

**CALIFORNIA ENVIRONMENTAL QUALITY ACT
FINDINGS IN CONNECTION WITH THE APPROVAL OF
THE HELIOS ENERGY RESEARCH FACILITY**

I. CERTIFICATION OF THE FINAL ENVIRONMENTAL IMPACT REPORT

The University of California (“University” or “UC”), as the lead agency, has prepared the Final Environmental Impact Report (“Final EIR”) for the Helios Energy Research Facility (“Helios Facility” or “Project”) for UC-Lawrence Berkeley National Laboratory (LBNL; also referred to as the “Lab”).

The Final EIR assesses the potential environmental effects of implementation of the Helios Facility, identifies the means to eliminate or reduce potential significant adverse impacts, and evaluates a reasonable range of alternatives to the proposed Project. In addition, the Final EIR includes text changes, Responses to Comments on the Draft EIR from responsible agencies, interested groups and individuals, and the Mitigation Monitoring and Reporting Program for the proposed Project.

The Board of Regents of the University of California (The “Regents”) hereby certifies that the Final EIR has been completed in compliance with the California Environmental Quality Act (“CEQA”). The Regents further certify that they have received the Final EIR, and reviewed and considered the information contained in the Final EIR prior to making the approvals set forth below in Section III. The Regents further certify that the Final EIR reflects their independent judgment and analysis. The conclusions presented in these Findings are based upon the Final EIR and other evidence in the administrative record.

II. FINDINGS

In this action, The Regents are certifying the Helios Facility EIR. Having received, reviewed and considered the Final EIR and other information in the administrative record, The Regents hereby adopt the following Findings and Statement of Overriding Considerations in compliance with CEQA, the CEQA Guidelines, and the University’s procedures for implementing CEQA for the Helios Facility. The Regents certify that their Findings are based on a full appraisal of all viewpoints, including all comments received up to the date of adoption of these Findings, concerning the environmental impacts identified and analyzed in the Final EIR, and are supported by substantial evidence. The Regents adopt these Findings and Statement of Overriding Considerations in conjunction with its approvals as set forth in Section III, below.

A. Environmental Review Process

1. *Preparation of the EIR*

On July 26, 2007, the University released a Notice of Preparation (“NOP”) announcing the preparation of a Draft EIR and describing its proposed scope. A public Scoping meeting was held August 8, 2007.

The University issued a Draft EIR for the Project on November 19, 2007. A 53-day public comment period (November 16, 2007, through January 11, 2008), which is longer than the mandated 45-day comment period required by state law, was provided by the University. However, in response to public and agency requests for an extension, the University extended the comment period further to end on February 1, 2008, and thereby provided a 74-day comment period. During this period, LBNL held a public meeting on the Draft EIR on December 17, 2007, to receive verbal comments. The Final EIR contains all of the comments received during the public comment period, together with written responses to those comments which were prepared in accordance with CEQA, the CEQA Guidelines, and the University’s procedures for implementing CEQA. The Regents certify that it has reviewed the comments received and responses thereto and finds that the Final EIR provides adequate, good faith and reasoned responses to the comments.

2. *Status of EIR as “Stand Alone” Document*

The Helios Project EIR is a “stand alone” document that does not rely upon tiering from any programmatic CEQA document. However, LBNL actively follows the 2006 Long Range Development Plan (“2006 LRDP”) as a planning guide for Lab development. Accordingly, relevant 2006 LRDP principles, strategies, and design guidelines are identified in these Findings. Additionally, mitigation measures adopted as part of the 2006 LRDP are required for the proposed Project and are thus included as part of the proposed Project in the EIR. The analysis in these Findings evaluates environmental impacts that would result from project implementation following the application of the 2006 LRDP’s mitigation measures. These mitigation measures are included in the Project and will be monitored pursuant to the Mitigation Monitoring and Reporting Plan that will be adopted for the Project. These Findings incorporate by reference the mitigation measures adopted as part of the 2006 LRDP and as set forth in the Helios Project EIR.

3. *Adoption of Alternative 5 (Project with Alternate Access Road) as Proposed Project*

As described in Chapter 2.0 of the Final EIR, Lab staff has recommended that The Regents approve Alternative 5, the Proposed Project with Alternate Access Road, instead of the project as proposed. Alternative 5 was described and evaluated in Chapter 6 of the Draft EIR.

Alternative 5 (the “Preferred Alternative”) would construct the Helios building as described in the EIR. However, the new access road to serve the research building would be constructed along a different alignment. Under this Preferred Alternative, the proposed access road would be located south of the access road included in the proposed project, avoiding Buildings 73 and 73A, and would intersect with Centennial Drive approximately 400 feet southwest of the

project's proposed intersection. Similar to the proposed project, advanced flashing lights would be installed on Centennial Drive alerting motorists that there is an intersection ahead.

Figure 2.0-1 in Chapter 2 of the Final EIR shows the Preferred Alternative as currently proposed. The Preferred Alternative differs from Alternative 5 as presented in the Draft EIR and the previously proposed project only in a few respects that are summarized below.

- The proposed access road under the Preferred Alternative does not include a turnaround area near the Centennial Drive intersection. This change in the description of the alternative would not increase the severity of previously disclosed environmental impacts of Alternative 5 nor would it result in new environmental impacts.
- Because of the topography of the area where the access road would be built under the Preferred Alternative, retaining walls would be needed along some portions of the access road and retaining walls would be constructed at the intersection of the access road with Centennial Drive (see Figure 2.0-1). The impact of the new roadway, including the visual impact, is described in more detail below.
- Under the Preferred Alternative, no solar panels are proposed over the parking spaces, although solar panels would still be used on the roof top area of the EBI portion of the proposed building. The elimination of the solar panels from the parking area would not alter the previously evaluated environmental impacts of the previously proposed project or Alternative 5.

The potential for landslide materials to affect the Helios building and access road was discussed under Helios Impact GEO-3 and Impact GEO-5, and Helios Mitigation Measure GEO-3 was included to ensure that unstable areas are appropriately addressed during project design (Draft EIR, pages 4.5-14 through 4.5-17). It was noted in Section 5 that Alternative 5 would result in impacts related to geology and soils that are similar to those of the proposed project. Since the publication of the Draft EIR, based on a geotechnical investigation of the building site and the access road (under the Preferred Alternative), LBNL has determined that soft earth materials are present under a portion of the Helios building site and landslide deposits are present along portions of the access road. All of these areas will require stabilization. LBNL has examined various geotechnical solutions to address the soft earth materials at the building site, and has opted for lime treatment of this material. The area with soft earth materials would be excavated and the excavated materials would be stockpiled on site, treated with lime, and placed in lifts within the excavated area until the necessary base grades are reached. None of the excavated material would be off-hauled. Landslide deposits along the access road would either be removed and replaced with engineered fill or stabilized in place using retaining walls.

With respect to storm water improvements included in the previously proposed project and Alternative 5, the Draft EIR noted that a hydromodification vault would be constructed under the turnaround area adjacent to and west of the Helios building to handle all flows from the building and other paved areas including the northern portion of the access road and the parking area. For the lower, southerly portion of the access road, no storm water improvement to control storm

water was proposed as part of the previously proposed project (or Alternative 5). Instead of the hydromodification vault, the Preferred Alternative has been designed with a bioretention pond on one of the existing terraces within the project footprint area. Similar to the proposed project and Alternative 5, under the Preferred Alternative, all storm water would flow through grassy swales before discharge into the bioretention pond. Furthermore, storm water from the lower portion of the access road under the Preferred Alternative would drain into an existing storm drain that discharges into the mid canyon basin in Strawberry Creek. An in-line stormwater pollution prevention device (Stormwater Management StormFilter with nine filter cartridges) would be installed in the existing storm drain to remove hydrocarbons, sediment, particulate-bound metals, and nitrate in storm water. All proposed facilities have been evaluated and found to be feasible (Greco and Remington 2008).

