NORTH DISTRICT DEVELOPMENT PLAN
PROJECT # 958080

Initial Study

The following Initial Study has been prepared in compliance with CEQA.

Prepared By:

University of California, Riverside
Campus Planning – Capital Asset Strategies
1223 University Avenue, Suite 240
Riverside, California 92507

June 2018

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INTRODUCTION

Initial Study

Pursuant to Section 15063 of the *California Environmental Quality Act (CEQA) Guidelines* (Title 14, California Code of Regulations, Sections 15000 et seq.), an Initial Study is a preliminary environmental analysis that is used by the lead agency (the public agency principally responsible for approving or carrying out the proposed project) as a basis for determining whether an Environmental Impact Report, a Mitigated Negative Declaration, or a Negative Declaration is required for a project. The *State CEQA Guidelines* require that an Initial Study contain a project description, description of environmental setting, identification of environmental effects by checklist or other similar form, explanation of environmental effects, discussion of mitigation for significant environmental effects, evaluation of the project's consistency with existing, applicable land use controls, and the name of persons who prepared the study.

The purpose of this Initial Study is to evaluate the potential environmental impacts of the proposed University of California Riverside ("UC Riverside") North District Development Plan to determine what level of additional environmental review, if any, is appropriate. As shown in the Determination in Section IV of this document and based on the analysis contained in this Initial Study, it has been determined that the proposed NDD Plan could result in potentially significant impacts; therefore, preparation of an Environmental Impact Report (EIR) is appropriate.

The University of California (University), as the lead agency pursuant to CEQA, requires each campus of the University of California to prepare a Long Range Development Plan (LRDP) that sets forth concepts, principles, and plans to guide the future growth of the campus. Pursuant to this obligation, UC Riverside prepared the 2005 LRDP and the supporting Final Environmental Impact Report (Final EIR) for the UC Riverside campus (State Clearinghouse No. 2005041164). In November 2005, The Board of Regents of the University of California (The Regents) certified the Final EIR and approved the 2005 LRDP. In 2006, UC Riverside amended the 2005 LRDP to allow a 3.25-acre deed restriction in the Agricultural Operations fields south of MLK (2005 LRDP Amendment 1). In 2011, UC Riverside approved a major amendment (Amendment 2) to the 2005 LRDP, based on an evaluation of its environmental impacts in a Final EIR (State Clearinghouse No. 2010111034). The LRDP Amendment 2 EIR supplemented the 2005 LRDP EIR, focusing on the incremental environmental effects of LRDP Amendment 2. In 2013, the 2005 LRDP was amended (Amendment 3) to provide an overlay to the land use designation of one 10-acre site on the West Campus for the siting of a solar array project.

The 2005 LRDP, as amended by Amendments 1, 2, and 3, is the land use planning document used by UC Riverside to guide the development of the campus to accommodate a projected student body of 25,000 full time equivalent (FTE) students which was estimated to be reached by 2020. The 2005 LRDP EIR, as augmented and updated by the 2011 LRDP Amendment 2 EIR, is the environmental document that provides a full evaluation of the environmental effects of campus development anticipated under the

2005 LRDP and is used by the Campus to conduct tiered environmental review of specific development projects proposed on the campus, pursuant to CEQA Guidelines Section 15152.

The proposed North District Development Plan (NDD Plan) is a plan put forth by UC Riverside to provide up to 6,000 student beds on the East Campus on an approximately 55-acre site located in the northeastern portion of the campus. The NDD Plan comprises Phase 1 which involves the construction of about 1,500 student beds and associated facilities by 2021 and a future phase(s) which involves the construction of up to 4,500 student beds and associated facilities between 2019 and 2024/5. The project site is developed with Canyon Crest Family Student Housing that was occupied by student families until 2017 and is currently vacant. The site is designated for Family, Apartments, and Residence Hall Student Housing and Related Support, and Athletics and Recreation in the 2005 LRDP. Furthermore, as a student housing project, the proposed project would support current and projected enrollment on the campus. The student population for the campus is projected to exceed the LRDP threshold of 25,000 prior to the projected completion of buildout of the project in 2024/5. Therefore, the University has determined that it will not tier the environmental review of this project from the 2005 LRDP EIR and the 2011 LRDP Amendment 2 EIR, but will instead prepare a stand-alone EIR that evaluates and disclose the potential environmental impacts of the proposed NDD Plan.

At this time, project-level details are available only for Phase 1 development. With respect to the future phase(s) of development, the NDD Plan provides a development program and a land use diagram, but does not have details with respect to specific buildings. Given this level of detail, the EIR for the NDD Plan will provide a program-level analysis for the entire plan and a project-level analysis of the potential environmental impacts from the implementation of Phase 1.

Anticipated Project Approvals

Necessary project approvals are anticipated to include, but are not limited to, consideration of the following by The University of California Board of Regents (anticipated in March 2019):

- Certification of the North District Development Plan EIR,
- Amendment to the UCR LRDP,
- Approval of the North District Development Plan, and
- Approval of the design of the first phase of the proposed project.

Public and Agency Review

The Notice of Preparation (NOP) and this Initial Study will be circulated for public and agency review from June 19, 2018 through July 20, 2018. Copies of the Initial Study are available during normal operating hours at Campus Planning – Capital Asset Strategies, UCR and online at

http://cpp.ucr.edu/environmental/ceqadocs.html. Comments on the NOP/Initial Study must be received by 5:00 PM on July 20, 2018. They may be e-mailed to CEQA@ucr.edu or sent to:

Campus Planning – Capital Asset Strategies
1223 University Avenue, Suite 240
Riverside, California 92507
Attn: Tricia D. Thrasher, ASLA, LEED AP

A public scoping meeting for the NDD Plan EIR will be held on July 3, 2018, from 5:30 PM to 7:30 PM at University Village Suite 210 located at 1223 University Avenue, Riverside, California. The public and agency review period for the EIR is anticipated to commence in approximately November 2018.

Organization of the Initial Study

This Initial Study is organized into the following sections:

Section I – Project Information: provides summary background information about the proposed project, including project location, lead agency, and contact information.

Section II –Project Location and Description: includes a description of the proposed project, including the need for the project, the project's objectives, and the elements included in the project.

Section III –Environmental Factors Potentially Affected: identifies which environmental factors, if any, involve at least one significant or potentially significant impact that cannot be reduced to a less than significant level.

Section IV – Determination: indicates whether impacts associated with the proposed project would be significant, and what, if any, additional environmental documentation is required.

Section V – Evaluation of Environmental Impacts: contains the Environmental Checklist form for each resource and presents an explanation of all checklist answers. The checklist is used to assist in evaluating the potential environmental impacts of the proposed project and determining which impacts, if any, need to be mitigated or to be further evaluated in an EIR.

Section VI – Supporting Information Sources: lists references used in the preparation of this document.

Section VII – Initial Study Preparers: lists the names of individuals involved in the preparation of this document.

I. PROJECT INFORMATION

1. Project title:

   North District Development Plan

2. Lead agency name and address:

   The Regents of the University of California
   1111 Franklin Street
   Oakland, CA 94607

3. Contact person and phone number:

   Tricia D. Thrasher, ASLA, LEED AP
   Principal Environmental Planner
   University of California, Riverside
   (951) 827-1484
   CEQA@ucr.edu

4. Project location:

   University of California, Riverside
   Riverside, California 92507

5. Project sponsor's name and address:

   University of California, Riverside
   Campus Planning – Capital Asset Strategies
   1223 University Avenue, Suite 240
   Riverside, California 92521

6. Custodian of the administrative record for this project (if different from response to item 3 above.):

   Same as above.

II. PROJECT LOCATION AND DESCRIPTION

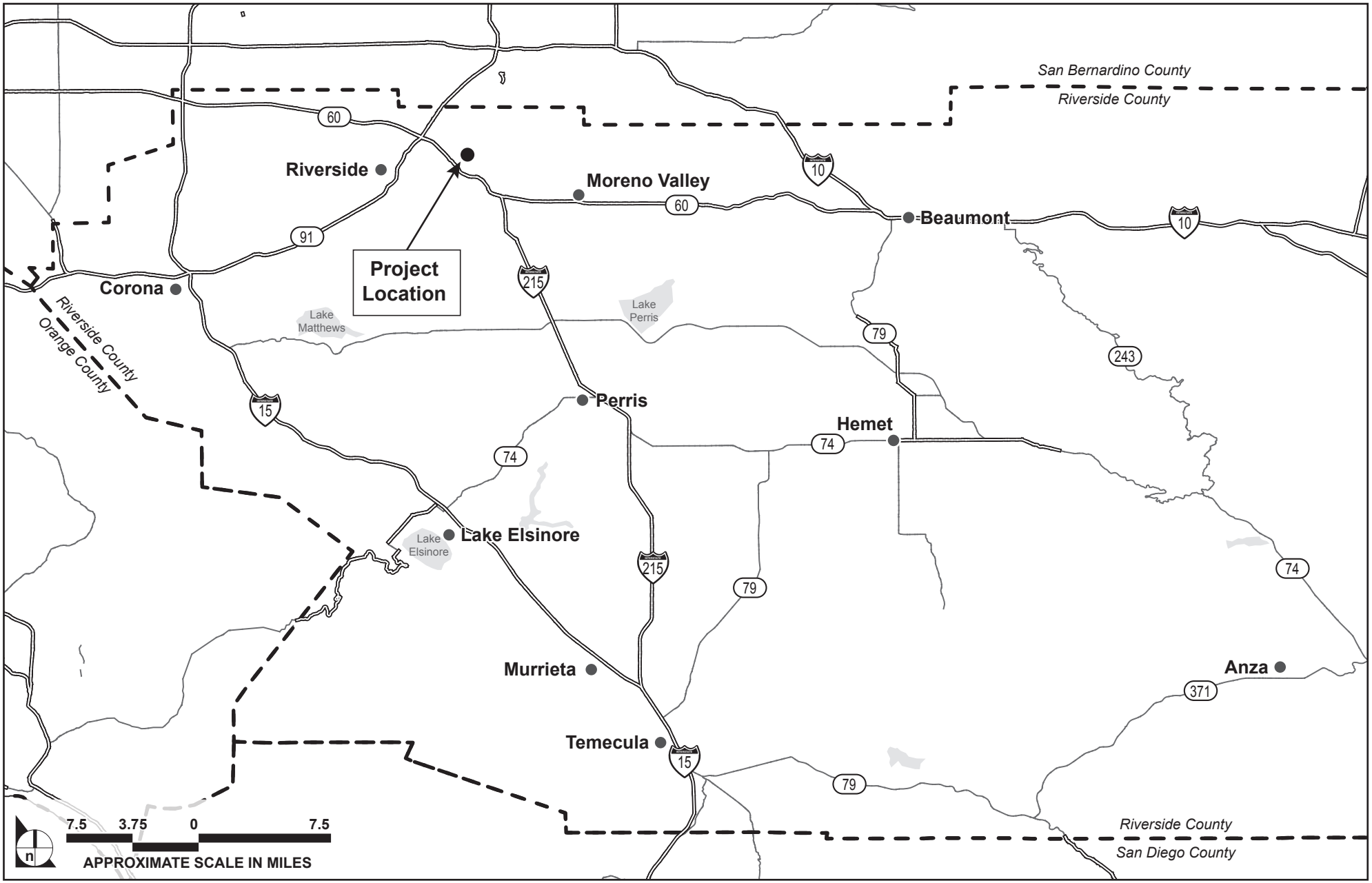
The NDD Plan (proposed project) is a proposed land use plan to redevelop an existing student housing project site on the East Campus with a new higher-density student housing project. The NDD Plan designates land uses for the entire 55-acre site, and the Campus anticipates that the plan area will be developed in phases, beginning with Phase 1 in the southern portion of the 55-acre site. The NDD Plan includes a mix of land use designations that would allow for the construction of student housing units (for first year, second year, transfer, and upper division undergraduate and graduate students), support spaces, site improvements, utilities and supporting infrastructure improvements, dining facilities, recreational fields, an athletic field, and related parking.

Location: The UC Riverside campus is located in the City of Riverside, three miles east of downtown Riverside and just west of the Box Springs Mountains. The City of Riverside is located within the County of Riverside, in a larger geographic area known as the Inland Empire, which includes western Riverside and San Bernardino counties. **Figure 1, Regional Location**, shows the location of the campus in a regional context. The campus is generally bounded by University Avenue and Blaine Street on the north, Watkins Drive and Valencia Hill Drive and its extension south on the east, a line extending east from Le Conte Drive on the south, and Chicago Avenue on the west. The campus is bisected diagonally by the I-215/SR-60 freeway. The area to the east of I-215/SR-60 is called the East Campus.

The proposed NDD Plan area is an approximately 55-acre site located in the northeastern portion of East Campus (**Figure 2, Project Location**). The Plan area consists of the existing vacant Canyon Crest Family Student Housing Complex which includes single-family dwellings, most of which are vacant although some are now used as storage and maintenance facilities, including permanent structures and modular units in the northwestern portion of the site. A park with a playground is located in the western portion of the Plan area, south of Cherry Street. There are nine asphalt-paved residential streets within the Plan area in addition to several gravel roads. The project site is surrounded by Blaine Street and a small shopping plaza to the north and Canyon Crest Drive and the Falkirk Apartments to the west. The Plan area is bounded by Linden Street to the south along with the Police Facility, a track facility, the Student Recreation Center, and the Aberdeen-Inverness (A-I) Residence Halls. To the east of the project site are parking lots, the UC Riverside Child Development Center, and the Campus Corporation Yard (which includes three campus support facility buildings [Corporation A, B, and C], two warehouses (Warehouse #1 and #2), the Mail Services building, the Transportation and Parking Services (TAPS) building and yard, a car shed, a gas storage building, and outdoor storage and parking areas).

North District Development Plan

Land Use Plan: Figure 3, Proposed Land Use Designations presents the land use designations that are included in the NDD Plan. **Table 1** below presents the acres assigned to each land use designation/district and the types and intensity of land uses planned for each land use district.



SOURCE: Impact Sciences, 2018

FIGURE **1**

IMPACT SCIENCES

Regional Location

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SOURCE: Google Maps, 2018

FIGURE **2**

IMPACT SCIENCES

Project Location

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SOURCE: Solomon Cordwell Buenz, 2018

FIGURE 3

IMPACT SCIENCES

Proposed Land Use Designations

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Table 1
North District Development Plan
Proposed Land Use Designations and Districts

Land Use	Acres	Bed/Spaces/Seats/Mixed Use
Student Residential and Mixed Uses District 1	4.25	700-1,000 Beds 10,000-15,000 sf Mixed Use
Student Residential and Mixed Uses District 2	6.15	800-1300 Beds 13,000-22,000 sf Mixed Use 600 Seat Dining Facility
Student Residential and Mixed Uses District 3	5.45	700-1,400 Beds 30,000-50,000 sf Mixed Use
Student Residential and Mixed Uses District 4	8.40	1,400-2,600 Beds 50,000-70,000 sf Mixed Use
Student Residential and Mixed Uses District 5	3.40	700-1,000 Beds
Athletics Event Center	5.70	5,000-7,000 Seats
Parking 1	2.15	Less than or equal to 1,200 Spaces
Parking 2	4.05	Less than or equal to 1,200 Spaces
Open Space	11.60	--
Total Acres	***51.15***	

The NDD Plan provides for the phased development of apartments, mixed-use residential, resident life amenity spaces, living and learning spaces, resident life support spaces, dining facilities, athletics facilities, and parking areas (**Figure 4, North District Development Plan (Conceptual)**). **Table 2** below sets forth the number of student beds and other amenities that would be developed in Phase 1 of the Plan and the additional beds and facilities that would be built in the future phase(s).

The NDD Plan sets forth details regarding the facilities that would be built in Phase 1 and includes a land use diagram to guide the development of the future phase(s). The Plan, however, establishes building heights, noting that heights would range from 5 to 6 stories for the apartment buildings, 5 to 6 stories for residence halls, 1 to 2 stories for mixed use buildings, a 2-story dining facility, and parking structures would be 7 levels.

NOT ACCORDING TO SCALE

SOURCE: Solomon Cordwell Buenz, 2018

FIGURE **4**

IMPACT SCIENCES

North District Development Plan (Conceptual)

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Table 2
North District Development Plan
Phased Development Program

Unit Mix	Phase 1	Future Phase	NDD Plan Total
Apartments	1,500 beds	2,558 beds	4,058 beds
	361,836 sq. ft.	1,009,811 sq. ft.	1,371,647 sq. ft.
Residence Halls	--	1,200 beds	1,200 beds
		244,059 sq. ft.	244,059 sq. ft.
Residential Floor Amenity / Support Spaces	7,846 sq. ft.	TBD	TBD
Circulation, Mechanical, & Structure	147,958 sq. ft.	TBD	TBD
Living, Learning, Community & Administration	10,704 sq. ft.	TBD	TBD
Support & Maintenance	5,177 sq. ft.	TBD	TBD
Dining Facilities	--	33,380 sq. ft.	33,380 sq. ft.
Field House	--	21,893 sq. ft.	21,893 sq. ft.
Competition Field	--	3,000 seats	3,000 seats
Surface Parking	844 spaces	--	--
Structured Garage Parking	--	2,164 spaces	2,164 spaces

Open Space and Landscaping: The NDD Plan proposes a large open space area in the eastern portion of the Plan area. The site material palette for the NDD Plan would include hardscape and softscape materials that are derived from the existing campus aesthetic. Key intersections and open spaces, such as the primary plaza, main building entries, and courtyard patios, would include specialty paving that highlights the importance of those spaces. Planting materials would include native and adaptive species that are drought tolerant, reflect the native landscape of the region, and highlight UC Riverside's commitment to sustainability and water use reduction. Incorporation of trees throughout the site would provide shade and respite from the heat while creating pleasant places to rest and relax throughout the Plan area.

During construction, tree protection zones would be placed at or beyond the dripline of trees wherever possible. Protection fencing would include 8-foot high chain-link fence. Per the tree survey and arborist evaluation, two tiers of trees would be considered for preservation.[1] Of the 681 trees in the site

1 The full North District Tree Evaluation, completed by Psomas in March 2017, is included as Appendix B to this Initial Study. According to the Evaluation, first tier trees consists of the following criteria: High health rating (4 min.), high aesthetic rating (4 min.), California natives, significant height, significant canopy, significant trunk. The second tier trees are selected for: Moderate-high health rating (3 min.), moderate-high aesthetic rating (3 min.), significant height, significant canopy, significant trunk. The third tier trees include: Low-moderate health

inventory, 46 shrubs, 132 invasive specimens (for example pepper trees) and six short-lived specimens would be removed. Of the remaining 497 trees, 110 trees are first tier and 56 are second tier. All third tier trees would be removed in Phase 1. The arrangement of buildings on the site of the future phase(s) would be positioned to retain clusters of healthy, existing trees. This approach would give the site development an immediate sense of scale and would provide shade for residents and visitors. The goal would be to add replacement trees at a rate of approximately four-to-one, which would help to strengthen the landscape design, highlight pedestrian corridors and provide future shade and comfort throughout the open spaces.

General Access and Circulation: Vehicular access would be provided from Linden Street, Blaine Street, and Watkins Drive.

As depicted in **Figure 5**, multi-modal routes would be provided to encourage walking and riding to and from the campus with the intent of creating a pedestrian friendly experience for students, staff, and visitors to the North District. Additional pedestrian walks, plazas, and bicycle routes would be developed under the NDD Plan. Bike lanes shall be included on all major streets. Bike parking would be provided throughout the NDD Plan area. Secure bike parking would be included inside the buildings as well as in outdoor, secure parking facilities. These would be provided at a rate of one stall per four residents. Temporary and visitor parking would be provided at all residential buildings, the NCAA field, and the dining facility at a rate of 2.5 percent of the maximum occupancy, with a minimum of four spaces per building.

Service Access: The Plan's network of pedestrian walks would be sized and designed to allow for service access along the main multi-modal pathways throughout the site. Convenient pick-up locations for each housing area along the service routes would facilitate trash and recycling storage at residential buildings with. The new dining facility would include loading and service area for food delivery and substantial trash and recycling collection.

Emergency Access: The NDD Plan would be designed to allow for direct emergency access to all buildings. Access would be provided on the surrounding streets as well as on the multi-modal malls throughout the development site. The design of these paths would meet the requirements for emergency vehicles, including the 22,000 pounds per square inch (psi) loading and access to building facades. Pedestrian egress routes have also been established to provide safe and direct routes for evacuation of the site during emergencies.

Utilities:

Water: Riverside Public Utilities (RPU) currently provides water to the Campus. Combined 12-inch fire and water lines would be installed throughout the NDD Plan area to serve future buildings. Tie-in points

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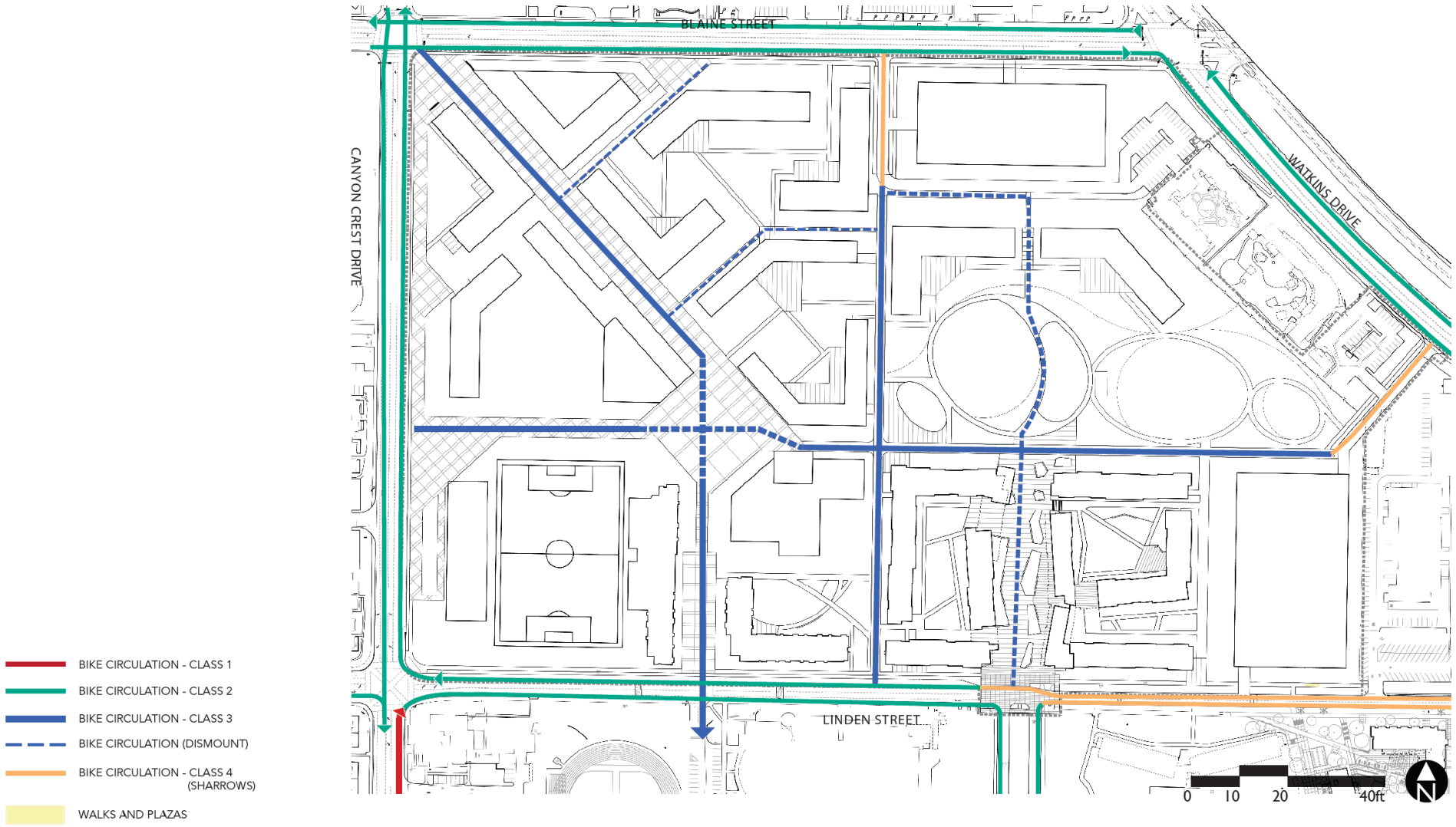
rating (less than 3), low-moderate aesthetic rating (less than 3), California invasive tree species, trees that are short lived and/or brittle, trees that are dead or dying.



SOURCE: Solomon Cordwell Buenz, 2018

FIGURE 5

IMPACT SCIENCES

North District Development Plan - Multi-Modal Routes

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to the existing public 14-inch public water line would be installed at the intersections of Linden Street and the recreational mall and Linden Street and Aberdeen Drive. As shown in **Table 3**, peak domestic water demand under Phase 1 would be about 940 gallons per minute (GPM) and at NDD Plan buildout would be approximately 3,340 GPM.

Table 3
Water and Wastewater Projections

Utility Type	Phase 1 (GPM)[a]	Future Phase (GPM)	NDD Plan Total (GPM)
Peak Domestic Water Demand	940	2400	3,340
Wastewater Generation	940	2400	3,340
Source: UCR Facilities, May 2018			

Wastewater: Sanitary sewer lines would be installed to serve the proposed buildings. Three tie-in points would be installed at Linden Street and Aberdeen Drive, Linden Street nearby the recreational mall, and at Canyon Crest Drive. Development under the NDD Plan would upsize 800 feet of the existing City sewer line located within Canyon Crest Drive, north of Linden Street, from 8 inches to 15 inches.

Stormwater: The NDD Plan area would be separated into seven drainage areas (Drainage Areas A through G). Stormwater flow would be directed towards proposed detention and treatment areas within each drainage area.

Electricity and Natural Gas: The RPU currently provides electricity to the campus. Natural gas is provided to the campus by the Southern California Gas Company (SCGC). The Campus plans to size the new utility infrastructure to accommodate the future development in the NDD Plan area.

Sustainable Design Features: The approach to sustainable project master planning would be as follows:

Physical and Environmental Design

- The NDD Plan will minimize site disturbance by locating the development on land that is previously developed (the site currently houses the Canyon Crest Family Student Housing complex) and by preserving as many Tier 1 and Tier 2 trees as possible, focusing on larger clusters of those trees. New trees that are adaptive to the local environment would be added at a rate of approximately 4:1.

- The NDD Plan attempts to replicate natural site hydrology processes, to manage 85th percentile rainfall event rainwater runoff onsite using low-impact development strategies.

- Using a combination of existing and new shading trees, planting areas, and high albedo paving and roofing materials, the NDD Plan reduces the urban heat island effect resulting from roof and paved non-roof site surfaces.

- To increase night sky access, improve nighttime visibility, and reduce the consequences of development for the campus wildlife and off-campus neighbors, the NDD Plan will be designed to minimize light pollution by limiting uplight and light trespass beyond the Plan area, using the International Dark Sky Association's (IES/IDA) Model Lighting Ordinance light fixture selection criteria.

- To manage solid waste, the project will provide convenient locations for the collection of waste, recycling, and composting throughout the development and will recycle, reuse, or salvage at least 50 percent of nonhazardous demolition and construction debris.

Organization/Building Form and Orientation

- Each building will be configured for the best use of space and solar orientation possible within the overall masterplan concept. Design features would incorporate passive solar design to minimize heat gain and glare on south facing windows. All south, west, or southwest facing windows would be recessed by two feet from the rest of the building with an external overhang at the top floor, whereas north facing windows would be flush with the building's exterior to allow for slightly larger units.

- The NDD Plan will promote livability, walkability, and transportation efficiency, by being a compact development with a 33 dwelling units per acre residential density.

Landscape and Irrigation Systems/Materials

- Outside of the athletics event center, outdoor water use would be reduced by prioritizing the planting of native/adaptive and drought tolerant plant species, with sub-surface irrigation to reduce maintenance, runoff, and fertilizer and pesticide applications. Outdoor water use will comply with the state of California Model Water Efficient Landscape Ordinance. The Ordinance seeks to increase water efficiency standards for new and retrofitted landscapes through more efficient irrigation systems, greywater reuse (optional), onsite storm water capture (optional), and by limiting the portion of landscapes that can be covered in turf.

- The proposed design of the NDD Plan would provide tree-lined blocks and shaded sidewalks to encourage walking, skating, and bicycling. These strategies also help reduce urban heat island effects, improve air quality, increase evapotranspiration, and reduce cooling loads in buildings.

Mobility Systems

- North District is located on an existing bicycle network, with existing bike paths and lanes on Watkins Drive, Blaine Street, and Canyon Crest Drive. The Plan will provide long-term bicycle storage for at least 30 percent of all regular building occupants, according to the LEED rating system requirements, which exceeds the campus existing requirements of 25 percent (Appendix B of the RFP). The Plan will also provide short-term bicycle storage for at least 2.5 percent of all peak visitors to the North District.

- North District is also located on an existing quality public transit network that serves to reduce the number of vehicle miles travelled significantly for the future residents of the development.

- The NDD Plan will provide safe, appealing, and comfortable street environments (walkable streets) that encourage the existing patterns of walking, biking, and skate-boarding on campus to continue onto the North District.

Plan Phasing: The construction under the NDD Plan would occur from 2019 through 2024/5. Construction would occur in phases with Phase 1 providing about 1,500 beds and occurring from 2019 to 2021. The phasing of the remainder of the NDD Plan development is uncertain at this time and may occur in one or more phases. The entire development program is expected to be completed by 2024/5.

Population: As a residential project, development under the NDD Plan is intended to meet the needs of projected campus enrollment and would not, of itself, increase the enrollment at UC Riverside. The NDD Plan would add an additional approximately 5,258 on-campus beds for students, and compared to existing conditions, about 5,100 students would live on campus rather than seeking housing in the City of Riverside and other communities. The NDD Plan would add approximately 70 staff to the campus.

Phase 1

Phase 1 would be the first development completed within the NDD Plan. As described in **Table 4**, Phase 1 proposes to construct on-campus student apartments, living and learning spaces, resident life amenity spaces, two surface parking lots, and reconfigure two small adjacent parking lots that serve the existing UC Riverside Child Development Center (**Figure 6, North District Development Plan - Phase 1 Site Plan**).

TOTAL PHASE 1 AREA - 19.40 AR

SOURCE: Soloman Cordwell Buenz, 2017

FIGURE 6

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North District Development Plan - Phase I Site Plan

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Table 4
Phase 1 Building Program

Program Element	No. of Units	No. of Beds	Sq Ft /Unit	Building Space (gross square feet)
4 Bedroom / 2 Bathroom Apartment	264	1,044	975	255,000
2 Bedroom / 2 Bathroom Apartment (Double)	106	424	864	91,584
Single Occupied Unit (RA Unit)	20	20	483	9,660
2 Bedroom / 2 Bathroom Apartment (RD)	2	4	864	1,728
1 Bedroom / 1 Bathroom Apartment (ARD)	8	8	483	3,864
Total Program	***400***	***1,500***	***911***	***361,836***
Residential Floor Amenity / Support Spaces				7,846
Circulation, Mechanical, & Structure				147,958
Living, Learning, Community & Administration				10,704
Support & Maintenance				5,177
Surface Parking				775 spaces
Total Square Footage				***533,521***
PROJECT TOTALS	**400**	**1,500**		**533,521**

Student Apartment Buildings: Student apartments would be located in four buildings, Buildings A through D. Buildings A and B would be 5 to 6 stories in height and Buildings C and D would be 4 to 5 stories high. Each set of buildings, A-B and C-D, would have a general public entrance as well as separate resident entrances.

Landscaping: New tree plantings are proposed throughout the site to highlight main walkways and provide canopy in courtyard spaces. About 105 existing trees would remain on the proposed Phase 1 project site (1st and 2nd tier trees and palm trees) and up to 140 proposed trees would be planted. All tier three trees would be removed to eliminate those that are unhealthy and are invasive. Landscaping would consist of climate adaptive planting.

Parking: Phase 1 of the proposed project would include four surface parking lots for students, faculty, visitors, and the UC Riverside Child Development Center (see **Table 5**).

Table 5
Proposed Surface Parking

Parking Location	Number of Spaces
Northern Lot	451
Southeastern Lot	324
North Childcare Lot	38
South Childcare Lot	31
Total	**844**

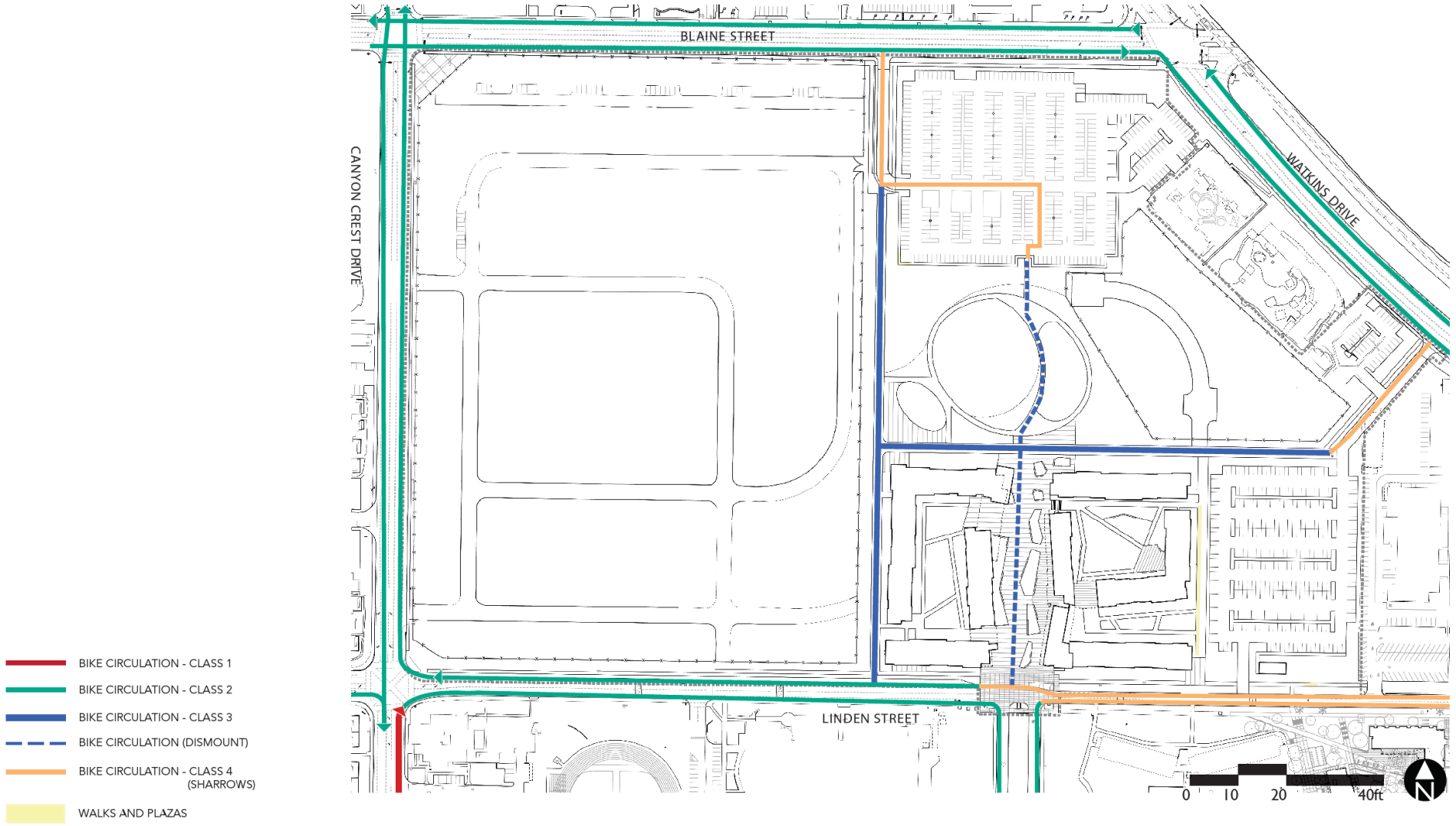
General Access and Circulation: Vehicular access to Phase 1 of the project site would be from the south along Linden Street, from the north along Blaine Street, or from the East via Watkins Drive.

As shown in **Figure 7**, multi-modal routes would be provided to encourage walking and biking to and from the campus with the intent of creating a pedestrian friendly experience for students, staff, and visitors to the project site. Bike lanes would exist on all streets and bike routes include the following classifications: Class 1, 8-foot wide separated or buffered bike lanes; Class 2, 5 to 6-foot striped lanes on streets; Class 3 shared walkways; and Class 4 shared streets with sharrow markings.[2] The Phase 1 project site would have 42 secured indoor bicycle parking space, 345 outdoor secured bicycle parking spaces, and 32 outdoor temporary bicycle parking spaces.

Service Access: Service access would be provided via the north south road that transects the project site and from Watkins Avenue to the north south road. The project site's network of pedestrian walks would be sized and designed to allow for service access along the main multi-modal pathways and residential buildings would facilitate trash and recycling storage with convenient pick up locations for each housing area located along the primary service routes.

Emergency Access*:* In Phase 1, the design concept would establish all future emergency access routes, giving responders full access to all buildings and to the undeveloped portions of the site. Emergency access would be provided via Blaine Street, Watkins Avenue, Linden Street, and Canyon Crest Drive. On the project site, emergency vehicles would travel down the north-south road that transects the project site and around the proposed apartment buildings. Where initial buildings would be developed, pedestrian egress routes would also be established to provide safe and direct routes for evacuation of the site during emergencies.

2 *Sharrows are shared lanes for motorist and bicyclists.*



SOURCE: Solomon Cordwell Buenz, 2018

FIGURE 7

IMPACT SCIENCES

North District Development Plan - Phase 1 - Multi-Modal Routes

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Utilities:

Water: Existing water lines are located within Blaine Street, Canyon Crest Drive, and Linden Street. A combined 12-inch domestic water and fire line is proposed between the grouped apartment buildings and would connect to existing water line in Linden Street at Aberdeen Drive (tie-in point to public water line). Peak domestic water demand under Phase 1 is estimated at 940 gallons per minute.

Wastewater: Existing 8-inch sanitary sewer lines are located in Canyon Crest Drive and Linden Street. There are two existing 8-inch sanitary sewer lines in Linden Street; one that serves the vacant Canyon Crest Family Student Housing complex and one that serves the corporation yard located adjacent to the east of the project site. Phase 1 of the proposed project would install sanitary sewer lines that serve each apartment building and would connect to the existing sanitary sewer line in Linden Street at Aberdeen Drive (tie-in point). Phase 1 of the proposed project would also upsize 1,200 feet of the existing City sewer line located within Canyon Crest Drive, south of Linden Street, from 8 inches to 15 inches.

Stormwater: The Phase 1 project site is divided into five drainage areas (Drainage Areas A through E). Site drainage is designed for these five areas. Stormwater detention and treatment areas are proposed throughout each of the drainage areas near apartment buildings, surface parking lots, and the proposed park area. Detention and treatment areas would be composed of series of planters designed as gardens and swales that collect, slow, treat and infiltrate stormwater. Stormwater drainage from the Phase 1 project site would generally drain to the west.

Sustainable Design Features: The proposed Phase 1 site would be designed to meet all provisions of the University Policy on Sustainable Practices and consider the UC Carbon Neutrality Initiative by targeting Leadership in Energy and Environmental Design (LEED) certification at a Silver level for individual buildings using the framework of the LEED rating system, the project proposes sustainable development that minimizes energy and water use, employs low-impact development criteria, reduces resource consumption for construction and operation, and provides healthy and comfortable living and working spaces. Sustainable features included in Phase 1 would be the same as the sustainable features described above for the NDD Plan.

Construction: Phase 1 would demolish the existing Canyon Crest Family Student Housing. Site mobilization and preparation would occur from Spring 2019 to Summer/Fall 2019. Building construction, including surface parking lot construction, would commence in late Summer/early Fall 2019 and would be completed in Fall 2021. Landscaping activities and off-site repairs would occur in the Summer of 2020.

Construction workers would access the site via Blaine Street and Watkins Drive. Construction workers would park on the north parking area, which would also be used as a laydown area for construction of the proposed apartments. A construction trailer compound would be located adjacent to the northern border of the parking and laydown area. Construction workers would also park in an area west of the proposed apartments, which would also be used as a laydown area for construction of the apartments.

Population: The first phase of the proposed project would house approximately 1,500 students, which would include both undergraduate and graduate students.

Project Objectives:

The objectives of the NND Plan are to:

- Support the Campus goal to house up to 50 percent of enrolled students on-campus and to guarantee on-campus housing to all freshman and transfer students;
- Enhance the student experience by integrating the principles of residential and academic life;
- Promote environmental and sustainability goals by reducing vehicular trips to and from the campus;
- Provide affordable on-campus student housing;
- Develop and operate approximately 4,000 to 6,000 beds of student housing for first year, second year, transfer, upper division undergraduate students and graduate students, along with adequate support spaces, multi-functional spaces, amenities and associated infrastructure while maximizing the building height and density of the entire project site;
- Provide an approximately 600-seat dining facility by delivery of the Future Phase of the project;
- Complete and open the student housing component of the first phase of approximately 1,500 beds by 2020;
- Complete and open the Athletics Event Center as soon as feasible;
- Establish a new iconic gateway to the Campus on the northwest corner of the project site;
- Provide adequate parking to support all phases of development through delivery of the Future Phase.

Discretionary approval authority and other public agencies whose approval is required:

As the public entity principally responsible for approving or carrying out the proposed project, The Regents of the University of California (Regents) is the Lead Agency under CEQA. The Regents is responsible for complying with the California Environmental Quality Act and determining whether to approve the proposed project.

The South Coast Air Quality Management District (SCAQMD) would act as a responsible agency as any emergency generators included in the project would require a permit from the SCAQMD. There are no natural resources on or near the project site that could trigger the involvement of any trustee agencies.

III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

IV. DETERMINATION

On the basis of the initial evaluation that follows:

☐ I find that the proposed project WOULD 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 would not be a significant effect in this case because revisions in the project have been made that would avoid or reduce any potential significant effects to a less than significant level. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

Signature — June 18, 2018
Date

Tricia D. Thrasher, ASLA, LEED AP,
Principal Environmental Planner

V. EVALUATION OF ENVIRONMENTAL IMPACTS

As previously noted, the Campus has determined that the NDD Plan is not within the scope of the amended 2005 LRDP and the associated 2005 LRDP EIR and Amendment 2 EIR. Therefore, the analysis in this Initial Study is not tiered from the two program EIRs that address campus development under the amended LRDP. However, this Initial Study utilizes the information in the two EIRs to characterize existing conditions, as appropriate. The 2005 LRDP EIR and the LRDP Amendment 2 EIR are incorporated by reference into this Initial Study.

Although the NDD Plan is not within the scope of the amended 2005 LRDP, UC Riverside has determined that the 2005 LRDP Planning Strategies (PS) and Planning Principles (PP) that have been incorporated into projects proposed under the 2005 LRDP are important to the Campus and will be incorporated into all development under the NDD Plan.[3] The analysis in this Initial Study references applicable Planning Strategies and Planning Principles.

Appendix G of the *State CEQA Guidelines* provides a suggested format to use when preparing an Initial Study. The Environmental Checklist used in this document adopts a slightly different format with respect to response column headings, while still addressing the Appendix G checklist questions for each environmental issue area.

The following Environmental Checklist uses the following response headings to identify potential environmental effects that will be addressed in the NDD Plan EIR:

Impact to be Analyzed in the EIR: This category includes those impacts that may or may not be significant. The effect may be a less than significant impact that will be addressed to provide a more comprehensive analysis; an impact for which further analysis is necessary or desirable before a determination about significance can be made; an impact that is potentially significant but may be reduced to a less than significant level with the adoption of mitigation measures, or an impact that may be significant and unavoidable.

No Additional Analysis Required: This category includes those impacts where the project would clearly not result in an impact or would clearly result in a less than significant impact under CEQA criteria, and no additional analysis beyond that provided in the Initial Study is necessary.

3 Copies of the 2005 LRDP Planning Strategies (PS) and Planning Principles (PP) and mitigation measures (MM) are included in Appendix A to this Initial Study.

Impact Questions and Responses

5.1 AESTHETICS Would the project…		Impact to be Analyzed in the EIR	No Additional Analysis Required
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)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☑	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☑	☐

DISCUSSION:

a. A scenic vista is generally defined as an expansive view of highly valued landscape as observable from a publicly accessible vantage point. In the vicinity of the UC Riverside campus, the Box Spring Mountains are the most prominent visual feature from many locations, and sweeping panoramic views of the Box Springs Mountains were considered a scenic vista. Although panoramic views of the Box Springs Mountains are available in the vicinity of the campus, no specific objects, scenes, settings, or features of interest are visible within that portion of the Box Springs Mountains adjacent to the campus. No specific focal views of the Box Springs Mountains were identified by the Campus in the 2005 LRDP EIR, and scenic vistas were considered to be limited to panoramic views of the Box Springs Mountains from publicly accessible viewpoints. Implementation of the NDD Plan, including the Phase 1 project, could have an adverse effect on a scenic vista. The EIR will include an evaluation of the proposed project's impacts with regard to scenic vistas.

b. The campus is bisected by the I-215/SR-60 freeway, and is generally bounded by University Avenue, Canyon Crest Drive, Blaine Street, Watkins Drive, Valencia Hill Drive, Le Conte Drive, and Chicago Avenue. None of these roadways is officially designated or identified as eligible for designation as a state scenic highway. Therefore, implementation of the NDD Plan, including the Phase 1 project, would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway, and no impact would occur. No further analysis of this issue is required in the EIR.

c. The East Campus under existing conditions is primarily developed with academic and support buildings, student residences, landscaping, roadways, and parking areas. The 2005 LRDP EIR indicated that the introduction of new academic and residential structures on large parcels has the potential to degrade the visual character and quality of the campus. Implementation of future development on the campus would be guided by a range of LRDP planning strategies, including Land Use 1 through 3, Open Space 1 through 7, Conservation 1 through 4, Campus and Community 1, and Development Strategy 1 through 3, all of which would preserve or enhance the visual character and quality of the campus. In addition, future development on the campus would continue existing campus programs and practices, such as PP 4.1-1 and PP 4.1-2(a) and (b),

which would require that buildings be designed to be consistent with the Campus Design Guidelines and that mature trees be relocated, whenever feasible. It is anticipated that development under the NDD Plan, including the Phase 1 project, would also implement the LRDP planning strategies and existing campus programs and practices mentioned above and would not substantially degrade the existing visual character or quality of the site and its surroundings, and this impact would be less than significant. However, in order to provide complete information and discussion of this topic, further analysis of this issue will be included in the EIR.

d. Although there are some sources of light and glare currently on the project site, implementation of the NDD Plan, including the Phase 1 project, would result in the construction of a large number of new substantially taller buildings with increased sources of light and/or glare. The NDD Plan EIR, which includes analysis of the Phase 1 project, will review new sources of light and glare to evaluate the potential impacts on day or nighttime views in the area.

CUMULATIVE IMPACTS:

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not substantially damage scenic resources; therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to this topic and further analysis in the NDD Plan EIR is not required.

All other potential cumulative aesthetic impacts for all other topics will be addressed in the NDD Plan EIR.

5.2 AGRICULTURAL AND FORESTRY RESOURCES Would the project…	Impact to be Analyzed in the EIR	No Additional Analysis Required
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)) or timberland (as defined by Public Resources Code Section 4526)?	☐	☑
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?	☐	☑

DISCUSSION:

a. As shown in Figure 4.2-1 of the 2005 LRDP EIR (Farmland on the UC Riverside Campus), development within the NDD Plan area, including the Phase 1 project site, would not be within an area designated as Farmland. Implementation of the NDD Plan, including the Phase 1 project, would not result in the loss of Farmland, and there would be no impact. Further evaluation in the NDD Plan EIR is not required.

b. Lands affected by proposed development under the NDD Plan, including the Phase 1 project, are not zoned for agricultural use or under a Williamson contract. Therefore, no impacts would occur and further evaluation in the NDD Plan EIR is not required.

c. There are no areas within the NDD Plan area, including the Phase 1 project site, that are zoned as forestland or timberland. No impact would occur and further evaluation in the NDD Plan EIR is not required.

d. No part of the NDD Plan area, including the Phase 1 project site, contains forest lands. Furthermore, the surrounding area does not include any forest land or timber land. No impact would occur and further evaluation in the NDD Plan EIR is not required.

e. The lands surrounding the NDD Plan area, including the Phase 1 project site, are campus lands and not zoned for agricultural use. In addition, the NDD Plan, including the Phase 1 project, would neither construct any uses sensitive to agricultural noise or activities nor construct any uses that would conflict with agricultural practices. Therefore, the NDD Plan, including the Phase 1 project, would not create land use conflicts with adjacent agricultural lands that could result in the abandonment of agricultural uses or cause the lands to convert to non-agricultural uses. Therefore, no impact would occur and further evaluation in the NDD Plan EIR is not required.

