%2C%20these%20buildings%20used,and%2050.1%20gallons%20per%20worker (accessed August 26, 2021)

6.11 Land Use and Planning

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

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

Documentation:

- **a. No Impact.** The project would be renovating and expanding an existing assisted living facility and relocating and rehabilitating a historic residence on an already-developed property. The project would not physically divide an established community. The project does not involve the construction or removal of a primary access route that would create a physical barrier to mobility within an established community or between a community and outlying areas. There would be no impact.
- **b.** Less than Significant Impact. The proposed project requires approval from the City Planning Commission for the issuance of a Use Permit to allow construction and operation of the project facilities. Section 21.3 of the City's 1973 General Plan covers residential uses, and the updated Housing Element was adopted on January 19, 2011. The project is consistent with the goals and objectives of this General Plan section because the project would be subject to design review and proposes the same land use as the existing onsite facility. The project site is designated Residential, Group 1 in the General Plan. The project would be consistent with the following relevant General Plan land use goals and related policies and programs, including policies concerning special-needs housing:

Goal #3 of the Housing Element to "Have a Mix of Housing Types and Choices." Provide for an adequate supply of safe, decent and affordable housing for all economic segments of the community and promote throughout the City a mix of housing types responsive to household size, income, age and accessibility needs. Diligently pursue efforts to meet the City's regional housing needs and expand housing opportunities for low- and moderate-income families and individuals, and persons with special needs. The following program supports this goal:

• Policy 3.2: Streamlined Review. Continue existing streamlined development review process for all residential projects and facilitate priority review where appropriate for affordable, below market rate and special need housing projects

The project is generally consistent with the purpose of the One-Family Residential R-6.0 Zoning District because the residential use of the relocated residence is an allowed use, and the proposed assisted living facility is a conditional use per Municipal Code 22.14.040. Assisted living facilities are not considered multifamily residential uses; therefore, density limits do not apply. The proposed project requires a Conditional Use Permit from the Planning Commission for the expanded use, and the project design would also need to be approved by the City Planning Commission to ensure

compliance with the City's Design Review requirements and procedures, pursuant to Sections 22.34.030 through 22.34.100 of the City's Municipal Code.

The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The impact would be less than significant.

References:

City of Martinez, 1973. General Plan. Housing Element (adopted January 19, 2011) Available at: http://www.cityofmartinez.org/civicax/filebank/blobdload.aspx?BlobID=17257 (accessed July 29, 2021)

City of Martinez, 2020. Zoning Ordinance. Available at: https://library.municode.com/ca/martinez/codes/code_of_ordinances?nodeId=CD_ORD_TIT22ZO (accessed July 29, 2021)

6.12 Mineral Resources

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

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

Documentation:

- a. No Impact. The State Board of Mining and Geology has adopted regulations to protect lands classified as MRZ-2 (i.e., lands where information indicates that significant stone, sand, and/or gravel deposits are present, or where a high likelihood for their presence exists; and lands otherwise designated as areas of statewide or regional significance relative to mineral resources). Mapping conducted in 1996 by the State Division of Mines and Geology did not indicate the project site area to contain any MRZ-2 designated resource zones. The Martinez General Plan does not identify the site as containing locally important mineral resources. Therefore, the construction and operation of the project would not cause for the loss of known mineral resources of locally important mineral resources.
- **b. No Impact.** Refer to Section 6.12.a, above. The project would have no impact in mineral availability.

References:

State of California Department of Conservation, 1996. Generalized Mineral Land Classification Map of the South San Francisco Bay Production-Consumption Region.

6.13 Noise

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

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

Documentation:

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

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

Sound pressure levels are typically expressed on a logarithmic scale in terms of decibels (dB). A dB is a unit of measurement that indicates the relative amplitude (i.e., intensity or loudness) of a sound, with 0 dB corresponding roughly to the threshold of hearing for the healthy, unimpaired human ear. Since decibels are logarithmic units, an increase of 10 dBs represents a ten-fold increase in acoustic energy,

while 20 dBs is 100 times more intense, 30 dBs is 1,000 times more intense, etc. In general, there is a relationship between the subjective noisiness or loudness of a sound and its intensity, with each 10 dB increase in sound level perceived as approximately a doubling of loudness. Due to the logarithmic basis, decibels cannot be directly added or subtracted together using common arithmetic operations:

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

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

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

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

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

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

When considering environmental noise, it is important to account for the different responses people have to daytime and nighttime noise. In general, during the nighttime, background noise levels are generally quieter than during the daytime but also more noticeable, because household noise has decreased as people begin to retire and sleep. Accordingly, a variety of methods for measuring and normalizing community environmental noise have been developed. The California Office of Planning and Research's General Plan Noise Element Guidelines identifies the following common metrics for measuring noise (OPR, 2017):

• L_{dn} (Day-Night Average Level): The average equivalent A-weighted sound level during a 24-hour day, divided into a 15-hour daytime period (7 AM to 10 PM) and a 9-hour nighttime period (10 PM to 7 AM). A 10 dB "penalty" is added to measure nighttime noise levels when calculating the 24-hour average noise level. For example, a 45-dBA nighttime sound level (e.g., at 2 AM) would contribute as much to the overall day-night average as a 55-dBA daytime sound level (e.g., at 7 AM).

• CNEL (Community Noise Equivalent Level): The CNEL descriptor is similar to L_{dn}, except that it includes an additional 5 dBA penalty for noise events that occur during the evening time period (7 PM to 10 PM). For example, a 45-dBA evening sound level (e.g., at 8 PM) would contribute as much to the overall day-night average as a 50-dBA daytime sound level (e.g. at 8 AM).

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

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

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

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

"highly annoyed" with annoyance being an expression of negative feelings resulting from interference with activities, the disruption of one's peace of mind, or degradation of the enjoyment of one's environment.

Noise effects on human beings are generally categorized as:

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

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

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

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

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

Existing Noise and Vibration Environment: In 2015, the City of Martinez released a public draft of its 2035 General Plan. Though not yet adopted by the City, the process of developing an update to the General Plan Noise Element and the noise chapter for the 2035 General Plan Environmental Impact Report resulted in the preparation of Noise Background Report that documented noise sources and ambient sound level readings throughout the city. The Draft 2035 General Plan Noise and Air Element identifies transportation noise as the primary sources of existing noise throughout the City (City of Martinez, 2016). Specifically, the following transportation sources are identified as the most substantial transportation noise generating sources:

• Interstate Highway 680

- State Highway 4
- Union Pacific and BNSF railroads
- Major arterials and local streets
- Buchanan Field Airport

The Draft 2035 General Plan Air and Noise Element also acknowledges other sources of noise exist within the city (e.g., domestic activities, construction, landscaping and maintenance activities) but notes that these sources are usually temporary and intermittent.

The noise chapter of the Draft General Plan Environmental Impact Report also includes traffic roadway volumes for various roadway segments throughout the city under 2014 conditions and future 2040 conditions. The segment of Alhambra Avenue from Shell Avenue/D Street to SR 4 (i.e., the segment located west of the project area) was estimated to have noise level of 65 and 66 dBA L_{dn} at a distance of 75 feet from the roadway centerline in 2014 and 2040, respectively (City of Martinez, 2015). Similarly, the segment of SR 4 west of Alhambra Avenue was estimated to have a noise level of 72 dBA L_{dn} at a distance of 75 feet from the roadway centerline under both 2014 and 2040 conditions. The project site is approximately 540 feet east of the centerline of Alhambra Avenue and 850 feet north of the centerline of SR4. Adjusting for distance, the estimated noise exposure level at and near the project area is assumed to be up to 56.4 L_{dn} from Alhambra Ave and 61.5 L_{dn} from SR 4 under 2014 conditions, resulting in a combined noise level 62.6 L_{dn} . Under 2040 conditions, noise exposure from Alhambra Avenue increases to 57.4 L_{dn} , resulting in a total noise exposure (from traffic noise on both Alhambra Avenue and SR 4) of 62.9 L_{dn} at and near the project area.