LBNL is not seeking approval of the auditorium from The Regents at this time. Under the Preferred Alternative, the auditorium would not be constructed in the first phase of the project. However, the design of the Preferred Alternative allows for adequate land to be maintained in front of the proposed research building to construct the auditorium in a later phase. Therefore, the auditorium was included in the Final EIR and its impacts have been evaluated.

The Preferred Alternative could reduce or eliminate potentially significant impacts related to tree removal. However, the Preferred Alternative would increase the likelihood of disturbance to special-status plant species and Alameda whipsnake habitat. To address this potentially significant impact, additional mitigation is incorporated into the project to reduce the potential impact to a less-than-significant level. The Preferred Alternative may also increase the magnitude of impact to cultural resources related to roadway construction activities that could encounter previously undisturbed archaeological resources.

Design features of the Preferred Alternative that were incorporated to address the potential hydromodification effect of the increased runoff have been evaluated and are shown to decrease potential impacts to hydrology. Thus, Helios Impacts HYDRO-2 and HYDRO-4 would be less than significant and the proposed Helios Mitigation Measures HYDRO-1a, HYDRO-2a and 2b, and HYDRO-4a and 4b are not required for the Preferred Alternative.

The potential safety impact under the Preferred Alternative due to the lack of adequate sight distance at the new intersection is found not to present a significant safety risk, but to ensure safety at the intersection Mitigation Measure TRANS-2 will be revised to allow only minimal landscaping in the area. All other impacts of the Preferred Alternative would be identical to the impacts of the previously proposed Project and those impacts that are significant or potentially significant would require the implementation of the same mitigation measures that were presented for the previously proposed Project in the Draft EIR.

4. *Absence of Significant New Information*

CEQA Guidelines Section 15088.5 requires a lead agency to recirculate an EIR for further review and comment when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR but before certification. New information includes: (i) changes to the project; (ii) changes in the environmental setting; or (iii) additional data or

other information. Section 15088.5 further provides that “[n]ew information added to an EIR is not ‘significant’ unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement.”

Approval of Alternative 5 and the minor refinements to Alternative 5 as presented in the Draft Final EIR would not result in any new significant environmental impacts or substantially more severe environmental impacts as set forth in the Draft EIR. Accordingly, recirculation of the EIR is not required in light of these project refinements.

Having reviewed the information contained in the Draft and Final EIRs and in the administrative record as well as the requirements under CEQA Guidelines Section 15088.5 and interpretive judicial authority regarding recirculation of draft EIRs, The Regents hereby find that no new significant information was added to the EIR following public review, and thus recirculation of the EIR is not required by CEQA.

B. Impacts and Mitigation Measures

The following section summarizes the direct and cumulative environmental impacts of the Helios Facility identified in the Final EIR, and provides Findings as to those impacts, as required by CEQA and the CEQA Guidelines. A full explanation of these environmental Findings and conclusions is set forth in the Final EIR. These Findings hereby incorporate by reference the analysis in the Final EIR supporting the Final EIR’s findings and conclusions and in making these Findings, The Regents ratify, adopt and incorporate the evidence, analysis, explanation, findings, Responses to Comments and conclusions of the Final EIR except where they are specifically modified by these Findings. In the comments on the Draft EIR, certain measures were suggested by various commentors as potential mitigation measures. With respect to the measures that were suggested in the comments, and not adopted by the Final EIR, the Responses to Comments in the Final EIR explain that the suggested mitigation measures are either already part of ongoing campus programs and procedures, or why they are infeasible and thus not recommended by the Final EIR for adoption. The Regents hereby adopt and incorporate by reference the reasons stated in the response to comments contained in the Final EIR as its grounds for finding these suggested mitigation measures to be infeasible.

The findings set forth below, including the statement of overriding considerations, are made with respect to the adoption of the Preferred Alternative (Alternative 5 – Project with Alternate Access Road Alignment), as described above in Section II.A.3. The Preferred Alternative is hereinafter referred to as the “Project” or the “proposed Project,” and the findings set forth below apply to the Preferred Alternative as the proposed Project.

1. *Aesthetics*

a) *Impact VIS-1: Construction activities associated with the project would create temporary aesthetic nuisances for adjacent land uses. Mitigation Measures would reduce this impact to a less-than-significant level.*

Mitigation Measure VIS-1: LBNL and their contractors shall minimize the use of on-site storage and when necessary store building materials and equipment away from public view to the maximum extent feasible and shall keep activity within the project site and laydown areas.

FINDING: For the reasons stated in the Final EIR, The Regents find that implementation of the Project would create temporary aesthetic nuisances for adjacent land uses. Mitigation Measure VIS-1 is hereby adopted, and implementation of this mitigation measure will reduce this impact to a less-than-significant level.

b) *Impact VIS-2: The proposed Project would alter views of the LBNL site and would result in a substantial adverse effect to a scenic vista or substantially damage scenic resources. This is a significant and unavoidable impact.*

Mitigation Measure VIS-2: Trees and mature vegetation removal that is required for the access road construction will be minimized to reduce the potential visibility of the improved roadway.

FINDING: For the reasons stated in the Final EIR, The Regents find that implementation of the Project would result in visual changes, and could result in a substantial adverse effect to a scenic vista or substantially damage scenic resources. Although Mitigation Measure VIS-2 will reduce this impact to some extent, there are no mitigation measures available to reduce this impact to a less than significant level. The Regents find this remaining significant impact to be acceptable because the benefits of the project outweigh this and the other unavoidable environmental impacts of the project for the reasons set forth in Section II.E. of these findings.

c) *Impact VIS-3: The proposed Project would alter the existing visual character of the Berkeley Laboratory site but would not substantially degrade the existing visual character and quality of the site and its surroundings. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

d) *Impact VIS-4: The proposed Project would create a new source of substantial light or glare that would not adversely affect day or nighttime views in the area. Mitigation Measures would reduce this impact to a less-than-significant level.*

Mitigation Measure VIS-4a: Upon project implementation, the contractor shall install the PV panels at adequate angles that minimize the amount of glare that could be created while maintaining the functionality of the PV system.

Mitigation Measure VIS-4b: Upon project implementation, the contractor shall install a mechanized system that controls the angle of the proposed PV louvers. This system shall be designed to ensure screening to building occupants while eliminating PV louver angles that would create substantial sources of glare.

Mitigation Measure VIS-4c: To the maximum extent feasible, glazing materials shall be installed on the glass that comprises the PV louvers. The glazing shall be installed only if it can reduce glare while maintaining the functionality of the PV film within the glass.

