



## PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

### STAFF REPORT

**DATE:** AUGUST 24, 2021

**TO:** DESIGN COMMISSION

**FROM:** DAVID M. REYES, DIRECTOR OF PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

**SUBJECT:** APPLICATION FOR FINAL DESIGN REVIEW  
NEW CONSTRUCTION OF A THREE-STORY 80,000 SQUARE FOOT LABORATORY BUILDING  
RESNIK SUSTAINABILITY CENTER  
1200 E. CALIFORNIA BOULEVARD (CALIFORNIA INSTITUTE OF TECHNOLOGY)

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#### **RECOMMENDATION:**

The staff recommends that the Commission:

#### **Environmental Determination**

Find that the application for Final Design Review was subject to environmental review in the Addendum to the previously certified FSEIR that was prepared for the subject project and reviewed by the Design Commission during Concept Design Review on March 23, 2021, and that there are no changed circumstances or new information which would require further environmental review.

#### **Findings for Compliance with the Tree Protection Ordinance**

1. Acknowledge that on March 23, 2021 the Design Commission approved the removal of five protected trees (tree #s 2782, 2786, 2787, 2789 and 2790) and that the application for Final Design Review, upon implementation of conditions of approval, will be consistent with this prior approval;
2. Acknowledge that a tree inventory (Attachment D) identifies removal of two additional protected trees (tree #s 2797 and 3224) and relocation of one protected tree (tree # 1566).
3. Find that, upon implementation of conditions of approval, the removal of tree #3224 and the relocation of tree #1566 will meet finding 6 of the Tree Protection Ordinance (PMC

Section 8.52.075.A): *“the project, as defined in Section 17.12.020, includes a landscape design plan that emphasizes a tree canopy that is sustainable over the long term by adhering to the replacement matrix prepared by the city manager and included in the associated administrative guidelines;”* and,

4. Find that the removal of tree # 2797 meets finding #3 of the Tree Protection Ordinance: *“there is an objective feature of the tree that makes the tree not suitable for the protections of this chapter;”* and, therefore,
5. Approve the removal of two additional protected trees and relocation of one protected tree.

### **Findings for Final Design Approval**

1. Find that the project, upon implementation of the conditions of Final Design Review approval, will comply with the conditions of Concept Design Review;
2. Find that the project, upon implementation of the conditions of Final Design Review approval, will be consistent with the purposes of design review, the design-related goals and policies in the Land Use Element of the General Plan and the Design Guidelines in the Caltech Master Plan; and,
3. Based on these findings, approve the application for Final Design Review subject to the following conditions, which shall be subject to staff review and approval prior to issuance of a building permit:

### **Conditions:**

1. Submit detailed landscape plans for the proposed improvements to Beckman Lawn, which shall be a substantially similar design as the conceptual design presented in this application, but with details of species, sizes and quantities of landscape materials proposed to be planted.
2. The project shall comply with the development standards in the Caltech Master Plan, including those requirements listed in Attachment A. If changes to the current design are required to ensure compliance with the Master Plan, an application for Changes to an Approved Project may be required prior to issuance of a building permit. If a Conditional Use Permit application is submitted to request approval of deviations from development standards in the Caltech Master Plan, the process shall be completed and effective prior to issuance of a building permit.
3. The proposed new replacement tree species shall be modified to comply with the Tree Replacement Matrix species requirements, which require replacement trees for removed specimen trees to be of species from either the specimen or native tree lists and replacement trees for removed native trees to be of species from the native tree list.
4. A tree protection plan prepared by a Certified Arborist shall be incorporated into the

plans submitted for building plan check and shall include the City of Pasadena Tree Protection Guidelines dated 5/13/19 (see Attachment E). The trees, which will be protected, are tree numbers 1560, 1561, 1567, 1582-1585, 2788, 2780, 2801, 3223, 2759 2779, 2777 and 1555 as shown in the submitted tree inventory.

