

3.1 AESTHETICS

This section describes the existing visual characteristics of the LRDP area and evaluates the potential of the 2021 LRDP to result in substantial adverse visual impacts. The visual impact analysis considers existing scenic resources and the potential for public views to be affected by the project.

Comments received on the NOP (See Appendix B) related to aesthetics identified concerns regarding the change in visual character (including trees) and changes to existing scenic vistas, views, and corridors, as well as potential impacts to the Great Meadow and East Meadow within the main residential campus. All aesthetic-related comments are addressed, where appropriate, in the environmental analysis of this section.

3.1.1 Regulatory Setting

FEDERAL

There are no federal programs or policies addressing visual resources that pertain to the 2021 LRDP.

STATE

California Scenic Highway Program

California's Scenic Highway Program was created by the California Legislature in 1963 and is managed by the California Department of Transportation (Caltrans). The goal of this program is to preserve and protect scenic highway corridors from changes that would affect the aesthetic value of the land adjacent to highways. A highway may be designated "scenic" depending on how much of the natural landscape travelers can see, the scenic quality of the landscape, and the extent to which development intrudes on travelers' enjoyment of the view (Caltrans 2008). There are no officially designated State scenic highways in Santa Cruz County (Caltrans 2011). The closest State-designated scenic highway are segments of California SR-1 located in Monterey County (Caltrans 2020) over 25 miles to the south and outside the project viewshed.

California Coastal Act

The California Coastal Act of 1976 (Pub. Resources Code §30000-30900) was enacted with goals to protect, maintain, enhance, and restore the quality of the coastal zone environment as well as its natural and manmade resources, assure conservation of coastal zone resources, and protect the ecological balance of the coastal zone and prevent its deterioration and destruction (CCC 2019). Chapter 3 of the California Coastal Act includes coastal resources planning and management policies. Chapter 3, article 6, "Development," include the following requirements related to scenic and visual resources:

- ▶ **Section 30251:** The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.
- ▶ **Section 30254:** New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works

facilities can accommodate only a limited amount of new development, services to coastal-dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.

- ▶ A portion of the main residential campus and the Westside Research Park are located in the coastal zone and are subject to requirements in the California Coastal Act for the protection of visual resources.

UNIVERSITY OF CALIFORNIA

Design Review Process

The UC initiated independent design and cost review of building plans in 1985 in response to concerns about the design quality management of a rapidly growing capital improvement program. Current UC policy requires independent architectural design review and independent cost estimates of projects when a total project cost exceeds \$5 million. The policy requires design reviews to be performed early in the design process, at suitable intervals during design, and at the time of completion of design. Selection of the review or reviewers and the format for the design review process are left to the discretion of the Chancellor.

Design review of projects is conducted by the UC Santa Cruz Design Advisory Board, which is comprised of outside design professionals. The Design Advisory Board reports to and advises the Chancellor and Executive Vice Chancellor through the Advisory Committee for Campus Planning and Stewardship (CPS) and advises building committees with the assistance of the Campus Architect and Campus Planner. The Design Advisory Board reviews projects and planning proposals on all properties administered by the Santa Cruz campus including the main residential campus, Westside Research Park, Silicon Valley Center; Coastal Science Campus, Lick Observatory at Mount Hamilton, Big Creek Natural Reserve, and UC Monterey Bay Education, Science, and Technology Center (UC MBEST). At a minimum, consultation with the Design Advisory Board begins when a project's site is initially under consideration, with periodic reviews during Schematic Design, Design Development and Construction Documents, of major projects (UC Santa Cruz 2020).

At UC Santa Cruz, the responsibilities of the Design Advisory Board include the following:

- ▶ To assure compatibility with the approved Long Range Development Plan and supporting planning documents that have been adopted by the campus.
- ▶ To review planning studies, proposed building designs and siting alternatives for compatibility with their settings and appropriateness to their functional programs and budgets.
- ▶ To ensure that proposals for new projects are presented in a broad context, with due consideration given at all points of project development to issues of landscape design, circulation, and environmental protection.
- ▶ To review all aspects of exterior urban and landscape design and to provide guidance to the design teams, building committees, and the campus planning committee.
- ▶ To identify and articulate to the campus community planning and design issues critical to ongoing campus development.

UC Santa Cruz Campus Standards Handbook

The UC Santa Cruz Campus Standards Handbook is provided to UC Santa Cruz consultants for guidance in preparation of construction documents for projects. The handbook outlines building and site specification requirements related to products and design constraints for all construction activities. Design constraints are complementary to specific project and program requirements and may be modified by a project manager. While the standards of the handbook focus on areas of functionality and durability, sections related to site requirements, such as exterior lighting standards, tree protection, landscaping, planting, and trash collection relate to and correspond with campus aesthetics. Standards related to design and aesthetics are included below:

Exterior Lighting Standards

Provide lighting along paths to adequately illuminate the pathway. Site lighting with non-glare, downlighting characteristics is preferred for all areas around buildings, especially at housing areas. Forest areas should be illuminated with non-directional fixtures that provide light throughout the surrounding area.

Landscape General Design

- A. Landscape areas should contribute to the identity of each particular college or building complex. New landscaping at existing buildings should conform to or complement the existing character of planting.
- B. The design of each particular college or building complex should be sensitive to, and complementary of, any existing sensitive vegetation and mature specimen trees. All landscaping should endeavor to enhance the natural beauty of the site and to establish or preserve the identity of each college and / or building complex.
- C. The landscape design shall provide for bicycle parking and circulation as well as for pedestrian circulation.
- D. Personal security should be enhanced in the landscape design by maintaining visibility. Avoid creating darkened or hidden areas, both in design and plant selection.

Landscape General Planting

- A. Planting areas outside building compounds should relate to the surrounding native plant community and utilize native plants, closely related species, or, in specific and limited locations, ornamentals successfully used on campus.
- B. Planting areas within building compounds should respond to the uses and functions of the buildings and spaces: providing sunny seating areas, shady resting areas, colorful entries, and screening or buffers when necessary. Plant sizes should be chosen to assure long term adaptability to specific site locations.
- C. Ground covers and vegetation shall be designed to minimize erosion.
- D. Do not use decomposed granite or gravel at paths within developed areas or adjacent to buildings. These materials migrate onto lawns and into building entry systems, creating maintenance problems.

Lawn Areas

- A. Minimize lawn areas to conserve water usage on campus within a new building complex. (General lawn areas are to be specified according to each particular project program requirements.) When lawn areas are provided, provide a few larger areas of lawn, as opposed to many smaller patches of lawn, in order to minimize maintenance costs.
- B. In layout of lawn areas and other specialized landscape areas, consider the ease of lawn mower or other maintenance equipment access to such areas.

UC Santa Cruz Physical Design Framework

The UC Santa Cruz Physical Design Framework was prepared in 2010 as part of the "pilot phase" of the process redesign for approving capital improvement projects. Described as more evocative than prescriptive, the Physical Design Framework encourages an approach of "structured improvisation." The document has been structured to convey a vision of campus lands, and to propose a series of design guidelines intended to ensure that the future area planning studies, building and siting decisions, and building and infrastructure designs remain true to that vision (UC Santa Cruz 2010). The following guidelines presented in the Physical Design Framework are relevant to scenic and visual resources:

Meadow Areas

- ▶ Maintain the continuity and visual "sweep" of the meadow landscape across the lower campus, from the Pogonip east of the campus to Wilder Ranch State Park on the west.
- ▶ Do not permit new plantings or plant succession to change the overall visual character of the lower campus meadows. Avoid new fencing, except where necessary to manage meadows or grasslands.

- ▶ Preserve the integrity of meadows by maintaining a clear meadow boundary. Site development so as not to encroach on the meadow open space.
- ▶ Consider opportunities to manage, restore and enhance native meadow habitat as appropriate to maintain the visual expanse of open space and natural vegetative and wildlife diversity.
- ▶ Consider long-range views in the siting and design of facilities, both south towards the ocean and north towards the forest edge, particularly where the meadows meet the forest edge.

Forests and Forest Edge Areas

- ▶ Build carefully in the forest. Make development compatible with existing vegetation.
- ▶ Build no taller than the surrounding tree canopy.
- ▶ Consider the visual continuity of the forest edge as seen from a distance when designing buildings there. Maintain heights of buildings and infrastructure elements significantly below the tree line.
- ▶ Design nighttime lighting in the forest to provide a safe environment while minimizing light pollution and intrusion into wildlife habitats.
- ▶ Arrange building elements and clusters to create an irregular building profile against the forest edge. Avoid long, unbroken horizontal roof lines.
- ▶ Choose exterior colors to blend with the forest edge. Avoid using bright colors or highly reflective exterior surfaces.
- ▶ Use plant materials, either existing or newly planted, to blend new development appropriately into the forest edge.
- ▶ Incorporate the dramatic sense of transition when moving between the shade of the forest and light of the meadow into the design of buildings there.
- ▶ Site and design future development to preserve the visual and ecological integrity of the forest, to maintain a contiguous forest cover and habitat for wildlife, and to maintain public safety. Protect trees and understory vegetation of mixed age and species to maintain forest diversity.
- ▶ During project planning, identify trees and tree clusters of particular aesthetic value and incorporate them in the design.
- ▶ Consider the visual continuity of the forest edge as seen from a distance when designing buildings there. Maintain heights of buildings and infrastructure elements significantly below the tree line.
- ▶ Choose exterior colors to blend with the forest edge. Avoid using bright colors or highly reflective exterior surfaces.

Areas in and near the Cowell Lime Works Historic District

- ▶ Preserve the historic buildings and landscape around the campus entrance as important remnants of local history, emblematic of the historic use of the site. Protect the historic integrity of the structures by matching program uses to historic structures to avoid alterations that adversely affect the historic character of the district.
- ▶ Preserve and enhance landscape setting elements that contribute to the district's historic feeling and association. Avoid introduction of incompatible ancillary elements (e.g., fences, lights, signs, site furniture).

Guidelines Related to Topography, Geology, and Hydrology

- ▶ Limit grading beyond project footprint to reduce impacts on existing trees, vegetation, and landscape. Avoid highly geometric grading patterns, transition gradually from constructed slopes to original topography.
- ▶ During project planning, identify trees and tree clusters of particular aesthetic value and incorporate them in the design.