FINDING: For the reasons stated in the Final EIR, The Regents find that implementation of the Project would create a new source of substantial light and glare that could potentially affect day and nighttime views and could conflict with local lighting regulations and policies. Mitigation Measures VIS-4a, VIS-4b, and VIS-4c are hereby adopted, and implementation of these measures will reduce this impact to a less-than-significant level.

e) *Cumulative Impact VIS-1: Construction activities associated with the proposed Project, in conjunction with other near-term development, would not substantially affect visual resources. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

f) *Cumulative Impact VIS-2: The proposed Project, in conjunction with reasonably foreseeable near-term and long-term development, would not substantially affect visual resources. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

2. Air Quality

a) *Impact AIR-1: Construction of the proposed Project would generate short-term emissions of fugitive dust and criteria air pollutants that would not adversely affect local air quality in the vicinity of the construction site. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

b) *Impact AIR-2: The proposed Project would generate long-term operational emissions of criteria pollutants from increases in traffic and stationary and area sources that would not adversely affect air quality. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

c) *Impact AIR-3: The proposed Project would increase carbon monoxide concentrations at busy intersections and along congested roadways in the project vicinity but would not expose sensitive receptors to substantial pollution concentrations. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

d) *Impact AIR-4: The proposed Project would not create objectionable odors affecting a substantial number of people. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

e) *Impact AIR-5: The proposed Project would not expose maximally exposed individuals to cancer risks exceeding 10 in one million. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

f) *Impact AIR-6: The proposed Project would not generate ground level concentrations of noncarcinogenic toxic air contaminants that would result in a Hazard Index greater than 1.0 for the maximally exposed individual. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

g) *Cumulative Impact AIR-1: The proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

h) *Cumulative Impact AIR-2: Although the proposed Project would result in greenhouse gas emissions, its contribution to the significant cumulative impact associated with greenhouse gas emissions would not be cumulatively considerable. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

i) *Cumulative Impact AIR-3: Even though overall cumulative impacts will decrease over time, the proposed Project will make some incremental contribution to cumulative cancer risk impacts. This is a significant and unavoidable cumulative impact.*

Mitigation Measure Cumulative AIR-3: Because most of the cancer risk from TACs is due to diesel particulate emissions, measures to reduce the risk (beyond regulations already in place that will substantially reduce diesel particulate emissions in the next 20 years) shall include those measures that could reduce vehicle travel to and from the Helios project (LRDP Mitigation Measures TRANS-1d and TRANS-3), and those measures that reduce emissions from construction equipment and the project's backup generator (LRDP Mitigation Measures AQ-1b and AQ-4a).

FINDING: For the reasons stated in the Final EIR, The Regents find that implementation of the Helios Project, in combination with other potential contributing projects, would contribute to the cumulative cancer risk impacts associated with future development of the Lab and UC Berkeley. Although Mitigation Measure Cumulative AIR-3 will apply to the Project, and will reduce this impact to some extent, there are no mitigation measures available to reduce the Project's contribution to the cumulative impact and reduce this impact to a less than significant level. The Regents find this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other unavoidable environmental impacts of the Project for the reasons set forth in Section II.E. of these findings.

j) *Cumulative Impact AIR-4: The proposed Project would not result in a cumulatively considerable contribution to cumulative noncancer health impacts associated with future development of LBNL and UC Berkeley. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

3. *Biological Resources*

a) *Impact BIO-1: Construction of the proposed Project would result in the permanent removal of 4.01 acres of vegetation. Mitigation Measures would reduce this impact to a less-than-significant impact.*

Mitigation Measure BIO-1a: All trees removed to construct the proposed Project will be replaced at a ratio of 2:1.

Mitigation Measure BIO-1b: For trees that would be removed by the project and meet the UC Berkeley specimen tree criteria, LBNL will replace the trees at a ratio of 3:1, consistent with UC Berkeley's specimen tree replacement policy.

Mitigation Measure BIO-1c: To ensure the successful replacement of trees, a tree replacement plan shall be implemented within the LBNL boundary and shall meet the following standards: (1) The plan shall identify suitable areas for tree replacement to occur such that existing native woodlands are enhanced and/or expanded. (2) The plan shall provide for replacing trees at a 2:1 ratio (or 3:1 for specimen trees, as appropriate), with native trees replaced in-kind and non-native trees replaced with appropriate native species. (3) The plan shall specify, at a minimum, the following: (a) the location of planting sites; (b) site preparation and planting procedures; (c) a schedule and action plan to maintain and monitor the tree replacement sites; (d) a list of criteria and performance standards by which to measure success of the tree replacement; and (e) contingency measures in the event that tree replacement efforts are not successful.

FINDING: For the reasons stated in the Final EIR, The Regents find that implementation of the Project would result in the permanent removal of 4.01 acres of vegetation. Mitigation Measures BIO-1a, BIO-1b, and BIO-1c are hereby adopted, and implementation of these measures will reduce this impact to a less-than-significant level.

b) *Impact BIO-2: The proposed Project could result in direct and indirect adverse effects to creeks and seeps subject to ACOE and CDFG jurisdiction and sensitive plant communities and sensitive habitats. The Project includes LRDP Mitigation Measure BIO-2a, requiring avoidance of the freshwater seep, and a wetland mitigation plan if avoidance is not feasible. This is a less-than-significant impact.*

Mitigation Measure BIO-2: If a Wetland Mitigation Plan is required pursuant to LRDP Mitigation Measure BIO-2a, to further ensure the success of the required Wetland Mitigation Plan, the plan shall specify, at a minimum, the following: (1) the goals of the mitigation effort; (2) the location of the mitigation site; (3) the approach, site preparation and planting procedures; (4) a schedule and action plan to maintain and monitor the mitigation site; (5) a list of criteria and performance standards by which to measure success of the wetland mitigation; and (6) contingency measures in the event that mitigation efforts are not successful.

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required. However, Mitigation Measure BIO-2 is hereby adopted.

c) *Impact BIO-3: The proposed Project would not adversely affect special-status nesting birds (including raptors) such that nests are destroyed, they abandon their nests or that their reproductive efforts fail. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

d) *Impact BIO-4: Removal of trees and structures during the breeding season would not result in direct mortality of special-status bats. In addition, construction noise would not cause maternity roost abandonment and subsequent death of young. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

e) *Impact BIO-5: Construction of the proposed Project would not result in take or harassment of Alameda whipsnake. The Project would result in a potentially significant impact from the removal of additional coastal scrub habitat that is considered suitable habitat for the Alameda whipsnake. Mitigation measures would reduce this impact to a less than significant level.*

Mitigation Measure BIO-5a: Signage shall be posted along the road identifying the potential presence of rare and protected wildlife and the need to proceed with caution for the safety of the species.

Mitigation Measure BIO-5b: To compensate for the loss of 3.98 acres of Alameda whipsnake habitat (combination of scrub and annual grassland), LBNL will enhance, create, and/or restore habitat for Alameda whipsnake with a minimum of a 2:1 functional

equivalence to the habitat to be removed by development of the access road under the Preferred Alternative. To the degree possible, the mitigation will take place on LBNL land. A minimum of 8.0 acres of enhancement (Eucalyptus and other non-native tree removal, scrub planting, rock outcrop creation) will occur on the contiguous habitat area to the west of the project site. This area is designated as open-space perimeter in the LBNL 2006 LRDP. This mitigation shall be implemented by developing an Alameda whipsnake habitat enhancement, creation, and management plan that includes the foregoing provisions that will be submitted to the Resource Agencies for approval. It will include details on which trees will be removed, and provide information on areas suitable for scrub creation or enhancement within that area. It will detail the following (1) the approach, site preparation, plant species, and planting procedures; (2) a schedule and action plan to maintain and monitor the mitigation site; (3) a list of criteria and performance standards by which to measure success of the mitigation; and (4) contingency measures in the event that mitigation efforts are not successful.