5. As required in PMC §8.52.077, the applicant shall post a performance bond (or alternate security provided in a form acceptable to the director of finance) in an amount equal to 100% of the appraised value of the tree proposed to be relocated, calculated using the most recent edition of the Guide for Plant Appraisal published by the International Society of Arboriculture to ensure that the relocated tree is properly established and maintained for three years. Evidence of compliance with this condition shall be submitted to staff for review and approval prior to issuance of a building permit.
6. A separate application for design review shall be required for any new signage proposed in conjunction with this project.
7. Comply with the conditions provided by the Departments of Public Works and Transportation listed in Attachment A, to the satisfaction of said departments.
8. The project shall comply with the Model Water Efficient Landscape Ordinance and any changes to the proposed landscape design that may be required shall be reviewed and approved by staff prior to issuance of a building permit.
9. A copy of this decision letter, including written responses to each condition indicating how and where they are addressed, shall be included in the plans submitted for building permit plan check.
10. The lighting temperature specified on the final plans shall not rise above 3,000 kelvin for all proposed exterior fixtures. Replacement lighting elements should be regulated by maintenance staff in the future.
11. An 8' x 8' minimum mock-up panel of the building finishes shall be provided and reviewed by staff prior to construction and installation.
12. Prior to issuance of a building permit, submit to staff written confirmation from utility providers (Pasadena Water & Power and The Gas Company) that the utility equipment shown on the plans are sufficient to meet the demands of the project and that the locations shown in the plans are approved.
13. This project will be subject to 50%, 75%, and 100% inspection points and sign-off by staff of the Design & Historic Preservation section to ensure that the project is constructed as indicated and specified in the decision letter and that all work is performed consistent with the approved plans.

#### **EXECUTIVE SUMMARY:**

The application presents design revisions in response to the conditions of approval from the previous Concept Design Review phase in addition to providing more detailed plans, elevations,

sections and color and material information for the project. The current drawings are more fully detailed and present a palette of materials that is consistent with the design of the building. Upon reviewing the drawings in detail, staff recommends approval of the application with the conditions of approval outlined above and explained within this report.

## **BACKGROUND:**

On March 23, 2021, the Design Commission approved an application for Concept Design Review for construction of a new three-story plus basement, approximately 80,000 sf building to house the Resnick Sustainability Center at the California Institute of Technology (CalTech). This application is for Final Design Review of the same project.

## **Project Overview**

- General Plan Designation: Institutional (0 – 3.00 FAR)
- Zoning: PS (Public and Semi-Public)
- Design Guidelines: The applicable design guidelines are the design-related goals and policies in the Land Use Element of the General Plan and the Design Guidelines in the Caltech Master Plan.
- Site: The site is comprised of a 17-acre lot on the east side of S. Wilson Avenue between E. California Boulevard and San Pasqual Street. Its shape is rectangular and is currently developed with 14 buildings including Braun Laboratories, Mead Laboratory, Noyes Laboratory, Beckman Laboratory, Baxter Hall, Beckman Auditorium, Beckman Institute, Broad Center, and a few smaller support buildings. There is a surface parking lot west of Mead Laboratory and another one north of Beckman Auditorium. A tree inventory provided with the application identifies 55 private trees in the vicinity of the project site, eight of which are protected specimen trees and 14 of which are protected native trees. There are also six trees within the public right-of-way along the frontage of the project site.
- Surroundings: The buildings listed above on the project site are north, south and east of the proposed new building. To the west, across S. Wilson Avenue from the project site are two large multi-story parking structures as well as two single-family residences. Nearby designated historic resources include Villa San Pasqual (1953, Lionel V. Mayell) at 1000 San Pasqual Street, Wilson Court, 1031 San Pasqual Street (1923, Whitescarver and Picton and S. Russell Johnson), Whispering Waters (1961, Lionel V. Mayell) at 1000 Cordova Street, Mentor Court (1923, Delux Building Company) at 937 E. California Boulevard and Bullocks South Lake (1947, Wurdeman & Beckett) at 401 S. Lake Avenue.
- Project Description: The project involves demolition of the Mead Laboratory building, removal of 37 trees, five of which are protected specimen trees and one of which is a protected native tree, relocation of one protected native tree, and construction of a three-story plus basement, approximately 80,000 sf building to house the Resnick Sustainability Center. No new parking is proposed to be constructed as part of the project. The project also involves reconfiguring existing open spaces to the south, west and north of the

proposed new building, including creation of outdoor classroom space and a new amphitheater and shade structure.

