INITIAL STUDY

59 ARDEN ROAD PROJECT

BERKELEY, CALIFORNIA

LSA

August 2024

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INITIAL STUDY

59 ARDEN ROAD PROJECT

BERKELEY, CALIFORNIA

Submitted to:

City of Berkeley
Planning and Development Department
Land Use Planning Division
1947 Center Street, 2nd Floor
Berkeley, California 94704

Prepared by:

LSA
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Pt. Richmond, California 94801
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Project No. CBE1906.10

LSA

August 2024

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LIST OF ABBREVIATIONS AND ACRONYMS

ACTC	Alameda County Transportation Commission
APN	Assessor's Parcel Number
BAAQMD	Bay Area Air Quality Management District
BAHA	Berkeley Architectural Heritage Association
BMC	Berkeley Municipal Code
CalRecycle	California Department of Resources Recycling and Recovery
CAP	City of Berkeley Climate Action Plan
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CH4	methane
City	City of Berkeley
Clean Air Plan	BAAQMD 2017 Clean Air Plan
CNDDB	California Natural Diversity Database
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
COA	Condition of Approval
dB	decibel
dBA	A-weighted sound level

District	Panoramic Hill Historic District
ES-R	Environmental Safety-Residential
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FTA	Federal Transit Administration
GHG	greenhouse gas
GWP	Global Warming Potential
HFC	hydrofluorocarbon
I-580	Interstate 580
IS/ND	Initial Study/Negative Declaration
LDR	Low Density Residential
L_{dn}	day-night average level
L_{eq}	equivalent continuous sound level
Lmax	maximum instantaneous sound level
mgd	million gallons per day
MRP	Municipal Regional Permit
N_2O	nitrous oxide
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OPR	State Office of Planning and Research
PFC	perfluorocarbons
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PM_{10}	particulate matter less than 10 microns in diameter

Porter-Cologne Act	Porter-Cologne Water Quality Control Act
POTW	publicly-owned treatment works
PPV	peak particle velocity
proposed project	59 Arden Road Project
rms	root mean square
RWQCB	Regional Water Quality Control Board
SF6	sulfur hexafluoride
SO_2	sulfur dioxide
SR-24	State Route 24
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
VdB	vibration velocity decibels
VMT	vehicle miles traveled
ZAB	Zoning Adjustments Board
ZE	zero emission

CITY OF BERKELEY
LAND USE PLANNING
INITIAL
STUDY

1.0 PROJECT INFORMATION

The following is an Initial Study/Negative Declaration (IS/ND) for the proposed project located at 59 Arden Road (herein referred to as "proposed project"). An overview of the project site location and existing characteristics is followed by a description of the proposed development and a summary of requested approvals and entitlements. Copies of all materials referenced in this report are available for review in the project file during regular business hours at the City of Berkeley (City) Planning and Development Department, Land Use Planning Division, as well as on the City's website at: https://aca.cityofberkeley.info/CitizenAccess/Default.aspx. (Click on Zoning tab; enter permit number ZP2022-0127; select permit ZP2022-0127; click on the "Record Info" drop down menu; click on Attachments for a list of all application materials.)

1. **Project Title:**
   59 Arden Road Project

2. **Lead Agency Name and Address:**
   City of Berkeley (City)
   1947 Center Street, 2nd Floor
   Berkeley, California 94704

3. **Contact Person and Phone Number:**
   Cecelia Mariscal, Associate Planner
   Planning and Development Department
   Land Use Planning Division
   Phone: (510) 981-7433
   Email: CMariscal@berkeleyca.gov

4. **Project Sponsor's Name and Address:**
   Michael Wallman
   59 Arden Road
   Berkeley, California 94704

5. **General Plan Designation:**
   Low Density Residential

6. Zoning:

Environmental Safety-Residential (ES-R)

7. Project Location and Existing Conditions

The approximately 0.25-acre (11,156-square-foot) project site is located at 59 Arden Road in Berkeley, Alameda County (Assessor's Parcel Number [APN] 55-1862-37). The project site is generally surrounded by single-family residential uses and is bordered by Arden Road to the east and the Orchard Lane pedestrian path to the north.

Regional access to the project site is provided by Interstate 580 (I-580) and State Route 24 (SR-24). The project site is accessed via a private driveway located on Arden Road.

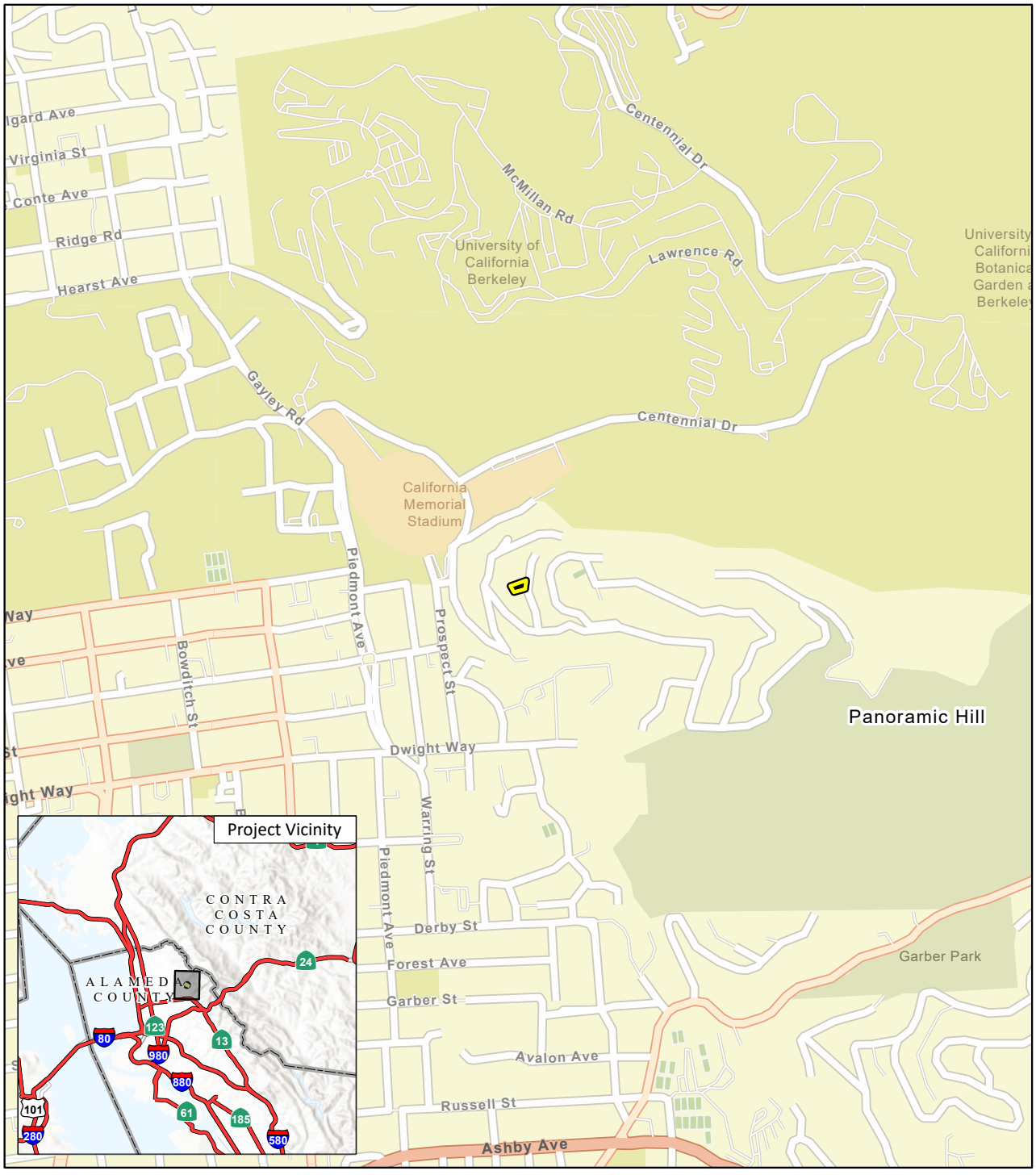
The project site generally slopes downward from northeast to southwest. The northeastern corner of the project site is currently developed with a 2,662-square-foot, three-story, single-family residence, constructed in 1914 with a maximum height of 30 feet . The remainder of the project site consists of a paved private driveway and landscaping, including some mature trees, shrubs, and grasses. The existing residence is a contributing element to the Panoramic Hill Historic District, which is listed on the National Register of Historic Places (NRHP) (refer to Section 3.5, Cultural Resources of this IS/ND for additional information).

Figure 1-1 depicts the site's regional and local context and Figure 1-2 depicts an aerial view of the project site.

8. Project Description:

The proposed project would result in the construction of a 114-square-foot parking pad, concrete retaining wall, fence, and gate. No modifications to the existing residential structure are proposed. The proposed parking pad would be located within the 20-foot minimum front setback, required in the Environmental Safety-Residential Zoning District (E-SR), on the eastern side of the parcel. Construction of the proposed parking pad would require widening of the existing 13-foot-wide curb cut at the southwest corner of the project site by 9 feet to 22 feet. The proposed concrete retaining wall would range from 2 feet and 6 inches to 3 feet and 6 inches, in height and would be located along the eastern portion of the parking pad. The concrete retaining wall would be located on both the uphill and downhill slopes of the existing driveway. Figure 1-3 shows the proposed project site plan.

Grading and Construction. The proposed project would require a total of 4 cubic yards of soil to be cut and exported offsite during construction of the parking pad, retaining wall, fence, and gate. The maximum depth of onsite excavation would be at a depth of 4 feet below the ground surface and is expected to occur during construction of the parking pad. Construction of the proposed project would occur for approximately 1-month period. Excavation on the site for the parking pad would last approximately 1 day.



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Project Location

FIGURE 1-1

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SOURCE: Esri Street Map 2024

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59 Arden Road Project
Project Location and Regional Vicinity

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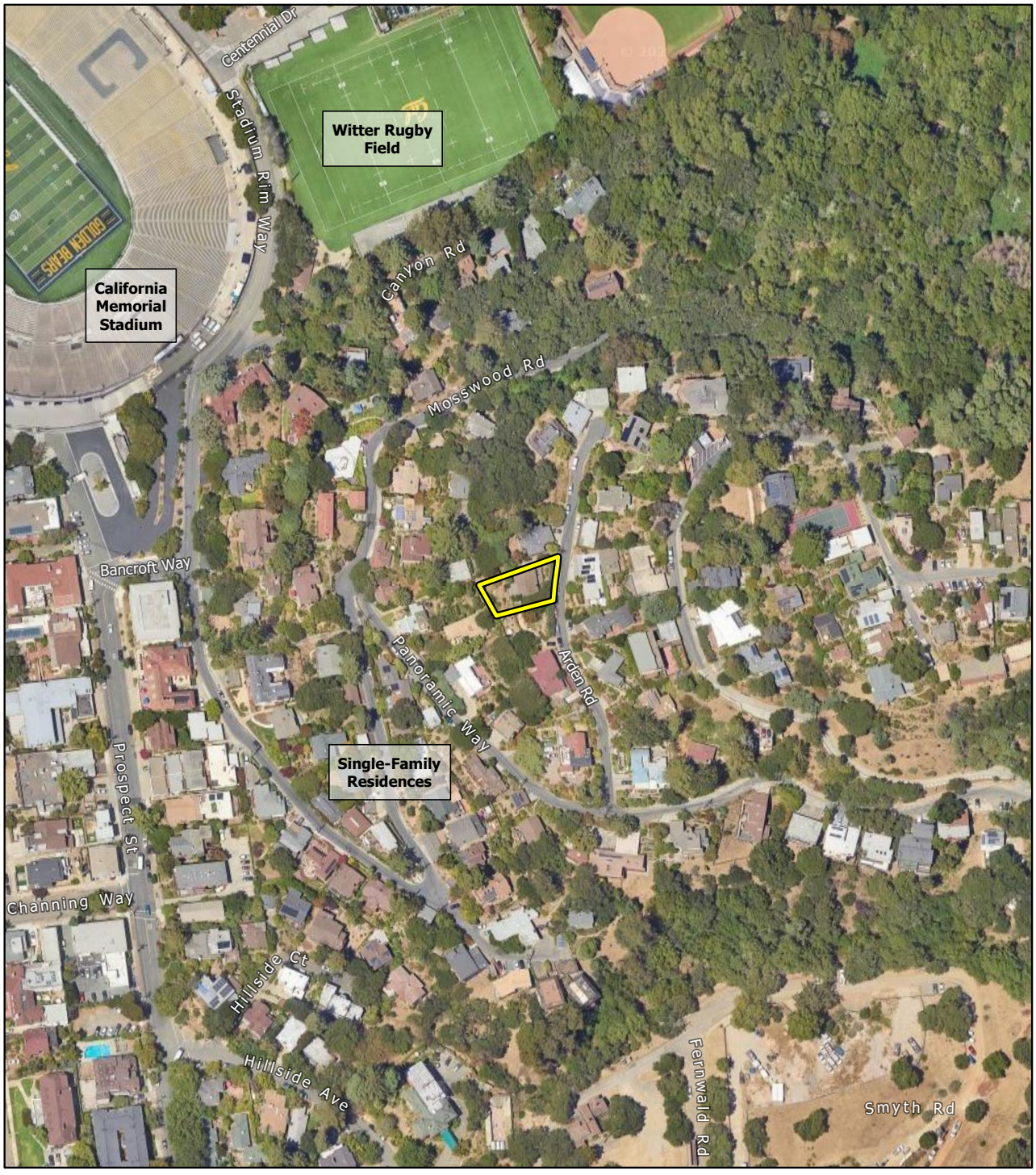

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FIGURE 1-2

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SOURCE: Google Maps (2023)

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59 Arden Road Project

Aerial Photograph of the Project Site and Surrounding Land Uses

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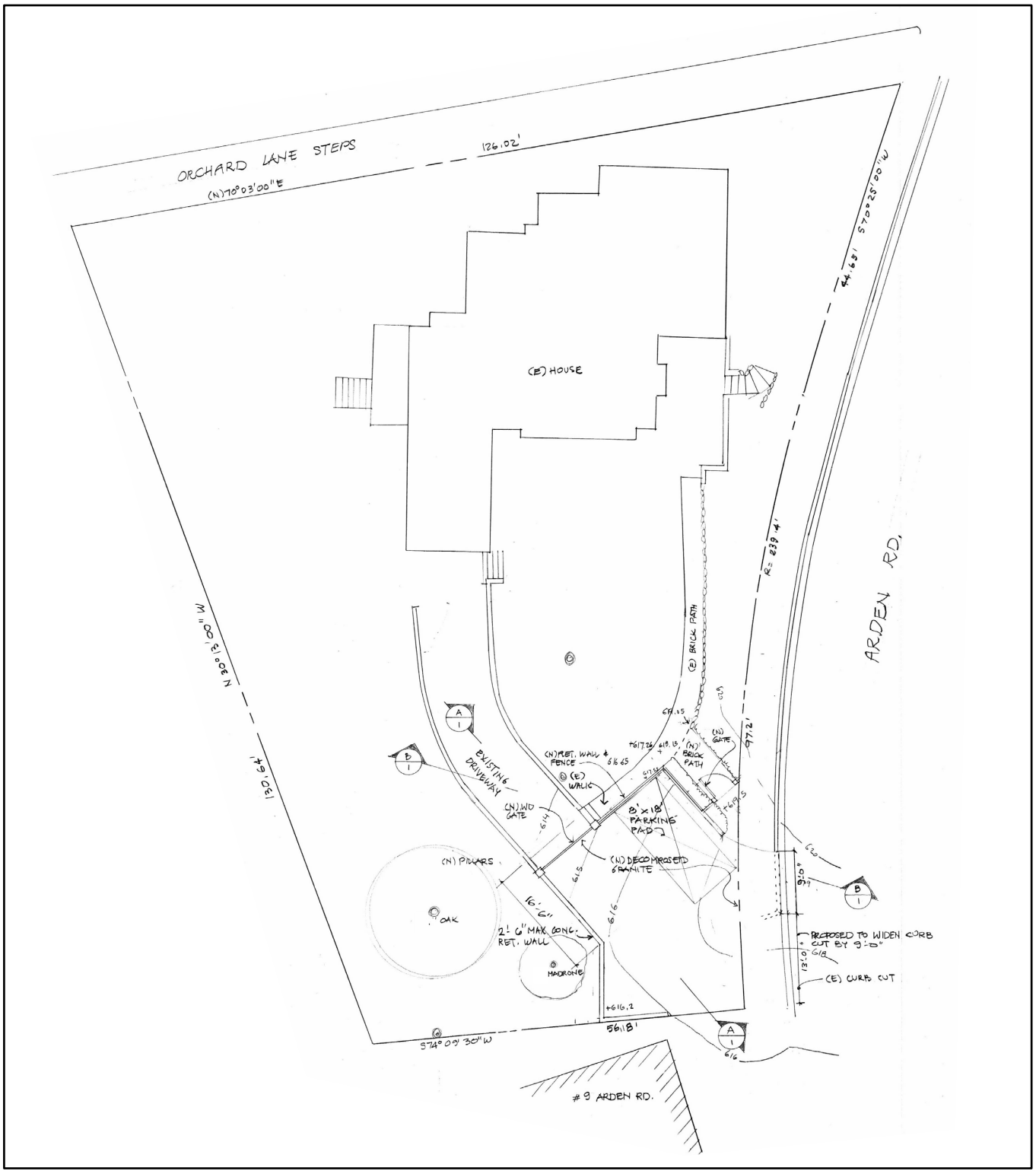

FIGURE 1-3

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SOURCE: Carolyn Van Lang

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59 Arden Road Project

Proposed Site Plan

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Discretionary Actions. The proposed project is subject to action by the City's Zoning Adjustments Board (ZAB). Per the City of Berkeley Municipal Code (BMC), the project would require the following discretionary entitlements from the City of Berkeley:

A. Administrative Use Permit to establish a new parking space by constructing a parking pad, retaining wall, fence, and gate within the ES-R Zoning District

The proposed project, if approved, would be subject to the City's standard Conditions of Approval (COA), pursuant to BMC Section 23B.32.040.D and required findings. Applicable COAs are identified in Table 1.A, below, and summarized in the appropriate topical sections. Each COA is titled pursuant to the subject area it addresses.