If adequate mitigation cannot be planned on LBNL land, potential mitigation sites shall be identified adjacent to or within the designated critical habitat for the Alameda whipsnake in the easternmost portion of the LBNL site; this area is designated as a fixed constraint under the 2006 LRDP and development within this area is prohibited. The USFWS and CDFG shall be consulted to discuss the measures to be included in the Plan.

FINDING: For the reasons stated in the Final EIR, construction of the proposed Project could result in a potentially significant impact to coastal scrub habitat that is considered suitable habitat for the Alameda whipsnake. Mitigation Measures BIO-5a and BIO-5b, are hereby adopted, and implementation of these measures will reduce impacts to the Alameda whipsnake and Alameda whipsnake habitat to a less-than-significant level.

f) *Impact BIO-6: Development of the proposed Project would not result in the loss of San Francisco lacewing and suitable habitat for the species. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

g) *Cumulative Impact BIO-1: The proposed Project, in conjunction with other reasonably foreseeable near-term projects and long term development, would not result in a significant cumulative impact on biological resources. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

4. Cultural Resources

a) *Impact CUL-1: The proposed Project would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

b) *Impact CUL-2: The proposed Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

c) *Impact CUL-3: The proposed Project would not disturb any human remains, including those interred outside of formal cemeteries. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

d) *Cumulative Impact CUL-1: The proposed Project, in conjunction with other reasonably foreseeable near-term and long-term development, would not result in a significant cumulative impact on cultural resources. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

5. *Geology and Soils*

a) *Impact GEO-1: The proposed Project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

b) *Impact GEO-2: The proposed Project would not expose people to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic ground-shaking hazards, although some structures could sustain damage. This is a potentially significant impact. The seismic safety measures outlined in the EIR analysis of Impact GEO-2 (which measures are part of the Project) and mitigation measures would reduce this impact to a less-than-significant level.*

Mitigation Measure GEO-2: In addition to damage assessment of the Helios building (which is covered in the LBNL Master Emergency Program Plan), assessment of stormwater conveyance systems and detention/retention ponds and Helios retaining walls will be conducted by the Damage Assessment Team following earthquakes strong enough to cause damage.

FINDING: For the reasons stated in the Final EIR, The Regents find that beyond potential damage to the Helios building itself, there are several associated facilities that, if damaged

in an earthquake, could cause significant environmental impacts, particularly with respect to stormwater bioretention pond and stormwater conveyance systems and the retaining walls along the steeply-sloped portion of the proposed Helios Access Road. Minor damage during one seismic-shaking hazard event could weaken these structures such that they would be more likely to fail during a subsequent event. Mitigation Measures GEO-2 is hereby adopted, and implementation of this measure will reduce this impact to a less-than-significant level.

c) *Impact GEO-3: The proposed Project could expose people and structures to seismic landslide hazards. Mitigation Measures would reduce this to a less-than-significant impact.*

Mitigation Measure GEO-3: All recommendations of the site-specific geotechnical study shall be incorporated into the project design and implemented as part of the project.

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required. Furthermore, the geotechnical investigation for the proposed project includes an assessment of the effect of expansive soils. Preliminary analysis indicates that the geotechnical risk as a result of expansive soils is low, especially because the project will require a relatively large amount of imported fill. Therefore the impact is considered less than significant. Based on the results and recommendations of the geotechnical investigation, adequate measures will be incorporated into the project design, if required, to address expansive soils. Implementation of geotechnical recommendations (in compliance with Helios Mitigation Measure GEO-3) will ensure this impact is reduced to a less-than-significant level. Therefore, Mitigation Measure GEO-3 is hereby adopted, and implementation of this mitigation measure will ensure this impact remains less-than-significant.

d) *Impact GEO-4: The proposed Project is located in an area of expansive soils that could create substantial risk to life or property. This is a potentially significant impact. Mitigation Measure GEO-3 would reduce this impact to a less-than-significant level.*

Mitigation Measure GEO-3: All recommendations of the site-specific geotechnical study shall be incorporated into the project design and implemented as part of the project.

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required. Furthermore, the geotechnical investigation for the proposed project includes an assessment of the effect of expansive soils. Preliminary analysis indicates that the geotechnical risk as a result of expansive soils is low, especially because the project will require a relatively large amount of imported fill. Therefore the impact is considered less than significant. Based on the results and recommendations of the geotechnical investigation, adequate measures will be incorporated into the project design, if required, to address expansive soils. Implementation of geotechnical recommendations (in compliance with Helios Mitigation Measure GEO-3) will ensure this impact is reduced to a less-than-significant level. Therefore, Mitigation Measure GEO-3 is hereby adopted, and implementation of this mitigation measure will ensure this impact remains less-than-significant.

e) *Impact GEO-5: The proposed Project is located on a geologic unit that may be unstable or could become unstable as a result of the project. Mitigation Measures would reduce this to a less-than-significant impact.*

Mitigation Measure GEO-5: The project proposes the use of water quality swales to treat stormwater runoff. These treatment facilities often incorporate infiltration of stormwater to provide water quality treatment. If site-specific geotechnical investigations indicate that infiltration of excess stormwater is not feasible due to slope-stability considerations, stormwater control and water quality treatment features will be designed with appropriate underdrain and/or retention systems to maintain the function of these facilities without infiltrating the collected stormwater.

FINDING: For the reasons stated in the Final EIR, this impact is potentially significant. Mitigation Measure GEO-5 is hereby adopted, and implementation of this mitigation measure will reduce this potentially significant impact to a less than significant level.

f) *Cumulative Impact GEO-1: The proposed Project, in conjunction with reasonably foreseeable near-term and long-term development, would place new structures and introduce an increased population in a seismically active region. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

6. Hazards and Hazardous Materials

a) *Impact HAZ-1: Implementation of the proposed Project would increase the routine use, transport and storage of hazardous materials and other scientific materials at LBNL but would not create a significant hazard to the public or the environment under the routine or reasonably foreseeable upset and accident conditions. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

b) *Impact HAZ-2: The proposed Project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, but some project components would be located in areas where contamination may be present and as a result, could create a potentially significant hazard to the public or the environment. Mitigation Measures would reduce this to a less-than-significant impact.*

Mitigation Measure HAZ-2: LBNL will prepare a due diligence assessment of all areas that would be excavated in order to install the new sewer pipeline. If contaminated materials are anticipated, the soils will be tested, and LBNL will implement appropriate measures to ensure that the contaminated soils or groundwater do not adversely affect construction workers and the environment.

FINDING: For the reasons stated in the Final EIR, The Regents find that implementation of the Project could result in potentially significant impacts resulting from hazardous

materials because all areas where ground disturbance would occur (even though limited) to construct the new sewer lines have not yet been evaluated for presence of hazardous materials. As such, there is a potential that some contamination may be encountered during construction which could potentially result in exposure to construction workers and the environment. Therefore, Mitigation Measure HAZ-2 is hereby adopted, and implementation of this mitigation measure will reduce this potentially significant impact to a less-than-significant level.

c) *Impact HAZ-3: The proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

d) *Impact HAZ-4: The proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

e) *Cumulative Impact HAZ-1: The proposed Project, in conjunction with reasonably foreseeable near-term and long-term development, would involve the use of hazardous chemicals, but such use would not pose a significant cumulative risk to the public or the environment. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

f) *Cumulative Impact HAZ-2: The proposed Project would not make cumulatively considerable contribution to the impact of evacuation during emergencies. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

7. Hydrology and Water Quality

a) *Impact HYDRO-1: Development of the project site would increase the area of impervious surfaces that would result in increased volume of stormwater runoff that could contribute to erosion and/or siltation in Strawberry Creek. Mitigation Measures would reduce this to a less-than-significant impact.*

Mitigation Measure HYDRO-1: Using the Bay Area Hydrology Model, calculations shall be provided following approval of the final project design to show that the proposed bioretention pond is sized appropriately to control flows such that ‘flow duration control’

is provided between 10 percent of the two-year recurrence storm and the 10-year recurrence storm.