- Site Design: The building is proposed to be placed in the same location as the existing Mead Laboratory building and to have a 90-foot setback from S. Wilson Avenue to align with Braun Laboratory, as required in the Caltech Master Plan. A new landscape design is proposed to be implemented in the setback area along with the retention of a significant mature tree and creation of a new access driveway from S. Wilson Avenue at the southern end of the site. On the north side, the building would align with the edge of the existing sidewalk along the existing service drive that is proposed to be retained. On the east side of the building, a setback of approximately 10 feet from the Noyes Laboratory building would be retained at the northern end of the building, which would reduce to approximately 3 feet at the southern end of the building. On the south side, an approximate 10-foot setback would be retained adjacent to the Braun Laboratory building. Landscape and hardscape improvements, including an amphitheater and shade structure, are also proposed south of the building.
- Architectural Style: Contemporary
- Developer: California Institute of Technology
- Architect: CannonDesign
- Landscape Architect: AHBE | MIG

**ANALYSIS:**

**Conditions of Concept Design Review:**

Below are the Commission’s conditions of approval and recommendation from Concept Design Review for the project, as well as the architect’s responses and staff’s comments. See Attachment B for the full responses and diagrams and Attachment C for the complete set of revised plans, elevations, wall sections, architectural details and materials specifications and imagery.

<b>Concept Design Review Conditions, March 23, 2021:</b>	<b>Architect Responses</b>	<b>Staff Comment:</b>
1. The landscape plans provided for Final Design Review shall provide details of the improvements to Beckman Lawn that are proposed to be implemented in conjunction with this project, with the goal of ensuring consistency with the proposed building and appropriate treatment as an entry portal to the campus.	“The design team is currently developing the conceptual design of Beckman Lawn. A working sketch of the Lawn is included below for reference.”	<p><i>Condition to be addressed through a condition of approval.</i></p> <p>The response provided includes a conceptual design drawing of the Beckman Lawn area; however, more detailed landscape drawings should be provided for review. While this area is an important open space within</p>

Concept Design Review Conditions, March 23, 2021:	Architect Responses	Staff Comment:
		<p>the campus, its development is an ancillary component of the project and the conceptual drawings provided depict an appropriate treatment of the space with a large lawn area flanked by double-allees of trees. As such, staff recommends a condition requiring submittal for staff review and approval of more detailed landscape plans for this area that are substantially the same design as the conceptual drawings presented in this application.</p>
<p>2. Provide drawings and details of walls within the building interior that may be publicly visible through the exterior curtain wall, which shall be designed to be articulated as exterior walls.</p>	<p>“Please refer to interior elevations of north and west corridor interior walls and typical wall and door details on sheets A0600 and A1006 in the drawing set submission.”</p>	<p><i>Condition satisfactorily addressed.</i></p> <p>The submitted drawings depict interior wall conditions on the sheets indicated in the architect’s response, which are shown largely as floor-to-ceiling glazing.</p>
<p>3. A tree protection plan prepared by a Certified Arborist shall be incorporated into the plans submitted for Final Design Review and shall include the City of Pasadena Tree Protection Guidelines dated 5/13/19 (see Attachment A). The trees, which will be protected, are tree numbers 1546, 1560, 1561, 1567, 1582-1585, 2780, 2788, 2779, 2797, 2801 3223 &amp; 3545 as shown in the submitted tree inventory.</p>	<p>“A tree protection plan consistent with the City of Pasadena Tree Protection Guidelines is being prepared and will be submitted with the completed Final Design Review package. An arborist report in support of the protection plan is attached. Please note that based on the further development of the design and considering the findings of the arborist we are proposing to remove additional trees, including some of those noted above. Our rationale is noted below.</p> <ul style="list-style-type: none"> <li>• Tree 1546—We are proposing to remove all the Camphor trees along the north side of the existing service drive (trees 1544-1549) to facilitate construction of the new building. These will be</li> </ul>	<p><i>Condition to be addressed through a condition of approval.</i></p> <p>See detailed discussion of this requirement in the main body of the report, below. A new tree inventory has been submitted with this application, which updates some of the information from the previous inventory. Therefore, staff recommends that this condition be repeated in this decision, with updated tree numbers to reflect the protection of trees proposed to be retained in the vicinity of the construction site. Note that based on the updated information</p>