9. Surrounding Land Uses and Setting:

The project site is located on Panoramic Hill in East Berkeley, which generally consists of low- and medium-density residential uses located north, south, east, and west of the project site. Land uses within the vicinity of the project site also include the University of California, Berkeley campus and associated facilities including California Memorial Stadium located approximately 560 feet to the northwest,), the University of California Clark Kerr Campus located approximately 0.2 mile to the south, and open space and recreational uses approximately 0.2 mile to the southeast. The Claremont Canyon Regional Preserve is also located southeast of the project site, and the University of California Botanical Garden at Berkeley is located northeast of the project site.

10. Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):

No other agency approval would be required for this proposed project.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

The City sent letters to tribes eligible to consult with the City, pursuant to Public Resources Code Section 21080.3.1, on May 15, 2024, notifying them of their opportunity to consult for this project. The Sacred Lands File Search (SLF) was submitted to the Native American Heritage Commissions (NAHC) on May 29, 2024. On June 24, 2024, the Confederated Villages of Lisjan Nation requested a copy of the CHRIS and SLF search results, and the completed Initial Study. On June 28, 2024, the NAHC responded, indicating the results of the SLF search were negative. The City forwarded this information to the Confederated Villages of Lisjan Nation. Prior to the scheduled consultation meeting on July 24, 2024 the Confederated Villages of Lisjan contacted the City via email to request clarification on the project scope. Based on this response provided by the City, the Confederated Villages of the Lisjan canceled the scheduled meeting and concluded consultation.

Table 1.A: Applicable City COAs

Issue Area	City COA
Air Quality	**Public Works - Implement BAAQMD-Recommended Measures During Construction**. For all proposed projects, BAAQMD recommends implementing all the Basic Construction Mitigation Measures, listed below to meet the best management practices threshold for fugitive dust: A. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. B. All haul trucks transporting soil, sand, or other loose material off site shall be covered. C. All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. D. All vehicle speeds on unpaved roads shall be limited to 15 mph. E. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. F. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. G. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. H. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.
Biological Resources	**Avoid Disturbance of Nesting Birds.** Initial site disturbance activities, including vegetation and concrete removal, shall be prohibited during the general avian nesting season (February 1 to August 31), if feasible. If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and activity status of any active nests on or adjacent to the project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the Migratory Bird Treaty Act and the California Fish and Game Code, nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation and concrete removal. In the event that active nests are discovered, a suitable buffer (typically a minimum buffer of 50 feet for passerines 250 feet for raptors) shall be established around such active nests and no construction shall be allowed inside the buffer areas until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). No ground-disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 31 and January 31.

Table 1.A: Applicable City COAs

Issue Area	City COA
Cultural Resources	**Archaeological Resources.** (Ongoing throughout demolition, grading, and/or construction). Pursuant to CEQA Guidelines section 15064.5(f), "provisions for historical or unique archeological resources accidentally discovered during construction" should be instituted. Therefore: A. In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist, historian or paleontologist to assess the significance of the find. B. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified professional would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Berkeley. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by the qualified professional according to current professional standards. C. In considering any suggested measure proposed by the qualified professional, the project applicant shall determine whether avoidance is necessary or feasible in light of factors such as the uniqueness of the find, project design, costs, and other considerations. D. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the Project site while mitigation measures for cultural resources is carried out. E. If significant materials are recovered, the qualified professional shall prepare a report on the findings for submittal to the Northwest Information Center.
	Human Remains. (Ongoing throughout demolition, grading, and/or construction). In the event that human skeletal remains are uncovered at the project site during ground-disturbing activities, all work shall immediately halt, and the Alameda County Coroner shall be contacted to evaluate the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.
Geology and Soils	**Paleontological Resources.** (Ongoing throughout demolition, grading, and/or construction). In the event of an unanticipated discovery of a paleontological resource during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards [SVP 1995,1996]). The qualified paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the City for review and approval.

Table 1.A: Applicable City COAs

Issue Area	City COA
Greenhouse Gas Emissions	**Construction and Demolition Diversion.** Applicant shall submit a Construction Waste Management Plan that meets the requirements of BMC Chapter 19.37 including 100 percent diversion of asphalt, concrete, excavated soil and land-clearing debris and a minimum of 65 percent diversion of other nonhazardous construction and demolition waste.
	Low-Carbon Concrete. The project shall maintain compliance with the Berkeley Green Code (BMC Chapter 19.37) including the use of concrete mix design with cement reduction of at least 25 percent. Documentation on concrete mix design shall be available at all times at the construction site for review by City Staff. (Project required to meet applicable code at time of building permit application, if different from above.)
Hydrology and Water Quality	**Stormwater Requirements.** The applicant shall demonstrate compliance with the requirements of the City's National Pollution Discharge Elimination System (NPDES) permit as described in BMC Section 17.20. The following conditions apply: A. The project plans shall identify and show site-specific Best Management Practices (BMPs) appropriate to activities conducted on-site to limit to the maximum extent practicable the discharge of pollutants to the City's storm drainage system, regardless of season or weather conditions. B. Trash enclosures and/or recycling area(s) shall be covered; no other area shall drain onto this area. Drains in any wash or process area shall not discharge to the storm drain system; these drains should connect to the sanitary sewer. Applicant shall contact the City of Berkeley and EBMUD for specific connection and discharge requirements. Discharges to the sanitary sewer are subject to the review, approval and conditions of the City of Berkeley and EBMUD. C. Landscaping shall be designed with efficient irrigation to reduce runoff, promote surface infiltration and minimize the use of fertilizers and pesticides that contribute to stormwater pollution. Where feasible, landscaping should be designed and operated to treat runoff. When and where possible, xeriscape and drought tolerant plants shall be incorporated into new development plans. D. Design, location and maintenance requirements and schedules for any stormwater quality treatment structural controls shall be submitted to the Department of Public Works for review with respect to reasonable adequacy of the controls. The review does not relieve the property owner of the responsibility for complying with BMC Chapter 17.20 and future revisions to the City's overall stormwater quality ordinances. This review shall be shall be conducted prior to the issuance of a Building Permit. E. All paved outdoor storage areas must be designed to reduce/limit the potential for runoff to contact pollutants. F. All on-site storm drain inlets/catch basins must be cleaned at least once a year immediately prior to the rainy season. The property owner shall be responsible for all costs associated with proper operation and maintenance of all storm drainage facilities (pipelines, inlets, catch basins, outlets, etc.) associated with the project, unless the City accepts such facilities by Council action. Additional cleaning may be required by City of Berkeley Public Works Engineering Dept. G. All on-site storm drain inlets must be labeled "No Dumping – Drains to Bay" or equivalent using methods approved by the City. H. Most washing and/or steam cleaning must be done at an appropriately equipped facility that drains to the sanitary sewer. Any outdoor washing or pressure washing must be managed in such a way that there is no discharge or soaps or other pollutants to the storm drain. Sanitary connections are subject to the review, approval and conditions of the sanitary district with jurisdiction for receiving the discharge.

Table 1.A: Applicable City COAs

Issue Area	City COA
	I. All loading areas must be designated to minimize "run-on" or runoff from the area. Accumulated waste water that may contribute to the pollution of stormwater must be drained to the sanitary sewer or intercepted and pretreated prior to discharge to the storm drain system. The property owner shall ensure that BMPs are implemented to prevent potential stormwater pollution. These BMPs shall include, but are not limited to, a regular program of sweeping, litter control and spill cleanup. J. Sidewalks and parking lots shall be swept regularly to prevent the accumulation of litter and debris. If pressure washed, debris must be trapped and collected to prevent entry to the storm drain system. If any cleaning agent or degreaser is used, wash water shall not discharge to the storm drains; wash waters should be collected and discharged to the sanitary sewer. Discharges to the sanitary sewer are subject to the review, approval and conditions of the sanitary district with jurisdiction for receiving the discharge. K. The applicant is responsible for ensuring that all contractors and sub-contractors are aware of and implement all stormwater quality control measures. Failure to comply with the approved construction BMPs shall result in the issuance of correction notices, citations, or a project stop work order.
Tribal Cultural Resources	**COA: Archeological Resources** and **COA: Human Remains**.
	Halt Work/Unanticipated Discovery of Tribal Cultural Resources. In the event that cultural resources of Native American origin are identified during construction, all work within 50 feet of the discovery shall be redirected. The project applicant and project construction contractor shall notify the City Planning Department within 24 hours. The City will again contact any tribes who have requested consultation under AB 52, as well as contact a qualified archaeologist, to evaluate the resources and situation and provide recommendations. If it is determined that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with State guidelines and in consultation with Native American groups. If the resource cannot be avoided, additional measures to avoid or reduce impacts to the resource and to address tribal concerns may be required.

COA = Condition of Approval

2.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist in Chapter 3.0.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Wildfire	☐ Utilities/Service Systems	☐ Mandatory Findings of Significance

2.1 DETERMINATION

On the basis of this initial evaluation:

☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Cecelia Mariscal, Associate Planner _____ Date

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3.0 ENVIRONMENTAL CHECKLIST

3.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☐	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

*a. Would the project have a substantial adverse effect on a scenic vista? **(No Impact)***

No scenic vistas to or from the project site are identified in the City's General Plan. BMC Section 23.502.020 defines a "view corridor" as a "significant view of the Berkeley Hills, San Francisco Bay, Mt. Tamalpais, or a significant landmark such as the Campanile, Golden Gate Bridge, and Alcatraz Island or any other significant vista that substantially enhances the value and enjoyment of real property".[1] Due to the topography of the project site and interviewing residential development, no views of the Berkeley Hills, San Francisco Bay, Mt. Tamalpais, the Campanile, Golden Gate Bridge, or Alcatraz Island are provided from the project site. The proposed 114-square-foot parking pad would not be visible from surrounding public roadways due to the distance from public vantage points, existing topography, and vegetation on and adjacent to the project site. In addition, the proposed concrete retaining wall, fence, and gate would be visually consistent with the surrounding single-family residences. Therefore, the proposed project would not have a substantial effect on a scenic vista or view corridor, and no impact would occur.

*b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? **(No Impact)***

No State scenic highways exist within the City of Berkeley. The nearest officially-designated State scenic highway is the portion of I-580 east of SR-24, approximately 3.3 miles south of the project

[1] City of Berkeley. BMC Section 23.502.020. Website: https://berkeley.municipal.codes/BMC/23.502.020 (accessed July 17, 2024).

site.[2] Therefore, the project site is not located in the vicinity of any State scenic highways and would not be visible from nearby roadways aside from the private driveway. Therefore, the proposed project would not substantially damage scenic resources within view of a State scenic highway, and no impact would occur.

c. In non-urbanized areas, would the project substantially degrade the existing visual character of quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? ***(Less Than Significant Impact)***

As defined in CEQA Guidelines Section 15387, an "urbanized area" refers to a central city or a group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile. Public Resources Code (PRC) Section 21071 defines an urbanized area as an incorporated city that has a population pf at least 100,000 persons. As of July 1, 2023, the City of Berkeley had a population of 118,962 persons.[3] Therefore, the project site is located within an urbanized area as defined by CEQA Guidelines Section 15387 and PRC Section 21071. Therefore, this analysis evaluates whether the proposed project would conflict with applicable zoning and other regulations governing scenic quality.

As noted in Section 1.0, Project Information, the project site is located within the ES-R zoning district. The ES-R district has a maximum site coverage limit of 30 percent, a minimum usable open space requirement of 400 square feet, and a maximum height requirement of two stories (up to 35 feet) for new buildings. The proposed project would construct of a 114-square-foot parking pad; a concrete retaining wall ranging from 2 feet and 6 inches to 3 feet and 6 inches, in height; fence; and a gate on a 11,156-square-foot site with an existing single-family residence. The proposed concrete retaining wall would be located along the eastern portion of the parking pad until it reaches the proposed gate, where it would be located on both the uphill and downhill sides of the existing driveway until it reaches the existing house. No modifications to the existing residential structure are proposed.

The proposed parking pad, concrete retaining wall, fence, and gate would change the visual appearance of the site, which is developed with an existing residence, a paved private driveway, and landscaping, including some mature trees, shrubs, and grasses. However, the proposed parking pad would not be visible from public roadways (i.e., Arden Road) due to the distance from public vantage points, existing topography, and vegetation on and adjacent to the project site. The proposed fence and gate may be visible from public roadways; however, the design of the fence and gate would be consistent with the surrounding residential area. Additionally, the proposed project, which includes related improvements to an existing residential site, would be visually consistent with surrounding land uses and would not conflict with the development standards for the ES-R

[2] California Department of Transportation. 2022. Scenic Highways. Website: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways (accessed April 2024).

[3] United States Census Bureau. 2023. QuickFacts, Berkeley City, California. July 1. Website: https://www.census.gov/quickfacts/fact/table/berkeleycitycalifornia/SBO030217 (accessed July 17, 2024)

zoning district. In addition, as discussed above, the proposed project would not have a substantial effect on a scenic vista or view corridor as none exist from the project site. Therefore, this impact would be less than significant.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ***(No Impact)***

Existing sources of light and glare in the project area include streetlights, vehicle headlights and taillights, and lighting associated with existing homes in the neighborhood. The proposed project would not introduce new sources of light and glare to the project site that do not currently exist as no new lighting is proposed as part of the project. Therefore, the proposed project would not adversely affect daytime or nighttime views in the area, and no impact would occur.

3.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(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?	☐	☐	☐	☒

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? ***(No Impact)***

The project site and vicinity are located within an urban area of the City of Berkeley. There are no agricultural uses located within the City of Berkeley, including on or near the project site. In addition, the City of Berkeley and the site are designated as Urban and Built-Up land by the Department of Conservation's Important Farmland Finder Map.[4] Therefore, development of the proposed project would not convert agricultural lands to non-agricultural uses. Additionally, the proposed project would have no impact on farmlands designated by the State of California as Unique or Prime Farmland, or Farmland of Statewide Importance. As such, no impact would occur.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? ***(No Impact)***

The project site is located within the ES-R zoning district on the City's Zoning Map and is therefore not eligible to enter into a Williamson Act contract.[5] The Land Use Element of the City's General Plan does not designate land for agricultural uses in Berkeley, and no adjacent properties are enrolled in Williamson Act contracts. In addition, as discussed above, the City of Berkeley and the site are designated as Urban and Built-Up land by the Department of Conservation's Important Farmland Finder Map.[6] Therefore, the proposed project would not conflict with existing zoning for an agricultural use or a Williamson Act contract, and no impact would occur.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? ***(No Impact)***

The project site is within the ES-R zoning district on the City's Zoning Map and is located in an urban, developed area. Therefore, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest uses, and no impact would occur.

d. Would the project result in the loss of forest land or conversion of forestland to non-forest use? ***(No Impact)***

The project site and vicinity are not located in an area that is designated as forest land. Therefore, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest uses, and no impact would occur.

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4 California Department of Conservation. 2016. California Important Farmland Finder (map). Website: maps.conservation.ca.gov/dlrp/ciff (accessed April 2024).

5 California Department of Conservation. 2019. Williamson Act Program. Website: https://www.conservation.ca.gov/dlrp/lca (accessed April 2024).

6 California Department of Conservation. 2016. Ibid.

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? ***(No Impact)***

As previously discussed, there are no agricultural uses located within the City of Berkeley, including on or near the project site, and the City of Berkeley and the project site are designated as Urban and Built-Up land by the Department of Conservation's Important Farmland Finder Map.[7] In addition, the project site and vicinity are not located in an area that is designated as forest land.

The proposed project would result in the construction of a 114-square-foot parking pad, concrete retaining wall, fence, and gate on the project site. The project site is surrounded by residential uses, the University of California campus properties, open space, and recreational uses. The Environmental Management Element of the City's General Plan states that "Agriculture in Berkeley is limited to personal and community gardens." No existing or proposed community gardens are located within the vicinity of the site. Additionally, implementation of the proposed project would not reduce sunlight at any personal gardens as improvements to the existing residential site would not be of sufficient height to cast new shadows on adjacent properties.