Noise Sensitive Receptors

Noise sensitive receptors are buildings or areas where unwanted sound or increases in sound may have an adverse effect on people or land uses. Residential areas, hospitals, schools, and parks are examples of noise sensitive receptors that could be sensitive to changes in existing environmental noise levels. In general, the existing noise sensitive receptor near the project area include:

- The multi-family residences (4032 Alhambra Way) that border the project area to the north.
- The single-family residences located east of the project area, across Alhambra Way.
- The single-family residences that border the project area to the south (addressed on Alhambra Way and Walnut Street) and west (addressed on Castro Street).
- The John Muir National Historic Site, the entrance to which is located approximately 600 feet west of the project area boundary on Alhambra Avenue.

In addition, the proposed project consists of the expansion of an assisted living facility that would support future sensitive residential-type receptors in the project area.

Applicable Noise Standards:

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

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

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

The City of Martinez Noise Element was adopted by the City through Resolution No, 194-85 on November 20, 1985, and utilizes the recommended State of California Office of Planning and Research (OPR) Noise Element Guidelines for community noise exposure. For low density residential land uses, these guidelines stipulate an ambient noise environment of up to 60 L_{dn} is acceptable, up to 70 L_{dn} is conditionally acceptable, and above 70 L_{dn} is normally unacceptable (City of Martinez, 1985). These guidelines are consistent with the State Office of Planning and Research's (OPR) most recent general plan guidelines (OPR, 2017).⁴

The City of Martinez Municipal Code, Title 8, Health and Safety, Chapter 8.34, Noise Control, implements the goals of the General Plan Noise Element by prescribing standards prohibiting detrimental levels of noise. This chapter contains the following standards that are relevant to the proposed project:

- Section 8.34.020 establishes the following indoor and outdoor noise level standards in the City:
 - A day-night noise level (Ldn) of 45 dB is the standard for interior noise levels. An Ldn of 45 dBA is achieved by an allowable interior noise level of 35 dBA between 10:00 AM and 7:00 AM and 45 dBA between 7:00 AM and 10:00 PM.
 - A day-night level (Ldn) of 60 dBA is the standard for exterior noise. An Ldn of 60 dBA is a maximum noise level of 50 dBA between 10:00 PM and 7:00 AM and 60 dBA between 7:00 AM and 10:00 PM.
- Section 8.34.030(B) prohibits the operation or use of any of the following before 7 AM, or after 7 PM, except on Saturday, Sunday, and State, Federal, or Local Holidays, when the prohibited time shall be before 9 AM and after 5 PM:
 - A hammer or any other device or implement used to repeatedly pound or strike an object.
 - An impact wrench, or other tool or equipment powered by compressed air.
 - o Any tool or piece of equipment powered by an internal-combustion engine such as, but not limited to, chain say, backpack leaf blower, and lawn mower. Except as specifically

⁴ The City's noise element does not establish specific noise standards for assisted living facilities. Although such facilities are akin to multi-family residential development, this evaluation applies the City's standards for single-family residential land uses because the project site is located on lands classified as One-Family Residential R-6.0 pursuant to the City's zoning code and generally designated as low density residential by the City's General Plan (Residential Group 1).

- included in this Chapter, motor vehicles, powered by an internal-combustion engine and subject to the State of California Vehicle Code, are excluded from this prohibition.
- Any electrically or battery powered tool or piece of equipment used for cutting, drilling, or shaping wood, plastic, metal, or other materials or objects, such as but not limited to a saw, drill, lathe, or router.
- O Any of the following: the operation and/or loading or unloading of heavy equipment (such as but not limited to bulldozer, road grader, back hoe), ground drilling and boring equipment, hydraulic crane and boom equipment, portable power generator or pump, pavement equipment (such as but not limited to pneumatic hammer, pavement breaker, tamper, compacting equipment), pile-driving equipment, vibrating roller, sand blaster, gunite machine, trencher, concrete truck, and hot kettle pump and the like
- o Construction, demolition, excavation, erection, alteration or repair activity.
- Operating or permitting the operation of powered model vehicles including but not limited to cars, aircraft and boats.
- O Use or operation of a loudspeaker, loudspeaker system, sound-amplifying equipment, public address system or similar device, in a fixed or movable position or mounted on a sound truck for the purpose of transmitting sound to a person in or on a street, sidewalk, park or public property in such a manner as to create a noise disturbance, unless specifically approved by the City of Martinez (i.e. Use Permit, City Council approval, or permit obtained under Section 8.34.050. Any amplified sound within a public park with a permit issued by the City is exempt from this Section).
- Use, operation, or maintenance of any horn, radio, machine or device used for the
 production or reproduction of sound which is directed to, or cast upon, public streets
 or highways which distracts, or is intended to distract, the attention of drivers of
 motor vehicles, unless operated to request assistance or warn of a hazardous situation.
- The operation of any licensed motor vehicle in violation of the State Vehicle Code or the operation of stereo, public address or other such amplified equipment on or within a motor vehicle in violation of the State Vehicle Code.
- Section 8.34.030(D) prohibits the loading, unloading, opening, closing, or other handling of boxes crates, containers, building materials, garbage cans, or similar objects between the hours of 10:00 PM and 7:00 AM, daily, in such a manner to as to create a noise disturbance.
- Section 8.34.040, Exceptions, specifies that certain noises and noise sources are exempt from the City's noise standards, including but not limited to, emergency signaling devices, standby machinery, or equipment operated only in emergency situations, emergency vehicle responses and all necessary equipment utilized for the purpose of responding to a declared state of emergency, uses established through the discretionary review process containing specific noise conditions of approval and/or mitigation measures, and noises permitted by permit granted under Municipal Code Section 8.34.050.
- Section 8.23.060, Noise Standards for New Construction, sets forth that all new residential developments within 500 feet of any major arterial, highway, railroad, or mass transit line shall submit to the Community Development Department on-site noise measurements to determine existing and future noise levels, and shall include noise attenuation provisions in the design of those developments if they are found to exceed the adopted standards of the Municipal Code. All new commercial and industrial development within 500 feet of any residential development shall be designed and operated within the acceptable standards for noise.

In addition, Title 8, Health and Safety, Chapter 8.16, Solid Waste Management, limits solid waste collection services to 6 days per week, excluding Sundays, between the hours of 6 AM and 7 PM in

residential and commercial districts, and prohibits solid waste collection services on legal holidays approved by the City.

Documentation:

a. Less than Significant Impact. As described below, the proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project site in excess of the standards contained in the City's General Plan or Municipal Code. This impact would be less than significant.

Temporary Construction Noise: As described in Section 6.3, Air Quality, the proposed project involves the renovation and expansion of the existing 7,544 square-foot Brookside Assisted Living Facility. Phase 1 of the project would involve the renovation and remodeling of the facility's first floor, adding 34 beds to the facility. Phase 2 would add a second story and 48 additional beds to the facility. In total, the project would add 82 beds and 11,996 square feet of building space to the existing facility. When complete, the updated facility would be approximately 19,540 square feet in size and contain 82 assisted living beds. The project would also include minor demolition of small garage/storage building and the renovation and relocation of an existing single-family residence within the property, approximately 65 feet from its current location). Phase 1 construction would last approximately 130 days, while Phase 2 would begin after Phase 1 is complete (anticipated to be Spring 2022) and last approximately 195 workdays. In total, construction activities at the site could last approximately one year. The project would involve minor grading for the expanded facilities (approximately 0.8 acres of the 1.2-acre site), and excavation activities would be required to construct new stormwater treatment facilities (bio retention basins).

Project construction would require the use of heavy-duty construction equipment that could temporarily increase noise levels at adjacent property lines near work areas. The type of equipment used could include bulldozers, backhoes, a grader, a scraper, compactors/rollers, small cranes, and material handlers, lifts, and trucks. This equipment would operate during site preparation, minor demolition, grading, and residence relocation activities; renovations to the existing assisted living facility and residence, as well as the 2nd story addition to the assisted living facility, are not anticipated to require substantial heavy equipment operations. Table 7 Typical Construction Equipment Noise Levels (dBA) presents the estimated, worst-case noise levels that could occur from operation of the typical construction equipment that would likely be used to develop the project. At their closest, construction equipment is expected to operate within approximately 70 feet of the multi-family residential building façade to the north of the project area, approximately 75 feet of single-family residential building façade to the east of the project area (across Alhambra Way), approximately 50 feet of the single-family residences to the south of the project area (addressed on Alhambra Avenue and Walnut Avenue), and approximately 110 feet from the single-family residential building façade to the west of the project area (on Castro Street). In all cases, work could occur within 50 feet of shared property lines and exterior residential use areas such as yards.

