

4.8 LAND USE AND PLANNING

4.8.1 Introduction

This section evaluates the potential land use and planning impacts of the proposed Helios project. The section reviews existing land use at the project site and relevant land use plans, policies, and regulations governing the project area affected by the proposed project. No comments related to land use and planning were received from the public or agencies in response to the Notice of Preparation (NOP) circulated for this Environmental Impact Report (EIR).

4.8.2 Environmental Setting

Project Location

The Lawrence Berkeley National Laboratory (LBNL) hill site covers approximately 200 acres in the eastern hills of Berkeley and Oakland. The site is largely buffered by undeveloped land owned by the University of California, although the northwest corner of the LBNL site generally abuts residential neighborhoods in the city of Berkeley.

The proposed project would be located in the southeastern area of the LBNL site. The project site is located east of Chicken Creek, south of Lawrence Road, west of the Molecular Foundry, and north of the University of California Berkeley (UC Berkeley) boundary line. The access road that would be constructed for the project would be approximately 1,200 feet and would descend along the hillside to Centennial Drive. A portion of the Helios Access Road would cross the boundary line for LBNL and would extend into UC Berkeley managed land. Access to the LBNL hill site is limited to three controlled-access vehicular gates on Cyclotron Road (the main Blackberry Canyon Gate) and Centennial Drive (the Strawberry Canyon and Grizzly Peak gates), all of which are staffed by an on-site security firm contracted by LBNL. Visitors primarily use the Blackberry Canyon Gate. The Grizzly Peak Gate is an exit-only gate after the morning commute hours (LBNL 2007).

LBNL Site

The LBNL hill site has increased in size by approximately 50 percent, from 134 acres to 202 acres between 1987 and 2007. This expansion is primarily due to the transfer of management responsibilities for some 66 acres of University land from UC Berkeley to LBNL.¹ As described in the Land Use section of the

¹ There was a calculation error in the prior statements that the LBNL site was 134 acres prior to the transfer of 66 acres of UC Berkeley land to LBNL. In fact, the LBNL site was 136 acres, so with the addition of the transferred land, as of 2007, the LBNL site is 202 acres.

Berkeley Lab's 1997 Supplemental Environmental Impact Report (SEIR) Addendum, the transfer of management was arranged to enable the Berkeley Lab to implement a fuel management program to reduce risk of building damage from wildland fire, to facilitate more effective overall management of The Board of Regents of the University of California (The Regents) land in this area, and to support the orderly development of the Berkeley Lab site.

The additional acreage now under the Berkeley Lab's management is generally within two distinct areas. The first area is along the southern perimeter of the Berkeley Lab where it adjoins the UC Berkeley campus; the Berkeley Lab has assumed jurisdiction over a swath of undeveloped land approximately 500 feet wide, on average, from the horseshoe curve of Cyclotron Road on the west, across the Berkeley-Oakland border to the curve of Lee Road around the southern edge of Building 62. The proposed Helios project is located within this area. The second area of expansion is at the eastern edge of the Berkeley Lab, where LBNL has assumed control of an approximately 1,000-foot perimeter of undeveloped land to the north and east of the Berkeley Lab's Life Sciences Cluster (Buildings 74, 83, 84, 85, and 85B). LBNL also has jurisdiction over land on both sides of Centennial Drive as the road makes its way uphill toward the Lawrence Hall of Science, although access to Centennial Drive itself is not controlled because the roadway crosses above internal Berkeley Lab roadways via an overpass (LBNL 2007).

Surrounding Land Uses

LBNL is surrounded by a mix of land uses including open space, institutional, residential, and commercial uses. Northeast of the central portion of the hill site, located on the slopes above the Berkeley Lab, are the Lawrence Hall of Science, the UC Berkeley Space Sciences Laboratory, and the UC Berkeley Mathematical Sciences Research Institute. These buildings and adjacent property are owned by the University of California and are publicly accessible via Centennial Drive. To the north, northwest, and west of LBNL are residential neighborhoods and a neighborhood-serving commercial area, centered on Euclid Avenue, within the City of Berkeley. Southwest of LBNL is the 1,230-acre UC Berkeley campus. Southeast of LBNL are the open space areas of Strawberry Canyon, also owned by the University of California. Land to the east, northeast, and southeast of LBNL consists primarily of open space, including the University of California's ecological study areas and the UC Berkeley Botanical Gardens. Northeast of LBNL is the 2,000-acre Tilden Regional Park and to the south is the 205-acre Claremont Canyon Regional Preserve, both of which are owned and managed by the East Bay Regional Park District.