Therefore, the proposed project would not result in the development of urban uses on a greenfield site, or other physical changes that would result in the conversion of farmland to non-agricultural use or forest land to non-forest use, and no impact would occur.

[7] California Department of Conservation. 2016. Ibid.

3.3 AIR QUALITY

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.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐

The City of Berkeley is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), which regulates air quality in the San Francisco Bay Area. Air quality conditions in the San Francisco Bay Area have improved significantly since the BAAQMD was created in 1955. Ambient concentrations of air pollutants and the number of days during which the region exceeds air quality standards have fallen substantially. In Berkeley, and in the rest of the air basin, exceedances of air quality standards occur primarily during meteorological conditions conducive to high pollution levels, such as cold, windless winter nights or hot, sunny summer afternoons.

Within the BAAQMD, ambient air quality standards for ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than 10 microns and less than 2.5 microns in diameter (PM_{10} and $PM_{2.5}$, respectively), and lead have been set by both the State of California and the federal government. The State has also set standards for sulfate and visibility. The BAAQMD is under State non-attainment status for ozone and particulate matter (both PM_{10} and $PM_{2.5}$) standards. The BAAQMD is classified as non-attainment for the federal ozone 8-hour standard and non-attainment for the federal $PM_{2.5}$ 24-hour standard.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan? ***(Less Than Significant Impact)***

The BAAQMD 2017 Clean Air Plan (Clean Air Plan),[8] adopted on April 19, 2017, is the applicable air quality plan for the air basin. The Clean Air Plan defines control strategies to reduce emissions and ambient concentrations of air pollutants; safeguard public health by reducing exposure to air pollutants that pose the greatest heath risk, with an emphasis on protecting the communities most heavily affected by air pollution; and reduce greenhouse gas (GHG) emissions to protect the climate. Consistency with the Clean Air Plan can be determined if the project: (1) supports the goals of the

[8] Bay Area Air Quality Management District. 2017. *Clean Air Plan*. April 19.

Clean Air Plan; (2) includes applicable control measures from the Clean Air Plan; and (3) would not disrupt or hinder implementation of any control measures from the Clean Air Plan. The project's constancy with the Clean Air Plan is discussed below.

Clean Air Plan Goals. The primary goals of the Bay Area Clean Air Plan are to attain air quality standards, reduce population exposure and protect public health in the Bay Area, and reduce GHG emissions and protect the climate.

The BAAQMD has established significance thresholds for project construction and operational impacts at a level at which the cumulative impact of exceeding these thresholds would have an adverse impact on the region's attainment of air quality standards. The health and hazards thresholds were established to help protect public health. As discussed below under Criterion b, implementation of the proposed project would result in less than significant operation-period emissions and, less than significant construction-period emissions with implementation of standard conditions implementing BAAQMD-required diesel and particulate reduction measures during construction (COA: Public Works - Implement BAAQMD-Required Measures During Construction). Therefore, the proposed project would not conflict with the Clean Air Plan goals.

Clean Air Plan Control Measures. The control strategies of the Clean Air Plan include measures in the following categories: Stationary Source Measures, Transportation Measures, Energy Measures, Building Measures, Agriculture Measures, Natural and Working Lands Measures, Waste Management Measures, Water Measures, and Super-GHG Pollutants Measures. The proposed project's compliance with each of these control measure categories is discussed below.

Stationary Source Control Measures. The Stationary Source Control Measures, which are designed to reduce emissions from stationary sources such as metal melting facilities, cement kilns, refineries, and glass furnaces, are incorporated into rules adopted by the BAAQMD and then enforced by the BAAQMD Permit and Inspection programs. Since the proposed project would not include any of these stationary sources, the Stationary Source Control Measures of the Clean Air Plan are not applicable to the proposed project.

Transportation Control Measures. The BAAQMD identifies Transportation Control Measures as part of the Clean Air Plan to decrease emissions of criteria pollutants, toxic air contaminants (TACs), and GHGs by reducing demand for motor vehicle travel, promoting efficient vehicles and transit service, decarbonizing transportation fuels, and electrifying motor vehicles and equipment. The project site is currently developed with an existing approximately single-family residence. The proposed project would result in the construction of a 114-square-foot parking pad, concrete retaining wall, fence, and gate to be associated with the existing residential use on the project site. The proposed project would not result in an increase in the generation of vehicle trips or vehicle miles traveled (VMT). Therefore, the proposed project would not conflict with the BAAQMD's initiatives to reduce vehicle trips and vehicle miles traveled.

Energy Control Measures. The Clean Air Plan also includes Energy Control Measures, which are designed to reduce emissions of criteria air pollutants, TACs, and GHGs by decreasing the amount of electricity consumed in the Bay Area, as well as decreasing the carbon intensity of the electricity used by switching to less GHG-intensive fuel sources for electricity generation.

Since these measures apply to electrical utility providers and local government agencies (and not individual projects), the energy control measures of the Clean Air Plan are not applicable to the proposed project.

Building Control Measures. The BAAQMD has authority to regulate emissions from certain sources in buildings such as boilers and water heaters, but it has limited authority to regulate buildings themselves. Therefore, the strategies in the control measures for this sector focus on working with local governments that do have authority over local building codes to facilitate adoption of best GHG control practices and policies. The proposed project would be required to comply with the 2019 Title 24 standards. Therefore, the proposed project would not conflict with these measures.

Agriculture Control Measures. The Agriculture Control Measures are designed to primarily reduce emissions of methane. Since the proposed project does not include any agricultural activities, the Agriculture Control Measures of the Clean Air Plan are not applicable to the proposed project.

Natural and Working Lands Control Measures. The Natural and Working Lands Control Measures focus on increasing carbon sequestration on rangelands and wetlands, as well as encouraging local governments to adopt ordinances that promote urban-tree plantings. Since the proposed project does not include the disturbance of any rangelands or wetlands, the Natural and Working Lands Control Measures of the Clean Air Plan are not applicable to the proposed project.

Waste Management Control Measures. The Waste Management Control Measures focus on reducing or capturing methane emissions from landfills and composting facilities, diverting organic materials away from landfills, and increasing waste diversion rates through efforts to reduce, reuse, and recycle. The proposed project would comply with local requirements for waste management (e.g., recycling and composting services). Therefore, the proposed project would be consistent with the Waste Management Control Measures of the Clean Air Plan.

Water Control Measures. The Water Control Measures focus on reducing emissions of criteria pollutants, TACs, and GHGs by encouraging water conservation, limiting GHG emissions from publicly owned treatment works (POTWs), and promoting the use of biogas recovery systems. Since these measures apply to POTWs and local government agencies (and not individual projects), the Water Control Measures are not applicable to the proposed project.

Super GHG Control Measures. The Super-GHG Control Measures are designed to facilitate the adoption of best GHG control practices and policies through the BAAQMD and local government agencies. Since these measures do not apply to individual projects, the Super-GHG Control Measures are not applicable to the proposed project.

Clean Air Plan Implementation. As discussed above, the proposed project would generally implement the applicable measures outlined in the Clean Air Plan, including Transportation Control Measures. Therefore, the proposed project would not disrupt or hinder implementation of a control measure from the Clean Air Plan and this impact would be less than significant.

b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? ***(Less Than Significant Impact)***

The BAAQMD is currently designated as a non-attainment area for State and national ozone standards and for national particulate matter ambient air quality standards. The BAAQMD's non-attainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in non-attainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The following analysis assesses the potential construction- and operation-related air quality impacts and CO impacts.

Construction Emissions. The BAAQMD developed screening criteria to provide lead agencies with a conservative indication of whether a proposed project would result in potentially significant air quality impacts. If all of the screening criteria are met by a proposed project, then the lead agency would not need to perform a detailed air quality assessment of the proposed project's emissions. These screening levels are generally representative without any form of mitigation measures taken into consideration. In addition, the screening criteria do not account for project design features, attributes, or local development requirements that could also result in lower emissions.

For single-family residential land uses, the BAAQMD screening size for construction criteria pollutants is 114 units. The proposed project would result in the construction of accessory structures to an existing residential use; therefore, based on the projects proposed scope of work, construction activities associated with the proposed project are not anticipated to exceed established thresholds. Additionally, the City of Berkeley requires implementation of the BAAQMD's Basic Construction Mitigation Measures, which are required by COA: Public Works - Implement BAAQMD-Recommended Measures During Construction, to reduce construction fugitive dust impacts to a less than significant level. Development projects that require a Use Permit are required to comply with the following COA that addresses potential impacts during construction. With implementation of this COA, construction impacts would be less than significant.

> ***COA Public Works - Implement BAAQMD-Recommended Measures During Construction*****.** For all proposed projects, BAAQMD recommends implementing all the Basic Construction Mitigation Measures, listed below to meet the best management practices threshold for fugitive dust:
>
> A. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

B. All haul trucks transporting soil, sand, or other loose material off site shall be covered.

C. All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

D. All vehicle speeds on unpaved roads shall be limited to 15 mph.

E. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

F. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

G. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

H. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Operational Emissions. As discussed above, the BAAQMD developed screening criteria to determine whether a project requires an analysis of project-generated criteria air pollutants. If all the screening criteria are met by a proposed project, then the lead agency does not need to perform a detailed air quality assessment.

For single-family residential land uses, the BAAQMD screening size for operational criteria pollutants is 325 units. The proposed project would result in the construction of accessory structures to an existing residential use; therefore, based on the BAAQMD's screening criteria, the proposed project is not anticipated to exceed established thresholds. Therefore, proposed project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project is in non-attainment under applicable federal or State ambient air quality standards. Impacts would be less than significant.

Localized CO Impacts. Emissions and ambient concentrations of CO have decreased dramatically in the Bay Area with the introduction of the catalytic converter in 1975. No exceedances of the State or federal CO standards have been recorded at Bay Area monitoring stations since 1991. The BAAQMD's 2017 California Environmental Quality Act (CEQA) Guidelines include recommended methodologies for quantifying concentrations of localized CO levels for proposed transportation projects. A screening-level analysis using guidance from the BAAQMD CEQA Guidelines was performed to determine the impacts of the project. The screening methodology provides a

conservative indication of whether the implementation of a proposed project would result in significant CO emissions. According to the BAAQMD's CEQA Guidelines, a proposed project would result in a less than significant impact to localized CO concentrations if the following screening criteria are met:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, and the 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 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, or below-grade roadway).

Implementation of the proposed project would not conflict with standards established by the Alameda County Transportation Commission (ACTC) for designated roads and highways, a regional transportation plan, or other agency plans. The proposed project would involve improvements that would support the existing residential use and would not result in additional trip generation. Therefore, the proposed project would not contribute to peak-hour traffic volumes at intersections in the vicinity of the project site, which are all well below 44,000 vehicles per hour. As such, the proposed project would not result in localized CO concentrations that exceed State or federal standards and impacts would be less than significant.

c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? ***(Less Than Significant Impact)***

Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers. Individuals particularly vulnerable to diesel particulate matter are children, whose lung tissue is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to diesel particulate matter. Exposure from diesel exhaust associated with construction activity contributes to both cancer and chronic noncancer health risks. The closest sensitive receptors to the project site include low- and medium-density residential uses located on all sides of the project site, with the nearest receptor located approximately 20 feet north of the project site.

Construction of the proposed project may expose these surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). As discussed above, the BAAQMD screening size for construction criteria pollutants for single-family residential land uses is 114 units. As the proposed project would result in the construction of accessory structures to an existing residential use, construction activities associated with the proposed project are not anticipated to exceed established thresholds. Therefore, with implementation of standard conditions that would implement BAAQMD-required

diesel and particulate reduction measures during construction (COA: Public Works - Implement BAAQMD-Required Measures During Construction) and require equipment controls to reduce diesel particulate matter for off-road construction equipment, project construction pollutant emissions would be below the BAAQMD significance thresholds. Once the project is constructed, the project would not be a source of substantial pollutant emissions. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during project construction and operation, and potential impacts would be less than significant.

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

During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed project would not include any activities or operations that would generate objectionable odors, and once operational, the proposed project would not be a source of odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. This impact would be less than significant.

3.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
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?	☐	☐	☐	☒

To establish existing conditions related to biological resources, the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDB)[9] was reviewed for lists of special-status species that have occurred or could occur on or near the site.

The northeastern corner of the project site is currently developed with a 2,662-square-foot, three-story, single-family residence. The remainder of the project site consists of a paved private driveway and landscaping, including some mature trees, shrubs, and grasses. One coast live oak (*Quercus agrifolia*) is present on the project site.

A total of 3 special-status plant species and 16 special-status wildlife species have CNDDB occurrences within 5 miles of the project site, as provided in Table 3.A. The CNDDB has occurrences for two Sensitive Natural Communities (Northern Coastal Salt March and Northern Maritime

[9] California Department of Fish and Wildlife. 2022. California Natural Diversity Database, commercial version dated April 2022. Biogeographic Data Branch, Sacramento.

Chaparral) within 5 miles of the site. None of these communities are present on or adjacent to the site.

Table 3.A: Special Status Species Within 5 Miles of the Project Site

Species	Taxonomic Group	Federal Listing	State Listing
Animals			
Green sturgeon (*Acipenser medirostris*)	Fish	Threatened	None[1]
Longfin smelt (*Spirinchus thaleichthys*)	Fish	Candidate	Threatened
Tidewater goby (*Eucyclogobius newberryi*)	Fish	Endangered	None[1]
Western bumble bee (*Bombus occdentalis*)	Insect	None	Candidate Endangered
Bay checkerspot butterfly (*Euphydryas editha bayensis*)	Insect	Threatened	None
Monarch (*Danaus plexippus plexippus*)	Insect	Candidate	None[2]
Foothill yellow-legged frog (*Rana boylii*)	Amphibian	Threatened	Endangered
California red-legged frog (*Rana draytonii*)	Amphibian	Threatened	None
Western pond turtle (*Emys marmorata*)	Reptile	Threatened	Threatened
Alameda whipsnake (*Masticophis lateralis euryxanthus*)	Reptile	Threatened	Threatened
Bald eagle (*Haliaeetus leucocephalus*)	Bird	Delisted	Endangered
California black rail (*Laterallus jamaicensis coturniculus*)	Bird	None	Threatened[3]
California Ridgeway's rail (*Rallus obsoletus obsoletus*)	Bird	Endangered	Endangered[3]
American peregrine falcon (*Falco peregrinus anatum*)[4]	Bird	Delisted	Delisted
White-tailed kite (*Elanus leucurus*)[5]	Bird	None	None[3]
Cooper's hawk (*Accipiter cooperi*)[6]	Bird	None	None
Plants			
Santa Cruz tarplant (*Holocarpha macradenia*)	Dicot	Threatened	Endangered
California seablite (*Suaeda califórnica*)	Dicot	Endangered	None
Pallid Manzanita (*Arctostaphylos pallida*)	Dicot	Threatened	Endangered

Source: Compiled by LSA (2024).

1. Species is not on the State Endangered/Threatened Species list but is considered a California Species of Special Concern.
2. Winter colonies recognized by CDFW and USFWS as a sensitive species in California and tracked by the CNDDB, but do not have a special status.
3. Species also considered a California Fully Protected Species.
4. American peregrine falcon is delisted on both the Federal and State Endangered/Threatened Species list, but it is considered a sensitive species.
5. The white-tailed kite is not a listed species, but it is a Fully Protected species under California Fish and Game Code.
6. The Cooper's hawk is also not a listed species, but it is tracked by the CNDDB because it is on the CDFW Watch list.

CDFW = California Department of Fish and Wildlife
CNDDB = California Natural Diversity Database

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

The project site has negligible value as habitat for any species listed as endangered or threatened by the federal Endangered Species Act or California Endangered Species Act. Due to the lack of suitable vegetation communities or soil substrates (e.g., salt marsh, open water, chaparral, alkaline substrates) and prior disturbance (e.g., landscaping, grading, construction) at the site, none of the special-status

plant species are expected to occur on the site. Similarly, no suitable habitat (e.g., streams, marshes, or chaparral) for most of the special-status wildlife in the area occurs on the site. Therefore, 14 of the 16 special-status wildlife species are not expected to occur on the site.

There is some potential that two special-status species—the white-tailed kite (*Elanus leucurus*) and Cooper's hawk (*Accipiter cooperi*)—could nest in trees on or adjacent to the site. Each species has one CNDDB occurrence within 5 miles of the site. The white-tailed kite is not a listed species, but it is a Fully Protected species under the California Fish and Game Code. The Cooper's hawk is also not a listed species, but it is tracked by the CNDDB because it is on the CDFW Watch list. Both species are locally common.

All native birds and their nests, regardless of their regulatory status, are protected by California Fish and Game Code. If conducted during the breeding season (February through August), vegetation removal and other demolition or construction activities could directly impact nesting birds by removing trees and/or vegetation, or structures that support active nests. Implementation of COA: Avoid Disturbance of Nesting Birds, listed below, would ensure that potential impacts to special-status species would be less than significant.