FINDING: For the reasons stated in the Final EIR, The Regents find that implementation of the Project could result in potentially significant impacts resulting from increased volume of stormwater runoff that could contribute to erosion and/or siltation in Strawberry Creek. Therefore, Mitigation Measure HYDRO-1 is hereby adopted, and implementation of this mitigation measure will reduce this potentially significant impact to a less than significant level. Adoption of the Preferred Alternative avoids the need for Mitigation Measure HYDRO-1a.

b) *Impact HYDRO-2: Development of the site would alter surface drainage patterns on the site which could result in increased peak flows and induce flooding in downstream reaches. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required. Adoption of the Preferred Alternative avoids the need for Mitigation Measures HYDRO-2a and HYDRO-2b.

c) *Impact HYDRO-3: Project construction activities would not increase turbidity or decrease water quality in surface waterways. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

d) *Impact HYDRO-4: Stormwater runoff from the proposed parking area, access road, and other impervious surfaces could potentially contribute to long-term pollutant discharges to surface waters, including on-site streams and downstream to Strawberry Creek and the Bay. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required. Adoption of the Preferred Alternative avoids the need for Mitigation Measures HYDRO-4a and HYDRO-4b.

e) *Impact HYDRO-5: Discharge of groundwater pumped or drained as part of construction-phase or post-construction-phase dewatering activities could adversely affect surface water quality. Mitigation Measures would reduce this impact to a less-than-significant level.*

Mitigation Measure HYDRO-5: Tritium monitoring shall continue at existing temporary monitoring wells SB31-02-2 and SB31-02-1 and shall be included in the long-term tritium monitoring program. In addition, sampling of discharges related to dewatering activities in the northern portion of the project, both during (where encountered in pier and/or test borings or other excavations) and after project construction (via pumping or gravity subdrains), shall be added to and managed under the tritium monitoring portion of the LBNL Environmental Restoration Program. All water from the dewatering system in the northern portion of the project will be collected and transported to an approved

disposal facility or will be re-infiltrated near the top of the plume to increase the residence time of the water and allow the tritium to decay.

FINDING: For the reasons stated in the Final EIR, The Regents find that implementation of the Project could adversely affect surface water quality due to the possibility that project site dewatering during construction and operation could accentuate plume migration towards the facility and potentially capture tritiated groundwater. Mitigation Measure HYDRO-5, is hereby adopted, and implementation of this measure will reduce this impact to a less-than-significant level.

f) *Cumulative Impact HYDRO-1: The proposed Project, in conjunction with reasonably foreseeable near-term and long-term development, would not result in a cumulative impact on surface water resources. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

8. Land Use and Planning

a) *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. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

b) *Cumulative Impact LU-1: The proposed Project, in conjunction with other reasonably foreseeable near-term and long-term development, would not involve a significant cumulative impact related to land use. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

9. Noise

a) *Impact NOISE-1: Construction/demolition activities would temporarily elevate noise levels at the project site and surrounding areas. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

b) *Impact NOISE-2: Temporary vibration related to construction activities would not cause an impact. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

c) *Impact NOISE-3: Vehicular traffic associated with the Helios project would result in an incremental, but imperceptible, long-term increase in ambient noise levels. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

d) *Impact NOISE-4: The operation of heating, ventilating, and air conditioning equipment at the Helios Facility would not result in a substantial long-term increase in ambient noise levels. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

e) *Cumulative Impact NOISE-1: Near-term development in the vicinity of the project site would increase exterior noise levels during construction. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

f) *Cumulative Impact NOISE-2: The proposed Project, in conjunction with reasonably foreseeable near-term and long-term development, would not result in a significant cumulative permanent increase in ambient noise levels. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

10. *Population and Housing*

a) *Impact POP-1: The proposed Project would not induce substantial population growth in an area, either directly or indirectly. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

b) *Cumulative Impact POP-1: The proposed Project, in conjunction with reasonably foreseeable near-term and long-term development, would not result in a significant cumulative impact on population or housing. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

11. *Public Services*

a) *Impact PUB-1: The proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities in order to maintain acceptable service ratios, response times, or other performance objectives, the*

construction of which could cause significant environmental impacts. This is a less-than-significant impact.

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

b) *Impact PUB-2: The proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities in order to maintain acceptable service ratios, response times, or other performance objectives, the construction of which could cause significant environmental impacts. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

c) *Impact PUB-3: The proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities in order to maintain acceptable service ratios or other performance objectives, the construction of which could cause significant environmental impacts. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

d) *Impact PUB-4: The proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered park or recreational facilities in order to maintain acceptable service ratios or other performance objectives, the construction of which could cause significant environmental impacts. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

e) *Impact PUB-5: The proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

f) *Cumulative Impact PUB-1: The proposed Project, in conjunction with reasonably foreseeable near-term and long-term development, would not result in a significant cumulative impact relating to demand for public services. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

12. *Transportation and Traffic*

a) *Impact TRANS-1: The proposed Helios project would not cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system under the near-term conditions. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

b) *Impact TRANS-2: The design of the proposed Helios parking area and access road would not result in inefficient and unsafe operations. This is a less-than-significant impact.*

Mitigation Measure TRANS-2: Final design shall incorporate the following measures to improve the efficiency and ensure the safety of vehicles, bicyclists, and pedestrians:

- Design the Centennial Drive/Helios Access Road intersection to provide adequate sight distance for a design speed of 35 miles per hour to allow vehicles to safely turn into and out of the new Helios Access Road.
- Locate the gate on the new roadway to provide adequate sight distance for vehicles approaching the gate.
- Design the new Centennial Drive/Helios Access Road intersection, roadway, and parking area to accommodate shuttle bus circulation.
- Provide minimal landscaping at the new Centennial Drive/Helios Access Road intersection (no shrubs or trees to exceed 3 feet in height). Maintain the landscaping regularly to provide adequate sight distance at this intersection.

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required. Mitigation Measure TRANS-2, however, is hereby adopted, and implementation of this measure will ensure that the final design of the roadway and intersection meets the safety standards.

c) *Impact TRANS-3: The proposed Helios project would result in increases in transit ridership. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

d) *Impact TRANS-4: The proposed Helios project would result in increased parking demand that may exceed the available parking supply. Mitigation Measures would reduce this impact to a less-than-significant level.*

Mitigation Measure TRANS-4: LBNL shall implement the following measures during special events at the Helios auditorium:

- Provide attendant and/or stacked parking for special events. Attendant and/or stacked parking should not be used for regular day-to-day operations as it would be inconsistent with the LBNL principle to discourage driving and encourage alternative travel modes; and
- Include information on availability of alternative transportation modes, such as LBNL shuttles, in announcements of special events at the Helios auditorium.