Research facilities surrounding the proposed project site include the National Center for Electron Microscopy which specializes in high-powered microscopes and the Molecular Foundry which provides support and research in Nanoscience. The location of the proposed project has been selected with a view to foster interaction between existing LBNL research programs in the Redwood cluster and the proposed

facility. The location is also close to the Berkeley Lab's southern fence line to facilitate access and interaction between the project and UC Berkeley laboratories.

Project Site Land Uses

The project site, including the access road, is approximately 6 acres and is currently undeveloped. The site has been heavily graded in conjunction with the recent construction of the Molecular Foundry building and in the past to establish the roadway terraces that descend south along the hill. There is minimal vegetation present where the building and parking area would be located. The vegetation consists of seasonal grasses and some newly planted trees associated with the Molecular Foundry construction. The area where the access road would be constructed and improved is more densely vegetated with seasonal scrub, mature trees, and grasses.

4.8.3 Regulatory Considerations

Local Plans and Policies

LBNL is a federal facility operated by the University of California and conducting work within the University's mission on land that is owned or controlled by The Regents of the University of California. As such, LBNL is generally exempted by the federal and state constitutions from compliance with local land use regulations, including general plans and zoning. However, LBNL seeks to cooperate with local jurisdictions to reduce any physical consequences of potential land use conflicts to the extent feasible. The western half of the LBNL site is within the Berkeley City limits, and the eastern half is within the Oakland City limits. This section summarizes relevant policies contained in the LBNL 2006 Long Range Development Plan (LRDP), and the Berkeley and Oakland General Plans.

2006 LRDP Principles and Strategies²

Future development at Berkeley Lab would build upon and strengthen the existing hillside cluster development pattern to create a more campus-like setting that reflects the Lab's unique site and functional needs. The main site would be organized into six "research clusters" defined by major topographic features encompassing research functions that share common needs and interests. One "service cluster" would provide a central location for facilities and shipping/receiving operations.

² While this Environmental Impact Report presents a "stand alone" impact analysis that does not rely upon tiering from any programmatic CEQA document, Berkeley Lab does actively follow the 2006 LRDP as a planning guide for Lab development. Accordingly, relevant 2006 LRDP principles, strategies, and design guidelines are identified in this section.

A network of pedestrian paths would link these clusters to the “Central Commons” area that would serve as the social heart of the Berkeley Lab. The Central Commons and pedestrian pathways would be essential elements of the LBNL’s functional and experiential qualities.

Most new buildings would be located on infill sites and/or adjacent to existing facilities, resulting in a higher density of development within each cluster, improving operational efficiencies, and creating a more collegial setting. These new facilities would also be planned and designed to segregate vehicular and pedestrian uses. Spaces for vehicular circulation, parking, deliveries, and service activities would be located at the perimeter of each research cluster. Outdoor spaces for pedestrian uses would be located toward the center of these clusters, in spaces formally defined by the edges of new and existing buildings.

The specific configuration and design of new development within these clusters would be guided by illustrative plans and design guidelines prepared by the Berkeley Lab. LBNL Design Guidelines support the objectives of the Laboratory and address the specific design of outdoor spaces and buildings. They are intended to result in an arrangement of facilities that would improve the Berkeley Lab’s appearance and functionality, and foster a sense of community and interaction.

The 2006 LRDP proposes four fundamental principles that form the basis for the development strategies provided for each element of the LRDP. All four principles are expressed in the land use plan: “Preserve and enhance the environmental qualities of the site as a model of resource conservation and environmental stewardship”; “build a safe, efficient, cost effective scientific infrastructure capable of long-term support of evolving scientific missions”; “build a more campus-like research environment”; and “improve access and connections to enhance scientific and academic collaboration and interaction.”