> ***COA: Avoid Disturbance of Nesting Birds.*** Initial site disturbance activities, including vegetation and concrete removal, shall be prohibited during the general avian nesting season (February 1 to August 31), if feasible. If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and activity status of any active nests on or adjacent to the project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the Migratory Bird Treaty Act and the California Fish and Game Code, nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation and concrete removal. In the event that active nests are discovered, a suitable buffer (typically a minimum buffer of 50 feet for passerines 250 feet for raptors) shall be established around such active nests and no construction shall be allowed inside the buffer areas until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). No ground-disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 31 and January 31.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ***(No Impact)***

The proposed project would not adversely affect any riparian habitat, which is absent from the site. Northern Coastal Salt Marsh and Northern Maritime Chaparral are the only special-status natural

communities that the CNDDB lists as being within 5 miles of the site.[10] Neither of these communities is present on or adjacent to the site, and neither would be affected by the proposed project. Therefore, there would be no impact to riparian habitats or sensitive natural communities.

c. Would the project have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? ***(No Impact)***

No potential State or federally protected wetlands are present on the project site.[11] Therefore, the proposed project would have no impact related to State or federally protected wetlands.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? ***(Less Than Significant Impact)***

The project site is located in an urbanized area of the City of Berkeley and is surrounded by residential development on all sites. Most of the species that likely use the site are "generalists" that are adept at moving through urban landscapes. However, trees, shrubs, other vegetation, and structures have the potential to support nests of many common native bird species. All native birds and their nests, regardless of their regulatory status, are protected by California Fish and Game Code. If conducted during the breeding season (February through August), vegetation removal and other demolition or construction activities could directly impact nesting birds by removing trees and/or vegetation, or structures that support active nests. Implementation of COA: Avoid Disturbance of Nesting Birds would ensure that potential impacts to nesting birds would be less than significant.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? ***(No Impact)***

[10] California Department of Fish and Wildlife. 2022. Ibid.

[11] U.S. Fish and Wildlife Service. National Wetlands Inventory, Surface Waters and Wetlands. Website: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/ (accessed July 18, 2024).

BMC Section 12.44.020[12] protects certain trees, and the City's Coast Live Oak Tree Ordinance[13] restricts removal of certain coast live oaks within the city. One coast live oak is present on the project site adjacent to the proposed construction area and is considered a protected tree under City ordinances. The proposed project would not include the removal of any trees, and construction activities would not adversely affect the coast live oak. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources, and the project would have no impact.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? ***(No Impact)***

The project site is not subject to any adopted habitat conservation plan or natural community conservation plan. Therefore, the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan and no impact would occur.

12 BMC Section 12.44.020: "It is unlawful for any person to cut, trim, remove, mutilate, injure or in any way impair the growth of any tree, shrub or plant being or growing in or on any public property within the City, or to cause or permit the same to be done. Provided, however, that in the event that any person desires permission to cut, trim, remove or in any way impair the natural growth of any such tree, shrub or plant, application shall first be made to the Director of Recreation and Parks for a permit therefor. Upon receipt of such application, the Director of Recreation and Parks may cause an inspection to be made and may thereafter issue or refuse to issue a permit for such work. Provided, further, that whenever it is deemed necessary by the Director of Recreation and Parks, he may require the work specified in said application, or any part thereof, to be done under his supervision, and the cost of such supervision shall be borne by the applicant if so determined by the Director of Recreation and Parks."

13 Coast Live Oak Tree Ordinance (Ordinance No. 6,905 N-S): "a) A moratorium is declared on the removal of any single stem coast live oak tree of a circumference of 18 inches or more or any multi-stemmed coast live oak with an aggregate circumference of 26 inches or more at a distance of four feet up from the ground; b) Any pruning of a coast live oak that is excessive and injurious (removal of more than one-fourth of the functioning leaf, stem, or root system in any 24 month period) to the tree is prohibited; and c) an exception may be made if the City Manager, or his designee, finds that the protected tree is a danger to life or limb due to the condition of the tree, or is in danger to property, and that the only mitigation would be removal of the tree."

3.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐
b. Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?	☐	☐	☒	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

The entire 59 Arden Road property, including the existing residence on the project site, is a contributing element to the Panoramic Hill Historic District (District), a resource consisting of 95 elements (i.e., buildings, structures, objects, paths) of which 76 are contributing resources, and 19 that are not considered contributing to the overall historic district eligibility. The proposed project would occur on a 0.26-acre site comprising two parcels (APNs 055-1862-037 and 055-1862-038), which represents 2 percent of the District's 12.3-acre size. The residence and garage at 59 Arden Road rests on APN 055-1862-037. The other parcel is vacant and contains gardens and seating area, surface pathways, and a driveway that parallels Arden Road and terminates short of the house. This District was evaluated by the Berkeley Architectural Heritage Association (BAHA) in November 2004 and formally included in the National Register of Historic Places (NRHP) on October 21, 2005.

The property as a whole, including the single-family structure and the existing facilities, are contributing elements to the NRHP-listed historic district (Panoramic Hill Historic District) but are not individually eligible for the NRHP. Accordingly, its significance is based on its contribution to the larger resource, and impacts to one element are not as consequential to maintaining historical significance as resources found individually eligible.

The single-family residence located at 9 Arden Road, directly south of and adjacent to 59 Arden Road, is a (APN 055-1862-039), was determined to be a noncontributing element to the District. For this reason, indirect impacts from project implementation to neighboring resources (9 Arden Road) are not further discussed in this analysis.

*a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? **(Less Than Significant Impact)***

According to the *CEQA Guidelines*, a proposed project may have a significant effect on the environment if it would create "an effect that may cause a substantial adverse change in the significance of a historical resource." Specifically, substantial adverse changes include "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (*CEQA Guidelines* §15064.5(b)(1)).

Generally, with respect to mitigating such impacts, a project that follows the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*[14] (Secretary's Standards) shall be considered as mitigated to a level of less than a significant impact on the historical resource (CEQA Guidelines Section 15064.5(b)(3)). Therefore, a project's impact on a historical resource can be considered less than significant if the project is implemented in accordance with the Secretary's Standards.

Secretary's Standards. Because the building at 59 Arden Road is a contributing element to the District, it is a historical resource under CEQA; therefore, the proposed project should comply with the Secretary's Standards in order to lessen or avoid potentially significant impacts to historic resources. The Secretary's Standards provide guidance for working with historic properties (and historical resources under CEQA) and are used by federal agencies and local governments to evaluate proposed rehabilitation, restoration, preservation, and reconstruction work on historical resources; they are applied to a wide variety of resource types, including buildings, sites, structures, objects, and districts.

The Secretary's Standards comprise four sets of standards to guide the treatment of historic properties and historical resources: Preservation, Rehabilitation, Restoration, and Reconstruction. Typically, one set of standards is chosen for a project based on the project scope. These four distinct treatments are defined as follows:

- **Preservation:** The Standards for Preservation "... require retention of the greatest amount of historic fabric, along with the building's historic form, features, and detailing as they have evolved over time."

- **Rehabilitation:** The Standards for Rehabilitation "... acknowledge the need to alter or add to a historic building to meet continuing new uses while retaining the building's historic character."

- **Restoration:** The Standards for Restoration "... allow for the depiction of a building at a particular time in its history by preserving materials from the period of significance and removing materials from other periods."

- **Reconstruction:** The Standards for Reconstruction "... establish a limited framework for re-creating a vanished or non-surviving building with new materials, primarily for interpretive purposes." [15]

Typically, one set of standards is chosen for a project based on the project scope. For the purposes of this impacts assessment, the proposed project would physically alter portions or features of the property at 59 Arden Road (through the construction of a new parking pad, fence, and gate), which

[14] Weeks, Kay D., and Anne Grimmer. 2017. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*. U.S. Department of the Interior, National Park Service, Technical Preservation Services, Washington, D.C.

[15] Ibid. Pages 2-3.

is one of 76 contributing elements to the District; however, there is negligible potential that the project, which would minimally alter approximately 2 percent of the total District, would diminish this resource to such a degree that the collective significance of the entire 12.3-acre resource would be lost. A resource should sufficiently retain integrity of setting to convey its significance. As part of the evaluation of integrity of setting, National Park Service guidance states that "physical features and their relationships should be examined not only within the exact boundaries of the property, but also between the property and its *surroundings* [emphasis in original]."[16]

The District, as a collection of 76 contributing elements and 19 noncontributing elements, retains sufficient integrity of both its immediate setting (within the boundaries of the parcels that contribute elements) and its contextual setting (between the properties and their surroundings) to convey its significance under Criterion C. Criterion C applies to properties that represent an important example of period architecture, landscape, or engineering. According to the NRHP nomination prepared by the Berkeley Architectural Heritage Association, the District's significance lies primarily for its collective ability as a representative example of the "*first phase associated with the Arts and Crafts Movement. The district includes notable houses by architects Ernest Coxhead, Bernard Maybeck, Julia Morgan, Walter Steilberg, and others; a distinctive street plan; and paths and steps that provide pedestrian circulation*."[17]

In terms of the Secretary's Standards, only one treatment standard, Rehabilitation, addresses potential impacts to the setting by new construction; therefore, the degree to which the project conforms to the Standards for Rehabilitation would serve as the basis for evaluating its potential impacts to the District and its *collective* integrity and significance. Of the 10 Standards for Rehabilitation issued, only two, Standards 9 and 10, most directly address new construction and are applicable to this impact assessment. Rehabilitation Standards 9 and 10 are quoted below.

- **Standard 9:** New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

- **Standard 10:** New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

As specified in Rehabilitation Standard 9, the new work shall protect the historic integrity of a historical resource. The National Park Service defines integrity as "the ability of a property to convey its significance".[18] The seven aspects of integrity are: *location*, *design*, *setting*, *materials*, *workmanship*, *feeling*, and *association*. Under Criterion C (the criterion under which the District is

16 National Park Service. 1997. *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*. United States Department of the Interior, National Park Service, Cultural Resources, National Register, History and Education, Washington D.C. Page 45.

17 Berkeley Architectural Heritage Association (BAHA). 2004. *National Register of Historic Places Registration Form: Panoramic Hill*. BAHA, Berkeley, California. Section 8, page 1. Copy on file at LSA.

18 National Park Service. 1997. N*ational Register Bulletin 15.*

listed on the NRHP), a property must retain the physical features that made up its character or appearance during the period of its association with the important person, in this case, "those physical features that characterize the type, period, or method of construction that the property [i.e., the District] represents." Ideally, resources eligible under Criterion C should retain "*design*, *workmanship*, and *materials* [as these are] usually more important than *location*, *setting*, *feeling*, and *association*."[19]

The National Park Service Technical Preservation Services Branch issued *New Construction within the Boundaries of Historic Properties*, which provides supplemental practical guidance, based on the Secretary's Standards, for incorporating new construction within historic contexts. The core tenet of the guidance is that "new construction needs to be built in a manner that protects the integrity of the historic building(s) and the property's setting."[20] While the proposed project would not change the built environment at 59 Arden Road, elements of the guidance are applicable for the assessment of project-related indirect impacts to 59 Arden Road and the District to which it contributes. A historical resource's context and setting includes aspects of the surrounding area that help modern visitors understand the historical resource in its historical context. These aspects can include, but are not limited to: massing, spacing, density, materials, street setbacks, and curtilage. National Park Service guidance provides the following instructive concepts:

1. *Related new construction – including buildings, driveways, parking lots, landscape improvements and other new features – must not alter the historic character of a property. A property's historic function must be evident even if there is a change of use.*

2. *The location of new construction should be considered carefully in order to follow the setbacks of historic buildings and to avoid blocking their primary façades. New construction should be placed away from or at the side or rear of historic buildings and must avoid obscuring, damaging, or destroying character-defining features of these buildings or the site.*

3. *Protecting the historic setting and context of a property, including the degree of open space and building density, must always be considered when planning new construction on an historic site. This entails identifying the formal or informal arrangements of buildings on the site, and whether they have a distinctive urban, suburban, or rural character. For example, a historic building traditionally surrounded by open space must not be crowded with dense development.*

4. *In properties with multiple historic buildings, the historic relationship between buildings must also be protected. Contributing buildings must not be isolated from one another by the insertion of new construction.*

5. *As with new additions, the massing, size, scale, and architectural features of new construction on the site of a historic building must be compatible with those of the historic building. When visible and in close proximity to historic buildings, the new construction must be subordinate to these*

19 Ibid. Page 48.

20 National Park Service. 2007. *New Construction within the Boundaries of Historic Properties*. Historic Preservation Tax Incentives. United States Department of the Interior, National Park Service, Cultural Resources and Partnerships and Science Directorate. Washington, D.C. Website: https://www.nps.gov/subjects/taxincentives/new-construction-in-historic-properties.htm (accessed May 9, 2024).

buildings. New construction should also be distinct from the old and must not attempt to replicate historic buildings elsewhere on site and to avoid creating a false sense of historic development.

6. *The limitations on the size, scale, and design of new construction may be less critical the farther it is located from historic buildings.*

7. *As with additions, maximizing the advantage of existing site conditions, such as wooded areas or drops in grade, that limit visibility is highly recommended.*

8. *Historic landscapes and significant viewsheds must be preserved. Also, significant archeological resources should be taken into account when evaluating the placement of new construction, and, as appropriate, mitigation measures should be implemented if the archeological resources will be disturbed.*[21]

Secretary's Standards Compliance Assessment. Table 3.B presents the results of a Rehabilitation Standards-based assessment of the proposed project in relation to the NRHP-listed Panoramic Hill Historic District. The following assessment matrix analyzes the potential for project-related indirect impacts to the District.

- ***Rehabilitation Standard 1:*** *A property would be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.*

  The building on the project site at 59 Arden Road was built in 1912 as a single-family residence, a use that has continued to the present. An attached garage was built on the south-facing façade in 1924. The building's physical location and footprint have not changed since construction. The proposed project would not alter or change in any way the workmanship, materials, or design of the house or facilitate a new use.

  As designed, the proposed project *would be compliant* with Rehabilitation Standard 1.

- ***Rehabilitation Standard 2:*** *The historic character of a property would be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize the property would be avoided.*

  The historic character of 59 Arden Road is conveyed by its Craftsman architectural qualities expressed as a bungalow building type. The proposed project would, as described above in Rehabilitation Standard 1, not result in any change to the residence. The project would replace damaged and broken paving, install a segment of wooden fence atop a short concrete retaining wall to partially enclose a parking pad and install an entrance gate and a brick path that leads toward the house. The proposed project would remove the southernmost section of a tall privacy hedge currently blocking views of and through 59 Arden Road toward West Berkeley, Oakland, San Francisco Bay, and beyond.

[21] National Park Service. 2007. *New Construction within the Boundaries of Historic Properties.*

Table 3.B: Secretary's Standards for Rehabilitation – Jack House Property

Rehabilitation Standard	Compliant	Not Compliant	Not Applicable
Standard 1: *A property would be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.*	**X**		
Standard 2: *The historic character of a property would be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize the property would be avoided.*	**X**		
Standard 3: *Each property would be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historical properties, would not be undertaken.*	**X**		
Standard 4: *Changes to a property that have acquired significance in their own right would be retained and preserved.*	**X**		
Standard 5: *Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property would be preserved.*	**X**		
Standard 6: *Deteriorated historic features would be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature would match the old in design, color, texture, and, where possible, materials. Replacement of missing features would be substantiated by documentary and physical evidence.*	**X**		
Standard 7: *Chemical or physical treatments, if appropriate, would be undertaken using the gentlest means possible. Treatments that cause damage to historic materials would not be used.*			**X**
Standard 8: *Archaeological resources would be protected and preserved in place. If such resources must be disturbed, mitigation measures would be undertaken.*			**X**
Standard 9: *New additions, exterior alterations, or related new construction would not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and would be compatible with the historic materials, features, size, scale, proportion, and massing to protect the integrity of the property and environment.*	**X**		
Standard 10: *New additions and adjacent or related new construction would be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*	**X**		

As proposed, the project would not alter any of the collective architectural features that underpin the District's collective significance under NRHP Criterion 3. The proposed project would alter approximately 2 percent of the total 12.3-acre District and not affect any of the property's primary contributing elements. When completed, the project would not in any way alter or diminish the collective character-defining features to such a degree that the 12.3-acre District would be no longer comprehensible as a historical resource due to project implementation.

As designed, the proposed project *would be compliant* with Rehabilitation Standard 2.

- ***Rehabilitation Standard 3:*** *Each property would be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historical properties, would not be undertaken.*

  The proposed project would not alter or remove the residence at 59 Arden Road. All the other contributing elements within the District would remain at their historical locations and in their historical orientations. As described above in Rehabilitation Standards 1 and 2, the project, as proposed, would not alter any of the District's character-defining features or introduce any new, nonhistorical uses, and would repair damaged or missing materials at ground level. The project would replace a deteriorating driveway, expand a curb cutout, and install a new fence and gate atop a concrete retaining wall. The proposed wooden fence and gate are designed to reflect a general Craftsman-derived aesthetic. When completed, the historic functions, orientations, and arrangement of the built environment features currently on the parcel would remain while enhancing the functional use of the southeastern corner of the parcel.

  As designed, the proposed project *would be compliant* with Rehabilitation Standard 3.

- ***Rehabilitation Standard 4:*** *Changes to a property that have acquired significance in their own right would be retained and preserved.*

  According to the NRHP nomination prepared by BAHA, the residence and garage at 59 Arden Road were constructed in 1912 and 1924, respectively. All the building's character-defining elements were present since their respective period of construction; no additional features have subsequently acquired significance since the BAHA recordation in 2004.