Table 7: Potential Project Construction Equipment Noise Levels								
	Noiga Laval	Percent	Predi	cted Equ	ıipment	Noise L	evels (l	(C)
Typical Equipment	Noise Level at 50 feet (L _{max}) ^(A)	Usage Factor ^(B)	50 Feet	70 Feet	75 Feet	110 Feet	150 Feet	300 Feet
Backhoe	80	0.4	76	73	72	69	66	60
Bulldozer	85	0.4	81	78	77	74	71	65
Compact roller	80	0.2	73	70	69	66	63	57
Compressor	80	0.4	76	73	72	69	66	60
Concrete Mixer	85	0.4	81	78	77	74	71	65
Crane	85	0.2	77	74	74	70	67	61
Delivery Truck	84	0.4	80	77	76	73	70	64
Excavator	85	0.4	81	78	77	74	71	65
Front End Loader	80	0.4	76	73	72	69	66	60
Generator	82	0.5	79	76	75	72	69	63
Man Lift	85	0.2	78	75	74	71	68	62
Paver	85	0.5	82	79	78	75	72	66
Pneumatic tools	85	0.5	82	79	78	75	72	66
Tractor	84	0.4	80	77	76	73	70	64

Sources: Caltrans, 2013 and FHWA, 2010.

- (A) L_{max} noise levels based on manufacturer's specifications.
- (B) Usage factor refers to the amount (percent) of time the equipment produces noise over the time period
- (C) Estimate does not account for any atmospheric or ground attenuation factors. Calculated noise levels based on Caltrans, 2013: L_{eq} (hourly) = L_{max} at 50 feet 20log (D/50) + 10log (UF), where: L_{max} = reference L_{max} from manufacturer or other source; D = distance of interest; UF = usage fraction or fraction of time period of interest equipment is in use.

As shown in Table 7, worst case hourly L_{eq} and L_{max} noise levels for a single piece of construction equipment are predicted to be approximately 82 and 85 dBA, respectively, at 50 feet; given the small size of the size, the concurrent operation of two or more large pieces of construction equipment is not anticipated. The magnitude of the Project's temporary and periodic increase in ambient noise levels would depend on the nature of the construction activity (i.e., demolition, building construction, grading) and the distance between the construction activity and sensitive receptors/outdoor use areas. At a distance of 70 feet, average construction noise levels would be less than 80 dBA L_{eq} , while at a distance of 150 feet, construction noise levels would be 71 dBA l_{eq} or less. These estimates assume no shielding or other noise control measures are in place at or near the work areas. These maximum noise levels would occur for a short period time, during site preparation, and grading activities, which are anticipated to last approximately three months. The majority of activities at the site (i.e., building renovations) would likely involve little to no heavy-duty off-road equipment operations.

The noise generated from project construction would be temporary and would not produce the same sound levels every day. In addition, neither the City's General Plan or Municipal Code establish numeric thresholds for the purposes of evaluating the significance of construction noise levels. The

proposed project, therefore, would not generate construction noise levels that exceed City standards or otherwise result in a substantial temporary increase in ambient noise levels because:

- 1. Construction activities would be tailored to the proposed building modifications and additions. Building renovation activities would not require substantial heavy duty equipment operations, and extensive grading activities are not proposed as part of the project. Worst case noise levels, which would occur during demolition, site preparation, and grading activities, would last approximately three months.
- 2. Construction equipment contains standard noise suppression devices such as mufflers, engine shields/covers, and engine/mechanical isolators/mounts that typically reduce engine, mechanical, and exhaust noise levels below standard reference noise levels, which are based on older equipment operations.
- 3. Construction activities would not generate noise levels that cause physical harm to a receptor (i.e., at a level that would cause hearing loss or permanent hearing damage). Such physiological effects occur when the human ear is subjected to extremely high short-term noise levels (i.e., 140 dBA from an explosion) or from a prolonged exposure to high noise environments. For example, to protect workers from noise-induced hearing loss, the U.S. Occupational Safety and Health Administration (OSHA) limits worker noise exposure to 90 dBA as averaged over an 8-hour period (29 CFR 1910.95). As shown in Table 7, worst-case construction noise levels would be approximately 82 dBA at a distance of 50 feet, which is approximately half as much sound energy as the OSHA limit.
- 4. The proposed Project would comply with City of Martinez Municipal Code Section 8.34.030(B)(6), which limits construction activities to 7 AM to 7 PM, Monday to Friday, and 9 AM to 5 PM on Saturday, Sunday, and State, Federal, and Local holidays. This code requirement generally limits construction activities to daytime hours when people are generally considered to be least sensitive to environmental noise levels.

For the reasons outlined above, the proposed Project's construction activities would not generate a substantial, temporary increase in ambient noise levels at sensitive receptor locations that would exceed an applicable standard.

Potential Onsite Operational Noise Levels: Once constructed, the proposed Project would generate noise from the same types of sources and activities currently present at the 36-bed Brookside Assisted Living Facility, such as on- and off-site vehicle trips, on-site vehicle maneuvering, queueing, and parking, the operation of stationary equipment such as heating, ventilation, and air conditioning (HVAC) equipment, landscaping and maintenance activities, and waste-disposal collection, etc. Although the project would increase the number of assisted living beds at the site from 36 beds under existing conditions to 82 beds under the proposed project, this change would not have the potential to generate a substantial permanent increase in ambient noise levels in the vicinity of the project that could exceed the standards contained in Chapter 8.34 of the City's Municipal Code or the City's General Plan for the following reasons:

- In general, assisted living residential facilities are not a substantial noise-generating land use type because:
 - o They do not involve substantial noise-generating activities during the nighttime. For example, administrative offices at the facility would be open from 9 AM to 6 PM Monday to Friday and 10 AM to 4 PM on Saturday and Sunday.

- Mechanical equipment associated with elevators and medical support amenities (services, housekeeping, etc.) are typically enclosed within the closets, sheds, or equipment rooms.
- o HVAC equipment is typically screened from public view by landscaping, fences, or walls and, therefore, shielded from adjacent property lines.
- The expanded facilities would be setback at least 20 feet from all shared property lines, and the largest building expansion would be located on the interior of the site.
- The proposed design of the expanded facility would place parking on the interior of the site, shielded from shared property lines to the south and west.
- The proposed project has been designed to provide a quiet, assisted living experience.
- The City's General Plan establishes procedures and standards to protect noise sensitive land uses from noise intrusion and the City's Municipal Code establishes specific numeric standards for residential lands that are not to be exceed (e.g., 60 L_{dn} for exterior noise), as well as limits and when certain noises may and may not occur (e.g., solid waste collection is limited to the hours 6 AM to 7 PM Monday to Saturday per Municipal Code Section 8.16.130).

As described above, the ambient noise environment at and in proximity to the project is estimated to range from approximately 62.6 to 62.9 dBA L_{dn}, which exceeds the exterior noise standard established in Municipal Code Section 8.34.020 (60 dBA L_{dn}), but is within the conditionally acceptable land use compatibility standard set by the General Plan (up to 70 L_{dn} for residential land uses). In order to substantially and permanently increase noise levels in the vicinity of the project area, the proposed project would need to result in a substantial increase in site activity or the addition of new noise sources that are substantially different than that which currently exists in the Project area. The proposed project would not have the potential to increase the existing ambient noise environment by three dBA or more, which is generally accepted as the level at which an increase in noise levels is perceptible. The project's potential onsite noise levels, therefore, would be less than significant.

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

The Traffic Impact Assessment (TIA) prepared for the proposed project indicates that the project would result in 103 net new daily trips per day, including 7 and 15 net new trips during the AM and PM peak hours, respectively. Most of these trips would access the site via Alhambra Avenue, Walnut Avenue, and Alhambra Way. The additional 7 to 15 trips per hour would not constitute a significant change to existing traffic volumes in the vicinity of the project area. The proposed project would result in less than a doubling of peak hour and daily traffic volumes on Sunrise Drive and other, surrounding roadways and, therefore, would not result in a substantial, permanent increase in noise levels along the roadways used to access the project. This impact would be less than significant.