General Building and Siting Design

- ▶ Site buildings so as to protect visually and ecologically significant landscape features.
- ▶ Avoid free-standing single buildings set as objects in the landscape. When a building's program or scale requires a single building, and particularly when it is anticipated to be a first phase with future additions, design the building to anticipate future clustering.
- ▶ Build no taller than the surrounding tree canopy.
- ▶ Make buildings that allow all their users to engage with their surroundings, by means of careful window placement, use of outdoor "rooms," construction of roof terraces, and the like.
- ▶ Design buildings to respond to both the natural and the built elements of UC Santa Cruz's complex visual environment, reflecting its variety and richness without disrupting its cohesion.
- ▶ Use exterior building materials and massing that integrate visually with the surrounding landscape.
- ▶ Design buildings and other facilities within or adjacent to clusters, whether new or existing, using massing, height, materials, and color that relate sensitively to each other and to their natural surroundings.
- ▶ Visually screen service functions and delivery areas from public spaces and pedestrian ways.
- ▶ Incorporate a mix of uses into new housing complexes, creating distinct "college-like" communities for living and learning.

Roads and Paths

Adapt roads, paths, and bridges to their terrain and to nearby dominant trees. Use grading and planting to screen road alignments, particularly through sensitive viewsheds. Where possible, align roads and paths to reveal and emphasize unique and character defining landscape elements: special plant communities, limestone outcroppings and views.

LOCAL

As noted in Section 3.0.1, "University of California Autonomy," UC Santa Cruz, a constitutionally created State entity, is not subject to municipal regulations of surrounding local governments for uses on property owned or controlled by UC Santa Cruz that are in furtherance of the University's educational purposes. However, UC Santa Cruz may consider, for coordination purposes, aspects of local plans and policies of the communities surrounding the campus when it is appropriate and feasible, but it is not bound by those plans and policies in its planning efforts.

County of Santa Cruz General Plan

The County of Santa Cruz General Plan (1994) contains the following policies related to visual resources in the county that may be relevant to the 2021 LRDP:

- ▶ **Policy 5.10.2: Development within Visual Resource Areas.** Recognize that visual resources of Santa Cruz County possess diverse characteristics and that the resources worthy of protection may include, but are not limited to, ocean views, agricultural fields, wooded forests, open meadows, and mountain hillside views. Require projects to be evaluated against the context of their unique environment and regulate structure height, setbacks and design to protect these resources consistent with the objectives and policies of this section. Require discretionary review for all development within the visual resource area of Highway One, outside of the Urban/Rural boundary, as designated on the GP/LCP Visual Resources Map and apply the design criteria of Section 13.20.130 of the County's zoning ordinance to such development.
- ▶ **Policy 5.10.3: Protection of Public Vistas.** Protect significant public vistas as described in policy 5.10.2 from all publicly used roads and vista points by minimizing disruption of landform and aesthetic character caused by grading operations, timber harvests, utility wires and poles, signs, inappropriate landscaping and structure design. Provide necessary landscaping to screen development which is unavoidably sited within these vistas.

- ▶ **Policy 5.10.4: Preserving Natural Buffers.** Preserve the vegetation and landform of natural wooded hillsides which serve as a backdrop for new development. Also comply with policy 8.6.6 regarding protection of ridgetops and natural landforms.
- ▶ **Policy 5.10.6: Preserving Ocean Vistas.** Where public ocean vistas exist, require that these vistas be retained to the maximum extent possible as a condition of approval for any new development.
- ▶ **Policy 5.10.9: Restoration of Scenic Vistas.** Require on-site restoration of visually blighted conditions as a mitigating condition of permit approval for new development. The type and amount of restoration shall be commensurate with the size of the project for which the permit is issued. Provide technical assistance for restoration of blighted areas.
- ▶ **Policy 5.10.10: Designation of Scenic Roads.** The following roads and highways are valued for their vistas. The public vistas from these roads shall be afforded the highest level of protection.
 - State Highways
 - Route 1 - from San Mateo County to Monterey County
 - Route 9 - from Route 1 to Santa Clara County
 - Route 17 - from Route 1 to Santa Clara County
 - Route 35 -from Route 17 to San Mateo County
 - Route 129 - from Route 1 to San Benito County
 - Route 152 - from Route 1 to Santa Clara County
 - Route 239 -from Route 9 in Boulder Creek to Route 9 at Waterman Gap
 - County Roads
 - Amesti Road - from Varni Road to Browns Valley Road
 - Beach Road - from Highway 1 to Palm Beach
 - Bonita Drive and San Andreas Road - from Highway 1 to Beach Road
 - Bonny Doon Road - from Route 1 to Pine Flat Road
 - Browns Valley Road - from Eureka Canyon Road to Hazel Dell Road
 - Buena Vista Drive - from San Andreas Road to Larkin Valley Road
 - Casserly Road - from Mile marker 1.75 to Highway 152
 - Corralitos Road - from Freedom Boulevard to Browns Valley Road
 - Empire Grade - from the Santa Cruz City limits to the end of Empire Grade
 - East Cliff Drive - from 33rd Avenue to 41st Avenue
 - Eureka Canyon Road - from Highland Way to Corralitos
 - Graham Hill Road - from Lockwood Lane to Route 9
 - Hazel Dell Road - from Browns Valley Road to Mt. Madonna Road
 - Highland Way - from Summit Road to Eureka Canyon Road
 - Ice Cream Grade
 - Martin Road - from Pine Flat to Ice Cream Grade
 - Mt. Hermon Road - from Scotts Valley City limits to Graham Hill Road
 - Mt. Madonna Road - from Gaffey Road to Hazel Dell Road
 - Pine Flat Road - from Bonny Doon Road to Empire Grade
 - Sand Dollar Drive
 - Smith Grade
 - Summit Road - from Highway 17 to Highland Way

- Sunset Beach and Shell Road
 - Swanton Road - from Route 1 at Davenport Landing to Route 1 at Greyhound Rock
- ▶ **Policy 5.10.11: Development Visible from Rural Scenic Roads.** In the viewsheds of rural scenic roads, require new discretionary development, including development envelopes in proposed land divisions, to be sited out of public view, obscured by natural landforms and/or existing vegetation. Where proposed structures on existing lots are unavoidably visible from scenic roads, identify those visual qualities worthy of protection (See policy 5.10.2) and require the siting, architectural design and landscaping to mitigate the impacts on those visual qualities.
- ▶ **Policy 5.10.12: Development Visible from Urban and Scenic Roads.** In the viewsheds of urban scenic roads, require new discretionary development to improve the visual quality through siting, architectural design, landscaping and appropriate signage. (See policies 5.10.18, 5.10.19 and 5.10.20.)
- ▶ **Policy 5.10.13: Landscaping Requirements.** All grading and land disturbance projects visible from scenic roads shall conform to the following visual mitigation conditions:
- Blend contours of the finished surface with the adjacent natural terrain and landscape to achieve a smooth transition and natural appearance; and
 - Incorporate only characteristic or indigenous plant species appropriate for the area.
- ▶ **Policy 5.10.15. Design Review for Public Projects Visible from Scenic Roads.** Require construction and development of any soundwalls and roadside amenities such as turnouts and vista points within or adjacent to Scenic Roads to be reviewed for consistency with the visual resource protection policies of this section and the Zoning ordinance.
- ▶ **Policy 8.6.5. Designing with the Environment.** Development shall maintain a complementary relationship with the natural environment and shall be low-profile and stepped-down on hillsides.
- ▶ **Policy 8.6.6. Protecting Ridgetops and Natural Landforms.** Protect ridgetops and prominent natural landforms such as cliffs, bluffs, dunes, rock outcroppings, and other significant natural features from development. In connection with discretionary review, apply the following criteria:
- (a) Development on ridgetops shall be avoided if other developable land exists on the property.
 - (b) Prohibit the removal of tree masses when such removal would erode the silhouette of the ridgeline form. Consider the cumulative effects of tree removal on the ridgeline silhouette.
 - (c) Restrict the height and placement of buildings and structures to prevent their projection above the ridgeline or treeline. Restrict structures and structural projections adjacent to prominent natural land forms. Prohibit the creation of new parcels which would require structures to project above the ridge line, treeline or along the edge of prominent natural landforms. (See Visual Resources section within the Conservation and Open Space chapter.)
 - (d) Require exterior materials and colors to blend with the natural landform and tree backdrops.

City of Santa Cruz General Plan

The City of Santa Cruz General Plan (2012) contains the following policies related to visual resources in the city that may be relevant to the 2021 LRDP:

- ▶ **Policy CD1.1.2:** Protect the Monterey Bay National Marine Sanctuary and the shoreline and views to and along the ocean, recognizing their value as natural and recreational resources.
- ▶ **Policy CD1.1.4:** Identify and emphasize distinguishing natural features that strengthen Santa Cruz's visual image (i.e., open space, Monterey Bay).
- ▶ **Policy CD1.2.1:** Develop complimentary siting, scale, landscaping, and other design guidelines to protect important public views and ensure that development is compatible with the character of the area.
- ▶ **Policy CD1.3.1:** Encourage UCSC development to blend with the natural landscape and maintain natural ridgelines as seen from the city.

- ▶ **Policy CD1.4.1:** Use planned development and other clustering techniques to protect resources and views and allow for siting that is sensitive to adjacent uses.
- ▶ **Policy CD3.5:** Require superior quality design for buildings at visually significant locations throughout the city, such as gateways to Santa Cruz and intersections of major corridors.
- ▶ **Policy CD4.1.6:** Encourage rehabilitation and adaptive reuse of architecturally significant buildings rather than demolition.
- ▶ **Policy CD4.2:** Ensure that new development and right-of-way improvement enhance the visual quality of streetscapes.
- ▶ **Policy CD4.2.1:** Where possible, site buildings at the street frontage and place parking areas away from street corners and to the rear of buildings.
- ▶ **Policy CD4.2.3:** Underground utilities when major road improvement or reconstruction is proposed, if possible.
- ▶ **Policy CD4.3.3:** Protect existing significant vegetation and landscaping that provides scenic value along with wildlife habitat and forage.

City of Santa Cruz Municipal Code

Chapter 24.12, "Community Design," identifies requirements for external sources of lighting related to signs (City of Santa Cruz n.d.). Specifically, Ordinance 24.12.360 states:

Where a sign is externally illuminated the light source must be shielded such that it is not visible from the front of the sign or lighting fixture, or from beyond the property line. Illuminated signs are prohibited in residential zone districts. Intermittent or flashing lighting shall be prohibited. Illuminated surfaces with an integral light source, such as electroluminescent paneling, may be used if their illumination intensity does not interfere with surrounding land uses. Lighted signs in the Beach Recreational Area and time and temperature devices in any district are not subject to these restrictions.