Development strategies provided by the 2006 LRDP are intended to minimize potential environmental impacts that could result from implementation of the 2006 LRDP. Development strategies set forth in the 2006 LRDP applicable to land use include the following:

Land Use Strategies

- Protect and enhance the site’s natural and visual resources, including native habitats, streams and mature tree stands by focusing future development primarily within the already developed areas of the site;
- Provide flexibility in the identification of land uses and in the siting of future facilities to accommodate the continually evolving scientific endeavor;
- Configure and consolidate uses to improve operational efficiencies, adjacencies and ease of access; and
- Minimize the visibility of Laboratory development from neighboring areas.

Development Framework Strategies

- Increase development densities within the most developed areas of the site to preserve open space, enhance operational efficiencies and improve access;
- To the extent possible site new projects to replace existing outdated facilities and ensure the best use of limited land resources;
- To the extent possible site new projects adjacent to existing development where existing utility and access infrastructure may be utilized;
- Site and design new facilities in accordance with University of California energy efficiency and sustainability policy to reduce energy, water and material consumption and provide improved occupant health, comfort and productivity; and
- Exhibit the best practices of modern sustainable development in new projects as a way to foster a greater appreciation of sustainable practices at the Laboratory.

Vehicle Access, Circulation, and Parking Strategies

- Reduce the percentage of parking spaces relative to the adjusted daily population;
- Consolidate parking into larger lots and/or parking structures, locate these facilities near Laboratory entrances to reduce traffic within the main site;
- Remove parking from areas targeted for outdoor social spaces and service areas;
- Consolidate service functions wherever possible in the Corporation Yard;
- Develop new campus-like outdoor spaces such as plazas within clusters of facilities and improve those that already exist;
- Minimize impervious surfaces to reduce storm water run-off and provide landscape elements and planting to stabilize slopes, reduce erosion and sedimentation; and
- Consolidate utility distribution into centralized utility corridors that generally coincide with major roadways.

LBNL Design Guidelines

The LBNL Design Guidelines were developed in parallel with the 2006 LRDP and were adopted by the Berkeley Lab following The Regents' consideration of the 2006 LRDP. The LBNL Design Guidelines provide specific guidelines for site planning, landscape and building design as a means to implement the 2006 LRDP's development principles as each new project is developed. Specific design guidelines are

organized by a set of design objectives that essentially correspond to the strategies provided in the 2006 LRDP. The document provides the following specific planning and design guidance relevant to land use:

From “A. The Land, Topography, and Views:”

- Provide screening landscape elements to visually screen large building;
- Mass and site buildings to minimize their visibility;
- Respect View Corridors; and
- Minimize further increases in impermeable surfaces at the Lab.

From “B. Research Clusters:”

- Create new Commons Spaces in clusters that currently lack them;
- Create as high a density and critical mass around commons spaces as possible;
- Segregate public entries and paths from service entries and paths where feasible; and
- Develop Research Clusters in a way that is mindful of future expansion.

From “C. Linkages:”

- Reduce the amount of impermeable surfaces at the Lab;
- Minimize visual and environmental impacts of new parking lots; and
- Site and design parking structures to integrate with the natural surroundings.

City of Berkeley General Plan

The City of Berkeley Draft General Plan was published in October 2000. On December 18, 2001, the Berkeley City Council certified the Draft General Plan EIR and approved the Housing, Land Use, and Transportation Elements. In spring 2002, the City Council approved the six remaining elements of the General Plan.

The Berkeley General Plan assigns land within the city to one of 12 land use designations. The LBNL site is designated as “Institutional,” which includes institutional, government, educational, recreational, open space, natural habitat, woodlands, and public service uses and facilities, such as the University of California, Bay Area Rapid Transit District (BART), Berkeley Unified School District, and East Bay Municipal Utility District (EBMUD) facilities. Within these areas, building intensity generally ranges

from a floor area ratio (FAR) of less than 1 to a FAR of 4.³ The current FAR of the Berkeley Lab site is approximately 0.2 (LBNL 2007).