Other Planning Considerations (Noise / Land Use Compatibility): The California Supreme Court in California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal.4th 369 (2015) ruled that CEQA review is focused on a project's impact on the environment "and not

the environment's impact on the project." Per this ruling, a Lead Agency is not required to analyze how existing conditions might impact a project's existing or future population except where specifically required by CEQA; however, a Lead Agency may elect to disclose information relevant to a project even if it not is considered an impact under CEQA. Furthermore, the City's Municipal Code and General Plan Noise Element set noise standards for receiving land uses which require evaluation for consistency and compliance even if such evaluation is not required by CEQA to be identified as a physical impact of the project.

This section discusses the existing noise environment and the degree to which the existing environment is compatible and consistent with City goals, policies, and standards for the Plan Area's noise environment.

Exterior Land Use Compatibility: The proposed project consists of the rehabilitation and expansion of an assisted living facility. According to the City's General Plan and OPR's land use and noise compatibility guidelines, the normally acceptable and conditionally acceptable noise limit for low density residential land uses is 60 dBA L_{dn} and 70 dBA L_{dn}, respectively. The predominant noise source in the vicinity of the project site is vehicle traffic on SR4 and Alhambra Avenue, which produces an ambient noise environment of approximately 63 dBA L_{dn} at the project area. These sound levels would be well below the 70 dBA Ldn conditionally acceptable noise level stipulated for the proposed land use, provided interior noise levels are acceptable. It is noted this noise estimate does not consider any noise reductions that may be realized from shielding by existing buildings located between the project area and SR4 and Alhambra Avenue, or any attenuation that may be realized by the soft ground cover present between the property line and building locations (which are set back at least 20 feet from property lines).

<u>Interior Noise Level Compatibility:</u> Part 2, California Building Code, Section 1207.4, and Martinez Municipal Code Section 8.34.020, establish that interior noise levels attributable to exterior noise sources shall not exceed 45 dBA L_{dn} in any habitable room.

As described above, traffic noise modeling contained in the City's Draft General Plan Update EIR indicates ambient noise levels at the site would be approximately 63 dBA L_{dn} along the project's southern and eastern property line under 2040 conditions, without any consideration of noise reductions from building shielding or soft ground cover present at the site. Standard construction techniques and materials for new residential buildings, or renovations such as the proposed project, are commonly accepted to provide a minimum exterior to interior noise attenuation (i.e., reduction) of 21 to 22 dBA with windows and doors closed, which would result in an interior noise level of approximately 42 dBA L_{dn} for the proposed facilities.⁶ Furthermore, a reduction of 12 to 18 dBA with windows partially open is also achievable (OPR, 2017). Given the proposed building is setback at least 20 feet from the property line, and that there are numerous buildings that serve to shield the

94 | City of Martinez

As described in the "Noise Fundamentals" subsection, theoretically, sound levels attenuate by 3 dBA each doubling of distance for the line sources (e.g., roadways).

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

site from a direct line of sight to Alhambra Avenue and SR 4, interior noise levels with windows open are also likely to be less than $45 L_{dn}$. Interior noise levels, and therefore, would be in compliance with State and local standards.

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

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

As is the case with airborne sound, groundborne vibrations may be described by amplitude and frequency; however, unlike airborne sound, there is no standard way of measuring and reporting amplitude. Vibration amplitudes can be expressed in terms of velocity (inches per second) or discussed in dB units in order to compress the range of numbers required to describe vibration. As with airborne sound, the groundborne velocity can also be expressed in decibel notation as velocity decibels, or dBV (FTA, 2018). The vibration of floors and walls may cause perceptible vibration, rattling of items such as windows or dishes on shelves, or a low-frequency rumble noise, referred to as groundborne noise. This report uses peak particle velocity (PPV) to describe vibration effects. Vibration impacts to buildings are usually discussed in terms of PPV in inches per second (in/sec). PPV represents the maximum instantaneous positive or negative peak of a vibration signal and is most appropriate for evaluating the potential for building damage. Vibration can impact people, structures, and sensitive equipment. The primary concern related to vibration and people is the potential to annoy those working and residing in the area. Vibration with high enough amplitudes can damage structures (e.g., crack plaster or destroy windows). Groundborne vibration can also disrupt the use of sensitive medical and scientific instruments, such as an electron microscope.

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

Caltrans' *Transportation and Construction Vibration Guidance Manual* provides a summary of vibration criteria that have been reported by researchers, organizations, and governmental agencies (Caltrans, 2018). Chapter six of this manual provides Caltrans' guidelines and thresholds for evaluation potential vibration impacts on buildings and humans from transportation and construction projects. These thresholds are summarized in Table 8, *Caltrans' Vibration Criteria for Building Damage*, and Table 9, *Caltrans' Vibration Threshold for Human Response*.

Table 8. Caltrans' Vibration Criteria for Building Damage

Standard Integrity	Maximum	PPV (in/sec)
Structural Integrity	Transient	Continuous
Historic and some older buildings	0.50	0.25

Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial and commercial structures	2.00	0.50
Source: Caltrans, 2018		

Table 9. Caltrans' Vibration Criteria for Human Response

Haman Dagnanga	Maximum PPV (in/sec)			
Human Response	Transient	Continuous		
Barely perceptible	0.035	0.012		
Distinctly perceptible	0.24	0.035		
Strongly perceptible	0.90	0.10		
Severely perceptible	2.00	0.40		
Source: Caltrans, 2018				

Vibration Impact Analysis: The potential for groundborne vibration is typically greatest when vibratory or large equipment such as rollers, impact drivers, or bulldozers are in operation. For the proposed project, the largest earthmoving equipment would primarily operate during site preparation and grading. This equipment could, at worst-case and for limited periods of time during site preparation and grading activities, operate within approximately 50 feet of the multi-family residential building façade to the north of the project area and approximately 50 feet of the single family residential building facades to the south of the project area; however, most large equipment site work would occur on the interior of the site at least 100 feet or more from nearby residential buildings. Table 10, *Potential Groundborne Vibration* Levels, lists the typical vibration levels generated by the type of heavy-duty construction equipment most likely to be used during project construction.

Table 10. Potential Groundborne Vibration Levels

Equipment	Peak Particle Velocity(A) (Inches/Second) at Distance						
Equipment	50 Feet	70 Feet	100 Feet	200 Feet			
Small Bulldozer	0.001	0.001	0.000	0.000			
Jackhammer	0.014	0.009	0.006	0.002			
Loaded Truck	0.031	0.020	0.013	0.005			
Large Bulldozer	0.036	0.023	0.015	0.006			
Vibratory Roller	0.085	0.055	0.035	0.014			

Sources: Caltrans, 2018 and FTA 2018.

Construction vibration impacts generally occur when construction activities occur in close proximity to buildings and vibration-sensitive areas, during evening or nighttime hours, or when construction activities last extended periods of time. Construction activities associated with the proposed project would occur in multiple phases and may last approximately one year in total, although heavy

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

equipment operations that could generate groundborne vibrations would be limited to minor demolition, site preparation, and grading activities. Pursuant to the City's Municipal Code, construction activities would also be confined to daytime hours only, when people are typically less sensitive to groundborne vibrations.

As shown in **Table 10**, specific vibration levels associated with typical construction equipment are highly dependent on the type of equipment used. For structural damage, the use of typical equipment during construction activities (e.g., bulldozer, jack hammer, etc.) would produce PPV levels up to 0.085 in/sec at 50 feet. These PPV values are well below Caltrans' guidelines standards for potential structural damage for the types of buildings in and adjacent to the Plan Area, which consist of a mix of older and newer residential structures (0.3 PPV to 0.5 PPV for continuous vibration sources; see Table 8). Similarly, the use of specific vibration-generating equipment such as a vibratory roller (0.085 in/sec PPV at 50 Feet would not exceed Caltrans' structural damage criteria for older (0.3 in/sec PPV) or newer (0.5 in/sec PPV) residential structures. For human annoyance and interference responses, the use of typical equipment (e.g., bulldozer, jack hammer, trucks, etc.) during construction could produce vibration levels (up to 0.036 in/sec PPV) that approach or slightly exceed Caltrans' distinctly perceptible vibration detection threshold (0.035 PPV, see Table 9), at distances up to 50 feet from work areas, but drop below this threshold at a distance of 70 feet. For specific vibration-generating equipment such as a vibratory roller, vibrations could be distinctly perceptible at greater distances (generally up to 100 feet from work areas).