3.1.2 Environmental Setting

REGIONAL SETTING

The city of Santa Cruz (City) is the largest city within the county of Santa Cruz and also serves as the County seat. The city is located along four miles of coastline on the Monterey Bay, which defines the city's southern boundary. In some places, the city's coastline slopes gently toward large beaches; in others, tall coastal cliffs drop off sharply, and stairways lead from the top of the cliff down to the rocky shoreline and beaches below. Additional open space surrounds the creeks and ravines that run along the city's western edge, cutting through the rugged topography to the coast. The city's eastern edge is defined by the Santa Cruz Harbor and the protected open space of Arana Gulch. Varied topography shapes the city's character and creates many public views throughout the community, including views of Monterey Bay and the city as a whole. Arroyos and steep coastal cliffs provide the greatest variation in the city's topography.

Other features in the region include pronounced hills—most notably the coastal terraces of the UC Santa Cruz main residential campus, Pogonip, the Carbonera area, and DeLaveaga Park. Open space areas, including those that make up the City's Greenbelt, are significant contributors to Santa Cruz's natural setting. Public views to and from these open spaces help to orient people within the community, and trails in some of the areas provide limited recreational access (City of Santa Cruz 2012). Important vantage points looking across open space areas towards the upper campus include points along Empire Grade, Glenn Coolidge Drive, and Hagar Drive.

VISUAL CHARACTER OF LRDP AREA

Figure 3.1-1 shows the locations of photographs and vantage points referenced in this section.



Source: Figure produced by Ascent Environmental in 2020

Figure 3.1-1 Photograph Locations

Main Residential Campus

The main residential campus is located in the northwestern portion of the city and is bounded by Empire Grade/High Street to the west and south, Coolidge Drive to the east, and forested, natural areas to the north. The main residential campus consists of coastal and marine terraces below the Santa Cruz Mountains which provide a backdrop of protected open space and afford panoramic views of the city and Monterey Bay. The visual character of the campus is defined initially by its spectacular natural environment of open meadow spaces, coastal oak forests and redwood groves. Nestled into the landscapes are dense building clusters connected by pathways and natural open spaces. Within the campus, there are ten colleges, each with separate communities of residential and academic support space, that are built around an academic core of shared facilities. The visual character of the UC Santa Cruz main residential campus can be further described through the various scenic viewpoints and types of development offered within the campus. These are further described below and under "Representative Viewpoints."

Campus Organization

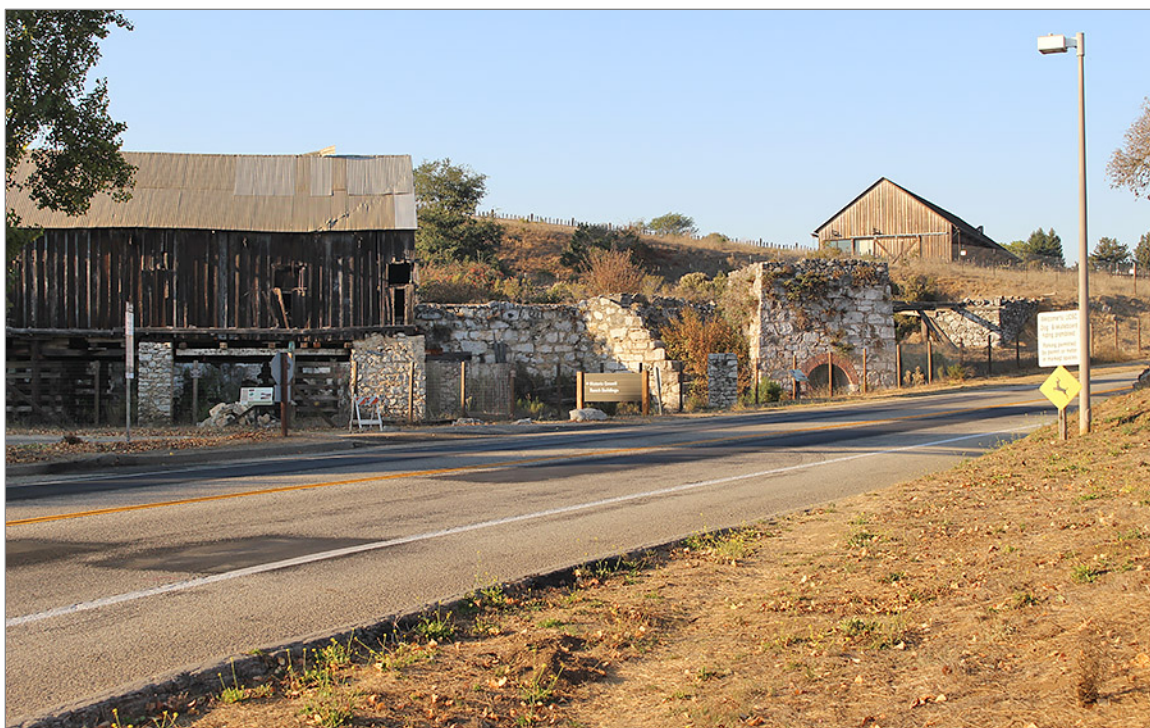
As described in Chapter 2, "Project Description," and shown on Figure 2-3, the main residential campus consists of three primary subareas: the north campus, which extends from the developed central campus subarea to the northern property line; the central campus, which extends roughly from the East and West Remote Parking Lots northward to the Crown and Merrill Colleges on the east and to the North Remote Parking Lot on the west; and the lower campus, which extends from the southern property line and main campus entrance northward to the East Remote Parking Lot on the east.

Existing Development

There are two primary entrances to the main residential campus. The main entrance is located at the southern end of the campus at the intersection of High Street and Bay Street. This entrance features UC Santa Cruz's entrance sign and large 19th-century wood-frame and stone buildings that are part of the Cowell Lime Works Historic District, as shown on Figure 3.1-2. There is a public information kiosk, and historic structures associated with the historic district, including the Cook House (Admissions Office), the Barn Theatre, cooperage, the hay barn, and other buildings and structures from the 19th century. A draft Cultural Resources Management Plan (Management Plan) for the Cowell Lime Works Historic District was prepared in 2006 that provides guidelines, strategies, and recommendations for long-term management of this historic district (UC Santa Cruz 2006). The management plan is being refined and additional studies are likely in the near term to identify opportunities to further improve the district for use as a campus and community amenity including adaptive reuse and rehabilitation of existing structures that preserves the spatial and historic character relationships in the district.

The second campus entrance, known as the west entrance, is located at the intersection of Empire Grade and Heller Drive. A small kiosk, located at the west campus entrance, is surrounded by open, rolling meadows. The Family Student Housing complex is visible on the north side of the west entrance, while Oakes College and Rachel Carson College are visible to the east. Cultivated areas on campus include the Arboretum and Botanic Garden, Center of Agroecology and Sustainable Food Systems (the Farm), and Chadwick Gardens. The Arboretum and Botanic Garden, which is surrounded by a fence, has a signed entrance off of Empire Grade. Additionally, vehicular entry points to campus property are available off of Empire Grade near Cave Gulch and Marshall Field, and from the east from Pogonip City Park. However, access to these entry points is restricted and these areas do not provide public vistas or direct access to main campus facilities.

Existing development within the main residential campus forms the campus core as shown on Figure 3.1-3, and includes a series of clustered buildings nestled in the redwood forests and at the periphery of the meadows, referred to as the "ecotone," where the redwood forests transition to the oak woodland. Campus development is generally clustered into several nodes, allowing for the retention of the existing redwood forest and meadows of the campus. Additionally, the campus is developed with parking areas, developed open space (e.g., plazas, courtyards, gardens, and recreational areas), pathways and pedestrian bridges, as well as public and service roads. The campus also has several large outdoor gathering areas, including the Quarry Amphitheater. Outdoor formal recreation areas include the East Field and the Lower East Field at the Athletics and Recreation facility located south of Cowell and Stevenson Colleges, the Oakes College Field, and the Family Student Housing Playing Field. Though these areas are not natural landscapes, they contribute to the overall visual character of the campus and of the more localized areas in which they are situated. Additionally, formal recreational areas are visually unobtrusive portions of campus that do not detract from more distant scenic views of the coast.



Source: Photograph provided by UC Santa Cruz in 2020

Figure 3.1-2 Photograph 1: View of the Cooperage and Kilns in the Cowell Lime Works Historic District



Source: Photograph provided by UC Santa Cruz in 2020

Figure 3.1-3 Photograph 2: View of the Humanities 1 building in the Campus Core

The first eight campus colleges were founded between 1965 and 1972; Colleges Nine and Ten were founded in 2000 and 2002, respectively. At UC Santa Cruz's founding, landscape architect Thomas Church stressed the goal of minimizing human intrusion on the environment by sensitive placement of buildings. He urged that the colleges and other buildings be placed at the boundaries between forests and grasslands. Thus, the bulk of campus buildings and colleges are located in the forested central campus. As shown on Figure 3.1-4 and 3.1-5 which shows Colleges Nine and Ten and Porter College, most structures blend with the surrounding forested areas and are partially screened by trees. Further, buildings have been deliberately designed not to extend above surrounding trees. By contrast, the lower campus is largely open space, dominated by the East Meadow and the Great Meadow. The extent to which lower campus buildings are visible from off-campus is largely dependent on topography. In particular, on-campus buildings in the grasslands are visible except where screened by topography.

Developed areas within the main residential campus are connected through a web of pathways. North/south routes cover significant changes in elevation, while east/west routes generally follow contours, traversing ravines via pedestrian bridges where needed. The bike path along Webster Way through the Great Meadow, a multi-use trail that accommodates both pedestrian and bicycle traffic, traverses the main residential campus and offers sweeping views of oak woodland, the forest edge, the Great Meadow, and Monterey Bay. A pedestrian path shown in Figure 3.1-6 shows how service roads, pedestrian paths, and bicycle routes weave between developed and natural areas.

Landscape Types

Landscape types within the main residential campus include meadows, forests and forest edge, and ravines. The original vision for development on the main residential campus, as directed by the 1963 LRDP, declared for the preservation of meadows, concentrating development in forested areas, maintenance of significant contiguous forest areas, and the preservation of healthy mature trees.

Expansive meadows are present at the main entrance of the campus and in the lower campus area with transitions to redwood forests within the central campus, followed by chaparral and mixed evergreen forests as elevation increases to the north. The visual contrast among these vegetation types contributes to the visual character of the main residential campus. The Moore Creek and Jordan Gulch ravines run north-south through the forest of the campus core. The ravines are important wildlife corridors and function as major campus stormwater conveyances, channeling significant flows in the channel bottoms and into the karst aquifer that underlies the main residential campus.