The Land Use Element of the Berkeley General Plan contains comprehensive objectives and policies that guide physical development in the city. One objective of the Land Use Element is to “minimize the negative impacts and maximize the benefits of University of California on the citizens of Berkeley.” About 95 acres, or almost half of the LBNL site, is within the city of Berkeley. As noted above, LBNL is not subject to local land use regulations and policies, but seeks consistency with local plans and policies where feasible. Berkeley General Plan land use policies relevant to the proposed project are as follows:

Policy LU-39 University Traffic: Reduce traffic impacts of the University on the citywide transportation system;

Policy LU-40 Public Use of University Facilities and Grounds: Continue to support maximum opportunities for citizen use of campus libraries and recreational facilities, the maintenance of the hill lands as open space, and the adoption of University development standards and policies to conserve and enhance present open space resources; and

Policy LU-41 Public Agency Development: Ensure that all land use plans, development, and expansion by public agencies are consistent with City laws, the City’s General Plan and Zoning Ordinance to the extent feasible, and the California Environmental Quality Act.

City of Oakland General Plan

The Land Use and Transportation Element of the Oakland General Plan assigns land within the City to one of 15 land use designations. The General Plan designates a portion of the LBNL site as “Institutional,” a designation that is “intended to create, maintain, and enhance areas appropriate for educational facilities, cultural and institutional uses, health services and medical uses as well as other uses of similar character.” The maximum building intensity in areas with Institutional designations is a FAR of 8; however, appropriate development standards for areas where the Institutional use is adjacent to sensitive land uses, such as residential uses, are addressed by the City’s zoning code. In addition to the “Institutional” designation, a portion of LBNL is also designated as a Resource Conservation Area, where future buildings are not permitted except as required to facilitate the maintenance of conservation areas (LBNL 2007).

³ Floor area ratio is the ratio of floor area in a building to the land area of the lot on which the building sits.

The Oakland General Plan was adopted more recently than the City's zoning regulations; thus, the General Plan and zoning regulations may conflict. When a conflict occurs between zoning regulations and the General Plan, the General Plan takes precedence (City of Oakland 2001). Specific General Plan policies relating to the LBNL site give priority to the appropriate siting and design of institutional facilities, to minimizing conflicts between residential and nonresidential activities, and to developing regulations and procedures that allow an open, fair, timely, and fully informed permitting and enforcement process for future development (LBNL 2007).

The Oakland City Council adopted the Land Use and Transportation Element of the Oakland General Plan on March 24, 1998. Slightly over half of the 200-acre LBNL site is within the North Hills area of the City of Oakland. As noted above, LBNL is not subject to local land use regulations and policies, but seeks consistency with local plans and policies where feasible for this portion of the site. Oakland General Plan policies relevant to the proposed project are as follows:

Objective N2: Encourage adequate civic, institutional, and educational facilities located within Oakland, appropriately designed and sited to serve the community;

Policy N2.1 Designing and Maintaining Institutions: As institutional uses are among the most visible activities in the City and can be sources of community pride, high-quality design and upkeep/maintenance should be encouraged. The facilities should be designed and operated in a manner that is sensitive to surrounding residential and other uses;

Policy N2.3 Supporting Institutional Facilities: The City should support many uses occurring in institutional facilities where they are compatible with surrounding activities and where the facility site adequately supports the proposed uses; and

Policy N2.8 Long Range Development Planning: Require, where legally allowed, and in all other situations encourage, those institutions designated with the "Institutional" land use classification should be required to present Long Range Operation and Development Plans to the City Planning Commission. While these plans could be binding or non-binding, they should present realistic information regarding the continued operation and/or expansion of the facilities. The City suggests that substantial public input be built into the process of developing the plans. The plans could be required as a part of development applications, or on a periodic basis.