CUMULATIVE IMPACTS:

The NDD Plan, including the Phase 1 project site, would not convert Prime Farmland to non-agricultural uses. Additionally, the NDD Plan and the Phase 1 project site would not result in an impact on forest land, timberland, lands under Williamson Act contract, and would not result in conversion of farmland to non-agricultural uses. Further analysis of cumulative impacts in the NDD Plan EIR is not required.

5.3 AIR QUALITY[4] Would the project…		Impact to be Analyzed in the EIR	No Additional Analysis Required
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☑	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☑	☐
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☑	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☑	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☑

DISCUSSION:

a. Implementation of the proposed NDD Plan would result in short- and long-term emissions of criteria air pollutants from mobile and stationary sources. These emissions would contribute to the non-attainment status of the South Coast Air Basin for ozone and airborne particulate matter. The NDD Plan EIR will analyze whether implementation of the NDD Plan would conflict with or obstruct implementation of applicable air quality plans. The NDD Plan EIR will also contain analyses of project-specific impacts associated with the Phase 1 project.

b. New vehicle trips generated by development under the NDD Plan, including the Phase 1 project, and construction activities could increase pollutant levels, and could contribute to a violation of an air quality standard. Emergency generators installed as part of the project could also emit pollutants. The NDD Plan EIR will examine the potential for vehicle and stationary source emissions under the NDD Plan (including emissions associated with the Phase 1 project) to violate state and federal air quality standards or to contribute to existing air quality violations. This issue will be further evaluated in the NDD Plan EIR.

c. Construction and operation of development planned under the NDD Plan, including the Phase 1 project, would generate air pollutants that could be considerable in a regional, cumulative

4 In 2015, the California Supreme Court in California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD) ruled that CEQA generally does not require a lead agency to consider the impacts of the environment on the future residents or users of the project. Specifically, the decision held that an impact of the existing environment on the project, including future users and/or residents, is not an impact for purposes of CEQA. However, if the project, including future users and residents, exacerbates existing conditions that already exist, that impact must be assessed, including how it might affect future users and/or residents of the project. Thus, in accordance with Appendix G of the State CEQA Guidelines and the CBIA v. BAAQMD ruling, the project would have a significant impact related to exposure of project residents and structures to hazards related to geology and soils only if the project would exacerbate existing conditions.

context. The EIR will include an evaluation of the air quality impacts that could result from implementation of the NDD Plan (including emissions associated with the Phase 1 project) and from other foreseeable projects in the region to determine whether increases in non-attainment criteria pollutants would be cumulatively considerable. This issue will be further evaluated in the NDD Plan EIR.

d. Sensitive receptors, considered to be places where children, the elderly, and other sensitive people are located, are more susceptible to the effects of air pollution than the general population. Nearby toxic air contaminants (TAC) and carbon monoxide (CO) pollution can impact sensitive receptors. Sensitive receptors on campus include child care centers, staff/faculty housing, and recreational areas. Implementation of the NDD Plan would result in increased construction, traffic, and operations, which would increase emissions of pollutants, including carbon monoxide, TACs, dust, and ozone precursors. The NDD Plan EIR will include a detailed analysis of increased pollutant emissions under the NDD Plan (including emissions associated with the Phase 1 project) and potential effects on sensitive receptors.

e. Construction of projects within the NDD Plan area, including the Phase 1 project, would require the use of diesel-fueled equipment and architectural coatings, both of which have an associated odor. However, these odors would be short-term and temporary and would not be pervasive enough to affect a substantial number of people nor would they be objectionable. Routine operation of development under the NDD Plan, including the Phase 1 project, would not involve activities that typically produce odors such as research facilities, wastewater treatment, manufacturing, and agriculture. Occasional use of maintenance products could produce localized odors, but they would be temporary and limited in area. Additionally, there could be airborne odors resulting from cooking activities associated with new dining facilities and odors from new trash receptacles. However, these odors would not be pervasive enough to cause objectionable odors affecting a substantial number of people. Consequently, short-term construction and long-term operation from implementation of the NDD Plan, including the Phase 1 project, would not create objectionable odors that could affect a substantial number of persons, nor expose project site occupants to substantial odors, and the impact would be less than significant. Further evaluation in the NDD Plan EIR is not required.

CUMULATIVE IMPACTS:

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not create objectionable odors that could affect a substantial number of persons, nor expose project site occupants to substantial odors; therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to this topic and further analysis in the NDD Plan EIR is not required.

All other potential cumulative air quality impacts for all other topics will be addressed in the NDD Plan EIR.

5.4 BIOLOGICAL RESOURCES Would the project…	Impact to be Analyzed in the EIR	No Additional Analysis Required
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 US Fish and Wildlife Service?	☐	☑
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☑
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?	☐	☑

DISCUSSION:

a. The NDD Plan area, including the Phase 1 project, is a disturbed site that has been previously developed with the existing Canyon Crest Family Student Housing complex. According to Figure 4.4-1 from the 2005 LRDP EIR, the NDD Plan area, including the Phase 1 project, is not identified as within an area containing sensitive biological resources. Therefore, the proposed development within the NDD Plan area, including construction of the Phase 1 project, would have no impact on special-status species. Further evaluation in the NDD Plan EIR is not required.

b. Riparian habitat, including designated California gnatcatcher critical habitat, exists on the campus. However, the NDD Plan area, which includes the Phase 1 project site, is not located within a riparian zone or within gnatcatcher critical habitat. Implementation of the NDD Plan, including the Phase 1 project, would have no impact on a sensitive natural community. Further evaluation in the NDD Plan EIR is not required.

c. Although there are federally protected seasonal wetlands or jurisdictional waters of the United States on the UC Riverside campus, there are none within the NDD Plan area. Therefore, implementation of the NDD Plan, including the Phase 1 project, would not affect any federally protected seasonal wetlands or jurisdictional wetlands. Further evaluation in the NDD Plan EIR is not required.

d. The NDD Plan area, which includes the Phase 1 project site, is previously disturbed land and is surrounded by urban land uses on all sides. Therefore, the site does not serve as a wildlife corridor.

The existing trees within the NDD Plan area provide important character and environmental benefits, including shade, and have been a cherished part of the Canyon Crest Family Student Housing community. Per the tree survey and arborist evaluation, two tiers of trees would be considered for preservation. Of the 681 trees in the site inventory, 46 shrubs, 132 invasive specimens (for example pepper trees) and six short-lived specimens would be removed. Of the remaining 497 trees, 110 trees are first tier and 56 are second tier (see above for definition of tiers). The remaining are third tier trees, which would be removed in the Phase 1 project. Removal of trees could impact nesting birds. **Mitigation Measures BIO-1** and **BIO-2** described below would be implemented to reduce any potential impact on nesting bird species to a less than significant level. Furthermore, the NDD Plan would protect valuable existing trees based on the tree locations and qualities. The arrangement of buildings on the NDD Plan site would be positioned to retain clusters of healthy, existing trees when possible. Replacement trees would be planted within the Plan area at a rate of approximately four-to-one, which would help to strengthen the landscape design, highlight pedestrian corridors, and provide future shade and comfort throughout the open spaces. During construction, tree protection zones would be placed at or beyond the dripline of trees wherever possible. Any construction work within the tree protection zone would be done by hand and using methods to ensure the safety of the trees to remain. Further evaluation in the NDD Plan EIR is not required.

Phase 1 would retain many existing trees in the northern segment of the site that would serve as a surface parking lot. Throughout the site, new tree plantings are proposed to highlight main walkways and provide canopy in the park and courtyard spaces. Approximately 105 existing trees would remain on the Phase 1 project site (1st and 2nd tier trees and palm trees) and up to 140 new trees would be planted. The 28 fan palms (*Washingtonia robusta*), primarily planted along Linden Street to mark a historic farm access drive, have been noted as iconic heritage trees by UC Riverside and would be protected within Linden Street improvements. In Phase 1, all tier 3 trees would be removed to eliminate those that are unhealthy and are invasive. Removal of trees could impact nesting birds. Similar to the NDD Plan analysis, **Mitigation Measures BIO-1** and **BIO-2** would be implemented to reduce any potential impact on nesting bird species to a less than significant level.

Mitigation Measures:

Mitigation Measure BIO-1

Prior to the onset of construction activities that would result in the removal of mature trees and would occur between March and mid-August, surveys for nesting special-status avian

species and raptors shall be conducted following the California Department of Fish and Wildlife (CDFW) guidelines. If no active avian nests are identified on or within 250 feet of the construction site, no further mitigation is necessary.

Mitigation Measure BIO-2

If active nests of special-status avian species or raptors are found within the construction footprint or within 250 feet of the construction site, exterior construction activities shall be delayed until the young have fledged or appropriate mitigation measures responding to the specific situation have been developed and implemented in consultation with CDFW.

e. Pursuant to the University of California's constitutional autonomy, development and uses on property owned or controlled by the University that are in furtherance of the University's educational purposes are not subject to local land use regulation, including County and City General Plans or local ordinances for the protection of biological resources. Nevertheless, because of the developed condition of NDD Plan site, which includes the Phase 1 site, implementation of the NDD Plan, including the Phase 1 project, would not conflict with any policies for the protection of biological resources. Therefore, no impacts would occur and no further evaluation in the EIR is required.

f. A Multiple Species Habitat Conservation Plan (MSHCP) was approved and adopted by Riverside County in 2003 as a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) and Natural Communities Conservation Plan (NCCP) focusing on conservation of both species and habitats to address biological ecological diversity conservation needs in western Riverside County. A portion of the campus is included in the MSHCP but is not identified for conservation. The NDD Plan area, which includes the Phase 1 project site, is not within the portion of the campus that is included in the MSHCP. There would be no impact with respect to this criterion and no further evaluation in the NDD Plan EIR is required.

CUMULATIVE IMPACTS:

As discussed above, implementation of the NDD Plan, including the Phase 1 project, would not result in any impacts on special-status species or a natural community, it would not contribute to any cumulative impacts to special-status species and natural communities in the County. No further evaluation in the NDD Plan EIR is required. The NDD Plan would also not affect wildlife movement and therefore would not contribute to a cumulative impact on wildlife movement. The NDD Plan would have the potential to affect nesting birds. However, with the implementation of the mitigation measures set forth above, the project's impact would be rendered less than significant and its contribution to the cumulative impact on nesting birds would not be considerable. No further evaluation in the NDD Plan EIR is required.

5.5 CULTURAL RESOURCES Would the project…	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☑
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☑
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☑

DISCUSSION:

a) Two historic resource evaluations have been completed for the NDD Plan project site, including a Phase I Cultural Resources Assessment prepared by Psomas in March 2017, and a Historic Resource Evaluation Report for the Canyon Crest Family Housing Complex University of California – Riverside, Riverside County, CA by Daly & Associates in March 2017, both documents are included in Appendix C of this Initial Study.

The Canyon Crest Family Student Housing (CCFSH) complex, historically known as the Canyon Crest Housing complex, was constructed outside of the city limits of Riverside, by the U.S. Army Corps of Engineers in 1940-1941 in conjunction with the building of Camp Haan, just to the south in the Moreno Valley. Camp Haan was built as a preemptive measure to bolster defensive forces on the West Coast due to concerns of armed invasion by Japan. The residential housing complex was constructed for personnel of both Camp Haan and March Air Field. It was quickly occupied by military personnel and their families, but within just a year, the U.S. Army passed control of the property to the Federal Public Housing Authority. They, in turn with legislation passed in 1937 for the creation of public housing, assisted Riverside County in creating their own public housing authority and taking over responsibility for the management of the CCFSH complex. Housing Authority of the County of Riverside (HACR) managed the property day-to-day, and instituted social programs and activities that included a nursery school operated under the auspices of the Riverside City School District. HACR managed the property until 1954 when it was sold by an act of Congress to UC Riverside.

Under the criterion for evaluating the CCFSH complex for listing in the National Register or California Register for its association with events that have made a significant contribution to the broad patterns of history in the cultural heritage of Riverside County, California or the United States, the complex does not appear eligible for listing as a historical resource. The subject property was not found to have been directly associated with the military activities undertaken to protect the West Coast from an attack from Japan, or with the actual wartime training activities of March Air Field or Camp Haan. The CCFSH complex was located away from the military bases so that the residents could take advantage of the shopping, social, and educational resources available in the City of Riverside, which were severely lacking in the Moreno Valley area. The CCFSH complex merely played a supporting role in the war effort by providing housing for persons associated with the military bases. The CCFSH complex does not appear to meet the guidelines for listing in the California Register under Criterion 1 as a historical resource significant in the history of the region. The property does not appear to present the qualities

important to the nationwide history of "home front" activities of World War II, which would make the property eligible for listing in the National Register under Criterion A.

Under the criterion for evaluating properties for listing in the National Register or California Register for their association with the lives of persons important to the history of Riverside County, California, or the United States, the Canyon Crest Family Student Housing complex property does not appear eligible for listing in the National Register under Criterion B, or the California Register under Criterion 2. There is no evidence found that individuals or tenants associated with the property were persons identified as having a direct effect to history of the region, state, or nation.

Per the criterion for evaluating built-environment structures, it is apparent that the individual buildings of Canyon Crest Family Student Housing complex, and the complex as a whole, have not retained sufficient levels of integrity necessary to present the structural characteristics and features required to be a strong representative of a housing complex constructed by the U.S. Army Corps of Engineers in the days leading up to the entrance of the United States into World War II. The individual units were designed using a Minimalist and modest style of architecture that could be constructed as quickly and inexpensively as possible, even though it was to be a permanent residential community. Alterations made later to the individual units when owned by UC Riverside, substantially changed the residential units appearance by removing the original windows, changing the type of roof on the majority of the units, and adding decorative clapboard elements to the exterior facades where none had previously been placed. The property does not appear eligible for listing in the California Register under Criterion 3, or in the National Register under Criterion C, as an example of a World War II-era housing complex. The CCFSH complex has not retained the aspects of physical integrity that include design, setting, materials, workmanship, and feeling, that are required to be present to convey a properties historic significance.

The CCFSH complex has not yielded, nor does it appear to have the potential to yield, information important to the history of the local area, California or the nation. The property does not appear eligible for listing in the National Register under Criterion D, or the California Register under Criterion 4. Therefore, the Canyon Crest Family Student Housing complex is not eligible for inclusion on the CRHR or NRHP. Demolition of the buildings on the Canyon Crest Family Student Housing complex and construction under the NDD Plan, including the Phase 1 project, would not significantly impact historical resources. No further evaluation in the NDD Plan EIR is required.

b-d) The Eastern Information Center (EIC), located at UC Riverside, conducted a cultural resources records search and literature review for the NDD Plan site, which includes the Phase 1 project site, on February 2, 2017. The EIC is a designated branch of the California Historical Resources Information System and houses records regarding archaeological and historic resources in Riverside, Inyo, and Mono Counties. The review consisted of an examination of the U.S. Geological Survey's (USGS') Riverside East 7.5-minute quadrangle maps to determine if any sites are recorded on or if any cultural resources studies have been conducted on or within a one-mile radius of the study area. Data sources consulted at the EIC included archaeological records, Archaeological Determinations of Eligibility (DOE), historic maps, and the Historic Property Data File (HPDF) maintained by the Office of Historic Preservation (OHP). The HPDF contains listings for the NRHP and/or CRHR, California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI).

While no evidence of prehistoric activity has been previously identified in the study area, nor was any evidence observed during the current survey, the NDD Plan site would be situated in an area traversed by Native American groups, as evidenced by sites located a short distance to the southwest. A field survey of the NDD Plan area, which includes the Phase 1 project site, was conducted on January 16, 2017. The field survey of the NDD Plan area did not result in the discovery of any archaeological resources. However, there is a potential to impact previously unknown archeological resources during earth-disturbing activities. In the case that an archaeological resource is discovered during construction, **Mitigation Measure CUL-1** below shall be implemented to reduce impacts to a less than significant level.

A paleontological records search was conducted at the Natural History Museum of Los Angeles County (NHMLAC) on January 5, 2017. The records search conducted at the NHMLAC indicated that the NDD Plan area, which includes the Phase 1 project site, was not sensitive for fossils at depths of less than ten feet. There is potential to impact previously unknown paleontological resources during earth-disturbing activities. However, LRDP PP 4.5-4 would continue to be implemented to reduce this impact to a less than significant level. Similarly, discovery of human remains could still occur during earth moving activities. With implementation of LRDP PP 4.5-5 would reduce the impact to human remains to a less than significant level.

Mitigation Measure:

Mitigation Measure CUL-1

If an archaeological resource is discovered during construction, all soil-disturbing work within 100 feet of the find shall cease and the University Representative shall contact a qualified archaeologist meeting the Secretary of Interior standards within 24 hours of discovery to inspect the site. If a resource within the project area of potential effect is determined to qualify as a unique archaeological resource (as defined by CEQA), the University shall devote adequate time and funding to determine if it is feasible, through project design measures to preserve the find intact. If it cannot be preserved, the University shall retain a qualified non-University archaeologist to design and implement a treatment plan, prepare a report, and salvage the material, as appropriate. Any important artifacts recovered during monitoring shall be cleaned, catalogued, and analyzed, with the results presented in a report of finding that meets professional standards.

a) If significant Native American cultural resources are discovered, as determined by the consulting archaeologist for which a Treatment Plan must be prepared, the developer, or his archaeologist shall immediately contact the University Representative. The University Representative shall contact the appropriate Tribal representatives.

b) If requested by Tribal representatives, the University, the developer, or faith, consult on the discovery and its disposition (e.g., avoidance, preservation, return of artifacts to tribe).

CUMULATIVE IMPACTS:

As discussed above, implementation of the NDD Plan, including the Phase 1 project, would not result in any impacts on historical resources. The NDD Plan would have the potential to affect archaeological resources, paleontological resources, and human remains. However, with implementation of LRDP PP 4.5-4 and 4.5-5, and **Mitigation Measure CUL-1** set forth above, the project's impact would be rendered less than significant and its contribution to the cumulative

impact on archaeological resources, paleontological resources, and human remains would not be considerable. No further evaluation in the NDD Plan EIR is required.

5.6 GEOLOGY and SOILS[5] Would the project…	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) 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?	☐	☑
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 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?	☐	☑

5 In 2015, the California Supreme Court in California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD) ruled that CEQA generally does not require a lead agency to consider the impacts of the environment on the future residents or users of the project. Specifically, the decision held that an impact of the existing environment on the project, including future users and/or residents, is not an impact for purposes of CEQA. However, if the project, including future users and residents, exacerbates existing conditions that already exist, that impact must be assessed, including how it might affect future users and/or residents of the project. Thus, in accordance with Appendix G of the State CEQA Guidelines and the CBIA v. BAAQMD ruling, the project would have a significant impact related to exposure of project residents and structures to hazards related to geology and soils only if the project would exacerbate existing conditions.

DISCUSSION:

a.(i). There are no active faults that cross the campus site and the campus site is not subject to significant seismic hazards (UCR 2005). Therefore, there are no faults that cross the NDD Plan area, which includes the Phase 1 project site. As a result there would be no risk of fault rupture. Implementation of the NDD Plan, including the Phase 1 project, would expose people and structures to potentially substantial adverse effects resulting from seismic ground shaking. However, it is anticipated that continued implementation of PP 4.6-1(a), PP 4.6-1(b), and PP 4.6-1(c) would ensure that the new buildings would be designed to be consistent with current seismic and geotechnical engineering practice to provide adequate safety levels, as defined in the California Code of Regulations and the University Policy on Seismic Safety. With implementation of PP 4.6-1(a), PP 4.6-1(b), and PP 4.6-1(c), this impact would be less than significant. No further analysis in the NDD Plan EIR is required.

a.(ii). The NDD Plan, which includes the Phase 1 project, would be implemented on the East Campus where soil erosion hazard mostly ranges from slight to moderate. Implementation of LRDP Planning Strategy Open Space 4, Planning Strategy Conservation 2, Planning Strategy Conservation 3, LRDP PP 4.6-2(a), and PP 4.6-2(b) would reduce the impact from substantial soil erosion or the loss of topsoil to a less than significant level. No septic tanks or alternative wastewater systems would be installed as part of development under the NDD Plan, which includes the Phase 1 project. No further analysis in the NDD Plan EIR is required.

a.(iii). Based on soils and depth to groundwater, the risk of liquefaction at the campus is low (UCR 2005). In addition, the risk of deep-seated landsliding is considered to be very low, even on natural slopes. In certain areas on the campus less dense strata and lenses of old alluvium are susceptible to collapse as well as the younger alluvium located near the University Arroyo. Fill material in many areas on the campus was deposited prior to the development of modern building codes. Therefore, the fill materials may exhibit great variability in their density and compressibility and may not be appropriate for the support of structures. In these instances the fill material would need to be recompacted or removed. The Riverside County Open Data geotechnical database maps the NDD Plan area, which includes the Phase 1 project, within a zone of low liquefaction hazard susceptibility (County of Riverside 2016). Furthermore, potential for liquefaction and liquefaction-related secondary effects to develop at the project site following a seismic event is negligible, due to deep groundwater conditions (Haley & Aldrich 2017). No impacts from project implementation would occur. No further analysis in the NDD Plan EIR is required.

a.(iv). The NDD Plan area, including the Phase 1 project site, and the surrounding area are characterized by relatively flat topography and therefore would not be subject to landslides. No impact would occur and no further analysis in the NDD Plan EIR is required.

b. Development under the NDD Plan, including the Phase 1 project, would be constructed on the East Campus where erosion hazard ranges from slight to moderate. Implementation of LRDP Planning Strategy Open Space 4, Planning Strategy Conservation 2, Planning Strategy Conservation 3, LRDP PP 4.6-2(a), and PP 4.6-2(b) would reduce the potential impact from substantial soil erosion or the loss of topsoil to a less than significant level. Further analysis in the NDD Plan EIR is not required.

c. Issues related to seismically induced and non-seismic landslide hazards are discussed in the response to **Item (a)(iv)**, above. Issues related to liquefaction and related hazards are discussed in the response to **Item (a)(iii)**, above. Issues related to soil properties are discussed in the response to **Item (d)**, below. No further analysis in the NDD Plan EIR is required.

d. Most of the soils on the campus have low to moderate shrink-swell characteristics, the potential for water uptake after rainfall to cause soils to expand and damage building foundations is considered low (UCR 2005). Soils on the East Campus generally have low shrink-swell potential. Development under the NDD Plan, including the Phase 1 project, would include the implementation of existing campus programs and practices, such as PP 4.6-1(a). In addition, the projects would be required to comply with applicable provisions of the CBC. Thus, development under the NDD Plan, including the Phase 1 project, would not result in structures being located on expansive soil, creating substantial risks to life or property, and this impact would be less than significant. No further analysis of this issue is required in the NDD Plan EIR.

e. No septic tanks or alternative wastewater disposal systems are included in the proposed project, therefore no impact would occur. No further analysis in the NDD Plan EIR is required.

CUMULATIVE IMPACTS:

The impacts of the NDD Plan associated with exposing people and property to ground shaking effects, as well as the effects of soil characteristics associated with differential settlement, liquefaction, and unstable soils would not be significant. Therefore, the NDD Plan would not contribute to any significant cumulative impacts related to geology and soils. No further analysis in the NDD Plan EIR is required.

5.7 GREENHOUSE GAS EMISSIONS Would the project…	Impact to be Analyzed in the EIR	No Additional Analysis Required
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 or reducing the emissions of greenhouse gases?	☑	☐

DISCUSSION:

a., b. Development of facilities under the NDD Plan, including the Phase 1 project, would generate GHG emissions associated with construction, mobile, and area sources. Proposed development would incorporate sustainable design features. However, this impact is still considered potentially significant, and this issue will be further analyzed in the EIR. In addition, the NDD Plan EIR will evaluate the potential for development within the NDD Plan area, including the Phase 1 project, to conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

CUMULATIVE IMPACTS:

The impact of a project's GHG emissions is essentially a cumulative effect. Potential GHG emissions impacts will be addressed in the NDD Plan EIR.

5.8 HAZARDS & HAZARDOUS MATERIALS[6] Would the project…		Impact to be Analyzed in the EIR	No Additional Analysis Required
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 two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☑
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☑
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☑	☐
h)	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☑

6 In 2015, the California Supreme Court in California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD) ruled that CEQA generally does not require a lead agency to consider the impacts of the environment on the future residents or users of the project. Specifically, the decision held that an impact of the existing environment on the project, including future users and/or residents, is not an impact for purposes of CEQA. However, if the project, including future users and residents, exacerbates existing conditions that already exist, that impact must be assessed, including how it might affect future users and/or residents of the project. Thus, in accordance with Appendix G of the State CEQA Guidelines and the CBIA v. BAAQMD ruling, the project would have a significant impact related to exposure of project residents to hazards only if the project would exacerbate existing conditions.

DISCUSSION:

a. Construction activities under the NDD Plan would involve the use of various products that could contain hazardous materials (such as solvents, adhesives, cements, paints, cleaning agents, degreasers, and fuels used in construction vehicles). Planned development under the NDD Plan would consist of student housing and support spaces, mixed-use student housing, dining facilities, and athletic facilities. Operation of these facilities would also involve hazardous materials, including general maintenance and landscaping. In addition, soil or groundwater contamination could be present at areas that could be developed under the NDD Plan. Development of contaminated sites could potentially expose campus occupants and construction workers to hazardous materials. The NDD Plan EIR will characterize hazardous materials transport, use, and disposal associated with the development under the Plan. The NDD Plan EIR will also identify potentially contaminated sites within the Plan area and will address potential impacts associated with development of contaminated sites.

The Phase 1 project analysis will evaluate the potential risks associated with hazardous materials and the potential for project site contamination.

b. There are no existing or proposed public schools within one-quarter mile of the NDD Plan area, including the Phase 1 project site. However, the UC Riverside Child Development Center is located immediately adjacent to the NDD Plan area. Although the proposed NDD Plan development would handle hazardous materials and wastes, as described above, operations would comply with federal, State, and local regulations pertaining to hazardous wastes, as well as the procedures required by PP 4.7-1. Adherence to these regulations and policies, which require proper handling techniques, disposal practices, and/or clean-up procedures, would ensure that risks associated with hazardous emissions or materials to the UC Riverside Child Development Center would be eliminated or reduced. Therefore, implementation of NDD Plan would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school, and this impact would be less than significant. However, in order to provide additional information and analysis, this impact will be further addressed in the NDD Plan EIR. Potential impacts related to toxic air emissions will be discussed in the NDD Plan EIR as part of the Air Quality analysis.

d. The NDD Plan area, which includes the Phase 1 project, is not located on properties associated with a hazardous site listed under Government Code Section 65962.5, also known as the Cortese List (Envirostor 2018). As a result, development under the NDD Plan, including the Phase 1 project, would not create a significant hazard to the public or the environment and no impact would occur. Further analysis in the NDD Plan EIR is not required.

e., f. The UC Riverside campus is not located within two miles of a public airport or public use airport, and is not included in an airport land use plan (UCR 2005). The closest airports to the UC Riverside campus are Flabob Airport, which is located approximately four miles to the west, and March Air Reserve Base, which is located approximately six miles to the southeast. Therefore, development under the NDD Plan, including the Phase 1 project, would not be located within two miles of a public airport or public use airport, and the Plan area is not included in an airport land use plan. No impact would occur. Further analysis in the NDD Plan EIR is not required.

g. The NDD Plan, including the Phase 1 project site, is not located within areas that are currently identified as emergency assembly areas (UCR 2016). However, development within the NDD Plan could result in lane or roadway closures which may impact adequate access for emergency vehicles. Therefore, development under the NDD Plan, including the Phase 1 project, may have the potential to physically interfere with the campus Emergency Action Plan (EAP). The NDD Plan EIR will characterize the campus' emergency response plans and capabilities, and it will assess the effects of development under the NDD Plan on the campus' ability to respond to emergencies. The NDD Plan EIR will also address the potential for the Phase 1 project to impair implementation of, or interfere with, the EAP.

h. The southeast hills may be susceptible to wildland fires. The NDD Plan area, which includes the Phase 1 project, is not located adjacent to the southeast hills that pose a high risk for wildland fires. Therefore, the proposed NDD Plan would not place people or structures at risk from wildland fires and there would be no impact. Further analysis in the NDD Plan EIR is not required.

CUMULATIVE IMPACTS:

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not locate development on or near hazardous material sites, within two miles of a public airport, public use airport, or private airship, and would not place people or structures at risk from wildland fires. Therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to these topics and further analysis in the NDD Plan EIR is not required.

All other potential cumulative hazard and hazardous materials impacts for all other topics will be addressed in the NDD Plan EIR.

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

DISCUSSION:

a., f. The facilities that would be developed under the NDD Plan, including the Phase 1 project, would be substantially similar to existing campus uses which would not contribute different types of storm water pollutants than those generated currently. Furthermore, development under the NDD Plan, including the Phase 1 project, would comply with the NPDES Phase I and Phase II requirements which would ensure that campus stormwater quality is not substantially degraded. Additionally, LRDP Planning Strategy Conservation 2 and PP 4.8-1 would be implemented to reduce impacts to water quality. Therefore, development under the NDD Plan, including the Phase 1 project, would have a less than significant impact on water quality. Further analysis in the NDD Plan EIR is not required.

b. Development under the NDD Plan, including the Phase 1 project, would modestly decrease the amount of impervious areas and would therefore not interfere with groundwater recharge. The increase in occupied building space would increase demand for potable water that could indirectly increase demand for groundwater, as the campus is supplied domestic water by the City of Riverside, which utilizes groundwater wells for potable water. However, development under the NDD Plan would implement LRDP PP 4.8-2(a) through PP 4.8-2(c) to promote conservation measures that would reduce demand for potable water. In addition, LRDP Planning Strategy Conservation 5 would be implemented which requires compliance with Title 24 requirements, which includes the California Plumbing Code and its water conservation measures. Consequently, implementation of the NDD Plan, including the Phase 1 project, would not substantially deplete groundwater supplies, and the NDD Plan project would have a less than significant impact to groundwater supplies and groundwater recharge. Further analysis in the NDD Plan EIR is not required.

c. Within the majority of the East Campus, soil erosion hazards range from slight to moderate. Construction activities under the NDD Plan, including the Phase 1 project, could result in erosion but the impact would be temporary. The National Pollution Discharge Elimination System (NPDES) permits require that planned projects within the NDD Plan, including the Phase 1 project, develop and implement a SWPPP, including control measures (or Best Management Practices) to control erosion and release of sediment and other pollutants from the NDD Plan area or Phase 1 project site. Furthermore, LRDP Planning Strategy Conservation 2, LRDP Planning Strategy Conservation 3, LRDP PP 4.8-3(c), PP 4.8-3(d), and PP 4.8-3(e) would be implemented as part of the development under the NDD Plan and the Phase 1 project. Therefore, development under the NDD Plan, including the Phase 1 project, would have a less than significant impact related to soil erosion. No further evaluation of impacts in the NDD Plan EIR is required.

d., e. As described above, the NDD Plan would decrease the amount of impervious areas and the project would include stormwater detention features throughout which would increase percolation and reduce runoff. Therefore, runoff from the site would not increase compared to existing conditions and the NDD Plan would have a less than significant impact to surface runoff and flooding. Similarly, the Phase 1 project would decrease the amount of impervious areas, and runoff from the site would not increase compared to existing conditions. Therefore, the Phase 1 project would have a less than significant impact to surface runoff and flooding. No further evaluation in the NDD Plan EIR is required.

g. The NDD Plan area, including the Phase 1 project site, is not within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map. No impact would occur. No further evaluation in the NDD Plan EIR is required.

h. As discussed above under **Item (g),** the NDD Plan area, including the Phase 1 project site, is not within a 100-year flood hazard area. No impact would occur. No further evaluation in the NDD Plan EIR is required.

i., j. The Prado Dam, the nearest dam to the campus, is located on the Santa Ana River downstream of the campus. The nearest upstream dam is Seven Oaks Dam. The potential for catastrophic failure of the Seven Oaks Dam is considered remote (UCR 2005). Therefore, development under the NDD Plan, including the Phase 1 project, is unlikely to experience inundation from dam failure, mudflow, seiche, or tsunami. There would be no impact with regard to these criteria. No further evaluation in the NDD Plan EIR is required.

CUMULATIVE IMPACTS:

All impacts of the NDD Plan associated with hydrology and water quality would not be significant. Therefore, the NDD Plan would not contribute to any significant cumulative impacts related to hydrology and water quality. No further analysis in the NDD Plan EIR is required.

5.10 LAND USE & PLANNING Would the project…		Impact to be Analyzed in the EIR	No Additional Analysis Required
a)	Physically divide an established community?	☐	☑
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☑	☐
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☑

DISCUSSION:

a. Development under the NDD Plan, including the Phase 1 project, would be located on the East Campus in an area surrounded by existing student housing, dining facilities, athletic facilities, and parking lots. Implementation of the NDD Plan, including the Phase 1 project, would not physically divide an established community. Further analysis in the NDD Plan EIR is not required.

b. As a state entity, UC Riverside is not subject to regional or local land use controls. The 2005 LRDP is the land use plan that is applicable to the UC Riverside campus. Although the development under the NDD Plan is outside the scope of the 2005 LRDP, the Campus has designed the NDD Plan to be generally consistent with the 2005 LRDP; however, as some changes are being made to the existing land use designations under the NDD Plan, an LRDP Amendment is required The NDD Plan EIR will analyze consistency with the 2005 LRDP land use plan and policies.

c. As discussed above under Biological Resources, the NDD Plan area, which includes the Phase 1 project site, is not within the portion of the campus that is included in the MSHCP. There would be no impact with respect to this criterion. Further analysis in the NDD Plan EIR is not required.

CUMULATIVE IMPACTS:

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not physically divide an established community or conflict with any applicable habitat conservation plan or natural community conservation plan. Therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to these two topics and further analysis in the NDD Plan EIR is not required.

Potential cumulative impact related to conflicts with any applicable land use plan, policy, or regulation will be addressed in the NDD Plan EIR.

5.11 MINERAL RESOURCES Would the project…		Impact to be Analyzed in the EIR	No Additional Analysis Required
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?	☐	☑

DISCUSSION:

a., b. The NDD Plan area, which includes the Phase 1 project site, is not designated as a mineral resource zone, and no known or potential mineral resources are located on the campus. No impacts would occur. Further analysis in the NDD Plan EIR is not required.

CUMULATIVE IMPACTS:

No mineral resource zones or mineral resource recovery sites exist on the campus or its environs. Development under the NDD Plan EIR, including the Phase 1 project, would not contribute to a cumulative impact on mineral resources. Further analysis in the NDD Plan EIR is not required.

5.12 NOISE Would the project…		Impact to be Analyzed in the EIR	No Additional Analysis Required
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☑	☐
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☑	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☑	☐
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☑	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☑
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☑

DISCUSSION:

a. Development under the NDD Plan, including the Phase 1 project, could result in increases or changes in noise levels from sources such as construction activities, stationary sources, and increased vehicular traffic, which could exceed applicable noise standards. The impact is considered potentially significant. The NDD Plan EIR will evaluate the potential for development under the NDD Plan to increase noise levels and expose people to noise levels in excess of local standards. The NDD Plan EIR will also include project-specific analyses of noise effects associated with the proposed Phase 1 project.

b. Demolition and construction activities proposed under the NDD Plan and the Phase 1 project would generate perceptible groundborne vibration levels when heavy equipment or impact tools are used. Structures and residents in the proximity of the Plan area, and the Phase 1 project site, could be adversely affected by vibration generated during construction. The NDD Plan EIR will examine the potential for increased groundborne vibration or noise levels associated with development under the NDD Plan. The effects of specific construction practices will be evaluated. The NDD Plan EIR will also include project-specific analyses of potential effects associated with groundborne vibration or noise levels associated with specific development of the Phase 1 project.

c. Vehicle traffic associated with the proposed project could result in a substantial permanent increase in ambient noise levels along affected roadways. The impact is considered potentially significant. The NDD Plan EIR will analyze permanent increases in ambient noise levels caused by increase in traffic (if any) from the implementation of the NDD Plan, and it will examine permanent noise increases caused specifically from the implementation of the proposed Phase 1 project.

d. Construction activities associated with the NDD Plan and the Phase 1 project could result in substantial temporary increases in ambient noise levels in the vicinity of the NDD Plan area and the Phase 1 project site. The impact is considered potentially significant. The NDD Plan EIR will examine the potential for construction activities, special events, and operation of emergency vehicles or other operations under the NDD Plan to increase ambient noise levels. The NDD Plan EIR will also analyze temporary or periodic increases in ambient noise levels caused by implementation of the proposed Phase 1 project.

e., f. The NDD Plan area, which includes the Phase 1 project site, is not located within an airport land use plan study area, nor is it within two miles of a public airport or the vicinity of a private airstrip (UCR 2011). Therefore, implementation of the NDD Plan and the Phase 1 project would not expose people residing or working in the area to excessive noise levels. Further analysis in the NDD Plan EIR is not required.

CUMULATIVE IMPACTS:

As discussed above, the NDD Plan, including the Phase 1 project, is not located within an airport land use plan study area, nor is it within two miles of a public airport or the vicinity of a private airstrip; therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to these topics and further analysis in the NDD Plan EIR is not required.

All other potential cumulative noise impacts for all other topics will be addressed in the NDD Plan EIR.

5.13 POPULATION AND HOUSING Would the project…		Impact to be Analyzed in the EIR	No Additional Analysis Required
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☑	☐
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☑
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☑

DISCUSSION:

a. The proposed NDD Plan would provide additional on-campus housing for students to respond to existing and projected enrollment. The NDD Plan EIR will further evaluate whether the NDD Plan would induce substantial population growth directly or indirectly, including whether population growth would occur as part with the proposed Phase 1 project.

b., c. The existing Canyon Crest Family Student Housing Facility is currently vacant and has been since the Summer of 2017. Therefore, implementation of the NDD Plan would not displace housing or people and no impact would occur. Further analysis in the NDD Plan EIR is not required.

CUMULATIVE IMPACTS:

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not displace housing or people; therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to these topics and further analysis in the NDD Plan EIR is not required.

The cumulative impact related to potential to induce substantial population growth directly or indirectly will be addressed in the NDD Plan EIR.

5.14 PUBLIC SERVICES Would the project…	Impact to be Analyzed in the EIR	No Additional Analysis Required
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?	☐	☑

DISCUSSION:

a.(i). Development under the NDD Plan, including the Phase 1 project, would add building space to the campus and increase the number of students living on campus, which would increase the campus's demand for fire protection services. The NDD EIR will evaluate this increased demand, compare this demand to existing and planned equipment and staffing levels, and will evaluate potential environmental impacts associated with any new or altered facilities that would be required to meet this demand.

a.(ii). Development under the NDD Plan, including the Phase 1 project, would increase the number of students residing on the campus, which would increase the campus's demand for police services. The NDD Plan EIR will evaluate this increased demand, compare this demand to existing and planned police staffing levels, and will evaluate potential impacts associated with any new or altered facilities that would be required to meet this demand.

a.(iii). The NDD Plan, including the Phase 1 project, would not provide housing for families with school-age children that would attend local schools. There would be no impact on local schools. Further analysis in the NDD Plan EIR is not required.

a.(iv). Development under the NDD Plan, including the Phase 1 project, would increase the on-campus population, which could increase demand for parks. The NDD Plan EIR will evaluate this increased demand and will evaluate potential impacts associated with any new or altered facilities that would be required to meet this demand. In addition, the NDD Plan would evaluate the potential impacts from construction of the planned athletic facilities under the NDD Plan. The NDD Plan EIR will include project-specific analyses of potential environmental effects that could result from construction of the Phase 1 project.

a.(v). Although development under the NDD Plan, including the Phase 1 project, would increase the number of students that would live on campus, the additional students that would live on-campus would be served by campus libraries, and an expansion of libraries would not be needed. There would be no impact. Further analysis in the NDD Plan EIR is not required.

CUMULATIVE IMPACTS:

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not impact local schools or libraries; therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to these topics and further analysis in the NDD Plan EIR is not required.

All other potential cumulative public service impacts for all other topics will be addressed in the NDD Plan EIR.

5.15 RECREATION Would the project…	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) 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) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☑	☐

DISCUSSION:

a. UC Riverside maintains a variety of indoor and outdoor recreational facilities. The NDD Plan, including the proposed Phase 1 project, would increase the on-campus population. As adequate recreational facilities would be provided on the campus, the increased on-campus population due to the proposed project would not increase the use of neighborhood and regional parks such that substantial physical deterioration of the facilities would occur or be accelerated. Further analysis in the NDD Plan EIR is not required.

b. The proposed NDD Plan provides for the construction an athletic facility on campus. The NDD Plan EIR will include a program-level analysis of the potential effects of development under the NDD Plan, and it will analyze the potential environmental effects associated with construction of the athletic field. The Phase 1 project does not include construction of any recreational facilities. Further project-level analysis in the NDD Plan EIR is not required.

CUMULATIVE IMPACTS:

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not result in substantial physical deterioration of neighborhood and regional recreational facilities; therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to this topic and further analysis in the NDD Plan EIR is not required.

The potential cumulative impact from the development of recreational facilities under the NDD Plan will be addressed in the NDD Plan EIR.

5.16 TRANSPORTATION & TRAFFIC Would the project…		Impact to be Analyzed in the EIR	No Additional Analysis Required
a)	Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☑	☐
b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards established by the county congestion management agency for designated roads and highways?	☑	☐
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☑
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☑	☐
e)	Result in inadequate emergency access?	☑	☐
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☑	☐

DISCUSSION:

a, b Provision of on-campus housing under the NDD Plan would have the potential to reduce daily and peak hour trips to the campus compared to both existing conditions as well as No Project conditions. The NDD Plan EIR will include a detailed evaluation of the changes in traffic under the NDD Plan. The scope of the traffic analysis will include a detailed evaluation of trip generation due to the project, and if an increase in peak hour trips due to the project is indicated, the traffic analysis will analyze impacts on study intersections, freeway ramp intersections, freeway interchanges, and vehicle miles of travel (VMT). The analysis will estimate the traffic conditions with full implementation of the proposed NDD Plan and with traffic increases caused by other regional growth. The regional growth projections will be based on the RIVTAM regional traffic model. The NDD Plan EIR will evaluate the project-specific traffic impacts that could result from implementation of the Phase 1 project.

c. The closest airports to the campus are Flabob Airport, which is located approximately four miles to the west, and March Air Reserve Base, which is located approximately six miles to the southeast. Development under the NDD Plan, including the Phase 1 project, would also not result in a change in air traffic patterns or an increase in air traffic levels, as the Plan area is not located within two miles of the nearest airport, or within the airport land use plan study area for either the Flabob Airport or the March Air Reserve Base, and no impact would occur. No further analysis in the NDD Plan EIR is required.

d. The NDD Plan, which includes the Phase 1 project, would include alterations to roadways that could produce hazardous design features. The NDD Plan EIR will evaluate potential hazards caused by design features or incompatible roadway uses under the NDD Plan, and it will evaluate the potential for project-specific hazards associated with the proposed Phase 1 project.

e. Implementation of the NDD Plan, which includes the Phase 1 project, could affect emergency access by causing roadway changes that could hinder emergency access. The NDD Plan will evaluate potential program-level impacts to emergency access and will evaluate project-specific emergency access for the proposed Phase 1 project.

f. The NDD Plan EIR will analyze any adopted policies, plans, or programs regarding alternative transportation that are applicable to the campus in order to determine if the NDD Plan, including the Phase 1 project, would conflict with those plans. The NDD Plan EIR will evaluate the potential effects of implementing the NDD Plan and the project-specific effects associated with the proposed Phase 1 project.

CUMULATIVE IMPACTS:

As discussed above, campus development under the NDD Plan would not result in a change in air traffic patterns; therefore, campus development under the NDD Plan would not contribute to cumulative effects with regard to this topic.

All other potential cumulative transportation and traffic impacts for all other topics will be addressed in the EIR.

5.17 TRIBAL CULTURAL RESOURCES			
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		Impact to be Analyzed in the EIR	No Additional Analysis Required
a)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)	☐	☑
b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe	☐	☑

DISCUSSION:

a., b. Assembly Bill (AB) 52, which came into effect on July 1, 2015, requires that lead agencies consider the effects of projects on tribal cultural resources and conduct notification and consultation with federally and non-federally recognized Native American tribes early in the environmental review process. The Campus has obtained a Sacred Lands File search from the Native American Heritage Commission. Pursuant to AB 52, the Campus sent out notification letters to all tribes that have requested notifications from the UC Riverside campus. The letters were sent, receipt requested on March 22, 2018: the Agua Caliente Band of Cahuilla Indians, the Soboba Band of Luiseno Indians, and the Torres-Martinez Desert Cahuilla Indians.[7] According to AB 52, the tribes had 30 days from the receipt of the letter to request consultation with UC Riverside. On April 2, 2018, Katie Croft, Cultural Resources Manager, representing the Agua Caliente Band of Cahuilla Indians, Tribal Historic Preservation Office, responded to the notification letter stating that they did not require consultation. No other requests for formal consultation have been received by UC Riverside from the other two tribes as of the publication of this Initial Study.

The area of disturbance for the NDD Plan area, which includes the Phase 1 project, is not known or expected to contain any TCRs. As noted in **Section 5.5** above, earthmoving activities associated with the proposed NDD Plan, including the Phase 1 project, could expose previously undiscovered buried archaeological resources, including human remains, which could be considered TRCs and could be adversely affected by the project construction. The impact would be considered potentially significant. However, LRDP PP 4.5-4, and **Mitigation Measure CUL-1** would be implemented to ensure that should cultural resources be encountered, they would be protected, documented, and preserved, as appropriate. If human remains are uncovered and are determined to be of Native American origin, the Campus will implement the procedures set forth in LRDP PP 4.5-5 for protection of the remains, documentation, and respectful treatment in

7 Copies of the correspondence are included as Appendix D to this Initial Study.

consultation with a Native American Most Likely Descendant. Therefore, while no TCRs are expected to be affected by the implementation of the NDD Plan, including the Phase 1 project, these measures would ensure that any previously unknown TRCs encountered during ground disturbing activities associated with the NDD Plan, which includes the Phase 1 project, would not be adversely affected.

CUMULATIVE IMPACTS:

As discussed above, implementation of the NDD Plan would have the potential to affect TCRs. However, with implementation of LRDP PP 4.5-4, LRDP PP 4.5-5, and **Mitigation Measure CUL-1**, the project's impact would be rendered less than significant and its contribution to the cumulative impact on TRCs would not be considerable. No further evaluation in the NDD Plan EIR is required.