There are three large meadows (Great, East, and the large meadow to the west of Empire Grade) in the lower campus as well as three smaller meadows (Porter, Crown, and Kerr) surrounded by forest lands in the central and north campus. Several of the undeveloped open space areas within the main residential campus are valued as scenic resources. These meadows consist primarily of introduced Mediterranean grasses, though patches of coastal prairie (which include higher proportions of native grasses) also exist. Meadows in the redwood forest area of the north campus also support coastal prairie communities.

Scenic Vistas and Views

Scenic views within the main residential campus are available from several prominent vantage points. These vantage points offer impressive long-range views of Santa Cruz, Monterey Bay, and adjacent hillsides. From the central campus, vantage points/scenic views along the southern forest edge generally offer unbroken sweeping views towards Monterey Bay. Prominent scenic views within campus include the Cowell College Plaza (evaluated later as a viewpoint), the Arts area in the Academic Core (Figure 3.1-7), University House, the knoll at Porter College (Figure 3.1-8), and the field at Oakes College (Figure 3.1-9). Sweeping views across the meadows (Great Meadow and East Meadow) down towards the bay are available from these points and from other points within the Great Meadow. Points along Glenn Coolidge Drive also offer panoramic views of the city, bay, and Pogonip City Park. Similarly, points along Heller Drive and Empire Grade offer panoramic views of the bay. Viewpoints along Empire Grade, Glenn Coolidge Drive, and Hagar Drive provide views of the lower campus, looking north towards the central campus. From these viewpoints, sweeping views are available across the meadows up to the forest edge. Short-range views on the campus are influenced by topography, vegetation type, height density of vegetation, and building density. Examples of locations that provide short-range scenic views and vistas include small meadows surrounded by forests or buildings, as well as relatively open meadowland vegetated with oaks and madrones. Short-range views in forested areas of ravines and pathways are also available in some areas.



Source: Figure provided by UC Santa Cruz in 2020

Figure 3.1-4 Photograph 3: View of College 9 and 10



Source: Figure provided by UC Santa Cruz in 2020

Figure 3.1-5 Photograph 4: Aerial View of Porter College



Source: Source: Photograph provided by UC Santa Cruz in 2020

Figure 3.1-6 Photograph 5: View of Pedestrian Path Within the Campus Core



Source: Photograph provided by UC Santa Cruz in 2020

Figure 3.1-7 Photograph 6: View of the Great Meadow from the Arts Area in the Academic Core



Source: Photograph provided by UC Santa Cruz in 2020

Figure 3.1-8 Photograph 7: View from the Knoll at Porter College



Source: Photograph provided by UC Santa Cruz in 2020

Figure 3.1-9 Photograph 8: View from the Field at Oakes College

Views of the campus are regarded by local residents as an important visual resource for the city, as it provides an open backdrop for developed areas of western Santa Cruz. The lower campus grasslands and forest canopy of the north campus are visible from various points throughout the city, including the wharf, the Santa Cruz Beach Boardwalk, and SR 1. Because most campus buildings are located in the forested central campus, few buildings can be seen from views outside of the campus. The most notable exceptions are the Recital Hall and Digital Arts Research Center, which can be seen from lower elevations. Some of the buildings within Cowell and Stevenson Colleges can also be seen from off-campus locations, though they are partially screened by vegetation.

Westside Research Park

The Westside Research Park is located at 2300 Delaware Avenue in the western portion of the city of Santa Cruz. The 18-acre developed property is bounded by Antonelli Pond Park to the west, commercial facilities to the north, Natural Bridges Drive and a vacant lot to the east, and Delaware Avenue and Natural Bridges State Park to the south. As shown on Figure 3.1-10, the site is developed with three buildings, two parking lots, two outdoor service yards, lawns, and other amenities, including a public access trail, tennis courts, and a volleyball court. The property is generally flat in topography and is surrounded by raised earthen berms with vegetation that primarily screens the site from the surrounding streets. The site does not provide any scenic views, nor is it part of a scenic vista.



Source: Photograph provided by UC Santa Cruz in 2020

Figure 3.1-10 Photograph 9: View of Westside Research Park

VISUAL CHARACTER OF SURROUNDING LAND USES

Main Residential Campus

The main residential campus is bounded by Pogonip City Park and Henry Cowell Redwoods State Park to the east, private and forested land to the north, and Wilder Ranch State Park to the west. Residential, commercial, and educational uses within the city border the main residential campus to the south and portions of the east. Other residential uses include the Cave Gulch Neighborhood, which is located just outside the northwestern campus boundary and consists of single-family homes, a llama ranch, places of worship, and several schools, including the Waldorf School. The western, northern, and eastern campus boundaries are largely forested, with the exception of a portion along Pogonip City Park and the open area west of Empire Grade which are predominantly grassland. As previously described, the southeastern and southern campus edges are largely developed with low-rise development (typically one to three stories in height). Off-campus development in these areas includes single-family homes, mixed-density residential housing, an elementary school, a church, and a small area of commercial development. The southwestern edge of the main residential campus consists of meadows both within and outside of campus boundaries.

Westside Research Park

Westside Research Park is located in the Natural Bridges Industrial Park, along the western edge of urbanized Santa Cruz. The visual character of the area surrounding Westside Research Park is varied with light industrial, commercial, and residential uses. Generally, surrounding development consists of generally low-rise structures (one to two stories in height), ranging from low-density warehouse and light industrial buildings to single- and multi-family developments. The area to the south and west is predominantly characterized by open space uses, including the Natural Bridges State Beach area to the south and Antonelli Pond and the associated open space area, which is owned by the Santa Cruz Land Trust to the west. The UC Santa Cruz Coastal Science Campus is located 0.5 mile southwest of the Westside Research Park.

REPRESENTATIVE VIEWPOINTS

In addition to the vantage points identified above and due to the availability of long-distance views both within and of the LRDP area, several representative viewpoints were also selected to describe visual conditions within and around the LRDP area. Figure 3.1-11 shows the location of the viewpoints referenced in this section.

Viewpoint 1: View from City of Santa Cruz Wharf Looking Northwest Towards the Main Residential Campus

As shown in Figure 3.1-12 (View from City of Santa Cruz Wharf looking northwest towards main residential campus), the main residential campus is visible in the background from the wharf in the city of Santa Cruz looking northwest. Some campus buildings, such as the Digital Art Research Center, Athletics and Recreation Wellness Center, and infill housing at Stevenson College, are visible from this viewpoint, although most campus structures either blend with the landscape or are shielded by surrounding topography and mature trees. In the foreground, there are many small shops and businesses located in predominantly 1-2 story buildings in the foreground, as well as overhead utility lines, that impede long-distance views through the area. This viewpoint also includes a view of other typical urban visual features, including pedestrian and bike amenities, vehicles, and rail crossing infrastructure. Ornamental landscaping, mature trees, and some street lighting are also visible in the foreground.

Viewpoint 2: View from Coastal Science Campus Looking North Towards the Main Residential Campus

As shown in Figure 3.1-13 (View from Coastal Science Campus looking north towards the main residential campus), Viewpoint 2 provides a long-distance view of the Santa Cruz foothills to the north, as viewed from the UC Santa Cruz Coastal Science Campus on the western end of Delaware Avenue in the west side of Santa Cruz. The main residential campus is visible in the background, although much of the existing campus development is obscured by terrain and mature trees in front of the existing campus structures. Portions of Porter and Rachel Carson colleges can be seen from this viewpoint, although the full structures are not visible due to the intervening terrain and vegetation. The foreground from this viewpoint includes open space and grassland areas, overgrown vegetation and mature trees, several low-rise, light industrial uses, street lighting, and residential housing units (along the right edge of the image).

Viewpoint 3: View from High Street Looking North Towards Main Residential Campus Entry at Glenn Coolidge Drive

As shown in Figure 3.1-14 (View from High Street looking north towards main residential campus entry at Glenn Coolidge Drive), Viewpoint 3 provides a view of the entrance to the main residential campus from High Street looking north. This viewpoint includes the "University of California Santa Cruz" entrance sign, other campus directional signage, as well as a glimpse of the low-sloped hills that continue as the viewer travels north along Coolidge Drive. The Barn Theater and UC Santa Cruz Police station are partially obscured by vegetation and topography but visible on the left and right sides, respectively, of the image. High Street, which intersects Bay Drive, is aligned east-northwest, and transitions into Empire Grade at its western end. Empire Grade is aligned in a northwesterly to northerly direction and provides access to the main residential campus via Arboretum Road and Heller Drive.

Viewpoint 4: View from Empire Grade Looking East Towards Main Residential Campus

As shown in Figure 3.1-15 (View from Empire Grade looking east towards main residential campus), Viewpoint 4 offers views of the UC Santa Cruz campus setting from the western edge of the main residential campus, along Empire Grade. From this viewpoint, portions of campus buildings in the Oakes College area and Rachel Carson College to the east can also be seen, although the existing topography and vegetation preclude unimpeded views of the existing campus development. In the foreground, this view includes a large swath of open space and grasslands within the campus, known as Oakes Meadow. The Oakes Meadow landscape consists of low-rolling hills, various grasses, overgrown vegetation, and trees, as well as some recreational walking paths.

Viewpoint 5: View from Hagar Drive Looking East

As shown in Figure 3.1-16 (View from Hagar Drive looking west), views from Hagar Drive facing west towards McHenry Road are dominated by existing open space within the center of the main residential campus. In the background, the UC Santa Cruz Recital Hall, Digital Art Research Center and New Media facilities, and Academic Resource Center buildings can be seen but are partially obscured by existing terrain and vegetation. Further north beyond the buildings, dense tree cover of the redwood forested area can be seen. In general, this view consists of portions of developed campus as well as low-rolling hills, scattered vegetation and mature trees, and open space areas.

Viewpoint 6: View from Bike Path Looking East Towards Great Meadow

As shown in Figure 3.1-17 (View from bike path looking east towards Great Meadow), Viewpoint 6 provides a view facing east towards the Great Meadow from the bike path along Webster Way through the Great Meadow within the main residential campus. The view is dominated by open space with rolling hills and oak woodland areas precluding long-distance views. To the left, the UC Santa Cruz Recital Hall building can be seen, but additional campus development is not visible through the existing vegetation and topography. Long-distance views of the Monterey Bay to the south can also be seen from this viewpoint.