Although construction equipment vibration levels could be slightly to distinctly perceptible when used within 50 to 100 feet of adjacent residential structures, vibration levels would not be substantial nor excessive for several reasons. First, any equipment operation near property lines would be short in duration and intermittent (lasting only a few hours or days in work areas closest to building locations). As construction equipment moves around the site and operates at distances of 100 feet or more from nearby residences, vibration levels would begin to drop to levels that would not be perceptible according to Caltrans' thresholds. Second, potential construction vibration levels would not result in structural damage because the estimated vibration levels are substantially below Caltrans' thresholds for potential damage to older and newer residential structures. Finally, as noted, construction activities would be limited to daytime hours only and, therefore, potential construction-induced vibrations would not have the potential to be perceptible and annoy residential receptors during the more sensitive nighttime period. Thus, short-term, intermittent construction equipment vibration levels would not be excessive. The impact would be less than significant.

Once operational, the proposed project would not result in the operation of sources that would generate substantial groundborne vibration levels. The impact would be less than significant.

c. Less than Significant Impact. The project site is approximately 3.75 miles west of the Buchanan Field Airport, which is a public airport. The *Contra Costa County Airport Land Use Compatibility Plan* (ALUC) contains land use compatibility criteria and policies applicable to local agencies in preparing land use plans and ordinances and to landowners in the design of new development.

The proposed project is not located within an existing or future noise level contour and, therefore, would not expose people working or residing in the project area to excessive aircraft noise levels. This impact would be less than significant (Contra Costa County, 2000).

The Plan contains noise, safety, and airspace protection (i.e., building and structure height) compatibility criteria intended to determine whether a proposed land use plan, ordinance, or

development is compatible with the Airport's activities. The Plan designates composite noise contours, safety zones, and airspace protection overlay zones based upon the noise, safety, and airspace protection criteria. The project is not located within the Airport's designated composite noise contour areas or safety zones, and therefore is not subject to land use restrictions related to acceptable noise levels and safety in the Airport vicinity. The impact would be less than significant.

References:

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

California Department of Transportation (Caltrans) 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol.* Sacramento, California. September 2013.

_____2018. Transportation and Construction Vibration Guidance Manual. Sacramento, California. April 2018.

City of Martinez 1985. General Plan Noise Element. Adopted November 20, 1985.

City of Martinez 2015. 2035 General Plan Update Draft EIR. Available at: https://www.cityofmartinez.org/civicax/filebank/blobdload.aspx?BlobID=12243. (accessed September 10, 2021)

City of Martinez 2016. 2035 *General Plan Update Noise and Air Element*. Web. Available at: https://www.cityofmartinez.org/civicax/filebank/blobdload.aspx?BlobID=19927 (accessed September 10, 2021)

County of Contra Costa. 2000. *Contra Costa County Airport Land Use Compatibility Plan*. "Chapter 5: Background Data: Buchanan Field Airport. Available at: https://www.contracosta.ca.gov/DocumentCenter/View/853/Background-Data---Buchanan-Field-Airport-Part-1?bidId= (accessed September 10, 2021)

TJKM, 2021. Traffic Circulation and VMT Analysis for Brookside Assisted Living, March 4, 2021.

- U.S. Department of Housing and Urban Development, 2009a. Noise Guidebook. Prepared by the Environmental Planning Division, Office of Environment and Energy.
- U.S. Department of Housing and Urban Development, 2009b. Noise Guidebook, Chapter 4 Supplement: Sound Transmission Class Guidance. Prepared by the Environmental Planning Division, Office of Environment and Energy.
- U.S. Federal Highway Administration (FHWA) 2010. "Construction Noise Handbook, Chapter 9 Construction Equipment Noise Levels and Ranges." *U.S. Department of Transportation FHWA*. August 24, 2017. Available at:
- http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook/9.cfm (accessed September 10, 2021)
- U.S. Federal Transit Administration (FTA) 2018. *Transit Noise and Vibration Impact Assessment Manual*. FTA Report No. 0123. Prepared by John A. Volpe National Transportation Systems Center. Washington, DC. September 2018.

6.14 Population and Housing

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

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

- a. Less than Significant Impact. The project would not include the construction of any new homes or a substantial number of new businesses or infrastructure, and therefore would not induce substantial unplanned population growth. The existing unoccupied residence would be renovated and relocated on a newly created parcel (Parcel 2), which would allow for single family residential use to resume in the house but would not induce substantial unplanned population growth. Regarding the assisted living facility, the project proposes construction in two phases. Phase 2 includes construction of the second story of the main building to add approximately 24 bedrooms with 48 additional beds on the second floor. The proposed facility would have a total of approximately 82 beds, which would increase capacity from 36 existing beds. While the facility would be larger and serve more individuals, this facility is expected to serve the local population, does not function as housing, and would not induce substantial unplanned population growth.
- **b. No Impact.** The proposed project site includes the relocation of a single unoccupied existing single-family residence. No people would be displaced by the project, as the facility and residence are currently vacant. No housing would be displaced by the project. Therefore, there is no impact on displacement.

6.15 Public Services

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

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

Documentation:

a. Less than Significant Impact. The City of Martinez is served by the Contra Costa County Fire Protection District. The District includes Emergency Operations, Support Services, Training/Safety, Emergency Medical Services (EMS), Communications, Administration, and Fire Prevention Bureau Divisions (Contra Costa County Fire Protection District 2018). The District provides services related to fire prevention, training and safety, and standard fire department operations, including emergency response, emergency medical services, and hazardous materials control. The District's service area encompasses 304 square miles in 20 cities and areas of unincorporated Contra Costa County. In total, the District serves a population of approximately one million people (Contra Costa County Fire Protection District 2018).

The Contra Costa County Fire Protection District currently operates 25 active fire stations and 27 companies, and consists of over 400 employees, including 288 firefighters (Contra Costa County Fire Protection District, 2018). The active fire station closest to the project site is Station 13. Station 13 is located at 251 Church Street, Martinez, approximately 3,500 feet south of the project site.

Station 13 would likely be the first to respond to calls from the project site, as driving time is estimated to be two minutes. The proposed project is anticipated to marginally increase demand for fire protection services, but it is not expected to compromise response times, exceed planned staffing levels or equipment, nor require the construction of additional fire facilities. Additionally, the City and the Contra Costa County Fire Protection District Engineering and Plan Review Division would review the project design prior to issuance of a building permit to ensure incorporation of adequate fire and safety features into the project, including adequate Fire Protection District vehicle and equipment access.

The City has also adopted the California Fire Code by reference through ratification of the Contra Costa County Fire Protection District Fire Code (Chapter 15.28 of the Municipal Code) with modifications for local conditions. Regulations from the Fire Code that would reduce fire risk on the project site and, therefore, decrease demand on fire services include, but are not limited to, the policies listed in Table 11 below:

Table 11. Contra Costa County Fire Protection District Fire Code Regulation

Regulations Number	Subject Matter
105.7.26	Access for fire apparatus
105.7.27	Construction, alteration, or renovation of a building
	for which a building permit is required
105.7.31	Water supply for fire protection
304.1.2	Vegetation
321.3	Weeds and Rubbish a Public Nuisance
503.1.4	Access to Open Spaces
505.3	Street names and addressing
903.2.1.8	Group B [automatic sprinkler system]
903.2.9	Group S-1 [automatic sprinkler system]
903.4.2	Alarms
907.5.2.3.1	Public and common areas
907.6.6	Monitoring of fire alarm systems
5001.5.3	Emergency response support information

The project could slightly increase demand for fire and emergency services, but the project site is located close to Station 13 and would not require construction of new or expanded facilities. Compliance with the California Fire Code and project review by the Contra Costa County Fire Protection District Engineering and Plan Review Division would result in less than significant impacts related to fire protection.

b. Less than Significant Impact. The City of Martinez is under the jurisdiction of the Martinez Police Department (MPD), which provides police protection services throughout the city. MPD headquarters is located at 525 Henrietta Street, approximately 1.5 miles north of the project site and roughly five minutes away by vehicle. The MPD services include an abandoned vehicle program, security camera registration, dispatch, emergency operations management, and emergency training opportunities, including a CERT (Community Emergency Response Team) program (MPD 2021).