  As designed, the proposed project *would be compliant* with Rehabilitation Standard 4.

- ***Rehabilitation Standard 5:*** *Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property would be preserved.*

  The distinctive materials, features, finishes of 59 Arden Road represents the cohesive Craftsman qualities and historic character of this 12.3-acre District. The proposed project would, as described above in Rehabilitation Standard 1, not change the location and building footprint, which have remained since construction. The proposed project would not alter or change in any way its workmanship, materials, or design or introduce a new use. As described above in Rehabilitation Standard 3, the proposed project would replace a section of deteriorating

driveway, add a parking pad, expand a curb cutout, and install a new wooden fence and gate atop a short concrete retaining wall. The proposed fence and gate are designed to reflect the District's natural and Craftsman-derived aesthetic. When completed, the historic functions, orientations, and arrangement of the built environment features of 59 Arden Road would remain and the District would continue to convey its significance as a historical resource because of project implementation.

As designed, the proposed project *would be compliant* with Rehabilitation Standard 5.

- ***Rehabilitation Standard 6:*** *Deteriorated historic features would be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature would match the old in design, color, texture, and, where possible, materials. Replacement of missing features would be substantiated by documentary and physical evidence.*

  The Craftsman bungalow architectural qualities of 59 Arden Road would not be removed. As described above in Rehabilitation Standards 3 and 5, the proposed project would replace a deteriorating driveway, expand a curb cutout, and install a new fence and gate. The proposed fence and gate are designed to reflect the District's natural and Craftsman-derived aesthetic. When completed, the historic functions, orientations, and arrangement of the built environment features currently on the parcel would remain and the District would continue to convey its significance as a historical resource as a result of project implementation.

  As designed, the proposed project *would be compliant* with Rehabilitation Standard 6.

- ***Rehabilitation Standard 7:*** *Chemical or physical treatments, if appropriate, would be undertaken using the gentlest means possible. Treatments that cause damage to historic materials would not be used.*

  The proposed project would preserve and protect the materials, workmanship, and design of the residence and garage at 59 Arden Road, which are the principal elements that allow this property to be eligible as a contributing element of this 12.3-acre District.

  As designed, the proposed project *would be compliant* with Rehabilitation Standard 7.

- ***Rehabilitation Standard 8:*** *Archaeological resources would be protected and preserved in place. If such resources must be disturbed, mitigation measures would be undertaken.*

  The environmental review of this project under CEQA would account for the potential occurrence of archaeological deposits, assess potential impacts, and impose mitigation to avoid, or substantially lessen, potential impacts.

  As designed, the proposed project *would be compliant* with Rehabilitation Standard 8.

- ***Rehabilitation Standard 9:*** *New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic*

materials, features, size, scale, proportion, and massing to protect the integrity of the property and environment.

The intent of Rehabilitation Standard 9 is to avoid or limit potential actions that would diminish the integrity of a historical resource as the result of new construction. As previously mentioned, the most relevant aspects of integrity for NRHP-listed properties under Criterion C (association with a type, period, or method of construction, or represents the work of a master, or possess high artistic values) are *design*, *workmanship*, and *materials*. Integrity of *location*, *setting*, *feeling*, or *association* are less critical.[22]

As stated above, the basic integrity test for properties that are significant under NRHP Criterion C is whether the property retains the physical character-defining features that convey its significance as a period architectural specimen. The following section analyzes the key aspects of integrity for the project site at 59 Arden Road, as well as the District to which it contributes, and provides determinations regarding the impact(s) of the proposed project.

Integrity of *design* is the place where the historical resource was constructed or the place where the historic event occurred. The Craftsman bungalow residence and attached garage would remain in their historical configurations and the Craftsman architectural qualities would remain untouched. Accordingly, the proposed project would not alter the design integrity of the house or any of the other 75 contributing elements within the 12.3-acre District to which it contributes.

Integrity of *workmanship* is the physical evidence of the crafts of a particular culture or people during any given period ion history or prehistory. As described above in integrity of design, the aspects of workmanship that when assembled from a representative example of a Craftsman bungalow, would remain in place as currently configured. Any alterations the building sustained since construction 112 years ago would remain as they were when the BAHA included 59 Arden Road among the 76 contributing elements to the District in 2004. As an aspect of a larger resource, the threshold of alterations and changes to an individual contributing element are less consequential when part of a larger collection of elements than those found individually eligible. Accordingly, the proposed project would not alter the design integrity of the house or any of the other 75 contributing elements within the 12.3-acre District to which it contributes.

Finally, integrity of *materials* reflects the physical elements that were assembled, combined, or deposited during a particular period of time in a particular pattern or configuration. Integrity of materials assesses whether sufficient authenticity of a historical resource remains. The project will not alter the materials that make up the Craftsman bungalow residence and attached garage. The proposed alterations would occur at ground level or in the southeastern portion of the parcels that comprise the 0.26-acre property at 59 Arden Road. The use of exposed concrete and wooden fence would be in harmony with the overall aesthetic of the District's built

[22] National Park Service. 1997. N*ational Register Bulletin 15.* Page 48.

environment. As stated in the 2004 NRHP nomination, "In these various ways, the hillside development of houses, retaining walls, streets, fountains, and fences is in tune with nature."[23]

- New Construction within the Boundaries of Historic Properties: The following are applicable considerations provided in the document entitled *New Construction within the Boundaries of Historic Properties*.[24] Although new construction would not occur within the boundaries of a historic property, the selected aspects are useful in assessing the project's compliance with Rehabilitation Standard 9. Each of the eight aspects is discussed below:

  1. *Related new construction – including buildings, driveways, parking lots, landscape improvements and other new features – must not alter the historic character of a property. A property's historic function must be evident even if there is a change of use.*

     The proposed project would repair existing ground-level infrastructure on a parcel that comprises approximately than 2 percent of the total 12.3-acre District. When completed, the function of this portion of the parcel and the District would be unchanged. When completed, the project would not introduce a new use onto this property or within the District as a whole.

  2. *The location of new construction should be considered carefully in order to follow the setbacks of historic buildings and to avoid blocking their primary elevations. New construction should be placed away from or at the side or rear of historic buildings and must avoid obscuring, damaging, or destroying character-defining features of these buildings or the site.*

     The proposed improvement would occur at the southeastern portion of the 0.26-acre parcel, approximately 75 feet from the residence. No impacts to building setbacks would occur. The driveway, curb cut, and fencing are not described as elements that underpin the eligibility of 59 Arden Road as a contributing element to the NRHP-listed District. The improvements would not alter or obscure views of the house to a degree higher than was extant when the house was identified as a contributing element to the District 20 years ago. Improvements would occur at the furthest distance from the house and/or at ground level. Views of the residence at 59 Arden Road or of the District's surrounding environment would not be obscured by new construction.

  3. *Protecting the historic setting and context of a property, including the degree of open space and building density, must always be considered when planning new construction on an historic site. This entails identifying the formal or informal arrangements of buildings on the site, and whether they have a distinctive urban, suburban, or rural character. For example, a historic building traditionally surrounded by open space must not be crowded with dense development.*

[23] Berkeley Architectural Heritage Association (BAHA). 2004. Section 7, page 3.
[24] National Park Service, 2007.

The proposed project would not result in a denser built environment at 59 Arden Road or within the District.

4. *In properties with multiple historic buildings, the historic relationship between buildings must also be protected. Contributing buildings must not be isolated from one another by the insertion of new construction*.

   The proposed project would not introduce new buildings. Accordingly, the historic relationship of the historical built environment would not change. The building south of adjacent to the project site at 59 Arden Road is not a contributing element to the District, thereby removing the potential for indirect project-related impacts to an adjacent contributing element.

5. *As with new additions, the massing, size, scale, and architectural features of new construction on the site of a historic building must be compatible with those of the historic building. When visible and in close proximity to historic buildings, the new construction must be subordinate to these buildings. New construction should also be distinct from the old and must not attempt to replicate historic buildings elsewhere on site and to avoid creating a false sense of historic development*

   The extant relationship between the building and landscaped areas within the 0.26-acre parcel at 59 Arden Road or the District to which it contributes would not be altered by the proposed construction.

6. *The limitations on the size, scale, and design of new construction may be less critical the farther it is located from historic buildings*.

   The Craftsman bungalow residence and attached garage are approximately 75 feet from where the proposed improvements would occur at the southeastern corner of the 0.26-acre parcel. The proposed improvements at the southeastern corner of the project site would maintain the extant character at 59 Arden Road and, by extension, the larger 12.3-acre District to which it contributes. Therefore, the design, size, and scale of the reposed improvements, as proposed, would not result in an impact to 59 Arden Road or the District.

7. *As with additions, maximizing the advantage of existing site conditions, such as wooded areas or drops in grade, that limit visibility is highly recommended.*

   The project as proposed would not alter the open spaces south of the built environment at 59 Arden Road or minimize their current configuration to an extent that would limit the enjoyment, visibility of and from, and feeling within the 0.26-acre project site.

8. *Historic landscapes and significant viewsheds must be preserved. Also, significant archeological resources should be taken into account when evaluating the placement of new construction and, as appropriate, mitigation measures should be implemented if the archeological resources will be disturbed*.

While none of the landscape elements or viewsheds with respect to 59 Arden Road were formally identified or alluded to as contributing elements in the NRHP District nomination, the use of "Panoramic Hill" in its name implies expansive views from this area in the Berkeley Hills was an enticement to build and market for sale this residential tract development in the early 20th century. As proposed, the project would not impact the District's landscape features.

As described above, the view of 59 Arden Road from the public right-of-way is nearly totally obscured by a dense privacy hedge along the property line. Views of or through the property are not possible by pedestrians or motorists on Arden Road. Views, or lack thereof, would not change by the proposed project. As currently proposed, the project would not block or obscure any historically significant views of the house at 59 Arden Road and the landscape beyond to a degree higher than they already are, and presumably were in place whiten the District was nominated 20 years ago.

- ***Rehabilitation Standard 10:*** *New additions and adjacent or related new construction would be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*

  If the proposed improvements were to be removed in the future, the essential form and integrity of the contributing element at 59 Arden Road and the District to which it contributes would remain unimpaired. As designed, the proposed development *would be in compliance* with Rehabilitation Standard 10.

Conclusion. The project would alter a portion of a 0.26-acre parcel within a 12.3-acre District. The building on the project site is a contributing element to a NRHP-listed historic district but is not individually eligible for the NRHP. Accordingly, its significance is based on its contribution as an element of a larger resource, and impacts to one element are not as consequential to maintaining historical significance as resources found individually eligible. The total area that would be affected by the project represents approximately 2 percent of the total area within the District.

Considering the proposed improvements and the total area affected by the project in comparison to the historical resource of which it is a part, the proposed project would not result in a significant adverse change in the significance of this historical resource (*CEQA Guidelines* §15064.5(b)(2)(A)(B)). Therefore, the analysis above supports the conclusion that the project, as currently proposed, would be compliant with the Secretary's Standards for Rehabilitation. Therefore, implementation of the proposed project would result in less than significant impacts on historical resources.

b. Would the project cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5? ***(Less Than Significant Impact)***

No archaeological resources are currently known to exist on the project site; however, the proposed project would require excavation of approximately 4 cubic yards of soil to a depth of approximately 4 feet below the ground surface. Ground-disturbing activities could have a substantial adverse change on unrecorded buried archeological deposits that qualify as historical resources, as defined in *CEQA Guidelines* Section 15064.5, and could materially impair pre-contact archeological deposits.

However, the proposed project would be required to comply with the following COA that addresses this potential impact. Implementation of the City's COAs related to the accidental discovery of potential archeological resources would ensure that this impact would be less than significant.

> ***COA: Archaeological Resources.*** *(Ongoing throughout demolition, grading, and/or construction).* Pursuant to CEQA Guidelines section 15064.5(f), "provisions for historical or unique archeological resources accidentally discovered during construction" should be instituted. Therefore:
>
> A. In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist, historian or paleontologist to assess the significance of the find.
>
> B. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified professional would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Berkeley. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by the qualified professional according to current professional standards.
>
> C. In considering any suggested measure proposed by the qualified professional, the project applicant shall determine whether avoidance is necessary or feasible in light of factors such as the uniqueness of the find, project design, costs, and other considerations.
>
> D. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the Project site while mitigation measures for cultural resources is carried out.
>
> E. If significant materials are recovered, the qualified professional shall prepare a report on the findings for submittal to the Northwest Information Center.

c. Would the project disturb any humans remains, including those interred outside of formal cemeteries? ***(Less Than Significant Impact)***

No human remains are currently known to exist on the project site; however, the proposed project would require excavation of approximately 4 cubic yards of soil to a depth of approximately 4 feet below the ground surface. Ground-disturbing activities could disturb, and in turn have a substantial adverse change on, unrecorded human remains. However, the proposed project would be required to comply with the following COA that addresses this potential impact. Implementation of the City's COAs related to human remains would ensure that this impact would be less than significant.

> ***COA: Human Remains.*** (*Ongoing throughout demolition, grading, and/or construction*). In the event that human skeletal remains are uncovered at the

project site during ground-disturbing activities, all work shall immediately halt, and the Alameda County Coroner shall be contacted to evaluate the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.

3.6 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

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

Construction-Period Energy Use. The anticipated construction schedule assumes that the proposed project would be built over a 1-month period. The proposed project would require grading, site preparation, and building activities during construction. Although project construction would require energy for the manufacture and transportation of building materials, preparation of the site for grading activities, and building construction, energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, this impact would be less than significant.

Operational Energy Use. Typically, energy consumption is associated with fuel used for vehicle trips and electricity and natural gas use. The expected energy consumption during operation of the proposed project would be consistent with typical usage rates for residential uses; however, energy consumption is largely a function of personal choice and the physical structure and layout of buildings. The proposed project would be required to comply with applicable Title 24 standards. In addition, the proposed project would not result in an increase in the generation of vehicle trips or Vehicle Miles Traveled (VMT). Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy-efficiency measures into building design, equipment use, and transportation. Therefore, this impact would be less than significant.

*b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? **(Less Than Significant Impact)***

In 2002, the Legislature passed Senate Bill 1389, which required the California Energy Commission (CEC) to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission (ZE) vehicles and their

infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

The CEC approved the 2023 Integrated Energy Policy Report,[25] which provides the results of the CEC's assessments of a variety of energy issues facing California. The 2023 Integrated Energy Policy Report covers a broad range of topics, including implementation of Senate Bill 350, integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency, transportation electrification, barriers faced by disadvantaged communities, demand response, transmission and landscape-scale planning, the California Energy Demand Preliminary Forecast, the preliminary transportation energy demand forecast, renewable gas (in response to Senate Bill 1383), updates on California electricity reliability, natural gas outlook, and climate adaptation and resiliency.

As indicated above, energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the proposed project's total impact to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the CEC's 2023 Integrated Energy Policy Report. Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation, and this impact would be less than significant.

[25] California Energy Commission (CEC). 2024. *2023 Integrated Energy Policy Report*. January 31. Website: https://www.energy.ca.gov/publications/2023/2023-integrated-energy-policy-report (accessed May 2024).

3.7 GEOLOGY AND SOILS

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

The California Geological Survey (CGS) maps Seismic Hazard Zones that delineate areas susceptible to geologic hazards that require additional investigation. According to the CGS, the project site is located within an Alquist-Priolo Zone and Seismic Hazard Zone for landslides.[26] The Seismic Hazards Mapping Act requires that site-specific geotechnical investigations be conducted to identify the hazard and provide recommendations prior to permit approval for most developments designed for human occupancy within the Zones of Required Investigation. However, the proposed project includes the construction of a 114-square-foot parking pad, concrete retaining wall, fence, and gate as an accessory to the existing residence and would not result in any structures designed for human occupancy. Therefore, no site-specific geotechnical investigation is required.[27]

As specified under Policy S-14 in the Disaster Preparedness and Safety Element of the City of Berkeley General Plan,[28] soil investigation and/or geotechnical reports in conjunction with

[26] California Department of Conservation. 2015. Earthquake Zones of Required Investigation. Website: https://maps.conservation.ca.gov/cgs/EQZApp/app/.

[27] According to personal communication with Cecilia Mariscal, Associated Planner with the City of Berkeley, on May 14, 2024, the Chief Building Official waived the geotechnical report requirement due to the proposed project's small scale.

[28] Berkeley, City of. 2001. *City of Berkeley General Plan*.

development and/or redevelopment would be required on sites within designated hazard zones, such as areas with high potential for soil erosion, landslide, fault rupture, liquefaction, and other soil-related constraints. Although the project site is located within the ES-R zoning district, due to the nature of the proposed project, a soil investigation or geotechnical report is not required.[29]

Furthermore, the City of Berkeley has adopted the 2022 California Building Code (CBC), with local amendments, which provides for stringent construction requirements for projects in areas of high seismic risk. The design and construction of individual projects are required to conform with, or exceed, current best standards for earthquake resistant construction in accordance with the 2022 CBC (or more recent applicable code) and with the generally accepted standards of geotechnical practice for seismic design in Northern California.

a. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i. Rupture of a known earthquake fault, 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? ***(No Impact)***

The California Supreme Court concluded in its *CBIA v. BAAQMD* decision that "CEQA generally does not require an analysis of how existing environmental conditions will affect a project's future users or residents." With this ruling, CEQA no longer considers the impact of the environment on a project (such as the impact of existing seismic hazards on new project occupants) to be an environmental impact unless the project could exacerbate an existing environmental hazard. The proposed project would not change existing seismic hazards and, therefore, would not exacerbate existing hazards related to surface fault rupture and seismic ground shaking. As such, no impact would occur. The following discussions of seismic hazards are provided for informational purposes only.