Viewpoint 7: View from Cowell College Looking South

As shown in Figure 3.1-18 (View from Cowell College looking south), Viewpoint 7 provides long-distance views from Cowell College facing south towards Westside Research Park and the western portion of the city of Santa Cruz. As seen from this vantage point, clear expansive and distant scenic views of the city, coast, and Pacific Ocean are available from within the main residential campus. This view also provides short-distance views of buildings and seating areas within Cowell College, Cowell Service Road, and the Upper East recreational field. The Athletics and Recreation Wellness Building, which is also shown in Viewpoint 1, above, is partially obscured but visible from this viewpoint.



Source: Figure produced by Ascent Environmental in 2020

Figure 3.1-11 Viewpoint Locations



Before



After

190101118.01 GRX 011

Source: Figure produced by Ascent Environmental in 2020

Figure 3.1-12 Viewpoint 1 (View from City of Santa Cruz Wharf Looking Northwest Towards the Main Residential Campus)



Before



After

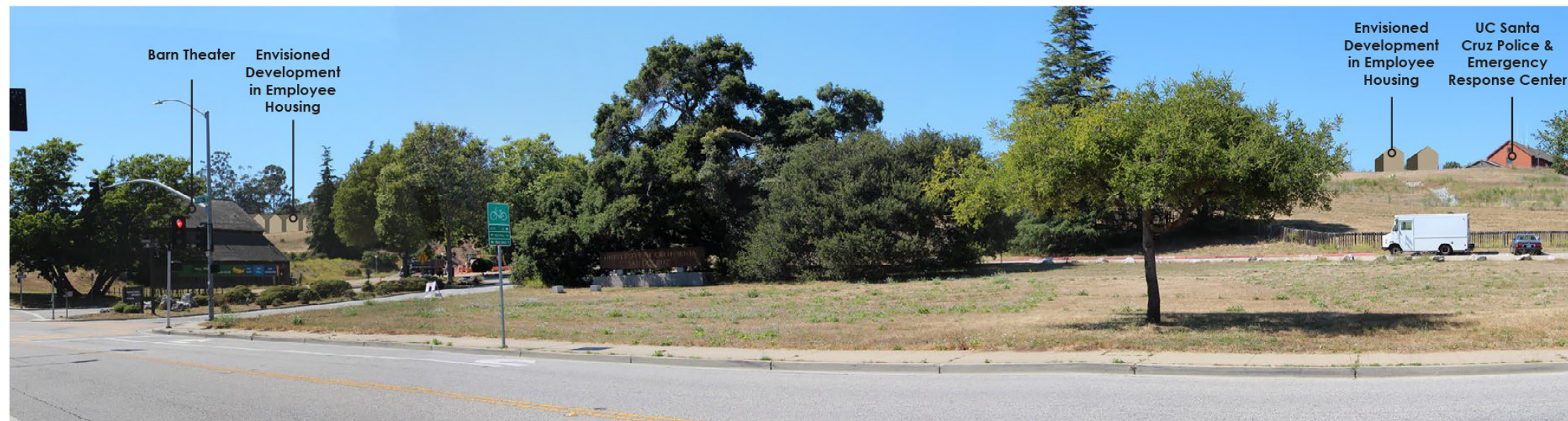
190101118.01 GRX 012

Source: Figure produced by Ascent Environmental in 2020

Figure 3.1-13 Viewpoint 2 (View from Coastal Science Campus Looking North Towards the Main Residential Campus)



Before



After

190101118.01 GRX 013

Source: Figure produced by Ascent Environmental in 2020

Figure 3.1-14 Viewpoint 3 (View from High Street Looking North Towards Main Residential Campus Entry at Glenn Coolidge Drive)



Before



After

190101118.01 GRX 014

Source: Figure produced by Ascent Environmental in 2020

Figure 3.1-15 Viewpoint 4 (View from Empire Grade Looking East Towards Main Residential Campus)



Before



After

190101118.01 GRX 015

Source: Figure produced by Ascent Environmental in 2020

Figure 3.1-16 Viewpoint 5 (View from Hagar Drive Looking West)



Before



After

190101118.01 GRX 016

Source: Figure produced by Ascent Environmental in 2020

Figure 3.1-17 Viewpoint 6 (View from Bike Path Looking East Towards Great Meadow)



Before



After

190101118.01 GRX 017

Source: Figure produced by Ascent Environmental in 2020 8/19

Figure 3.1-18 Viewpoint 7 (View from Cowell College Looking South)

VIEWER PERSPECTIVE AND SENSITIVITY

Viewer sensitivity is considered in assessing the impacts of visual change and is a function of several factors. The sensitivity of the viewer or viewer concern is based on the visibility of resources in the landscape, proximity of the viewers to the visual resource, elevation of the viewers relative to the visual resource, frequency and duration of views, numbers of viewers, and types and expectations of individuals and viewer groups.

The viewer's distance from landscape elements plays an important role in the determination of an area's visual quality. Visibility and visual dominance of landscape elements depend on their placement within a viewshed. A viewshed is defined as all of the surface area visible from a particular location (e.g., an overlook) or sequence of locations (e.g., a roadway or trail) (FHWA 1981). Landscape elements are considered higher or lower in visual importance based on their proximity to the viewer. Generally, the closer a resource is to the viewer, the more dominant, and thus the more visually important it is. In the case of views at UC Santa Cruz, the Great Meadow is an exception due to its prominence in long distance views of the main residential campus. For purposes of analysis, landscapes are separated into foreground, middleground, and background views (USDA-FS 1995). In general, the foreground is characterized by clear details (within 0.25 or 0.5 mile of the viewer); the middleground is characterized by the loss of clear detail in a landscape, creating a uniform appearance (from the foreground to 3 to 5 miles in the distance); and the background extends from the middleground to the limit of human sight (Bacon 1979).

Visual sensitivity is also affected by viewer activity, awareness, and expectations in combination with the number of viewers and the duration of the view. Visual sensitivity is generally higher for views that are observed by people who are driving for pleasure, or engaging in recreation activities such as hiking, biking, camping or by residents of an area. Sensitivity is lower for people engaged in work activities or commuting to work. Viewer response must be based on regional context. The same landform or landscape feature may be valued differently in different settings; landscape features common in one area would not be valued as highly as the same feature in a landscape that generally lacks similar features. For example, a small hill may have little value in a mountainous area but may be highly valued in a landscape that has little topographic variation.

LIGHT AND SKY GLOW CONDITIONS

The terms "glare" and "sky glow" are used in this impact analysis to describe the visual effects of lighting. For the purposes of this impact analysis, glare is considered to be direct exposure to bright lights, reflective surfaces, and sky glow is a glow that extends beyond the light source and dominates or partially dominates views above the horizon at night.

Nighttime lighting within the main residential campus consists primarily of building, street, parking lot, and pathway lighting. The main residential campus also includes outdoor athletic field lighting within the Recreation & Athletics land use areas. Nighttime lighting is also provided through headlights of cars driving within and around the main residential campus. Angled down-lighting fixtures are generally used on the campus, per the Campus Standards Handbook, and are present within the housing areas. Parts of the campus that typically provide more non-directional lighting include the forest areas. These areas are more illuminated to provide a sense of pathway security for pedestrians. Generally, the main residential campus is a visible source of nighttime lighting, and sky glow, the diffuse brightening of the night sky, can be observed on some nights, particularly when fog is present, which reflects the lighting.

Lighting at the Westside Research Park is similar to that of commercial and industrial building uses. Lighting is provided around the exterior of the building, within the parking lot, and along the surrounding roads. Lighting in the parking lot and along the building exterior is angled and cast downwards.

Other more prominent nighttime lighting sources in the vicinity include those associated with the city of Santa Cruz, located to the south of the main residential campus and surrounding the Westside Research Park.

3.1.3 Environmental Impacts and Mitigation Measures

SIGNIFICANCE CRITERIA

Based on Appendix G of the State CEQA Guidelines, a visual resources impact would be considered significant if implementation of the 2021 LRDP would do any of the following:

- ▶ have a substantial adverse effect on a scenic vista;
- ▶ substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- ▶ in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point); if the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality; or
- ▶ create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

ANALYSIS METHODOLOGY

The evaluation of potential aesthetic and visual resource impacts is based on on-site review of the LRDP area and surrounding environment, review of site photos representing key vantage points, and documents pertaining to the UC Santa Cruz main residential campus, Westside Research Park, and surrounding areas. In determining the level of significance, this analysis focuses on the nature and magnitude of visual change, the number of public vantage points from where this change would be visible, and the number of viewers who would be affected by this change. In addition, the analysis considers viewer sensitivity as a function of the visibility of resources in the landscape, proximity of the viewers to the visual resource, elevation of the viewers relative to the visual resource, frequency and duration of views, numbers of viewers, and types and expectations of individuals and viewer groups.

It is assumed that projects implemented under the 2021 LRDP would comply with existing procedures pertaining to development within UC Santa Cruz (e.g., Design Review) and would be generally consistent with the UC Santa Cruz Physical Design Framework.

2021 LRDP Physical Planning Principles

In addition, the 2021 LRDP Physical Planning Principles, which are described below, articulate the manner in which future development under the 2021 LRDP would be planned, designed, constructed, and maintained.

A. The Campus Land – Respect and Resiliency

1. Preserve the integrity of campus landscapes. Buildings shall respond to the varied natural environments -- meadow, ecotone (forest edge), and forest – with architecture that is sensitive to the natural setting.
2. Respect major natural features. Maintain continuity of wildlife habitats, surface drainage flows, and compatibility of landscaping with surrounding native plant communities.
3. Minimize disturbance to open space. Retain for research and for its aesthetic values, as well as to honor the character and cultures of this incomparable site chosen for UC Santa Cruz.
4. Integrate planning for long-term resilience. To the extent possible, include climate adaptive strategies in all development to manage potential long-term and short-term challenges to the campus buildings and infrastructure. Foster conservation and maintenance of the land resource.
5. Integrate the natural and built environment. In forested areas, buildings should not protrude above the surrounding tree canopy; in visually sensitive areas, interruption of prime viewsheds and viewpoints will be minimized.

B. Academic Core Infill and Expansion – Growth from Within

1. Grow from within. Focus growth in previously developed areas of the academic core, including infill buildings and opportunities to densify, to minimize impacts on the natural environment
2. Maintain adjacencies with existing development. Continue compact expansion north of the Academic Core to facilitate connections to new neighboring colleges and student housing.
3. Sensitively site buildings to protect scenic viewsheds. Extend clustered development south of the Academic Core, maintaining the existing pattern of lower density development to minimize visibility of new buildings and maintain view corridors from existing buildings.
4. Maintain an open space network within the academic core. Provide spaces for contemplation, reflection and wellness.
5. Build sustainably and efficiently. Maximize investment in the land by considering long-term life cycle costs and increased building height, where feasible.