The assisted living portion of the project is not considered a residential use. The proposed project could slightly increase demand for police protection services but is not expected to compromise response times or exceed planned staffing levels/equipment nor directly require the construction of additional police facilities. In addition, the project developer is required to pay the City Police Facilities Impact Mitigation Fee for new development. As of July 29, 2021, the fee for the non-residential project would fall under the retail land use category, which is \$0.39 per square foot (City of Martinez 2019). The impact would be less than significant.

c. Less than Significant Impact. The project does not propose additional residential uses beyond the existing single-family residence and would not induce population growth. The project would not result in the need for new or renovated school facilities. The impact would be less than significant.

d. Less than Significant Impact. The proposed project does not include new residential uses and would not be expected to induce population growth. The project expects to have up to three full-time employees and is expected to serve the local community. The project would not require new or expanded recreation facilities. The impact would be less than significant.

The project developer is required to pay the City Park & Recreation Impact Mitigation Fee for new development. Currently, the fee for the non-residential retail land use category is \$1.09 per square foot (City of Martinez 2019).

e. Less than Significant Impact. The project does not propose residential uses and would not induce population growth. The project expects to have up to three full-time employees. The project would not require new or expanded library or other public facilities. The impact would be less than significant.

References:

City of Martinez. 1973. *Martinez General Plan*. "Safety Element". Available at: https://www.cityofmartinez.org/depts/planning/advance.asp (accessed July 20, 2021)

City of Martinez. 2019. "Master Fee Schedule." Available at: https://www.cityofmartinez.org/civicax/filebank/blobdload.aspx?BlobID=15645 (accessed July 20, 2021)

Contra Costa County Fire Protection District. 2018. *Annual Report 2018*. Available at: https://www.cccfpd.org/annual-report-archives (accessed July 20, 2021)

Contra Costa County Fire Protection District. 2019. "Ordinance NO.2019-37, Fire Code." Available at: https://www.cccfpd.org/pdfs/firecode.pdf (accessed July 20, 2021)

Martinez Police Department. 2020. "Martinez Police Department Overview." Available at: https://www.cityofmartinez.org/civicax/filebank/blobdload.aspx?BlobID=19981 (accessed July 20, 2021)

6.16 Recreation

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

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

Documentation:

- **a.** Less than Significant Impact. The project does not propose residential uses and would not induce population growth. The project does not require or include recreational amenities. The project is expected to employ up to 12 employees and is expected to serve up to 82 residents. The project would include outdoor areas for residents and would not be expected to generate increased demand or use of existing parks and recreational facilities in the project vicinity. The impact would be less than significant.
- **b. No Impact.** The project does not propose onsite or offsite recreational facilities or require the construction or expansion of recreational facilities. There would be no impact.

References:

City of Martinez. 1973. *Martinez General Plan*. "Parks and Recreation Element." Available at: https://www.cityofmartinez.org/depts/planning/advance.asp (accessed July 26, 2021).

City of Martinez. 2020. "City of Martinez Parks." Available at: https://www.cityofmartinez.org/depts/recreation/parks/default.asp (accessed July 26, 2021).

City of Martinez. 2019. "Master Fee Schedule." Available at: https://www.cityofmartinez.org/civicax/filebank/blobdload.aspx?BlobID=15645 (accessed July 26, 2021).

6.17 Transportation

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

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

Documentation:

a. Less than Significant Impact. TJKM prepared a Traffic Circulation and VMT Analysis for the project. The study assesses potential project impacts to transit, pedestrian, bicycle, and roadway plans and facilities. No significant project impacts were identified related to these topics. The TJKM analysis and findings related to these facilities are summarized below.

Vehicle access to the proposed project is provided via Alhambra Way, Alhambra Avenue, Walnut Ave, and State Route 4. Alhambra Way is a two-lane road with intermittent on-street parking on both sides. The road passes through residential uses and is classified as a minor arterial street north of SR 4 (TJKM, 2021). Alhambra Avenue is a principal arterial street (north of SR 4). It is a four-lane road with a two-way left-turn lane and has a Class II bike lane. It also has an interchange on SR 4 that provides regional access between Martinez, Hercules, Concord, Antioch, and beyond into the Central Valley and foothills.

Transit Facilities

The project area is connected by transit. The Central Contra Costa Transit Authority, also known as the County Connection, provides bus service to the area. This agency operates Routes 98X, 16 and 316, which provides service from the Martinez Amtrak Station to and from the Concord, Walnut Creek, and Pleasant Hill BART Stations. WestCAT (Western Contra Costa Transit Authority) and Tri-Delta Transit also run routes in the project area.

The project would not interfere with existing bus routes and would not remove or relocate any bus stops. Additionally, the project would not interfere or conflict with any transit plans or goals of the City of Martinez or Central Contra Costa Transit Authority. The impact to transit facilities would be less than significant.

Pedestrian and Bicycle Facilities

Alhambra Way has a five-foot sidewalk only on the east side of the road. Alhambra Avenue and Walnut Avenue have sidewalks on both sides of the road. There is a signalized marked crosswalk at the intersection of Walnut Avenue and Alhambra Avenue.

Alhambra Way presently contains a Class III bike route and is expected to be updated to Class II bike lanes as per the Draft General Plan 2035, Circulation Element. Alhambra Avenue contains Class II bike lanes from Marina Vista Avenue to Haven and Berrellesa Street to Paso Nogal Road. A small segment at Walnut Avenue is closed to vehicle traffic and can only be accessed through biking and walking.

It is anticipated that the project would generate some additional pedestrian and bicycle activity in the area. The increase in pedestrian and bicycle activity would be minimal, and the project would not conflict with any adopted plans, policies, or programs that support alternative transportation. The project would not generate pedestrian, bicycle, or transit travel demand that is not able to be supported by current transit, bicycle, or pedestrian facilities and/or plans. The impact to transit, bicycle, and pedestrian facilities would be less than significant.

Roadway Facilities

The proposed project would create incrementally more demand and subsequent impact on the City's roadways as traffic is expected to increase as a result of the project. The existing roadway infrastructure in the city is adequate to meet the needs of the project. The physical impact to roadway facilities would be less than significant.

b. Less than Significant Impact. Per CEQA Guidelines Section 15064.3(c) (Applicability), the provisions of Section 15064.3 (Determining the Significance of Transportation Impacts) became applicable as of July 1, 2020. The City has not yet adopted a Vehicle Mile Traveled (VMT) policy. The City is working with Contra Costa County to develop local standards for future VMT analyses. In the interim, the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018) is recognized as the professional source for determining if a project's VMT may be assumed to cause a less than significant transportation impact.

TJKM calculated the number of additional trips generated by the proposed assisted living facility as compared to the existing facility (Martinez Convalescent Hospital). Table 12 shows the additional trips generated by the proposed facility.

Table 12. Trip Generation

Land Size U		T 1 4	Daily Daily			A.M. Peak				P.M. Peak				
Use (ITE Code)	Size	Unit	Rate	Trips	Rate	In: Out	In	Out	Total	Rate	In: Out	In	Out	Total
Assisted Living (254)	82	Beds	2.60	213	0.18	67:33	10	5	15	0.34	45:55	13	15	28
Existing Convales cent Hospital (620)	36*	Beds	3.06	110	0.22	63:37	5	3	8	0.37	41:59	5	8	13

Net New Trips	103		5	2	7		8	7	15
Source: TJKM, 2021									

Per the TJKM analysis, the proposed facility is expected to generate 103 additional daily trips. Based on the County VMT screening criteria, projects that generate fewer than 110 daily vehicle trips are exempted from the preparation of a detailed VMT analysis (Contra Costa County, 2020). Additionally, a detailed VMT analysis would also not be required because the proposed project is within the half-a-mile of an existing major transit stop at Alhambra Avenue and Walnut Avenue intersection served by WestCAT (Western Contra Costa Transit Authority), County Connection and Tri-delta Transit with a service frequency interval of 15 minutes or less. The project could be concluded to be infill development that would result in a less than significant transportation impact under CEQA Guidelines Section 15064.3.

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

The proposed facility would maintain the location of the existing driveway at Alhambra Way and proposes an additional driveway on the newly-created Parcel 2 to serve the relocated single-family residence. The project proposes no significant change to the positioning of buildings (except for the residence). The proposed drive aisle is 24 feet wide, with two-way travel and perpendicular parking. The driveway has enough space for vehicles to turn around and can accommodate emergency vehicles. The proposed internal circulation appears to provide adequate site access and circulation to accommodate visitors as well as employees, and delivery and garbage trucks. Visibility would also be adequate at the driveway during entry and exit. The design of the driveways would comply will all applicable City regulations, including sight distances, line-of-sight triangles, and curb design. Therefore, project driveways would not increase hazards in the area.