FINDING: For the reasons stated in the Final EIR, this impact is less than significant. The Project as approved does not include the construction of the auditorium. If the auditorium is built, however, the Project's impact related to parking during special events at the auditorium could be potentially significant, but Mitigation Measure TRANS-4 is hereby adopted, and implementation of this measure will ensure that this impact is less than significant.

e) *Impact TRANS-5: The proposed Helios project would not result in increased hazards to pedestrians or bicyclists or conflicts with adopted policies, plans, or programs promoting walking or bicycling. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

f) *Impact TRANS-6: The construction of the proposed Helios project would temporarily and intermittently result in impacts on vehicles, pedestrians, or bicyclists, and parking. This is a less-than-significant impact.*

Mitigation Measure TRANS-6: LBNL shall include the following in the CTMP prepared for the proposed Project:

- Consider stacked parking within the LBNL site or off-site parking for construction workers to minimize parking demand.
- If necessary, require a flag person to direct traffic when trucks enter and exit the Helios Access Road on Centennial Drive.

FINDING: For the reasons stated in the Final EIR, the project's impact related to construction truck traffic would be less than significant. However, to further minimize impacts related to construction activities, Mitigation Measure TRANS-6, is hereby adopted, and implementation of this measure will further minimize impacts related to construction activities.

g) *Cumulative Impact TRANS-1: The proposed Project, in conjunction with reasonably foreseeable near-term and long-term development, would degrade intersection levels of service. This is a significant and unavoidable cumulative impact.*

FINDING: For the reasons stated in the Final EIR, The Regents find that implementation of the Helios Project, in combination with other potential contributing projects, would

make a cumulatively considerable contribution to the three significant and unavoidable impacts to intersections identified in the 2006 LRDP EIR. Although Mitigation Measures associated with the 2006 LRDP and included in the Helios Project will reduce this impact to some extent, there are no mitigation measures available to reduce the project's contribution to the cumulative impact and reduce this impact to a less than significant level. In addition, in conjunction with the approval of the 2006 LRDP, the Berkeley Lab has committed to work with the City of Berkeley and UC Berkeley to implement the necessary improvements at the affected intersections to improve operations. At this time, there is not a plan in place for the installation of those traffic improvements, although these measures will remain binding mitigation commitments. Accordingly, although mitigation may be accomplished in the future and the mitigation commitment remains binding, at this time these impacts cannot be determined to be mitigated to a less than significant level. The Regents find this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other unavoidable environmental impacts of the Project for the reasons set forth in Section II.E. of these findings.

h) *Cumulative Impact TRANS-2: Although construction traffic associated with near-term projects could result in temporary periods of traffic congestion on city streets, the project's contribution to the impact would not be cumulatively considerable. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

i) *Cumulative Impact TRANS-3: The proposed Project, in conjunction with other reasonably foreseeable near-term and long-term development, would not substantially affect transit, parking, or pedestrian and bicycle circulation and would not make a cumulatively considerable contribution to such impacts. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

13. Utilities and Service Systems

a) *Impact UTILS-1: Implementation of the Helios project would not require an expansion of the EBMUD wastewater treatment plant or an expansion of the City's sewer conveyance facilities. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

b) *Impact UTILS-2: The proposed Project would require the construction of new stormwater drainage facilities, the construction of which would not cause significant environmental impacts. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

c) *Impact UTILS-3: The proposed Project would result in the need for additional chilled water facilities, the construction and operation of which would not result in a significant environmental impact. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

d) *Impact UTILS-4: The proposed Project would create additional demand for electricity and natural gas, but would not result in the construction of new or expansion of existing transmission or energy production facilities. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

e) *Cumulative Impact UTILS-1: The proposed Project, in conjunction with reasonably foreseeable near-term and long-term development, would not result in a significant cumulative impact relating to demand for utilities and service systems. This is a less-than-significant impact.*

FINDING: For the reasons stated in the Final EIR, this impact is less than significant and therefore no project-level mitigation measures are required.

C. Mitigation Monitoring and Reporting Program

Public Resources Code §21081.6 and CEQA Guidelines §15091(d) require the lead agency approving a project to adopt a Mitigation Monitoring and Reporting Program for the changes to the project which it has adopted or made a condition of project approval in order to ensure compliance during project implementation. The Mitigation Monitoring and Reporting Program adopted by The Regents requires LBNL to monitor Mitigation Measures designed to eliminate or reduce significant impacts to a less than significant level. The Mitigation Monitoring and Reporting Program includes all of the Measures identified in the Final EIR and has been designed to ensure compliance during implementation of the Helios Project.

The Regents find that the impacts of the Helios Project have been mitigated to the extent feasible by the Mitigation Measures identified in the Final EIR and in the Mitigation Monitoring and Reporting Program. The Regents hereby adopt the Mitigation Monitoring and Reporting Program for the Helios Project that accompanies the Final EIR. The Mitigation Monitoring and Reporting Program designates responsibility and anticipated timing for the implementation of mitigation for conditions within the jurisdiction of LBNL. Implementation of the Mitigation Measures specified in the Final EIR and the Mitigation Monitoring and Reporting Program will be accomplished through administrative controls over Project planning and implementation, and monitoring and enforcement of these measures will be accomplished through inspection and documentation by appropriate LBNL personnel. LBNL reserves the right to make amendments and/or substitutions to the Mitigation Measures if, in the exercise of discretion of the Lab, it is determined that the amended or substituted Mitigation Measure will mitigate the identified potential environmental impact to at least the same degree as the original Mitigation Measure, or would attain an adopted performance standard for mitigation, and where the amendment or

substitution would not result in a new significant impact on the environment which cannot be mitigated.

D. Alternatives

Chapter 6 of the Draft EIR evaluated a reasonable range of potential alternatives to the Helios Project, both on-site and off-site. In compliance with CEQA and the CEQA Guidelines, the alternatives analysis also included an analysis of a No Project Alternative and discusses the environmentally superior alternative. The analysis examined the feasibility of each alternative, the environmental impacts of each alternative, and the ability of each alternative to meet the project objectives identified in Section 2.4 of the Draft EIR. Table 6.0-1 in the Draft EIR compares the environmental impacts of the proposed Project and each of the alternatives.

The Regents certify that it has independently reviewed and considered the information on alternatives provided in the Final EIR and the administrative record, and finds that Alternatives 1, 2, 3, and 4 are infeasible or would not meet most of the project objectives in comparison to the Helios Project for the reasons set forth below. Alternative 5, the Proposed Project with Alternate Access Road Alignment Alternative, is being selected as the preferred alternative in order to avoid the removal of large trees at the intersection of the proposed access road with Centennial Drive.

1. *Project Objectives*

The Regents find that the project objectives for the Project are as described in Section 2.4 of the Draft EIR. The key objectives of the Helios Project are as follows:

- Provide an integrated and appropriately designed facility for high-level/advanced research in solar and other alternative energy sources and technologies;
- Create a facility that draws upon the intellectual, technological, and material resources of LBNL and UC Berkeley to support and stimulate research in developing sciences and technologies and that encourages the next scientific discovery;
- Co-locate different research programs in one facility to promote cross-pollination of ideas and theories and create a multi-disciplinary collaborative environment;
- Locate the facility such that researchers have convenient access to unique and top-rated scientific facilities and that duplication of facilities is avoided;
- Foster interaction and collaboration between the project, LBNL, and UC Berkeley researchers and students by locating the facility near the Berkeley Laboratory's fence line; and
- Create a facility that becomes a benchmark for energy efficient usage for future similar building types.

2. *Alternatives to the Helios Project*

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In addition to the alternative being selected as the preferred alternative, the Lab evaluated four alternatives to the Helios Project: the No Project Alternative, Reduced Facility Alternative, the Split Site Design Alternative, and Alternate LBNL Location Alternative.