5.18 UTILITIES & SERVICE SYSTEMS Would the project…	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☑	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☑	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☑
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☑	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments?	☑	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☑	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☑	☐

DISCUSSION:

a. Wastewater generated on the project site would be conveyed to and treated at Riverside Regional Water Quality Control Plant (RRWQCP). The NDD Plan, including the Phase 1 project, would increase the volume of wastewater received at the RRWQCP for treatment. Although development under the NDD Plan, including the Phase 1 project, is not expected to cause the RRWQCP to exceed wastewater treatment requirements, this potential impact will be evaluated in the NDD Plan EIR.

b. Increase in on-campus population under the NDD Plan would increase the volume of water use and the quantity of wastewater discharged to the RRWQCP. The NDD Plan EIR will evaluate the increased demand for water and wastewater treatment and conveyance facilities due to the NDD Plan and it will evaluate potential impacts associated with any new or expanded facilities that would be required to meet this demand. The NDD Plan EIR will also address the project-specific water and wastewater conveyance improvements needed to serve the proposed Phase 1 project.

c) The NDD Plan would decrease the amount of impervious areas and runoff from the site would not increase compared to existing conditions and improvements to off-campus storm drain systems would not be required. The development of the NDD Plan would require the installation of additional storm drain improvements within the Plan area. The new infrastructure would be

installed in portions of the project site that are already disturbed, and connections to existing stormwater lines would be located on campus. The potential environmental effects associated with the construction of the new storm drain systems would be less than significant. No further evaluation of this issue in the EIR is necessary.

d. Development under the NDD Plan, including the Phase 1 project, could increase demand for water supplies. The NDD Plan EIR will characterize existing and projected water supplies, evaluate anticipated increases in demand, and determine if this demand could result in new or expanded entitlements.

e. The NDD Plan EIR will evaluate the increased demand on wastewater treatment and conveyance facilities associated with the proposed Phase 1 project.

f., g. Nonhazardous municipal waste from the campus is handled by Burrtec Waste Industries. The waste is sent to the Badlands Landfill. The NDD EIR will evaluate whether the existing landfill capacity would be sufficient to accommodate development under the NDD Plan, including implementation of the Phase 1 project. In addition, the NDD Plan EIR will evaluate compliance with federal, state, and local statutes and regulations related to solid waste disposed under the NDD Plan, including solid waste disposal associated with the proposed Phase 1 project.

CUMULATIVE IMPACTS:

As discussed above, campus development under the NDD Plan, including the Phase 1 project, would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities; therefore, campus development under the NDD Plan, including the Phase 1 project, would not contribute to cumulative effects with regard to this topic and further analysis in the NDD Plan EIR is not required.

Potential cumulative impacts related to wastewater, water supply, and solid waste will be addressed in the NDD Plan EIR.

5.19 MANDATORY FINDINGS OF SIGNIFICANCE Would the project…	Impact to be Analyzed in the EIR	No Additional Analysis Required
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☑
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 that will cause substantial adverse effects on human beings, either directly or indirectly?	☑	☐

DISCUSSION:

a. Development under the NDD Plan, including the Phase 1 project, would not affect fish or wildlife habitat, populations, communities, or ranges (see Biological Resources responses [a] through [f]). Implementation of the NDD Plan, including the Phase 1 project, would not eliminate important examples of the major periods of California history or prehistory (see Cultural Resources responses [a] through [d]). Further analysis in the NDD Plan EIR is not required.

b. Cumulative impacts for each environmental factor are addressed in the preceding sections. As that discussion shows, development under the proposed NDD Plan could result in significant cumulative impacts with regard to Aesthetics, Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Land Use and Planning, Noise, Population and Housing, Population and Housing, Public Services, Recreation, Transportation/Traffic, and Utilities and Services Systems. These impacts will be evaluated in the NDD Plan EIR.

c. As indicated in the discussions above, implementation of the NDD Plan, including the Phase 1 project, has the potential to result in significant impacts. The NDD Plan EIR will evaluate whether any of those impacts have the potential to result in substantial adverse effects on human beings either directly or indirectly.

VI. REFERENCES

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VII. REPORT PREPARERS

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2005 LRDP Planning Strategies, Programs and Practices, and Mitigation Measures

2005 LRDP PLANNING STRATEGIES, PROGRAMS, AND PRACTICES

Planning Strategies

Land Use

1. Achieve academic core densities of 1.0 FAR or higher on the East Campus and 1.6 to 1.9 FAR on the West Campus in order to achieve a balance of academic land area versus other required uses.

2. In order to achieve these development densities, infill sites in the partially developed East Campus academic core and expand to the West Campus academic zone immediately adjacent to the I-215/SR-60 freeway, maintaining a compact and contiguous academic core.

3. Maintain the teaching and research fields on the West Campus south of Martin Luther King Jr. Boulevard.

4. Pursue a goal of housing 50 percent of student enrollment in on campus or campus controlled housing.

5. Remove existing family housing units on the East Campus, and provide replacement and additional units of family housing on the West Campus.

6. Provide expanded athletics and recreational facilities and fields on the East and West Campuses, adjacent to concentrations of student housing.

7. Over time, relocate parking from central campus locations to the periphery of the academic core and replace surface parking with structures, where appropriate.

Open Space

1. Protect the steep and natural southeast hillsides designated as a Natural Open Space Reserve, to protect wildlife habitat, to provide a visual backdrop to the campus, and protect against erosion.

2. Within the Natural Open Space Reserve, no major facilities will be allowed (except for sensitively sited utility projects), vehicular and pedestrian access will be limited, and native plant materials will be used, where needed, for erosion, screening, and restoration.

3. In Naturalistic Open Space areas, where arroyos and other natural features exist, preserve wherever possible, existing landforms, native plant materials, and trees. Where appropriate, restore habitat value.

4. Provide landscaped buffers and setbacks along campus edges, such as Valencia Hill Drive and its extension south of Big Springs Road, Martin Luther King Jr. Boulevard, and the I-215/SR-60 freeway.

5. Retain the Carillon Mall as a major Campus Landmark Open Space, respecting its existing dominant width of approximately 200 feet throughout its length. Other “named” malls and walks will be 100 feet wide.

6. Provide a new Campus Landmark Open Space on the West Campus, the Gage Canal Mall, to reflect the natural dry arroyos that are part of the Riverside landscape, and provide gathering/activity space within and adjacent to the Mall.

7. Provide neighborhood parks and tot lots in the family housing areas as neighborhood open space.

Campus and Community

1. Provide sensitive land use transitions and landscaped buffers where residential neighborhoods might experience noise or light from UCR activities.

2. Encourage a "permeable" edge with the community where interaction is desirable, especially along University Avenue and in areas where a high proportion of students live in close proximity to the campus.

3. Discourage vehicular traffic originating off campus from moving through campus as a short cut.

4. Provide strong connections within the campus and its edges to promote walking, bicycling and transit use, rather than vehicular traffic.

5. Continue to improve campus signage and wayfinding to provide easy access for visitors and to discourage impacts in neighboring residential areas.

6. Locate public-oriented uses, such as performance facilities, galleries and major sports venues, where they can be easily accessed and where they can contribute to the vitality and economic health of businesses along University Avenue.

7. Work cooperatively with the City of Riverside to effect the redevelopment of University Avenue between the campus and Chicago Avenue as a high intensity mixed use district, with an abundance of campus/community serving businesses and uses.

8. Encourage the City to explore the opportunity for student housing in a mixed use configuration along University Avenue.

9. Strongly encourage private developers to provide a variety of housing types that target both current and future needs of the overall community and the campus.

10. Use City/UCR/RCC enhancement of Downtown cultural, arts and entertainment resources and the campus need for off-campus housing as the foundation of a revitalization program.

11. Support the City in their coordination of Block Grant, Redevelopment set-aside, and other funds for the upgrading of Neighborhood Reinvestment Areas adjacent to University Avenue.

12. Support the City in creating design guidelines for community, student, faculty, staff and visitor housing along University Avenue that has a friendly street presence.

13. Support the City in amending the Eastside Community Plan to update housing strategies and action plans for rehabilitation of existing housing stock and new construction. This should be done in conjunction with modifications to the University Avenue Specific Plan.

14. Support the City in creating a "town/gown square" at the southwest corner of the intersection of University and Chicago Avenues to provide retail and services for the community and campus.

15. Support the City in developing design guidelines for mixed use housing and retail along University Avenue.

16. Partner with the City to create a Riverside/UCR Entrepreneurial Program at the "town/gown square" related to minority business Opportunities in the University Avenue and Hunter Business Park areas.

17. Work with the City to link the open spaces of UCR, University Avenue, the Marketplace and the Downtown with enhanced streetscape treatments for University to Market and from Market to Santa Fe Street along Mission Inn Avenue/7th Street.

18. Work with the City to link the open spaces of UCR with the Citywide Trail Network.

19. Work with the City to develop streetscape concepts with banners, lighting, street furniture and public art that celebrate the linkages between the University and Downtown. Banners should highlight cultural and artistic events in Downtown and at UCR when appropriate.

20. Work with the City to evaluate the conversion of University Avenue from Iowa Avenue to the I-215/SR 60 freeway from an auto emphasis street to a biking, pedestrian, transit street with localized auto access. Consider Martin Luther King Jr. Boulevard/14th Street and Blaine/3rd Street as primary freeway connecting streets.

21. Work with the City to emphasize University Avenue as the link between the UCR campus and Downtown rather than as the link to the freeways.

22. Work with the City to encourage bicycle and pedestrian use and safety, including minimizing the number of curb cuts for residential and retail development along University Avenue to Chicago Avenue and then to the Downtown.

Transportation

1. Develop an integrated multi-modal transportation plan to encourage walking, biking, and transit use.

2. Expand shuttle or tram service connecting major parking lots and campus destinations, and linking the East and West Campuses. Coordinate this system with RTA routes and schedules.

3. Provide a continuous network of bicycle lanes and paths throughout the campus, connecting to off-campus bicycle routes.

4. Over time, limit general vehicular circulation in the central campus, but allow transit, service, and emergency vehicle access, and provide access for persons with mobility impairments.

5. Provide bicycle parking at convenient locations.

6. Implement parking management measures that may include

   - Restricted permit availability

- Restricted permit mobility

- Differential permit parking (price determined by proximity to facilities/buildings).

Development Strategies

1. Establish a design review process to provide regular review of building and landscape development on campus.

2. Review and update, as needed, the Campus Design Guidelines and the Campus Landscape Guidelines (now the 2007 Campus Design Guidelines) to ensure conformity with LRDP planning strategies.

3. Review other plans that may be prepared, such as district, sub-area or transportation plans, for conformity with the goals and design intent of the 2005 LRDP.

Programs and Practices

PP 4.1-1 The Campus shall provide design professionals with the 2007 Campus Design Guidelines and instructions to implement the guidelines, including those sections related to use of consistent scale and massing, compatible architectural style, complementary color palette, preservation of existing site features, and appropriate site and exterior lighting design.

(This is identical to Land Use PP 4.9-1(a))

PP 4.1-2(a) The Campus shall continue to provide design professionals with the 2007 Campus Design Guidelines and instructions to develop project-specific landscape plans that are consistent with the Guidelines with respect to the selection of plants, retention of existing trees, and use of water conserving plants, where feasible.

(This is identical to Land Use PP 4.9-1(b))

PP 4.1-2(b) The Campus shall continue to relocate, where feasible, mature "specimen" trees that would be removed as a result of construction activities on the campus.

(This is identical to Land Use PP 4.9-1(c).)

PP 4.1-2(c) To reduce impacts to the Natural Open Space Reserve area:

(i) If any construction is proposed within the Open Space Reserve, conduct surveys for threatened and endangered species at an appropriate time of year. If these species are located in this area, the site or sites shall be protected from damage by either protective fencing or some other means of restricting access.

(ii) Landscaping around development areas adjacent to the Open Space Reserve shall emphasize native or historically significant plant material that provide

wildlife value and a sensitive transition from developed areas to natural open spaces. A qualified native landscape specialist shall be retained to develop an appropriate native landscape plan for the development areas.

(This is identical to Biological Resources PP 4.4-1(a) and Hydrology PP 4.8-3(a).)

PP 4.1-2(d) To reduce disturbance of Natural and Naturalistic Open Space areas:

(i) Unnecessary driving in sensitive or otherwise undisturbed areas shall be avoided. New roads or construction access roads would not be created where adequate access already exists.

(ii) Removal of native shrub or brush shall be avoided, except where necessary.

(iii) Drainages shall be avoided, except where required for construction. Limit activity to crossing drainages rather than using the lengths of drainage courses for access.

(iv) Excess fill or construction waste shall not be dumped in washes.

(v) Vehicles or other equipment shall not be parked in washes or other drainages.

(vi) Overwatering shall be avoided in washes and other drainages.

(vii) Wildlife including species such as fox, coyote, snakes, etc. shall not be harassed. Harassment includes shooting, throwing rocks, etc.

(This is identical to Biological Resources PP 4.4-1(b) and Hydrology PP 4.8-3(b).)

PP 4.3-1 The Campus shall continue to implement a Transportation Demand Management program that meets or exceeds all trip reduction and AVR requirements of the SCAQMD. The TDM program may be subject to modification as new technologies are developed or alternate program elements are found to be more effective.

(This is identical to Transportation and Traffic PP 4.14-1)

PP 4.3-2(a) Construction contract specifications shall include the following:

(i) Compliance with all SCAQMD rules and regulations

(ii) Maintenance programs to assure vehicles remain in good operating condition

(iii) Avoid unnecessary idling of construction vehicles and equipment

(iv) Use of alternative fuel construction vehicles

(v) Provision of electrical power to the site, to eliminate the need for on-site generators

PP 4.3-2(b) The Campus shall continue to implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule 403 and have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation. The Campus shall implement these measures as necessary to reduce fugitive dust. Individual measures shall be specified in construction documents and require implementation by construction contractor:

(i) Apply water and/or approved non-toxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days)

(ii) Replace ground cover in disturbed areas as quickly as possible

(iii) Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content

(iv) Water active grading sites at least twice daily

(v) Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period

(vi) All trucks hauling dirt, sand, soil, or other loose materials shall be covered or maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code

(vii) Sweep streets at the end of the day if visible soil material is carried over to adjacent roads

(viii) Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip

(ix) Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces

(x) Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads

(This is identical to Geology PP 4.6-2(a) and Hydrology PP 4.8-3(c).)

PP 4.3-2(c) The Campus shall continue to implement SCAQMD Rule 1403—Asbestos when demolishing existing buildings on the campus.

PP 4.4-1(a) To reduce impacts to the Natural Open Space Reserve area:

(i) If any construction is proposed within the Open Space Reserve, conduct surveys for threatened and endangered species at an appropriate time of year. If these species are located in this area, the site or sites shall be protected from damage by either protective fencing or some other means of restricting access.

(ii) Landscaping around development areas adjacent to the Open Space Reserve shall emphasize native or historically significant plant material that provides wildlife value and a sensitive transition from developed areas to natural open spaces. A qualified native landscape specialist shall be retained to develop an appropriate native landscape plan for the development areas.

(This is identical to Aesthetics PP 4.1-2(c) and Hydrology PP 4.8-3(a).)

PP 4.4-1(b) To reduce disturbance of Natural and Naturalistic Open Space areas:

(i) Unnecessary driving in sensitive or otherwise undisturbed areas shall be avoided. New roads or construction access roads would not be created where adequate access already exists.

(ii) Removal of native shrub or brush shall be avoided, except where necessary.

(iii) Drainages shall be avoided, except where required for construction. Limit activity to crossing drainages rather than using the lengths of drainage courses for access.

(iv) Excess fill or construction waste shall not be dumped in washes.

(v) Vehicles or other equipment shall not be parked in washes or other drainages.

(vi) Overwatering shall be avoided in washes and other drainages.

(vii) Wildlife including species such as fox, coyote, snakes, etc. shall not be harassed. Harassment includes shooting, throwing rocks, etc.

(This is identical to Aesthetics PP 4.1-2(d) and Hydrology 4.8-3(b).)

PP 4.4-2(a) Impacts to riparian and wetland habitats shall be avoided, wherever feasible. If avoidance is not feasible, then the impacts will be evaluated as part of the Clean Water Act section 404 and California Fish and Game Code section 1602 permit application process. If mitigation is required, the University of California will develop and implement a resource mitigation program to be reviewed and approved by the USACE and CDFG through the state and federal permit process. The permit shall mitigate the habitats such that they are consistent with the Clean Water Act and CDFG policy of "no net loss" of wetland. Furthermore, impacted wetlands and/or riparian vegetation that cannot be avoided would be replaced at a ratio approved by the USACE and CDFG. If replacement within the area is not feasible, then an approved mitigation bank or other off-site area will be used. The revegetation of impacted areas or mitigation parcels will be

performed by a qualified restoration specialist and shall be conducted only on sites where soils, hydrology, and microclimate conditions are suitable for riparian habitat. First priority will be given to areas that are adjacent to existing patches of native habitat.

PP 4.4-2(b) In compliance with NPDES, the Campus would continue to implement Best Management Practices, as identified in the UCR Stormwater Management Plan (UCR 2003):

(i) Public education and outreach on stormwater impacts

(ii) Public involvement/participation

(iii) Illicit discharge detection and elimination

(iv) Pollution prevention/good housekeeping for facilities

(v) Construction site stormwater runoff control

(vi) Post-construction stormwater management in new development and redevelopment

(This is identical to Geology and Soils PP 4.6-2(b) and Hydrology PP 4.8-3(d).)

PP 4.5-2 If any project is proposed that would require or result in the relocation or demolition of a historic structure, the Campus shall prepare a project-specific CEQA analysis, pursuant to Section 15064.5 et seq. of the CEQA Guidelines.

PP 4.5-3 If construction would occur within the southeast hills or within the portion of the West Campus north of Martin Luther King Boulevard, a surface field survey shall be conducted in conjunction with a project specific environmental analysis in accordance with CEQA. Depending on the results of the survey, the following measures shall be implemented:

(i) If no evidence of surface archaeological resources is discovered, or if development would occur in areas not designated as sensitive for archaeological resources:

- Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering unique archaeological resources and taught how to identify these resources if encountered. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected, the type of activities that may result in impacts, and the legal framework of cultural resources protection. Construction specifications shall require that all construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified, non-University archaeologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be

informed that unauthorized collection of archaeological resources is prohibited.

- The Campus shall require the site project contractor to report any evidence of archaeological resources unearthed during development excavation to the campus.

- The archaeologist shall then be present during the grading and shall have the authority to halt disturbance of any archaeological resources long enough to assess the situation, conduct testing, and implement mitigation measures that would reduce impacts in accordance with Section 21083.2 of CEQA.

(ii) If any evidence of archaeological materials is discovered on the surface during field survey, then:

- A qualified archaeologist shall prepare a recovery plan for the resources.

- An archaeologist shall also be present during grading and shall have the authority to halt disturbance of any archaeological resources long enough to assess the situation, conduct testing, and implement mitigation measures that would reduce impacts in accordance with Section 21083.2 of CEQA.

PP 4.5-4 Construction specifications shall require that if a paleontological resource is uncovered during construction activities:

(i) A qualified paleontologist shall determine the significance of the find.

(ii) The Campus shall make an effort to preserve the find intact through feasible project design measures.

(iii) If it cannot be preserved intact, then the University shall retain a qualified non-University paleontologist to design and implement a treatment plan to document and evaluate the data and/or preserve appropriate scientific samples.

(iv) The paleontologist shall prepare a report of the results of the study, following accepted professional practice.

(v) Copies of the report shall be submitted to the University and the Riverside County Museum.

PP 4.5-5 In the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately and the area of the find shall be protected and the University immediately shall notify the Riverside County Coroner of the find and comply with the provisions of P.R.C. Section 5097 with respect to Native American involvement, burial treatment, and re-burial, if necessary.

PP 4.6-1(a) During project-specific building design, a site-specific geotechnical study shall be conducted under the direct supervision of a California Registered Engineering Geologist or licensed geotechnical engineer to assess seismic, geological, soil, and groundwater conditions at each construction site and develop recommendations to prevent or abate any identified hazards. The study shall follow applicable recommendations of CDMG Special Publication 117 and shall include, but not necessarily be limited to

- Determination of the locations of any suspected fault traces and anticipated ground acceleration at the building site
- Potential for displacement caused by seismically induced shaking, fault/ground surface rupture, liquefaction, differential soil settlement, expansive and compressible soils, landsliding, or other earth movements or soil constraints
- Evaluation of depth to groundwater

The structural engineer shall incorporate the recommendations made by the geotechnical report when designing building foundations.

PP 4.6-1(b) The Campus shall continue to implement its current seismic upgrade program.

PP 4.6-1(c) The Campus will continue to fully comply with the University of California's Policy for Seismic Safety, as amended. The intent of this policy is to ensure that the design and construction of new buildings and other facilities shall, as a minimum, comply with seismic provisions of California Code of Regulations, Title 24, California Administrative Code, the California State Building Code, or local seismic requirements, whichever requirements are most stringent.

PP 4.6-2(a) The Campus shall continue to implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule 403 and have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation. The Campus shall implement these measures as necessary to reduce fugitive dust. Individual measures shall be specified in construction documents and require implementation by construction contractor:

(i) Apply water and/or approved nontoxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days)

(ii) Replace ground cover in disturbed areas as quickly as possible

(iii) Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content

(iv) Water active grading sites at least twice daily

(v) Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period

(vi) All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code

(vii) Sweep streets at the end of the day if visible soil material is carried over to adjacent roads

(viii) Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip (ix) Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces

(x) Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads

(This is identical to Air Quality PP 4.3-2(b) and Hydrology PP 4.8-3(c).)

PP 4.6-2(b) In compliance with National Pollution Discharge Elimination System (NPDES), the Campus would continue to implement Best Management Practices, as identified in the UCR Stormwater Management Plan (UCR 2003):

(i) Public education and outreach on stormwater impacts

(ii) Public involvement/participation

(iii) Illicit discharge detection and elimination

(iv) Pollution prevention/good housekeeping for facilities

(v) Construction site stormwater runoff control

(vi) Post-construction stormwater management in new development and redevelopment

(This is identical to Biological Resources PP 4.4-2(b) and Hydrology PP 4.8-3(d).)

PP 4.7-1 The Campus shall continue to implement the current (or equivalent) health and safety plans, programs, and practices related to the use, storage, disposal, or transportation of hazardous materials, including, but not necessarily limited to, the Business Plan, the Broadscope Radioactive Materials License, and the following programs: Biosafety, Emergency Management, Environmental Health, Hazardous Materials, Industrial Hygiene and Safety, Laboratory/Research Safety, Radiation Safety, and Integrated Waste Management. These programs may be subject to modification as more stringent standards are developed or if

the programs are replaced by other programs that incorporate similar health and safety protection measures.

PP 4.7-2 The Campus shall perform hazardous materials surveys on buildings and soils, if applicable, prior to demolition. When remediation is deemed necessary, surveys shall identify all potential hazardous materials within the structure to be demolished, and identify handling and disposal practices. The Campus shall follow the practices during building demolition to ensure construction worker and public safety.

PP 4.7-3 The Campus will inform employees and students of hazardous materials minimization strategies applicable to research, maintenance, and instructional activities, and require the implementation of these strategies where feasible. Strategies include but are not limited to the following:

(i) Maintenance of online database by EH&S of available surplus chemicals retrieved from laboratories to minimize ordering or new chemicals.

(ii) Shifting from chemical usage to micro techniques as standard practice for instruction and research, as better technology becomes available.

PP 4.7-4 Prior to demolition of structures on the campus or new construction on former agricultural teaching and research fields, the Campus shall complete a Phase I environmental site assessment to determine the potential for soil or groundwater contamination on a project site. If the assessment determines that a substantial potential exists on the site, the Campus shall develop and implement an appropriate testing and, if needed, develop a remediation strategy prior to demolition or construction activities.

If contaminated soil and/or groundwater is encountered during the removal of onsite debris or during excavation and/or grading activities

(i) The construction contractor(s) shall stop work and immediately inform EH&S.

(ii) An on-site assessment shall be conducted to determine if the discovered materials pose a significant risk to the public or construction workers.

(iii) If the materials are determined to pose such a risk, a remediation plan shall be prepared and submitted to EH&S to comply with all federal and State regulations necessary to clean and/or remove the contaminated soil and/or groundwater.

(iv) Soil remediation methods could include, but are not necessarily limited to, excavation and on-site treatment, excavation and off-site treatment or disposal, and/or treatment without excavation.

(v) Remediation alternatives for cleanup of contaminated groundwater could include, but are not necessarily limited to, on-site treatment, extraction and off-site treatment, and/or disposal.

(vi) The construction schedule shall be modified or delayed to ensure that construction will not inhibit remediation activities and will not expose the public or construction workers to significant risks associated with hazardous conditions.

PP 4.7-7(a) To the extent feasible, the Campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time only a single lane is available, the Campus shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the Campus shall provide appropriate signage indicating alternative routes.

(This is identical to Transportation and Traffic PP 4.14-5.)

PP 4.7-7(b) To maintain adequate access for emergency vehicles when construction projects would result in roadway closures, the Office of Design and Construction shall consult with the UCPD, EH&S, and the RFD to disclose roadway closures and identify alternative travel routes.

(This is identical to Transportation and Traffic PP 4.14-8.)

PP 4.8-1 The Campus will continue to comply with all applicable water quality requirements established by the SARWQCB.

(This is identical to Utilities PP 4.15-5.)

PP 4.8-2(a) To further reduce the campus' impact on domestic water resources, to the extent feasible, UCR will

(i) Install hot water recirculation devices (to reduce water waste)

(ii) Continue to require all new construction to comply with applicable State laws requiring water-efficient plumbing fixtures, including but not limited to the Health and Safety Code and Title 24, California Code of Regulations, Part 5 (California Plumbing Code)

(iii) Retrofit existing plumbing fixtures that do not meet current standards on a phased basis over time

(iv) Install recovery systems for losses attributable to existing and proposed steam and chilled-water systems

(v) Prohibit using water as a means of cleaning impervious surfaces

(vi) Install water-efficient irrigation equipment to maximize water savings for landscaping and retrofit existing systems over time

(This is identical to Utilities PP 4.15-1(b))

PP 4.8-2(b) The Campus shall promptly detect and repair leaks in water and irrigation pipes.

(This is identical to Utilities PP 4.15-1(c))

PP 4.8-2(c) The Campus shall avoid serving water at food service facilities except upon request.

(This is identical to Utilities PP 4.15-1(d))

PP 4.8-3(a) To reduce impacts to the Natural Open Space Reserve area:

(i) If any construction is proposed within the Open Space Reserve, conduct surveys for threatened and endangered species at an appropriate time of year. If these species are located in this area, the site or sites shall be protected from damage by either protective fencing or some other means of restricting access.

(ii) Landscaping around development areas adjacent to the Open Space Reserve shall emphasize native or historically significant plant material that provides wildlife value and a sensitive transition from developed areas to Natural open spaces. A qualified native landscape specialist shall be retained to develop an appropriate native landscape plan for the development areas.

(This is identical to Biological Resources PP 4.4-1(a) and Aesthetics 4.1-2(c).)

PP 4.8-3(b) To reduce disturbance of Natural and Naturalistic Open Space areas:

(i) Unnecessary driving in sensitive or otherwise undisturbed areas shall be avoided. New roads or construction access roads would not be created where adequate access already exists.

(ii) Removal of native shrub or brush shall be avoided, except where necessary.

(iii) Drainages shall be avoided, except where required for construction. Limit activity to crossing drainages rather than using the lengths of drainage courses for access.

(iv) Excess fill or construction waste shall not be dumped in washes.

(v) Vehicles or other equipment shall not be parked in washes or other drainages.

(vi) Overwatering shall be avoided in washes and other drainages.

(vii) Wildlife including species such as fox, coyote, snakes, etc. shall not be harassed. Harassment includes shooting, throwing rocks, etc.

(This is identical to Aesthetics PP 4.1-2(d) and Biological Resources PP 4.4-1(b).)

PP 4.8-3(c) The Campus shall continue to implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule 403 and have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation. The Campus shall implement these measures as necessary to reduce fugitive dust. Individual measures shall be specified in construction documents and require implementation by construction contractor:

(i) Apply water and/or approved nontoxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days)

(ii) Replace ground cover in disturbed areas as quickly as possible

(iii) Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content

(iv) Water active grading sites at least twice daily

(v) Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period (vi) All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code

(vii) Sweep streets at the end of the day if visible soil material is carried over to adjacent roads

(viii) Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip

(ix) Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces

(x) Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads

(This is identical to Air Quality PP 4.3-2(b) and Geology PP 4.6-2(a).)

PP 4.8-3(d): In compliance with NPDES, the Campus would continue to implement Best Management Practices, as identified in the UCR Stormwater Management Plan (UCR 2003):

(i) Public education and outreach on stormwater impacts

(ii) Public involvement/participation

(iii) Illicit discharge detection and elimination

(iv) Pollution prevention/good housekeeping for facilities

(v) Construction site stormwater runoff control

(vi) Post-construction stormwater management in new development and redevelopment

(This is identical to Biological Resources PP 4.4-2(b) and Geology and Soils PP 4.6-2(b).)

PP 4.8-3(e) Prior to the time of design approval, the Campus will evaluate each specific project to determine if the project runoff would exceed the capacity of the existing storm drain system. If it is found that the capacity would be exceeded, one or more of the following components of the storm drain system would be implemented to minimize the occurrence of local flooding:

(i) Multi-project stormwater detention basins

(ii) Single-project detention basins

(iii) Surface detention design

(iv) Expansion or modification of the existing storm drain system

(v) Installation of necessary outlet control facilities

PP 4.8-10 In the event of an emergency, including catastrophic failure of the California State Water Project pipeline, the Campus would implement the Emergency Operations Plan.

PP 4.9-1(a) The Campus shall provide design professionals with the 2007 Campus Design Guidelines and instructions to implement the guidelines, including those sections related to use of consistent scale and massing, compatible architectural style, complementary color palette, preservation of existing site features, and appropriate site and exterior lighting design.

(This is identical to Aesthetics PP 4.1-1.)

PP 4.9-1(b) The Campus shall continue to provide design professionals with the 2007 Campus Design Guidelines and instructions to develop project-specific landscape plans that are consistent with the Guidelines with respect to the selection of plants, retention of existing trees, and use of water conserving plants, where feasible.

(This is identical to Aesthetics PP 4.1-2(a).)

PP 4.9-1(c) The Campus shall continue to relocate, where feasible, mature "specimen" trees that would be removed as a result of construction activities on the campus.

(This is identical to Aesthetics PP 4.1-2(b).)

PP 4.10-1(a) UCR will incorporate the following siting design measures to reduce long-term noise impacts:

(i) Truck access, parking area design, and air conditioning/refrigeration units will be designed and evaluated when planning specific individual new facilities to minimize the potential for noise impacts to adjacent developments.

(ii) Building setbacks, building design and orientation will be used to reduce intrusive noise at sensitive student residential and educational building locations near main campus access routes, such as Blaine Street, Canyon Crest Drive, University Avenue, and Martin Luther King Jr. Boulevard. Noise walls may be advisable to screen existing and proposed facilities located near the I-215/SR-60 freeway.

(iii) Adequate acoustic insulation would be added to residence halls to ensure that the interior Ldn would not exceed 45 dBA during the daytime and 40 dBA during the nighttime (10 P.M. to 7 A.M.) in rooms facing major streets.

(iv) Potential noise impacts would be evaluated as part of the design review for all projects. If determined to be significant, mitigation measures would be identified and alternatives suggested. At a minimum, campus residence halls and student housing design would comply with Title 24, Part 2 of the California Administrative Code.

PP 4.10-2 The UCR campus shall limit the hours of exterior construction activities from 7:00 A.M. to 9:00 P.M. Monday through Friday and 8:00 A.M. to 6:00 P.M. on Saturday when necessary. Construction traffic shall follow transportation routes prescribed for all construction traffic to minimize the impact of this traffic (including noise impacts) on the surrounding community.

PP 4.10-5(a) The Campus shall continue to provide on-campus housing to continue the evolution of UCR from a commuter to a residential campus.

PP 4.10-5(b) The Campus shall continue to implement an Alternative Transportation program that facilitates and promotes the use of transit, carpools, vanpools, and bicycling.

PP 4.10-6 The Campus shall continue to shield all new stationary sources of noise that would be located in close proximity to noise-sensitive buildings and uses.

PP 4.10-7(a) To the extent feasible, construction activities shall be limited to 7:00 A.M. to 9:00 P.M. Monday through Friday, 8:00 A.M. to 6:00 P.M. on Saturday, and no construction on Sunday and national holidays, as appropriate, in order to minimize disruption to area residences surrounding the campus and to on-campus uses that are sensitive to noise.

PP 4.10-7(b) The Campus shall continue to require by contract specifications that construction equipment be required to be muffled or otherwise shielded. Contracts shall specify that engine-driven equipment be fitted with appropriate noise mufflers.

PP 4.10-7(c) The Campus shall continue to require that stationary construction equipment material and vehicle staging be placed to direct noise away from sensitive receptors.

PP 4.10-7(d) The Campus shall continue to conduct regular meetings, as needed, with on campus constituents to provide advance notice of construction activities in order to coordinate these activities with the academic calendar, scheduled events, and other situations, as needed.

PP 4.10-8 The Campus shall continue to conduct meetings, as needed, with off-campus constituents that are affected by campus construction to provide advance notice of construction activities and ensure that the mutual needs of the particular construction project and of those impacted by construction noise are met, to the extent feasible.

PP 4.12-1(a) As development occurs, the following measures will be incorporated:

(i) New structures would be designed with adequate fire protection features in compliance with State law and the requirements of the State Fire Marshal. Building designs would be reviewed by appropriate campus staff and government agencies.

(ii) Prior to implementation of individual projects, the adequacy of water supply and water pressure will be determined in order to ensure sufficient fire protection services.

(iii) Adequate access will be provided to within 50 feet of the main entrance of occupied buildings to accommodate emergency ambulance service.

(iv) Adequate access for fire apparatus will be provided within 50 feet of stand pipes and sprinkler outlets.

(v) Service roads, plazas, and pedestrian walks that may be used for fire or emergency vehicles will be constructed to withstand loads of up to 45,000 pounds.

(vi) As implementation of the LRDP occurs, campus fire prevention staffing needs would be assessed; increases in staffing would be determined through such needs assessments.

PP 4.12-1(b) (i) Accident prevention features shall be reviewed and incorporated into new structures to minimize the need for emergency response from the City of Riverside.

(ii) Increased staffing levels for local fire agencies shall be encouraged to meet needs generated by LRDP project related on-campus population increases.

PP 4.12-2(a) As development under the LRDP occurs, the Campus will hire additional police officers and support staff as necessary to maintain an adequate level of service, staff, and equipment, and will expand the existing police facility when additional space is required.

PP 4.12-2(b) The Campus will continue to participate in the "UNET" program (for coordinated police response and staffing of a community service center), which provides law enforcement services in the vicinity of the campus, with equal participation of UCR and City police staffs.

PP 4.14-1 The Campus shall continue to implement a Transportation Demand Management program that meets or exceeds all trip reduction and AVR requirements of the SCAQMD. The TDM program may be subject to modification as new technologies are developed or alternate program elements are found to be more effective.

(This is identical to Air Quality PP 4.3-1.)

PP 4.14-2 The Campus will periodically assess construction schedules of major projects to determine the potential for overlapping construction activities to result in periods of heavy construction vehicle traffic on individual roadway segments, and adjust construction schedules, work hours, or access routes to the extent feasible to reduce construction-related traffic congestion.

PP 4.14-4 The Campus shall provide design professionals for roadway and parking improvements with the Campus Design Guidelines and instructions to implement those elements of the guidelines relevant to parking and roadway design.

PP 4.14-5 To the extent feasible, the Campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time only a single lane is available, the Campus shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the Campus shall provide alternate routes and appropriate signage.

(This is identical to Hazards and Hazardous Materials PP 4.7-7(a).)

PP 4.14-6 For any construction-related closure of pedestrian routes, the Campus shall provide alternate routes and appropriate signage and provide curb cuts and street crossings to assure alternate routes are accessible.

PP 4.14-8 To maintain adequate access for emergency vehicles when construction projects would result in roadway closures, the Office of Design and Construction shall consult with the UCPD, EH&S, and the RFD to disclose roadway closures and identify alternative travel routes.

(This is identical to Hazards and Hazardous Materials PP 4.7-7(b).)

PP 4.15-1(a) Improvements to the campus water distribution system, including necessary pump capacity, will be made as required to serve new projects. Project-specific CEQA analysis of environmental effects that would occur prior to project-specific approval will consider the continued adequacy of the domestic/fire water systems, and no new development would occur without a demonstration that appropriate domestic/fire water supplies continue to be available.

PP 4.15-1(b) To further reduce the campus' impact on domestic water resources, to the extent feasible, UCR will

(i) Install hot water recirculation devices (to reduce water waste)

(ii) Continue to require all new construction to comply with applicable State laws requiring water-efficient plumbing fixtures, including but not limited to the

Health and Safety Code and Title 24, California Code of Regulations, Part 5 (California Plumbing Code)

(iii) Retrofit existing plumbing fixtures that do not meet current standards on a phased basis over time

(iv) Install recovery systems for losses attributable to existing and proposed steam and chilled-water systems

(v) Prohibit using water as a means of cleaning impervious surfaces

(vi) Install water-efficient irrigation equipment to local evaporation rates to maximize water savings for landscaping and retrofit existing systems over time

(This is identical to Hydrology PP 4.8-2(a).)

PP 4.15-1(c) The Campus shall promptly detect and repair leaks in water and irrigation pipes.

PP 4.15-1(d) The Campus shall avoid serving water at food service facilities except upon request.

PP 4.15-5 The Campus will continue to comply with all applicable water quality requirements established by the SARWQCB.

(This is identical to Hydrology PP 4.8-1.)

APPENDIX B

NDD Tree Inventory Report

Tree Inventory Report

University of California, Riverside
North District Area

Prepared for

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March 13, 2017

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EXHIBITS

ATTACHMENTS

1.0 INTRODUCTION

The purpose of this report is to present the findings of a tree inventory for the North District Area within the University of California, Riverside (UCR) campus, which includes the existing Canyon Crest Family Student Housing complex (study area).

1.1 PROJECT UNDERSTANDING

The study area for this report consists of the approximately 51-acre Canyon Crest Family Student Housing complex and is located north of West Linden Street, east of Canyon Crest Drive, south of Blaine Street, and west of the University of California's Child Development Center and Parking Lots 23 and 28. The regional location and local vicinity of the study area is presented in Exhibit 1. The study area occurs on the U.S. Geological Survey's (USGS') Riverside East 7.5-minute quadrangle (refer to Exhibit 2). The survey area elevation ranges from approximately 1,037 to 1,102 feet above mean sea level.

Psomas undertook this study to evaluate existing trees in the study area. This study will be used to inform future land use planning decisions for the North District Area and to support future environmental documentation pursuant to the California Environmental Quality Act (CEQA). Future building opportunities identified in the UCR Physical Master Plan Study (May 2016) include potential student housing, recreation, and retail uses in the North District Area. UCR is initiating pre-development studies to inform future planning activities; however, there are currently no site-specific development plans.

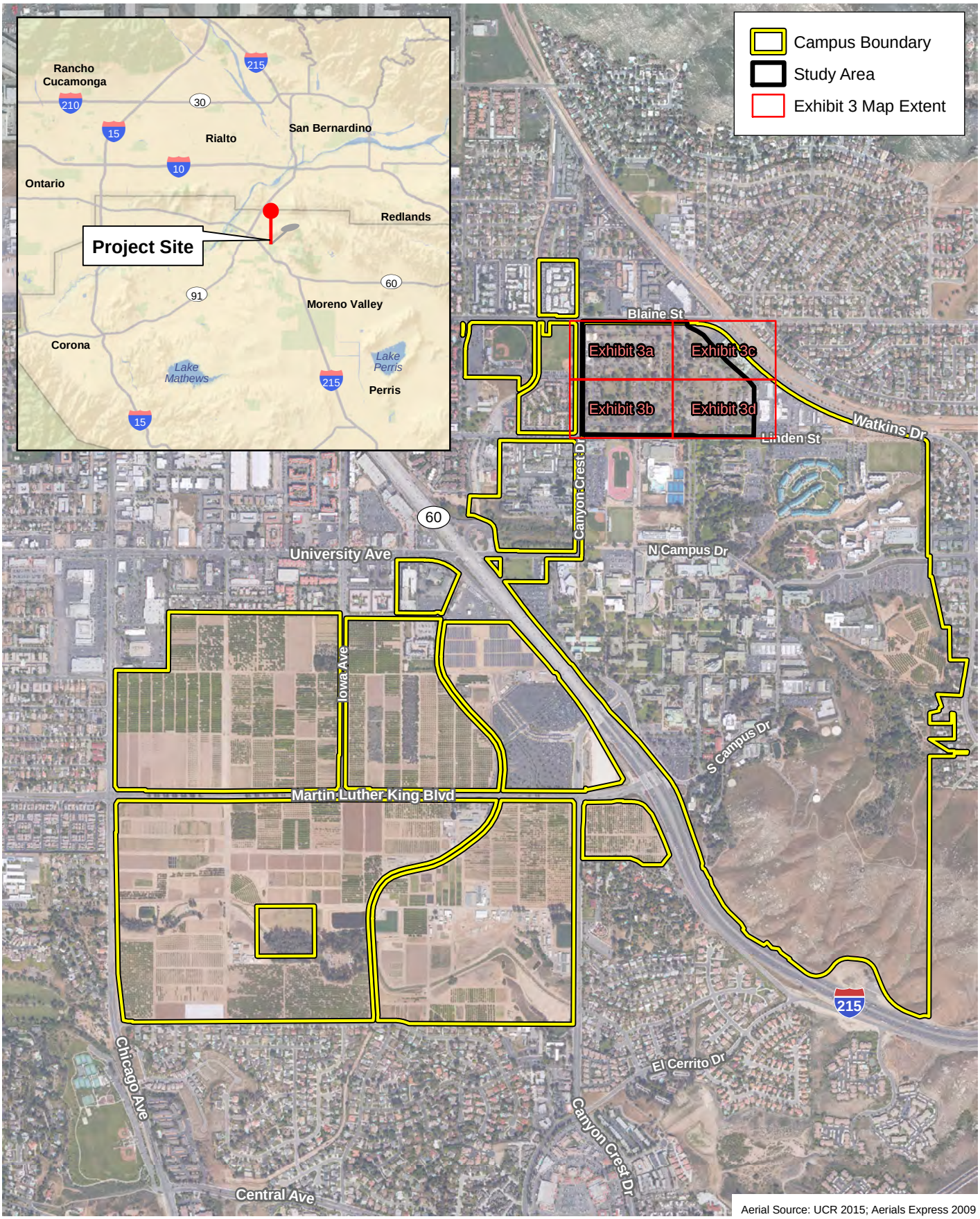
1.2 EXISTING CONDITIONS

The survey area contains the Canyon Crest Family Student Housing complex, a campus radio broadcasting station, and various maintenance/support facilities for the campus. The survey area has no existing native vegetation types, and consists mainly of ruderal, ornamental, disturbed, and developed areas.

2.0 METHODOLOGY

Field surveys in support of this tree report were performed on January 10, 11, 12, and 17, 2017, by Psomas Certified Arborist Trevor Bristle (International Society of Arboriculture [ISA] Certificate No. WE-10233A) and Biologist Cristhian Mace. There are no specific regulations that govern tree removal on campus; UCR removes trees on campus at its own discretion. Campus Programs and Practices (PP) 4.1-2(b) included in the UCR 2005 Long-Range Development Plan (LRDP) Environmental Impact Report (EIR) (State Clearinghouse [SCH] No. 2005041164) requires that the campus continue to relocate, where feasible, mature "specimen" trees that would be removed as a result of construction activities on the campus. Mature trees are considered trees with a trunk diameter at breast height (dbh) of 12-inches or greater. However, to provide a comprehensive evaluation of trees located in the study area, this study includes trees with a trunk dbh of 4-inches or greater.

During the survey, each tree was assigned an individual number and the following data were collected: dbh, tree height, and canopy width. Qualitative ratings for each tree's overall health and aesthetic quality were also given. The collected data are included in Attachment A and described in more detail below.



Aerial Source: UCR 2015; Aerials Express 2009

Regional and Local Vicinity

Exhibit 1

Tree Inventory Report
North District Pre-Development Studies, University of California, Riverside

1,500 750 0 1,500 Feet

PSOMAS

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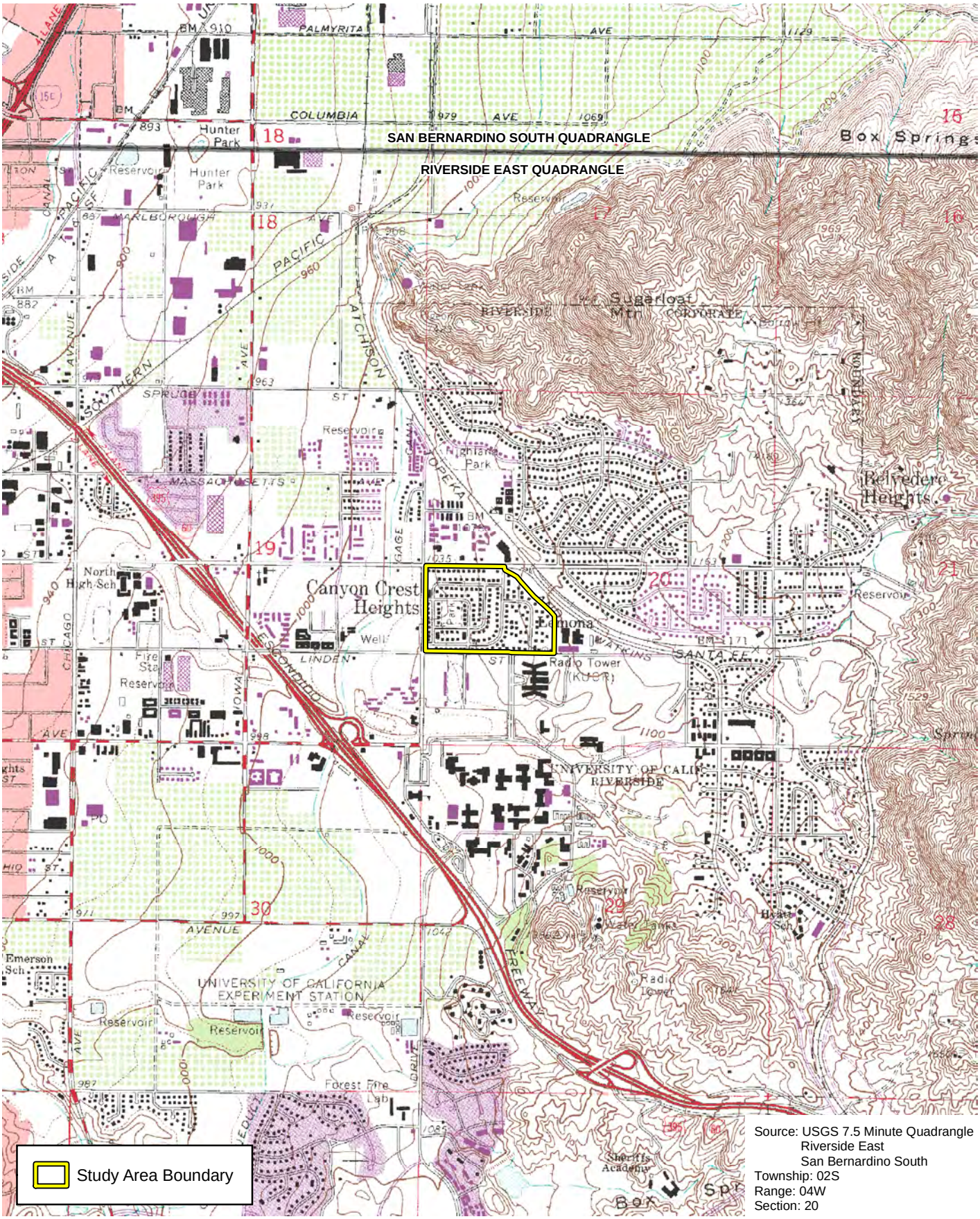
D:\Projects\UCR\0007\MXDs\TreeReport\ex_RL_LV_20170213.mxd



Source: USGS 7.5 Minute Quadrangle
Riverside East
San Bernardino South
Township: 02S
Range: 04W
Section: 20

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Study Area

Exhibit 2

Tree Inventory Report
North District Pre-Development Studies, University of California, Riverside

2,000 1,000 0 2,000
Feet

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2.1 MAPPING

Each tree that was surveyed was mapped using a hand-held Global Positioning System (GPS) device. Where the GPS device was unable to receive a clear signal (due to the dense tree canopy) locations were recorded in a nearby clearing and the distance and direction from the GPS location to the tree location were recorded. Locations were confirmed in the field by using geo-referenced field maps.