4.8.4 Impacts and Mitigation Measures

Significance Criteria

The impact of the proposed project on land use and planning would be considered significant if it would exceed the following Standards of Significance, in accordance with Appendix G of the *California Environmental Quality Act (CEQA) Guidelines* and the UC CEQA Handbook:

- Physically divide an established community;
- Conflict with applicable land use plan, policy, or regulation or an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

Issues Not Discussed Further

The Helios project Initial Study found that implementation of the proposed project would not have any impact with respect to physically dividing an established community. The proposed project would be located within the existing LBNL site as well as a portion of the UC Berkeley campus. The project would not divide any established communities. The proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan as none are applicable to the project site and its vicinity. These issues are not discussed further in this section.

Project Impacts and Mitigation Measures

Helios Impact LU-1: **The proposed project would not conflict with the applicable land use plan or policy (i.e., 2006 LBNL LRDP, 2006 LBNL Design Guidelines, or UC Berkeley 2020 LRDP) adopted for the purpose of avoiding or mitigating an environmental effect. (Less than Significant)**

The land use plans and policies that would apply to the proposed project include the LBNL 2006 LRDP and LBNL 2006 Design Guidelines. In addition, because the proposed project would be located on the UC Berkeley campus, the UC Berkeley 2020 LRDP would also be an applicable land use plan. A project that is consistent with the requirements and goals of these plans and guidelines would help avoid or mitigate environmental impacts associated with development on the LBNL hill site and UC Berkeley campus. The consistency of the proposed project with the LBNL 2006 LRDP and guidelines is evaluated below.

Consistency with the LBNL 2006 LRDP⁴

In order to assess a proposed project's consistency with the 2006 LRDP, the following questions must be answered:

- Is the proposed project included in the scope of the development projected in the 2006 LRDP?
- Is the proposed location of the project in an area designated for this type of use in the 2006 LRDP?
- Are the changes to Berkeley Lab population associated with the proposed project included within the scope of the 2006 LRDP's population projections?
- Are the objectives of the proposed project consistent with the objectives adopted for the 2006 LRDP?

The following discussion describes the proposed project's relationship to and consistency with the development projections, population projections, land use designations, and objectives contained in the 2006 LRDP. It should be noted that because the 2006 LRDP used 2003 building space and population as baseline, the building space added or removed and the population added to the Berkeley Lab by projects approved since 2003 are counted under the 2006 LRDP.

Consistency with 2006 LRDP Scope of Development

The 2006 LRDP provides for the construction of approximately 980,000 gross square feet (gsf) of additional research and support space and demolition of up to 320,000 gsf of building space, for a net increase of 660,000 gsf of new research and support space. As a result, the total building space for the Berkeley Lab under the 2006 LRDP is 2,420,000 gsf.

The proposed Helios project would add approximately 160,000 gsf of research and support space to the LBNL site. The building space proposed for the project is well within the 2006 LRDP's scope of development. Other projects that the Berkeley Lab has approved for implementation since 2003 would also add research and support space to LBNL and would be counted against the adopted 2006 LRDP building space for LBNL. As shown in **Table 4.8-1, 2006 LRDP Building Space and Approved and Pending Projects**, below, the approved projects in conjunction with the Helios project will not add research and support space that would cause LBNL to exceed the amount of the building space allowed under the 2006 LRDP.

⁴ The proposed project is an element of the growth under the 2006 LRDP and as the analysis in this section states, the project is consistent with the 2006 LRDP. The EIR for the 2006 LRDP is currently being challenged in a lawsuit brought by several individuals. If the 2006 LRDP is set aside as a result of this litigation, then the project likely would proceed under LBNL's 1987 LRDP, as amended. If any further action is needed to determine consistency with the 1987 LRDP, or if a plan amendment were needed, the physical environmental impacts associated with any such action would be the same, and those impacts are addressed in this EIR.

Table 4.8-1
2006 LRDP Building Space and Approved and Pending Projects

Project	Research and Support Space Increment (gsf)	Cumulative Total (gsf)
Existing Building Space as of 2003	N/A	1,760,000
Molecular Foundry Building	95,000	1,855,000
Guest House	25,000	1,880,000
User Support Building	30,000	1,910,000
Animal Care Facility	7,100	1,917,100
Building Space Demolished since 2003	69,939	1,847,161
Helios Energy Research Facility*	160,000	2,007,161
Computational Research and Theory Facility*	140,000	2,147,161
Current Building Space at LBNL	N/A	2,147,161
2006 LRDP Space Cap	660,000	2,420,000

* Indicates a proposed but not yet approved project; all other projects listed in the table are approved projects.