C. Campus Life and Housing – The Expanded Ring

1. Continue the pattern of colleges and student housing around the periphery. Optimize access to learning, research, and student support destinations by locating colleges and housing as close to the academic core as possible.
2. Cluster non-college student housing in infill locations near or adjoining existing colleges. Support the diverse student body with a variety of housing types, located with convenient access to academic and student support services.
3. Distribute recreational opportunities close to student housing. Complement concentrated college athletic facilities at the Athletics and Recreation area by promoting a diverse array of other opportunities for wellness and exercise throughout the campus.
4. Enrich the quality of campus life. Provide a variety of public services and student support spaces to help meet basic needs and allow students to thrive.
5. Provide supportive living / learning communities. Continue to balance the context of a major research university with the more intimate scale in the residential colleges.

D. Integrated Transportation – Walkable Core

1. Consolidate parking at the periphery of the academic core. Serve with frequent, direct transit service, and enhanced walking and biking pathways directly connecting to the academic core
2. Activate the core. Limit routine vehicular traffic flow from internal roadways to prioritize pedestrian connectivity and promote a safe pedestrian environment
3. Prioritize efficient transit access and routes. Extend Meyer Drive to create an inner campus loop and interconnected roadway network for improved access
4. Create active building frontages at ground level. Enhance the visual and experiential quality of the pedestrian and connect interior programs visually with exterior surroundings.
5. Generate dynamic public gathering spaces. Provide gathering spaces shared between buildings and at entries for increased public activity and to foster dynamic interactions between students, faculty and staff.

E. Pedestrian Mobility – Web of Pathways

1. Extend the pattern of east-west pedestrian paths. Provide convenient and direct access from new housing at the periphery to academic and social destinations in the core.
2. Improve existing pathways to reinforce walkability. Designate and prioritize select pedestrian corridors between key destinations throughout campus.

3. Strive to provide equal access throughout campus. Remove barriers through physical and programmatic improvements.
4. Expand comprehensive program of Travel Demand Management (TDM) strategies. Continue to expand options and incentives for alternative circulation modes, such as walking and bicycling.
5. Manage service road access with public circulation. Promote use of service roads to safely accommodate bicycle and pedestrian circulation. Avoid pedestrian and vehicular conflicts where possible and route deliveries and loading docks away from building entries and gathering spaces.

F. Campus and Community – Culture and Connectivity

1. Protect historic cultural resources. Maintain the historical integrity of the Cowell Lime Works Historic District and other cultural resources through rehabilitation of structures while embracing opportunities for the area to more actively contribute to campus and community life.
2. Protect prehistoric, archaeological and tribal cultural resources. In recognition of the history of Indigenous peoples and their relationship to their traditional homeland, partner with the Amah Mutsun Tribal Band in designing land stewardship practices.
3. Cultivate public programs as community resources. Continue investments in programs serving both the campus and the Santa Cruz communities.
4. Expand employee housing near campus entries. Cluster development to share resources and infrastructure and locate with ease of access to city destinations and amenities.
5. Ensure continued collaboration and communication with the greater community. Work together to sustain economic, social and physical health for the region by identifying shared strategies that address common goals.

ISSUES NOT EVALUATED FURTHER

Result in Damage to Scenic Resources within a State Scenic Highway

There are no officially designated State highways in Santa Cruz County. The closest State-designated highway includes segments of California SR-1 located in Monterey County, which is approximately 30 miles south of the main residential campus. Given the distance to the main residential campus, views of the LRDP area are not visible from designated segments of SR-1. Therefore, potential effects of the 2021 LRDP on scenic resources within a State scenic highway are not addressed further.

IMPACTS AND MITIGATION MEASURES

Impact 3.1-1: Result in a Substantial Adverse Effect on a Scenic Vista

Implementation of the 2021 LRDP would result in the construction and operation of additional facilities within the UC Santa Cruz main residential campus and Westside Research Park that could result in alteration of scenic vantage and viewpoint locations including views towards the coast. However, regarding views both from and toward campus, new development would be designed and constructed in a manner consistent with, and generally adjacent to, existing development which has already altered some long-distance views. In addition, any campus-related development would be required to comply with the UC Santa Cruz Design Review Process, and standards set forth in the UC Santa Cruz Campus Standards Handbook, and be generally consistent with the Physical Design Framework and the Physical Planning Principles and Guidelines in the 2021 LRDP, which are established to provide aesthetically compatible facilities. Therefore, this impact would be **less than significant**.

As noted above, the UC Santa Cruz main residential campus provides views of the city, coast, and the Monterey Bay from various vantage points. From many vantage points within the main residential campus, long distance views are

expansive, especially on clear days. Views of the coast and Monterey Bay are not available from the Westside Research Park due to intervening structures, trees and landscaping present within Natural Bridges State Beach and along Delaware Avenue.

Prominent campus vantage points/scenic views within the main residential campus include the Cowell College Plaza, the Arts area of the Academic Core, University House, the knoll at Porter College, and the field at Oakes College. Sweeping views across the meadows down towards the bay are available from these points and from other points within the Great Meadow. Points along Glenn Coolidge Drive offer panoramic views of the city, bay, and Pogonip City Park. Similarly, points along Heller Drive and Empire Grade offer panoramic views of the bay. Viewpoints along Empire Grade, Glenn Coolidge Drive, and Hagar Drive provide views of the lower campus, looking north towards the central campus.

New development planned under the 2021 LRDP would occur within existing developed areas of the campus, including the academic core area, colleges and student housing areas, and employee housing areas. Many of the buildings within the academic core are within the forested portion of campus and do not offer views of the Monterey Bay. Therefore, infill development within the forested portions of the main residential campus would not be expected to compromise views of the Monterey Bay since no key vantage points currently exist within that area. Similarly, new development within the northern area of the main residential campus would not be expected to affect scenic vistas towards the Monterey Bay since views to the ocean are blocked by existing forest.

Viewpoint 1: View from City of Santa Cruz Wharf looking northwest towards the main residential campus

Viewpoint 1 represents a view of the main residential campus from the Wharf in the city looking northwest. This view is one of the seven vantage points selected for visual simulation for this EIR and is representative of how the hills within the main residential campus provide a backdrop for the city. Sensitive viewing groups in this area primarily consist of city residents or tourists. For this area of the main residential campus, development is envisioned for new recreation and athletics, as well as colleges and student housing. Types of development under these uses could include playing fields and courts, indoor recreational facilities, event spaces, health and wellness facilities, as well as residence halls, apartments, townhomes, and academic buildings. As seen from the existing viewpoint and visual simulation, campus structures are positioned within the distant background and are not clearly visible. New buildings would be clustered around existing development and would not substantially alter long-distance views towards the main residential campus from the Wharf or other areas in the vicinity. Similar to existing conditions, future development within this area is not expected to be visible from this vantage point due to the topography and landscaping within the campus. Further, the visible hillside would remain undeveloped. As a result, no substantial adverse changes are anticipated.

Viewpoint 2: View from Coastal Science Campus looking north towards the main residential campus

Viewpoint 2 provides a long-distance view of the Santa Cruz foothills to the north, as viewed from the UC Santa Cruz Coastal Science Campus on the western end of Delaware Avenue in the west side of Santa Cruz. From this vantage point, existing campus buildings are largely obscured by vegetation, distant trees and surrounding hillside; however, distant views of Rachel Carson and Porter College are visible in the background. Sensitive viewers from this viewpoint primarily include UC Santa Cruz students, faculty, staff, as well as recreationalists using the trails or community members visiting the campus (e.g., Seymour Marine Discovery Center). Envisioned development in this area includes college and student housing uses, which could consist of new academic buildings, apartments, and residence halls. As shown in the visual simulation, future development would likely not be visible from this vantage point due to topography and vegetation. Further, future development would be similar in height, character, and massing to existing surrounding uses in this area of the campus. Since visual conditions would remain similar to existing views from this vantage point, no substantial adverse changes are anticipated.

Viewpoint 3: View from High Street looking north towards main residential campus entry at Glenn Coolidge Drive

Viewpoint 3 provides a view of the main residential campus entrance from High Street looking north. Sensitive viewing groups in this area include nearby residents, tourists, as well as UC Santa Cruz students, faculty, and staff. Due to the low-rolling hills, landscaping, and proposed setbacks from existing conditions within this area of campus, development uphill to the northwest and northeast of the campus entrance is largely obstructed. Views from the

entrance are largely centered on the Cowell Lime Work Historic District, with the Barn Theater prominently visible at the intersection of Bay and High. As shown in Figure 3.1-14, development under the 2021 LRDP is proposed within the middleground of this viewpoint and would consist of employee housing, which could include townhomes and apartment-style buildings, community-building amenities, and parking areas. Proposed development per the employee housing land use designation would be generally clustered adjacent to the existing Ranch View Terrace development to the northwest, as well as the area currently being used for campus support facilities and adjacent to the Office of Emergency Services uphill to the northeast. Though new buildings would be visible from High Street, the presence of new structures would not dominate views north towards the campus (as these views are already limited due to natural topography and landscaping), and would be similar in size and height to existing developed structures. Consistent with the UC Santa Cruz Physical Design Framework, development would be integrated into the landscape and visibility would be minimized to the extent feasible by implementing development patterns and architecture that are sensitive to the natural setting. In addition, the Management Plan for the Cowell Lime Works Historic District is being refined and additional studies are likely in the near term to identify opportunities to further improve the district for use as a campus and community amenity including adaptive reuse and rehabilitation of existing structures that preserves the spatial and historic character relationships in the district. For these reasons, no substantial adverse changes are anticipated.

Viewpoint 4: View from Empire Grade looking east towards main residential campus

Viewpoint 4 provides a view of the UC Santa Cruz campus setting from the western edge of the main residential campus, along Empire Grade. From this vantage point, views are largely dominated by open meadow, which includes low-rolling hills, scattered vegetation, and a few mature trees. In the background, Oakes and Rachel Carson College can be seen. Sensitive viewing groups largely include UC Santa Cruz students, faculty, and staff, but could also include nearby residents or tourists visiting the campus, and passersby. New development within this area of campus would include student residences, apartments, and related uses, intended for non-college-affiliated housing. As shown in Figure 3.1-15, new structures would be visible in the middleground, and would be similar in massing and height to existing surrounding buildings. Though new development would be visible from Empire Grade, the envisioned student housing buildings would be clustered together and at a lower density in order to protect critical viewsheds from existing buildings, as well as views into the campus from Empire Grade. Further, new structures would be situated within the hillside, taking advantage of depressions in the topography to minimize massing and height, and would not adversely affect scenic views along Empire Grade looking east. As a result, no substantial adverse changes are anticipated.