The project would generate traffic in the area consistent with the convalescent use and residential vehicle activity in the vicinity. The project would not result in incompatible uses as it relates to transportation and traffic.

d. Less than Significant Impact. A significant impact would occur if the proposed project would not satisfy emergency design and access requirements of the Contra Costa County Fire Protection Division. A significant impact would also occur if the project would inhibit the ability of emergency vehicles to serve the project site or adjacent uses. Emergency access to the project would occur through the existing road network, and emergency services would enter the property from Alhambra Way. The proposed project would not result in inadequate emergency access because all access features will satisfy City of Martinez design requirements, including Fire Division requirements, prior to project approval. Therefore, the proposed project would result in less than significant impacts related to emergency access.

References:

TJKM, 2021. *Traffic Circulation and VMT Analysis for Brookside Assisted Living*, March 4, 2021. (Included as Appendix F)

Office of Planning and Research, December 2018. Technical Advisory on Evaluation Transportation Impacts in CEQA. Available at: https://www.opr.ca.gov/docs/20190122-743 Technical Advisory.pdf (accessed July 26, 2021).

6.18 Tribal Cultural Resources

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

<u>Conclusion:</u> Implementation of <u>Mitigation Measures CUL-1 through CUL-4</u> (in Section 6.5, Cultural Resources, of this Initial Study) would reduce potential impacts to less than significant levels. Regarding tribal cultural resources, the proposed project would not result in any significant environmental impacts with the incorporation of <u>Mitigation Measures CUL-1 and CUL-4</u>, which addresses as-yet undiscovered cultural resources.

Documentation:

ai. Less than Significant with Mitigation Incorporated. As detailed in Section 6.5 Cultural Resources, the California Historical Resources Information System (CHRIS) search at the Northwest Information Center (NWIC) showed that there are known Native American sites within the project boundaries which qualify as tribal cultural resources (TCRs). Although a Sacred Lands File (SLF) search was conducted through the Native American Heritage Commission (NAHC), which was returned with a negative result, and the tribes contacted did not respond to the CEQA consultant's scoping letters (See Section 6.5), the information gathered during additional background research shows that the project site and surrounding area is very sensitive for prehistoric archaeological resources, and thus TCRs.

Based on the results of the cultural research detailed in Section 6.5, known TCRs are present on the site, and there is a high potential that additional TCRs could be present below the surface of the site. Therefore, project excavation could result in the discovery of TCRs. In the event that project ground-disturbing activities disturb, damage, or destroy previously unknown buried prehistoric features,

sites or artifacts which qualify as TCRs, a significant impact could occur. Implementation of **Mitigation Measures CUL-1 through CUL-4** would reduce potential impacts to undiscovered archeological resources to a less than significant level.

aii. Less than Significant with Mitigation Incorporated. Some Native American artifacts may not be considered unique archaeological resources under the CEQA guidelines (i.e., if there is not a demonstrable public interest in that information, it does not possess a special and particular quality such as being the oldest of its type or the best available example of its type, and it is not directly associated with a scientifically recognized important prehistoric event or person). However, it is possible for a lead agency to determine that an artifact is considered significant to a local tribe, and therefore be considered a significant resource under CEQA. All Native American artifacts (tribal finds) shall be considered as a significant Tribal Cultural Resource, pursuant to PRC 21074 until the lead agency has enough evidence to determine significance. This ensures that the default assumption is that all Native American artifacts are significant resources under CEQA. Implementation of Mitigation Measures CUL-1 through CUL-4 would reduce impacts to TCRs to less than significant.

Mitigation Measures CUL-1 through CUL-4 would reduce potential impacts to Native American artifacts to a less than significant level.

References:

Tom Origer and Associates, 2021. Re: Archival Search Results of the Property at 4110 Alhambra Way, Martinez, Contra Costa County. April 13, 2021. Unpublished document not available for public release; on file with NWIC and MIG, Inc.

6.19 Utilities and Service Systems

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

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

Documentation:

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

Water:

Water service would be provided by the City of Martinez municipal water. The project would connect to the existing 10-inch water main underneath Alhambra Way that is maintained by the Contra Costa Water District (CCWD). Prior to issuance of building permits, the developer would be required to provide the City and CCWD with a detailed evaluation indicating specifications for any minor modifications needed to the existing municipal conveyance system to accommodate project needs. Construction of new water supply connection and other minor water supply modifications would be conducted in compliance with the City's Public Improvement Standards and City-approved utilities construction Best Management Practices (BMPs); therefore, this standard construction activity can be considered less than significant. No new public water supply facilities would be needed to serve the proposed project. The impact would be less than significant.

Wastewater:

The project would be served by the Central Contra Costa Sanitation District (CCCSD, or Central San) for wastewater services and sewage. City growth is accounted for in the City's General Plan and Central San has planned for the growth and infrastructural demands of the City and its surrounding area. Increase in wastewater and sewer services from project development would be consistent with the City's General Plan and anticipated by Central San. Furthermore, as discussed in Section 6.11, Land Use and Planning, the project would be consistent the City's General Plan land use and zoning designations for the project site.

Per the 2015 UWMP, the Central San Treatment Plant, treats an average of approximately 35.6 million gallons of wastewater per day generated in a 144-square mile area by approximately 476,400 residents and more than 3,000 businesses. The project would generate a relatively small increase in wastewater compared to the existing generation from the Central San service area and capacity of the treatment plant. The project applicant would also be required to obtain a sewer connection permit and pay fees for permitting and connection to the Central San system. By paying this fee and obtaining appropriate permits, this would help ensure that Central San has adequate system capacity to serve the project's current and future service demands.

The proposed project would not introduce new land uses or operations that would generate wastewater that could cause Central San to exceed wastewater treatment requirements. No new public wastewater conveyance or treatment facilities would be needed to serve the proposed project. The impact would be less than significant.

Storm Water:

The project site is currently occupied with a non-operational assisted living facility, access road and parking, and a two-story vacant single-family residence. The western part of the site borders Alhambra Creek. The proposed project would create approximately 17,745 square feet of new impervious surfaces, for a total of 26,505 square feet of impervious area, which would generate storm water runoff. Stormwater treatment and retention would be accomplished through a combination of onsite filtration and bioretention infrastructure. A preliminary Storm Water Control Plan Exhibit has been prepared for the applicant by Humann Company Inc, dated July 22, 2020, which proposes several bioretention areas throughout the site. Refer to Section 6.10, Hydrology and Water Quality, for a further discussion of project storm water infrastructure and runoff treatment.

The project's Preliminary Storm Water Control Plan has proposed onsite storm drainage improvements, low impact development (LID) design strategies, and maintenance (operational) requirements. These include the construction and utilization of a bioretention area with appropriately sized filters, signage to indicate "no dumping," plant selection to minimize the use of fertilizers and pesticides, and project design so that impervious surfaces drain to integrated management practices (IMPs). In addition, prior to issuance of the project grading permit, the applicant shall submit the project Storm Water Pollution Prevention Plan (SWPP) for review and approval by the City Engineer. The approved SWPPP shall be maintained and implemented throughout entire project construction period. The City shall verify that all post-construction BMPs are installed and functioning properly prior to issuing a certificate of occupancy. The proposed bioretention areas would provide peak flow management, and runoff would be metered into existing municipal storm water drains. The impact from storm water infrastructure construction and operation would be less than significant.

Electric Power:

The proposed project would generate demand for electric power. The project would connect to and be served by existing electricity infrastructure owned and operated by PG&E. Multiple PG&E transmission poles and power lines are located adjacent to the project site running along Alhambra Way. The process of connecting the project to existing infrastructure is expected to be standard for conveying electrical power to a commercial project. The site is proposing trenching utilities, and all construction would be conducted in compliance with City-approved BMPs for utilities infrastructure improvements. No new electric power generation facilities would be required to serve the project. The impact would be less than significant.