As described on pages 6.0-6 to 6.0-7 of the Draft EIR, the Lab also evaluated alternate off-site locations that would involve use of the Richmond Field Station for the location of the proposed Project. This off-site alternative was not evaluated in detail because it would not meet the 2006 LRDP and Helios project objectives to expand functionality of Berkeley Lab facilities, provide for cross-disciplinary research, or foster collaborative work environments among researchers, since it would result in a division of resources between locations. Furthermore, if the Helios Facility were located at the Richmond Field Station, it would be too distant to provide convenient access to the unique research facilities at the Berkeley Lab, including the Advanced Light Source, the Molecular Foundry, and the National Center for Electron Microscopy. Proximity to these facilities would be integral to the research programs in the Helios Facility, and if the project were located at a distant location such as the Richmond Field Station, it would not meet the key project objectives to be close to these unique research facilities and to the UC Berkeley campus. Furthermore, most senior Helios scientists would have teaching assignments on the UC Berkeley campus and/or would collaborate on research with other research groups on the campus or LBNL. This would necessitate frequent trips between the campus, LBNL, and this facility for seminars and classes. Siting the proposed building at the Richmond Field Station would greatly increase the travel time between the proposed facility, the UC Berkeley campus, and LBNL, resulting in travel-related air pollutant emissions, traffic impacts, and substantial loss of productive time. For this reason, an off-site location at the Richmond Field Station was rejected from further consideration in this EIR. Locating the proposed project at Mare Island, Alameda Air Base, Merced, or Nevada would not be feasible for the same reasons noted above. Furthermore, siting the proposed project at any of the alternate locations would not be consistent with the adopted LRDP which provides for the location of the proposed project at LBNL.

Locating the EBI portion of the proposed project or the entire Helios project on the UC Berkeley campus was also considered but rejected because the building space and population associated with the proposed project are not included in the UC Berkeley 2020 LRDP. Additionally, the UC Berkeley 2020 LRDP states that projects that do not involve substantial UC Berkeley student engagement and participation should be located in surrounding adjacent areas and not on the UC Berkeley main campus. Locating the proposed facility on the UC Berkeley Hill Campus is also not an option because the 2020 LRDP provides for a modest amount of development (100,000 gross square feet of new building space) for the Hill Campus which is much less than the space needed for the proposed facility. Furthermore, many of the same environmental impacts would still occur if the project were developed on the UC Berkeley Hill Campus or the main campus. Therefore, locating the Helios and EBI portions of the proposed project on the UC Berkeley campus was not evaluated in detail in this EIR.

The following summarizes the four alternatives that were considered in detail.

i. No Project Alternative

In accordance with CEQA and the CEQA Guidelines, the Final EIR evaluates the “No Project Alternative,” which compares the impact of approving the proposed Project with the impact of not approving it. With this alternative, the proposed Project would not be constructed at the project site and the research programs associated with the Helios project would not be developed. It should be noted that adoption of the No Project Alternative would not necessarily preclude ultimate development of the project site with another use in accordance with the 2006 LRDP. However, should another building be constructed at this site for another research program, it would not involve non-LBNL users and therefore the construction of an alternate access road would not be required for that development project.

As compared with the proposed Project, the No Project Alternative would result in fewer impacts, and the intensity of the impacts described in Chapter IV of the EIR would be substantially less than with the proposed Project. The No Project Alternative would avoid the project’s significant and unavoidable impacts, but impacts similar to those described for the proposed Project could occur if the site were developed under the 2006 LRDP.

The No Project Alternative is rejected because the No Project Alternative would not achieve any of the objectives of the proposed Project.

ii. Alternative 2: Reduced Facility Alternative

The Reduced Facility Alternative would consist of development of a smaller research facility at the Project site than the Helios Project by eliminating the Synthetic Biology research program from the Helios portion of the proposed Project. This alternative would provide for up to 132,000 square feet of office and laboratory space to accommodate approximately 410 researchers, staff, and visitors with the same amount of space devoted to the auditorium and other common areas as for the proposed Helios Project. However, because the Synthetic Biology research program is critical to the other proposed research programs in the Helios Facility, it is assumed for this alternative that this program would be located in another existing facility at LBNL. Therefore, under this alternative, the population of the Berkeley Lab would still increase by about 500 persons. Access road improvements, parking, and improvements to utilities would be the same as for the proposed Project.

The Reduced Facility Alternative would generally result in lesser impacts than would the proposed Helios Project, due to the lesser intensity of development, although this alternative would result in significant, unavoidable impacts—albeit at a lesser intensity—on visual quality, as well as resulting in significant, unavoidable project-specific and cumulative impacts related to air quality. The Reduced Facility Alternative would require the same parking as the proposed Project and would have project-specific and cumulative significant and unavoidable impacts to levels of service at certain local intersections, in a manner similar to the proposed Project.

This alternative is rejected because it would not satisfy most of the Lab’s key project objectives. Specifically, it would not fully achieve the objectives of providing adequate space for the planned research functions and for interaction and collaboration among research scientists. By

eliminating the Synthetic Biology component, a shared research area for Helios and EBI would be eliminated. Because this research program is critical to the other proposed research programs in the Helios Facility, this program ultimately would need to be located at another existing facility at LBNL.

iii. Alternative 3: Split Site Design Alternative

This alternative would separate the Helios and EBI portions of the project into two separate rectangular buildings that would be located adjacent to each other in the same location as the proposed Project. The purpose of this design would be to reduce bulk and visibility of the project. This alternative would maintain the auditorium at the same location as proposed under the project and the parking area and access road would be the same. Both buildings would be four stories high, rather than the seven-story profile of the northerly portion of the proposed building. The total square footage for the buildings combined would be approximately 170,000 gsf, larger than the proposed Project. The additional square footage is due to the need to provide additional restrooms, elevators, stairs and lobbies that both buildings would require. Under this alternative, each building would have its own mechanical equipment and this equipment would be placed on the roof of the buildings. This would eliminate the green roofs proposed for the southern portion of the proposed Project. Similar to the proposed Project, about 500 researchers, staff, and visitors would be associated with this alternative.

The Split Site Design Alternative would have impacts that would be very similar to those of the currently proposed Helios Project, and in fact would increase impacts to hydrology including impacts involving stormwater and drainage problems. This alternative would slightly decrease but not reduce the proposed Project's significant and unavoidable impact on visual resources (effect on a scenic vista or substantially damage to scenic resources). Like the project, this alternative would also result in a significant, unavoidable cumulative impact related to levels of service at local intersections and levels of cancer risk associated with emissions from development.

The Split Site Design Alternative is rejected because it does not satisfy many of the Lab's key project objectives. This Alternative would not fully achieve the objectives of integration of different research programs in one facility and facilitating interaction and collaboration among research scientists. The Split Design alternative would slightly reduce the significant and unavoidable visual impact of the proposed Project, although all other significant impacts would remain unchanged. It would have greater impacts than the project with respect to hydrology and water quality because of a greater footprint and the loss of the green roof on the Helios portion of the building. Further, this Alternative would involve wasteful duplication of some common facilities because it would place an important program element (the Synthetic Biology program) at some other location at LBNL and therefore would inconvenience the Helios researchers who would need to travel within the LBNL site to use the synthetic biology labs.

iv. Alternate LBNL Location Alternative

The Alternate LBNL Location Alternative proposes use of another site within the LBNL hill site for development of the proposed Project. This location is approximately 500 feet northeast of

the proposed Project site and is located east of the Molecular Foundry building on both sides of Centennial Drive. Two buildings would be constructed on either side of Centennial Drive. The first building would be between Centennial Drive and Lawrence Road. Because the available area is limited, in order to accommodate the Helios program this building would be a six stories and 90 feet high. Space for the future auditorium would be located north of this building. The second building that would accommodate the EBI program would be east of Centennial Drive and would be a five story, 75 feet high building. Because the site is served by both Lawrence Road and Centennial Drive, a new access roadway would not be required. All other utility improvements under this alternative would be the same as under the proposed Project. Similar to the proposed Project, about 500 researchers, staff and visitors would be associated with this alternative.