Concept Design Review Conditions, March 23, 2021:	Architect Responses	Staff Comment:
	<p>replaced with new trees in conjunction with the renovation of Beckman Lawn. A tree removal application will be filed for 1546, which meets the criteria for protection.</p> <ul style="list-style-type: none"> <li>• Trees 2797—Sequoia. All the sequoias on the site are not healthy, and we are proposing to remove them (trees 2794-2797). Please refer to the arborist report prepared by Carlberg Associates. A tree removal application will be filed for 2797, which meets the criteria for protection.</li> </ul> <p>Please refer to the attached tree disposition plan for a complete accounting of proposed tree removals. Note that a tree numbered 2779 does not appear in Caltech’s tree inventory for this site.</p>	<p>submitted, tree # 1546 is not a protected tree and, therefore, does not require submittal of an application for Private Tree Removal to remove it.</p>
<p>4. The landscape plans submitted for Final Design Review shall clearly identify the tree numbers of all existing trees proposed to remain, as listed in the submitted tree inventory, and, if any additional protected trees are identified for removal, submit additional applications for Private Tree Removal in conjunction with the application for Final Design Review.</p>	<p>“The landscape plan includes tree numbers from the tree inventory for trees proposed to remain. Additional Private Tree Removal applications will be submitted as noted above.”</p>	<p><i>Condition satisfactorily addressed.</i></p> <p>The planting plans on sheets L3.11 and L3.12 include the tree numbers of all existing protected trees proposed to remain. The applicant has also submitted applications for Private Tree Removal for two additional protected trees proposed to be removed and one protected tree that is proposed to be relocated. See further discussion of these proposals in the body of this report below.</p>
<p>5. The project shall comply with the development standards in the Caltech Master Plan, including those requirements listed in Attachment B. If changes to the current design are required to ensure</p>	<p>“The project will comply with the development standards in the Caltech Master Plan. If changes to the current design are required, an Application for Changes to Approved Project will be submitted.”</p>	<p><i>Condition to be addressed through a condition of approval.</i></p> <p>The submitted plans have been reviewed by staff of the Community Planning Section, which have</p>

Concept Design Review Conditions, March 23, 2021:	Architect Responses	Staff Comment:
<p>compliance with the Master Plan, an application for Changes to an Approved Project may be required, either separately from or in conjunction with Final Design Review.</p>		<p>determined that there remain three areas where the project is not in full compliance with the development standards in the Caltech Master Plan. These standards include the front setback (portion of undulating curtain-wall projects 7'6" into the setback area), elevator tower appurtenance height (15' limit; elevator tower proposed at 21'3") and rooftop appurtenance area (25% of building footprint maximum; proposed area unknown but appears to exceed this limit). Staff has discussed these outstanding issues with the applicant team, which may apply for a Conditional Use Permit (CUP) to allow the design to be built as currently presented in this application. As such, staff recommends repeating this condition of approval, with additional language requiring completion of the CUP process, if requested, prior to issuance of a building permit for the project.</p>
<p>6. Comply with the conditions provided by the Departments of Public Works and Transportation listed in Attachment C, to the satisfaction of said departments.</p>	<p>"Please see responses below."</p>	<p><i>Condition to be addressed through a condition of approval.</i></p> <p>Compliance with the conditions from other City departments requires review by staff of those departments during building plan check. As such, staff recommends that this condition be repeated in this decision.</p>