The 2006 LRDP also includes approximately 585,000 square feet of parking space (representing a net gain of 500 parking spaces). Since 2003, the total number of parking spaces at the Berkeley Lab has decreased from about 2,300 spaces to 2,160 due to construction staging on several parking facilities. The proposed project would add 50 new parking spaces. The combined total of spaces is well within the 500 additional parking spaces allowed under the 2006 LRDP.

Consistency with 2006 LRDP Land Use Designations

The applicable land use plan for the Berkeley Lab is the 2006 LRDP. The 2006 LRDP designates the project site as Research and Academic (see **Figure 4.8-1, 2006 Land Use Diagram**). This land use designation is provided in the 2006 LRDP for the location of research and academic uses. The proposed project is consistent with the land use zone and no zone change would be required. The 2006 LRDP designates the Chicken Creek riparian area as a No Development zone. The project proposes no facilities that would intrude into the Chicken Creek No Development zone. The 2006 LRDP Height Zone Map designates the project area as appropriate for buildings that are up to six stories high. The Energy Biosciences Institute (EBI) portion of the proposed project would have a total of seven floor levels of which five stories and a parapet that would be above grade. Therefore, the project would be consistent with the 2006 LRDP Height Zone Map. The proposed location of the project is thus in an area that is designated for the project's type of use as set forth in the 2006 LRDP.

Consistency with 2006 LRD^P Population Projections

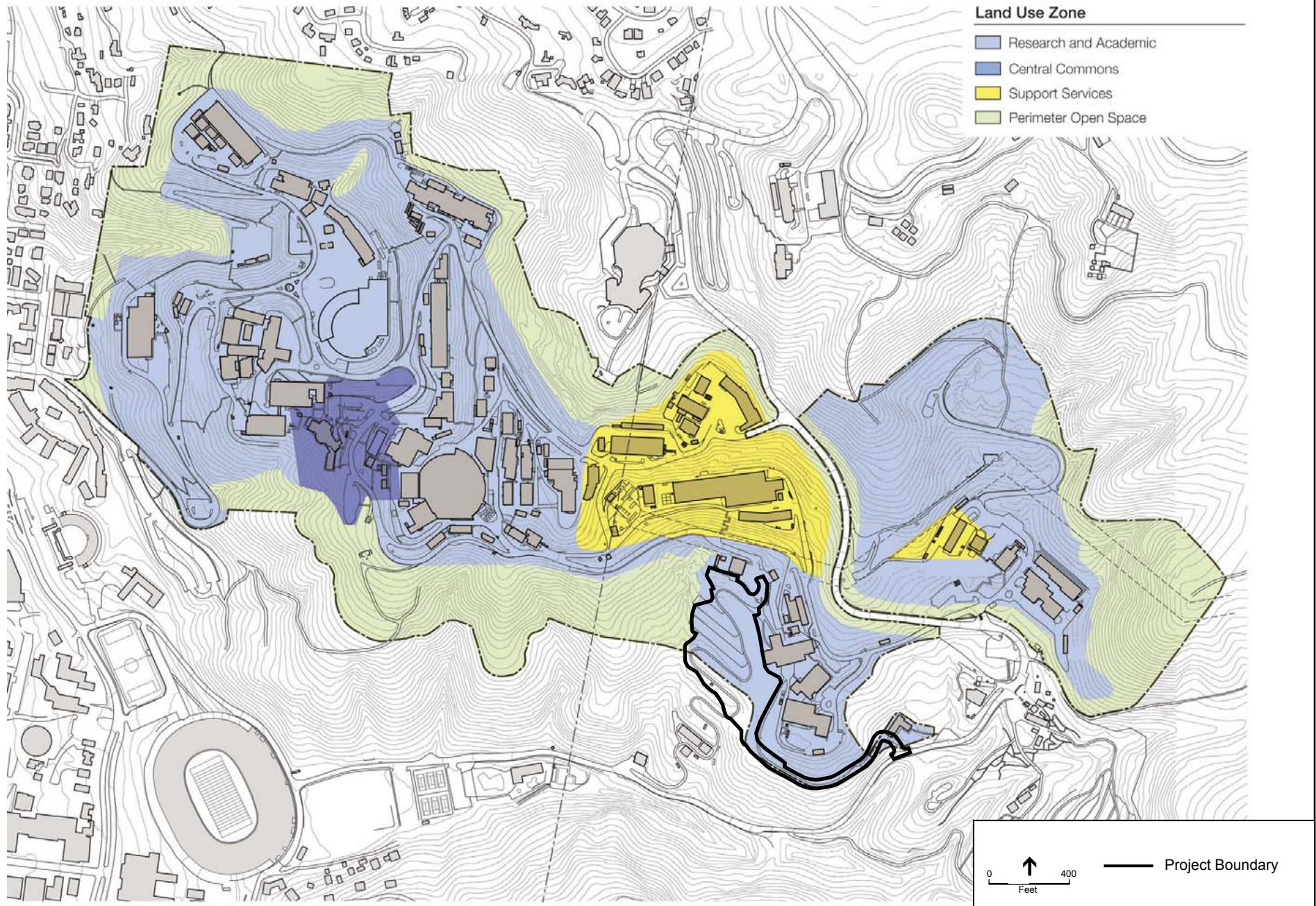
The 2006 LRD^P projects that, through 2025, the on-site adjusted daily population at the Berkeley Lab will increase to approximately 5,375 persons, which is an increase of approximately 1,000 persons over the 2003 baseline. The proposed project, which would add approximately 455 new employees to the Berkeley Lab, would not, in itself or in combination with other recently approved and currently proposed projects, increase the Berkeley Lab's adjusted daily population to a level that would reach or exceed that projected for the site under the 2006 LRD^P (see **Table 4.8-2, 2006 LRD^P Adjusted Daily Population and Approved and Pending Projects**). Therefore, the proposed project is within the 2006 LRD^P's population projections.