2.2 DIAMETER

Using a diameter tape, trunk diameters were measured at a height of 4.5 feet above mean natural grade; multiple trunks were measured separately. The diameter of the largest two trunks was combined to determine the total diameter of each tree. In addition, the total number of trunks was recorded. The diameter was estimated for trees that were not accessible (e.g., located on a steep slope or infested with bees).

2.3 HEIGHT AND CANOPY

The height of each tree was estimated from mean natural grade to the highest branch. Also, the diameter of each tree's canopy was estimated at its widest point.

2.4 AESTHETICS

Each tree assessed was inspected and compared to an archetype tree (considered excellent on all points mentioned below) of the same species. Tree aesthetics were evaluated with respect to overall form and symmetry, crown balance, branching pattern, and broken branches.

The trees were rated on a scale of 1 to 5, as follows:

1: Very Poor

2: Poor

3: Fair

4: Good

5: Excellent

2.5 HEALTH

The health of each tree was assessed based on a visual examination from the ground. Tree health was evaluated based on evidence of vigor, such as the amount of foliage; leaf color and size; presence of branch or twig dieback; severity of insect infestation; the presence of disease; heart rot; fire damage; mechanical damage; amount of new growth; appearance of bark; and rate of callous development over wounds. The tree's structural integrity was also evaluated with respect to branch attachment, branch placement, root health, and stability. In addition, the health assessment considered such elements as the presence of decay, weak branch attachments, and the presence of exposed roots due to soil erosion.

The trees were rated on the 1 to 5 scale, noted above.

3.0 RESULTS

A total of 681 trees with a trunk dbh of 4-inches or greater were identified in the survey area, consisting of 55 different species as summarized in Table 1. Of these trees, 486 meet the criteria to be considered mature trees (trunk dbh of 12-inches or greater). The locations of the trees included in this tree survey are provided in Exhibit 3. A detailed summary of all collected tree data is provided in Attachment A.

TABLE 1
SUMMARY OF TREE SURVEY RESULTS

Species		Total	Native	Non-Native	Mature Trees
Common Name	**Scientific Name**				
African fern pine	*Afrocarpus gracilior*	3		X	1
tree of heaven[a]	*Ailanthus altissima*	5		X	2
silktree	*Albizia julibrissin*	2		X	
strawberry tree	*Arbutus unedo*	38		X	6
paper mulberry	*Broussonetia papyrifera*	3		X	1
weeping bottlebrush	*Callistemon viminalis*	16		X	
Chinese hackberry	*Celtis sinensis*	2		X	1
lemon	*Citrus* x *Limon*	4		X	1
orange	*Citrus* x *sinensis*	3		X	
laurel-leaf snailseed	*Cocculus laurifolius*	38		X	12
lemon-scented gum	*Corymbia citriodora*	2		X	2
red flowering gum	*Corymbia ficifolia*	3		X	3
Italian cypress	*Cupressus sempervirens*	3		X	2
loquat	*Eriobotrya japonica*	4		X	3
crybaby tree	*Erythrina crista-galli*	1		X	1
silver dollar gum	*Eucalyptus polyanthemos*	30		X	29
red ironbark	*Eucalyptus sideroxylon*	10		X	10
Moreton Bay fig	*Ficus macrophylla*	2		X	2
Indian laurel fig	*Ficus microcarpa*	7		X	3
Oregon ash	*Fraxinus latifolia*	97	X		59
shamel ash	*Fraxinus uhdei*	3		X	1
maidenhair tree	*Ginkgo biloba*	1		X	
honeylocust	*Gleditsia triacanthos*	2		X	2
toyon	*Heteromeles arbutifolia*	5	X		2
black poui	*Jacaranda mimosifolia*	1		X	1
Chinese juniper	*Juniperus chinensis*	1		X	1
goldenrain tree	*Koelreuteria bipinnata*	11		X	2
glossy privet	*Ligustrum lucidum*	1		X	
sweetgum	*Liquidambar styraciflua*	1		X	1
Chinaberry	*Melia azedarach*	1		X	1
white mulberry	*Morus alba*	15		X	13
avocado	*Persea americana*	11		X	11
date palm[b]	*Phoenix dactylifera*	1		X	1
Canary Island pine	*Pinus canariensis*	5		X	5
Aleppo pine	*Pinus halepensis*	13		X	9
Japanese cheesewood	*Pittosporum tobira*	1		X	

TABLE 1
SUMMARY OF TREE SURVEY RESULTS

Species		Total	Native	Non-Native	Mature Trees
Common Name	**Scientific Name**				
western sycamore	*Platanus racemosa*	28	X		23
fremont cottonwood	*Populus fremontii*	5	X		5
apricot	*Prunus armeniaca*	1		X	
Catalina cherry	*Prunus ilicifolia* ssp. *lyonii*	2	X		1
Mexican plum	*Prunus mexicana*	1		X	1
pomegranate	*Punica protopunica*	4		X	4
coast live oak	*Quercus agrifolia*	4	X		3
holm oak	*Quercus ilex*	59		X	52
cork oak	*Quercus suber*	31		X	30
black locust	*Robinia pseudoacacia*	4		X	2
black willow	*Salix gooddingii*	1	X		
octopus tree	*Schefflera actinophylla*	1		X	1
Peruvian peppertree	*Schinus molle*	112		X	109
Brazilian peppertree	*Schinus terebinthifolius*	13		X	9
tipu	*Tipuana tipu*	7		X	6
Chinese elm	*Ulmus parvifolia*	12		X	12
Siberian elm	*Ulmus pumila*	4		X	1
Mexican fan palm[b]	*Washingtonia robusta*	38		X	37
shiny xylosma	*Xylosma congestum*	8		X	2
Total		**681**	**142**	**539**	**486**

[a] Tree of Heaven is listed as a Cal-IPC moderately invasive plant.
[b] The age of palms is not well-correlated to trunk diameter. Therefore it is unclear palms are to be considered as mature trees.

In general, the various trees in the survey area are in good health, which would be expected of landscaped trees that have been regularly maintained. No readily observed diseases or insect infestations were identified during the course of the survey. As the survey took place during winter, many of the deciduous trees have become dormant and lost their foliage for the year. Since foliage was not available to assist with determining health on these trees, the bark, twigs, branches, and overall stature of the tree were used to assess this aspect.

Of the various trees planted within the survey area, 142 are native to California and include 7 species: Oregon ash, toyon, western sycamore, Fremont cottonwood, Catalina cherry, coast live oak, and black willow. The remaining 539 trees are non-native, consisting of the 48 species that are listed above in Table 1.

Generally, transplantation of the trees in the survey area is not recommended as tree location is costly with a likelihood of eventual mortality. However transplantation will be evaluated on a case-by-case basis to comply with the objective of PP 4.1-2(b) to preserve larger trees. Trees are either too large to be transplanted or are easily replaced from nursery container stock. Tree relocation is not recommended due to the potential of eventual mortality and the high cost. Any trees deemed to be of intrinsic value to the campus can be taken into account prior to construction activities and protected or avoided accordingly.

Aerial Source: ESRI, NAIP 2014

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Tree Locations

Tree Inventory Report

North District Pre-Development Study Area, University of California, Riverside

75 37.5 0 75 Feet

Exhibit 3a

PSOMAS

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Tree Locations

Tree Inventory Report
North District Pre-Development Study Area, University of California, Riverside

75 37.5 0 75 Feet

Exhibit 3b

PSOMAS

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Tree Locations

Tree Inventory Report
North District Pre-Development Study Area, University of California, Riverside

Exhibit 3c

75 37.5 0 75 Feet

PSOMAS

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Tree Locations

Tree Inventory Report
North District Pre-Development Study Area, University of California, Riverside

Exhibit 3d

N W E S

75 37.5 0 75 Feet

PSOMAS

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4.0 RECOMMENDED TREE AVOIDANCE AND MINIMIZATION MEASURES DURING CONSTRUCTION

Future construction activities may have unintended and/or indirect negative effects on trees. In order to avoid any unintended harm to trees adjacent to potential construction areas, the following measures are recommended:

1. Brightly colored construction fencing should be placed along or outside the dripline (i.e., outer canopy edge) of any trees to be preserved during construction activities.
2. No stockpiling of materials, vehicle operation, or other soil-disturbing activities shall occur within the driplines of trees that are to be preserved during construction.
3. Changes to the grade or drainage patterns in the areas surrounding the dripline of a protected tree not designated for removal is recommended so that excess water does not drain to these trees.
4. A Certified Arborist should be retained to ensure compliance with any tree protection measures set forth and to work with construction personnel to minimize impacts to trees that are to be preserved during construction.

5.0 REFERENCES

California Invasive Plant Council (Cal-IPC). 2017 (February, access date). Ailanthus altissima (*Tree of heaven*). http://www.cal-ipc.org/ip/management/plant_profiles/Ailanthus_altissima.php.

University of California, Riverside (UCR). 2016 (May 17). *Physical Master Plan Study*. Riverside, CA.http://cpp.ucr.edu/masterplan_study/ucriverside_pmps_full_report_05242016a.pdf.

——. 2005 (November). *University of California, Riverside 2005 Long Range Development Plan Final Environmental Impact Report* (prepared by EIP Associates). Riverside, CA: UCR. http://lrdp.ucr.edu/UCR%20LRDP%20Volume%20I%20Draft%20EIR.pdf.

ATTACHMENT A

TREE SURVEY DATA

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
1	weeping bottlebrush	*Callistemon viminalis*	2	6.0	1.5	7.5	20	18	3	3	
2	weeping bottlebrush	*Callistemon viminalis*	4	4.5	3.0	7.5	20	20	3	3	
3	shiny xylosma	*Xylosma congestum*	1	7.0		7.0	25	22	3	3	
4	shiny xylosma	*Xylosma congestum*	2	5.0	2.0	7.0	15	20	3	3	
5	shiny xylosma	*Xylosma congestum*	2	8.0	4.0	12.0	25	25	3	3	X
6	shiny xylosma	*Xylosma congestum*	1	9.0		9.0	20	22	3	3	
7	shiny xylosma	*Xylosma congestum*	1	8.0		8.0	25	20	3	3	
8	strawberry tree	*Arbutus unedo*	2	7.0	3.5	10.5	15	20	3	3	
9	strawberry tree	*Arbutus unedo*	1	4.0		4.0	8	12	3	3	
10	strawberry tree	*Arbutus unedo*	3	5.0	3.5	8.5	12	12	3	3	
11	strawberry tree	*Arbutus unedo*	1	4.5		4.5	8	10	3	3	
12	Oregon ash	*Fraxinus latifolia*	1	9.4		9.4	20	20	3	3	
13	Oregon ash	*Fraxinus latifolia*	1	7.5		7.5	25	20	3	3	
14	Oregon ash	*Fraxinus latifolia*	1	10.8		10.8	25	20	3	3	
15	strawberry tree	*Arbutus unedo*	4	8.2	4.8	13.0	12	20	3	3	X
16	strawberry tree	*Arbutus unedo*	1	9.0		9.0	8	20	2	1	
17	strawberry tree	*Arbutus unedo*	3	5.0	4.0	9.0	15	20	3	3	
18	strawberry tree	*Arbutus unedo*	4	8.4	6.0	14.4	20	30	2	3	X
19	strawberry tree	*Arbutus unedo*	6	3.5	3.5	7.0	10	18	2	2	
20	Oregon ash	*Fraxinus latifolia*	1	6.7		6.7	20	12	3	3	
21	Oregon ash	*Fraxinus latifolia*	1	9.6		9.6	30	25	3	3	
22	toyon	*Heteromeles arbutifolia*	2	3.8	2.0	5.8	16	30	2	2	
23	weeping bottlebrush	*Callistemon viminalis*	3	4.1	2.0	6.1	15	12	3	3	
24	Oregon ash	*Fraxinus latifolia*	1	11.7		11.7	30	30	3	3	
25	strawberry tree	*Arbutus unedo*	6	4.8	4.0	8.8	12	15	3	3	
26	strawberry tree	*Arbutus unedo*	3	3.0	3.0	6.0	12	18	4	3	
27	Oregon ash	*Fraxinus latifolia*	1	9.0		9.0	30	22	3	3	
28	strawberry tree	*Arbutus unedo*	2	7.2	5.4	12.6	20	25	4	3	X
29	Oregon ash	*Fraxinus latifolia*	1	10.0		10.0	35	25	3	3	
30	strawberry tree	*Arbutus unedo*	3	4.0	4.0	8.0	20	25	3	3	

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
31	Oregon ash	*Fraxinus latifolia*	1	8.2		8.2	30	25	3	3	
32	Oregon ash	*Fraxinus latifolia*	1	15.3		15.3	30	35	3	3	X
33	Oregon ash	*Fraxinus latifolia*	1	9.8		9.8	30	30	3	3	
34	toyon	*Heteromeles arbutifolia*	2	4.2	3.6	7.8	12	20	2	2	
35	strawberry tree	*Arbutus unedo*	2	6.5	2.5	9.0	14	18	2	2	
36	strawberry tree	*Arbutus unedo*	5	6.5	3.0	9.5	15	20	2	2	
37	strawberry tree	*Arbutus unedo*	2	8.0	8.0	16.0	25	25	3	3	X
38	Oregon ash	*Fraxinus latifolia*	1	16.4		16.4	30	35	3	3	X
39	strawberry tree	*Arbutus unedo*	3	3.3	3.0	6.3	12	20	2	2	
40	Oregon ash	*Fraxinus latifolia*	1	12.9		12.9	30	35	3	3	X
41	weeping bottlebrush	*Callistemon viminalis*	2	4.3	2.0	6.3	20	20	3	3	
42	weeping bottlebrush	*Callistemon viminalis*	2	4.3	4.3	8.6	12	25	3	3	
43	Oregon ash	*Fraxinus latifolia*	1	11.0		11.0	40	35	3	3	
44	weeping bottlebrush	*Callistemon viminalis*	5	3.0	3.0	6.0	20	25	3	3	
45	Oregon ash	*Fraxinus latifolia*	1	11.1		11.1	30	30	3	3	
46	strawberry tree	*Arbutus unedo*	3	5.0	3.6	8.6	15	18	3	3	
47	strawberry tree	*Arbutus unedo*	5	4.5	4.4	8.9	15	25	2	2	
48	strawberry tree	*Arbutus unedo*	3	5.2	5.0	10.2	20	25	3	3	
49	strawberry tree	*Arbutus unedo*	1	7.1		7.1	10	15	3	2	
50	Oregon ash	*Fraxinus latifolia*	1	11.0		11.0	30	25	3	3	
51	Oregon ash	*Fraxinus latifolia*	1	7.5		7.5	20	25	3	3	
52	Oregon ash	*Fraxinus latifolia*	1	10.6		10.6	30	25	3	3	
53	strawberry tree	*Arbutus unedo*	2	8.0	6.8	14.8	20	25	2	1	X
54	strawberry tree	*Arbutus unedo*	4	6.3	5.0	11.3	15	25	3	2	
55	Oregon ash	*Fraxinus latifolia*	1	13.4		13.4	30	35	3	3	X
56	Oregon ash	*Fraxinus latifolia*	1	14.6		14.6	55	35	4	4	X
57	shiny xylosma	*Xylosma congestum*	2	9.2	3.0	12.2	35	30	3	3	X
58	shiny xylosma	*Xylosma congestum*	1	10.0		10.0	35	25	3	3	
59	weeping bottlebrush	*Callistemon viminalis*	2	2.0	1.8	3.8	20	15	3	3	
60	weeping bottlebrush	*Callistemon viminalis*	5	4.9	2.0	6.9	20	25	3	3	

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
61	white mulberry	*Morus alba*	1	21.5		21.5	30	25	2	1	X
62	Peruvian peppertree	*Schinus molle*	1	37.8		37.8	50	40	3	3	X
63	Peruvian peppertree	*Schinus molle*	1	30.3		30.3	50	35	3	3	X
64	Peruvian peppertree	*Schinus molle*	1	39.0		39.0	50	40	3	2	X
65	Oregon ash	*Fraxinus latifolia*	1	5.3		5.3	18	15	3	3	
66	Fremont cottonwood	*Populus fremontii*	1	23.0		23.0	35	25	2	2	X
67	Peruvian peppertree	*Schinus molle*	1	41.1		41.1	50	35	3	3	X
68	loquat	*Eriobotrya japonica*	2	4.9	4.0	8.9	15	15	4	3	
69	silver dollar gum	*Eucalyptus polyanthemos*	1	33.3		33.3	50	50	3	3	X
70	Oregon ash	*Fraxinus latifolia*	1	8.5		8.5	18	22	3	3	
71	Peruvian peppertree	*Schinus molle*	1	31.0		31.0	50	40	3	3	X
72	Peruvian peppertree	*Schinus molle*	1	26.2		26.2	50	40	3	3	X
73	western sycamore	*Platanus racemosa*	1	28.0		28.0	65	55	3	3	X
74	Peruvian peppertree	*Schinus molle*	1	19.9		19.9	45	35	3	3	X
75	Peruvian peppertree	*Schinus molle*	1	24.3		24.3	50	35	3	3	X
76	Peruvian peppertree	*Schinus molle*	1	25.2		25.2	50	40	3	3	X
77	Peruvian peppertree	*Schinus molle*	1	23.3		23.3	45	40	3	3	X
78	Peruvian peppertree	*Schinus molle*	1	40.0		40.0	50	40	3	3	X
79	weeping bottlebrush	*Callistemon viminalis*	4	3.8	3.0	6.8	15	12	3	3	
80	weeping bottlebrush	*Callistemon viminalis*	4	4.2	4.0	8.2	22	20	3	3	
81	holm oak	*Quercus ilex*	1	4.6		4.6	25	8	3	3	
82	strawberry tree	*Arbutus unedo*	4	4.1	3.8	7.9	15	15	3	3	
83	strawberry tree	*Arbutus unedo*	3	4.0	4.0	8.0	10	10	3	3	
84	strawberry tree	*Arbutus unedo*	2	5.5	2.8	8.3	15	12	3	3	
85	shiny xylosma	*Xylosma congestum*	1	4.2		4.2	15	15	3	3	
86	holm oak	*Quercus ilex*	1	4.4		4.4	22	10	3	3	
87	holm oak	*Quercus ilex*	4	5.0	4.5	9.5	25	20	4	3	
88	Oregon ash	*Fraxinus latifolia*	1	7.7		7.7	20	10	3	3	
89	strawberry tree	*Arbutus unedo*	3	4.3	2.0	6.3	12	10	3	3	
90	goldenrain tree	*Koelreuteria bipinnata*	1	8.2		8.2	35	25	4	4	

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
91	strawberry tree	*Arbutus unedo*	1	5.5		5.5	12	10	3	3	
92	goldenrain tree	*Koelreuteria bipinnata*	1	12.4		12.4	35	35	4	4	X
93	strawberry tree	*Arbutus unedo*	3	5.5	5.0	10.5	12	10	3	3	
94	strawberry tree	*Arbutus unedo*	4	4.3	3.2	7.5	12	10	2	2	
95	strawberry tree	*Arbutus unedo*	2	5.4	4.1	9.5	12	15	3	3	
96	goldenrain tree	*Koelreuteria bipinnata*	1	12.0		12.0	35	30	4	4	X
97	holm oak	*Quercus ilex*	2	3.9	2.7	6.6	18	10	3	3	
98	holm oak	*Quercus ilex*	1	3.5		3.5	20	15	3	3	
99	weeping bottlebrush	*Callistemon viminalis*	4	3.4	3.0	6.4	20	16	3	3	
100	weeping bottlebrush	*Callistemon viminalis*	6	4.0	3.6	7.6	15	20	3	3	
101	strawberry tree	*Arbutus unedo*	4	3.5	3.0	6.5	15	10	3	3	
102	goldenrain tree	*Koelreuteria bipinnata*	2	4.0	3.8	7.8	25	15	4	4	
103	strawberry tree	*Arbutus unedo*	1	7.0		7.0	20	20	3	3	
104	loquat	*Eriobotrya japonica*	2	6.7	6.1	12.8	40	30	3	3	X
105	strawberry tree	*Arbutus unedo*	7	5.2	5.2	10.4	18	25	3	3	
106	Oregon ash	*Fraxinus latifolia*	1	15.4		15.4	35	30	3	3	X
107	Brazilian peppertree	*Schinus terebinthifolius*	8	4.0	3.9	7.9	25	30	3	2	
108	Oregon ash	*Fraxinus latifolia*	1	12.6		12.6	30	20	3	3	X
109	strawberry tree	*Arbutus unedo*	5	9.3	7.3	16.6	20	30	3	3	X
110	goldenrain tree	*Koelreuteria bipinnata*	2	4.3	4.0	8.3	25	20	4	3	
111	Oregon ash	*Fraxinus latifolia*	1	7.5		7.5	20	10	3	3	
112	strawberry tree	*Arbutus unedo*	4	5.6	4.4	10.0	12	20	3	2	
113	strawberry tree	*Arbutus unedo*	4	4.5	3.9	8.4	12	16	3	3	
114	strawberry tree	*Arbutus unedo*	5	6.0	4.5	10.5	15	20	2	2	
115	cork oak	*Quercus suber*	1	19.8		19.8	40	35	3	3	X
116	cork oak	*Quercus suber*	1	30.8		30.8	40	35	3	2	X
117	cork oak	*Quercus suber*	1	12.2		12.2	25	15	3	2	X
118	cork oak	*Quercus suber*	1	22.2		22.2	40	40	3	3	X
119	silver dollar gum	*Eucalyptus polyanthemos*	1	38.5		38.5	50	50	4	4	X
120	Indian laurel fig	*Ficus microcarpa*	3	5.1	4.9	10.0	12	12	3	3	

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
121	sweetgum	*Liquidambar styraciflua*	2	20.3	13.6	33.9	60	20	3	3	X
122	western sycamore	*Platanus racemosa*	1	32.4		32.4	65	50	3	3	X
123	Mexican fan palm	*Washingtonia robusta*	1	17.2		17.2	45	8	3	3	X
124	Mexican fan palm	*Washingtonia robusta*	1	26.5		26.5	45	10	3	3	X
125	Peruvian peppertree	*Schinus molle*	1	36.0		36.0	60	50	3	3	X
126	Peruvian peppertree	*Schinus molle*	2	28.0	31.5	59.5	60	45	3	3	X
127	Peruvian peppertree	*Schinus molle*	1	24.0		24.0	35	25	3	2	X
128	holm oak	*Quercus ilex*	1	36.1		36.1	55	45	4	4	X
129	Aleppo pine	*Pinus halepensis*	1	27.9		27.9	60	50	3	3	X
130	holm oak	*Quercus ilex*	1	26.5		26.5	55	40	3	3	X
131	Chinese hackberry	*Celtis sinensis*	1	8.8		8.8	25	25	3	3	
132	holm oak	*Quercus ilex*	1	30.5		30.5	55	60	4	4	X
133	holm oak	*Quercus ilex*	1	11.9		11.9	25	30	4	4	
134	Mexican fan palm	*Washingtonia robusta*	1	31.7		31.7	40	10	3	3	X
135	Mexican fan palm	*Washingtonia robusta*	1	22.7		22.7	50	8	3	3	X
136	Moreton Bay fig	*Ficus macrophylla*	1	20.4		20.4	40	30	4	3	X
137	holm oak	*Quercus ilex*	1	16.3		16.3	50	40	4	3	X
138	holm oak	*Quercus ilex*	1	17.5		17.5	50	35	3	3	X
139	African fern pine	*Afrocarpus gracilior*	1	16.0		16.0	40	20	3	3	X
140	African fern pine	*Afrocarpus gracilior*	1	11.5		11.5	35	20	4	4	
141	Oregon ash	*Fraxinus latifolia*	1	16.6		16.6	30	30	3	3	X
142	Oregon ash	*Fraxinus latifolia*	1	15.6		15.6	30	25	3	3	X
143	silver dollar gum	*Eucalyptus polyanthemos*	1	42.8		42.8	65	45	4	3	X
144	holm oak	*Quercus ilex*	1	35.8		35.8	60	55	4	3	X
145	Peruvian peppertree	*Schinus molle*	1	20.2		20.2	45	30	3	2	X
146	holm oak	*Quercus ilex*	1	16.0		16.0	35	30	3	3	X
147	Peruvian peppertree	*Schinus molle*	1	19.1		19.1	35	25	3	2	X
148	holm oak	*Quercus ilex*	1	21.6		21.6	50	40	2	2	X
149	white mulberry	*Morus alba*	1	9.3		9.3	40	30	3	3	
150	tree of heaven	*Ailanthus altissima*	1	4.5		4.5	18	5	3	3	

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
151	Siberian elm	*Ulmus pumila*	2	4.0	3.5	7.5	30	20	3	3	
152	silver dollar gum	*Eucalyptus polyanthemos*	1	50.2		50.2	65	60	4	4	X
153	avocado	*Persea americana*	1	14.8		14.8	35	30	3	3	X
154	tipu	*Tipuana tipu*	1	24.0		24.0	70	55	4	4	X
155	tipu	*Tipuana tipu*	1	20.5		20.5	65	55	4	4	X
156	tipu	*Tipuana tipu*	1	18.6		18.6	65	45	4	4	X
157	Peruvian peppertree	*Schinus molle*	1	34.0		34.0	45	30	3	2	X
158	Peruvian peppertree	*Schinus molle*	1	40.8		40.8	50	40	3	2	X
159	red ironbark	*Eucalyptus sideroxylon*	1	25.0		25.0	65	35	3	3	X
160	red ironbark	*Eucalyptus sideroxylon*	1	17.7		17.7	45	25	2	1	X
161	red ironbark	*Eucalyptus sideroxylon*	1	23.5		23.5	65	35	2	1	X
162	red ironbark	*Eucalyptus sideroxylon*	1	17.6		17.6	50	20	3	3	X
163	red ironbark	*Eucalyptus sideroxylon*	1	20.7		20.7	55	20	3	3	X
164	red ironbark	*Eucalyptus sideroxylon*	1	22.2		22.2	60	35	3	3	X
165	red ironbark	*Eucalyptus sideroxylon*	1	28.2		28.2	70	35	3	3	X
166	Brazilian peppertree	*Schinus terebinthifolius*	1	19.3		19.3	30	35	2	2	X
167	western sycamore	*Platanus racemosa*	1	20.6		20.6	45	45	1	1	X
168	red ironbark	*Eucalyptus sideroxylon*	1	35.2		35.2	70	45	3	3	X
169	holm oak	*Quercus ilex*	1	28.9		28.9	40	50	3	3	X
170	coast live oak	*Quercus agrifolia*	1	10.9		10.9	25	30	3	3	
171	holm oak	*Quercus ilex*	1	32.8		32.8	60	55	3	3	X
172	red ironbark	*Eucalyptus sideroxylon*	1	34.7		34.7	55	35	3	2	X
173	western sycamore	*Platanus racemosa*	1	28.1		28.1	55	45	2	1	X
174	silver dollar gum	*Eucalyptus polyanthemos*	1	38.1		38.1	70	45	3	3	X
175	coast live oak	*Quercus agrifolia*	1	16.2		16.2	35	35	3	3	X
176	silver dollar gum	*Eucalyptus polyanthemos*	1	37.5		37.5	60	55	3	3	X
177	coast live oak	*Quercus agrifolia*	1	18.0		18.0	40	40	4	3	X
178	silver dollar gum	*Eucalyptus polyanthemos*	1	34.5		34.5	75	55	3	3	X
179	Indian laurel fig	*Ficus microcarpa*	1	26.2		26.2	35	55	3	3	X
180	Siberian elm	*Ulmus pumila*	3	5.1	5.0	10.1	30	25	3	3	

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
181	avocado	*Persea americana*	1	15.9		15.9	25	30	2	2	X
182	Aleppo pine	*Pinus halepensis*	1	10.5		10.5	25	15	4	4	
183	Aleppo pine	*Pinus halepensis*	1	8.4		8.4	30	12	4	4	
184	Aleppo pine	*Pinus halepensis*	1	10.2		10.2	30	15	4	4	
185	Aleppo pine	*Pinus halepensis*	1	8.5		8.5	30	15	4	4	
186	avocado	*Persea americana*	2	16.2	16.2	32.4	30	30	2	2	X
187	white mulberry	*Morus alba*	1	17.0		17.0	35	25	4	4	X
188	goldenrain tree	*Koelreuteria bipinnata*	1	8.2		8.2	35	25	4	4	
189	goldenrain tree	*Koelreuteria bipinnata*	1	11.6		11.6	35	30	4	4	
190	avocado	*Persea americana*	1	25.5		25.5	35	40	3	3	X
191	avocado	*Persea americana*	1	17.2		17.2	35	35	3	3	X
192	Oregon ash	*Fraxinus latifolia*	1	23.0		23.0	35	40	4	4	X
193	date palm	*Phoenix dactylifera*	1	18.6		18.6	25	12	3	3	X
194	Oregon ash	*Fraxinus latifolia*	1	6.5		6.5	18	12	3	3	
195	Indian laurel fig	*Ficus microcarpa*	1	17.9		17.9	45	40	3	3	X
196	weeping bottlebrush	*Callistemon viminalis*	1	8.2		8.2	22	15	3	3	
197	white mulberry	*Morus alba*	1	25.9		25.9	30	25	2	2	X
198	avocado	*Persea americana*	1	18.0		18.0	25	25	4	3	X
199	avocado	*Persea americana*	1	16.2		16.2	25	20	4	4	X
200	loquat	*Eriobotrya japonica*	1	16.9		16.9	50	50	4	4	X
201	Japanese cheesewood	*Pittosporum tobira*	1	8.1		8.1	15	25	4	4	
202	loquat	*Eriobotrya japonica*	1	16.7		16.7	45	45	4	4	X
203	white mulberry	*Morus alba*	1	30.8		30.8	45	55	3	3	X
204	Oregon ash	*Fraxinus latifolia*	1	15.9		15.9	35	30	3	3	X
205	goldenrain tree	*Koelreuteria bipinnata*	1	8.5		8.5	30	30	4	4	
206	Oregon ash	*Fraxinus latifolia*	1	10.0		10.0	25	20	3	3	
207	Oregon ash	*Fraxinus latifolia*	1	12.0		12.0	30	25	3	2	X
208	Oregon ash	*Fraxinus latifolia*	2	21.7	12.4	34.1	45	45	3	2	X
209	Aleppo pine	*Pinus halepensis*	1	37.9		37.9	60	55	4	4	X
210	Mexican fan palm	*Washingtonia robusta*	1	8.5		8.5	10	10	3	3	

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
211	Oregon ash	*Fraxinus latifolia*	2	4.2	3.8	8.0	15	20	3	3	
212	Oregon ash	*Fraxinus latifolia*	4	4.1	2.5	6.6	20	15	3	3	
213	Oregon ash	*Fraxinus latifolia*	1	11.3		11.3	35	30	2	2	
214	Oregon ash	*Fraxinus latifolia*	1	24.2		24.2	45	50	2	2	X
215	Moreton Bay fig	*Ficus macrophylla*	3	8.7	8.3	17.0	35	30	4	4	X
216	Oregon ash	*Fraxinus latifolia*	1	13.0		13.0	25	20	3	3	X
217	Siberian elm	*Ulmus pumila*	1	4.7		4.7	20	12	4	4	
218	Siberian elm	*Ulmus pumila*	1	21.6		21.6	35	25	4	3	X
219	Oregon ash	*Fraxinus latifolia*	1	11.7		11.7	25	30	3	3	
220	Aleppo pine	*Pinus halepensis*	1	31.2		31.2	70	35	4	4	X
221	Oregon ash	*Fraxinus latifolia*	1	13.1		13.1	35	20	3	3	X
222	Oregon ash	*Fraxinus latifolia*	1	10.8		10.8	20	20	3	3	
223	Oregon ash	*Fraxinus latifolia*	1	20.6		20.6	35	30	3	3	X
224	Brazilian peppertree	*Schinus terebinthifolius*	1	18.0		18.0	25	35	4	4	X
225	silver dollar gum	*Eucalyptus polyanthemos*	1	39.2		39.2	70	55	3	3	X
226	Aleppo pine	*Pinus halepensis*	2	24.3	23.5	47.8	65	45	4	3	X
227	Oregon ash	*Fraxinus latifolia*	1	22.4		22.4	35	40	3	3	X
228	Oregon ash	*Fraxinus latifolia*	1	22.3		22.3	40	35	3	3	X
229	Oregon ash	*Fraxinus latifolia*	1	23.7		23.7	45	45	3	3	X
230	Oregon ash	*Fraxinus latifolia*	1	22.2		22.2	35	40	3	3	X
231	Oregon ash	*Fraxinus latifolia*	1	12.6		12.6	18	25	3	3	X
232	red flowering gum	*Corymbia ficifolia*	1	17.4		17.4	30	30	4	4	X
233	red flowering gum	*Corymbia ficifolia*	1	13.1		13.1	30	35	4	4	X
234	Oregon ash	*Fraxinus latifolia*	1	39.8		39.8	65	40	4	4	X
235	Oregon ash	*Fraxinus latifolia*	1	35.4		35.4	75	45	4	3	X
236	Oregon ash	*Fraxinus latifolia*	2	7.3	7.3	14.6	25	25	2	2	X
237	shamel ash	*Fraxinus uhdei*	3	6.4	5.2	11.6	30	20	3	3	
238	Mexican fan palm	*Washingtonia robusta*	1	16.5		16.5	25	10	4	3	X
239	Mexican fan palm	*Washingtonia robusta*	1	15.8		15.8	60	8	4	4	X
240	Mexican fan palm	*Washingtonia robusta*	1	12.7		12.7	60	8	4	4	X

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
241	Mexican fan palm	*Washingtonia robusta*	1	13.6		13.6	60	8	4	4	X
242	Mexican fan palm	*Washingtonia robusta*	1	15.8		15.8	60	8	4	4	X
243	Mexican fan palm	*Washingtonia robusta*	1	16.4		16.4	60	8	4	4	X
244	Mexican fan palm	*Washingtonia robusta*	1	19.0		19.0	60	8	4	4	X
245	Mexican fan palm	*Washingtonia robusta*	1	16.7		16.7	60	8	4	4	X
246	Mexican fan palm	*Washingtonia robusta*	2	36.0	16.0	52.0	50	15	4	3	X
247	Mexican fan palm	*Washingtonia robusta*	1	15.5		15.5	60	8	4	3	X
248	weeping bottlebrush	*Callistemon viminalis*	3	4.8	4.7	9.5	15	12	4	3	
249	pomegranate	*Punica protopunica*	2	8.1	8.0	16.1	15	20	3	2	X
250	pomegranate	*Punica protopunica*	2	6.2	6.2	12.4	15	12	3	2	X
251	Mexican fan palm	*Washingtonia robusta*	1	22.0		22.0	50	10	3	3	X
252	Mexican fan palm	*Washingtonia robusta*	1	17.3		17.3	50	10	3	3	X
253	Oregon ash	*Fraxinus latifolia*	1	12.1		12.1	30	35	3	3	X
254	Mexican fan palm	*Washingtonia robusta*	1	13.9		13.9	60	8	4	4	X
255	Mexican fan palm	*Washingtonia robusta*	1	14.6		14.6	60	8	4	4	X
256	Mexican fan palm	*Washingtonia robusta*	1	15.5		15.5	60	8	4	4	X
257	Mexican fan palm	*Washingtonia robusta*	1	13.4		13.4	60	8	4	4	X
258	Mexican fan palm	*Washingtonia robusta*	1	15.6		15.6	60	8	4	4	X
259	Mexican fan palm	*Washingtonia robusta*	1	16.6		16.6	60	8	4	4	X
260	Mexican fan palm	*Washingtonia robusta*	1	12.8		12.8	60	8	4	4	X
261	silver dollar gum	*Eucalyptus polyanthemos*	1	31.4		31.4	60	40	4	3	X
262	silver dollar gum	*Eucalyptus polyanthemos*	1	34.0		34.0	60	55	4	4	X
263	silver dollar gum	*Eucalyptus polyanthemos*	1	36.4		36.4	60	40	4	4	X
264	silver dollar gum	*Eucalyptus polyanthemos*	1	37.0		37.0	60	35	4	3	X
265	Aleppo pine	*Pinus halepensis*	1	39.0		39.0	60	50	4	4	X
266	Peruvian peppertree	*Schinus molle*	1	51.1		51.1	50	65	4	2	X
267	Holm oak	*Quercus ilex*	1	36.6		36.6	55	70	3	3	X
268	Indian laurel fig	*Ficus microcarpa*	1	8.2		8.2	35	25	4	3	
269	Catalina cherry	*Prunus ilicifolia* ssp. *lyonii*	1	10.4		10.4	30	30	1	1	
270	Mexican fan palm	*Washingtonia robusta*	1	19.9		19.9	65	8	4	4	X

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
271	Holm oak	*Quercus ilex*	1	15.7		15.7	40	35	4	3	X
272	tipu	*Tipuana tipu*	1	9.8		9.8	35	35	4	3	
273	lemon	*Citrus* x *Limon*	1	9.1		9.1	15	18	3	3	
274	black willow	*Salix gooddingii*	1	11.8		11.8	40	30	4	4	
275	black locust	*Robinia pseudoacacia*	1	17.9		17.9	40	35	4	4	X
276	black locust	*Robinia pseudoacacia*	1	17.2		17.2	40	30	4	3	X
277	black locust	*Robinia pseudoacacia*	1	6.5		6.5	25	22	1	1	
278	black locust	*Robinia pseudoacacia*	1	8.7		8.7	40	25	2	2	
279	holm oak	*Quercus ilex*	1	27.6		27.6	50	45	4	4	X
280	holm oak	*Quercus ilex*	1	27.4		27.4	50	45	4	4	X
281	Oregon ash	*Fraxinus latifolia*	1	16.4		16.4	30	35	3	3	X
282	Oregon ash	*Fraxinus latifolia*	1	10.6		10.6	25	15	3	3	
283	crybabytree	*Erythrina crista-galli*	1	20.5		20.5	20	25	2	2	X
284	red flowering gum	*Corymbia ficifolia*	1	13.4		13.4	25	20	3	3	X
285	Oregon ash	*Fraxinus latifolia*	1	18.0		18.0	25	30	3	3	X
286	Mexican fan palm	*Washingtonia robusta*	1	19.7		19.7	50	10	4	4	X
287	Oregon ash	*Fraxinus latifolia*	1	14.4		14.4	25	30	3	3	X
288	Mexican fan palm	*Washingtonia robusta*	1	18.6		18.6	50	10	4	3	X
289	Oregon ash	*Fraxinus latifolia*	1	17.1		17.1	25	25	3	3	X
290	orange	*Citrus* x *sinensis*	3	6.7	3.9	10.6	12	20	3	3	
291	Chinese juniper	*Juniperus chinensis*	2	9.4	6.2	15.6	25	15	4	3	X
292	Oregon ash	*Fraxinus latifolia*	1	15.3		15.3	25	25	3	3	X
293	tipu	*Tipuana tipu*	1	19.5		19.5	60	45	4	4	X
294	tipu	*Tipuana tipu*	1	23.5		23.5	60	45	4	4	X
295	Oregon ash	*Fraxinus latifolia*	1	18.4		18.4	30	25	3	3	X
296	Oregon ash	*Fraxinus latifolia*	1	13.6		13.6	25	30	3	3	X
297	Oregon ash	*Fraxinus latifolia*	1	18.7		18.7	25	30	3	3	X
298	Oregon ash	*Fraxinus latifolia*	1	13.8		13.8	25	20	3	3	X
299	Oregon ash	*Fraxinus latifolia*	1	19.9		19.9	25	30	3	3	X
300	Oregon ash	*Fraxinus latifolia*	1	15.4		15.4	25	30	3	3	X

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
301	Oregon ash	*Fraxinus latifolia*	1	7.4		7.4	20	18	3	3	
302	silktree	*Albizia julibrissin*	1	6.7		6.7	22	15	4	4	
303	pomegranate	*Punica protopunica*	2	8.3	5.0	13.3	15	8	3	3	X
304	apricot	*Prunus armeniaca*	2	5.5	4.2	9.7	15	12	4	4	
305	Chinese hackberry	*Celtis sinensis*	3	15.2	14.5	29.7	35	35	4	4	X
306	Oregon ash	*Fraxinus latifolia*	1	9.2		9.2	30	30	3	3	
307	Oregon ash	*Fraxinus latifolia*	1	12.6		12.6	30	25	3	3	X
308	orange	*Citrus* x *sinensis*	6	5.2	3.6	8.8	15	12	3	3	
309	Oregon ash	*Fraxinus latifolia*	1	11.5		11.5	20	25	3	3	
310	white mulberry	*Morus alba*	1	30.9		30.9	35	35	3	3	X
311	Aleppo pine	*Pinus halepensis*	1	15.6		15.6	30	40	4	3	X
312	Oregon ash	*Fraxinus latifolia*	1	10.9		10.9	30	25	3	3	
313	glossy privet	*Ligustrum lucidum*	1	10.7		10.7	30	35	3	3	
314	octopus tree	*Schefflera actinophylla*	3	7.0	6.5	13.5	15	12	4	3	X
315	avocado	*Persea americana*	1	26.9		26.9	40	35	3	3	X
316	Oregon ash	*Fraxinus latifolia*	1	9.2		9.2	22	20	3	3	
317	Oregon ash	*Fraxinus latifolia*	1	11.5		11.5	30	25	3	3	
318	Indian laurel fig	*Ficus microcarpa*	2	20.0	9.0	29.0	55	45	3	3	X
319	Oregon ash	*Fraxinus latifolia*	1	16.6		16.6	30	25	3	3	X
320	Mexican fan palm	*Washingtonia robusta*	1	24.0		24.0	25	12	4	3	X
321	avocado	*Persea americana*	1	24.7		24.7	35	40	3	3	X
322	Mexican fan palm	*Washingtonia robusta*	1	23.4		23.4	55	10	4	3	X
323	Oregon ash	*Fraxinus latifolia*	1	11.2		11.2	25	25	3	3	
324	tree of heaven	*Ailanthus altissima*	3	19.4	15.4	34.8	55	40	4	4	X
325	tree of heaven	*Ailanthus altissima*	3	19.1	14.1	33.2	50	45	4	4	X
326	Oregon ash	*Fraxinus latifolia*	1	15.0		15.0	35	30	3	3	X
327	avocado	*Persea americana*	1	22.3		22.3	25	20	2	2	X
328	Oregon ash	*Fraxinus latifolia*	1	12.2		12.2	25	30	3	3	X
329	avocado	*Persea americana*	1	14.6		14.6	30	35	1	1	X
330	lemon	*Citrus* x *Limon*	2	8.8	6.9	15.7	25	25	3	3	X

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
331	Peruvian peppertree	*Schinus molle*	1	54.3		54.3	40	45	4	2	X
332	cork oak	*Quercus suber*	1	27.9		27.9	50	55	4	3	X
333	cork oak	*Quercus suber*	1	25.8		25.8	50	45	4	3	X
334	silver dollar gum	*Eucalyptus polyanthemos*	1	31.6		31.6	65	65	4	4	X
335	cork oak	*Quercus suber*	1	31.3		31.3	55	65	4	4	X
336	cork oak	*Quercus suber*	1	31.0		31.0	50	35	2	1	X
337	tree of heaven	*Ailanthus altissima*	2	6.2	3.8	10.0	35	20	4	4	
338	cork oak	*Quercus suber*	1	29.3		29.3	40	50	3	3	X
339	cork oak	*Quercus suber*	1	27.1		27.1	40	50	3	3	X
340	Mexican fan palm	*Washingtonia robusta*	1	14.3		14.3	30	12	3	3	X
341	tree of heaven	*Ailanthus altissima*	1	5.5		5.5	30	12	4	4	
342	holm oak	*Quercus ilex*	1	38.1		38.1	55	55	4	4	X
343	white mulberry	*Morus alba*	1	9.4		9.4	25	30	4	3	
344	Peruvian peppertree	*Schinus molle*	1	38.6		38.6	65	55	4	3	X
345	Mexican fan palm	*Washingtonia robusta*	1	33.9		33.9	35	12	3	3	X
346	Peruvian peppertree	*Schinus molle*	1	34.2		34.2	40	35	4	3	X
347	Brazilian peppertree	*Schinus terebinthifolius*	1	26.2		26.2	45	40	3	3	X
348	holm oak	*Quercus ilex*	1	26.2		26.2	45	40	2	2	X
349	cork oak	*Quercus suber*	1	16.6		16.6	40	35	3	3	X
350	cork oak	*Quercus suber*	1	18.7		18.7	40	35	2	2	X
351	cork oak	*Quercus suber*	1	25.6		25.6	40	45	3	2	X
352	cork oak	*Quercus suber*	1	30.3		30.3	45	45	4	3	X
353	lemon	*Citrus* x *Limon*	7	4.5	3.9	8.4	20	25	3	3	
354	Western sycamore	*Platanus racemosa*	1	27.3		27.3	65	45	4	3	X
355	cork oak	*Quercus suber*	1	20.7		20.7	45	40	2	2	X
356	cork oak	*Quercus suber*	1	16.6		16.6	40	45	4	3	X
357	Western sycamore	*Platanus racemosa*	1	31.7		31.7	60	60	4	3	X
358	holm oak	*Quercus ilex*	1	31.5		31.5	60	50	4	3	X
359	holm oak	*Quercus ilex*	1	43.3		43.3	60	65	4	3	X
360	cork oak	*Quercus suber*	1	10.2		10.2	25	20	4	3	

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
361	cork oak	*Quercus suber*	1	31.5		31.5	60	45	4	3	X
362	silver dollar gum	*Eucalyptus polyanthemos*	1	40.3		40.3	65	50	4	4	X
363	Peruvian peppertree	*Schinus molle*	1	31.6		31.6	40	40	4	3	X
364	Peruvian peppertree	*Schinus molle*	1	22.1		22.1	40	40	4	3	X
365	Peruvian peppertree	*Schinus molle*	1	32.3		32.3	35	35	4	3	X
366	Oregon ash	*Fraxinus latifolia*	1	16.4		16.4	25	30	3	3	X
367	Oregon ash	*Fraxinus latifolia*	1	23.2		23.2	30	40	3	3	X
368	Peruvian peppertree	*Schinus molle*	1	26.0		26.0	25	25	4	2	X
369	Peruvian peppertree	*Schinus molle*	1	39.8		39.8	30	40	4	3	X
370	holm oak	*Quercus ilex*	1	29.2		29.2	55	60	4	4	X
371	cork oak	*Quercus suber*	1	34.0		34.0	60	50	4	3	X
372	Peruvian peppertree	*Schinus molle*	1	35.2		35.2	30	35	4	3	X
373	Mexican fan palm	*Washingtonia robusta*	1	16.4		16.4	45	10	4	3	X
374	Mexican fan palm	*Washingtonia robusta*	1	33.1		33.1	40	12	4	3	X
375	Mexican fan palm	*Washingtonia robusta*	1	16.6		16.6	55	10	4	3	X
376	holm oak	*Quercus ilex*	1	17.7		17.7	40	40	4	4	X
377	toyon	*Heteromeles arbutifolia*	1	9.9		9.9	25	30	4	4	
378	white mulberry	*Morus alba*	1	21.0		21.0	35	35	3	3	X
379	holm oak	*Quercus ilex*	4	9.8	7.4	17.2	45	40	4	3	X
380	holm oak	*Quercus ilex*	1	23.2		23.2	50	50	4	3	X
381	Oregon ash	*Fraxinus latifolia*	1	10.5		10.5	30	25	3	3	
382	Oregon ash	*Fraxinus latifolia*	1	10.5		10.5	25	30	3	3	
383	Oregon ash	*Fraxinus latifolia*	1	8.4		8.4	22	20	3	3	
384	paper mulberry	*Broussonetia papyrifera*	2	31.8	30.1	61.9	35	45	2	1	X
385	paper mulberry	*Broussonetia papyrifera*	6	4.8	2.9	7.7	25	25	3	3	
386	paper mulberry	*Broussonetia papyrifera*	5	5.6	5.0	10.6	25	30	3	3	
387	holm oak	*Quercus ilex*	8	24.6	15.2	39.8	60	60	4	3	X
388	China berry	*Melia azedarach*	2	32.8	19.6	52.4	20	15	3	2	X
389	toyon	*Heteromeles arbutifolia*	2	7.9	5.1	13.0	55	45	3	2	X
390	white mulberry	*Morus alba*	1	25.3		25.3	30	30	3	3	X