Concept Design Review Recommendation, March 23, 2021:	Architect Responses	Staff Comment:
1. Consider providing an entry canopy at the westerly building entry similar to the proposed canopy at the northerly entry.	“We have studied the building entry condition as recommended but believe that the use of the organic façade to provide covering and definition to the west entrance is the more appropriate solution.”	<p><i>Recommendation satisfactorily addressed.</i></p> <p>The recommendation, which is not binding on the project, has been studied and is not proposed to be implemented. See Attachment B for images of the studies that were prepared. The westerly entrance is within a large span of exposed ground-level storefront glazing with a projecting curtain wall above and prominent stairs leading to this area, which staff finds adequately identifies the entrance location.</p>

**Materials & Colors:**

The most prominent and publicly visible elevations on the north and west sides of the building are proposed to be largely covered in an undulating and curving glass-curtain wall system with diagonally oriented projecting metal shading fins. The glazing system is proposed to be one-inch insulated glazing with a triple-silver low-E coating and the mullions are proposed to be painted metal frames with a PPG Duranar fluoropolymer powder coating in silver color. The projecting fins are proposed to be painted aluminum with the same type of coating as the mullions, but in “bone white” color. Details provided depict the exposed edges of this system, as well as soffits being covered in dark grey metal panels. Metal panel cladding is also proposed at the southern end of the ground level on the west elevation, with an overhead door for the loading area utilizing the same material to allow the door to blend in with the façade when it is not in use. At the east end of the north elevation and the south end of the west elevation are small areas of exposed walls that are proposed to be coated in acrylic stucco in a color to match the adjacent Noyes Laboratory building to the east, which is a beige color that is also seen on other nearby buildings including the Beckman Laboratory to the north and the Braun Laboratory to the south. The more modern Broad Center north of the Beckman Laboratory also incorporates a similar color on the south-facing façade, and has a silver metal cladding on the west- and north-facing facades. The parking structure to the west is a combination of beige and white plaster.

Overall, the design team has previously demonstrated how the proposed design is compatible with surrounding existing buildings, while maintaining a contemporary expression that is reflective of the building’s sustainability purpose and vision, and the Design Commission approved the conceptual design on that basis. The materials and colors used on the exterior

are also compatible with the exterior materials and colors of surrounding buildings. The submitted architectural details demonstrate that the edges, corners and transitions will be high-quality, durable and consistent with the architectural style of the building. Consistent with standard conditions of recent Final Design Review approvals, staff recommends that a large-scale mock-up panel be provided for staff review during construction to ensure high-quality materials installation.

### **Mechanical Screening:**

The roof plans on sheets A0104 and A0105 depict placement of mechanical systems on the roof of the building with a screening system surrounding them. Sheet A0304 provides elevations of the mechanical enclosure and the applicant has also provided a basis of design for the materials, which is proposed to consist of metal panels similar to Centria IW-30A (see Attachment F) with expressed joints giving a tongue-and-groove appearance set in a diagonal pattern. The roof also includes enclosed penthouses that are proposed to be coated in plaster matching the same light beige color proposed for other plaster surfaces on the building. The mechanical systems on the rooftop will be adequately screened from ground-level views and the screening will utilize materials that are consistent with the main building materials and finishes.

The utility plan on sheet C1.50 also depicts a grouping of backflow devices and Fire Department connections adjacent to the trash enclosure to the southwest of the building. The planting plan on sheet L3.11 depicts dense plantings of African Iris, Sweet Bay and Berkeley Sedge and four Mexican Sycamore trees in this area to screen these utilities from street view. During final inspection, if additional plantings are necessary for screening the utilities, staff will have the ability to require them to be installed.

### **Landscaping:**

An extensive program of landscape and hardscape is proposed for the areas surrounding the building, including creation of a new amphitheater area and outdoor classrooms to the southeast of the building, within the area behind the Braun and Noyes Laboratories. This area would include concrete pathways that match those found throughout the campus, with specialty paving at the outdoor classroom and amphitheater areas. Concrete seatwalls would also be incorporated into these areas and a custom shade structure with arching metal supports and perforated metal infill panels and roofing is proposed at the amphitheater area.