Table 4.8-2
2006 LRD^P Adjusted Daily Population and Approved and Pending Projects

Project	Population Increment (FTE)	Cumulative Total
Existing ADP as of 2003	0	4,375
Molecular Foundry Building	140	4,515
Guest House	8	4,523
User Support Building	0	4,523
Animal Care Facility	10	4,533
Helios Energy Research Facility*	455	4,988
Computational Research and Theory Facility*	165	5,153
Other non-project related population growth since 2003	0	5,153
2006 LRD ^P Population	1,000	5,375

Note: This table reports the net new persons associated with each project and does not include persons that would be relocated from another LBNL building on the hill site to the project site. The table considers persons relocating to LBNL from UC Berkeley as new LBNL population.

* Indicates a proposed but not yet approved project; all other projects listed in the table are approved.



SOURCE: LBNL 2006 Long Range Development Plan

FIGURE 4.8-1



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2006 LRDP Land Use Diagram

Consistency with 2006 LRD^P Objectives

The primary objectives of the 2006 LRD^P are to revitalize existing facilities and infrastructure at the Berkeley Lab's hill site and to guide the future development at the site. The 2006 LRD^P identifies the following principal objectives:

- Strengthen and expand existing research programs to sustain and grow Berkeley Lab's role as a national research laboratory;
- Expand partnerships and collaborations to enhance Berkeley Lab's scientific and technical base;
- Provide flexibility to return staff from its off-site facilities leased in Berkeley and Oakland to the main site in order to enhance collaboration, productivity, and efficiency;
- Expand the capacity of existing high demand advanced facilities and provide broader functionality;
- Rehabilitate facilities that have outlived their intended purpose and can be cost-effectively adapted for use in regions of scientific discovery;
- Replace single-purpose facilities with new facilities programmed to accommodate multiple disciplines with advanced infrastructure suitable for future scientific endeavors; and
- Construct new scientific facilities to support future research initiatives and continued growth in existing programs.