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
391	holm oak	*Quercus ilex*	1	26.3		26.3	55	50	2	2	X
392	Mexican fan palm	*Washingtonia robusta*	2	32.1	32.0	64.1	40	20	4	3	X
393	Mexican fan palm	*Washingtonia robusta*	1	14.2		14.2	55	8	4	3	X
394	cork oak	*Quercus suber*	1	27.5		27.5	55	45	3	3	X
395	coast live oak	*Quercus agrifolia*	1	16.6		16.6	35	40	4	4	X
396	silver dollar gum	*Eucalyptus polyanthemos*	1	20.5		20.5	55	50	4	3	X
397	silver dollar gum	*Eucalyptus polyanthemos*	1	41.0		41.0	70	60	4	3	X
398	holm oak	*Quercus ilex*	1	32.2		32.2	55	55	4	3	X
399	Mexican fan palm	*Washingtonia robusta*	1	16.9		16.9	60	10	4	3	X
400	silver dollar gum	*Eucalyptus polyanthemos*	1	45.2		45.2	70	65	4	3	X
401	pomegranate	*Punica protopunica*	2	6.8	6.0	12.8	20	20	3	3	X
402	cork oak	*Quercus suber*	1	26.7		26.7	45	45	4	3	X
403	Aleppo pine	*Pinus halepensis*	1	31.4		31.4	75	45	4	4	X
404	silver dollar gum	*Eucalyptus polyanthemos*	1	41.3		41.3	70	50	4	4	X
405	cork oak	*Quercus suber*	1	16.6		16.6	40	30	4	3	X
406	holm oak	*Quercus ilex*	1	24.2		24.2	45	45	4	3	X
407	Indian laurel fig	*Ficus microcarpa*	1	5.9		5.9	25	18	3	3	
408	Indian laurel fig	*Ficus microcarpa*	1	11.5		11.5	30	25	3	3	
409	Fremont cottonwood	*Populus fremontii*	1	26.7		26.7	55	45	4	3	X
410	cork oak	*Quercus suber*	1	22.4		22.4	50	45	4	3	X
411	Mexican plum	*Prunus mexicana*	1	14.1		14.1	35	25	4	4	X
412	cork oak	*Quercus suber*	1	39.8		39.8	65	55	3	3	X
413	cork oak	*Quercus suber*	1	13.7		13.7	25	20	3	3	X
414	holm oak	*Quercus ilex*	1	24.1		24.1	50	50	4	3	X
415	cork oak	*Quercus suber*	1	23.9		23.9	50	45	3	3	X
416	cork oak	*Quercus suber*	1	25.3		25.3	35	40	3	3	X
417	holm oak	*Quercus ilex*	1	14.4		14.4	40	30	3	3	X
418	Chinese elm	*Ulmus parvifolia*	1	25.3		25.3	60	65	4	4	X
419	Chinese elm	*Ulmus parvifolia*	1	14.8		14.8	60	50	4	4	X
420	Italian cypress	*Cupressus sempervirens*	1	14.1		14.1	55	4	4	4	X

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
421	Italian cypress	*Cupressus sempervirens*	1	14.0		14.0	55	4	4	4	X
422	cork oak	*Quercus suber*	1	15.1		15.1	50	35	3	3	X
423	Chinese elm	*Ulmus parvifolia*	1	18.2		18.2	65	55	4	4	X
424	cork oak	*Quercus suber*	1	27.9		27.9	50	45	3	3	X
425	cork oak	*Quercus suber*	1	15.8		15.8	40	35	4	4	X
426	red ironbark	*Eucalyptus sideroxylon*	1	21.2		21.2	70	55	4	4	X
427	Peruvian peppertree	*Schinus molle*	1	28.2		28.2	30	25	4	3	X
428	Peruvian peppertree	*Schinus molle*	1	23.6		23.6	30	25	4	3	X
429	holm oak	*Quercus ilex*	1	18.3		18.3	30	35	2	2	X
430	toyon	*Heteromeles arbutifolia*	2	6.8	5.8	12.6	18	25	4	4	X
431	holm oak	*Quercus ilex*	1	40.4		40.4	60	65	4	3	X
432	goldenrain tree	*Koelreuteria bipinnata*	1	8.9		8.9	30	25	4	4	
433	holm oak	*Quercus ilex*	1	38.1		38.1	70	65	3	3	X
434	holm oak	*Quercus ilex*	1	10.0		10.0	25	25	4	3	
435	Oregon ash	*Fraxinus latifolia*	1	26.4		26.4	35	30	3	3	X
436	Oregon ash	*Fraxinus latifolia*	1	38.3		38.3	40	35	2	2	X
437	Peruvian peppertree	*Schinus molle*	1	42.1		42.1	55	40	4	3	X
438	silver dollar gum	*Eucalyptus polyanthemos*	1	21.9		21.9	50	35	4	4	X
439	Peruvian peppertree	*Schinus molle*	1	37.0		37.0	40	40	4	3	X
440	holm oak	*Quercus ilex*	1	28.2		28.2	50	40	4	4	X
441	holm oak	*Quercus ilex*	1	24.6		24.6	50	45	4	4	X
442	holm oak	*Quercus ilex*	1	19.6		19.6	40	35	4	4	X
443	cork oak	*Quercus suber*	1	39.4		39.4	50	45	3	3	X
444	silver dollar gum	*Eucalyptus polyanthemos*	1	15.8		15.8	60	40	3	3	X
445	silver dollar gum	*Eucalyptus polyanthemos*	1	34.6		34.6	75	55	4	4	X
446	silver dollar gum	*Eucalyptus polyanthemos*	1	50.8		50.8	75	55	4	4	X
447	silver dollar gum	*Eucalyptus polyanthemos*	1	9.6		9.6	40	25	3	3	
448	silver dollar gum	*Eucalyptus polyanthemos*	1	14.9		14.9	40	30	4	4	X
449	holm oak	*Quercus ilex*	1	18.6		18.6	40	30	4	3	X
450	western sycamore	*Platanus racemosa*	1	22.2		22.2	50	25	4	3	X

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
451	silver dollar gum	*Eucalyptus polyanthemos*	1	40.0		40.0	60	50	4	4	X
452	silktree	*Albizia julibrissin*	1	6.1		6.1	20	12	4	4	
453	African fern pine	*Afrocarpus gracilior*	1	4.7		4.7	18	12	4	4	
454	silver dollar gum	*Eucalyptus polyanthemos*	1	50.0		50.0	60	50	3	3	X
455	Oregon ash	*Fraxinus latifolia*	1	21.0		21.0	40	30	3	3	X
456	Oregon ash	*Fraxinus latifolia*	2	22.2	18.1	40.3	45	35	3	3	X
457	Peruvian peppertree	*Schinus molle*	1	32.8		32.8	40	35	4	3	X
458	Peruvian peppertree	*Schinus molle*	1	29.0		29.0	40	30	4	3	X
459	Peruvian peppertree	*Schinus molle*	1	48.1		48.1	40	45	4	3	X
460	Peruvian peppertree	*Schinus molle*	1	38.5		38.5	45	40	4	3	X
461	Peruvian peppertree	*Schinus molle*	1	41.9		41.9	45	45	4	3	X
462	Peruvian peppertree	*Schinus molle*	1	36.7		36.7	45	45	4	3	X
463	Peruvian peppertree	*Schinus molle*	1	26.0		26.0	45	40	4	3	X
464	holm oak	*Quercus ilex*	1	28.7		28.7	45	40	3	3	X
465	white mulberry	*Morus alba*	1	14.8		14.8	30	30	4	4	X
466	holm oak	*Quercus ilex*	1	28.8		28.8	35	50	4	3	X
467	Brazilian peppertree	*Schinus terebinthifolius*	2	14.6	14.0	28.6	20	25	2	2	X
468	Peruvian peppertree	*Schinus molle*	1	25.5		25.5	35	35	4	3	X
469	Peruvian peppertree	*Schinus molle*	1	41.3		41.3	35	35	4	3	X
470	Peruvian peppertree	*Schinus molle*	1	27.1		27.1	35	35	4	3	X
471	Chinese elm	*Ulmus parvifolia*	1	28.7		28.7	55	50	4	4	X
472	western sycamore	*Platanus racemosa*	1	32.4		32.4	55	45	4	4	X
473	Peruvian peppertree	*Schinus molle*	1	26.8		26.8	40	40	4	3	X
474	Mexican fan palm	*Washingtonia robusta*	1	13.2		13.2	55	8	4	3	X
475	Peruvian peppertree	*Schinus molle*	1	41.9		41.9	40	40	4	3	X
476	orange	*Citrus x sinensis*	1	5.2		5.2	15	15	4	4	
477	Peruvian peppertree	*Schinus molle*	1	46.4		46.4	40	35	4	3	X
478	Peruvian peppertree	*Schinus molle*	1	33.1		33.1	40	40	4	3	X
479	Peruvian peppertree	*Schinus molle*	1	44.0		44.0	45	40	4	3	X
480	holm oak	*Quercus ilex*	1	23.2		23.2	50	45	4	4	X

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
481	Peruvian peppertree	*Schinus molle*	1	27.2		27.2	45	40	4	3	X
482	Peruvian peppertree	*Schinus molle*	1	34.3		34.3	45	40	4	3	X
483	white mulberry	*Morus alba*	1	18.6		18.6	30	30	3	3	X
484	Peruvian peppertree	*Schinus molle*	1	18.2		18.2	45	40	4	3	X
485	holm oak	*Quercus ilex*	1	28.1		28.1	55	50	2	3	X
486	Peruvian peppertree	*Schinus molle*	1	30.4		30.4	55	50	4	3	X
487	lemon	*Citrus* x *limon*	1	7.5		7.5	12	12	3	3	
488	holm oak	*Quercus ilex*	1	23.4		23.4	50	50	4	3	X
489	Peruvian peppertree	*Schinus molle*	1	30.0		30.0	45	35	4	3	X
490	western sycamore	*Platanus racemosa*	1	7.2		7.2	35	20	3	2	
491	Peruvian peppertree	*Schinus molle*	1	24.2		24.2	45	35	4	3	X
492	Aleppo pine	*Pinus halepensis*	1	22.1		22.1	60	40	4	4	X
493	shamel ash	*Fraxinus uhdei*	2	9.5	8.0	17.5	35	25	4	4	X
494	Peruvian peppertree	*Schinus molle*	1	24.5		24.5	45	40	4	3	X
495	Peruvian peppertree	*Schinus molle*	1	28.6		28.6	45	35	4	3	X
496	Peruvian peppertree	*Schinus molle*	1	42.8		42.8	45	40	4	3	X
497	holm oak	*Quercus ilex*	1	25.8		25.8	45	55	4	3	X
498	Peruvian peppertree	*Schinus molle*	1	16.4		16.4	45	30	4	3	X
499	shamel ash	*Fraxinus uhdei*	1	5.5		5.5	22	10	4	4	
500	Peruvian peppertree	*Schinus molle*	1	25.3		25.3	40	40	4	3	X
501	Peruvian peppertree	*Schinus molle*	1	9.2		9.2	30	25	4	3	
502	Peruvian peppertree	*Schinus molle*	1	25.3		25.3	40	35	4	3	X
503	Peruvian peppertree	*Schinus molle*	1	22.2		22.2	35	30	4	3	X
504	Catalina cherry	*Prunus ilicifolia* ssp. *lyonii*	1	16.0		16.0	25	20	3	2	X
505	western sycamore	*Platanus racemosa*	1	37.2		37.2	70	55	4	4	X
506	Peruvian peppertree	*Schinus molle*	1	23.8		23.8	45	45	4	3	X
507	Peruvian peppertree	*Schinus molle*	1	21.9		21.9	25	40	4	3	X
508	Peruvian peppertree	*Schinus molle*	1	35.0		35.0	50	40	4	3	X
509	Peruvian peppertree	*Schinus molle*	1	30.6		30.6	45	40	4	3	X
510	Peruvian peppertree	*Schinus molle*	1	5.9		5.9	30	25	4	4	

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
511	Peruvian peppertree	*Schinus molle*	1	27.1		27.1	50	45	4	3	X
512	Fremont cottonwood	*Populus fremontii*	1	20.6		20.6	60	45	4	3	X
513	Fremont cottonwood	*Populus fremontii*	1	23.5		23.5	60	30	4	3	X
514	silver dollar gum	*Eucalyptus polyanthemos*	1	56.8		56.8	70	60	4	4	X
515	Fremont cottonwood	*Populus fremontii*	1	14.9		14.9	45	25	4	3	X
516	holm oak	*Quercus ilex*	2	18.2	17.7	35.9	55	40	4	3	X
517	white mulberry	*Morus alba*	2	16.6	15.8	32.4	35	35	4	3	X
518	white mulberry	*Morus alba*	1	23.4		23.4	35	35	4	3	X
519	Peruvian peppertree	*Schinus molle*	1	32.0		32.0	45	40	4	3	X
520	Peruvian peppertree	*Schinus molle*	1	36.4		36.4	45	40	4	3	X
521	Peruvian peppertree	*Schinus molle*	1	29.1		29.1	35	30	4	2	X
522	Aleppo pine	*Pinus halepensis*	1	22.3		22.3	55	45	4	4	X
523	western sycamore	*Platanus racemosa*	1	26.5		26.5	65	50	4	3	X
524	Peruvian peppertree	*Schinus molle*	1	33.1		33.1	45	35	4	3	X
525	Oregon ash	*Fraxinus latifolia*	1	24.3		24.3	35	45	1	1	X
526	Oregon ash	*Fraxinus latifolia*	2	14.0	12.5	26.5	35	40	2	2	X
527	silver dollar gum	*Eucalyptus polyanthemos*	2	26.0	24.8	50.8	65	50	4	4	X
528	Peruvian peppertree	*Schinus molle*	1	22.8		22.8	35	30	4	3	X
529	western sycamore	*Platanus racemosa*	1	25.1		25.1	45	35	4	3	X
530	holm oak	*Quercus ilex*	1	19.2		19.2	50	40	3	3	X
531	holm oak	*Quercus ilex*	1	24.8		24.8	55	40	3	3	X
532	holm oak	*Quercus ilex*	1	27.1		27.1	55	50	3	3	X
533	Peruvian peppertree	*Schinus molle*	1	35.5		35.5	35	40	4	3	X
534	Peruvian peppertree	*Schinus molle*	1	36.2		36.2	40	40	4	3	X
535	Peruvian peppertree	*Schinus molle*	1	21.3		21.3	40	35	4	4	X
536	Peruvian peppertree	*Schinus molle*	1	20.2		20.2	35	30	4	3	X
537	holm oak	*Quercus ilex*	1	25.5		25.5	55	50	4	3	X
538	Peruvian peppertree	*Schinus molle*	1	8.8		8.8	22	15	2	2	
539	western sycamore	*Platanus racemosa*	1	30.3		30.3	60	50	3	3	X
540	silver dollar gum	*Eucalyptus polyanthemos*	1	37.9		37.9	65	50	4	4	X

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
541	Peruvian peppertree	*Schinus molle*	1	34.1		34.1	35	40	4	3	X
542	Peruvian peppertree	*Schinus molle*	1	12.4		12.4	30	25	4	3	X
543	Peruvian peppertree	*Schinus molle*	1	22.1		22.1	40	35	4	3	X
544	Peruvian peppertree	*Schinus molle*	1	27.2		27.2	35	25	4	3	X
545	holm oak	*Quercus ilex*	1	28.0		28.0	50	50	4	4	X
546	holm oak	*Quercus ilex*	1	27.8		27.8	50	35	4	4	X
547	western sycamore	*Platanus racemosa*	1	25.9		25.9	45	45	4	3	X
548	Chinese elm	*Ulmus parvifolia*	1	29.7		29.7	30	40	4	3	X
549	holm oak	*Quercus ilex*	1	46.1		46.1	55	45	4	4	X
550	Peruvian peppertree	*Schinus molle*	1	43.3		43.3	45	35	4	3	X
551	Peruvian peppertree	*Schinus molle*	1	39.5		39.5	35	30	4	3	X
552	holm oak	*Quercus ilex*	1	47.8		47.8	60	60	4	4	X
553	tipu	*Tipuana tipu*	1	18.0		18.0	55	40	4	4	X
554	Peruvian peppertree	*Schinus molle*	1	51.0		51.0	55	40	4	3	X
555	Peruvian peppertree	*Schinus molle*	1	19.8		19.8	45	40	4	3	X
556	Peruvian peppertree	*Schinus molle*	1	28.9		28.9	45	45	4	3	X
557	Peruvian peppertree	*Schinus molle*	1	28.0		28.0	40	35	4	3	X
558	Peruvian peppertree	*Schinus molle*	1	29.2		29.2	40	25	4	3	X
559	Peruvian peppertree	*Schinus molle*	1	30.2		30.2	40	35	4	3	X
560	Peruvian peppertree	*Schinus molle*	1	19.4		19.4	40	30	4	3	X
561	Oregon ash	*Fraxinus latifolia*	1	20.0		20.0	45	30	3	3	X
562	Peruvian peppertree	*Schinus molle*	1	42.4		42.4	50	55	4	3	X
563	Oregon ash	*Fraxinus latifolia*	1	19.7		19.7	65	45	4	4	X
564	Oregon ash	*Fraxinus latifolia*	1	27.8		27.8	65	40	4	4	X
565	Oregon ash	*Fraxinus latifolia*	1	32.5		32.5	60	50	4	4	X
566	Oregon ash	*Fraxinus latifolia*	1	27.0		27.0	60	50	4	4	X
567	Oregon ash	*Fraxinus latifolia*	1	26.6		26.6	65	45	4	4	X
568	maidenhair tree	*Ginkgo biloba*	1	5.3		5.3	15	12	3	3	
569	blue gum	*Eucalyptus globulus*	1	21.1		21.1	85	35	4	4	X
570	blue gum	*Eucalyptus globulus*	1	22.7		22.7	85	45	4	4	X

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
571	Peruvian peppertree	*Schinus molle*	1	18.1		18.1	35	25	4	3	X
572	Brazilian peppertree	*Schinus terebinthifolius*	4	5.7	5.0	10.7	25	40	4	3	
573	Peruvian peppertree	*Schinus molle*	1	20.2		20.2	50	45	4	4	X
574	Peruvian peppertree	*Schinus molle*	1	14.5		14.5	30	30	4	3	X
575	Peruvian peppertree	*Schinus molle*	1	33.6		33.6	35	30	4	3	X
576	Peruvian peppertree	*Schinus molle*	1	24.0		24.0	35	30	4	3	X
577	Peruvian peppertree	*Schinus molle*	1	29.1		29.1	35	25	4	3	X
578	white mulberry	*Morus alba*	1	14.4		14.4	25	15	4	3	X
579	holm oak	*Quercus ilex*	2	19.3	15.6	34.9	55	50	2	3	X
580	silver dollar gum	*Eucalyptus polyanthemos*	1	40.0		40.0	75	60	4	4	X
581	Peruvian peppertree	*Schinus molle*	1	30.1		30.1	45	35	4	3	X
582	Peruvian peppertree	*Schinus molle*	1	27.1		27.1	45	35	4	3	X
583	Peruvian peppertree	*Schinus molle*	1	27.6		27.6	45	40	4	3	X
584	Peruvian peppertree	*Schinus molle*	1	15.3		15.3	40	25	4	3	X
585	Peruvian peppertree	*Schinus molle*	1	36.1		36.1	40	40	4	3	X
586	Peruvian peppertree	*Schinus molle*	1	13.9		13.9	40	25	4	3	X
587	Peruvian peppertree	*Schinus molle*	1	32.1		32.1	40	40	4	3	X
588	Peruvian peppertree	*Schinus molle*	1	31.1		31.1	40	45	4	3	X
589	Peruvian peppertree	*Schinus molle*	1	16.6		16.6	35	30	4	3	X
590	Peruvian peppertree	*Schinus molle*	1	37.2		37.2	30	20	2	2	X
591	Peruvian peppertree	*Schinus molle*	1	28.2		28.2	50	45	4	3	X
592	Peruvian peppertree	*Schinus molle*	1	22.2		22.2	45	35	4	3	X
593	Peruvian peppertree	*Schinus molle*	1	25.4		25.4	45	45	4	3	X
594	Italian cypress	*Cupressus sempervirens*	1	9.4		9.4	50	4	4	4	
595	Peruvian peppertree	*Schinus molle*	1	15.5		15.5	30	30	4	3	X
596	weeping bottlebrush	*Callistemon viminalis*	2	5.1	3.3	8.4	15	20	3	3	
597	weeping bottlebrush	*Callistemon viminalis*	1	5.2		5.2	15	15	3	3	
598	holm oak	*Quercus ilex*	1	23.2		23.2	50	45	4	3	X
599	Peruvian peppertree	*Schinus molle*	1	32.5		32.5	45	40	4	3	X
600	Oregon ash	*Fraxinus latifolia*	1	20.5		20.5	55	35	4	4	X

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
601	Oregon ash	*Fraxinus latifolia*	1	23.3		23.3	55	40	4	4	X
602	Oregon ash	*Fraxinus latifolia*	1	26.0		26.0	55	35	4	4	X
603	Oregon ash	*Fraxinus latifolia*	1	21.3		21.3	55	35	4	4	X
604	laurel-leaf snailseed	*Cocculus laurifolius*	1	6.3		6.3	15	20	4	4	
605	laurel-leaf snailseed	*Cocculus laurifolius*	1	7.3		7.3	25	15	4	4	
606	laurel-leaf snailseed	*Cocculus laurifolius*	2	6.5	6.2	12.7	25	25	4	4	X
607	laurel-leaf snailseed	*Cocculus laurifolius*	1	8.4		8.4	25	20	3	4	
608	honeylocust	*Gleditsia triacanthos*	1	14.0		14.0	35	25	4	4	X
609	laurel-leaf snailseed	*Cocculus laurifolius*	1	7.9		7.9	20	18	4	4	
610	honeylocust	*Gleditsia triacanthos*	1	20.7		20.7	35	35	3	3	X
611	laurel-leaf snailseed	*Cocculus laurifolius*	1	14.1		14.1	22	22	4	4	X
612	laurel-leaf snailseed	*Cocculus laurifolius*	1	8.7		8.7	22	20	4	4	
613	laurel-leaf snailseed	*Cocculus laurifolius*	2	8.1	7.0	15.1	20	20	4	4	X
614	laurel-leaf snailseed	*Cocculus laurifolius*	1	13.1		13.1	25	25	4	4	X
615	laurel-leaf snailseed	*Cocculus laurifolius*	1	16.6		16.6	25	35	4	4	X
616	goldenrain tree	*Koelreuteria bipinnata*	1	5.3		5.3	15	15	4	4	
617	Brazilian peppertree	*Schinus terebinthifolius*	1	15.6		15.6	25	25	4	4	X
618	Brazilian peppertree	*Schinus terebinthifolius*	1	13.2		13.2	25	22	4	4	X
619	Brazilian peppertree	*Schinus terebinthifolius*	1	16.6		16.6	25	25	4	4	X
620	Brazilian peppertree	*Schinus terebinthifolius*	1	18.1		18.1	20	18	4	4	X
621	Brazilian peppertree	*Schinus terebinthifolius*	1	20.4		20.4	22	25	4	4	X
622	Brazilian peppertree	*Schinus terebinthifolius*	1	11.9		11.9	15	20	4	4	
623	Brazilian peppertree	*Schinus terebinthifolius*	1	11.3		11.3	20	15	4	4	
624	laurel-leaf snailseed	*Cocculus laurifolius*	1	6.3		6.3	15	3	1	1	
625	laurel-leaf snailseed	*Cocculus laurifolius*	1	6.8		6.8	25	20	4	4	
626	laurel-leaf snailseed	*Cocculus laurifolius*	1	9.0		9.0	25	20	4	4	
627	laurel-leaf snailseed	*Cocculus laurifolius*	1	9.6		9.6	25	15	4	4	
628	laurel-leaf snailseed	*Cocculus laurifolius*	1	5.3		5.3	25	15	4	4	
629	laurel-leaf snailseed	*Cocculus laurifolius*	1	6.2		6.2	25	20	4	4	
630	laurel-leaf snailseed	*Cocculus laurifolius*	1	5.8		5.8	25	25	4	4	

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
631	laurel-leaf snailseed	*Cocculus laurifolius*	1	10.1		10.1	25	25	4	4	
632	laurel-leaf snailseed	*Cocculus laurifolius*	1	4.6		4.6	25	20	4	4	
633	laurel-leaf snailseed	*Cocculus laurifolius*	1	8.8		8.8	25	25	4	4	
634	Chinese elm	*Ulmus parvifolia*	1	13.9		13.9	55	40	4	4	X
635	Chinese elm	*Ulmus parvifolia*	1	16.5		16.5	55	40	4	4	X
636	laurel-leaf snailseed	*Cocculus laurifolius*	1	8.6		8.6	25	20	4	4	
637	Oregon ash	*Fraxinus latifolia*	1	5.8		5.8	50	25	4	4	
638	laurel-leaf snailseed	*Cocculus laurifolius*	1	7.3		7.3	20	25	4	3	
639	laurel-leaf snailseed	*Cocculus laurifolius*	1	7.8		7.8	25	30	4	3	
640	Chinese elm	*Ulmus parvifolia*	1	16.1		16.1	55	45	4	4	X
641	Chinese elm	*Ulmus parvifolia*	1	16.7		16.7	55	35	4	4	X
642	Chinese elm	*Ulmus parvifolia*	1	18.3		18.3	55	40	4	4	X
643	Chinese elm	*Ulmus parvifolia*	1	17.6		17.6	55	40	4	3	X
644	Chinese elm	*Ulmus parvifolia*	1	18.8		18.8	55	65	4	3	X
645	black poui	*Jacaranda mimosifolia*	1	22.1		22.1	55	55	4	4	X
646	western sycamore	*Platanus racemosa*	1	17.7		17.7	55	40	4	4	X
647	western sycamore	*Platanus racemosa*	1	20.7		20.7	70	45	4	3	X
648	western sycamore	*Platanus racemosa*	1	11.3		11.3	45	25	1	1	
649	Canary Island pine	*Pinus canariensis*	1	16.2		16.2	65	15	4	4	X
650	Canary Island pine	*Pinus canariensis*	1	17.7		17.7	65	35	4	4	X
651	Canary Island pine	*Pinus canariensis*	1	23.7		23.7	65	35	4	4	X
652	white mulberry	*Morus alba*	1	26.2		26.2	35	45	4	4	X
653	western sycamore	*Platanus racemosa*	1	15.2		15.2	45	35	4	4	X
654	western sycamore	*Platanus racemosa*	1	19.8		19.8	70	35	4	4	X
655	western sycamore	*Platanus racemosa*	1	7.8		7.8	25	4	1	1	
656	western sycamore	*Platanus racemosa*	1	15.5		15.5	50	35	4	4	X
657	western sycamore	*Platanus racemosa*	1	29.1		29.1	65	50	4	4	X
658	western sycamore	*Platanus racemosa*	1	20.5		20.5	50	30	4	4	X
659	goldenrain tree	*Koelreuteria bipinnata*	1	6.4		6.4	20	18	4	4	
660	Canary Island pine	*Pinus canariensis*	1	21.2		21.2	65	30	4	4	X

TABLE A
TREE SURVEY DATA

Tree Tag No.	Common Name	Tree Species	No. Main Trunks	dbh (in)		Total Trunk dbh	Height (ft)	Canopy Diameter (ft)	Health Rating	Aesthetic Rating	Mature Tree
				1st Trunk	2nd Trunk						
661	laurel-leaf snailseed	*Cocculus laurifolius*	2	11.8	2.9	14.7	25	20	4	4	X
662	laurel-leaf snailseed	*Cocculus laurifolius*	2	9.1	4.7	13.8	25	20	4	4	X
663	laurel-leaf snailseed	*Cocculus laurifolius*	1	7.5		7.5	25	20	4	4	
664	laurel-leaf snailseed	*Cocculus laurifolius*	2	8.3	6.7	15.0	25	20	4	4	X
665	laurel-leaf snailseed	*Cocculus laurifolius*	1	6.8		6.8	25	20	4	4	
666	laurel-leaf snailseed	*Cocculus laurifolius*	1	5.3		5.3	25	20	4	4	
667	laurel-leaf snailseed	*Cocculus laurifolius*	1	5.7		5.7	25	20	4	4	
668	laurel-leaf snailseed	*Cocculus laurifolius*	2	7.6	4.8	12.4	25	20	4	4	X
669	laurel-leaf snailseed	*Cocculus laurifolius*	2	8.3	5.6	13.9	25	20	4	4	X
670	laurel-leaf snailseed	*Cocculus laurifolius*	1	8.7		8.7	25	20	4	4	
671	laurel-leaf snailseed	*Cocculus laurifolius*	2	6.8	6.2	13.0	25	20	4	4	X
672	laurel-leaf snailseed	*Cocculus laurifolius*	1	7.8		7.8	25	20	4	4	
673	laurel-leaf snailseed	*Cocculus laurifolius*	2	7.1	5.4	12.5	25	20	4	4	X
674	laurel-leaf snailseed	*Cocculus laurifolius*	1	8.1		8.1	25	20	4	4	
675	laurel-leaf snailseed	*Cocculus laurifolius*	1	5.3		5.3	25	20	4	4	
676	western sycamore	*Platanus racemosa*	1	10.4		10.4	30	25	4	3	
677	western sycamore	*Platanus racemosa*	1	21.6		21.6	60	40	4	3	X
678	western sycamore	*Platanus racemosa*	1	9.3		9.3	40	30	4	4	
679	western sycamore	*Platanus racemosa*	1	14.1		14.1	35	35	4	4	X
680	Canary Island pine	*Pinus canariensis*	1	21.2		21.2	70	30	4	4	X
681	western sycamore	*Platanus racemosa*	1	15.2		15.2	40	30	4	4	X

dbh: diameter at breast height; ft: feet.

Aesthetics/Health Rating: 1=Very Poor, 2=Poor, 3=Fair, 4=Good, and 5=Excellent

APPENDIX C

Cultural Resources Reports

Phase I Cultural Resources Assessment

University of California, Riverside
North District Area

Prepared for

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Principal Environmental Planner
University of California, Riverside
Capital Asset Strategies – Capital Planning
1223 University Avenue, Suite 240
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Prepared by

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March 13, 2017

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TABLES

EXHIBITS

ATTACHMENTS

NATIONAL ARCHAEOLOGICAL DATABASE (NADB)

INFORMATION SHEET

Phase I Cultural Resources Assessment
University of California, Riverside North District Area

by
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Patrick O. Maxon, M.A., RPA

March 2017

Submitted by:

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USGS 7.5 Minute Quadrangle: Riverside East

Psomas

Project Number: 3UCR000700

Key Words: UC Riverside, Canyon Crest Student Housing

MANAGEMENT SUMMARY

PURPOSE AND SCOPE

Psomas undertook this study to evaluate cultural resources in the North District Area on the University of California, Riverside (UCR) campus, where existing Canyon Crest Family Student Housing is presently located (study area). This study will be used to inform future land use planning decisions for the North District Area and to support future environmental documentation pursuant to the California Environmental Quality Act (CEQA). This document has been prepared to satisfy Section 15064.5 of the State CEQA Guidelines with respect to the identification and preservation of cultural resources. The format of this report follows an amended version of the Office of Historic Preservation's (OHP's) *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format* (Office of Historic Preservation 1990).

DATES OF INVESTIGATION

The Eastern Information Center (EIC), located at UCR, conducted a cultural resources records search and literature review for the study area on February 2, 2017. Psomas also contacted the Natural History Museum of Los Angeles County (NHMLAC) on January 5, 2017, to conduct a paleontological records search for the project. A field survey of the study area was conducted on January 16, 2017.

FINDINGS OF THE INVESTIGATION

The results of the archaeological and historic records searches indicate that the property has not been the subject of a cultural resources study. The NHMLAC provided the results of its records search indicating the project area was not sensitive for fossils at depths of less than ten feet. The 178 World War II-era homes in the study area are of sufficient age to warrant a historic evaluation. A historic evaluation of the property has been conducted by Daly & Associates and has been submitted under separate cover. The historic evaluation concluded that the property is not eligible for listing on the California Register of Historic Resources (CRHR). The survey of the property did not result in the discovery of any cultural resources, neither historic nor prehistoric.

RECOMMENDATIONS

While a specific development project has not been identified for the North District Area, in the event that future development activities involve earth-moving activities in native sediment and archaeological or paleontological resources are discovered, Psomas recommends that a qualified Archaeologist and/or Paleontologist be contacted so that the discovery can be evaluated pursuant to Section 15064.5 of the State CEQA Guidelines. See Campus Programs and Practices (PPs) 4.5-4, and Mitigation Measures (MMs) CUL-1, which are listed below. In addition, if human remains are discovered, requirements outlined in PP 4.5-5 shall be followed.

PP 4.5-4 Construction specifications shall require that if a paleontological resource is uncovered during construction activities:

(i) A qualified paleontologist shall determine the significance of the find.

(ii) The Campus shall make an effort to preserve the find intact through feasible project design measures.

(iii) If it cannot be preserved intact, then the University shall retain a qualified non-University paleontologist to design and implement a treatment plan to

document and evaluate the data and/or preserve appropriate scientific samples.

(iv) The paleontologist shall prepare a report of the results of the study, following accepted professional practice.

(v) Copies of the report shall be submitted to the University and the Riverside County Museum.

PP 4.5-5 In the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately and the area of the find shall be protected and the University immediately shall notify the Riverside County Coroner of the find and comply with the provisions of P.R.C. Section 5097 with respect to Native American involvement, burial treatment, and re-burial, if necessary.

MM CUL-1 If an archaeological resource is discovered during construction, all soil-disturbing work within 100 feet of the find shall cease and the University Representative shall contact a qualified archaeologist meeting the Secretary of Interior standards within 24 hours of discovery to inspect the site. If a resource within the project area of potential effect is determined to qualify as a unique archaeological resource (as defined by CEQA), the University shall devote adequate time and funding to determine if it is feasible, through project design measures to preserve the find intact. If it cannot be preserved, the University shall retain a qualified non-University archaeologist to design and implement a treatment plan, prepare a report, and salvage the material, as appropriate. Any important artifacts recovered during monitoring shall be cleaned, catalogued, and analyzed, with the results presented in a report of finding that meets professional standards.

a. If significant Native American cultural resources are discovered, as determined by the consulting archaeologist for which a Treatment Plan must be prepared, the developer, or his archaeologist shall immediately contact the University Representative. The University Representative shall contact the appropriate Tribal representatives.

b. If requested by Tribal representatives, the University, the developer, or his project archaeologist shall in good faith, consult on the discovery and its disposition (e.g., avoidance, preservation, return of artifacts to tribe).

DISPOSITION OF DATA

This report will be filed with the EIC and at Psomas. All field notes and other documentation related to the study are on file at Psomas.

1.0 INTRODUCTION

As part of pre-development studies, Psomas was retained to complete a cultural resources study for the UCR North District Area (study area) located in the City of Riverside in Riverside County, California. The North District Area is an approximate 51-acre area containing 178 residential dwellings (Canyon Crest Family Student Housing), 5 buildings that hold support services for the Canyon Crest Family Student Housing, one recreational park pavilion, and the building that houses KUCR radio station. The tract is bound on the north and south by Blaine Street and West Linden Street, respectively; Canyon Crest Drive to the west; and UCR's Child Development Center and Parking Lots 23 and 28 to the east. The North District Area's local and regional vicinity are provided on Exhibit 1.

The study area is located in Section 20 (Township 2 South; Range 4 West) of the U.S. Geological Survey's (USGS') Riverside East and San Bernardino South 7.5-Minute Quadrangles (see Exhibit 2).

The study area is being considered for future development opportunities identified for the North District Area in the UC Riverside Master Plan Study (May 2016), including potential student housing, recreation, and retail uses, and a Campus Events Center. There are currently no site-specific development plans.

2.0 REGULATORY SETTING

2.1 STATE

2.1.1 California Register of Historical Resources

CEQA requires a lead agency to determine whether a project would have a significant effect on one or more historical resources. A "historical resource" is defined as a resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR) (*California Public Resources Code* [PRC], Section 21084.1); a resource included in a local register of historical resources (14 *California Code of Regulations* [CCR], Section 15064.5[a][2]); or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (14 CCR 15064.5[a][3]).

Section 5024.1 of PRC, Section 15064.5 of the State CEQA Guidelines (14 CCR), and Sections 21083.2 and 21084.1 of the CEQA Statutes were used as the basic guidelines for the cultural resources study. PRC 5024.1 requires evaluation of historical resources to determine their eligibility for listing on the CRHR. The purposes of the CRHR are to maintain listings of the State's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources in the CRHR were expressly developed to be in accordance with criteria developed for listing in the National Register of Historic Places (NRHP) (per the criteria listed in the *Code of Federal Regulations* [CFR], Title 36, Part 60.4) and include those listed below.

> A resource may be listed as an historical resource in the California Register if it meets any of the following National Register of Historic Places criteria:
>
> (1) Is associated with events that have made a significant contribution to the broad patterns of California's history or cultural heritage.
>
> (2) Is associated with the lives of persons important in our past.

(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possesses high artistic values.

(4) Has yielded, or may be likely to yield, information important in prehistory or history.

According to Section 15064.5(a)(3)(A–D) of the State CEQA Guidelines (14 CCR), a resource is considered historically significant if it meets the criteria for listing in the NRHP (per the criteria listed at 36 CFR 60.4 previously discussed). Impacts that affect those characteristics of the resource that qualify it for the NRHP or that would adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered to have a significant effect on the environment. Impacts to cultural resources from a proposed project are thus considered significant if the project (1) physically destroys or damages all or part of a resource; (2) changes the character of the use of the resource or physical feature within the setting of the resource that contributes to its significance; or (3) introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

The purpose of a cultural resources investigation is to evaluate whether any built environment cultural resources are present in or near a project site or can reasonably be expected to exist in the subsurface. If resources are discovered, management recommendations would be included that require evaluation of the resources for NRHP or CRHR eligibility.

Broad mitigation guidelines for treating historical resources are codified in Section 15126.4(b) of the State CEQA Guidelines. To the extent feasible, public agencies should seek to avoid significant effects to historical resources, with preservation in place being the preferred alternative. If not feasible, a data recovery plan shall be prepared to guide subsequent excavation. Mitigation for historical resources such as buildings, bridges, and other structures that are consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (Weeks and Grimmer 1995) will generally be considered mitigated below a level of significance.

2.1.2 Human Remains

Section 7050.5 of the *California Health and Safety Code* provides for the disposition of accidentally discovered human remains. Section 7050.5 states that, if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains.

Section 5097.98 of the PRC states that, if remains are determined by the Coroner to be of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours which, in turn, must identify the person or persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

3.0 ENVIRONMENTAL SETTING

Located generally within the Santa Ana River Watershed, the North District Area is situated amidst valley lowlands intersected by rolling hills surrounded by low hills and mountain ranges. Topographically, elevations range from 680 to 1,900 feet above mean sea level (msl).

The Santa Ana River Valley is classified as a Mediterranean climate that experiences cool wet winters and hot dry summers. Periods of precipitation are brief, generally occurring from November to March, and may bring up to 40 inches per year in the San Bernardino Mountains and 12 inches in the coastal plain regions (WRCC 2009).

The North District Area is entirely within a built environment. No native habitats or terrain remain in the immediate vicinity.

4.0 CULTURAL BACKGROUND

4.1 PREHISTORIC BACKGROUND

Several chronologies are generally used to describe the sequence of the later prehistoric periods of Southern California. William Wallace (1955) developed the first comprehensive California chronologies and defines four periods for the southern coastal region. Wallace's synthesis is largely "descriptive and classificatory, emphasizing the content of archaeological cultures and the relationships among them" (Moratto 1984:159). Wallace relies upon the concept of "cultural horizons", which are generally defined by the temporal and spatial distribution of a set of normative cultural traits, such as the distribution of a group of commonly associated artifact types. As a result, his model does not allow for much cultural variation within the same time period, nor does it provide precise chronological dates for each temporal division. Nonetheless, although now more than 50 years old, the Wallace chronology has provided a general framework for Southern California prehistory that remains valid today.

Horizon I: Early Man or Paleo-Indian Period (11,000 BCE to 7,500 BCE[1]). While initially termed Early Man Horizon (I) by Wallace (1955), this early stage of human occupation is commonly referred to as the Paleo-Indian Period today (Chartkoff and Chartkoff 1984:24). As discussed above, the precise start of this period is still a topic of considerable debate. At inland archaeological sites, the surviving material culture of this period is primarily lithic, consisting of large, extremely well made stone projectile points and tools (e.g., scrapers and choppers). Encampments were probably temporary, located near major kills or important resource areas. The San Dieguito Tradition, defined by Warren at the stratified C.W. Harris site in San Diego County, is encompassed by this period of time (Moratto 1984:97).

Horizon II: Milling Stone Assemblages (7,500 BCE to 1,000 BCE). Encompassing a broad expanse of time, the Milling Stone Period was named for the abundant millingstone tools associated with sites of this period. These tools, the mano and metate, were used to process small, hard seeds from plants associated with shrub-scrub vegetation communities. An annual round of seasonal migrations was likely practiced, with movements coinciding with ripening vegetal resources and the periods of maximal availability of various animal resources. Along the coast, shell midden sites are common site types. Some formal burials, occasionally with associated grave goods, are also evident. This period of time is roughly equivalent to Warren's (1968) Encinitas Tradition. Warren (1968) suggests that, as millingstones are common and projectile

[1] BCE stands for "Before Common Era" and CE stands for "Common Era". These alternative forms of "BC" and "AD", respectively, are used throughout this document.

points are comparatively rare during this period of time, hunting was less important than the gathering of vegetable resources.

More recent studies suggest that a diversity of subsistence activities, including hunting of various game animals, were practiced during this period (Koerper 1981; Koerper and Drover 1983). At present, little is known about cultural change during this time period within Southern California. While this lack of noticeable change gives the appearance of cultural stasis, almost certainly many regional and temporal cultural shifts did occur. Future research that is focused on temporal change within the Milling Stone Period would greatly benefit the current understanding of Southern California prehistory.

Horizon III: Intermediate Cultures (1,000 BCE to 750 CE). The Intermediate Period is identified by a mixed strategy of plant exploitation, terrestrial hunting, and maritime subsistence strategies. Chipped stone tools, such as projectile points, generally decrease in size, but increase in number. Abundant bone and shell remains have been recovered from sites dating to these time periods. In coastal areas, the introduction of the circular shell fishhook and the growing abundance of fish remains in sites over the course of the period suggest a substantial increase in fishing activity during the Intermediate Horizon. It is also during this time period that mortar and pestle use intensified dramatically. The mano and metate continued to be in use on a reduced scale, but the greatly intensified use of the mortar and pestle signaled a shift away from a subsistence strategy based on seed resources to that of the acorn. It is probably during this time period that the acorn became the food staple of the majority of the indigenous tribes in Southern California. This subsistence strategy continued until European contact. Material culture became more diverse and elaborate and included steatite containers, perforated stones, bone tools, ornamental items, and asphalt adhesive.

While Warren (1968) recognized the start of the Campbell Tradition within the Santa Barbara region at roughly the beginning of Intermediate Period, he did not see clear evidence of cultural change farther south. As a result, the Encinitas Tradition in Southern California encompasses both the Milling Stone and Intermediate Periods in Warren's chronology (1968:2, 4). However, the more recent chronology posited by Koerper and Drover clearly recognizes an Intermediate Period within Southern California. They suggest that Warren's inability to recognize an intermediate cultural stage was likely due to "the lack of conclusive data in 1968" (1983:26).

Horizon IV: Late Prehistoric Cultures (750 CE to 1769 CE). During the Late Prehistoric Period, exploitation of many food resources, particularly marine resources among coastal groups, continued to intensify. The material culture in the Late Prehistoric Horizon increased in complexity in terms of the abundance and diversity of artifacts being produced. The recovery and identification of a number of small projectile points during this period likely suggests a greater utilization of the bow and arrow, which was likely introduced near the end of the Intermediate Period. Shell beads, ornaments, and other elements of material culture continue to be ornate, varied, and widely distributed; the latter evidence suggests elaborate trade networks. Warren's (1968) scheme divides the late prehistoric period into several regional traditions. Western Riverside County, Orange County, and the Los Angeles Basin area are considered part of the "Shoshonean" tradition, which may be related to a possible incursion of Takic speakers into these areas during this period. The Late Prehistoric Period includes the first few centuries of early European contact (1542–1769 CE); it is also known as the Protohistoric Period as there was a low level of interaction between native Californians and Europeans prior to Portolá's overland expedition in 1769.

In the few centuries prior to European contact, the archaeological record reveals substantial increases in the indigenous population (Wallace 1955:223). Some village sites may have contained as many as 1,500 individuals. Apparently, many of these village sites were occupied throughout the year rather than seasonally. This shift in settlement strategy was likely influenced

by improved food procurement and storage technology, which enabled population growth and may have helped stimulate changes in sociopolitical organization.

Evidence is growing that prehistoric cultural change has been much more variable through time and across culture areas than previously thought. Cultural traits such as maritime economies, seafaring, complex trade networks, and year-round occupation of villages appear to have developed much earlier than previously thought. Culture change during the Late Prehistoric Period, in particular, may have been driven more by environmental and resource pressures than optimal adaptation to the environment (Byrd and Raab 2007).

4.2 ETHNOGRAPHIC BACKGROUND

4.2.1 Gabrielino/Tongva

At the time of Spanish contact, the study area is believed to have been inhabited by the Gabrielino near the eastern extent of their ethnographic territory (see Kroeber 1925; Harrington 1933; Johnston 1962; Blackburn 1963; Heizer 1968; Bean and Smith 1978; McCawley 1996). The name "Gabrielino" identifies those people who came under the control of Mission San Gabriel Arcángel and included the inhabitants of most of current-day Los Angeles and Orange Counties and portions of Riverside and San Bernardino Counties. Today, many Gabrielino prefer to be known as *Tongva*. According to the ethnographic evidence, the Gabrielino territory included the coastal plain of Los Angeles and Orange Counties extending from Topanga Canyon in the north to Aliso Creek in the south, and eastward of Mount Rubidoux in Western Riverside County. Their territory also included Santa Catalina, San Clemente, and San Nicolas Islands.

Gabrielino territory occupied one of the richest environmental habitats in all of California. The territory included four macro-environments: the Interior Mountains/Adjacent Foothills, the Prairie, the Exposed Coast, and the Sheltered Coast (Bean and Smith 1978). These diverse macro-environments, and the resources contained within each, enabled the Gabrielino to develop one of the most complex cultures of any of the native California groups. The abundance of resources provided many opportunities for the Gabrielino to exploit native plants and animals. This, in turn, allowed the population to settle in small villages throughout the territory.

Permanent villages evolved in resource-rich areas near rivers, streams, and along the coast. Secondary, or satellite, villages were also established nearby. The Gabrielino traditionally constructed two types of dwellings: the subterranean pit house and the thatched lean-to (*wickiup*). The pit house was constructed by excavating approximately two feet below the surface and constructing the walls and roof with wooden beams and earth around the excavation pit. The lean-to, or wickiup, was constructed of thatched walls and thatched roof, surrounded by large converging poles. A hearth located inside the structure provided warmth. Hearths used for cooking were located outside. Sweathouses, or *temescals*, were used as a meeting place for the men (Kroeber 1925; Bean and Smith 1978).

The material culture of the Gabrielino reflected an elaborately developed artistic style and an adaptation to the various environments in their territory. This artistic style was often manifested in elaborate shell bead and asphaltum ornamentation on many utilitarian items (e.g., bone awl handles, bowls, or mortar rims). Spears and bows and arrows were used for hunting, while manos and metates, as well as mortars and pestles, were used for processing plant and animal material into food items. The Gabrielino were also known for their high quality of basketry made from rush stems (*Juncus* sp.), native grass (*Muhlenbergia rigens*), and squawbush (*Rhus trilobata*) (Bean and Smith 1978:542).