The Alternate LBNL Location Alternative would generally result in lesser impacts to hydrological resources than the proposed Project. However, it would not avoid the project's significant and unavoidable impacts on visual quality (changes in views and visual character), air quality (significant unavoidable cumulative impact related to emissions of toxic air contaminants), and transportation (significant unavoidable cumulative impact to levels of service at local intersections). In fact, this alternative would increase the project's significant and unavoidable impacts to visual quality. Additionally, the Alternate LBNL Location Alternative would create a potentially significant impact related to the safety of the project driveway/roadway connection to Centennial Drive.

While the Alternate LBNL Location Alternative would meet some of the project objectives related to providing adequate space needed for the research programs, convenient access to other unique facilities at LBNL, and easy access (although via a controlled entry) from and proximity to UC Berkeley to foster interaction among the researchers in the proposed facility and UC Berkeley and LBNL, the Alternate LBNL Location Alternative is rejected because it would not meet the project objectives of design with respect to integrating the Helios and EBI programs because the two programs would be housed in buildings separated by a busy roadway. Thus, the Alternate LBNL Location Alternative would result in a greater visual impact, and may introduce a new potentially significant impact related to road safety associated with the proposed driveway for the alternative.

v. Environmentally Superior Alternative

The Regents find that the No Project Alternative is the environmentally superior alternative because its environmental impacts would not be worse than under the Helios Project in any category, and would be reduced in several categories. Section 15126(e)(2) dictates that if the environmentally superior alternative is the no project alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. The environmentally superior alternative, excepting the No Project Alternative, is the Reduced Facility Alternative because it would reduce the significant and unavoidable impacts associated with the project more than any of the other alternatives.

E. Statement of Overriding Considerations

1. Impacts that Remain Significant

As discussed above, The Regents have found that the following impacts of the Helios Project remain significant, either in whole or in part, following adoption and implementation of the mitigation measures described in the Final EIR:

Number	Impact
VIS-2	The proposed Project would alter views of the LBNL site and would result in a substantial adverse effect to a scenic vista or substantially damage scenic resources.
Number	Cumulative Impact
AIR-3	Even though overall cumulative impacts will decrease over time, the proposed Project will make some incremental contribution to cumulative cancer risk impacts associated with future development of LBNL and UC Berkeley.
TRANS-1	The proposed Project, in conjunction with reasonably foreseeable near-term and long-term development, would degrade intersection levels of service.

2. Overriding Considerations

In accordance with CEQA Guidelines Section 15093, The Regents have, in determining whether or not to approve the Project, balanced the economic, social, technological and other benefits of the project against its unavoidable environmental risks, and have found that the benefits of the Helios project outweigh the significant adverse environmental effects that are not mitigated to less-than-significant levels, for the reasons set forth below. This statement of overriding considerations is based on The Regents' review of the Final EIR and other information in the administrative record, including but not limited to the 2006 LRDP.

A. The Helios facility will house basic scientific research programs to advance the technologies needed to produce carbon-neutral fuels. This research includes the Helios program, which includes research into the conversion of solar energy into carbon-neutral energy sources that can respond to human energy demands in an environmentally sustainable manner. This also includes the Energy Biosciences Institute, which will research issues related to producing renewable biofuels and applying biofuels to reduce the environmental impact of human energy consumption. This research will include investigation into reducing the environmental impacts of alternative energy production. Approval of the Helios facility will provide an integrated and appropriately designed facility for high-level/advanced research in solar and other alternative energy sources and technologies. Providing a modern facility that can foster collaborative research on alternative energy sources is a substantial and lasting benefit of approval of the Helios project.

B. By locating different research programs in one facility, and by locating that facility adjacent to other LBNL facilities, approval of the Helios Project will further interdisciplinary research on alternative energy sources and technology, furthering LBNL's goals

of promoting basic interdisciplinary scientific research. Locating these facilities at LBNL will benefit researchers and students at both LBNL and UC Berkeley by providing access to new interdisciplinary research programs. Among the reasons that this project was awarded to the University of California was the unique situation of having LBNL's and UC Berkeley's world-class researchers in the immediate vicinity, along with the fact that many of these researchers are "joint appointments" between the two institutions.

C. Approval of the Helios Project furthers the collaborative science and interdisciplinary research goals of LBNL by siting new research facilities near existing research facilities, so that researchers from different facilities may work together on interdisciplinary research projects. Particularly important in this co-location are LBNL's nearby and unique "User Facilities," including the Advanced Light Source, the National Center for Electron Microscopy, and the adjacent Molecular Foundry facility. The Helios facility was sited and designed specifically to take advantage of a pedestrian access link between the project and the Molecular Foundry's main entrances.

F. RECORD OF PROCEEDINGS

The record of proceedings upon which The Regents base these findings consists of all the documents and evidence relied upon by the Berkeley Lab in preparing the proposed Helios Project EIR. The custodian of the record of proceedings is the Environmental Planning Group, Lawrence Berkeley National Laboratory, MS 90J-0120, One Cyclotron Road, Berkeley CA 94720.

G. SUMMARY

1. Based on the foregoing Findings and the information contained in the record, The Regents have made one or more of the following Findings with respect to the significant environmental effects of the Project identified in the Final EIR:

a. Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects on the environment.

b. Those changes or alterations that are wholly or partially within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other public agency.

c. Specific economic, legal, social, technological, or other considerations, make infeasible the mitigation measures or alternatives identified in the Final EIR that would otherwise avoid or substantially lessen the identified significant environmental effects of the Project.

2. Based on the foregoing Findings and the information contained in the record, it is hereby determined that:

a. All significant effects on the environment due to approval of the Project have been eliminated or substantially lessened where feasible.

b. Any remaining significant effects on the environment found to be unavoidable are acceptable due to the factors described in the Statement of Overriding Considerations in Section II.E, above.

III. APPROVALS

The Regents hereby take the following actions:

- A. The Regents certify the Final EIR for the Helios Project, as described in Section I, above.
- B. The Regents hereby adopt as conditions of approval of the Helios Project all Mitigation Measures within the responsibility and jurisdiction of the University set forth in Section II.B of the Findings, above.
- C. The Regents hereby adopt the Mitigation Monitoring and Reporting Program for the Project accompanying the Final EIR and discussed in Section II.C of the Findings, above.
- D. The Regents hereby adopt the Findings in their entirety as set forth in Section II, above, including the Statement of Overriding Considerations.
- E. Having certified the Final EIR, independently reviewed and analyzed the Final EIR, incorporated Mitigation Measures into the Project, and adopted the foregoing Findings and Statement of Overriding Considerations, The Regents hereby approve the design of the Helios Energy Research Facility, Berkeley campus, revised to be consistent with EIR Alternative 5 “Proposed Project with Alternate Access Road Alignment.”