Viewpoint 5: View from Hagar Drive looking west

Viewpoint 5 offers a view from Hagar Drive facing west toward the southern boundary of the Arts area, where the Recital Hall, Digital Art Research Center, and Academic Resource Center buildings can be seen in the distant background. This view is largely dominated by a portion of the Great Meadow as well as vegetation along Hagar Drive. Similar to Viewpoint 4, sensitive viewers primarily include UC Santa Cruz students, faculty, and staff, as well as nearby residents or tourists visiting the campus, and passersby. Future development envisioned adjacent to the Digital Art Research Center would include academic support infill development. Additional development envisioned adjacent to the Recital Hall and Academic Resource Center buildings would also include academic and support uses in a clustered development pattern. This could include new buildings clustered to preserve views from existing buildings and open spaces on campus as well as views north through the Great Meadow. Proposed development in this area would be less dense than in the academic core, which is primarily surrounded by forested conditions rather than meadows and open view corridors. As described in Chapter 2, "Project Description," new buildings would range from two to four stories in height and would be sited to minimize their visibility at the top of the adjoining meadows, tucked against the edge of the ravine and nestled into the topography. As shown in Figure 3.1-16, new development is not expected to be seen from this vantage point and would not substantially alter views from Hagar Drive. Existing vegetation in the foreground, as well as views of the Great Meadow in the middleground, would continue to be maintained and the 2021 LRDP would not result in a substantial adverse change from this viewpoint.

Viewpoint 6: View from bike path looking east towards Great Meadow

Viewpoint 6 provides a view facing east towards the Great Meadow from the bike path along Webster Way within the main residential campus. This view is dominated by rolling hills and vegetation of the northern portion of the Great

Meadow, as well as mature trees in the background and scenic views towards the ocean looking south in the distant background. Sensitive users of this area include UC Santa Cruz students, faculty, and staff that regularly occupy this area for class or to travel to and from portions of the campus, as well as recreationalists that visit the campus. Additionally, recreationalists who utilize the bike path along Webster Way through the Great Meadow also constitute sensitive viewer groups in this area. The 2021 LRDP proposes new academic and support uses in this area of campus which would be less dense than in the academic core in order to preserve views north through the Great Meadow. As previously described for Viewpoint 5, new buildings in this area would be sited to minimize their visibility at the top of the adjoining meadows. As shown in Figure 3.1-17, existing trees and vegetation can be seen between the clusters of new development that would be visible within the middleground of this viewpoint. Development would be similar in both size and height to existing surrounding development. Though new structures would be present, they would be positioned amongst the rolling hills and would not block long-distance scenic views towards the ocean from existing buildings and open spaces on the campus. As a result, no substantial adverse changes are anticipated.

Viewpoint 7: View from Cowell College looking south

Viewpoint 7 provides long-distance views facing south from Cowell College. This view includes existing developed academic structures and uses within the foreground, recreational fields within the middleground, and expansive and long-distance views towards the ocean in the background. Sensitive viewers in this area include UC Santa Cruz students, faculty, and staff, as well as recreationalists that regularly occupy this area of Cowell College and the recreation fields. The 2021 LRDP proposes new college and student housing, and recreation and athletic uses in this area of the campus. Proposed development under the 2021 LRDP would be visually consistent with the existing residential housing to the north and east of Cowell College, as well as the adjacent Athletics and Recreation facilities. Types of development associated with these uses could include new student residences, apartments, and academic buildings within the Colleges and Student Housing land use designation, as well as additional playing fields and courts, indoor recreational facilities, event spaces, and health and wellness facilities within the Recreation & Athletics. As shown in Figure 3.1-18, future development would be located south of Cowell College and would likely be shielded by existing development in this portion of campus. The scenic view from the Cowell Plaza is intended to remain unobstructed. Further, planned structures would be similar in height and massing to surrounding buildings. As currently envisioned, development within this area would not block or alter views from campus towards the ocean, and no substantial adverse changes are anticipated.

Summary

Development consistent with the proposed 2021 LRDP within the main residential campus is expected to be consistent with and complementary to existing development and is not anticipated to result in substantial changes in long-distance and scenic views from within or across the main residential campus. As further shown in Section 2, "Project Description, Figure 2-4, as well as Figures 3.1-12 through 3.1-18, above (simulations of development consistent with the 2021 LRDP), new development would be clustered nearby or adjacent to existing buildings and structures such that short- and long- distance views, both from and towards campus would not be adversely impaired. Further, any campus-related development would be required to comply with the UC Santa Cruz Design Review Process, standards set forth in the Campus Standards Handbook, and be consistent with the Physical Design Framework.

With respect to potential development at Westside Research Park, the development of mixed-use land use (i.e., potential additional employee housing, public services, etc.) at this location would generally be low-rise (up to 4 stories) structures adjacent to the existing academic/administrative space located on site. As noted above, adjacent development includes a mix of light industrial, commercial, and residential uses, but all structures located in the area are of similar massing and scale, including the multi-family residential structures located to the northwest adjacent to Antonelli Pond. Therefore, views from the adjacent Antonelli Pond are not anticipated to change significantly.

Because future 2021 LRDP development would be sited within and/or adjacent to existing developed areas, would comply with design and building standards that require consistency with surrounding uses, and would not further obstruct any existing long-distance views towards the coast and Monterey Bay, adverse effects on a scenic vista are not anticipated. As a result, impacts would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.1-2: Result in Adverse Effects on the Aesthetic Quality of the Cowell Lime Works Historic District

Implementation of the 2021 LRDP would result in temporary and permanent visual changes associated with new development that could affect the Cowell Lime Works Historic District on the UC Santa Cruz main residential campus. Development under the 2021 LRDP could degrade the aesthetic quality of the Cowell Lime Works Historic District, which is considered a scenic resource. This would be a **potentially significant** impact.

The 2021 LRDP acknowledges the cultural and aesthetic importance of the Cowell Lime Works Historic District (Historic District), which includes the historic structures located in the campus main entrance area. The 2021 LRDP proposes development to the east and west of the historic district (See Section 2, "Project Description, Figure 2-4). and some limited development could occur within the historic district, in addition to rehabilitation of historic buildings, for academic & support facilities, community-facing programs, and visitor resources. Also, some development would occur adjacent to the historic district in proximity to buildings that contribute to the historic district. As discussed in Section 3.4, "Archaeological, Historical and Tribal Cultural Resources," the Cowell Lime Works Historic District was determined to be eligible for listing in the National Register of Historic Places and in the California Register of Historic Resources.

Damage to or destruction of a building or structure that is a designated historic resource, eligible for listing as a historic resource, or a potential historic resource that has not yet been evaluated, could result in the change in its historical significance and alter the aesthetic quality of the resource. Future development proposed proximate to the Cowell Lime Works Historic District would be required to comply with the UC Santa Cruz Design Review Process and the standards set forth in the Campus Standards Handbook. New development would also be required to be generally consistent with the Physical Design Framework's guidelines for consideration of and consistency with adjacent development. However, the 2021 LRDP does not include specific sites for development, nor building designs and definitive footprints for the envisioned development, potential modifications and adverse changes to historic resources cannot be precluded at this time. Therefore, the impact to the aesthetic quality of the historical resource would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.4-4a: Protect Cowell Lime Works Historic District

(Refer to Section 3.4, "Archaeological, Historical, and Tribal Cultural Resources")

Significance after Mitigation

The Cowell Lime Works Historic District Management Plan is being refined to identify opportunities to further improve the district for use as a campus and community amenity including adaptive reuse and rehabilitation of existing structures that preserves the spatial and historic character relationships in the historic district. Implementation of Mitigation Measures 3.4-4a in Section 3.4, "Archaeological, Historical, and Tribal Cultural Resources," would require UC Santa Cruz to implement specific design considerations and conduct any development within or proximate to the Cowell Lime Work Historic District in a manner compatible with the historic aspect of the historic district until such time as the Cowell Lime Works Historic District Management Plan is adopted. Future projects located within the Cowell Lime Works Historic District would be evaluated for consistency with the visual design guidelines included in the Cowell Lime Works Historic District Management Plan. In addition, future development proposed proximate to the historic district would be required to comply with the UC Santa Cruz Design Review Process to ensure that design is complementary to and does not interfere with the historic aspect of the historic District and its buildings with respect to scale, massing, architectural style, and materials, such that the rural historic visual character of the district is maintained. As a result, implementation of the 2021 LRDP would not result in damage or substantial adverse changes in the visual quality of the historic district, and impacts would be **less than significant**.

Impact 3.1-3: Degrade Existing Visual Character or Quality

Implementation of the 2021 LRDP would result in temporary and permanent visual changes throughout the UC Santa Cruz main residential campus and Westside Research Park, especially in areas valued for their visual character or quality including publicly accessible vantage points along Empire Grade west of the Santa Cruz city limits. While new buildings and other development resulting from 2021 LRDP implementation would be required to comply with standards set forth in the UC Santa Cruz Campus Standards Handbook and be generally consistent with the Physical Design Framework and the Physical Planning Principles and Guidelines in the 2021 LRDP to ensure consistency with the existing character and quality of the campus and surrounding areas, visual changes resulting from construction and new development could degrade the existing visual character and quality within the campus, especially in areas valued for their visual character or quality, including publicly accessible vantage points along Empire Grade west of the Santa Cruz city limits. This impact would be **potentially significant**.

The 2021 LRDP focuses land use changes primarily within the main residential campus of UC Santa Cruz, with some limited new development at the Westside Research Park. While the land use changes would modify the existing visual character and quality within the main residential campus and at the Westside Research Park, land use changes would generally be visually consistent with existing development under the 2021 LRDP. However, development is also planned for more remote areas of the campus, including areas proximate to Empire Grade to the west of the Santa Cruz city limits. Policy 5.10.10: Designation of Scenic Roads in the *County of Santa Cruz General Plan* designates Empire Grade as a scenic road from the Santa Cruz city limits, which is located southwest of the boundary of the Arboretum and Botanic Garden on the main campus, to the end of Empire Grade.

For example, potential future development of student housing may occur along Heller Drive, proximate to Empire Grade and employee housing may be developed to the west of Empire Grade. The area in the northern portion of campus is valued for its scenic quality because the visual landscape and attractiveness of redwood trees and forest within the foreground along Empire Grade. Therefore, it is possible that the introduction of new buildings and structures could damage the scenic value of the redwood forested area.