Fault Rupture. Fault-rupture hazard is the hazard of ground breakage and displacement along fault traces during earthquakes. Fault rupture is generally expected to occur along known active fault traces. During large earthquakes, such as the 1906 San Francisco earthquake, ground displacements of more than 10 feet have occurred. Because the Hayward fault (the active fault trace nearest the subject site) is a strike-slip fault, the most likely ground displacement would be a lateral movement of the ground, where the ground west of the fault moves northward with respect to the ground east of the fault. Such displacement could cause severe damage or collapse to structures placed across the fault trace.

As discussed above, the project site is located within an Alquist-Priolo zone, indicating the potential for fault rupture to occur. However, according to the CGS, the main fault trace of the Hayward fault is accurately reported approximately 450 feet to the west of the project site. As such, it is unlikely that active traces of the Hayward fault are present within the site, and the risk for a fault-rupture hazard to exist on the site is low. In addition, because the proposed project would construct a 114-square-foot parking pad, concrete retaining wall, fence, and gate as an accessory to the existing

[29] Personal communication with Cecilia Mariscal, Associated Planner with the City of Berkeley, on May 14, 2024.

residence and would not result in any structures designed for human occupancy, the proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault.

Ground Shaking. Seismic ground shaking generally refers to all aspects of motion of the earth's surface resulting from an earthquake and is normally the major cause of damage in seismic events. It is likely that the site would experience strong ground shaking during the lifetime of the proposed project. The Association of Bay Area Governments has published maps predicting ground-shaking intensities for various earthquake scenarios in the Bay Area. Three different scenarios were modeled for the Hayward fault: a moment-magnitude-7.1 earthquake on the northern segment, a moment-magnitude-7.0 earthquake on the southern segment, and a moment-magnitude-7.3 earthquake on the entire length of the Hayward fault. Each of these models predicts extreme ground shaking in the vicinity of the site. The probability of a large earthquake on the Hayward fault is believed to be high during the life of the proposed project. The risk of ground-shaking impacts is reduced through adherence to the design and materials standards set forth in the 2022 CBC.

In addition, because the proposed project would construct a 114-square-foot parking pad, concrete retaining wall, fence, and gate as an accessory to the existing residence and would not result in any structures designed for human occupancy, the proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving ground shaking. Therefore, compliance with the existing building codes, described above, would ensure that potential impacts related to seismic ground shaking would be reduced to the extent feasible.

Seismic-Related Ground Failure and Liquefaction. Soil liquefaction is a phenomenon primarily associated with saturated soil layers located close to the ground surface. During ground shaking, these soils lose strength and acquire a "mobility" sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie relatively close to the ground surface. However, some soft, low-plasticity silts and clay soils can also be subject to liquefaction-type behavior. According to the CGS, the project site is not located within a liquefaction zone. In addition, because the proposed project would construct a 114-square-foot parking pad, concrete retaining wall, fence, and gate as an accessory to the existing residence and would not result in any structures designed for human occupancy, the proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic related ground failure or liquefaction.

Landslides. Seismically induced landslides occur as the rapid movement of large masses of soil on unstable slopes during an earthquake. According to the CGS, the project site is located within a mapped landslide zone. However, because the proposed project would construct a 114-square-foot parking pad, concrete retaining wall, fence, and gate as an accessory to the existing residence and would not result in any structures designed for human occupancy, the proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.

b. Would the project result in substantial soil erosion or the loss of topsoil? ***(Less Than Significant Impact)***

Soil erosion, which is discussed in detail in Section 3.10, Hydrology and Water Quality, could occur during project grading and construction. As described in Section 3.10, compliance with COA: Stormwater Requirements would reduce impacts related to erosion and siltation to less than significant levels. Therefore, the potential impacts related to substantial erosion or loss of topsoil would be less than significant.

> ***COA: Stormwater Requirements.*** The applicant shall demonstrate compliance with the requirements of the City's National Pollution Discharge Elimination System (NPDES) permit as described in BMC Section 17.20. The following conditions apply:
>
> A. The project plans shall identify and show site-specific Best Management Practices (BMPs) appropriate to activities conducted on-site to limit to the maximum extent practicable the discharge of pollutants to the City's storm drainage system, regardless of season or weather conditions.
>
> B. Trash enclosures and/or recycling area(s) shall be covered; no other area shall drain onto this area. Drains in any wash or process area shall not discharge to the storm drain system; these drains should connect to the sanitary sewer. Applicant shall contact the City of Berkeley and EBMUD for specific connection and discharge requirements. Discharges to the sanitary sewer are subject to the review, approval and conditions of the City of Berkeley and EBMUD.
>
> C. Landscaping shall be designed with efficient irrigation to reduce runoff, promote surface infiltration and minimize the use of fertilizers and pesticides that contribute to stormwater pollution. Where feasible, landscaping should be designed and operated to treat runoff. When and where possible, xeriscape and drought tolerant plants shall be incorporated into new development plans.
>
> D. Design, location and maintenance requirements and schedules for any stormwater quality treatment structural controls shall be submitted to the Department of Public Works for review with respect to reasonable adequacy of the controls. The review does not relieve the property owner of the responsibility for complying with BMC Chapter 17.20 and future revisions to the City's overall stormwater quality ordinances. This review shall be shall be conducted prior to the issuance of a Building Permit.
>
> E. All paved outdoor storage areas must be designed to reduce/limit the potential for runoff to contact pollutants.
>
> F. All on-site storm drain inlets/catch basins must be cleaned at least once a year immediately prior to the rainy season. The property owner shall be

responsible for all costs associated with proper operation and maintenance of all storm drainage facilities (pipelines, inlets, catch basins, outlets, etc.) associated with the project, unless the City accepts such facilities by Council action. Additional cleaning may be required by City of Berkeley Public Works Engineering Dept.

G. All on-site storm drain inlets must be labeled "No Dumping – Drains to Bay" or equivalent using methods approved by the City.

H. Most washing and/or steam cleaning must be done at an appropriately equipped facility that drains to the sanitary sewer. Any outdoor washing or pressure washing must be managed in such a way that there is no discharge or soaps or other pollutants to the storm drain. Sanitary connections are subject to the review, approval and conditions of the sanitary district with jurisdiction for receiving the discharge.

I. All loading areas must be designated to minimize "run-on" or runoff from the area. Accumulated waste water that may contribute to the pollution of stormwater must be drained to the sanitary sewer or intercepted and pretreated prior to discharge to the storm drain system. The property owner shall ensure that BMPs are implemented to prevent potential stormwater pollution. These BMPs shall include, but are not limited to, a regular program of sweeping, litter control and spill cleanup.

J. Sidewalks and parking lots shall be swept regularly to prevent the accumulation of litter and debris. If pressure washed, debris must be trapped and collected to prevent entry to the storm drain system. If any cleaning agent or degreaser is used, wash water shall not discharge to the storm drains; wash waters should be collected and discharged to the sanitary sewer. Discharges to the sanitary sewer are subject to the review, approval and conditions of the sanitary district with jurisdiction for receiving the discharge.

K. The applicant is responsible for ensuring that all contractors and sub-contractors are aware of and implement all stormwater quality control measures. Failure to comply with the approved construction BMPs shall result in the issuance of correction notices, citations, or a project stop work order.

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

Subsidence or Collapse. Subsidence or collapse can result from the removal of subsurface water resulting in either catastrophic or gradual depression of the surface elevation of a project site. As discussed in Chapter 1.0, Project Information, the maximum depth of excavation is expected to

occur for installation of the proposed parking pad and would be at a depth of 4 feet below the ground surface. As a result, temporary dewatering from excavations is not anticipated to be necessary during construction. Therefore, potential impacts related to subsidence or soil collapse would be less than significant.

Liquefaction or Lateral Spreading. As discussed above, the project site would not be susceptible to liquefaction because the site is not located within a mapped liquefaction zone. Therefore, potential impacts related to liquefaction or lateral spreading would be less than significant.

Landslide. As discussed above, although the project site is located within a mapped landslide zone, because the proposed project would construct a 114-square-foot parking pad, concrete retaining wall, fence, and gate as an accessory to the existing residence, it would not result in any structures designed for human occupancy. In addition, implementation of the proposed project would not exacerbate landslide risks at the project site. Therefore, potential impacts related to landslides would be less than significant.

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? ***(Less Than Significant Impact)***

Expansive soils are characterized by the potential for shrinking and swelling as the moisture content of the soil decreases and increases, respectively. Shrink-swell potential is influenced by the amount and type of clay minerals present and can be measured by the percent change of the soil volume. Plasticity indexes greater than 15 usually indicate a swelling problem may exist, and the percent swell generally increase with the plasticity indexes.[30] In general, clays have a higher plasticity index, silts have a lower plasticity index, and soils with a plasticity index of 0 typically have little or no silt or clay.

According to the United States Department of Agriculture Natural Resource Conversation Service Web Soil Survey, the project site is entirely underlain by the Xerorthents-Millsholm complex.[31, 32] The Xerorthents-Millsholm complex consists of about 70 percent loamy Xerorthents (altered soil or fill material), 20 percent Millsholm clay, and 10 percent of small areas of Maymen loam, Los Gatos loam, and Los Gatos silty clay loam. This complex is well to somewhat excessively drained. The xerorthents in this complex consist of soil materials that have been altered by cutting or filling for urban development. As a result, they have variable soil characteristics. The Millsholm soil formed in

30 Federal Highway Administration, 1977. *An evaluation of expedient methodology for identification of potentially expansive soils.* Report No. FHWA-RD-77-94. June.

31 United States Department of Agriculture Natural Resource Conversation Service. *Web Soil Survey.* Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (accessed May 15, 2024).

32 A "complex" consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

material that weathered from fine-grained sandstone. This soil complex is generally underlain by sandstone, siltstone, and undivided Quaternary deposits.[33]

As the project site is underlain by the Xerorthents-Millsholm complex, which consists in part of Millsholm clay and Los Gatos silty clay loam, the project site is underlain by a moderately expansive material, with a corresponding moderate potential for shrink/swell behavior with changes in moisture content. However, the proposed project would be required to comply with the 2022 CBC, which would ensure that the proposed project would not be affected by expansive soils. Therefore, this impact would be less than significant.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? ***(No Impact)***

The project does not propose the use of septic tanks or alternative wastewater disposal systems; therefore, no impact would occur.

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ***(Less Than Significant Impact)***

The proposed project would require excavation of approximately 4 cubic yards of soil to a depth of approximately 4 feet below the ground surface. Ground-disturbing activities could adversely impact previously unidentified fossils. However, development projects that require a Use Permit are required to comply with the following COA that addresses this potential impact. Implementation of this COA related to paleontological resources would ensure that this impact would be less than significant:

> ***COA: Paleontological Resources.*** (Ongoing throughout demolition, grading, and/or construction). In the event of an unanticipated discovery of a paleontological resource during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards [SVP 1995,1996]). The qualified paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the City for review and approval.

[33] University of California, Berkeley. 1987. *Strawberry Creek Management Plan, Section 3.3, Soils.* Website: https://creeks.berkeley.edu/strawberry-creek-management-plan-1987/33-soils.

3.8 GREENHOUSE GAS EMISSIONS

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

Greenhouse Gas Emissions (GHGs) are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2);
- Methane (CH_4);
- Nitrous oxide (N_2O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulfur hexafluoride (SF_6).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhance the natural greenhouse effect, believed to be causing global warming. While manmade GHGs include naturally occurring GHGs such as CO_2, CH_4, and N_2O, some gases, like HFCs, PFCs, and SF_6, are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? ***(Less Than Significant Impact)***

This section describes the proposed project's construction- and operational-related GHG emissions and contribution to global climate change. The BAAQMD CEQA Guidelines do not address emission thresholds for construction; however, the BAAQMD encourages disclosure. Thus, construction emissions are discussed in this section.

Construction Activities. Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. The BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions. The proposed project would include the construction of a 114-square-foot parking pad, concrete retaining wall, fence, and gate on the project site. Based on the relatively small project size, it is not expected that construction of the proposed project would result in substantial GHG emissions. Therefore, project construction impacts associated with GHG emissions would be less than significant.

Operational Emissions. Long-term GHG emissions are typically generated from mobile sources (e.g., cars, trucks, and buses), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (landfilling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). The project is not anticipated to increase mobile-source GHG emissions, area source emissions, or energy source emissions as the proposed project would support the existing residence on the project site and would not generate new vehicle trips. Waste-source emissions generated by the proposed project include energy generated by landfilling and other methods of disposal related to transporting and managing project-generated waste.

For single-family residential land uses, the BAAQMD screening size for operational GHG pollutants is 56 units. The proposed project would result in improvements to the existing single-family home. Based on the BAAQMD's screening criteria, the proposed project would not exceed established thresholds. Therefore, operation of the proposed project would not generate significant GHG emissions that would have a significant effect on the environment, and this impact would be less than significant.

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

The City of Berkeley Climate Action Plan (CAP), adopted in 2009, outlines actions to implement in order to achieve a GHG reduction target of 80 percent below 2000 emission levels by the year 2050, consistent with the State's direction to local governments. In 2018, then-Governor Brown committed California to carbon neutrality by 2045, the Berkeley City Council resolved to become a "Fossil Fuel Free City," and the Council declared a Climate Emergency. The CAP actions and

associated goals and policies, as well as the more recent Berkeley climate actions, relate to sustainable transportation and land use, buildings energy use, waste reduction and recycling, community outreach and empowerment (including equity), and preparing for climate change.

As discussed above, the proposed project would result in the construction of a 114-square-foot parking pad, concrete retaining wall, fence, and gate on the project site. The proposed project would not result in an increase in the generation of vehicle trips or VMT; therefore, the proposed project would not conflict with sustainable transportation and land use measures identified in the CAP. In addition, the proposed project would be required to comply with applicable Title 24 standards.

The proposed project would be consistent with the California Department of Resources Recycling and Recovery (CalRecycle) Waste Diversion and Recycling Mandate, which would reduce solid waste production by 75 percent, and the Berkeley Green Code, which also requires 100 percent of concrete, asphalt, and land clearing debris to be reused and recycled. Therefore, the proposed project would not conflict with any of the building energy use or waste and recycling measures identified in the CAP. In addition, the following COAs would require implementation of a Construction Waste Management Plan and compliance with the Berkeley Green Code.

> ***COA: Construction and Demolition Diversion.*** Applicant shall submit a Construction Waste Management Plan that meets the requirements of BMC Chapter 19.37 including 100 percent diversion of asphalt, concrete, excavated soil and land-clearing debris and a minimum of 65 percent diversion of other nonhazardous construction and demolition waste.
>
> ***COA: Low-Carbon Concrete.*** The project shall verify compliance with the Berkeley Green Code (BMC Chapter 19.37) including use of concrete mix design with a cement reduction of at least 25 percent.

Given the above, the proposed project would be consistent with the City's CAP, commitment to carbon neutrality by 2045, and Climate Emergency declaration and would implement measures designed to reduce GHG emissions. Therefore, the proposed project would not conflict with plans, policies, or regulations adopted for the purpose of reducing GHG emissions. This impact would be less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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 Section 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 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? ***(Less Than Significant Impact)***

The proposed project would result in the construction of a 114-square-foot parking pad, concrete retaining wall, fence, and gate on the project site. Hazardous materials (e.g., oil, grease, fuels, paint) would be transported and used on site for proposed construction activities. The operational phase of the proposed project is not anticipated to include storage and use of hazardous materials. In addition, the proposed project is for private residential use and would generally not involve transport, use, or disposal of significant quantities of hazardous materials.

Project construction would involve the use and transport fuels, oils, paints, and other chemicals used during construction activities. Handling and transportation of hazardous materials could result in accidental releases or spills and associated health risks to workers, the public, and environment.

Transport and use of hazardous materials would be subject to all applicable State and federal laws, such as Hazardous Materials Transportation Act, the Resource Conservation and Recovery Act, the California Hazardous Materials Management Act, California Health and Safety Code, and California

Code of Regulations Title 8 and Title 22. Therefore, compliance with existing regulations would ensure that the proposed project would not create a significant hazard to the public or the environment associated with the routine transport, use, or disposal of hazardous materials by ensuring these materials are properly handled during construction of the proposed project. Therefore, this impact would be less than significant.