Natural Gas:

The proposed project may generate demand for natural gas to heat the facility and the residence. The project would be served by existing natural gas infrastructure owned and operated by PG&E. A PG&E natural gas pipeline runs below Alhambra Way adjacent to the east of the project site (PG&E Pipe Locator). Though no new natural gas facilities would be needed to serve the proposed project, natural gas improvements would be required to connect project components to existing natural gas pipelines. The process of connecting the project to existing infrastructure is expected to be standard for conveying natural gas to a commercial development. Construction would be conducted in compliance with City-approved BMPs for utilities infrastructure improvements. No new natural gas facilities would be needed to serve the project. The impact would be less than significant.

Telecommunications:

The proposed project would connect to existing telecommunications infrastructure. A telecommunications provider for the project has not yet been selected. Telecommunications infrastructure is often grouped with electric power infrastructure on utility poles and transmission towers; therefore, it can be reasonably assumed the project would connect to telecommunications infrastructure on existing utility poles. As noted above, the applicant is proposing to trench all utilities. The process of connecting the project to existing infrastructure is standard for transmitting internet and other telecommunications services to a commercial development. Construction would be conducted in compliance with City-approved BMPs for utilities infrastructure improvements. Connection to existing telecommunications infrastructure would not cause significant environmental effects. The impact would be less than significant.

In summary, the project would not require or result in the construction of new public or private utilities and service facilities. However, project completion would require improved connections from Alhambra Way to the residence after it is relocated. Other infrastructure improvements would connect project components to existing public and private utilities infrastructure. City standards would include undergrounding all new connections to overhead facilities, including electric, telephone, and television lines. Construction of the new or expanded utilities infrastructure would comply with City standards, and impacts would be less than significant.

b. Less than Significant Impact. The City of Martinez's primary source of potable water is from the San Joaquin River Delta, distributed by the Contra Costa Water District (CCWD). CCWD's water service area includes the city limits and several unincorporated areas of Contra Costa County. The City works with the Contra Costa Water District to provide water to customers and users within the city boundaries.

As discussed in Section 6.10b, Hydrology and Water Quality of this Initial Study, the project would use approximately 910,325 gallons per year, or 2.79 acre-feet per year (AFY). This includes water

use reported in the project's landscaping plans 117,929 gallons per year, water needs to support the 19,540 square foot assisted living facility and 2,349 square foot residence. This calculation is further detailed in Section 6.10b (also see footnote #3 on Page 76).

Project water consumption is expected to be approximately 2.79 AF per year. The 2015 UWMP concludes the City will continue to be able to provide water to customers in normal, dry, and multiple dry years. Considering existing and future projected water supplies and city water consumption, the City has adequate water supplies to serve the proposed project. No new water supply source or entitlements would be necessary, and the impact would be less than significant.

- **c.** Less than Significant Impact. See the wastewater discussion in Section 6.19.a, above. The Central San wastewater treatment facility would have adequate capacity to treat project wastewater in addition to existing commitments. No new public wastewater conveyance or treatment facilities would be needed to serve the proposed project.
- d. Less than Significant Impact. The City of Martinez is responsible for solid waste collection at the project site. The City has a service agreement with Republic Services for waste collection and disposal. Solid waste and recyclable items would be taken from the project site to the Contra Costa Transfer and Recovery Station located in the city, 2.9 miles east of the project site. Solid waste would then be transferred to the Keller Canyon Landfill in Pittsburg. The landfill site is 1,399 acres and is permitted to accept 3,500 tons of waste per day. The landfill site has an estimated permitted capacity of 75 million cubic yards. Because the Keller Canyon Landfill has substantial capacity to accommodate the project's solid waste disposal needs, the project waste impact would be less than significant.
- e. Less than Significant Impact. The project involves construction and demolition activities requiring materials to be removed and recycled offsite. The primary State legislation regarding solid waste is AB939, the Integrated Waste Management Act, adopted in 1989. AB939 requires local jurisdictions to achieve a minimum 50 percent solid waste diversion rate. A minimum 50 percent diversion rate for construction demolition and debris is also required. The project would not conflict with State laws governing construction or operational solid waste diversion and would comply with local implementation requirements.

The City adopted an ordinance that requires construction and remodeling projects to reuse or recycle construction debris. The ordinance complies with CALGreen, which is part of California's statewide mandatory green building code. Per the ordinance, the City requires that all construction or demolition projects complete and submit a Waste Management Plan (WMP) form that identifies the types of debris generated by the project and how they will be managed. Per the City's ordinance, all projects must adhere to a 65 percent recycling diversion requirement for all project construction debris generated. The project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste, and therefore the impact would be less than significant.

References:

City of Martinez, 2014. Construction and Demolition Waste Ordinance. Available at: https://www.cityofmartinez.org/gov/sustain/recycling/waste_ordinance.asp (accessed September 5, 2021)

City of Martinez, 2016. Urban Water Management Plan. Available at: https://www.cityofmartinez.org/civicax/filebank/blobdload.aspx?BlobID=16263 (accessed August 5, 2021)

City of Martinez, 2020. Martinez Municipal Code, Stormwater Management and Discharge. Available at:

https://library.municode.com/ca/martinez/codes/code_of_ordinances?nodeId=CD_ORD_TIT15BUCO_CH15.06STMADICO_15.06.050STCOPLRE (accessed September 13, 2021)

Pacific Gas & Electric. Gas Transmission Pipeline Map. Available at: https://www.pge.com/en_US/safety/how-the-system-works/natural-gas-system-overview/gas-transmission-pipeline/gas-transmission-pipelines.page (accessed September 13, 2021)

Humann Company Inc, July 22, 2020. Vesting Tentative Parcel Map, Stormwater Control Plan Exhibit

United State Energy Information Administration, February 9, 2017. "2012 Commercial Buildings Energy Consumption Survey: Water Consumption in Large Buildings Summary." Available at: https://www.eia.gov/consumption/commercial/reports/2012/water/#:~:text=On%20average%2C%20these%20buildings%20used,and%2050.1%20gallons%20per%20worker (accessed September 13, 2021)

6.20 Wildfire

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

<u>Conclusion:</u> Regarding wildfire, the proposed project would not result in any significant environmental impacts. The project site is located in a local responsibility area (LRA) according to the CAL FIRE FRAP (Fire and Resource Assessment Program) Map (CAL FIRE 2009), and the site is not in a fire hazard severity zone.

Documentation:

a. - d. Less than Significant Impact. The project site is not located in a fire hazard severity zone according to the CAL FIRE FRAP Map (CAL FIRE 2009). According to the FRAP Map, the project is located in a local responsibility area (LRA). The nearest very high fire hazard zone occurs in Martinez approximately 600 feet southwest of the project site in an urban area close to the intersection of Alhambra Avenue at Highway 4. The project area is residential, and the impact of the project on wildfire risks would be less than significant.

References:

CAL FIRE. 2009. "Martinez Very High Fire Hazard Severity Zones in LRA." Available at: https://osfm.fire.ca.gov/media/5780/martinez.pdf (accessed July 21, 2021).

6.21 Mandatory Findings of Significance

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

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

Documentation:

a. Less than Significant with Mitigation Incorporated. The project would be built on an area that is already impacted by development. As discussed in Section 6.4, potential cumulative impacts to fish and wildlife species are less than significant with incorporation of Mitigation Measures BIO-1 and BIO-2.

The project site is not known to have any association with an important example of California's history or prehistory. As discussed in Section 6.5, construction-phase procedures would be implemented in the event any archaeological or paleontological resources are discovered during grading and excavation, consistent with **Mitigation Measure CUL-1**. Implementation of this Mitigation Measure would ensure that impacts related to cultural resources would be less than significant.

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

The project's contribution to long-term, cumulative impacts would not be significant. In particular, the project is subject to development permitting fees and property taxes to offset project related impacts to public services and utility systems such as fire protection services, traffic control and roadways, storm drain facilities, water and wastewater facilities, and other public facilities and equipment. The impacts would be less than significant. As discussed in Section 6.1, the project would not substantially impact any scenic vistas, scenic resources, or the visual character of the area, and would not result in excessive light or glare.

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

7. Lead Agency and Consultants

Lead Agency:

City of Martinez Planning Department 525 Henrietta Street Martinez, California 94553

Hector Rojas, AICP, Planning Manager

Consultants:

MIG, Inc. 800 Hearst Avenue Berkeley, California 94710

Abrams Associates 1875 Olympic Boulevard, Suite 210 Walnut Creek, California 94596

Brunzell Historical Napa, California

TJKM 4305 Hacienda Drive, Suite 550 Pleasanton, California 94588