The front yard area west of the new building is proposed to include integral color concrete paving creating a circular configuration around a large specimen tree to be preserved. The southerly portion of this circle would be designed as an accessibility ramp and stairs would be provided at the northeastern portion. South of this area, a small grove of new trees is proposed to be planted on either side of the service area, which consists of concrete paving leading to the loading zone of the building, as well as a trash enclosure that is designed to be tucked into the southerly new tree grove to reduce its visibility. The southeast, northwest and southwest sides of the enclosure are proposed to be constructed of CMU blocks coated in stucco to match the building and the northwest-facing doors are proposed to consist of metal-framed perforated metal panels.

The planting plans indicate that 13 new 48-inch-box Marina Strawberry Trees, three 60-inch-box

Saucer Magnolia Trees, two 60-inch-box Western Sycamore Trees, 13 48-inch-box Mexican Sycamore Trees and 12 60-inch-box Southern Live Oak Trees are proposed to be planted in the vicinity of the project. A water-wise palette of shrubs, vines and groundcovers are also proposed to be planted around the building. It should be noted that these plantings include, in addition to the front yard and outdoor learning spaces previously described, a planting zone along the northern edge of the building and another south of the building along a walkway extending east-west between the proposed building and the existing Braun Laboratory.

The hardscape and landscape program proposed for the building is compatible with the building design and the campus landscape design overall. A standard condition regarding compliance with the City’s Model Water Efficient Landscape Ordinance is recommended.

Protected Tree Removals

During Concept Design Review the Design Commission reviewed and approved the removal of five protected trees using Tree Protection Ordinance finding #6, which requires planting of new trees in compliance with the adopted Tree Replacement Matrix. As noted above, the Commission also included a condition of approval requiring submittal of a Tree Protection Plan to ensure adequate protection during construction of protected trees proposed to be retained in the vicinity of the project construction zone.

The applicant is now requesting removal of two additional protected trees and relocation of one protected tree, as outlined in the table below:

Tree Number	Tree Species (Common Name)	Tree Type	Diameter at Breast Height (Inches)	Tree Height (Feet)	Tree Canopy Spread (Feet)	Location
1566 (relocate)	Quercus agrifolia (Coast Live Oak)	Protected Native Tree	9.3	20	10-20	South of Noyes Laboratory
3224	California Sycamore (Platanus racemosa)	Protected Native Tree	9.7	30	10-15	South of Noyes Laboratory
2797	Sequoia sempervirens (Coast Redwood)	Protected Specimen Tree	31.2	60	12-21	East of Braun Laboratory

The application for removal of tree #2797 states that Redwood trees on the campus are generally drought-stressed due to climate change and that this particular tree interferes with the roof overhang of the Braun Laboratory building, which has caused it to grow in a distorted manner. As such, this tree may be removed using Tree Protection Ordinance finding #3, which states, “there is an objective feature of the tree that makes the tree not suitable for the protections of this chapter.” The applications for removal of tree #3224 and the relocation of tree #1566 indicate that the trees conflict with the proposed new building and landscape construction. As such, Tree Protection Ordinance finding #6 would be the most appropriate finding to evaluate, to potentially allow their removal. This finding states, “the project, as defined

in Section 17.12.020, includes a landscape design plan that emphasizes a tree canopy that is sustainable over the long term by adhering to the replacement matrix adopted by resolution of the city council and included in the associated administrative guidelines.”

Based on the adopted tree replacement matrix, either six 15-gallon or three 24-inch box trees of species on the native tree list would be required to be planted to replace tree #3224 in order to meet this finding. During Concept Design Review, it was determined that either 40 24-inch box or 20 36-inch box trees would be required to be planted to allow for the removal of the five protected trees that were proposed for removal at that time. The submitted landscape plan has been revised since Concept Design Review and no longer complies with the Tree Replacement Matrix with respect to the new tree species proposed to be planted. The only species proposed to be planted that is on either the native or specimen tree list is the proposed Western Sycamore trees and now only two 60” box specimens are proposed rather than the previous 37 48-inch box specimens. However, a total of 43 new trees are proposed to be planted, in sizes that are all larger than required by the Tree Replacement Matrix, which is in compliance with the number of trees required to be planted. To ensure full compliance, staff recommends a condition requiring the proposed tree plantings to be modified to comply with the species requirements of the Tree Replacement Matrix as listed above.