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

The public and/or the environment could be affected by the release of hazardous materials from the proposed project into the environment by exposing workers, the public, or the environment to potentially contaminated soil and groundwater during construction and/or operation of the project. However, the project site proposed for construction is entirely surrounded by existing residential uses. Therefore, it is unlikely the soil and groundwater are contaminated with significant toxic or hazardous materials that would be released during construction. Additionally, compliance with the regulations described previously under Criterion a above, would ensure that the proposed project would not create a significant hazard to the public or the environment through accident conditions involving the release of hazardous materials into the environment during transport, use, or disposal of hazardous materials by ensuring that these materials are properly handled during construction of the proposed project. Therefore, this impact would be less than significant.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? ***(Less Than Significant Impact)***

The project site is approximately 560 feet from University of California, Berkeley-affiliated recreational facilities and approximately 0.2 mile from the Clark Kerr Campus, which is a residence hall for the University of California, Berkeley, that includes academic support and recreational services. However, compliance with federal, State, and local regulations for the management of hazardous materials as discussed under Criterion a, above, would ensure that potential impacts to nearby schools associated with hazardous materials emissions and use at the project site would be less than significant.

d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ***(No Impact)***

The project site is not included on any list of hazardous materials site compiled pursuant to Government Code Section 65962.5.[34] No impact would occur.

[34] California Environmental Protection Agency. 2020. Cortese List Data Resources. Website: calepa.ca.gov/sitecleanup/corteselist/ (accessed April 2024).

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? ***(No Impact)***

The project site is not located within an airport land use plan or within 2 miles of a public airport or public use airport. The nearest airport, Oakland International Airport, is located approximately 8.6 miles north of the project site. Therefore, the proposed project would not result in a safety hazard to people working or residing in the area due to the proximity of an airport. No impact would occur.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ***(No Impact)***

The proposed project would not include any modifications to the existing roadways in the vicinity of the project site and therefore would not result in any impacts related to emergency access or an adopted emergency response plan. In addition, the construction of the additional parking pad on the project site would allow for a second vehicle to park on site as opposed to the street, which would improve emergency access on Arden Road. No impact would occur.

g. Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? ***(No Impact)***

According to the California Department of Forestry and Fire Protection, the project site is located within a Very High Fire Hazard Severity Zone in a Local Responsibility Area.[35] The City of Berkeley identifies the project site as located within Fire Zone 3.[36] However, as previously described, the project site is entirely surrounded by existing development. As such, the project site is not within an area at an increased risk for wildland fires. The proposed project elements, including the 114-square-foot parking pad, concrete retaining wall, fence, and gate, would also not exacerbate the existing fire hazard condition at the site or increase the risk of loss, injury or death involving wildland fires. In addition, the Berkeley Fire Department performs defensible space and home hardening inspections on properties designated as Fire Zones 2 and 3 to ensure risks associated with wildfires are minimized to the extend feasible. Therefore, no impact would occur.

35 California Department of Forestry and Fire Protection. Fire Hazard Severity Zone Viewer. Website: https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/ (accessed July 18, 2024).

36 City of Berkeley. Berkeley CWP Community Base Map, Fire Hazard Severity Zones. Website: https://cwpp-berkeley.hub.arcgis.com/apps/berkeley-cwpp-community-base-map/explore (accessed July 18, 2024).

3.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b. Substantially decrease 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 substantial erosion or siltation on- or offsite;	☐	☐	☒	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
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?	☐	☐	☒	☐

According to the City's Watershed Management Plan, the project site is located within the Potter Watershed, which has a total Drainage Area of 2,693 acres, receives annual precipitation of 22 inches, and drains into the San Francisco Bay.[37] As provided in the Watershed Management Plan, a major creek channel is present to the south of the project site.

The project site generally slopes downward from northeast to southwest. Stormwater runoff from the project site likely sheet flows southwest, down the hillside, where it enters existing curb and gutters located in Panoramic Way and is conveyed into the City's stormwater system.

In Berkeley, stormwater runoff is collected and conveyed by roof gutters, downspouts, and street gutters into storm drain inlets and pipelines. The Public Works department installs, maintains, and repairs storm drainage infrastructure within the City right-of-way to convey runoff from private property, streets, and sidewalks. This drainage infrastructure (including storm drain inlets, catch basins, cross-drains, valley gutters, and 78 miles of storm drain pipelines) reduces flood hazards to public and private property. The creeks and creek culverts within the city also receive stormwater

[37] Berkeley, City of. 2011. *Watershed Management Plan*. October.

run-off. The storm drain pipes, creeks, and creek culverts ultimately discharge untreated stormwater to San Francisco Bay.[38]

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? ***(Less Than Significant Impact)***

Construction. The proposed project includes the construction of a 114-square-foot parking pad, concrete retaining wall, fence, and gate on the project site. Construction activities would involve disturbance, grading, and excavation of soil, which could result in temporary erosion and movement of sediments into the storm drain system, particularly during precipitation events. Project construction would require the excavation of approximately 4 cubic yards of soil. Pollutants of concern during construction include sediments, paint, solvents, trash, petroleum products, lubricants, concrete waste (dry and wet), and other chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (e.g., paints, solvents, oils, and fuels), and concrete-related waste may be spilled or leaked and have the potential to be transported via stormwater runoff into receiving waters (i.e., the San Francisco Bay).

The proposed project would be required to comply with City COAs, including COA: Stormwater Requirements, which requires the implementation of BMPs to limit to the maximum extent practicable the discharge of pollutants to the City's storm drainage system. With compliance with COA: Stormwater Requirements, potential water quality impacts during construction would be reduced to less than significant.

Operation. The proposed project would be required to comply with City COAs, including COA: Stormwater Requirements, which requires the implementation of BMPs to limit to the maximum extent practicable the discharge of pollutants to the City's storm drainage system. With compliance with COA: Stormwater Requirements, potential water quality impacts during operation would be reduced to less than significant.

Most regulatory requirements apply to projects over 5,000 square feet or 1 acre, as those are the established thresholds where projects could impact water quality standards or discharge requirements. Due to the small size of the proposed project and minimal increase in impervious surface area at the project site and implementation of City required COAs, implementation of the proposed project would not substantially degrade water quality and this impact would be less than significant.

[38] Berkeley, City of. *Watershed Resources Home Page*. Website: https://berkeleyca.gov/city-services/streets-sidewalks-sewers-and-utilities/storm-water# (accessed April 2024).

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? ***(No Impact)***

Groundwater Basins. The project site is not located within a mapped Division of Water Rights groundwater basin boundary.[39]

Construction. As discussed in Chapter 1.0, Project Information, the maximum depth of excavation is expected to occur for installation of the proposed parking pad and would be at a depth of 4 feet below the ground surface. As a result, temporary dewatering from excavations is not anticipated to be necessary during construction. Therefore, no impact associated with groundwater supply and recharge would occur during project construction.

Operation. The proposed project would not increase water demands at the project site as the proposed improvements do not generate water demand. Therefore, operation of the proposed project would not affect groundwater supplies. Development of the project would result in an increase in impervious surfaces on the project site by approximately 114-square feet, which represents a minimal change in pervious surface area at the project site. Therefore, the proposed project would not result in a significant decrease in groundwater recharge that would result in a net deficit in aquifer volume or a lowering of the local groundwater table level. Therefore, the proposed project would not interfere with groundwater recharge.

For the reasons listed above, the project would have no impact related to the decrease of groundwater supplies or interference with groundwater recharge.

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i. Result in 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 on- or off site; iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv. Impede or redirect flood flows? ***(Less Than Significant Impact)***

Erosion or Siltation. The proposed project would not alter the course of a stream or a river. Project construction would require the excavation of approximately 4 cubic yards of soil. Grading and excavation activities may slightly and temporarily alter on-site drainage; however, the existing drainage patterns would generally be maintained and would not be substantially altered or modified. During construction, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. However, compliance with the COA: Stormwater Requirements would reduce impacts related to erosion and siltation to less than significant levels.

[39] State of California Department of Water Resources, DWR Mapping Tool, https://sgma.water.ca.gov/webgis/index.jsp?appid=gasmaster&rz=true, Accessed April 2024.

Flooding. Development of the project would result in an increase in impervious surfaces on the project site by approximately 114-square feet, which represents a minimal change in pervious surface area at the project site. Therefore, the proposed project would not result in a significant increase in the volume and rate of stormwater runoff discharged from the project site that would result in flooding and the project would have no impact.

Storm Drain Capacity. As described above, development of the project would result in an increase in impervious surfaces on the project site by approximately 114-square feet, which represents a minimal change in pervious surface area at the project site. Implementation of the proposed project would not result in a substantial increase in the amount or rate of stormwater runoff from the project site, and therefore the project would have no impact.

Additional Sources of Polluted Runoff. As described above under Criterion a above, the proposed project would be required to comply with COA: Stormwater Requirements and construction BMPs would be implemented to reduce pollutants of concern in stormwater runoff from the project site. Additionally, no groundwater dewatering activities are anticipated as part of project construction, and the project would not introduce pollutants into surface waters. Compliance with existing regulations would ensure that potential impacts related to additional sources of polluted runoff would be less than significant.

Flood Flows. The proposed project would result in a minimal increase in imperious surface on the project site. Therefore, the project would not substantially alter the existing drainage patterns on the project site. In addition, according to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06001C0080G, the entirety of the project site is located in Zone X, which is identified as an area of minimal flood hazard.[40] The project site is not located within a 100-year floodplain. Therefore, no impact related to flooding related to alterations to the site would occur.

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? ***(No Impact)***

As discussed above, according to FEMA FIRM No. 06001C0080G, the entirety of the project site is located in Zone X, which is identified as an area of minimal flood hazard, and the project site is not located within a 100-year or 500-year flood hazard zone. The project site is not located in an area mapped by the California Department of Conservation as being within a tsunami zone.[41] Seiches are waves that are created in an enclosed body of water such as a bay, lake, or harbor and go up and down or oscillate and do not progress forward like standard ocean waves. There are no enclosed bodies of water in the nearby vicinity of the project site. Therefore, the project would have no impacts related to the release of pollutants in the event of inundation from flooding.

[40] Federal Emergency Management Agency (FEMA). 2017. Flood Insurance Rate Map No. 06001C0080G. Map Effective August 3, 2009. Website: https://msc.fema.gov/portal/search?AddressQuery=water%20street%2C%20perris%2C%20California%20 (accessed April 2024).

[41] California Department of Conservation. *California Tsunami Maps.* Website: https://maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation/ (accessed April 2024).

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? ***(Less Than Significant Impact)***

The San Francisco Bay Regional Water Quality Control Board (RWQCB) implements the Water Quality Control Plan (Basin Plan), which is the master policy document that establishes the water quality objectives and strategies needed to protect designated beneficial water uses in the San Francisco Bay region. The SWRCB and the San Francisco Bay RWQCB enforce compliance with the water quality objectives of the Basin Plan through the issuance of NPDES permits. Due to the size of the proposed project, the proposed project would not be required to comply with NPDES permits as water quality impacts with implementation of the proposed project would be minimal. However, the proposed project's compliance with City COAs, including COA: Stormwater Requirements, would ensure that the proposed project would not have the potential to conflict with the water quality objectives of the Basin Plan and this impact would be less than significant.

The project site is not located within a mapped Division of Water Rights groundwater basin boundary and is not subject to a sustainable groundwater management plan. For these reasons, the proposed project would not conflict with or obstruct the implementation of a sustainable groundwater management plan and the project would have no impact.

3.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒

*a. Would the project physically divide an established community? **(No Impact)***

The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying areas. For instance, the construction of an interstate highway though an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside of the community.

The proposed project would include improvements to an existing single-family residence and would not involve modifications to any of the existing roadways or public rights-of-way within the vicinity of the site. Therefore, the proposed project would not physically divide an established community and the project would have no impact.

*b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? **(No Impact)***

The General Plan designates the site as Low Density Residential (LDR). Areas designated as LDR are intended for single-family homes, community services, schools, home occupations, recreational uses, and open space and institutional facilities.

The project site is within the ES-R (Environmental Safety Residential) zoning district. The proposed project would be consistent with the LDR General Plan designation and the ES-R zoning designation, which allow for single-family dwellings and residential uses and associated ancillary improvements. Additionally, the proposed project would be consistent with the ES-R development standards. Therefore, the proposed 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, and no impact would occur.

3.12 MINERAL RESOURCES

	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?	☐	☐	☐	☒

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? ***(No Impact)***

The project site is located within an urban area, and there are no known mineral resources within or in the vicinity of the project site.[42] The proposed project would not result in the loss of availability of a known mineral resource of value to the region or residents of the State, and no impact related to the loss of mineral resources would occur. No impact would occur.

b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? ***(No Impact)***

Please refer to Criterion a above. The proposed project would not result in the loss of availability of any known locally important mineral recovery sites. No impact would occur.

42 Berkeley, City of. 2001. Environmental Management Element. Website: https://www.cityofberkeley.info/Planning_and_Development/Home/General_Plan_-_Environmental_Management_Element(2).aspx (accessed April 2024).

3.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. 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 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Noise is usually defined as unwanted sound and consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a tenfold increase in acoustic energy, while 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night.

A project would have a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies, including, as appropriate, the City of Berkeley.

Certain land uses are considered more sensitive to noise than others. Examples of these land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The closest sensitive receptors to the project site include low- and medium-density residential uses located on all sides of the project site, with the nearest receptor located approximately 20 feet north of the project site. Further to the southwest are educational and residential uses located 0.2 feet from the project site.

The City's exterior and interior noise limits are shown in Table 3.C. The hourly noise level standards vary based on the receiving land use type and the time period. In order to assess intermittent or maximum noise levels, the time-weighted noise level additions presented in BMC Section 13.40.050 and described in further detail below should be applied.

Table 3.C: Exterior and Interior Noise Limits, BMC Section 13.40.050

Zoning District	Time Period	Noise Level (dBA)
Exterior Noise Limits		
R-1, R-2, R-1A, R-2A, and ESR	7:00 a.m.–10:00 p.m. 10:00 p.m.–7:00 a.m.	55 45
R-3 and above	7:00 a.m.–10:00 p.m. 10:00 p.m.–7:00 a.m.	60 55
Commercial	7:00 a.m.–10:00 p.m. 10:00 p.m.–7:00 a.m.	65 60
Industry	Anytime	70
Interior Noise Limits		
All	7:00 a.m.–10:00 p.m. 10:00 p.m.–7:00 a.m.	45 40

Source: City of Berkeley Municipal Code, Tables 13.40-1 and 13.40-2 (2014).
dBA = A-weighted decibels

The maximum noise levels vary based on the receiving land use type and the time period. The ordinance also limits noise generated by construction. The ordinance restricts construction activities to weekdays between the hours of 7:00 a.m. and 7:00 p.m. and on weekdays and holidays between 9:00 a.m. and 8:00 p.m., except for emergency work.

The following noise standards are outlined in BMC Chapter 13.40.050:

A. Maximum permissible sound levels shall be determined by the zoning district of the property subject to the noise, not the property from which the noise originates.

1. The noise standards for the various categories of land use in Table 6 [of BMC Chapter 13.40.050 and shown in Table 3.A of the Initial Study Checklist] shall, unless otherwise specifically indicated in other codes, apply to all such property within a designated zone.

2. No person shall operate or cause to be operated any source of sound at any location within the incorporated City or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the sound level when measured on any other property to exceed:

a. The noise standard for that land use as specified in Table 6 [Table 3.A of the Initial Study] for a cumulative period of more than 30 minutes in any hour; or

b. The noise standard for that land use as specified in Table 6 [Table 3.A of the Initial Study] plus 5 dBA for a cumulative period of more than 15 minutes in any hour; or

c. The noise standard for that land use as specified in Table 6 [Table 3.A of the Initial Study] plus 10 dBA for a cumulative period of more than 5 minutes in any hour; or

d. The noise standard for that land use as specified in Table 6 [Table 3.A of the Initial Study] plus 15 dBA for a cumulative period of more than 1 minute in any hour; or

e. The noise standard for that land use as specified in Table 6 [Table 3.A of the Initial Study] plus 20 dBA for any period of time.

The following interior noise standards are outlined in BMC Section 13.40.060:

3. No person shall operate or cause to be operated within a multi-family dwelling unit any source of sound or allow the creation of any noise which causes the sound level when measured inside a neighboring dwelling unit to exceed:

   a. The noise standard as specified in Table 6 [Table 3.A of the Initial Study] for a cumulative period of more than 5 minutes in any hour; or

   b. The noise standard as specified in Table 6 [Table 3.A of the Initial Study] plus 5 dBA for a cumulative period of more than one minute in any hour; or

   c. The noise standard as specified in Table 6 [Table 3.A of the Initial Study] plus 10 dBA for any period of time.

Section 13.40.070 of the BMC restricts construction activities to weekdays between the hours of 7:00 a.m. and 7:00 p.m. and on weekends and holidays between 9:00 a.m. and 8:00 p.m., except for emergency work. Construction activities are divided into two categories: mobile equipment and stationary equipment. Mobile equipment, as defined by BMC Section 13.40.070, includes sound levels for nonscheduled, intermittent, short-term operation of less than 10 days of jackhammers, drills, saws, sander grinders, and similar tools. Stationary equipment, according to BMC Section 13.40.070, would be repetitively scheduled and relatively long-term operation for longer than 10 days. Equipment used during construction of the proposed project would be considered stationary because construction would last longer than 10 days. Where technically and economically feasible, construction activities shall be conducted in such a manner that maximum sound levels at affected properties would not exceed those listed in Table 3.D, below.