4.2.2 Luiseño

The study area was also within the territory occupied by the Luiseño, named by the Spanish after the Mission San Luis Rey de Francia in the present-day City of Oceanside, where some of their linguistic group frequented. The Luiseño cultural area incorporated southern Riverside County, northern San Diego County, and eastern Orange County, and the area was linguistically comprised of a language of the Shoshonean language family (Kroeber 1925: Plate 57). The contact period ethnicity of the study area is clear, belonging to the Luiseño culture to which the nearby Indian reservations/communities of Pechanga and Pala attest. Ethnographic literature pertinent to the Luiseño, Cahuilla, and surrounding ethnographic groups is fairly extensive and has been collected since the 1800s (see Barrows 1900; Sparkman 1908; Kroeber 1925; White 1963; Bean 1972).

Linguistically, the Luiseño belonged to the Cupan group of the Takic subfamily of the more widespread Uto-Aztecan family. This was earlier called the Southern Californian Shoshonean and includes the languages of the Gabrielino, Serrano, Cahuilla, and Cupeño (Bean and Shipek 1978). Although Kroeber (1925) and Harrington (1933) had distinguished the Luiseño from the Juaneño tribe at the Mission San Juan Capistrano based upon linguistic differences, later work by R.C. White (1963) had shown both groups to be one ethnic nationality (Bean and Shipek 1978).

A number of researchers (Sparkman 1908; Kroeber 1925; White 1963; Bean and Shipek 1978) have attempted to reconstruct past Luiseño lifeways. Based upon their work, the following conclusions are suggested. The Luiseño were intensive hunters and gatherers that used both coastal and inland resources. They lived in large sedentary villages that were typically located along valley bottoms, streams, coastal strands, and mountain ranges. These villages were usually in good defensive locations near perennial water sources with every village having access to a number of well-defined and well-defended resource areas that were usually within a day's travel from the village. These resource areas were owned either individually, by a family, or by the village as a whole and it was only with permission that one could exploit another's territory (Bean and Shipek 1978). Typically the village contained specialized activity areas that included residence houses, sweathouses, and special ceremonial enclosures (True 1966).

Each village was a politically independent clan triblet of patrilineally related people headed by a hereditary chief whose powers included religious, economic, and warfare duties. The chief was assisted by a council of ritual specialists and shamans whose positions were also hereditary (Sparkman 1908; Bean and Shipek 1978).

4.2.3 Cahuilla

According to maps provided by Bean and Shipek (1978:551), the study area is also located within traditional territory of the Cahuilla, an ethnographic Native American group descended from Late Prehistoric Takic-speaking inhabitants of the region. The name "Cahuilla" is believed to have originated from the group's word *káwiya* for "master" or "boss" (Bean 1978:575). Important ethnographic data about the Cahuilla were collected by Barrows (1900), Kroeber (1925), Hooper (1920), Strong (1929), Drucker (1937), Patencio (1943), Bean (1972, 1978), Bean and Saubel (1972), and Heizer (1974). Additional information is also presented in more general publications by Bean and Bourgeault (1989), Bean and Lawton (1979), and Dozier (1998).

The territory of the Cahuilla has been described as topographically diverse, "from the summit of the San Bernardino Mountains in the north to Borrego Springs and the Chocolate Mountains in the south, a portion of the Colorado Desert west of Orocopia Mountain to the east, and the San Jacinto Plain near Riverside and the eastern slopes of Palomar Mountain to the west" (Bean 1978:575). Three main divisions of the Cahuilla—Desert, Pass (or Western), and Mountain groups—were defined mainly by geographic distribution, but dialectic differentiation was apparent

(Strong 1929). A network of trails linking Cahuilla villages and those of neighboring groups facilitated trade and maintenance of social ties. Core or "classic" Cahuilla territory is often regarded as the Coachella Valley and the well-watered, palm-lined canyons at the eastern foot of the San Jacinto Mountains.

4.3 HISTORY

The major historic periods for the greater Southern California area are defined by key events documented by participants, witnesses, historians, and cartographers. Paramount among these was the transfer of political control over *Alta California*, including the study area and surrounding lands specifically.

- Spanish Period (1769–1822)
- Mexican Period (1822–1848)
- American Period (1848–Present)

Spanish explorer Juan Rodriguez Cabrillo made temporary landfall at the Chumash village of *Sisolop* (present-day Ventura) on October 12, 1542 (Grant 1978:518). He was the first of several early explorers, representing several nations, to explore the Alta California coast. However, the end of the prehistoric era in Southern California is marked by the arrival of the Gaspar de Portolá overland expedition from New Spain (Mexico) and the founding of the first Spanish settlement at San Diego on July 16, 1769 (Johnston 1962). With the onset of the **Spanish Period,** the Gabrielino first came into direct contact with Europeans when the Portolá expedition passed through the San Gabriel Valley where the expedition camped briefly as they continued west toward Ventura (Bean and Smith 1978: 541).

Two of the 21 Franciscan missions established by the Spanish in Alta California impacted Gabrielino people profoundly: *Mission San Gabriel Arcángel* and *Mission San Fernando Rey de España,* both in Los Angeles County, which were founded in September 1771 and in 1797, respectively. The Gabrielino were persuaded to settle in the vicinity of the two missions.

The missions were charged with administering to the natives within their areas. Mission life did give the Native Americans skills needed to survive in their rapidly changing world, but the population was decimated by the introduction of European diseases, such as measles and small pox, for which they had no immunity. After 1810, mission populations declined faster than they could be replenished.

The Mexican Revolution, beginning in 1821, overthrew Spanish control and the new government of Mexico had a very different outlook on mission activities. Mexico's independence from Spain in 1822 brought the **Mexican Period** to California. Mexico secularized the missions in 1833 and expanded on the Spanish practice of granting large tracts of ranch land to soldiers, civil servants, and pioneers (Cleland 1966). Secularization of the missions, planned under the Spanish, was greatly accelerated by the Mexican government. Plans to provide land, training, and living quarters for the Native American population never developed and the mission lands were soon under the control of a relatively few influential Mexican families. The rancho lifestyle was relatively short lived, but remains an influential period in California history.

During the 1840s, an increasing influx of Anglo-Americans from the eastern United States spurred an American challenge for the California territory. The **American Period** began with Mexico's defeat at the end of the Mexican-American War, resulting in the concession of California to the United States under the Treaty of Guadalupe Hidalgo on February 2, 1848 (Rolle 1998:91, 104). Only a few days before, the discovery of gold on the American River had stimulated the Gold Rush of 1848–1849. After more than two years of legislative process and debate, California

became the 31st state of the Union on September 9, 1850 (Rolle 1998:106). When the new state was divided into 27 original counties, nearly all of present-day Riverside County was contained within the early boundaries of San Diego County. Population growth in the San Bernardino and Riverside areas eventually resulted in attempts to forge a new county in the region in 1891, initially including proposals to create Pomona County and San Jacinto County (Fitch 1993: vi). Riverside County, however, was not formally created until March 11, 1893, by using areas of eastern Los Angeles County and southern San Bernardino County (Coy 1973:207; Brown 1985:95).

5.0 METHODS

5.1 ARCHAEOLOGICAL/HISTORICAL RECORDS SEARCHES

A records search and literature review of documents on file at the Eastern Information Center (EIC) at the University of California, Riverside was conducted on February 2, 2017 (Attachment A). The EIC is a designated branch of the California Historical Resources Information System and houses records regarding archaeological and historic resources in Riverside, Inyo, and Mono Counties. The review consisted of an examination of the U.S. Geological Survey's (USGS') Riverside East 7.5-minute quadrangle maps to determine if any sites are recorded on or if any cultural resources studies have been conducted on or within a one-mile radius of the study area. Data sources consulted at the EIC included archaeological records, Archaeological Determinations of Eligibility (DOE), historic maps, and the Historic Property Data File (HPDF) maintained by the Office of Historic Preservation (OHP). The HPDF contains listings for the NRHP and/or CRHR, California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI).

5.2 NATIVE AMERICAN CONSULTATION

No Native American consultation was undertaken as part of this project. The North District Area is being considered for future development opportunities identified in the UC Riverside Master Plan Study, including student housing, recreation, and retail uses. The current effort does not require that Native American tribes receive project notification pursuant to Assembly Bill 52, as there is currently no defined project, and the CEQA process is not being initiated. Further, the current effort does not involve a General Plan or Specific Plan Amendment; therefore, consultation pursuant to Senate Bill 18 is not required. Required Native American outreach/coordination will be conducted by UCR at later stages in the project development process, as appropriate.

5.3 PALEONTOLOGICAL RECORDS SEARCH

The Natural History Museum of Los Angeles County (NHMLAC) maintains records documenting paleontological sites and rock formations within the county.

A paleontological resources records search and scientific literature review for the study area was requested from the NHMLAC on January 5, 2017, to determine if fossiliferous localities are recorded on or near the subject property (refer to Attachment B).

5.4 ARCHAEOLOGICAL FIELD SURVEY

On January 16, 2017, Psomas Archaeologist Matheson Lowe conducted a pedestrian survey of the study area. The survey began by identifying which neighborhood was within the study area and the streets and buildings that mark the perimeter of the study area. Once the boundaries were established and cross referenced with aerial maps, Mr. Lowe completed a windshield survey of the entire study area beginning at the eastern end of the study area and systematically moving

westward to the opposite side of the study area. This proved necessary in order to become familiar with the neighborhood within the study area and to establish where a pedestrian survey may be performed in large clearings, service roads or alleys, or of outstanding historic infrastructure. Mr. Lowe surveyed each of the five clearings that can be identified on an aerial map, a small park, and the length and breadth of three service roads within the neighborhood among the houses. No prehistoric or historic cultural artifacts, features or buildings were discovered.

5.5 HISTORIC EVALUATION

A historic evaluation has been conducted for the property by Daly & Associates (February 2017). The evaluation was conducted to determine if the property was eligible for inclusion on the CRHR. The historic evaluation has been submitted under separate cover.

6.0 RESULTS

6.1 ARCHAEOLOGICAL/HISTORICAL RECORDS SEARCH RESULTS

6.1.1 Previous Research

Studies

The records currently on file at the EIC indicate that at least 18 cultural resource studies have been conducted within a 1-mile radius of the study area (Attachment A). Of these recorded studies, none appear to have included any portion of the study area.

TABLE 1
CULTURAL RESOURCE INVESTIGATIONS

Report No.	Author/Year	Description
RI-02345	Drover 1988	Cultural Resource Assessment
RI-03605	Wlordaski1993	Archaeological Survey Report
RI-03693	Foster et al. 1991	Cultural Resource Assessment
RI-04363	Duke 1999	Cultural Resource Assessment
RI-04450	Duke 1999	Cultural Resource Assessment
RI-04997	McKenna et al. 2001	Cultural Resource Assessment
RI-04998	McKenna et al. 2001	Cultural Resource Assessment
RI-06424	Tang 2005	Historic Properties Survey
RI-07058	Kyle 2002	Cultural Resource Assessment
RI-07498	Bonner and Aislin-Kay 2007	Cultural Resource Assessment
RI-07816	Bonner and Aislin-Kay 2008	Cultural Resources Assessment
RI-07924	Zepeda-Herman 2008	Cultural Resource Assessment
RI-08308	Sarah A. Williams, 2009 Wayne H. Bonner, and Kathleen A, Crawford	Letter Report: Cultural Resources Records and Site Visit
RI-08577	Casey Tibbet 2010	Historic Resources Assessment: The Barn Group and University Cottage
RI-08620	Loftus and Auck 2010	Historic Resources Evaluation
RI-08771	Tang 2010	Cultural Resource Assessment
RI-08840	Wayne H. Bonner and Sarah A. Williams 2012	Cultural Resources Records Search and Site Visit Results for T-Mobile West
RI-09143	Gini Austerman 2013	Cultural Resource Assessment

Sites

The records search located three properties within ½ mile of the study area (Table 2). The first, P-33-011475, is the Canyon Crest Family Student Housing complex, the subject of this study. The referenced State of California Department of Parks and Recreation (DPR) Primary Record (No. 33-11475) concludes that the Canyon Crest Family Student Housing complex is not eligible for listing in the NRHP. Another resource is The UCR Barn (P-33-007877), a complex located ½ mile south of the study area, which has been determined also not to be a resource eligible for listing. The last resource (P-33-019877), is a historic residence located south of the study area.

TABLE 2
RECORDED CULTURAL RESOURCES

Trinomial/Primary	Recorder/Year	Description
P-33-019877	Auck and Loftus 2010	Residence
P-33-007877	Tibbet 2010	The Barn
P-33-011475	Tang 2002	Canyon Crest Family Student Housing

Additional data sources consulted at the EIC included Archaeological DOE, historic maps, and the HPDF maintained by the California OHP. The HPDF contains listings for the NRHP and/or CRHR, the CHL, and the CPHI. No cultural resources within the records search area were identified from any of these additional research materials. While no evidence of prehistoric activity has been previously identified in the study area, nor was any evidence observed during the current survey, the site is situated in an area traversed by Native American groups, as evidenced by sites located a short distance to the southwest. There is a potential to impact previously unknown resources during earth-disturbing activities.

6.2 PALEONTOLOGICAL RECORDS SEARCH RESULTS

A paleontological resources records search and scientific literature review for the study area and surrounding region was received from the NHMLAC on January 19, 2017 (Attachment B). The records search was conducted by Dr. Samuel McLeod of the NHMLAC's Vertebrate Paleontology Section (Attachment B).

The records search documents fossil localities previously identified in and adjacent to the study area.

According to the NHMLAC (McLeod 2017):

> The entire proposed project area has surface deposits composed of older Quaternary Alluvium, derived as alluvial fan deposits from the Box Springs Mountains to the northeast. These deposits, close to the source area of igneous rocks, typically do not contain significant vertebrate fossils, at least in the uppermost layers, and we have no vertebrate fossil localities nearby from these deposits. Our closest fossil vertebrate locality from older Quaternary deposits is LACM 7811, almost due west of the proposed project area west of Mira Loma along Sumner Avenue north of Cloverdale Road, that produced a fossil specimen of whipsnake, *Masticophis*, at a depth of 9 to 11 feet below the surface. Additionally, our locality LACM 1207, west-southwest of the proposed project area between Corona and Norco, produced a fossil specimen of deer, *Odocoileus*. Surface grading or very shallow excavations in the older Quaternary deposits exposed in the proposed project area may not uncover significant fossil vertebrate

remains. Deeper excavations that extend down into finer-grained older Quaternary deposits, however, may well encounter significant vertebrate fossils. Any substantial excavations in the proposed project area, therefore, should be closely monitored to quickly and professionally recover any potential vertebrate fossils without impeding development. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

6.3 ARCHAEOLOGICAL FIELD SURVEY RESULTS

The results of the archaeological and historic records searches indicate that the property has not been the subject of a cultural resources study recorded with the EIC. The built environment on the property, consisting of tract homes, roads, lawns, and sidewalks, obscured the ground sufficiently and no prehistoric or historic artifacts were observed.

6.4 HISTORIC EVALUATION RESULTS

The historic evaluation for the property determined that it is not eligible for inclusion on the CRHR or NRHP (Daly 2017).

7.0 IMPACT ANALYSIS

The field survey and historic evaluation revealed that no historically significant buildings, structures, objects, or sites are in the study area. Nearly the entire study area is obscured by buildings, pavement, and grass. While no development project is currently proposed, there is a possibility that buried archaeological materials (e.g., historic refuse or other resources) could be discovered during future shallow grading and excavation activities on the property. Deeper excavations that encounter native sediments have the potential to yield paleontological resources.

Although earth-disturbing activities in the study area would have a low probability of disturbing previously unrecorded archaeological resources, a potential exists that unknown archaeological resources would be discovered during construction activities. Implementation of Mitigation Measure (MM) CUL-1, which requires that a qualified Archaeologist evaluate unanticipated discoveries, would reduce potential impacts to a level considered less than significant.

There is a potential that deeper ground-disturbing activities associated with construction would encounter previously unknown unique paleontological resources. This could result in a significant impact to paleontological resources. Implementation of Campus Programs and Practices (PPs) 4.5-4, which requires that a qualified Paleontologist evaluate unanticipated discoveries, would reduce potential impacts to a level considered less than significant.

Additionally PP 4.5-5 identifies requirements if human remains are discovered.

8.0 RECOMMENDATIONS

PP 4.5-4 Construction specifications shall require that if a paleontological resource is uncovered during construction activities:

(i) A qualified paleontologist shall determine the significance of the find.

(ii) The Campus shall make an effort to preserve the find intact through feasible project design measures.

(iii) If it cannot be preserved intact, then the University shall retain a qualified non-University paleontologist to design and implement a treatment plan to document and evaluate the data and/or preserve appropriate scientific samples.

(iv) The paleontologist shall prepare a report of the results of the study, following accepted professional practice.

(v) Copies of the report shall be submitted to the University and the Riverside County Museum.

PP 4.5-5 In the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately and the area of the find shall be protected and the University immediately shall notify the Riverside County Coroner of the find and comply with the provisions of P.R.C. Section 5097 with respect to Native American involvement, burial treatment, and re-burial, if necessary.

MM CUL-1 If an archaeological resource is discovered during construction, all soil-disturbing work within 100 feet of the find shall cease and the University Representative shall contact a qualified archaeologist meeting the Secretary of Interior standards within 24 hours of discovery to inspect the site. If a resource within the project area of potential effect is determined to qualify as a unique archaeological resource (as defined by CEQA), the University shall devote adequate time and funding to determine if it is feasible, through project design measures to preserve the find intact. If it cannot be preserved, the University shall retain a qualified non-University archaeologist to design and implement a treatment plan, prepare a report, and salvage the material, as appropriate. Any important artifacts recovered during monitoring shall be cleaned, catalogued, and analyzed, with the results presented in a report of finding that meets professional standards.

a. If significant Native American cultural resources are discovered, as determined by the consulting archaeologist for which a Treatment Plan must be prepared, the developer, or his archaeologist shall immediately contact the University Representative. The University Representative shall contact the appropriate Tribal representatives.

b. If requested by Tribal representatives, the University, the developer, or his project archaeologist shall in good faith, consult on the discovery and its disposition (e.g., avoidance, preservation, return of artifacts to tribe).

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ATTACHMENT A

EASTERN INFORMATION CENTER RECORDS SEARCH

EASTERN INFORMATION CENTER
CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM
Department of Anthropology, University of California, Riverside, CA 92521-0418
(951) 827-5745 - eickw@ucr.edu
Inyo, Mono, and Riverside Counties

February 14, 2017
CHRIS Access and Use Agreement No.: 16
EIC-RIV-ST-3973

Patrick Maxon
Psomas
3 Hutton Centre Drive, Suite 200
Santa Ana, CA 92707

Re: Cultural Resources Records Search for UCR North District Project

Dear Mr. Maxon:

We received your request on January 11, 2017, for a cultural resources records search for the UCR North District Project located in Section 20, T.2S, R.4W, SBBM, in the city Riverside in Riverside County. We have reviewed our site records, maps, and manuscripts against the location map you provided.

Our records indicate that 18 cultural resources studies have been conducted within a half-mile radius of your project area. None of these studies involved the project area. Three additional studies provide overviews of cultural resources in the general project vicinity. PDF copies of these reports are included for your reference. All of these reports are listed on the attachments entitled "Eastern Information Center Report Listing", “Eastern Information Center Report Detail” and “Eastern Information Center Report Spreadsheet” and are available upon request at 15¢/page plus $40/hour for hard copies, or 15¢/page plus $40/hour and a $25 flat fee for PDFs.

Our records indicate that six cultural resources properties have been recorded within a half-mile radius of your project area. One of these properties involved the project area. PDF copies of the records are included for your reference. All of these resources are listed on the attachment entitled "Eastern Information Center Resource Listing", “Eastern Information Center Resource Detail” and “Eastern Information Center Resource Spreadsheet”.

The above information is reflected on the enclosed maps. Areas that have been surveyed are highlighted in yellow. Numbers marked in blue ink refer to the report number (RI #). Cultural resources properties are marked in red; numbers in black refer to Trinomial designations, those in green to Primary Number designations. National Register properties are indicated in light blue.

Additional sources of information consulted are identified below.

National Register of Historic Places: no listed properties are located within the boundaries of the project area.

Office of Historic Preservation (OHP), Archaeological Determinations of Eligibility (ADOE): no listed properties are located within the boundaries of the project area.

Office of Historic Preservation (OHP), Directory of Properties in the Historic Property Data File (HPD): One property (p# 33-19877) is listed and is ineligible for inclusion on the National Register of Historic Places.

Note: not all properties in the California Historical Resources Information System are listed in the OHP ADOE and HPD; the ADOE and HPD comprise lists of properties submitted to the OHP for review.

There are no historic reference maps of this area on file.

As the Information Center for Riverside County, it is necessary that we receive a copy of all cultural resources reports and site information pertaining to this county in order to maintain our map and manuscript files. Confidential information provided with this records search regarding the location of cultural resources outside the boundaries of your project area should not be included in reports addressing the project area.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by the IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

Sincerely,

Michael Amorelli
Information Officer

Enclosures

Report List

Reports

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-02345	NADB-R - 1082808; Voided - MF-2550	1988	DROVER, C.E.	A CULTURAL RESOURCES ASSESSMENT OF THE PROPOSED USDA SALINITY LABORATORY, UNIVERSITY OF CALIFORNIA, RIVERSIDE	AUTHOR(S)	
RI-03605	NADB-R - 1084329; Voided - MF-3879	1993	WLODARSKI, ROBERT J.	DRAFT REPORT: AN ARCHAEOLOGICAL SURVEY REPORT DOCUMENTING THE EFFECTS OF THE RCIC I-215 IMPROVEMENT PROJECT IN MORENO VALLEY, RIVERSIDE COUNTY, TO ORANGE SHOW ROAD IN THE CITY OF SAN BERNARDINO, SAN BERNARDINO COUNTY, CALIFORNIA.	HISTORICAL, ENVIRONMENTAL, ARCHAEOLOGICAL RESEARCH TEAM, Calabasas, CA	33-003815, 33-004299, 33-004495, 33-004496, 33-004768, 33-004787, 33-004791
RI-03696	NADB-R - 1084477; Voided - MF-4008	1993	WHITE, ROBERT S.	AN ARCHAEOLOGICAL ASSESSMENT OF A 153+ ACRE PARCEL AS SHOWN ON TPM 27764 LOCATED IMMEDIATELY SOUTHWEST OF BURNT VALLEY, NEAR ANZA, RIVERSIDE COUNTY	ARCHAEOLOGICAL ASSOCIATES	
RI-04363	NADB-R - 1085673; Voided - MF-4860	1999	DUKE, CURT	LETTER REPORT: CULTURAL RESOURCE ASSESSMENT FOR SPRINT PCS FACILITY RV03XC086-A (CANYON CREST HEIGHTS), COUNTY OF RIVERSIDE, CALIFORNIA.	LSA ASSOCIATES, INC.	
RI-04450	NADB-R - 1085795	1999	DUKE, CURT	CULTURAL RESOURCE ASSESSMENT FOR PACIFIC BELL MOBILE SERVICES FACILITY CM 681-02, COUNTY OF RIVERSIDE, CALIFORNIA	LSA ASSOCIATES, INC.	
RI-04997	NADB-R - 1086359; Submitter - 09-01-11-594	2001	MCKENNA ET AL.	A PHASE I CULTURAL RESOURCES INVESTIGATION OF THE PROPOSED CHILLER PLANT, TANK, AND PIPELINE SYSTEM ON THE UNIVERSITY OF CALIFORNIA, RIVERSIDE CAMPUS, RIVERSIDE, RIVERSIDE COUNTY, CALIFORNIA.	MCKENNA ET AL.	33-000495
RI-04998	NADB-R - 1086360; Submitter - 04-01-05-566	2001	MCKENNA ET AL.	A PHASE I CULTURAL RESOURCES INVESTIGATION OF THE ISLANDER PARK RETENTION BASINS AND CHANNEL IMPROVEMENTS PROJECT AREA, RIVERSIDE, RIVERSIDE COUNTY, CALIFORNIA.	MCKENNA ET AL.	33-000495, 33-002384

Report List

Reports

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-06424	NADB-R - 1087787; Submitter - CONTRACT #1505	2005	TANG, BAI, MICHAEL HOGAN, MATTHEW WETHERBEE, and ROBERT PORTER	IDENTIFICATION AND EVALUATION OF HISTORIC PROPERTIES, HIGHLAND, HUNT, AND BRYANT PARKS IMPROVEMENT PROJECT, CITY OF RIVERSIDE, RIVERSIDE COUNTY, CALIFORNIA	CRM TECH	
RI-07058		2002	Carolyn E. Kyle	Cultural Resource Assessment for Cingular Wireless Facility SB145-01 City of Riverside Riverside County, California	Kyle Consulting	
RI-07498		2007	Bonner, Wayne H. and Marnie Aislin-Kay	Letter Report: Cultural Resource Records Search and Site Visit Results for T-Mobile Facility Candidate IE25350A (UCR Sports Center), 1000 West Blaine Street, Riverside, Riverside County, California.	Michael Brandman Associates	
RI-07816	Submitter - RS0166-51 Cultural Rpt	2008	Bonner, Wayne H. and Marnie Aislin-Kay	Letter Report: Cultural Resource Records Search and Site Visit Results for AT&T Facility Candidate RS0166-51 (UCR Watkins-Valencia), 3671 Valencia Hill Drive, Riverside, Riverside County, California	Michael Brandman Associates	
RI-07924	Other - RECON 4694A	2008	Zepeda-Herman, Carmen	Letter Report: Results of Cultural Resources Survey for the Expanded Gage Exchange Project (RECON No. 4694A)		33-009774
RI-08308		2009	Sarah A. Williams, Wayne H. Bonner, and Kathleen A, Crawford	Letter Report: Cultural Resources Records and Site Visit Results for T-Mobile USA Candidate IE05098A, (TM098 UCR Monopine) UC Riverside, Riverside County, California.	Michael Brandman Associates, San Bernardino, CA	
RI-08577	Other - Project No. UCR1001; Submitter - Project No. UCR1001	2010	Casey Tibbet	Historic Resources Assessment: The Barn Group and University Cottage; University of California, Riverside City of Riverside, Riverside County, California	LSA	33-007877, 33-007878
RI-08620		2010	Shannon L. Loftus and Jessica J. Auck	REVISED: Historic Resources Evalutation: Assessor Parcel Numbers 251-18-005-6	Chambers Group, Inc	33-019877
RI-08771		2010	Bai 'Tom' Tang	Preliminary Historical/Archaeological Resourece Study Souther California Regional Rail Authority (SCRRA) Perris Valley Line Positive Train Control (PTC) Project	CRM TECH	

Report List

Reports

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-08840		2012	Wayne H. Bonner and Sarah A. Williams	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LCC Candidate IE25999A (UCR Parking Lot 1), 900 University Avenue, Riverside, Riverside County, California	Michael Brandman Associates	33-004768, 33-007375, 33-007877, 33-011475
RI-09143		2013	Gini Austerman	Cultural Resources Assessment West Campus Solar Farm UCR #950338 University of California, Riverside, Riverside County, California	LSA	

Resource List

Non-Confidential Reports

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-33-007877		Other - The Barn Group; Other - The Barn, The Barn Theater, The Barn Stable		Historic		1993 (Bai Tom Tang, Archaeological Research Unit, UCR); 2010 (Casey Tibbet, M.A., LSA Associates, Inc.)	RI-05873, RI-08577, RI-08840
P-33-011475			District	Historic			RI-08840
P-33-019877		Other - apn 251-18-005-6		Historic		2010 (Jessica J. Auck and Shannon Loftus, Chambers Group)	RI-08620

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 33-11475
HRI #
Trinomial
NRHP Status Code 6Z
Other Listings
Review Code Reviewer Date

*Resource Name or # (Assigned by recorder)

P1. Other Identifier: Canyon Crest Family Student Housing

*P2. Location: ___ Not for Publication √ Unrestricted *a. County Riverside

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Riverside East, Calif. Date 1967, photorevised 1980

T2S; R4W; NW 1/4 of SW 1/4 and a portion of W 1/2 of NE 1/4 of SW 1/4 of Sec 20 ; S.B. B.M.

Elevation: Ca. 1,030-1,100 feet above mean sea level

c. Address Various City Riverside Zip 92507

d. UTM: (Give more than one for large and/or linear resources) Zone 11 ; A: 469510 mE/ 3760110 mN
B: 469910 mE/ 3760110 mN
C: 470100 mE/ 3759900 mN
D: 470100 mE/ 3759730 mN
E: 469510 mE/ 3759730 mN

UTM Derivation: √ USGS Quad ___ GPS

e. Other Locational Data: (e.g., parcel #, directions to resource, etc., as appropriate) Located on the eastern side of Canyon Crest Drive between Blaine Street and Linden Street, approximately 1/4 mile north of the central campus of the University of California, Riverside (UCR)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) The Canyon Crest Family Student Housing compound is owned and operated by the University of California, Riverside, to provide an on-campus residential alternative for, as its name suggests, students with families. Formerly a WWII-era military housing project, the compound consists of some 190 residential structures divided almost evenly between single-unit houses and duplexes (see photos on p. 5). Also located in the compound are three storage/utility buildings, a former day-care facility, and three former residential buildings that have been converted to other uses, including one that houses the KUCR radio station.

All of the houses in the compound are one-story wood-frame structures with stuccoed walls, and in most cases the top portion of the exterior wall surface is further clad with wide clapboards or flush boards. Typical of buildings erected by the U.S. military, their simple design demonstrates much more an emphasis on utilitarianism than the influence of any established architectural style. The rectangular ground plans are essentially identical among the two subtypes, although in a dozen or so duplexes the two units are slightly offset from each other to create a modest variation. The interior living quarters sit upon elevated footings, with the entrances accessed through small stoops built of wood or concrete and flanked by wooden handrails.

While shown to be flat-roofed in historic photographs, the majority of the houses today sport recently installed low-pitch gable roofs with wide eaves, and the remaining flat-roofed specimens have also received wood-framed roof overlays with projecting eaves (see photo on p. 5). Only three structures in the compound still retain the original "box-like" appearance (see photo on p. 5), including the KUCR radio station. The new roofs are covered with composition shingles.

(Continued on p. 2)

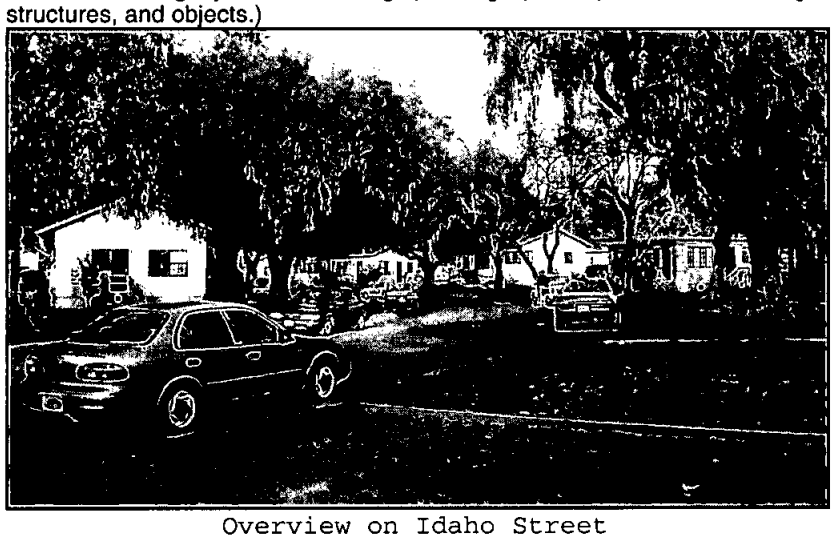
The KUCR radio station and an adjacent duplex, both in the southeastern corner of the compound, have also kept some of the steel-framed casement windows, as has the community center in the southwestern corner. In all other buildings throughout the compound, the windows have been replaced with aluminum-framed sliding sashes, with occasional double-hungs to accommodate window-mounted air conditioning units. The paneled and glazed front doors appear to be original, but are now obscured by steel-framed security doors.

The buildings in the compound are located in a spacious, lawn-covered area of approximately 55 acres. Most are placed along the narrow streets, except for 35 in the eastern portion of the compound that form small "courts" of three to six houses each. The streets are typically lined with mature landscaping trees, mostly pepper. A community park with modern picnic facilities and playground occupies approximately three acres in the west-central portion of the compound. Scattered storage sheds and clotheslines complete the picture of a modest and relaxed residential neighborhood of mid-20th century vintage.

***P3b. Resource Attributes:** (List attributes and codes) HP2—single family property; HP3—multiple family property; HP34—(former) military property

***P4. Resources Present:** ___Building ___Structure ___Object ___Site √ District ___Element of District ___Other (isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



Overview on Idaho Street
(See p. 5 for additional photographs)

P5b. Description of Photo: (view, date, accession #) Photo taken on February 13, 2002; view to the northwest

***P6. Date Constructed/Age of Sources:** √ Historic ___Prehistoric ___Both

***P7. Owner and Address:**
University of California, Riverside
900 University Avenue
Riverside, CA 92521

***P8. Recorded by:** (Name, affiliation, and address)
Bai "Tom" Tang, CRM TECH
2411 Sunset Drive
Riverside, CA 92506

***P9. Date Recorded:** February 2002

***P10. Survey Type:** Historical resources evaluation

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") None

***Attachments:** ___None ___Location Map ___Continuation Sheet ___Building, Structure, and Object Record ___Archaeological Record √ District Record ___Linear Resource Record ___Milling Station Record ___Rock Art Record ___Artifact Record ___Photograph Record √ Other (List): Continuation sheet (additional photographs)

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
DISTRICT RECORD

Primary # 33-11475
HRI #
Trinomial

Page 3 of 5

*NRHP Status Code 6Z
*Resource Name or # (Assigned by recorder)

D1. Historic Name: March Field, Riverside, California, Defense Housing Project
D2. Common Name: Canyon Crest Family Student Housing
*D3. **Detailed Description** (Describe overall coherence of the district, its setting, visual characteristics, and minor features. List all elements of district.): See Item P3a on pp. 1-2.
*D4. **Boundary Description** (Describe limits of district and attach map showing boundary and district elements.): The compound is bounded on the north by Blaine Street, on the west by Canyon Crest Drive (formerly California Avenue), on the south by Linden Street, and on the east by UCR's corporate yard and a day care center on Watkins Drive.
*D5. **Boundary Justification:** The boundaries are established to encompass the physical area occupied by the buildings in the compound.
*D6. **Significance: Theme** N/A **Area** N/A
Period of Significance N/A **Applicable Criteria** N/A
(Discuss district's importance in terms of its historical context as defined by theme, period of significance, and geographic scope. Also address the integrity of the district as a whole.)

According to archival records maintained by the University of California, Riverside, and by the County of Riverside, the Canyon Crest Family Student Housing compound was built in 1941 by the U.S. government as a military housing project in association with March Field, now March Air Reserve Base in Moreno Valley (County Recorder 1955; UCR 2000). The army air base was originally established in 1918, and its operations were greatly expanded during WWII.

After the end of the war, like many other wartime military establishments around the country, the "March Field, Riverside, California, Defense Housing Project" was no longer needed by the military. In 1955, a year after the dedication of the University of California's College of Letters and Science in Riverside, regents of the university acquired the compound from the U.S. government (County Recorder 1955).

During its first few years under the university's ownership, prior to the completion of the dormitories, the Canyon Crest compound was used for general student housing (UCR 1958:30). The transition "from Crest to dorms" took place in 1959, after the completion of the nearby Aberdeen-Inverness Residential Hall, the first dormitory building on the UCR campus (UCR 1959:87). By 1960, the compound housed married students, instructors, and other employees (UCR 1960:112-113). Plans were reported in that year for the return of upper-division students to the compound (*ibid.*), but it is unclear whether these plans were ever carried out.

During recent decades, the university renovated almost all of the buildings in the compound. Many of the exterior features observed in the buildings today, including the new roofs, windows, and security doors, resulted from these renovations. Some of them, such as the aluminum-framed windows and steel-framed security doors, were installed some time since the early 1990s, based on photographs taken in that period.

In 1990, LSA Associates, Inc., of Irvine, California, evaluated the historic significance of the compound under the National Register criteria, and concluded that it did not appear eligible for listing in the National Register due to the lack of specific architectural merits and of historic integrity (LSA 1990:22). Since then, the buildings in this compound have been further altered. While the overall setting of the compound and the spatial

(Continued on p. 4)

relationships among the buildings apparently remain unchanged, none of the buildings retains sufficient elements from its original appearance to relate to the compound's early history as a military housing project and the first dormitories on the UCR campus.

Based on these considerations, the present study concurs with LSA Associates' 1990 conclusion that the Canyon Crest Family Student Housing compound is not eligible for listing in the National Register of Historic Places, despite its association with the U.S. war efforts in the 1940s and the birth of UCR in the 1950s.

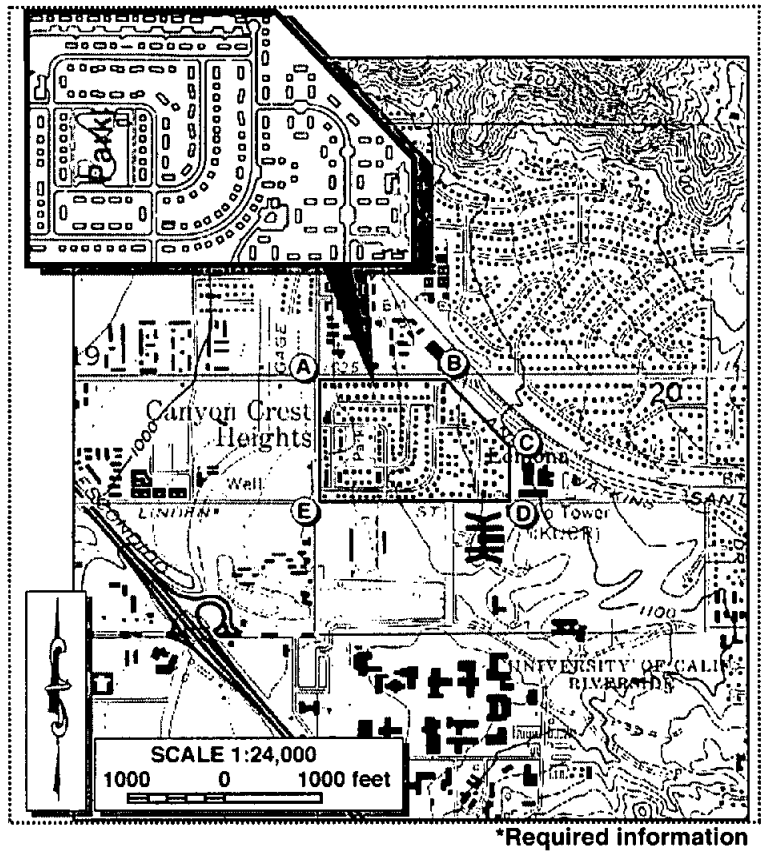
***D7. References** (Give full citations including the names and addresses of any informants, where possible):

County Recorder, Riverside
1955 Quitclaim Deed: the United States of America to the Regents of the University of California. Microfilm on file, Riverside County Recorder's Office (Book 1760, Page 13), Riverside.

LSA (LSA Associates, Inc.)
1990 An Inventory and Assessment of Cultural Resources on the Campus of UC Riverside. Appendix D to Environmental Impact Report: Long Range Development Plan, University of California, Riverside. On file, Office of Design and Construction, University of California, Riverside.

UCR (University of California, Riverside)
1958-1960 *Tartan*. The University of California, Riverside, yearbook.
2000 Riverside Facilities Management Buildings Biographical Listing. On file, Office of Academic Planning and Budget, University of California, Riverside.

***D8. Evaluator:** Bai "Tom" Tang
Date: February 2002
Affiliation and Address: CRM TECH, 2411 Sunset Drive, Riverside, CA 92506



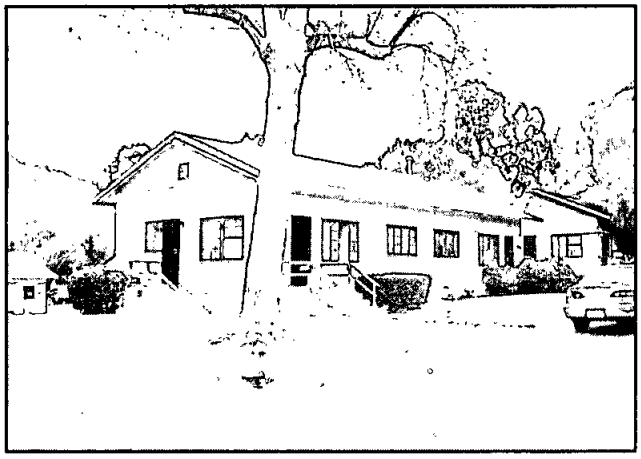
(This space reserved for official comments.)

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

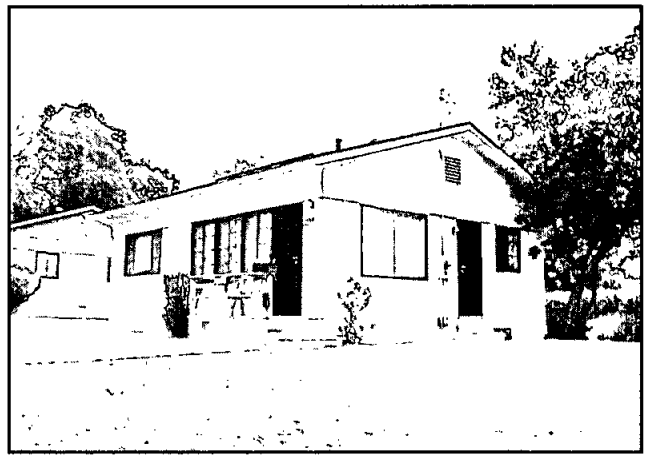
Primary # 33-11475
HRI #
Trinomial

*Resource Name or # (Assigned by recorder)

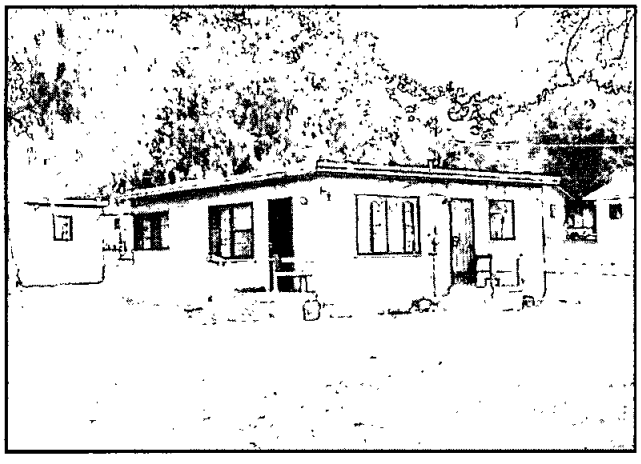
Recorded by Bai "Tom" Tang ***Date** February 2002 √ Continuation ____ Update



Typical duplex



Typical single-unit house



Flat-roofed specimen

One of the few relatively unaltered buildings in the compound

*Required information

ATTACHMENT B

PALEONTOLOGICAL RECORDS SEARCH

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

NATURAL HISTORY MUSEUM
LOS ANGELES COUNTY

Vertebrate Paleontology Section
Telephone: (213) 763-3325

e-mail: smcleod@nhm.org

19 January 2017

Psomas
3 Hutton Centre Drive, Suite 200
Santa Ana, CA 92707-8794

Attn: Ashley McCoy, Environmental Planner

re: Paleontological Resources for the proposed UCR North District Project, in the City of Riverside, Riverside County, project area

Dear Ashley:

I have conducted a thorough search of our Vertebrate Paleontology records for the proposed UCR North District Project, in the City of Riverside, Riverside County, project area as outlined on the portion of the Riverside East USGS topographic quadrangle map that you sent to me via e-mail on 5 January 2017. We do not have any vertebrate fossil localities that lie directly within the proposed project area boundaries, but we do have a vertebrate fossil locality somewhat in the general vicinity from sedimentary deposits similar to those that occur in the proposed project area.

The entire proposed project area has surface deposits composed of older Quaternary Alluvium, derived as alluvial fan deposits from the Box Springs Mountains to the northeast These deposits, close to the source area of igneous rocks, typically do not contain significant vertebrate fossils, at least in the uppermost layers, and we have no vertebrate fossil localities nearby from these deposits. Our closest fossil vertebrate locality from older Quaternary deposits is LACM 7811, almost due west of the proposed project area west of Mira Loma along Sumner Avenue north of Cloverdale Road, that produced a fossil specimen of whipsnake, *Masticophis*, at a depth of 9 to 11 feet below the surface. Additionally, our locality LACM 1207, west-southwest of the proposed project area between Corona and Norco, produced a fossil specimen of deer, *Odocoileus*.

Surface grading or very shallow excavations in the older Quaternary deposits exposed in the proposed project area may not uncover significant fossil vertebrate remains. Deeper excavations that extend down into finer-grained older Quaternary deposits, however, may well encounter significant vertebrate fossils. Any substantial excavations in the proposed project area, therefore, should be closely monitored to quickly and professionally recover any potential vertebrate fossils without impeding development. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice

HISTORIC RESOURCE EVALUATION REPORT

for

Canyon Crest Family Housing Complex
University of California - Riverside
Riverside County, CA

Prepared for:
Tricia D. Thrasher, ASLA, LEED AP
Principal Environmental Planner
University of California, Riverside
Capital Asset Strategies – Capital Planning
1223 University Avenue, Suite 240
Riverside, California 92507

Prepared by:
Pamela Daly, M.S.H.P.
Daly & Associates
2242 El Capitan Drive
Riverside, CA 92506

March 2017

TABLE OF CONTENTS

I. INTRODUCTION

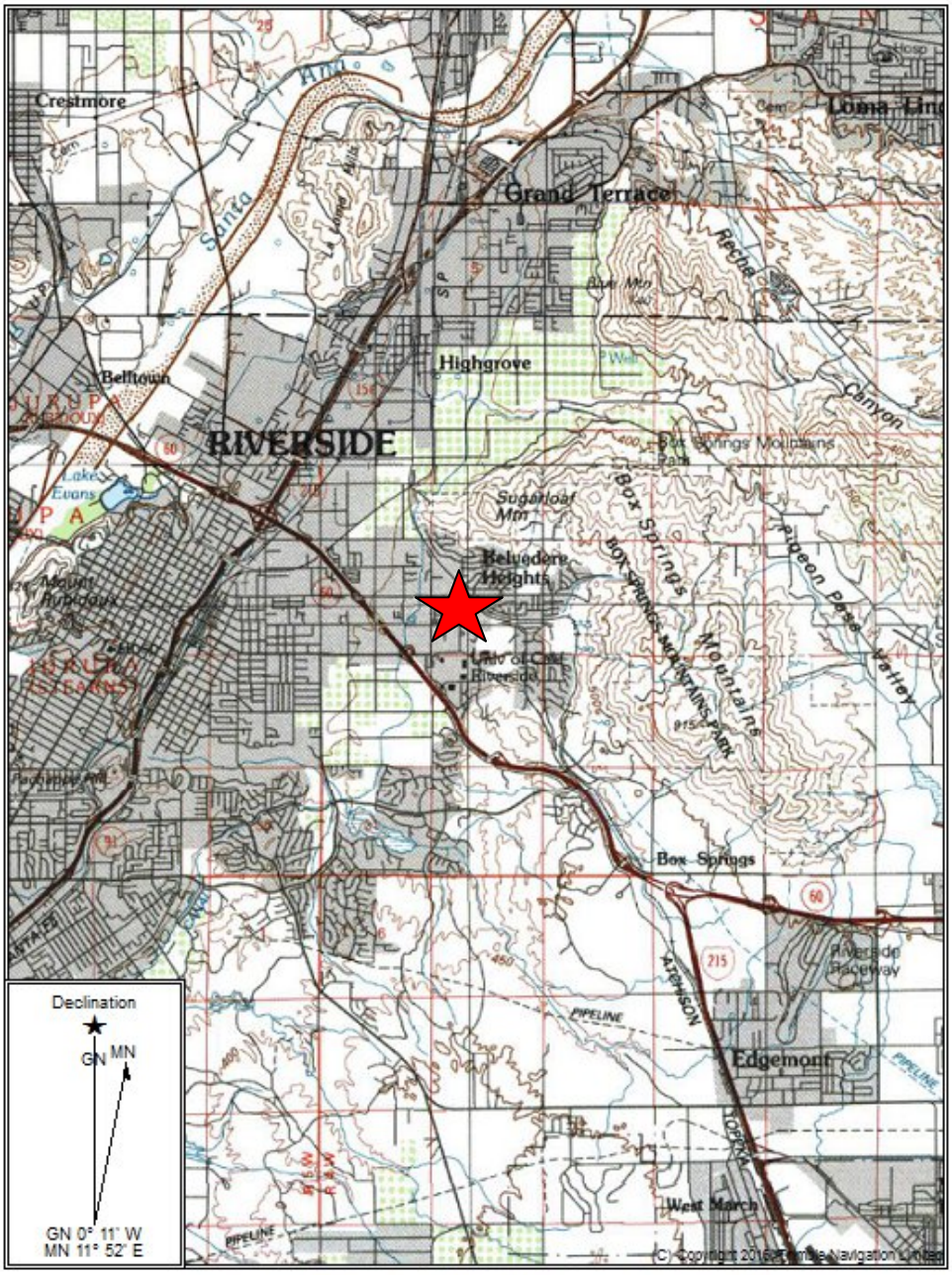
A. PROJECT DESCRIPTION

This assessment report documents and evaluates the federal and state significance, and eligibility of the Canyon Crest Family Housing complex located within the boundary of the University of California – Riverside (UCR), in Riverside County, California. (Figure 1).