Regarding the proposal to relocate a small protected oak tree, #1566, this tree is currently in a planter box south of Noyes Laboratory and is proposed to be relocated south of the amphitheater area and planted in natural soil. As this tree would be relocated rather than removed, it would not be required to be replaced in accordance with the Tree Replacement Matrix. However, as required by the Tree Protection Ordinance, the applicant will be required to post a performance bond in an amount equal to the appraised value of the tree to ensure that the relocated tree is properly established and maintained for three years and staff has recommended a condition of approval to reinforce this Code requirement.

In addition to the proposed new protected tree removals, the applicant engaged a certified Arborist (Carlberg Associates) to prepare a tree inventory and evaluate the condition of the existing trees in the vicinity of the project site. The tree inventory provides some updated information for the trees and also includes some re-numbering of trees from the previous review. As such, staff recommends that the previous tree protection plan condition from Concept Design Review be revised and reinstated in this decision to reflect the current tree inventory information.

### **Lighting:**

Lighting plans for the site are provided on sheets L1.11a and L1.12a, with fixture specifications provided on sheet L1.15a and A0051. Three fixtures by BEGA Lighting are proposed to be utilized within the landscape, including a conical pole-mounted fixture (16’ pole + 15” head), a cylindrical bollard-mounted fixture (18” pole + 7” head) and a compact floodlight, all with a matte, textured polyester powder coat finish to match the campus standard finish. The plan depicts the pole-mounted lights at the circular entry pathway within the front yard and along the pathways within the amphitheater/outdoor classroom areas south of the building, the bollard lights along the northerly driveway, and the floodlights within the amphitheater shade structure. An unspecified light fixture is also shown in the details provided of the amphitheater shade structure. Subject to the standard condition regarding lighting temperature not rising above

3,000 Kelvin, the lighting fixtures proposed are high quality and consistent with the design of the building and the campus overall.

**Signage:**

The plans provided do not indicate any signage proposed for the building. Because the Zoning Code requires design review for signs on all new development projects, staff recommends that this requirement be reinforced with a condition of approval.

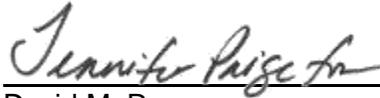
**Comments from Other Departments:**

During Concept Design Review, the Departments of Transportation and Public Works provided a series of recommended conditions which were incorporated into that previous approval. To reinforce that compliance with these conditions will continue to be required, staff recommends repeating this condition of Concept Design Review in this decision. In addition, as previously discussed, staff of the Community Planning Section has identified three areas where the project is not in full compliance with the Caltech Master Plan development standards (front setback, rooftop appurtenance area and rooftop appurtenance height), which will require either redesign or submittal of an application for a Conditional Use Permit. Staff has also recommended a condition of approval to ensure that these issues are addressed prior to issuance of a building permit, including requiring submittal of an application for Changes to an Approved project if the design is proposed to change to comply with these standards.

**CONCLUSION:**

Upon implementation of recommended conditions of approval, the project will comply with the conditions of Concept Design Review. The submitted drawings include materials specifications and architectural details that are high-quality and compatible with the overall building design. Staff recommends that the Commission approve the application for Final Design Review with conditions described in this report, which will be further reviewed by staff during building plan check.

Respectfully submitted,



David M. Reyes  
Director of Planning & Community Development  
Department

Prepared by:

Reviewed by:



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Kevin Johnson, Senior Planner



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Leon White, Principal Planner

Attachments:

- A. Comments/conditions from other City Departments/Divisions
- B. Architect's responses to Concept Design Review conditions
- C. Plans, elevations, details, materials
- D. Updated tree inventory
- E. Tree Protection Guidelines
- F. Mechanical screening basis of design