Table 3.D: Maximum Stationary Equipment Construction Noise Levels (dBA L_{eq}), BMC Section 13.40.070

Time of Day	R-1, R-2 Residential	R-3 and Above Multifamily Residential	Commercial/ Industrial
Weekdays, 7:00 a.m. to 7:00 p.m.	60	65	70
Weekends, 9:00 a.m. to 8:00 p.m., and legal holidays	50	55	60

Source: City of Berkeley Municipal Code Table 13.40-4 (2014).

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

The proposed project would generate noise during both the construction and operation periods, as discussed below.

Construction Noise Impacts. Construction of the proposed project would include construction activities that would result in a substantial temporary increase in ambient noise levels in the project site vicinity.

Maximum construction noise would be short-term, generally intermittent depending on the construction phase, and variable depending on receiver distance from the active construction zone. The duration of noise impacts generally would be from 1 day to several days, depending on the phase of construction. The entire construction duration is expected to occur for approximately 1 month. The level and types of noise impacts that would occur during construction are described below. As outlined above, the closest sensitive receptors to the project site include low- and medium-density residential uses located on all sides of the project site, with the nearest receptor located approximately 20 feet north of the project site. Further to the southwest are educational and residential uses located 0.2 feet from the project site. Project construction would result in short-term noise impacts on these receptors.

Two types of short-term noise impacts could occur during construction of the proposed project. The first type involves construction crew commutes and the transport of construction equipment and materials to the site for the proposed project, which would incrementally increase noise levels on roads leading to the site. As shown in Table 3.E, there would be a relatively high single-event noise exposure potential at a maximum level of 84 dBA L_{max} with trucks passing at 50 feet.

The second type of short-term noise impact is related to noise generated during excavation, grading, and construction on the project site. Construction is performed in discrete steps, or phases, each with its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Table 3.13.E lists maximum noise levels recommended for noise impact assessments for typical construction equipment, based on a distance of 50 feet between the equipment and a noise receptor. Average maximum noise levels range up to 85 dBA maximum instantaneous sound level (L_{max}) at 50 feet during the noisiest construction phases. The site preparation phase, including excavation and grading of the site, tends to generate the highest noise levels because earthmoving machinery is the noisiest construction equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of

Table 3.E: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L_{max}) at 50 Feet[1]
Compressor	40	80
Cranes	16	85
Dozers	40	85
Drill Rig	20	84
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Generator	50	82
Man-lift	20	85
Rollers	20	85
Water Truck	40	84
Welder	40	73

Source: Roadway Construction Noise Model (FHWA 2006).
Note: Noise levels reported in this table are rounded to the nearest whole number.
[1] Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
L_{max} = maximum instantaneous sound level

construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

As identified above, sensitive receptors are located approximately 20 feet north of the proposed project. The closest off-site residences may be subject to short-term construction noise reaching 85 dBA L_{max} when construction is occurring at the project site. Construction noise is permitted by the City when activities occur between the hours of 7:00 a.m. and 7:00 p.m. and on weekdays and holidays between 9:00 a.m. and 8:00 p.m., except for emergency work.[43] In addition, due to the small nature of the proposed project, limited construction activities, and limited construction period, construction noise impacts would be less than significant with compliance with applicable sections of the City's Municipal Code, including Sections 13.40.050, 13.40.060, and 13.40.070 as provided above.

Long-Term Noise Impacts. The proposed project would generally consist of the construction of construction of a 114-square-foot parking pad, concrete retaining wall, fence, and gate at the project site. As such, the proposed project does include stationary noise sources and would not generate long-term noise impacts from stationary noise sources. This impact would be less than significant.

b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? ***(Less Than Significant Impact)***

Vibrating objects in contact with the ground radiate vibration waves through various soil and rock strata to the foundations of nearby buildings. As the vibration propagates from the foundation throughout the remainder of the building, the vibration of floors and walls may cause perceptible

[43] BMC Chapter 13.40, Community Noise.

vibration from the rattling of windows or a rumbling noise. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. When assessing annoyance from groundborne noise, vibration is typically expressed as root-mean-square (rms) velocity in units of decibels of 1 micro-inch per second. To distinguish vibration levels from noise levels, the unit is written as "VdB." Human perception to vibration in indoor environments starts at levels as low as 67 VdB and sometimes lower. Annoyance due to vibration in residential settings starts at 70 VdB. Groundborne vibration is almost never annoying to people who are outdoors. Although the motion of the ground may be perceived, without the effects associated with the shaking of the building, the motion does not provoke the same adverse human reaction.

In extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Common sources of groundborne vibration include trains and construction activities such as blasting, pile driving, and operating heavy earthmoving equipment.

Construction and operation of the proposed project could expose sensitive structures and residential receptors to excessive groundborne vibration, as discussed below.

Construction Vibration. The nearest sensitive receptors that may be subject to vibration impacts during construction include the residences located approximately 20 feet north of the project site. Vibration levels calculated in rms are best for characterizing human response to building vibration, while vibration levels in peak particle velocity (PPV) are best used to characterize potential for building damage. Therefore, this construction vibration impact analysis discusses the level of human annoyance using vibration levels in VdB and assesses the potential for building damages using vibration levels in PPV (in/sec). The Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual*[44] guidelines indicate that a vibration level up to 102 VdB (an equivalent to 0.5 in/sec in PPV) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 in/sec in PPV).

For typical construction activity, the equipment with the highest vibration generation potential is the large bulldozer, which would generate 87 VdB at 25 feet.[45] The closest residential structures are located 20 feet north of the project construction boundary. Based on distance attenuation, the closest residences would experience vibration levels of up to 87 VdB (0.019 PPV [in/sec]). This vibration level at the closest residential structures from construction equipment would not exceed the FTA threshold of 94 VdB (0.2 in/sec PPV) for building damage. Therefore, this impact would be less than significant.

Operational Vibration. No permanent noise sources that would expose persons to excessive groundborne vibration or noise levels would be located within the project site. In addition, long-term operational activities associated with the proposed project would not involve the use of any

44 Federal Transit Administration (FTA). 2018. *FTA Transit Noise and Vibration Impact Assessment Manual*. FTA-0123. September.

45 Ibid.

equipment or processes that would result in potentially significant levels of ground vibration. Therefore, this impact would be less than significant.

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? ***(No Impact)***

The nearest airport, Oakland International Airport, is located approximately 8.6 miles north of the project site. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels due to the proximity of a public airport. Therefore, there would be no impact.

3.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (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?	☐	☐	☐	☒

a. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? ***(No Impact)***

The proposed project would result in the construction of a 114-square-foot parking pad, concrete retaining wall, fence, and gate on the project site. There is an existing residence on the site, and the proposed project does not include the expansion or development of additional housing units or the extension of public roads or other infrastructure. Therefore, the proposed project would not result in any new unplanned population growth. No impact would occur.

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? ***(No Impact)***

The proposed project does not include the demolition of any existing structures or the removal of any existing housing units. Therefore, the proposed project would not displace any existing people or housing. No impact would occur.

3.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☐	☒
ii. Police protection?	☐	☐	☐	☒
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

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

i. Fire protection?
ii. Police protection?
iii. Schools?
iv. Parks?
v. Other public facilities? ***(No Impact)***

The proposed project would result in the construction of accessory improvements to an existing residential site, including a 114-square-foot parking pad, concrete retaining wall, fence, and gate on the project site. There is an existing residential unit at the project site, and the site is already served by police and fire services. The proposed project would not result in an increase in population that would require the provision of new fire or police facilities, schools, parks, or other public facilities or result in the need for physically altered facilities. Therefore, the proposed project would have no impact related to public services, parks, or other public facilities.

3.16 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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? ***(No Impact)***

The proposed project would result in the construction of accessory improvements to an existing residential site, including a 114-square-foot parking pad, concrete retaining wall, fence, and gate on the project site. The proposed project would not increase the onsite population such that it would contribute to the increased use of existing neighborhood or regional parks such that substantial physical deterioration would occur. Therefore, no impact would occur.

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? ***(No Impact)***

The proposed project does not include the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. No impact would occur.

3.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? ***(No Impact)***

As previously discussed, the proposed project would result in ancillary improvements to the existing single-family home. There are no proposed changes to existing public roadways or transportation-related infrastructure. Therefore, the proposed project would have no impact on any program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

b. Would the project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)? ***(No impact)***

Under the Small Projects State Office of Planning and Research (OPR) screening criteria, projects generating 836 daily VMT or less, which is the equivalent of approximately 20 residential units, would have a less than significant impact related to VMT.[46] As previously discussed, the proposed project involves the development of accessory improvements associated with an existing residential use and would not result in any new residential units on the project site. Therefore, the proposed project would satisfy the Small Projects criterion and is therefore presumed to have no impact related to VMT.

c. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? ***(No Impact)***

As previously discussed, there are no proposed changes to existing public roadways or transportation-related infrastructure. Therefore, the proposed project would have no impact on hazards due to a design feature or incompatible uses.

[46] Berkeley, City of. 2020. *City of Berkeley VMT Criteria and Thresholds.* June 29.

d. Would the project result in inadequate emergency access? ***(No Impact)***

As previously discussed, there are no proposed changes to existing public roadways or transportation-related infrastructure. In addition, during project construction emergency access would be maintained. Therefore, the proposed project would have no impact on emergency access.

3.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or	☐	☐	☒	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

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

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. ***(Less Than Significant Impact)***

As previously described in Section 1.0, Project Information, the City sent letters to tribes eligible to consult with the City, pursuant to Public Resources Code Section 21080.3.1, on May 15, 2024, notifying them of their opportunity to consult for this project. The request for the California Historical Resources Information System (CHRIS) and Sacred Lands File (SLF) searches were submitted to the Native American Heritage Commission (NAHC) on May 29, 2024. On June 24, 2024, the Confederated Villages of Lisjan Nation requested a copy of the CHRIS and SLF search, and the completed Initial Study. On June 28, 2024, the NAHC responded, indicating the results of the SLF search were negative. The City forwarded this information to the Confederated Villages of Lisjan Nation. Prior to the scheduled consultation meeting on July 24, 2024, the Confederated Villages of

Lisjan Nation contacted the City via email to request clarification on the project scope. Based on the City's response and explanation of the work proposed, the Confederated Villages of the Lisjan Nation canceled the scheduled meeting and concluded consultation.

As described in Section 3.5, Cultural Resources, no archeological historical resources have been identified at the project site. However, if significant archeological deposits were unearthed during project construction, a substantial adverse change in the significance of a historical resource would occur from its demolition, destruction, relocation, or alteration such that the significance of the resource would be materially impaired (*CEQA Guidelines* Section 15064.5(b)(1)). With implementation of the City's standard COAs identified in Section 3.5, Cultural Resources, as well as COA: Halt Work/Unanticipated Discovery of Tribal Cultural Resources, impacts to archeological deposits and human remains that may qualify as tribal cultural resources would be less than significant.

> ***COA: Halt Work/Unanticipated Discovery of Tribal Cultural Resources.*** In the event that cultural resources of Native American origin are identified during construction, all work within 50 feet of the discovery shall be redirected. The project applicant and project construction contractor shall notify the City Planning Department within 24 hours. The City will again contact any tribes who have requested consultation under AB 52, as well as contact a qualified archaeologist, to evaluate the resources and situation and provide recommendations. If it is determined that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with State guidelines and in consultation with Native American groups. If the resource cannot be avoided, additional measures to avoid or reduce impacts to the resource and to address tribal concerns may be required.

3.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications 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 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?	☐	☐	☐	☒

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

The proposed project would not require new connections to existing water delivery or wastewater systems within the vicinity of the site.

As described in Section 3.10, Hydrology and Water Quality, development of the project would result in an increase in impervious surfaces on the project by approximately 140 square feet, which represents a minimal change in pervious surface area at the project site. Implementation of the proposed project would not result in a substantial increase in the amount or rate of stormwater runoff from the project site. Therefore, potential impacts related to stormwater drainage systems would be less than significant.

The project site and existing residence on-site is currently served by electrical, natural gas, and telecommunications facilities. Additionally, as previously described, the proposed project is not expected to result in an increase in demand for electrical power or natural gas, and would not generate substantially more solid waste beyond what was previously planned for. Therefore, the expansion of electrical, natural gas, or telecommunications facilities would not be required, and this impact would be less than significant.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? ***(No Impact)***

The proposed project would not increase water demands at the project site as the proposed improvements would not generate an increase in water demand. Therefore, no impact on water supplies would occur.

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? ***(No Impact)***

The proposed project would not increase wastewater demands at the project site as the proposed improvements would not generate any amount of wastewater. Therefore, no impact on wastewater capacity would occur.

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? ***(No Impact)***

As previously discussed, the proposed project would result in the construction of a 114-square-foot parking pad, concrete retaining wall, fence, and gate. The proposed project would not result in an increase in population to the site or a significant change in the amount of solid waste that is generated. Therefore, the proposed project would not 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. No impact would occur.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste? ***(No Impact)***

The proposed project would comply with all federal, State, and local solid waste statutes and/or regulations related to solid waste. No impact would occur.

3.20 WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
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?	☐	☐	☐	☒

*a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan? **(No Impact)***

The proposed project includes ancillary improvements to an existing single-family home and would not include roadway changes or any other futures that would substantially impair an adopted emergency response plan. Therefore, the proposed project would have no impact on an adopted emergency response plan or emergency evacuation plan.

*b. Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? **(No Impact)***

According to the California Department of Forestry and Fire Protection, the project site is located within a Very High Fire Hazard Severity Zone in a Local Responsibility Area.[47] The City of Berkeley identifies the project site as being located within Fire Zone 3.[48] However, as previously described, the project site is entirely surrounding by existing development. As such, the project site is not within an area at an increased risk for wildland fires. The proposed project elements, including the 114-square-foot parking pad, concrete retaining wall, fence, and gate, would also not exasperate the existing fire hazard condition at the site or increase the risk of loss, injury or death involving wildland fires. In addition, the Berkeley Fire Department performs defensible space and home hardening

47 California Department of Forestry and Fire Protection. Fire Hazard Severity Zone Viewer. Website: https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/ (accessed July 18, 2024).

48 City of Berkeley. Berkeley CWP Community Base Map, Fire Hazard Severity Zones. Website: https://cwpp-berkeley.hub.arcgis.com/apps/berkeley-cwpp-community-base-map/explore (accessed July 18, 2024).

inspections on properties designated as Fire Zones 2 and 3 to ensure risks associated with wildfires are minimized to the extend feasible.

In addition, the proposed project would not result in any significant changes to slope, or prevailing wind as compared to existing site conditions. Therefore, no impact would occur.

c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? ***(No Impact)***

The proposed project would not require the installation of infrastructure such as roads, fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate fire risk or result in temporary or ongoing impacts to the environment. Therefore, no impact would occur.

d. Would the project 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? ***(No Impact)***

As discussed in Section 3.10, Hydrology and Water Quality, the proposed project would not result in significant changes to existing drainage patterns on site. As discussed in Section 3.7, Geology and Soils, the proposed project is not at significant risk for flooding or landslides. Therefore, the project would have no impact.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	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 current 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?	☐	☐	☐	☒

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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? ***(Less Than Significant Impact)***

As discussed in Section 3.4, Biological Resources, the proposed project would not 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal, and this topic would be less than significant with implementation of City COA: Avoid Disturbance of Nesting Birds. As discussed in Section 3.5, Cultural Resources, the proposed project would not eliminate important examples of the major periods of California history or prehistory, and this topic would be less than significant with implementation of City COA: Archaeological Resources and COA: Human Remains. Therefore, this impact would be less than significant.

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

CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable, or which can compound to increase other environmental impacts." Section 15130 of the *CEQA Guidelines* requires evaluation of potential environmental impacts when the project's incremental effect is cumulatively considerable. "Cumulatively considerable" means

that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of "reasonably foreseeable probable future" projects, per CEQA Section 15355. Cumulative impacts can result from a combination of the proposed project together with other closely related projects that cause an adverse change in the environment. Cumulative impacts can result from individually minor but collectively significant projects taking place over time.

For all of the topics discussed in this Initial Study, the proposed project's impacts would be individually limited and not cumulatively considerable because the impacts are either temporary in nature (i.e., limited to the construction period) or limited to the project site (i.e., accidental discovery). Additionally, for each of the topics analyzed in the Initial Study, the proposed project would have no impacts or less than significant impacts, and therefore would not substantially contribute to any potential cumulative impacts.

When future development proposals are considered by the City, these proposals would undergo environmental review pursuant to CEQA, and when necessary, mitigation measures would be adopted as appropriate. In most cases, this environmental review and compliance with project conditions of approval, relevant policies and mitigation measures, and the General Plan, and compliance with applicable regulations would ensure that significant impacts would be avoided or otherwise mitigated to less than significant levels.

Implementation of these measures would ensure that the impacts of the proposed project and other projects within the vicinity would be below established thresholds of significance and that these impacts would not combine with the impacts of other cumulative projects to result in a cumulatively considerable impact on the environment as a result of project development. Therefore, this impact would be less than significant.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ***(No Impact)***

As discussed throughout this Initial Study, implementation of the proposed project would not result in any significant environmental effects. As such, implementation of the proposed project would not cause substantial direct or indirect adverse effects to human beings. No impact would occur.

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