The proposed project would support several of these key objectives of the 2006 LRD^P. The Helios project would support a new research initiative and would facilitate research related to alternate and sustainable energy sources with a view to reduce the dependence on fossil fuels and develop carbon neutral energy sources to mitigate global climate change. This research is expected to sustain and grow the Berkeley Lab's role as a national research laboratory. The Helios project would enhance the Berkeley Lab's scientific and technical base by facilitating collaboration between LBNL and UC Berkeley on this program.

The proposed project would also provide space and facilities for the EBI, a grant-based program that would focus on renewable biofuels for transportation. This program is also a new research initiative that would grow the Berkeley Lab's role as a national lab and would involve collaboration between the Berkeley Lab, UC Berkeley, and University of Illinois, Urbana Champaign (UIUC).

The location of the project site has been selected with a view to foster interaction between existing LBNL research programs in the Redwood cluster and the proposed facility. The location is also close to the Berkeley Lab's southwestern fence line to facilitate access and interaction between the project and UC Berkeley researchers and students.

The proposed project is consistent with the objectives of the 2006 LRD^P.

Consistency with LBNL 2006 Design Guidelines

In addition to the 2006 LBNL LRD^P, the proposed project must also be designed consistent with the 2006 LBNL Design Guidelines. As mentioned above, the 2006 LBNL Design Guidelines were developed in parallel with the 2006 LRD^P; therefore, certain areas of the Guidelines (i.e., population, development, land use/zones) would be similar to the 2006 LBNL LRD^P. Because as discussed above, the proposed project would be consistent with the population, development (i.e., height, area), land use/zoning requirements and objectives set forth by the 2006 LBNL LRD^P, the proposed project would also be consistent with the 2006 LBNL Design Guidelines.

Specific guidelines from the LBNL Design Guidelines are provided above in **Section 4.8.3, Regulatory Considerations**. The guidelines applicable to land use are separated into three main categories: Land, Topography, and Views; Research Clusters; and Linkages. With respect to Land, Topography, and Views, the proposed project would be constructed with a “green roof.” Green roofs are designed to be integrated with building architecture and be pleasant landscaped areas while capturing storm water runoff. The green roof would provide visually screening for the large Helios building. In addition, the proposed Helios building would further minimize its visibility by constructing two stories of its total seven stories below grade. With respect to the Research Clusters portion of the LBNL Design Guidelines, the proposed project would construct a gathering area that includes meeting rooms and a two-story lobby that would lead up to the café for the building that would provide food and seating for all employees of the Helios project. The Helios project would allow LBNL employees, EBI researchers, graduate students, and visiting researchers to work within the same building, encouraging interaction and exchange of ideas across disciplines and research topics. Projects that promote research clusters and minimize the visibility of new developments would be considered consistent with the LBNL Design Guidelines. Therefore, the proposed project would be consistent with the LBNL Design Guidelines and would not cause a significant impact with respect to this criterion.

Consistency with UC Berkeley 2020 LRD^P

A portion of the Helios Access Road would be located on UC Berkeley land. Approximately 0.8 acre of UC Berkeley land would be involved. Accordingly, this project component would be required to be consistent with the UC Berkeley 2020 LRD^P.

The area where the access road would be located is part of the UC Berkeley Hill Campus. The 2020 LRD^P land use diagram designates this area as a Study Site. The UC Berkeley 2020 LRD^P EIR notes that this area is currently used for material storage and vehicle parking and that the site should be studied to

identify a more suitable long term use. Given the current use of the site, the fact that a long-term use of the site is not identified, and because the proposed Helios project would require only a small fraction of the study site (about 0.8 acre), the proposed project would not conflict with the UC Berkeley 2020 LRDP. It should be noted that the proposed project component located on UC Berkeley land would not affect the UC Berkeley 2020 LRDP building space or population estimates; therefore, an evaluation of consistency with those elements is not required.

Mitigation Measure: No project-level mitigation measure required.

4.8.5 References

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- City of Berkeley. 2001. Berkeley General Plan EIR.
- City of Oakland. 2001. Community and Economic Development Agency, Guidelines for Determining Project Conformity with the General Plan and Zoning Regulations. December 5.
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