As described above in Section 3.1.1, the UC Santa Cruz Design Advisory Board reviews development proposals to ensure compatibility with the approved 2021 LRDP, review all aspects of exterior urban and landscape design, and provide guidance to the design teams, building committees, and the campus planning committee. The UC Santa Cruz Campus Standards Handbook identifies design and aesthetics standards specific to exterior lighting, landscape design and planting, and lawn areas. The UC Santa Cruz Physical Design Framework identifies design guidelines for specific areas of the main residential campus including meadow areas, forest and forest edge areas, areas in and near the Cowell Lime Works Historic District, and road and paths. In addition, the Physical Design Framework also includes general building and siting design, and guidelines related to topography, geology, and hydrology. The 2021 LRDP continues the procedures (i.e., use of the UC Santa Cruz Campus Standards Handbook and consultation with the Design Advisory Board) employed by UC Santa Cruz for the protection and long-term conservation of important visual quality within the campus. Specifically, consistent with the 1963 LRDP, the 2021 LRDP includes Physical Planning Principles, which articulate a pattern of development that will contribute to student success and promote the academic mission while respecting the unique history and environment of the site. (Refer to the list of Physical Planning Principles above in the "Analysis and Methodology" section and in Chapter 4.2, "LRDP Physical Planning Principles and Guidelines" of the 2021 LRDP). Further, the 2021 LRDP also provides standards and guidelines for specific areas that are envisioned for development under the 2021 LRDP including the Academic Core – South, Academic Core – North, Steinhart Way Infill Opportunities, Athletics and Recreation Area, Cowell and Stevenson Housing Densification. Additionally, as discussed in Impact 3.1-1, proposed land use changes would continue to maintain existing visual conditions in areas where UC Santa Cruz interfaces with surrounding uses within the city and county because new development would remain visually consistent with existing uses.

As described in Chapter 2, "Project Description," future buildings for academic and support under the 2021 LRDP would generally be similar to those already existing in the academic core, ranging in height between four and six stories. In the southern extent of the academic core, buildings would range from two to four stories in height and would be sited to minimize their visibility at the top of the adjoining meadows. To the north within forested areas,

buildings may be as tall as six or more floors, as dictated by their programs. Further, all future buildings, as part of the UC Santa Cruz Design Review Process, Campus Standards Handbook requirements, and Physical Design Framework guidelines, would include landscaping and other features consistent with existing environmental and site conditions, which would soften the visual interface between new development under the 2021 LRDP and existing campus structures and surrounding landscape. Additionally, land use changes identified in the 2021 LRDP largely focus future development within existing developed areas of the main residential campus. Land use changes proposed at the Westside Research Park would also occur within a developed area of the city and would be consistent with surrounding uses, which include commercial, industrial, community, and multi-family residential uses. While new development in these areas may change the visual quality, required compliance with UC Santa Cruz design standards (i.e., Physical Design Framework and Campus Standards Handbook) would provide for a continued congruous visual condition, consistent with existing development. Potential adverse effects, including those associated with development at Westside Research Park, would be avoided through continued implementation of the existing UC Santa Cruz Design Review Process in addition to compliance with the Campus Standards Handbook requirements and consistency with the Physical Design Framework guidelines.

Compliance with the UC Santa Cruz Physical Design Framework and the Campus Standards Handbook, which establish requirements intended to maintain important aesthetic features and compatibility with existing visual conditions, may include the installation of landscaping (both in terms of bulk and color) and exterior features consistent with adjacent development (e.g., exterior lighting and finishes). Overall, the 2021 LRDP would require future new/renovated land uses to consider and incorporate design elements of the existing visual character of the particular area of the campus in which that development would occur, such that the visual quality and character would not be substantially degraded. However, development activities within areas of campus that are highly regarded for their scenic and visual qualities could degrade or damage the character or quality of surrounding uses and landscapes. The northeast portion of the main residential campus contains redwood forests that are valued for their scenic nature. Additionally, the existing redwood trees in this area provides a visual continuity of forested area and a natural screening feature for future development. New development that extends beyond the height of existing redwood trees or otherwise alters the scenic nature within the forested area, including publicly accessible vantage points along Empire Grade north of the city limits, could damage or degrade the visual character and quality of the area. As a result, this impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.1-3a: Require Setback Distance from Empire Grade

UC Santa Cruz shall require that development located north of the Arboretum and Botanic Garden entrance under the 2021 LRDP, which could be seen from Empire Grade, include a minimum setback of 200 feet from Empire Grade. If establishment of a 200-foot buffer is not feasible, a vegetated barrier or screen that prevents a direct line of site between a resource and developed structures shall be provided. Vegetation shall be native to California and selected to match existing vegetation located nearby.

Mitigation Measure 3.1-3b: Implement Design Measures for Protection of Views Along Empire Grade

Development within 500 feet of Empire Grade and west of the Santa Cruz city limits and the Arboretum and Botanic Garden within the UC Santa Cruz main residential campus shall be subject to review by the Campus Design Advisory Board to ensure that design of new facilities shall be visually unobtrusive and not unduly interfere with existing views. Review of future development by the Campus Design Advisory Board shall occur upon initial selection of sites. Design shall comply with standards set forth in the UC Santa Cruz Campus Standards Handbook and be generally consistent with the Physical Design Framework and Physical Planning Principles and Guidelines in the 2021 LRDP.

Mitigation Measure 3.1-3c: Implement Design Measures for Protection of View within Scenic Areas

For any development within primary campus viewsheds identified as scenic areas, UC Santa Cruz shall require that siting, development patterns, and architecture is consistent with the 2021 LRDP Physical Planning Principles and Guidelines, including those related to building height and massing, in order to ensure that the visual character and

quality of scenic areas are not substantially degraded. Primary campus viewsheds include primary views of the main residential campus including the Great Meadow, East Meadow, and three smaller meadows (Porter, Crown, and Kerr), as well as prominent scenic views from Cowell College Plaza, the Arts area in the Academic Core, University House, the knoll at Porter College, and the field at Oakes College. Review of future developments by the Campus Design Advisory Board shall occur upon initial selection of sites. Design shall also comply with standards set forth in the UC Santa Cruz Campus Standards Handbook and be generally consistent with the Physical Design Framework.

Significance after Mitigation

Implementation of Mitigation Measures 3.1-3a, 3.1-3b, and 3.1-3c would reduce impacts to **less than significant** by requiring building limitations and development requirements as well as distancing and screening requirements, that would provide for development that is consistent with and complementary of the landscaped and existing built conditions, thereby minimizing adverse effects on existing visual character of the LRDP area. Additionally, implementation of these mitigation measures would ensure cohesive development and consistency with the natural landscapes present within these areas of campus. In addition, future projects would be required to undergo review by the Campus Design Advisory Board and incorporate design recommendations as part of the development project.

Impact 3.1-4: Create a New Source of Light or Glare

Implementation of the 2021 LRDP would introduce new sources of light and glare associated with new buildings and facilities. Such lighting could contribute to indirect lighting and/or glare on adjacent land uses that could adversely affect daytime or nighttime views and result in additional sky glow. This impact is considered **potentially significant**.

As previously described, exterior lighting within the main residential campus includes building, street, parking lot, and pathway lighting. The main residential campus also includes outdoor athletic field lighting within the Recreation & Athletics land use areas. Lighting present at the Westside Research Park consists of building, parking lot, and neighboring roadway lighting. Further, during fog conditions, nighttime lighting within the main residential campus has contributed to sky glow. Land use changes under the 2021 LRDP would create new sources of light that would include the following: exterior building lighting, lighted recreational facilities, pedestrian/bicycle pathways, parking lot lights, and headlights of vehicular traffic. These sources of light could create spillover light impacts on nearby sensitive receptors, especially in existing residential areas of the main residential campus as well as commercial and residential uses surrounding the Westside Research Park. With regard to lighted recreational facilities, development under the 2021 LRDP may include additional/improved recreational opportunities, including potential sport facilities that could require nighttime lighting. Illumination of these facilities (e.g., athletic fields, tennis courts, etc.) would include light fixtures that would be located along the periphery of the facilities. While these fixtures would be similar in character to existing recreation field light fixtures at existing recreational fields and areas within the main residential campus, new fixtures, if not properly directed and shielded, could result in sky glow and light spillover onto adjacent uses, including housing both on and off campus.

While new land uses would be subject to the UC Santa Cruz Campus Standard Handbook building and site specification requirements, as well as the guidelines presented in the Physical Design Framework, the types of building materials that may be used could result in additional glare. Therefore, it is possible, as specific architectural features and building materials have yet to be determined, that light and/or glare from new on-campus development could disrupt sensitive receptors (i.e., students and faculty), intrude on sensitive uses and facilities, and potentially contribute to sky glow within the area. As a result, this impact is considered **potentially significant**.

Mitigation Measures

Mitigation Measure 3.1-4: Minimize Light and Glare Resulting from New Development

UC Santa Cruz shall incorporate site-specific consideration of the orientation of the building, use of landscaping materials, and choice of primary façade materials to minimize potential off-site spillover of lighting and glare from new development. As part of this measure and prior to project approval, UC Santa Cruz shall require the incorporation of site- and project-specific design considerations to minimize light and glare including, but not limited to, the following:

- ▶ The use of non-reflective exterior surfaces and non-reflective (mirrored) glass.
- ▶ Safety lighting along proposed pedestrian/bicycle pathways shall be limited to non-glare, downlit, low-bollard style lights that focus illumination to the pathway surface, consistent with the exterior lighting standards identified in the UC Santa Cruz Campus Standards Handbook.
- ▶ All new outdoor lighting shall utilize directional lighting methods with shielded and cutoff type light fixtures to minimize glare and upward directed lighting such that light spillover onto adjacent structures does not occur. Verification of inclusion in project design shall be provided at the time of design review.

Consistent with the Illuminating Engineering Society of North America (IESNA) Lighting Handbook, installation of new lighting sources shall comply with the recommended "light trespass" standards for light spillover specific to the lighting environment in the project area (e.g., dark, low brightness, medium district brightness, and high district brightness) identified in the Illuminating Engineering Society of North America (IESNA) Lighting Handbook.

Significance after Mitigation

Implementation of Mitigation Measure 3-1.4 would ensure the use of non-reflective surfaces and direction lighting with shielded and cutoff type light fixtures such that light spillover onto adjacent uses and sky glow, which is typically associated with upward directed lighting, as a result of development under the 2021 LRDP would not substantially increase beyond existing conditions and impacts would be reduced to a **less-than-significant** level.