Historically known as the Canyon Crest Housing complex (CCH), it is regionally situated east of the center of the City of Riverside, and in the northern region of the UCR campus. (Figure 2) The CCH site is bound by the Blaine Street to the north, Linden Street to the south, Canyon Crest Drive to the west, and on the east by UCR's Corporate Yard (accessed from Linden Street) and the UCR Child Development Center (accessed from Watkins Drive). The CCH site is surrounded primarily on the west, south, and east by UCR campus buildings and activities.

CCH is composed of approximately 51 acres upon which there are situated 178 residential dwellings, five buildings that hold support services for the CCH, one recreational park pavilion, and the building that houses KUCR radio station. (Figure 3)

The built-environment resources located within the CCH study area will be evaluated for listing in the National Register of Historic Places (National Register) and the California Register of Historical Resources (California Register). Our report includes a discussion of the survey methodology used, a brief historic context of the property and surrounding area, and the identification and formal evaluation of the subject property.

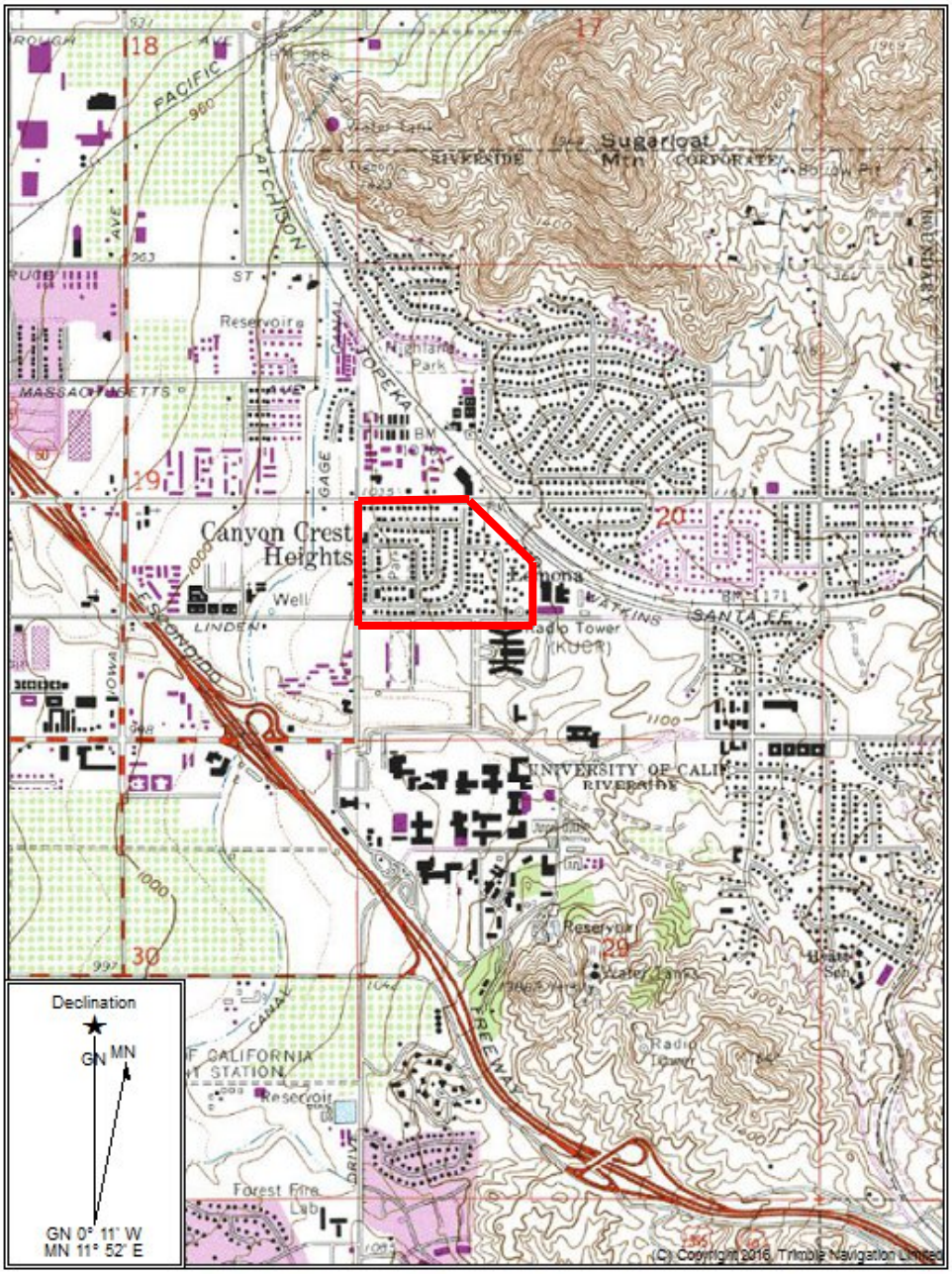


SCALE 1:100000

0 10000

Feet

Figure 1: Project Vicinity
Canyon Crest Family Housing
University of California - Riverside
Riverside County, CA



SCALE 1:24000

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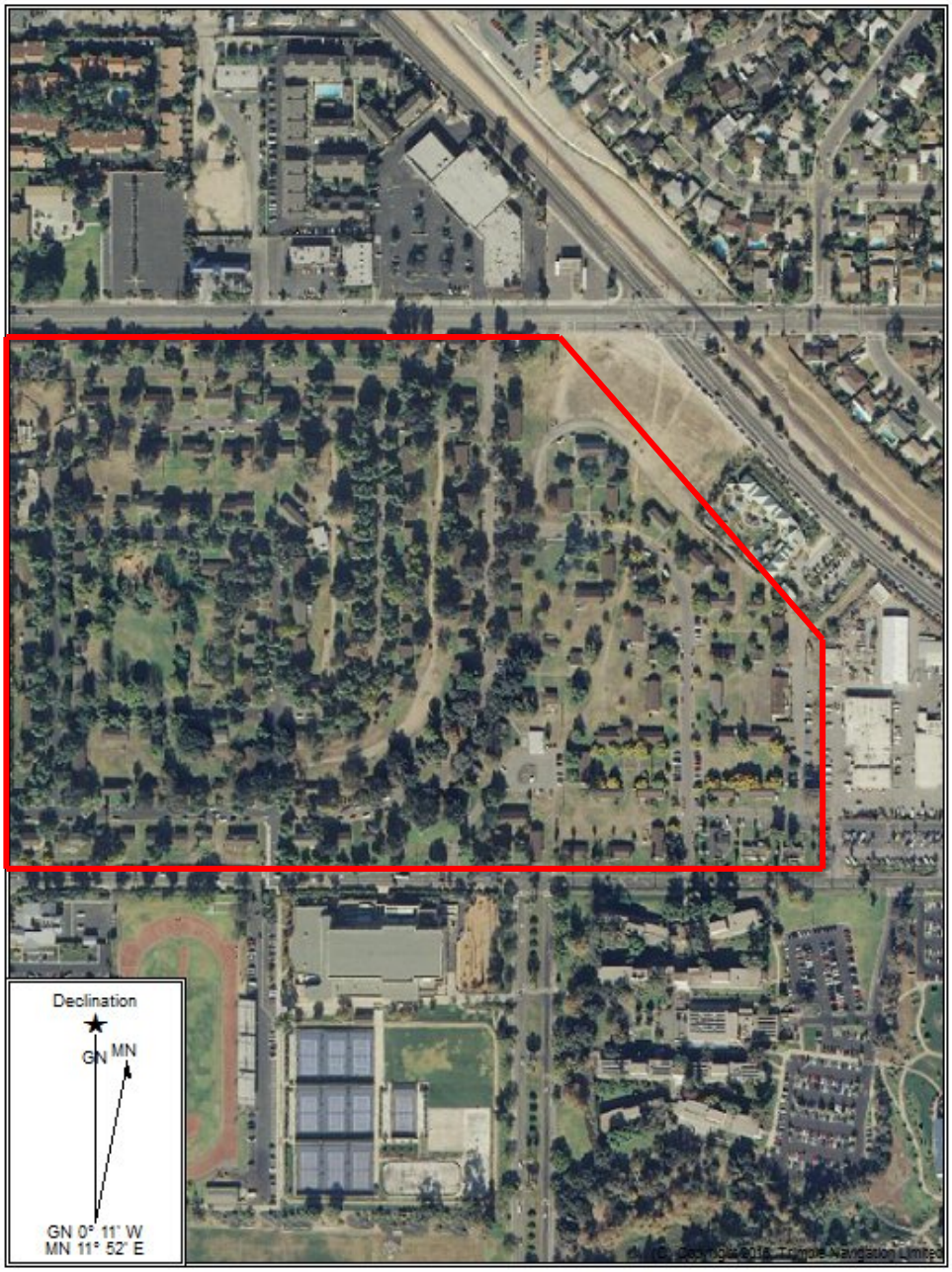
Feet

Figure 2: Project Location
Canyon Crest Family Student Housing
University of California - Riverside
Riverside County, CA



SCALE 1:5000

0 100 200 300 400 500 600 700 800 900

Feet

Figure 3: Aerial View
Canyon Crest Family Housing
Univerisity of California - Riverside
Riverside County, CA

B. BACKGROUND INFORMATION

A search of prior studies of the CCH revealed that the complex had been previously surveyed as part of an investigation and documentation of cultural resources at UCR in 1990. A report was prepared by LSA Associates (Irvine) titled "An Inventory and Assessment of Cultural Resources on the Campus of UC Riverside" as part of "The Environmental Impact Report: Long Range Development Plan, University of California – Riverside", for UCR's Office of Campus Planning.

CRM Tech prepared a historical resource evaluation of the Canyon Crest Family Student Housing complex in February 2002. CRM Tech's report was presented in a set of Department of Parks and Recreation (DPR) Series 523 Inventory Site Forms that are recorded at the Eastern Information Center as P33-11475.

Both the LSA Associates report of 1990, and the CRM Tech report of 2002, found that the CCH did not appear eligible for listing in the National Register. Neither of the prior studies evaluated the CCH for its significance under the criteria for listing a property in the California Register.

The current study of the CCH was conducted to update the findings of the prior studies (as they are over 10 years old), under the auspices of a qualified architectural historian to evaluate the eligibility of listing the CCH in the National Register or California Register as required under the California Environmental Quality Act (CEQA).

C. METHODOLOGY

This historic resource assessment and evaluation of the properties within the Project was conducted by Pamela Daly, M.S.H.P., Principal Architectural Historian. Ms. Daly holds a Master of Science Degree in Historic Preservation from the University of Vermont, and a Bachelor of Science Degree in Business Management (with a minor in History).

In order to identify and evaluate the subject properties as potential historical resources, a multi-step methodology was utilized. An inspection of the site and the existing structures, combined with a review of data for this parcel, was performed to document existing conditions and assist in assessing and evaluating the property for significance. Photographs were taken of the structures, landscape, or other points of interest situated in the proposed project area, during the intensive-level survey.

The National Register and California Register historical significance criteria were employed to evaluate the significance of the property. In addition, the following tasks were performed for the study:

- The National Register and California Register property inventories were searched.

- Site-specific research was conducted on the subject property utilizing historic topographic and road maps, city directories, newspaper articles from the *Riverside Daily Press* and *San Bernardino County Sun*, historic photographs, and other published sources.

- Background research was performed at local and regional historic archives, and through internet resources such as available from the California State Military Museum (Sacramento).

- Ordinances, statutes, regulations, bulletins, and technical materials relating to federal, state, and local historic preservation, designation assessment processes, and related programs were reviewed and analyzed.

II. REGULATORY FRAMEWORK

Historic resources fall within the jurisdiction of several levels of government. Federal laws provide the framework for the identification, and in certain instances, protection of historic resources. Additionally, states and local jurisdictions play active roles in the identification, documentation, and protection of such resources within their communities. The National Historic Preservation Act (NHPA) of 1966, as amended, particularly Section 106 of the NHPA, and CEQA are the primary laws and regulations governing the evaluation and significance of historic resources of national, state, regional, and local importance. A description of these relevant laws and regulations is presented below.

In analyzing the historic significance of the subject property, criteria for designation under federal, state, and local landmark programs were considered. Additionally, the California Office of Historic Preservation (OHP) survey methodology was used to survey and rate the relative significance of the Property.

A. FEDERAL LEVEL

1. National Register of Historic Places

First authorized by the Historic Sites Act of 1935, the National Register was established by the NHPA as "an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment."[1] The National Register recognizes properties that are significant at the national, state and local levels.

To be eligible for listing in the National Register, the quality of significance in American history, architecture, archaeology, engineering, or culture must be in a district, site, building, structure, or object that possesses integrity of location, design, setting, materials, workmanship, feeling and association, and:[2]

A. is associated with events that have made a significant contribution to the broad patterns of our history; or
B. is associated with the lives of persons significant in our past; or
C. embodies the distinctive characteristics of a type, period, or method of construction or that represents the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

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1 Code of Federal Regulations (CFR), 36 § 60.2.

2 *Guidelines for Completing National Register Forms, National Register Bulletin 16*, U.S. Department of the Interior, National Park Service, September 30, 1986 ("National Register Bulletin 16"). This bulletin contains technical information on comprehensive planning, survey of cultural resources, and registration in the National Register of Historic Places.

D. yields, or may be likely to yield, information important to prehistory or history.

A property eligible for listing in the National Register must meet one or more of the four criteria (A-D) defined above. In addition, unless the property possesses exceptional significance, it must be at least 50 years old to be eligible for National Register listing.

In addition to meeting the criteria of significance, a property must have integrity. "Integrity is the ability of a property to convey its significance."[3] According to *National Register Bulletin 15*, within the concept of integrity, the National Register criteria recognize seven aspects or qualities that, in various combinations, define integrity. To retain historic integrity a property will always possess several, and usually most, of these seven aspects. The retention of specific aspects of integrity is paramount for a property to convey its significance.[4] The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association. The following is excerpted from *National Register Bulletin 15,* which provides guidance on the interpretation and application of these factors.

- Location is the place where the historic property was constructed or the place where the historic event occurred.[5]
- Design is the combination of elements that create the form, plan, space, structure, and style of the property.[6]
- Setting is the physical environment of a historic property.[7]
- Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.[8]
- Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.[9]
- Feeling is property's expression of the aesthetic or historic sense of a particular period of time.[10]

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3 *National Register Bulletin 15*, page 44.

4 *Ibid*.

5 "The relationship between the property and its location is often important to understanding why the property was created or why something happened. The actual location of a historic property, complemented by its setting is particularly important in recapturing the sense of historic events and persons. Except in rare cases, the relationship between a property and its historic associations is destroyed if the property is moved." *Ibid*.

6 "A property's design reflects historic functions and technologies as well as aesthetics. It includes such considerations as the structural system; massing; arrangement of spaces; pattern of fenestration; textures and colors of surface materials; type, amount, and style of ornamental detailing; and arrangement and type of plantings in a designed landscape." *Ibid*.

7 *National Register Bulletin 15*, page 45.

8 "The choice and combination of materials reveals the preferences of those who created the property and indicated the availability of particular types of materials and technologies. Indigenous materials are often the focus of regional building traditions and thereby help define an area's sense of time and place." *Ibid*.

9 "Workmanship can apply to the property as a whole or to its individual components. It can be expressed in vernacular methods of construction and plain finishes or in highly sophisticated configurations and ornamental detailing. In can be based on common traditions or innovative period techniques." *Ibid*.

- Association is the direct link between an important historic event or person and a historic property.[11]

In assessing a property's integrity, the National Register criteria recognize that properties change over time; therefore, it is not necessary for a property to retain all its historic physical features or characteristics. The property must, however, retain the essential physical features that enable it to convey its historic identity.[12]

For properties that are considered significant under National Register criteria A and B, *National Register Bulletin 15* states that a property that is significant for its historic association is eligible if it retains the essential physical features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s).[13]

In assessing the integrity of properties that are considered significant under National Register criterion C, *National Register Bulletin 15* provides that a property important for illustrating a particular architectural style or construction technique must retain most of the physical features that constitute that style or technique.[14]

The primary effects of listing in the National Register on private property owners of historic buildings is the availability of financial and tax incentives.[15] In addition, for projects that receive federal funding, the NHPA Section 106 clearance process (published at 36 CFR Part 800) must be completed. State and local laws and regulations may apply to properties listed in the National Register. For example, demolition or inappropriate alteration of National Register eligible or listed properties may be subject to CEQA.

B. STATE LEVEL

The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also carries out the duties as set forth in the Public Resources Code (PRC) and maintains the California Historical Resources Inventory. The State Historic Preservation Officer

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[10] "It results from the presence of physical features that, taken together, convey the property's historic character." *Ibid*.

[11] "A property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to the observer. Like feeling, associations require the presence of physical features that convey a property's historic character…Because feeling and association depend on individual perceptions, their retention alone is never sufficient to support eligibility of a property for the National Register." *Ibid*.

[12] *National Register Bulletin 15*, page 46.

[13] *Ibid*.

[14] "A property that has lost some historic materials or details can be eligible if it retains the majority of the features that illustrate its style in terms of the massing, spatial relationships, proportion, patter of windows and doors, texture of materials, and ornamentation. The property is not eligible, however, if it retains some basic features conveying massing but has lost the majority of features that once characterized its style." *Ibid*.

[15] See 36 CFR 60.2(b) (c).

(SHPO) is an appointed official who implements historic preservation programs within the state's jurisdictions.

1. California Register of Historical Resources

Created by Assembly Bill 2881, which was signed into law on September 27, 1992, the California Register is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change."[16] The criteria for eligibility for the California Register are based upon National Register criteria.[17] Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.[18]

The California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed in the National Register of Historic Places and those formally determined eligible for the National Register of Historic Places;
- California Registered Historical Landmarks from No. 770 onward;
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Resources Commission for inclusion in the California Register.[19]

Other resources which may be nominated to the California Register include:

- Individual historical resources;
- Historical resources contributing to historic districts;
- Historical resources identified as significant in historical resources surveys with significance ratings of Category 1 through 5;
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as a historic preservation overlay zone.[20]

To be eligible for the California Register, a historic resource must be significant at the local, state, or national level under one or more of the following four criteria:

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[16] California Public Resources Code § 5024.1(a).
[17] California Public Resources Code § 5024.1(b).
[18] California Public Resources Code § 5024.1(d).
[19] California Public Resources Code § 5024.1(d).
[20] California Public Resources Code § 5024.1(e).

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

Additionally, a historic resource eligible for listing in the California Register must meet one or more of the criteria of significance described above and retain enough of its historic character or appearance to be recognizable as a historic resource and to convey the reasons for its significance. Historical resources that have been rehabilitated or restored may be evaluated for listing.[21]

Integrity under the California Register is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. The resource must also be judged with reference to the particular criteria under which it is proposed for eligibility. It is possible that a historic resource may not retain sufficient integrity to meet criteria for listing in the National Register, but it may still be eligible for listing in the California Register.[22]

2. California Office of Historical Preservation Survey Methodology

The evaluation instructions and classification system prescribed by the California OHP in its Instructions for Recording Historical Resources provide a three-digit evaluation rating code for use in classifying potential historical resources. The first digit indicates one of the following general seven evaluation categories for use in conducting cultural resources surveys:

1. Listed in the National Register or the California Register;
2. Determined eligible for listing in the National Register or the California Register;
3. Appears eligible for the National Register or the California Register through survey evaluation;
4. Appears eligible for the National Register or the California Register through other evaluation;
5. Recognized as Historically Significant by Local Government;
6. Not eligible for any Listing or Designation; and
7. Not evaluated for the National Register or California Register or needs re-evaluation.

The second digit of the evaluation status code is a letter code indicating whether the resource is separately eligible (S), eligible as part of a district (D), or both (B). The third digit is a number that is used to further specify significance and refine the relationship of the property to

[21] California Code of Regulations, California Register of Historical Resources (Title 14, Chapter11.5), Section 4852(c).

[22] Ibid.

the National Register and/or California Register. Under this evaluation system, categories 1 through 4 pertain to various levels of National Register eligibility. The California Register, however, may include surveyed resources with evaluation rating codes through level 5. In addition, properties found ineligible for listing in the National Register, California Register, or for designation under a local ordinance are given an evaluation status code of 6.

III. EVALUATION

A. HISTORIC CONTEXT

1. Riverside County

In 1838, the Governor of Alta California bestowed upon Senor Don Juan Bandini a land grant of 40,569 acres in the region of modern day Southern California. The Rancho Jurupa grant covered a section of the Santa Ana River basin from near the southern boundary of San Bernardino County down into the northern of Riverside County to near present day Rubidoux Mountain.

Don Bandini sold 6,750 acres of the southern portion of his grant, and they eventually fell into the hands of Louis Rubidoux. The land was generally in the area near where Mount Rubidoux is located today. The rest of Bandini's 32,259 acres were sold to his son-in-law Abel Stearns who had married his daughter Arcadia.

Judge John W. North and his partners purchased 8,600 acres of land, which included the lands owned by Louis Rubidoux, in 1870. This section of land became the Southern California Colony and was incorporated in 1883. Renamed Riverside for its location on the east bank of the Santa Ana River, the town site was plotted on a grid pattern comprised of 182 blocks measuring 350 feet by 350 feet.[23]

From the time that Mrs. Eliza Tibbets of Riverside had planted the first Brazilian species of navel orange trees given to her by the U.S. Department of Agriculture in 1873, citrus trees and the navel orange industry grew exponentially in Riverside until there were over an estimated one-half million trees in 1882. The massive growth of the citrus industry supported the growth of the City of Riverside. Large numbers of residents were needed to work the groves, pick and pack the fruit, run the local shops and staff the city offices. Men and women from all over the country were able to move to Southern California in the late 1800s because of the low rail fares, and the ample job opportunities awaiting them.

Access to water for the new orange groves was a primary concern of the Riverside community. The Upper Riverside Canal (Riverside No. 1) was constructed in 1870-1871 by the Southern California Colony Association.[24] The water was diverted from the Santa Ana River from a point in the City of Colton, at the west end of East Washington Street, and sent by a series of hand dug ditches, wood flumes, and canals, south through the settlements of Grand Terrace and Highgrove, running approximately parallel to where the 215 Freeway and the 91 Freeway are located today, to the Arlington Heights area. The Lower Riverside Canal was

[23] City of Riverside. *Draft Fox Plaza Project EIR*, Section 5.5-8, Historic Resources.
[24] Starzak, Richard. *RCTC/I-215 Improvement Project, Riverside County, Historic Architectural Survey Report.* FHWA. RCTC. Caltrans. 1996-1997. Myra L. Frank & Associates, Inc.

constructed by the Riverside Land and Irrigating Company in 1875-76 to carry the water south of Arlington Avenue.[25] The total length of the canal is approximately 19 miles.

The second need of the agricultural-based community was a means of getting the oranges, and other citrus crops, to market. In 1887, the California Southern Railroad completed its line north from San Diego, along the coast until heading inland to follow the Santa Ana River to San Juan Capistrano, Orange, through Riverside to the San Bernardino Depot of the Atchison Topeka & Santa Fe Railroad (ATSF). From there, the goods could be sent to the east coast by way of the Cajon Pass and Barstow. The Southern Pacific Railroad (SPRR) built the first refrigerated box cars in 1886, and made it possible to get the citrus fruit to the east coast in almost perfect condition within a few days. The growers would have to send their product to the SPRR depot in Colton by way of the local motor car system, until 1904 when the SPRR ran a line into Riverside that continued into Los Angeles by crossing the Santa Ana River near Pedley, on its way through the southern sections of Ontario and Pomona.

With a reliable source of water, and a means to get the citrus fruit to a national market, the City of Riverside soon became the largest metropolitan city in southern California in the late 1800s.

2. March Field/Camp Haan

Built to "put the Yankee punch into the war by building an army in the air" March Field in Riverside County was constructed on Alessandro Field, east of the City of Riverside in 1918, to support the efforts of the United State Army in World War I.[26] Alessandro Field had been nothing more than a dirt strip that had been used by military pilots flying through Riverside County, from their home at Rockwell Field in San Diego.[27] During World War I twelve airplane hangars, six barracks, a mess hall, a hospital, a supply depot, and a residence for the commanding officer had been built on the flat, arid ground in the Moreno Valley.[28] Due to reduced military budgets after the end of the war, March Field was effectively shut down in 1923.[29]

The United States Congress created the United States Army Air Corp (USAAC) in 1926, and funds were made available to reopen March Field in 1927.[30] March Field became an operational base in 1931, and Lieutenant Colonel Henry H. (Hap) Arnold was made its base commander from 1931 to 1936. Permanent housing and facilities were constructed at March Base, and under Arnold's leadership March Field became a major military airfield in Southern California. While at March Field, Arnold took the lead on establishing a far-flung base in the

[25] Ibid.
[26] California State Military Museum. "March Air Reserve Base". Accessed February 24, 2017. http://www.militarymuseum.org/MarchAFB.html
[27] Ibid.
[28] Ibid.
[29] Ibid.
[30] Ibid.

Antelope Valley where his bomber squadrons could practice their maneuvers without endangering civilians or livestock. This base would become Muroc Air Base (and eventually Edwards Air Force Base) in 1939.[31]

March Field was situated in a lightly-settled area that was serviced with a direct line of the ATSF, and Highway 395, a north-south transportation highway, running along the airfields western border. As March Field was already an established base with fully operating infrastructure, it was not a difficult decision for the U.S. Army in 1940 to decide to build a ground troop and heavy artillery training base directly to the west, across Highway 395 and the ATSF, from March Field.

The U.S. Government knew that it would be drawn into the war in Europe, and possibly in the Pacific Region, before the Japanese attacked Pearl Harbor in December 1941. Camp Haan had started being constructed on 8,058 acres in November of 1940 as a Coast Artillery Antiaircraft Replacement Training Center.[32] Camp Haan was opened in January of 1941, and by October of that year it had "353 permanent wooden buildings, 2459 floor tents, six exchanges, five chapels, a hospital, 18 miles of sewers, and 28 miles of streets".[33] (Figure 4)

3. Canyon Crest Housing Complex

In 1938, the headquarters of the seventeen-state Northwestern Turkey Grower's Association, and the center of turkey growing and processing in Southern California, was located in the area "near the intersection of Eighth Street [University Avenue] and Canyon Crest Road, a short distance north of the Citrus Experiment Station".[34] The rural agrarian setting, with turkey farms and open landscape, located north of Camp Haan and March Field, and just outside the eastern boundary of the City of Riverside (in 1940), lent itself to being a good location for an "army housing project being considered east of the city, on a site of 40 acres located between Blaine and Linden streets" by Major R. F. Weeks of the U.S. Army Corps of Engineers in November of 1940.[35]

Under a project from the Works Progress Administration (WPA), the old Elsinore Road in Riverside was repaired and upgraded in February 1941 to "provide a more direct route for Camp Haan officers in travelling between the Riverside residential district and the anti-aircraft training center".[36] The "March Field Housing" project was constructed under the auspices of Major R.F. Weeks and the War Department.[37] Upon the completion of the project, the CCH

[31] California State Military Museum. "Edwards Air Force Base". Accessed February 24, 2017. http://www.militarymuseum.org/EdwardsAFB.html

[32] California State Military Museum. "Camp Haan". http://www.militarymuseum.org/cphaan.html

[33] Ibid.

[34] *Riverside Daily Press.* "Eyes Focused on Riverside as Turkey Industry Center". November 14, 1938.

[35] *Riverside Daily Press.* "No City Water for Army Housing Units". November 15, 1940.

[36] *Riverside Daily Press.* "WPA to Develop Old Elsinore Road". February 17, 1941.

[37] The Canyon Crest Housing complex was called by a number of names while under construction. Those names included the Blaine Street Army Housing Project and the March Field Housing Project. The previous names have

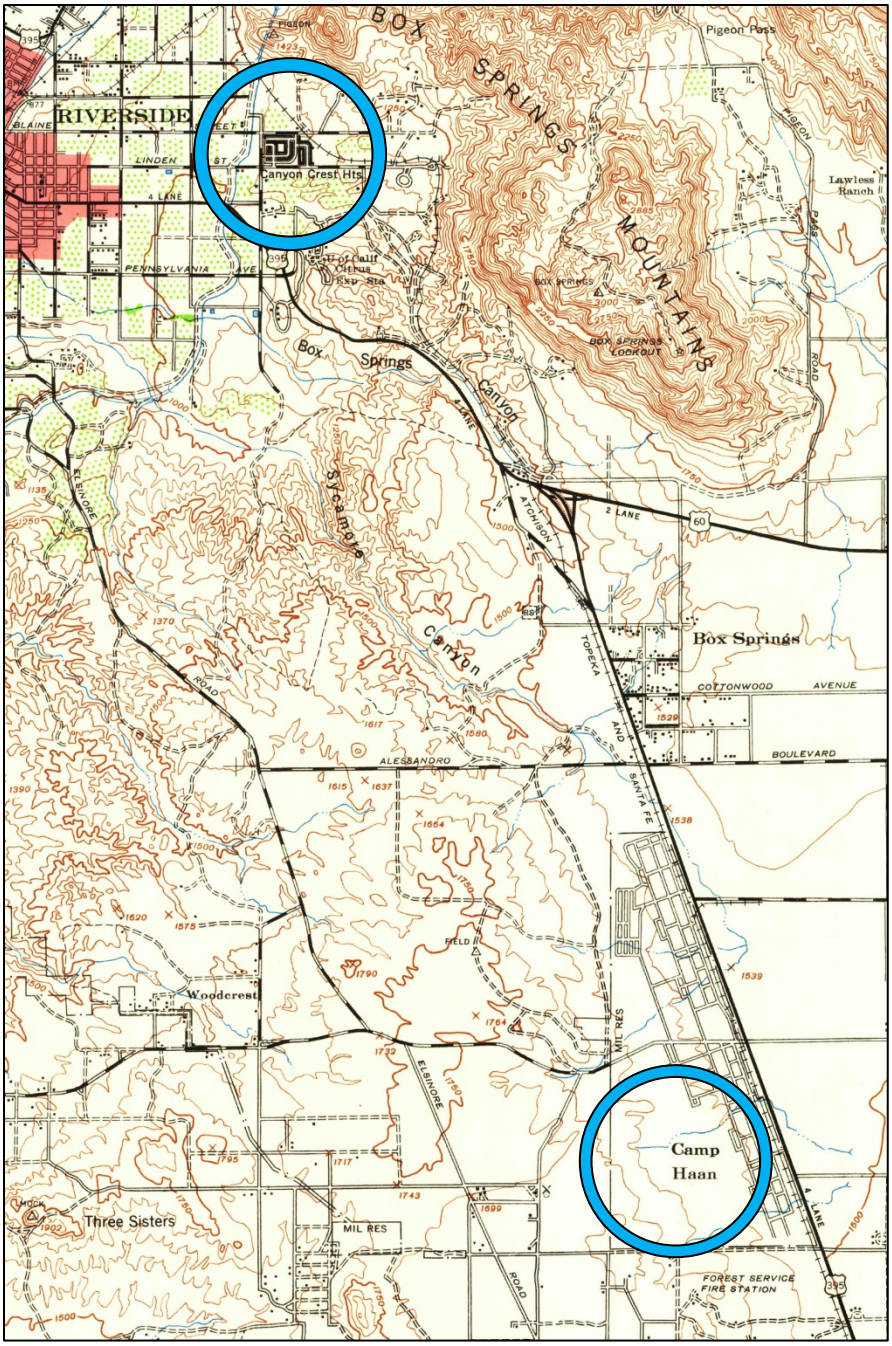

Figure 4: U.S. Geographical Society topographic map "Riverside" published in 1942. The excerpt above notes the location of the Canyon Crest Housing complex in relation to the location of Camp Haan to the south.

caused some confusion as the March Field Housing project was built for the military families of both March Field and Camp Haan, and when a Public Housing Project constructed at the intersection of Blaine Street and Kansas Avenue in 1943, was called the Blaine Street Housing complex.

complex that would be used for military personnel and their families stationed at Camp Haan and March Field, would be turned over to the Federal Works Agency of the Public Buildings Administration, under the management of Frederick C. Joss.[38]

Prior to the United States being engaged in World War II, the Great Depression had moved the issue of public housing into the public spotlight. In 1937, Congress passed the United States Housing Act (also known as the Wagner-Steagall Act) for the purpose of providing the necessary financial assistance and institutional expertise to support the construction of low-income housing. The Act was a major change from the efforts of social reformers in the early twentieth century as it called for the use of government monetary subsidies instead of depending on private investors and charitable organizations for the construction of new housing developments.

The view of urban planners and social workers was that good housing would greatly improve the quality of life for slum dwellers by providing safe and clean living conditions and lift them from the lowest segment of society. However, it should be noted, and has been discussed in depth by social activists, "public housing was not originally built to house the 'poorest of the poor', but was intended for select segments of the working class."[39] The Housing Act was designed to benefit a section of the white middle class that had been displaced during the Great Depression.[40]

With the U.S. Housing Act of 1937 in place, the California Legislature passed the Housing Authorities Law in 1938, to create legislation enabling the formation of housing authorities in California.[41] The law allowed a local housing authority be considered a "public corporation" and to hold the powers of owning land, issuing bonds, and use of eminent domain to obtain property for the public good. With federal and state legislative support, cities and counties could construct large public housing projects with Federal assistance.

The Federal Public Housing Authority began a campaign to have the CCH complex taken under local control in 1942. The Public Housing Authority first approached the City of Riverside to "assume custody" of the complex, but was turned down as the housing project was located outside of the City limits.[42] The City of Riverside, County of Riverside, the U.S. Army, and the Federal Public Housing Authority came together in November of 1942 to create a housing authority that would build much needed housing units with monies from the Federal Government. The meeting led to the creation of the Riverside County Housing Authority that same month. "The housing authority was set up with the idea of alleviating the acute shortage

[38] *Riverside Daily Press*. "Manager Named for Blain Street Housing Project". March 10, 1941.
[39] Stofoff, Jennifer. "A Brief History of Public Housing." US Department of Housing and Urban Development, Washington, D.C. Page 1. Accessed February 26, 2017. http://reengageinc.org/research/brief_history_public_housing.pdf
[40] Equality in housing would not come about in California until after 1954, when a lawsuit led to the desegregation of all housing projects in San Francisco. Banks v. the San Francisco Housing Authority.
[41] California Code 34200.
[42] *Riverside Daily Press*. "Housing Project Custody Declined". October 21, 1942.

of living accommodations in various parts of the county".[43] G. Stanley Wilson, an established local architect (Mission Inn, Riverside Municipal Auditorium, Old City Hall – Fullerton) was named the first chairman of the Riverside County Housing Authority.[44] The administrative control of the CCH complex was passed to the Housing Authority of the County of Riverside (HACR) in 1942.[45] (Figures 5)

Figure 5: Canyon Crest Housing in 1943. "A view in Canyon Crest Heights, build to help relieve the housing shortage for civilian defense workers and families of soldiers". Based upon the location of the water tank and tower, this view was taken looking east at the units along the north side of Blaine Alley. (Source: *Riverside Daily Press,* September 25, 1943)

Once the CCH was under the HACR, the HACR could apply for funds available from the Community Facilities Act of 1940 (Lanham Act) that provided federal monies to communities where local resources couldn't match the needs of the soaring increases in population resulting from military defense efforts in a community.[46] The Lanham Act provided money for the building of temporary housing units and associated infrastructure systems such as water and sanitation plants, hospitals, as well as nursery schools, day care centers, recreation facilities and schools.[47] Due to the number of women who entered the workforce to support war efforts, the establishment of nursery schools and day care centers became imperative to allow women to leave their young children to become factory workers, general laborers, and municipal workers. A nursery school was established at the CCH complex at 756 Linden Street in 1943, and was overseen by the Riverside City School District.[48] "Approximately 30 children between the ages of two and five are cared for daily by certified instructors. The schedule of the daycare facility called for the "care of children of working mothers 12 hours daily, six days a week".[49] (Figure 6)

[43] *Riverside Daily Press*. "Housing Authority Has First Meeting". December 1, 1942.
[44] *Riverside Daily Press*. "Housing Authority Has Meeting at Canyon Crest". December 17, 1942.
[45] *Riverside Daily Press*. "Housing Authority Has First Meeting". December 1, 1942.
[46] *Riverside Daily Press*. "Nursery School Project Outlined". June 29, 1943.
[47] Smith, Eve P. and Lisa A. Merkel-Holguin. A History of Child Welfare. Transaction Publishing: 1996. Page 87-90.
[48] *Riverside Daily Press*. "Nursery School Project Outlined". June 29, 1943.
[49] *Riverside Daily Press*. "Schools and Labor Problems Studied". October 4, 1943.

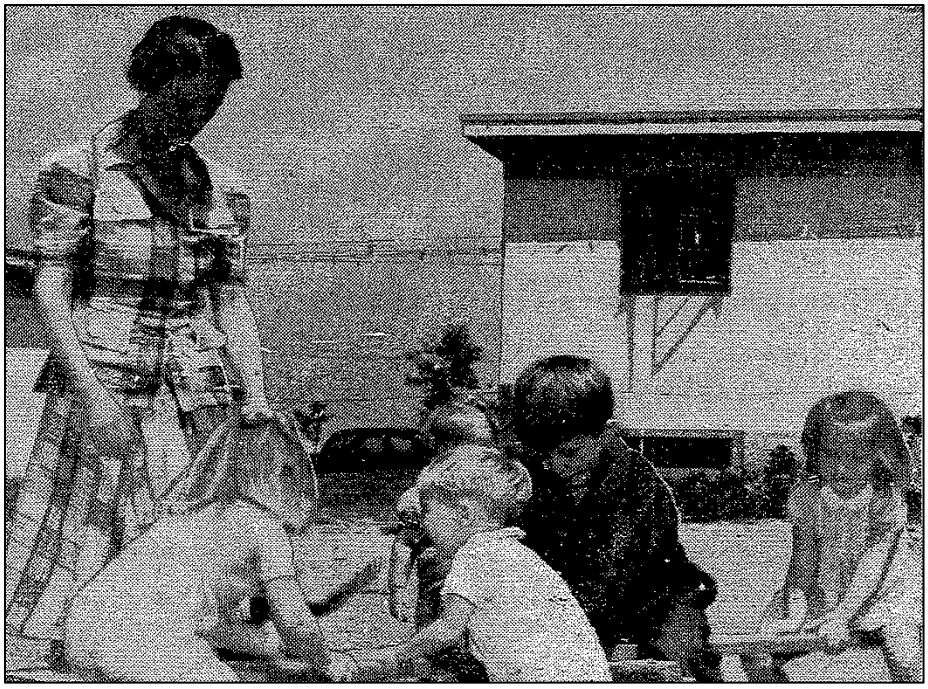

Figure 6: Photograph of a teacher and children at the Canyon Crest Housing nursery school in May 1943. (Source: *Riverside Daily Press*, May 25, 1943)

By 1945, the HARC had established at the CCH complex a community hall where motion pictures were shown, a grocery store, a local community newspaper, and activities such as the Girl and Boy Scouts, Brownies and Cub Scouts, a women's club, and a Sunday school.[50] With the surrender of Germany in May of 1945, the needs of public housing in the postwar era began to be viewed as that to be made available to the underprivileged, and rents would be based on tenants' income levels. Fred B. Prakel of the regional office of the Federal Public Housing Authority (predecessor to the Department of Housing and Urban Development) stated at a meeting in Riverside that "many people in this country live below the level that people in a democracy should live. Therefore, in order to provide those persons adequate housing at a rent they can pay, the government must establish a subsidy".[51] As a result, after the end of World War II, the tenants directly associated with the military bases at CCH slowly departed, and were replaced by public assistance clients who needed help with housing in the very tight housing market. (Toward the end of World War II, and immediately after, tenants of the two-bedroom units at CCH had been urged to rent out the second bedroom of their units to defense workers.[52]) (Figures 7 and 8)

[50] *Riverside Daily Press*. "Shackelford Will Take New Position". March 26, 1945.
[51] *Riverside Daily Press*. "Postwar Housing Plans Discussed at Town Hall". May 19, 1945.
[52] *Riverside Daily Press.* "Housing Crisis To Be Met Here By United Action". August 9, 1945.

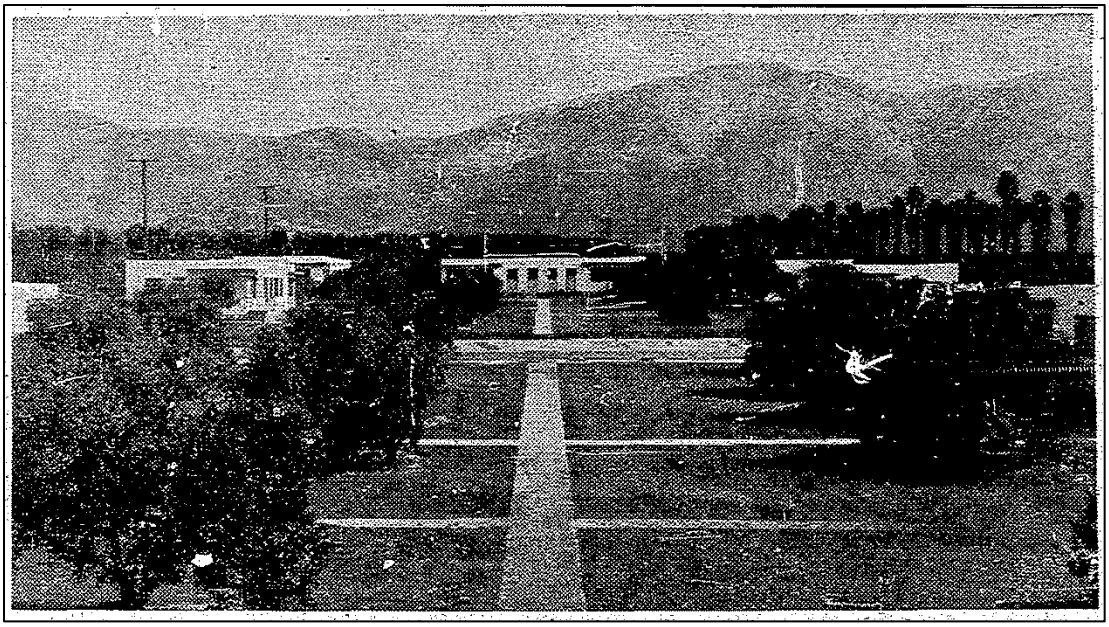

Figure 7: A view of Canyon Crest Housing "the only permanent housing community in this vicinity, with the others being temporary housing only". Based upon the location of the palm trees, this view may be looking north across the east-west portion of Avocado Street. (Source: *Riverside Daily Press*, January 1, 1944)

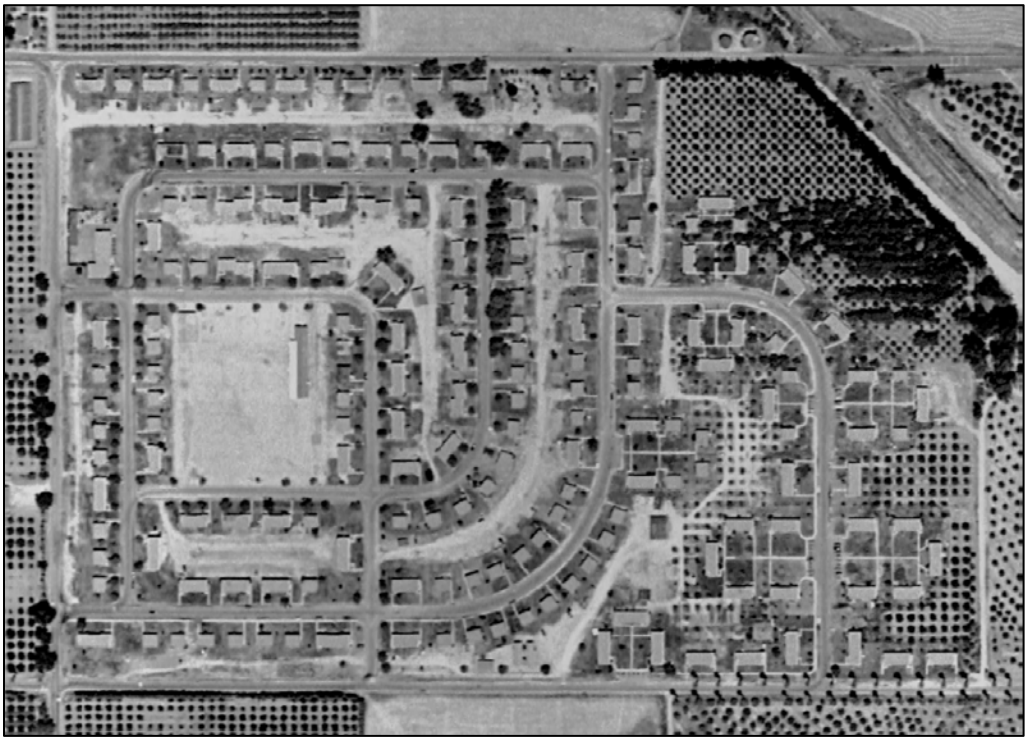

Figure 8: Aerial view of Canyon Crest Housing in 1948. (Source: NETR Historic Aerials)

The CCH complex had been scheduled for disposition by the Federal Public Housing Authority and the HACR after the end of World War II, but with the breakout of hostilities in Korea in the early 1950s, the Government retained the property for use by those working in defense efforts and who needed housing assistance in Riverside.

Simultaneously, the Regents of the University of California decided to expand the University of California Citrus Experiment Station that had been established in Riverside in 1907, with the construction of the College of Letters and Science in 1954. Dr. Gordon S. Watkins, Provost of the University of California at Riverside (UCR), made an offer to the HACR to take over the CCH complex for the future university complex. Dr. Watkins stated that the housing complex would allow the university to offer inexpensive housing to faculty, non-academic professionals, and military families taking advantage of the G.I. Bill.[53] As CCH was owned by the U.S. Government, UCR would require the U.S. Congress to approve the sale. After two years of negotiations, the CCH complex was formally transferred to UCR in July 1955 for the fair market price of $600,000. UCR was required to let the current tenants stay as long as needed, and members of the university could only move into the units as vacancies occurred.[54]

A picnic pavilion and restroom facility was constructed within the CCH complex in 1964, and one of the duplex residential buildings of the CCH complex on Linden Street became the home of the student FM radio station KUCR in 1966.[55/56]

B. HISTORIC RESOURCES IDENTIFIED

A site visit and intensive-level inspection of the built-environment resources within the CCH complex was performed by Pamela Daly, Architectural Historian, on December 29, 2016. The project site consists of 185 structures situated on 51.56 acres, generally located in the northeast region of the UCR campus.

The overall plan of the complex is relatively unchanged since its construction in 1940-1941, and as it appeared in 1948 (Figure 8). We noted the absence of three buildings along Linden Street that are visible in the aerial view of 1948, versus the aerial view of the complex captured by Google Earth in October 2016 (Figure 3). The new picnic pavilion was added to the property in 1964, and in the 1970s, according to historic aerial photographs, a duplex unit at the northeast corner of Avocado Street and Linden Street was removed and replaced with a new community building.

All of the residential units in the complex were constructed in two basic, Minimalist bungalow architectural designs. Those two variations are clearly seen in Figure 5. There are the units that had a flat roof system with overhanging eaves, or the units with exterior walls that rise above the flat roof system within, to create a low parapet wall that encircles the roof of the building. The units with the low parapet walls have a long horizontal board set above the

[53] *San Bernardino County Sun*. "UCR Said Anxious to Obtain Canyon Crest Housing Project". May 28, 1953.
[54] *The Los Angeles Times.* "University Takes Over $600,000 Housing Units". July 6, 1955.
[55] University of California – Riverside. "Construction Documents for Canyon Crest Housing Recreational Area, Project No. 905103". April 1964. UCR Office of Architects and Engineers.
[56] *Corona Daily Independent*. "New FM radio station OK'd for Riverside". July 11, 1966.

entrances to the building that gives the illusion of an extension of a roof edge, and provides some protection from wet weather.

UCR has provided information that there are currently 185 structures within the CCH complex.[57] Our count revealed:

88 Single units
60 Duplex – two adjoining units
12 Duplex – two, offset adjoining units
18 Duplex – larger two bedroom adjoining units

1. Single Residential Units

The single residential units are rectangular-massed one-story buildings measuring approximately 30 feet long by 25 feet wide. The building are set on a raised foundations created by poured concrete walls. The exterior walls are clad with a semi-rough stucco siding, and the original metal-frame casement windows units have been removed and replaced with modern composite units. As seen in Figures 5 and 7, all the residential units were originally constructed with flat roof systems, and our survey found that all the single units constructed in the style with parapet walls, were altered with the installation of a medium-pitch gable roof system. (Figures 9 and 10)

Figure 9: Single unit with original flat roof system on Utah Street.

[57] UCR. North District Opportunity Site map of Canyon Crest Family Housing. August 17, 2016.

Figure 10: Single unit with replacement gable roof system on Blaine Alley.

2. Duplex Residential Units

The smaller of the duplex residential units are rectangular-massed one-story buildings measuring approximately 55 feet long by 25 feet wide, and are comprised of two separate units conjoined end-to-end. The buildings are set on a raised foundations created by poured concrete walls. The exterior walls are clad with a semi-rough stucco siding, and the original metal-frame casement windows units have been removed and replaced with modern composite units. As seen in Figures 5 and 7, all the residential units were constructed with flat roof systems, and it appears that all the duplex units that had parapet walls (except for one as seen in Figure 11) were altered with the installation of a medium-pitch gable roof system. (Figures 11 and 12)

Figure 11: The last remaining duplex unit with pediment walls on Avocado Street.

Figure 12: Duplex with replacement gable roof system on Grape Street.

3. Offset Duplex Units

The offset duplex residential units are comprised of two, rectangular-massed one-story buildings measuring approximately 55 feet long by 25 feet wide. The adjoining buildings share a common wall but are set approximately five feet off center from each other. The buildings are set on a raised foundations created by poured concrete walls. The exterior walls are clad with a semi-rough stucco siding, and the original metal-frame casement windows units have been removed and replaced with modern composite units. There are no remaining offset duplex units with flat roof systems in the housing complex. (Figure 13)

Figure 13: Offset duplex unit on Utah Street.

4. Two-Bedroom Duplex Units

The larger duplex residential units are comprised of two, rectangular-massed one-story buildings measuring approximately 65 feet long by 25 feet wide that are comprised of two separate units conjoined end-to-end. The buildings are set on a raised foundations created by poured concrete walls. The exterior walls are clad with a semi-rough stucco siding, and the original metal-frame casement windows units have been removed and replaced with modern composite units. As seen in Figures 5 and 7, all the residential units were constructed with flat roof systems, and it appears that all the duplex units that had parapet walls were altered with the installation of a medium-pitch gable roof system. (Figures 14 and 15)

Figure 14: Two-bedroom duplex unit on Blaine Alley.

Figure 15: Two-bedroom duplex unit on Utah Street.

There are also seven buildings that are not used as residential units within the complex:

Building that houses KUCR radio (1941 duplex residence) - Linden Street
Building that houses Resident Services (constructed circa 1978) - Avocado Street
Maintenance yard building (constructed circa 1965) - west of Avocado Street
Carpentry Shop (1941) - between Utah and Avocado Streets
Resident Laundromat (circa 1948) - Florida Street
Park/playground picnic pavilion (1964) - at intersection of Cherry and Florida Streets
CCH complex warehouse and storage yard (circa 1948) - Kentucky Street

C. SIGNIFICANCE

The CCH complex, now known as the Canyon Crest Family Student Housing complex, was constructed outside of the city limits of Riverside, by the U.S. Army Corps of Engineers in 1940-1941 in conjunction with the building of Camp Haan, just to the south in the Moreno Valley. Camp Haan was built as a preemptive measure to bolster defensive forces on the West Coast due to concerns of armed invasion by Japan. The residential housing complex was constructed for personnel of both Camp Haan and March Air Field. It was quickly occupied by military personnel and their families, but within just a year, the U.S. Army passed control of the property to the Federal Public Housing Authority. They, in turn with legislation passed in 1937 for the creation of public housing, assisted Riverside County in creating their own public housing authority and taking over responsibility for the management of CCH. HACR managed the property day-to-day, and instituted social programs and activities that included a nursery school operated under the auspices of the Riverside City School District. HACR managed the property until 1954 when it was sold by an act of Congress to UCR.

Under the criterion for evaluating the Canyon Crest Family Student Housing complex for listing in the National Register or California Register for its association with events that have made a significant contribution to the broad patterns of history in the cultural heritage of Riverside County, California or the United States, the complex does not appear eligible for listing as a historical resource. The subject property was not found to have been directly associated with the military activities undertaken to protect the West Coast from an attack from Japan, or with the actual wartime training activities of March Air Field or Camp Haan. The CCH complex was located away from the military bases so that the residents could take advantage of the shopping, social, and educational resources available in the City of Riverside, which were severely lacking in the Moreno Valley area. The CCH complex merely played a supporting role in the war effort by providing housing for persons associated with the military bases. The CCH property does not appear to meet the guidelines for listing in the California Register under Criterion 1 as a historical resource significant in the history of the region. The property does not appear to present the qualities important to the nationwide history of "home front" activities of World War II, which would make the property eligible for listing in the National Register under Criterion A.

Under the criterion for evaluating properties for listing in the National Register or California Register for their association with the lives of persons important to the history of Riverside County, California, or the United States, the CCH complex property does not appear eligible for listing in the National Register under Criterion B, or the California Register under Criterion 2. We could find no evidence that individuals or tenants associated with the property were persons identified as having a direct effect to history of the region, state, or nation.

Per the criterion for evaluating built-environment structures, it is apparent that the individual buildings of CCH, and the complex as a whole, have not retained sufficient levels of integrity necessary to present the structural characteristics and features required to be a strong representative of a housing complex constructed by the U.S. Army Corps of Engineers in the days leading up to the entrance of the United States into World War II. The individual units were designed using a Minimalist and modest style of architecture that could be constructed as quickly and inexpensively as possible, even though it was to be a permanent residential community. Alterations made later to the individual units when owned by UCR, substantially changed the residential units appearance by removing the original windows, changing the type of roof on the majority of the units, and adding decorative clapboard elements to the exterior facades where none had previously been placed. The property does not appear eligible for listing in the California Register under Criterion 3, or in the National Register under Criterion C, as an example of a World War II-era housing complex. The CCH complex has not retained the aspects of physical integrity that include design, setting, materials, workmanship, and feeling, that are required to be present to convey a properties historic significance.

The Canyon Crest Housing complex has not yielded, nor does it appear to have the potential to yield, information important to the history of the local area, California or the nation. The property does not appear eligible for listing in the National Register under Criterion D, or the California Register under Criterion 4.

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V. INVENTORY SITE FORMS (DPR SERIES 523)

State of California — The Resources Agency	**Primary #: 33-11475** UPDATE
DEPARTMENT OF PARKS AND RECREATION	**HRI #**
PRIMARY RECORD	**Trinomial**
	NRHP Status Code: 6Z
Other Listings	
Review Code	**Reviewer** **Date**

 ***Resource Name:** Canyon Crest Family Student Housing Complex

P1. Other Identifier: Canyon Crest Housing Complex

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** Riverside

and

***b. USGS 7.5' Quad:** Riverside East **Date:** 1980 T2S; R4W; NW¼ of SW¼ of Sec 20; S.B.B.M.

c. Address: Various City: Riverside Zip: 92507

d. UTM: Zone: 11; Point A: 469425 mE/ 3760308 mN
Point B: 469776 mE/ 3760321 mN
Point C: 470000 mE/ 3760097 mN
Point D: 470010 mE/ 3759911 mN
Point E: 469426 mE/ 3759925 mN

e. Other Locational Data: Located on the eastern side of Canyon Crest Drive, between Blaine Street to the north and Linden Street to the south, in the northeast area of the UCR campus. Elevation: 1078 feet a.b.s.l

***P3a. Description:**

Historically known as the Canyon Crest Housing complex (CCH), the Canyon Crest Family Student Housing complex is regionally situated east of the center of the City of Riverside, and in the northern region of the University of California - Riverside campus. The CCH site is bound by the Blaine Street to the north, Linden Street to the south, Canyon Crest Drive to the west, and on the east by UCR's Corporate Yard (accessed from Linden Street) and the UCR Child Development Center (accessed from Watkins Drive). The CCH site is surrounded primarily on the west, south, and east by UCR campus buildings and activities. CCH is composed of approximately 51 acres upon which there are situated 180 residential dwellings, five buildings that hold support services for the CCH, one recreational park pavilion, and the building that houses KUCR radio station.

The overall plan of the complex is relatively unchanged since its construction in 1940-1941, and as it appeared in 1948 per historical aerial photographs. We noted the absence of three buildings along Linden Street that are visible in the aerial view of 1948, versus the aerial view of the complex captured by Google Earth in October 2016. (See Continuation Sheet for additional text.)

*P3b. Resource Attributes: HP3 (multiple-family property), HP4 (ancillary buildings), HP13 (community park/playground), HP30 (trees), HP31 (urban open space), HP35 (WPA property), HP39 (WWII military family housing), HP39 (university student/family housing), AH7 (roads, sidewalks).

***P4. Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☒District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing

P5b. Description of Photo: Duplex unit on Avocado Street. View looking southwest.

***P6. Date Constructed/Age and Sources:** Constr. 1940 per *Riverside Daily Press*. ☒Historic ☐Prehistoric ☐Both

***P7. Owner and Address:**
The University of California - Riverside
900 University Ave.
Riverside, CA 92521

***P8. Recorded by:**
Pamela Daly, M.S.H.P.
Daly & Associates
2242 El Capitan Drive
Riverside, CA 92506

***P9. Date Recorded:**
March 14, 2017

***P10. Survey Type:** Intensive-level

***P11. Report Citation:** Daly, Pamela. *Historic Resource Evaluation Report of Canyon Crest Family Student Housing, University of California – Riverside, Riverside County, CA.* Daly & Associates, Riverside, CA; prepared for University of California, Capital Assets Strategies – Capital Planning, 1223 University Avenue, Riverside, CA, 92507.

***Attachments:** ☐NONE ☒Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☒District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code**: 6Z

***Resource Name : Canyon Crest Family Student Housing Complex**

B1. Historic Name: Canyon Crest Housing Complex
B2. Common Name: Canyon Crest Housing Complex
B3. Original Use: Married persons housing during WWII B4. Present Use: Student/Family housing for UCR

***B5. Architectural Style:** late 1930s minimalist style

***B6. Construction History:** Constructed by the U.S. Army Corps of Engineers in 1940 in conjunction with the building of Camp Haan in Moreno Valley. At some point in time, after the property was purchased by the University of California – Riverside in 1955, the majority of the buildings had their flat roof systems replaced with medium-pitched gable roofs. Besides the roofs, all of the original window units in all the residential buildings were removed and replaced with modern composite units, and decorative tongue-in-groove siding was applied to some units.

***B7. Moved?** ■No ☐Yes ☐Unknown **Date:** **Original Location:**

***B8. Related Features:** Support buildings including: laundry, warehouse, carpenters shop, workshop, and picnic pavilion. Grounds and roads within the complex appear to have been altered since construction in 1940.

B9a. Architect: U.S. Military b. Builder: U.S. Army Corps of Engineers

***B10. Significance:** None. **Theme:** Family housing **Area:** Riverside County
Period of Significance: 1940-1942 **Property Type:** housing complex **Applicable Criteria:** none.

In 1938, the headquarters of the seventeen-state Northwestern Turkey Grower's Association, and the center of turkey growing and processing in Southern California, was located in the area "near the intersection of Eighth Street [University Avenue] and Canyon Crest Road, a short distance north of the Citrus Experiment Station". The rural agrarian setting, with turkey farms and open landscape, located north of Camp Haan and March Field, and just outside the eastern boundary of the City of Riverside (in 1940), lent itself to being a good location for an "army housing project being considered east of the city, on a site of 40 acres located between Blaine and Linden streets" by Major R. F. Weeks of the U.S. Army Corps of Engineers in November of 1940.

Under a project from the Works Progress Administration (WPA), the old Elsinore Road in Riverside was repaired and upgraded in February 1941 to "provide a more direct route for Camp Haan officers in travelling between the Riverside residential district and the anti-aircraft training center". The "March Field Housing" project was constructed under the auspices of Major R.F. Weeks and the War Department. Upon the completion of the project, the CCH complex that would be used for military personnel and their families stationed at Camp Haan and March Field, would be turned over to the Federal Works Agency of the Public Buildings Administration, under the management of Frederick C. Joss.

Prior to the United States being engaged in World War II, the Great Depression had moved the issue of public housing into the public spotlight. In 1937, Congress passed the United States Housing Act (also known as the Wagner-Steagall Act) for the purpose of providing the necessary financial assistance and institutional expertise to support the construction of low-income housing. The Act was a major change from the efforts of social reformers in the early twentieth century as it called for the use of government monetary subsidies instead of depending on private investors and charitable organizations for the construction of new housing developments. (See Continuation Sheet for additional text.)

B11. Additional Resource Attributes: None.

***B12. References:**
See Continuation Sheet.

B13. Remarks: None.

See aerial view with property site plan on continuation sheet.

***B14. Evaluator:** Pamela Daly, M.S.H.P.

***Date of Evaluation:** March 14, 2017.

(This space reserved for official comments.)

P3a. Description, continued:

The new picnic pavilion was added to the property in 1964, and in the 1970s, according to historic aerial photographs, a duplex unit at the northeast corner of Avocado Street and Linden Street was removed and replaced with a new community building.

All of the residential units in the complex were constructed in two basic, Minimalist bungalow architectural designs. Those two variations are clearly seen in historic photograph of Blaine Alley in 1943. There are the units that had a flat roof system with overhanging eaves, or the units with exterior walls that rise above the flat roof system within, to create a low parapet wall that encircles the roof of the building. The units with the low parapet walls have a long horizontal board set above the entrances to the building that gives the illusion of an extension of a roof edge, and provides some protection from wet weather.

UCR has provided information that there are currently 185 structures within the CCH complex. Our count revealed: 88 Single units; 60 Duplex – two adjoining units; 12 Duplex – two, offset adjoining units; and 18 Duplex – larger two bedroom adjoining units.

Single Residential Units: The single residential units are rectangular-massed one-story buildings measuring approximately 30 feet long by 25 feet wide. The building are set on a raised foundations created by poured concrete walls. The exterior walls are clad with a semi-rough stucco siding, and the original metal-frame casement windows units have been removed and replaced with modern composite units. All the residential units were originally constructed with flat roof systems, and our survey found that all the single units constructed in the style with parapet walls, were altered with the installation of a medium-pitch gable roof system.

Single unit with original flat roof system on Utah Street.

Single unit with replacement roof system on Blaine Alley.

P3a. Description, continued:

Duplex Residential Units: The smaller of the duplex residential units are rectangular-massed one-story buildings measuring approximately 55 feet long by 25 feet wide, and are comprised of two separate units conjoined end-to-end. The buildings are set on a raised foundations created by poured concrete walls. The exterior walls are clad with a semi-rough stucco siding, and the original metal-frame casement windows units have been removed and replaced with modern composite units. All the residential units were constructed with flat roof systems, and it appears that all the duplex units in the complex that had parapet walls (except for one seen below) were altered with the installation of a medium-pitch gable roof system.

The last remaining duplex unit with pediment walls on Avocado Street.

Duplex with replacement gable roof system on Grape Street.

P3a. Description, continued:

Offset Duplex Units: The offset duplex residential units are comprised of two, rectangular-massed one-story buildings measuring approximately 55 feet long by 25 feet wide. The adjoining buildings share a common wall but are set approximately five feet off center from each other. The buildings are set on a raised foundations created by poured concrete walls. The exterior walls are clad with a semi-rough stucco siding, and the original metal-frame casement windows units have been removed and replaced with modern composite units. There are no remaining offset duplex units with flat roof systems in the housing complex.

Offset duplex unit on Utah Street.

Mature trees along Utah Street. View looking south.

P3a. Description, continued:

Two-Bedroom Duplex Units: The larger duplex residential units are comprised of two, rectangular-massed one-story buildings measuring approximately 65 feet long by 25 feet wide that are comprised of two separate units conjoined end-to-end. The buildings are set on a raised foundations created by poured concrete walls. The exterior walls are clad with a semi-rough stucco siding, and the original metal-frame casement windows units have been removed and replaced with modern composite units. All the residential units were constructed with flat roof systems, and it appears that all the duplex units that had parapet walls were altered with the installation of a medium-pitch gable roof system.

Two-bedroom duplex unit on Blaine Alley.

Two-bedroom duplex unit on Utah Street.

P3a. Description, continued:

There are also seven buildings that are not used as residential units within the complex:

Building that houses KUCR radio (1941 duplex residence) - Linden Street

Building that houses Resident Services (constructed circa 1978) - Avocado Street

Maintenance yard building (constructed circa 1965) - west of Avocado Street

P3. Description, continued:

Carpentry Shop (1941) - between Utah and Avocado Streets

Resident Laundromat (circa 1948) - Florida Street

Park/playground picnic pavilion (1964) - at intersection of Cherry and Florida Streets
CCH complex warehouse and storage yard (circa 1948) - Kentucky Street

P3. Description, continued:

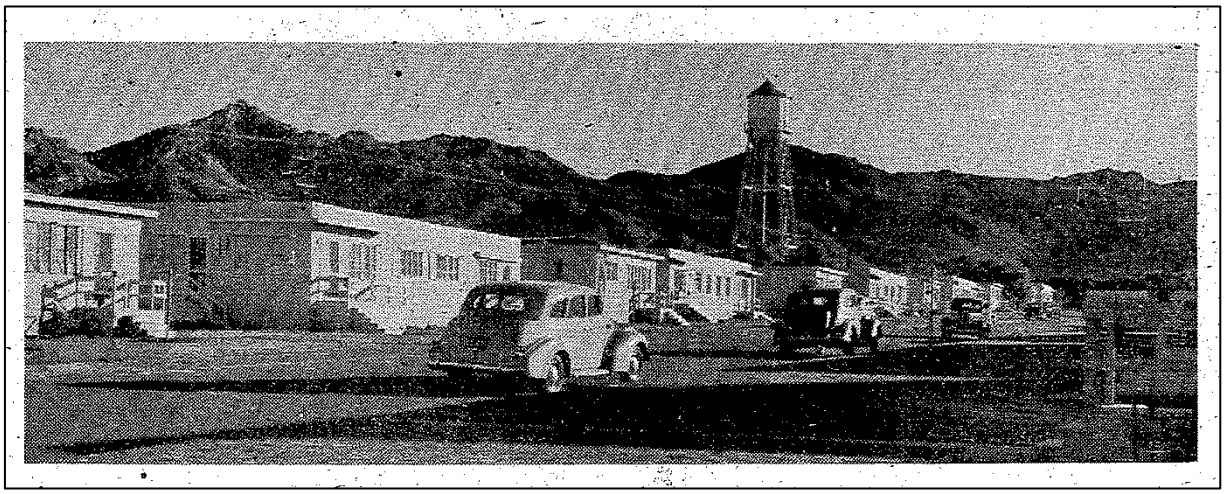
CCH complex warehouse and storage yard (circa 1948) - Kentucky Street

B10. Statement of Significance, continued:

The view of urban planners and social workers was that good housing would greatly improve the quality of life for slum dwellers by providing safe and clean living conditions and lift them from the lowest segment of society. However, it should be noted, and has been discussed in depth by social activists, "public housing was not originally built to house the 'poorest of the poor', but was intended for select segments of the working class." The Housing Act was designed to benefit a section of the white middle class that had been displaced during the Great Depression.

With the U.S. Housing Act of 1937 in place, the California Legislature passed the Housing Authorities Law in 1938, to create legislation enabling the formation of housing authorities in California. The law allowed a local housing authority be considered a "public corporation" and to hold the powers of owning land, issuing bonds, and use of eminent domain to obtain property for the public good. With federal and state legislative support, cities and counties could construct large public housing projects with Federal assistance.

The Federal Public Housing Authority began a campaign to have the CCH complex taken under local control in 1942. The Public Housing Authority first approached the City of Riverside to "assume custody" of the complex, but was turned down as the housing project was located outside of the City limits. The City of Riverside, County of Riverside, the U.S. Army, and the Federal Public Housing Authority came together in November of 1942 to create a housing authority that would build much needed housing units with monies from the Federal Government. The meeting led to the creation of the Riverside County Housing Authority that same month. "The housing authority was set up with the idea of alleviating the acute shortage of living accommodations in various parts of the county". G. Stanley Wilson, an established local architect (Mission Inn, Riverside Municipal Auditorium, Old City Hall – Fullerton) was named the first chairman of the Riverside County Housing Authority. The administrative control of the CCH complex was passed to the Housing Authority of the County of Riverside (HACR) in 1942.



Canyon Crest Housing in 1943. "A view in Canyon Crest Heights, build to help relieve the housing shortage for civilian defense workers and families of soldiers". Based upon the location of the water tank and tower, this view was taken looking east at the units along the north side of Blaine Alley. (Source: *Riverside Daily Press,* September 25, 1943)

Once the CCH was under the HACR, the HACR could apply for funds available from the Community Facilities Act of 1940 (Lanham Act) that provided federal monies to communities where local resources couldn't match the needs of the soaring increases in population resulting from military defense efforts in a community. The Lanham Act provided money for the building of temporary housing units and associated infrastructure systems such as water and sanitation plants, hospitals, as well as nursery schools, day care centers, recreation facilities and schools. Due to the number of women who entered the workforce to support war efforts, the establishment of nursery schools and day care centers became imperative to allow women to leave their young children to become factory workers, general laborers, and municipal workers. A nursery school was established at the CCH complex at 756 Linden Street in 1943, and was overseen by the Riverside City School District. "Approximately 30 children between the ages of two and five are cared for daily by certified instructors. The schedule of the daycare facility called for the "care of children of working mothers 12 hours daily, six days a week". (See Continuation Sheet for additional text.)

B10. Statement of Significance, continued:

By 1945, the HARC had established at the CCH complex a community hall where motion pictures were shown, a grocery store, a local community newspaper, and activities such as the Girl and Boy Scouts, Brownies and Cub Scouts, a women's club, and a Sunday school. With the surrender of Germany in May of 1945, the needs of public housing in the postwar era began to be viewed as that to be made available to the underprivileged, and rents would be based on tenants' income levels. Fred B. Prakel of the regional office of the Federal Public Housing Authority (predecessor to the Department of Housing and Urban Development) stated at a meeting in Riverside that "many people in this country live below the level that people in a democracy should live. Therefore, in order to provide those persons adequate housing at a rent they can pay, the government must establish a subsidy". As a result, after the end of World War II, the tenants directly associated with the military bases at CCH slowly departed, and were replaced by public assistance clients who needed help with housing in the very tight housing market. (Toward the end of World War II, and immediately after, tenants of the two-bedroom units at CCH had been urged to rent out the second bedroom of their units to defense workers.)

The CCH complex had been scheduled for disposition by the Federal Public Housing Authority and the HACR after the end of World War II, but with the breakout of hostilities in Korea in the early 1950s, the Government retained the property for use by those working in defense efforts and who needed housing assistance in Riverside.

Simultaneously, the Regents of the University of California decided to expand the University of California Citrus Experiment Station that had been established in Riverside in 1907, with the construction of the College of Letters and Science in 1954. Dr. Gordon S. Watkins, Provost of the University of California at Riverside (UCR), made an offer to the HACR to take over the CCH complex for the future university complex. Dr. Watkins stated that the housing complex would allow the university to offer inexpensive housing to faculty, non-academic professionals, and military families taking advantage of the G.I. Bill. As CCH was owned by the U.S. Government, UCR would require the U.S. Congress to approve the sale. After two years of negotiations, the CCH complex was formally transferred to UCR in July 1955 for the fair market price of $600,000. UCR was required to let the current tenants stay as long as needed, and members of the university could only move into the units as vacancies occurred.

A picnic pavilion and restroom facility was constructed within the CCH complex in 1964, and one of the duplex residential buildings of the CCH complex on Linden Street became the home of the student FM radio station KUCR in 1966.

The CCH complex, now known as the Canyon Crest Family Student Housing complex, was constructed outside of the city limits of Riverside, by the U.S. Army Corps of Engineers in 1940-1941 in conjunction with the building of Camp Haan, just to the south in the Moreno Valley. Camp Haan was built as a preemptive measure to bolster defensive forces on the West Coast due to concerns of armed invasion by Japan. The residential housing complex was constructed for personnel of both Camp Haan and March Air Field. It was quickly occupied by military personnel and their families, but within just a year, the U.S. Army passed control of the property to the Federal Public Housing Authority. They, in turn with legislation passed in 1937 for the creation of public housing, assisted Riverside County in creating their own public housing authority and taking over responsibility for the management of CCH. HACR managed the property day-to-day, and instituted social programs and activities that included a nursery school operated under the auspices of the Riverside City School District. HACR managed the property until 1954 when it was sold by an act of Congress to UCR.

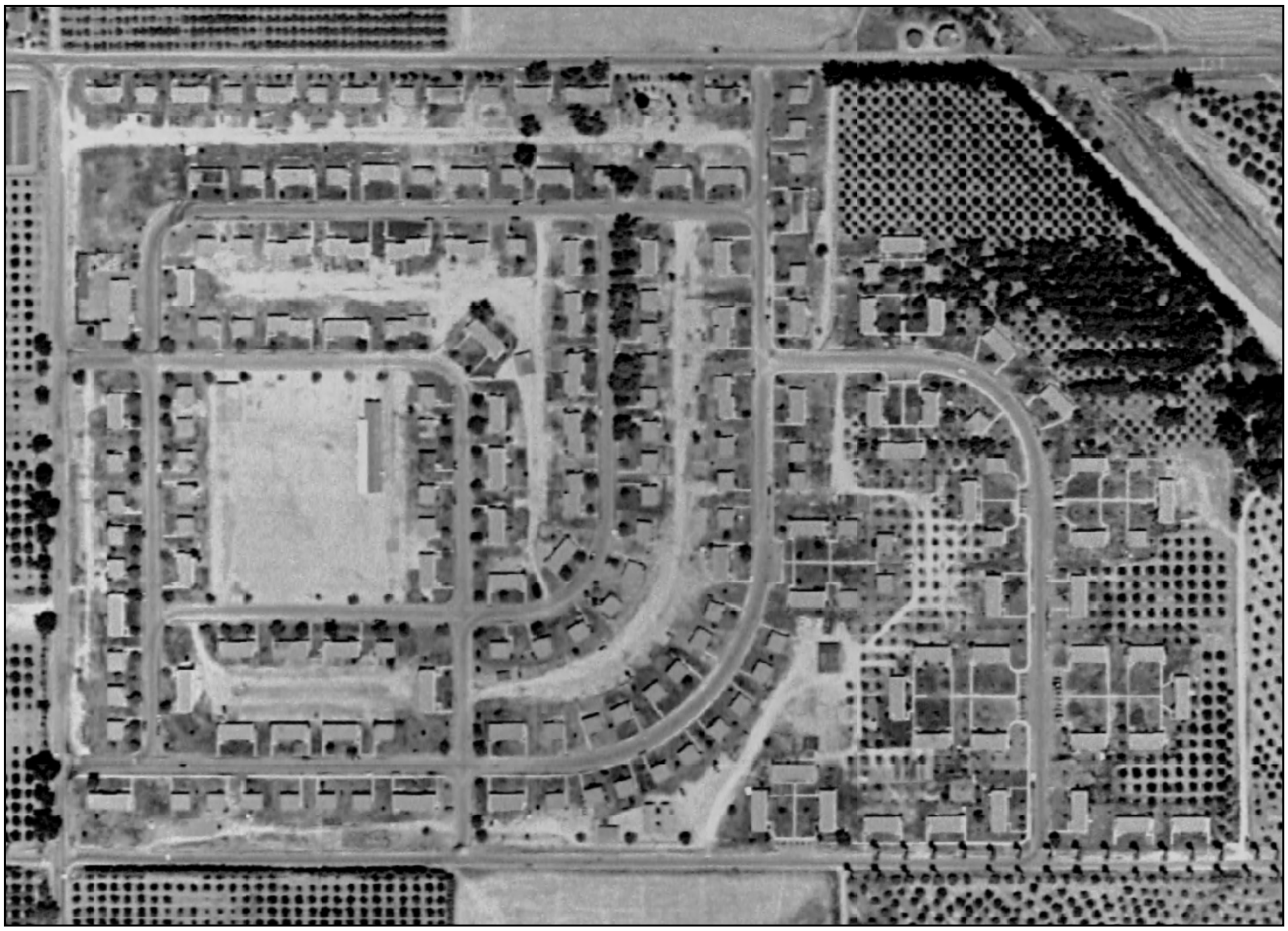
Under the criterion for evaluating the Canyon Crest Family Student Housing complex for listing in the National Register or California Register for its association with events that have made a significant contribution to the broad patterns of history in the cultural heritage of Riverside County, California or the United States, the complex does not appear eligible for listing as a historical resource. The subject property was not found to have been directly associated with the military activities undertaken to protect the West Coast from an attack from Japan, or with the actual wartime training activities of March Air Field or Camp Haan. The CCH complex was located away from the military bases so that the residents could take advantage of the shopping, social, and educational resources available in the City of Riverside, which were severely lacking in the Moreno Valley area. The CCH complex merely played a supporting role in the war effort by providing housing for persons associated with the military bases. The CCH property does not appear to meet the guidelines for listing in the California Register under Criterion 1 as a historical resource significant in the history of the region. The property does not appear to present the qualities important to the nationwide history of "home front" activities of World War II, which would make the property eligible for listing in the National Register under Criterion A. (See Continuation Sheet for additional text.)

B10. Statement of Significance, continued:

Under the criterion for evaluating properties for listing in the National Register or California Register for their association with the lives of persons important to the history of Riverside County, California, or the United States, the CCH complex property does not appear eligible for listing in the National Register under Criterion B, or the California Register under Criterion 2. We could find no evidence that individuals or tenants associated with the property were persons identified as having a direct effect to history of the region, state, or nation.

Per the criterion for evaluating built-environment structures, it is apparent that the individual buildings of CCH, and the complex as a whole, have not retained sufficient levels of integrity necessary to present the structural characteristics and features required to be a strong representative of a housing complex constructed by the U.S. Army Corps of Engineers in the days leading up to the entrance of the United States into World War II. The individual units were designed using a Minimalist and modest style of architecture that could be constructed as quickly and inexpensively as possible, even though it was to be a permanent residential community. Alterations made later to the individual units when owned by UCR, substantially changed the residential units appearance by removing the original windows, changing the type of roof on the majority of the units, and adding decorative clapboard elements to the exterior facades where none had previously been placed. The property does not appear eligible for listing in the California Register under Criterion 3, or in the National Register under Criterion C, as an example of a World War II-era housing complex. The CCH complex has not retained the aspects of physical integrity that include design, setting, materials, workmanship, and feeling, that are required to be present to convey a properties historic significance.

The Canyon Crest Housing complex has not yielded, nor does it appear to have the potential to yield, information important to the history of the local area, California or the nation. The property does not appear eligible for listing in the National Register under Criterion D, or the California Register under Criterion 4.



Aerial view of Canyon Crest Housing complex in 1948. (NETR Historic Aerials)

B12. References:

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"WPA to Develop Old Elsinore Road". February 17, 1941.
"Manager Named for Blain Street Housing Project". March 10, 1941.
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"Housing Authority Has First Meeting". December 1, 1942.
"Housing Authority Has Meeting at Canyon Crest". December 17, 1942.
"Nursery School Project Outlined". June 29, 1943.
"Schools and Labor Problems Studied". October 4, 1943.
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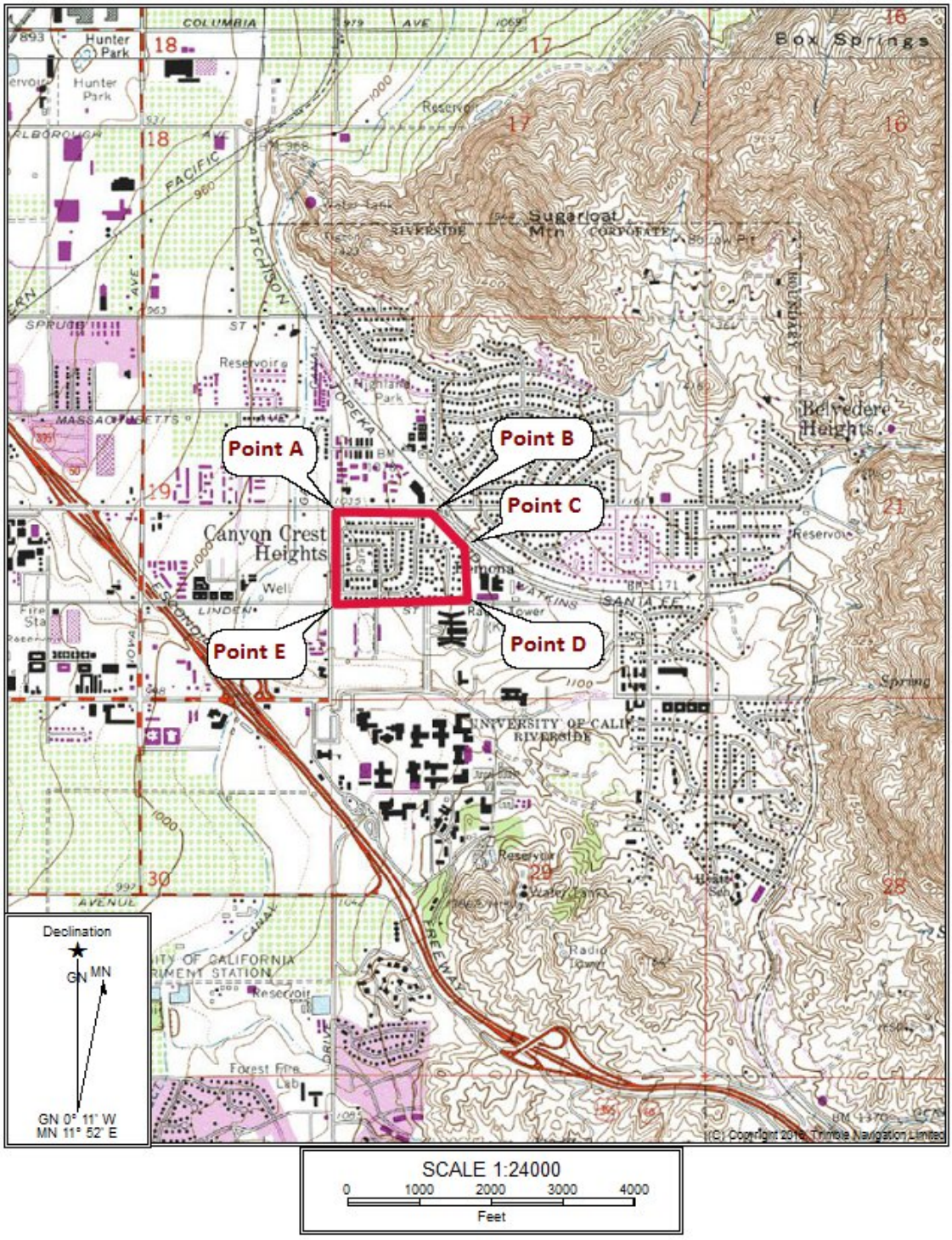
State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION	Primary #: 33-11475 UPDATE HRI#
LOCATION MAP	Trinomial

Page 14 **of** 14 ***Resource Name:** Canyon Crest Family Student Housing Complex

***Map Name:** Riverside East ***Scale:** 1:24,000 ***Date of Map:** 1980



APPENDIX D

Tribal Cultural Resources Correspondence

NORTH DISTRICT AND PHASE 1 HOUSING

March 29, 2018

AB52 TRACKING

Item/Action/Description	Date	AB52 Time Frame	UCR Response (Begin consultation w/i 30 days)	Step
Sacred Lands File Request (via Email)	3/19/18 Recvd response 3/21	n/a		pre
Notices to Tribes (2) • Agua Caliente Band of Cahuilla (ACBCI) *FedEx 3/23/18* • Soboba Band of the Luiseno Indians *Registered 3/23/18* • Torres-Martinez Desert Cahuilla (TMDCI) *Registered 3/23/18*	 Email Read 3/22 FedEx 3/26 11:59 Email Read 3/22 Del 3/27/18 Email Del 3/22 Del 3/26/18	(Respond to UCR w/i 30 days) √ No response No response	 N/A N/A N/A	2
ACBCI • Email no consultation requested	4/2/18		Closed 4/5	
Soboba • No response by 4/28			Email 5/8	
Torres-Martinez • No response by 4/27			Email 5/8	

*NOTE: Use receipt in future email correspondence.

Planning and Budget
Capital Asset Strategies
1223 University Avenue, Suite 240
Riverside, CA 92521

March 22, 2018

Patricia Garcia, Director of Tribal Historic Preservation Office
Agua Caliente Band of Cahuilla Indians
5401 Dinah Shore Drive
Palm Springs, California 92264

ACBCI-THPO@aguacaliente.net

Subject: Assembly Bill (AB) 52 Consultation (Public Resources Code §21080.3.1) – UC Riverside North District Project, Riverside County, California

Dear Ms. Garcia:

The University of California, Riverside (UCR) is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the proposed North District Project to be located on approximately 50 acres in the eastern portion of the campus, in the City of Riverside, Riverside County. The project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject to the statutory requirements of Senate Bill 18.

The project site is generally located north of Linden Street, east of Canyon Crest Drive, south of Blaine Street, and west of the UCR Corporation Yard and Child Development Centers on the UCR campus (refer to Exhibit 1 and Exhibit 2, attached). The project site consists of land previously developed (1943) and used by the campus for family housing, including parking, roadways, walkways and adjacent landscaped areas. The proposed project will demolish or remove the existing facilities from the site. New construction will include campus housing, mixed support uses, parking, an athletic facility, and adjacent landscaped areas, including utilities. The project site is located within Section 20, Township 2 South, Range 4 West of the USGS Riverside East, CA 7.5 Minute Quadrangle.

A Historic Resource Evaluation Report (Daly & Associates, 3/2017) and a Phase 1 Cultural Resources Assessment (Psomas, 3/2017) were completed for this property and are available here: http://cpp.ucr.edu/environmental/reference.html.

Assembly Bill (AB) 52 requires lead agencies to consult with California Native American Tribes that request such consultation in writing prior to the agency's release of a Notice of Preparation (NOP) of an Environmental Impact Report (EIR), or notice of a Mitigated Negative Declaration (MND), or Negative Declaration (ND) on or after July 1, 2015. UCR received your September 16, 2015 letter requesting formal notification of proposed projects within the Agua Caliente Band of Cahuilla Indians Traditional Use Area. This letter is intended as formal notification of the proposed Project pursuant to AB 52.

Your participation in this local planning process is important. The Sacred Lands File Search (SLF) conducted by the Native American Heritage Commission (NAHC) for the project had negative results. If you possess any information or knowledge regarding Native American Sacred Lands or other tribal cultural resources in and around the project site, and wish to consult with the UCR regarding these resources or mitigation measures to reduce impacts of the project, please direct your email to ceqa@ucr.edu or any correspondence on this matter to:

Tricia D. Thrasher, ASLA, LEED AP
Principal Environmental Planner
University of California, Riverside
Capital Asset Strategies – Campus Planning
1223 University Avenue, Suite 240
Riverside, CA 92507-7209

AB 52 allows Tribes 30 days after receiving notification to request consultation. Should we not receive a response within 30 days, we will presume that you have declined consultation.

Please let me know if you have any questions or would like to discuss this proposed project. I can be reached by phone at (951) 827-1484. Thank you for your interest on projects at UCR.

Respectfully,

Tricia D. Thrasher, ASLA, LEED AP
Principal Environmental Planner

Planning and Budget
Capital Asset Strategies
1223 University Avenue, Suite 240
Riverside, CA 92521

March 22, 2018

Michael Mirelez, Cultural Resource Coordinator
Torres Martinez Desert Cahuilla Indians
P. O. Box 1160
Thermal, California 92274

mmirelez@tmdci.org

Subject: Assembly Bill (AB) 52 Consultation (Public Resources Code §21080.3.1) – UC Riverside North District Project, Riverside County, California

Dear M. Mirelez:

The University of California, Riverside (UCR) is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the proposed North District Project to be located on approximately 50 acres in the eastern portion of the campus, in the City of Riverside, Riverside County. The project does not require a General or Specific Plan amendment or adoption; therefore, the project is not subject to the statutory requirements of Senate Bill 18.

The project site is generally located north of Linden Street, east of Canyon Crest Drive, south of Blaine Street, and west of the UCR Corporation Yard and Child Development Centers on the UCR campus (refer to Exhibit 1 and Exhibit 2, attached). The project site consists of land previously developed (1943) and used by the campus for family housing, including parking, roadways, walkways and adjacent landscaped areas. The proposed project will demolish or remove the existing facilities from the site. New construction will include campus housing, mixed support uses, parking, an athletic facility, and adjacent landscaped areas, including utilities. The project site is located within Section 20, Township 2 South, Range 4 West of the USGS Riverside East, CA 7.5 Minute Quadrangle.

A Historic Resource Evaluation Report (Daly & Associates, 3/2017) and a Phase 1 Cultural Resources Assessment (Psomas, 3/2017) were completed for this property and are available here: http://cpp.ucr.edu/environmental/reference.html.

Assembly Bill (AB) 52 requires lead agencies to consult with California Native American Tribes that request such consultation in writing prior to the agency's release of a Notice of Preparation (NOP) of an Environmental Impact Report (EIR), or notice of a Mitigated Negative Declaration (MND), or Negative Declaration (ND) on or after July 1, 2015. UCR received your May 2, 2016 letter requesting formal notification of proposed projects within the Torres Martinez Desert Cahuilla Indians Traditional Use Area. This letter is intended as formal notification of the proposed Project pursuant to AB 52.

Your participation in this local planning process is important. The Sacred Lands File Search (SLF) conducted by the Native American Heritage Commission (NAHC) for the project had negative results. If you possess any information or knowledge regarding Native American Sacred Lands or other tribal cultural resources in and around the project site, and wish to consult with the UCR regarding these resources or mitigation measures to reduce impacts of the project, please direct your email to ceqa@ucr.edu or any correspondence on this matter to:

Tricia D. Thrasher, ASLA, LEED AP
Principal Environmental Planner
University of California, Riverside
Capital Asset Strategies – Campus Planning
1223 University Avenue, Suite 240
Riverside, CA 92507-7209

AB 52 allows Tribes 30 days after receiving notification to request consultation. Should we not receive a response within 30 days, we will presume that you have declined consultation.

Please let me know if you have any questions or would like to discuss this proposed project. I can be reached by phone at (951) 827-1484. Thank you for your interest on projects at UCR.

Respectfully,

Tricia D. Thrasher, ASLA, LEED AP
Principal Environmental Planner

AGUA CALIENTE BAND OF CAHUILLA INDIANS

TRIBAL HISTORIC PRESERVATION

02-032-2018-002

April 02, 2018

[VIA EMAIL TO:tricia.thrasher@ucr.edu]
University of CA, Riverside
Ms. Tricia Thrasher
1223 University Avenue, Suite 240
Riverside, CA 92507-7209

Re: AB 52- UC Riverside North District

Dear Ms. Tricia Thrasher,

The Agua Caliente Band of Cahuilla Indians (ACBCI) appreciates your efforts to include the Tribal Historic Preservation Office (THPO) in the UC Riverside North District project. The project area is not located within the boundaries of the ACBCI Reservation. However, it is within the Tribe's Traditional Use Area. For this reason, the ACBCI THPO requests the following:

> *We have no interest in this site. However, if the Applicant discovers archaeological remains or resources during construction, the Applicant should immediately stop construction and notify the appropriate agency and the Tribe.

Again, the Agua Caliente appreciates your interest in our cultural heritage. If you have questions or require additional information, please call me at (760)699-6829. You may also email me at ACBCI-THPO@aguacaliente.net.

Cordially,

Katie Croft

Katie Croft
Cultural Resources Manager
Tribal Historic Preservation Office
AGUA CALIENTE BAND
OF CAHUILLA INDIANS

From: Tricia D Thrasher
To: Croft, Katherine (TRBL)
Subject: RE: AB 52- UC Riverside North District
Date: Thursday, April 5, 2018 11:33:57 AM

Dear Mx. Croft –

Thank you for your letter. We will inform you if any archaeological remains or resources are discovered during construction.

We consider this AB52 consultation for the UCR North District project complete.

…Tricia

Tricia D. Thrasher, ASLA, LEED AP
Principal Environmental Planner
UNIVERSITY OF CALIFORNIA, RIVERSIDE
Capital Asset Strategies - Campus Planning
951.827.1484

-----Original Message-----
From: Croft, Katherine (TRBL) <kcroft@aguacaliente.net>
Sent: Monday, April 2, 2018 9:40 AM
To: Tricia D Thrasher <tricia.thrasher@ucr.edu>
Subject: AB 52- UC Riverside North District

If you have any questions about the attached letter please feel free to contact me.

Thank you,

Katie Croft
Cultural Resources Manager
Agua Caliente Band of Cahuilla Indians
5401 Dinah Shore Drive
Palm Springs, CA 92264
760-699-6829 Office
760-413-6253 Cell
kcroft@aguacaliente.net

From: Tricia D Thrasher
To: mmirelez@tmdci.org
Subject: AB 52 - Complete - UC Riverside North District
Date: Tuesday, May 8, 2018 11:06:15 AM
Attachments: image003.png

An AB 52 notification concerning the UCR North District project was transmitted to you via email on March 22, 2018 and certified mail with delivery on March 26, 2018.

Since it is over 30 days since the notification, we consider this AB 52 consultation for this project complete.

…Tricia

Tricia D. Thrasher, ASLA, LEED AP
Principal Environmental Planner

UNIVERSITY OF CALIFORNIA
UC RIVERSIDE

Capital Asset Strategies - Campus Planning

University Village
1223 University Avenue Suite 240
Riverside, Ca 92507-7209

951.827.1484 | tricia.thrasher@ucr.edu

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710

March 21, 2018

Tricia D. Thrasher
University of California, Riverside

Sent via e-mail: tricia.thrasher@ucr.edu

RE: Proposed UCR North District Project, City of Riverside; Riverside East USGS Quadrangles, Riverside County, California

Dear Ms. Thrasher:

Government Code §65352.3 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of protecting, and/or mitigating impacts to cultural places in creating or amending general plans, including specific plans. Attached is a consultation list of tribes traditionally and culturally affiliated with the area that may have cultural places located within the boundaries of the project referenced above.

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results however the area is sensitive for cultural resources. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes on the attached list, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst