

**Attachment 4**

## MITIGATION MONITORING AND REPORTING PROGRAM

### California Institute of Technology (Caltech) Master Development Plan Amendment 1200 E. California Boulevard

This Mitigation Monitoring and Reporting Program (MMRP) for the California Institute of Technology (Caltech) Master Development Plan, located at 1200 E. California Boulevard, has been prepared pursuant to the California Environmental Quality Act (CEQA – Public Resources Code, Section 21000 *et seq.*), the CEQA Guidelines (Cal. Code Regs., Title 14, Chapter, Sections 15074 and 15097) and the City of Pasadena CEQA Guidelines. A Supplemental Environmental Impact Report (SEIR) is prepared when minor additions or changes are necessary to make a previously certified Environmental Impact Report (EIR) adequately apply to the project in the changed situation. This SEIR and the Final EIR for the Caltech Master Plan Project that was certified in 1989 comprise the environmental review documentation for the proposed project. The mitigation measures included herein are considered conditions of approval for the amendments to the Caltech Master Plan. No substantial changes to the measures were made. A master copy of this MMRP shall be kept in the Planning and Development Department, Community Planning Section, and shall be available for viewing upon request. A copy also will be available at the office of the Condition/Mitigation Monitoring Coordinator.

The applicant, Caltech, is requesting amendments to the Caltech Master Development Plan. The amendments include four (4) campus development projects and revisions to the Master Development Plan design guidelines and design review thresholds. The proposed amendments include the following:

- Development of a new chemistry and chemical engineering laboratory (CCE) between the Noyes and Beckman Laboratories or the demolition of the existing Mead Laboratory fronting on Wilson Avenue, and replacing it with a new laboratory;
- Rehabilitation of the existing North Undergraduate Houses (Lloyd, Page, and Ruddock) or construction of new student housing;
- Development of a new dormitory in place of the existing Braun and Marks Graduate Houses;
- Development of a new Campus Center in place of the existing Physical Plant offices and shops;
- Revisions to the Master Development Plan design guidelines and design review thresholds. The new design guidelines would allow for increased variation in architectural and design styles, and changing the building height measurement index from number of stories to height in feet above grade.

The MMRP includes mitigation measures in the Mitigation Monitoring and Reporting Matrix on the following pages. The matrix lists each mitigation measure or series of mitigation measures by environmental topic. For each mitigation measure, the frequency of monitoring and the responsible monitoring entity is identified. Mitigation measures may be shown in submittals and may be checked only once, or they may require monitoring periodically during and/or after construction. Once a mitigation measure is complete, the responsible monitoring entity shall date and initial the corresponding cell, and indicate how effective the mitigation measure was.

If any mitigation measures are not being implemented, the City may pursue corrective action. Penalties that may be applied, but are not limited to, the following: 1) a written notification and request for compliance; 2) withholding of permits; 3) administrative fines; 4) a stop-work order; 5) forfeiture of security bonds or other guarantees; and 6) revocation of permits or other entitlements.

Monitoring Program Costs

**I HEREBY AGREE TO PAY THE CITY MONITORING FEES, AND IMPLEMENT THESE MITIGATION MEASURES, AT A MINIMUM, IN THE DESIGN CONSTRUCTION, AND MAINTENANCE OF THE PROJECT.**

\*   
\_\_\_\_\_  
APPLICANT

11/07/06  
\_\_\_\_\_  
DATE

~~\* Applicant's approval is conditioned upon the enclosed corrections to the "Mitigation Measures AES1-(b) Public Art Location" of the **Mitigation Measures** and the enclosed corrections to the "AES 1(b) Public Art Relocation" of the **Mitigation Measure/Condition of Approval.**~~

## Mitigation Measures

### Aesthetics

#### **Mitigation Measure AES-1(a) Landscaping Plan:**

For each building in connection with the proposed amendments, the applicant shall submit a landscape plan that will have as a goal to restore the theme and visual integrity of existing landscaped areas. The design of landscaping at the new buildings should continue to promote integration of open space between existing and new buildings. Landscaped areas between new facilities within building envelopes should be consistent with the general character of the surrounding area and should promote a unified image for the campus. The landscaping plan required under BIO-1 will follow the provisions herein; therefore no significant impacts on aesthetics will result from the proposed amendments.

#### **Mitigation Measure AES-1(b) Public Art Location:**

Avoidance of development within Location 1 for Amendment 1 would be the preferred scenario in order to avoid impacts to a scenic resource. If avoidance of Location 1 is not feasible, prior to development the applicant shall comply with the City of Pasadena Arts and Culture Commission's deaccession procedures and policy.

#### **Mitigation Measure AES – 1(c) Avoidance of Open Space:**

Caltech shall avoid constricting or obstructing the open space area west of the Athenaeum. Replacement of the North Undergraduate Houses rather than rehabilitation would avoid this impact and would be the preferred scenario for preservation of the existing open space and preservation of existing visual resources in the area. However, if avoidance of this open space area is not feasible, the rehabilitation scenario shall incorporate a landscape element along the southern building façade. Landscaping should be developed to soften the visual impacts of new development within the existing north-south open space corridor west of the Athenaeum.

#### **Mitigation Measure AES – 2(a) Façade Articulation:**

Any addition or new construction associated with the residential houses shall be designed in a manner that clearly articulates the massing of the new building as distinct from the existing residential structures. Façades shall be designed in a manner that incorporates changes in relief such that no façade can measure greater than 150 feet without interruption. Articulated fenestration, parapets, and rooflines are encouraged.

#### **Mitigation Measure AES – 2(b) Replacement Landscaping:**

Any addition or new construction associated with removal of landscaping and ornamental vegetation shall design and implement replacement landscaping of a suitable nature. Landscaping shall integrate the surrounding landscape design and incorporate the new developments in order to soften the affect of building massing.

### Air Quality

#### **Mitigation Measure AQ – 1(a) ROG Control:**

The following shall be implemented to minimize daily ROG emissions related to the application of architectural coatings:

- Low VOC architectural and asphalt coatings shall be used on site and shall comply with AQMD Rule 1113-Architectural Coatings.
- Daily coating use shall be restricted to 65 gallons per day (assuming a VOC content of 1.1 pounds per gallon).

**Mitigation Measure AQ – 1(b) Ozone Precursor Control:**

The following shall be implemented during construction to minimize emissions from construction equipment:

- Equipment engines should be maintained in good condition and in proper tune as per manufacturer's specifications;
- Lengthen construction periods during the smog season so as to minimize the number of vehicles and equipment operating simultaneously; and
- Use new technologies to control ozone precursor emissions as they become available.
- Diesel oxidation catalysts and particulate filters shall be installed on all on and off road construction vehicles.

**Mitigation Measure AQ – 1(c) Fugitive Dust Control:**

The following shall be implemented during construction to minimize fugitive dust emissions:

- Water trucks shall be used during construction to keep all areas of vehicle movements damp enough to prevent dust from leaving the site. At a minimum, this will require twice daily applications (once in late morning and once at the end of the workday). Increased watering is required whenever wind speed exceeds 15 mph. Grading shall be suspended if wind gusts exceed 25 mph.
- If importation, exportation and stockpiling of fill material is involved, soil with 5% or greater silt content that is stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting material shall be tarped from the point of origin or shall maintain at least two feet of freeboard.
- All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering should occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day.
- All clearing, grading, earth moving, or excavation activities shall cease during periods of high winds (i.e., greater than 20 mph averaged over one hour) so as to prevent excessive amounts of dust.
- All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- Face masks shall be used by all employees involved in grading or excavation operations during dry periods to reduce inhalation of dust which may contain the fungus which causes San Joaquin Valley Fever.
- All active portions of the construction site shall be sufficiently watered to prevent excessive amounts of dust.

**Biology**

**Mitigation Measure BIO – 1 Construction Practices:**

Construction of individual campus developments associated with the proposed Master Plan amendments shall adhere to the following:

- No grading or development shall occur within 5 feet from the driplines of mature native or specimen trees that are not to be removed as part of the project, but that occur near the construction area.
- All mature native or specimen trees within 25 feet of proposed ground disturbances, which are not to be removed as part of the project, shall be temporarily fenced with chain-link or other material satisfactory to the City throughout all grading and construction activities. The

fencing shall be installed six feet outside the dripline of each specimen oak tree, and shall be staked every six feet.

- No construction equipment shall be parked, stored or operated within six feet of any mature native or specimen tree dripline.
- No fill soil, rocks, or construction materials shall be stored or placed within six feet of the dripline of a mature native or specimen tree (pervious paving and other materials are allowed, as approved by the City).
- Any roots encountered that are one inch in diameter or greater shall be cleanly cut. This shall be done under the direction of a City approved arborist/oak tree consultant.
- No permanent irrigation shall occur within the critical root zone of any mature native or specimen tree. Drainage plans shall be designed so that tree trunk areas are properly drained to avoid ponding.
- Any trenching required within the dripline or sensitive root zone of any mature native or specimen tree shall be done by hand. In addition, trenching in the protected zone needs to preserve roots over 1 inch by tunneling.

***Mitigation Measure BIO – 1(a) City Trees and Tree Protection Ordinance:***

Prior to the issuance of a building permit for each individual building in connection with the proposed amendments, the applicant shall submit a landscape plan including proposed tree removals and replacement, for review and approval by the Planning and Development Director and the Design Commission, according to the review thresholds in the CMDP. Such plan shall show the square feet of tree canopy coverage proposed to be removed within the development site. The area of removed canopy shall be replaced at a ratio of 1:1 through a combination of relocated and new trees planted within areas of the development site that are suitable for new tree planting. While canopy replacement on the development site shall be the first priority, any canopy that cannot be reasonably replaced onsite, shall be replaced within other areas of the campus that are targeted by the CMDP for landscaping. While incorporating a range of species necessary to maintain the landscaping theme existing in the campus, the landscape plan shall also provide for the replacement of removed trees with native and specimen trees protected under the Tree Protection Ordinance. Further, replacement trees shall achieve equal or greater canopy than the canopy removed within 5 years of implementation of the landscaping plan.

A Tree Protection Plan shall be prepared in accordance with the Tree Protection Guidelines per Chapter 8.52 of the Pasadena Municipal Code. The plan shall detail the protective measures to be used during demolition and construction of each building site proposed in the amendment. The plan shall be reviewed and approved by the Planning staff prior to issuance of any grading or building permits.

The applicant shall submit a landscape/planting plans for review and approval as provided in the provisions of the amended Master Plan.

***Mitigation Measure BIO – 2 Bird Nesting Surveys:***

Prior to any earthmoving activities during the breeding and nesting season (typically March 1 to September 1 or as early as February 1 for raptors), the applicant shall have a field survey conducted by a qualified biologist to determine if active nests of breeding birds are present within the area of potential influence of the activity. If nesting birds protected under the Migratory Bird Treaty Act are found within the area of potential influence, an appropriate buffer as determined by the biologist will be recommended and the nest shall not be disturbed until the young have fledged. This survey shall be conducted within three (3) days prior to commencement of grading for each development amendment.

**Historic Resources**

***Mitigation Measure H – 2 Design Review:***

The design of any construction on the location of the North Undergraduate Houses (either alterations to the existing building or demolition and construction of new buildings) shall be subject to the review by the Pasadena Design Commission in order to assure its conformance with the Secretary of Interior's Standards with respect to its potential impacts on the Athenaeum, South Undergraduate Houses, and the landscape features.

Caltech Master Development Plan Amendment Project EIR  
**Mitigation Monitoring and Reporting Program**

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
					Initial	Date
<b>AESTHETICS</b>						
<b>AES-1(a) Landscaping Plan.</b> For each building in connection with the proposed amendments, the applicant shall submit a landscape plan that will have as a goal to restore the theme and visual integrity of existing landscaped areas. The design of landscaping at the new buildings should continue to promote integration of open space between existing and new buildings. Landscaped areas between new facilities within building envelopes should be consistent with the general character of the surrounding area and should promote a unified image for the campus. The landscaping plan required under BIO-1 will follow the provisions herein; therefore no significant impacts on aesthetics will result from the proposed amendments.	Review and approve landscape plans for each individual building	Prior to issuance of individual building permits	Once for each individual building	CPPD		
<b>AES-1(b) Public Art Relocation.</b> Avoidance of development within Location 1 for Amendment 1 would be the preferred scenario in order to avoid impacts to a scenic resource. If avoidance of Location 1 is not feasible, prior to development the applicant shall comply with the City of Pasadena Arts and Culture Commission's deaccession procedures and policy.	Verification that Amendment 1 avoids the open space area between Noyes and Beckman Labs  OR IF AVOIDANCE IS INFEASIBLE  Verification that the applicant has replaced the art piece or contributed to an arts fund	Prior to issuance of building permit for Amendment 1	Once	CPACC and CPPD		
<b>AES-1(c) Avoidance of Open Space.</b> Caltech shall avoid constricting or obstructing the open space area west of the Athenaeum. Replacement of the North Undergraduate Houses rather than rehabilitation would avoid this impact and would be the preferred scenario for preservation of the existing open space and preservation of existing visual resources in the area. However, if avoidance of this open space area is not	Verification that North Undergraduate Housing does not encroach into the open space area west of Athenaeum  OR	Prior to approval of building permit for North Undergraduate Housing	Once	CPDC and CPPD		

Key: CPACC - City of Pasadena Arts and Culture Commission  
 CPDC - City of Pasadena Design Commission  
 CPPD - City of Pasadena Planning Division  
 HPC - Historic Preservation Commission



Catech Master Development Plan Amendment Project EIR  
**Mitigation Monitoring and Reporting Program**

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
					Initial	Date
feasible, the rehabilitation scenario shall incorporate a landscape element along the southern building façade. Landscaping should be developed to soften the visual impacts of new development within the existing north-south open space corridor west of the Athenaeum.	Review and approval of landscape plans for North Undergraduate Housing					
<b>AES-2(a) Facade Articulation.</b> Any addition or new construction associated with the residential houses shall be designed in a manner that clearly articulates the massing of the new building as distinct from the existing residential structures. Façades shall be designed in a manner that incorporates changes in relief such that no façade can measure greater than 150 feet without interruption. Articulated fenestration, parapets, and rooflines are encouraged.	Verification that new student residences meet specified requirements	Prior to issuance of building permits for student residences	Once for each student residence	CPDC and CPPD		
<b>AES-2(b) Replacement Landscaping.</b> Any addition or new construction associated with removal of landscaping and ornamental vegetation shall design and implement replacement landscaping of a suitable nature. Landscaping shall integrate the surrounding landscape design and incorporate the new developments in order to soften the affect of building massing.	Verification that replacement landscape meet specific requirements	Prior to issuance of individual building permits	Once for each individual building	CPDC and CPPD		
<b>AIR QUALITY</b>						
<b>AQ-1(a) ROG Control.</b> The following shall be implemented to minimize daily ROG emissions related to the application of architectural coatings:  <ul style="list-style-type: none"> <li>• Low VOC architectural and asphalt coatings shall be used on site and shall comply with AQMD Rule 1113-Architectural Coatings.</li> <li>• Daily coating use shall be restricted to 65 gallons per day (assuming a VOC content of 1.1 pounds per gallon).</li> </ul>	<ul style="list-style-type: none"> <li>• Review and approval of final construction specifications</li> <li>• Field verification of compliance with required specifications</li> </ul>	<ul style="list-style-type: none"> <li>• Specification review prior to issuance of individual building permits</li> <li>• Field verification as necessary during construction</li> </ul>	<ul style="list-style-type: none"> <li>• Specification review once for each building</li> <li>• Field verification as necessary</li> </ul>	CPPD		
<b>AQ-1(b) Ozone Precursor Control.</b> The following shall be implemented during construction to minimize	<ul style="list-style-type: none"> <li>• Review and approval of final construction</li> </ul>	<ul style="list-style-type: none"> <li>• Specification review prior</li> </ul>	<ul style="list-style-type: none"> <li>• Specification review once</li> </ul>	CPPD		

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**Mitigation Monitoring and Reporting Program**

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
					Initial	Date
<p>emissions from construction equipment:</p> <ul style="list-style-type: none"> <li>• Equipment engines should be maintained in good condition and in proper tune as per manufacturer's specifications;</li> <li>• Lengthen construction periods during the smog season so as to minimize the number of vehicles and equipment operating simultaneously; and</li> <li>• Use new technologies to control ozone precursor emissions as they become available.</li> <li>• Diesel oxidation catalysts and particulate filters shall be installed on all on and off road construction vehicles.</li> </ul>	<ul style="list-style-type: none"> <li>• Field verification of compliance with required specifications</li> </ul>	<ul style="list-style-type: none"> <li>• to issuance of individual building permits</li> <li>• Field verification as necessary during construction</li> </ul>	<ul style="list-style-type: none"> <li>• for each building</li> <li>• Field verification as necessary</li> </ul>			
<p><b>AQ-1(c) Fugitive Dust Control.</b> The following shall be implemented during construction to minimize fugitive dust emissions:</p> <ul style="list-style-type: none"> <li>• Water trucks shall be used during construction to keep all areas of vehicle movements damp enough to prevent dust from leaving the site. At a minimum, this will require twice daily applications (once in late morning and once at the end of the workday). Increased watering is required whenever wind speed exceeds 15 mph. Grading shall be suspended if wind gusts exceed 25 mph.</li> <li>• If importation, exportation and stockpiling of fill material is involved, soil with 5% or greater silt content that is stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting material shall be tarped from the point of origin or shall maintain at least two feet of freeboard.</li> <li>• All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering should occur at least twice daily with complete coverage, preferably in the late morning</li> </ul>	<p>Field verification of compliance with specifications</p>	<p>Throughout construction of individual buildings</p>	<p>As necessary during construction</p>	<p>CPPD</p>		

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Callech Master Development Plan Amendment Project EIR  
**Mitigation Monitoring and Reporting Program**

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
<p>and after work is done for the day.</p> <ul style="list-style-type: none"> <li>All clearing, grading, earth moving, or excavation activities shall cease during periods of high winds (i.e., greater than 20 mph averaged over one hour) so as to prevent excessive amounts of dust.</li> <li>All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.</li> <li>Face masks shall be used by all employees involved in grading or excavation operations during dry periods to reduce inhalation of dust which may contain the fungus which causes San Joaquin Valley Fever.</li> <li>All active portions of the construction site shall be sufficiently watered to prevent excessive amounts of dust.</li> </ul>							
<b>BIOLOGY</b>							
<p><b>BIO-1 Construction Practices.</b> Construction of individual campus developments associated with the proposed Master Plan amendments shall adhere to the following:</p> <ul style="list-style-type: none"> <li>No grading or development shall occur within 5 feet from the driplines of mature native or specimen trees that are not to be removed as part of the project, but that occur near the construction area.</li> <li>All mature native or specimen trees within 25 feet of proposed ground disturbances, which are not to be removed as part of the project, shall be temporarily fenced with chain-link or other material satisfactory to the City throughout all grading and construction activities. The fencing shall be installed six feet outside the dripline of each specimen oak tree, and shall be staked every six feet.</li> <li>No construction equipment shall be parked, stored or operated within six feet of any mature native or</li> </ul>	Requires protection of mature trees	During construction	Once per project application.  At least once, as required.	CPPD			

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**Mitigation Monitoring and Reporting Program**

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
<p>specimen tree dripline.</p> <ul style="list-style-type: none"> <li>No fill soil, rocks, or construction materials shall be stored or placed within six feet of the dripline of a mature native or specimen tree (previous paving and other materials are allowed, as approved by the City).</li> <li>Any roots encountered that are one inch in diameter or greater shall be cleanly cut. This shall be done under the direction of a City approved arborist/oak tree consultant.</li> <li>No permanent irrigation shall occur within the critical root zone of any mature native or specimen tree. Drainage plans shall be designed so that tree trunk areas are properly drained to avoid ponding.</li> <li>Any trenching required within the dripline or sensitive root zone of any mature native or specimen tree shall be done by hand. In addition, trenching in the protected zone needs to preserve roots over 1 inch by tunneling.</li> </ul>	<ul style="list-style-type: none"> <li>Review and approval of tree preservation and replacement plan to ensure consistency with required specifications</li> <li>Field verification of compliance</li> </ul>	<ul style="list-style-type: none"> <li>Plan review prior to issuance of individual building permits</li> <li>Field verification prior to issuance of individual occupancy permits</li> </ul>	<p>Once for each individual building</p>	<p>CPPD                      Development Director and CPDC</p>			
<p><b>BIO-1(a) City Trees and Tree Protection Ordinance.</b>                      Prior to the issuance of a building permit for each individual building in connection with the proposed amendments, the applicant shall submit a landscape plan including proposed tree removals and replacement, for review and approval by the Planning and Development Director and the Design Commission, according to the review thresholds in the CMDP. Such plan shall show the square feet of tree canopy coverage proposed to be removed within the development site. The area of removed canopy shall be replaced at a ratio of 1:1 through a combination of relocated and new trees planted within areas of the development site that are suitable for new tree planting. While canopy replacement on the development site shall be the first priority, any canopy that cannot be reasonably replaced onsite, shall be replaced within other areas of the campus that are targeted by the CMDP for landscaping.</p>							

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Callech Master Development Plan Amendment Project EIR  
**Mitigation Monitoring and Reporting Program**

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
<p>While incorporating a range of species necessary to maintain the landscaping theme existing in the campus, the landscape plan shall also provide for the replacement of removed trees with native and specimen trees protected under the Tree Protection Ordinance. Further, replacement trees shall achieve equal or greater canopy than the canopy removed within 5 years of implementation of the landscaping plan.</p> <p>A Tree Protection Plan shall be prepared in accordance with the Tree Protection Guidelines per Chapter 8.52 of the Pasadena Municipal Code. The plan shall detail the protective measures to be used during demolition and construction of each building site proposed in the amendment. The plan shall be reviewed and approved by the Planning staff prior to issuance of any grading or building permits.</p> <p>The applicant shall submit a landscape/planting plans for review and approval as provided in the provisions of the amended Master Plan.</p> <p><b>BIO-2 Bird Nesting Surveys.</b> Prior to any earthmoving activities during the breeding and nesting season (typically March 1 to September 1 or as early as February 1 for raptors), the applicant shall have a field survey conducted by a qualified biologist to determine if active nests of breeding birds are present within the area of potential influence of the activity. If nesting birds protected under the Migratory Bird Treaty Act are found within the area of potential influence, an appropriate buffer as determined by the biologist will be recommended and the nest shall not be disturbed until the young have fledged. This survey shall be conducted within three (3) days prior to commencement of grading for each development amendment.</p>	<p>Verification that specified bird nesting surveys have been conducted</p>	<p>Three days prior to grading for individual buildings</p>	<p>Once for each individual building</p>	<p>CPPD</p>			

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**Mitigation Monitoring and Reporting Program**

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification	
					Initial	Date
<b>HISTORIC RESOURCES</b>						
H-2 Design Review. The design of any construction on the location of the North Undergraduate Houses (either alterations to the existing building or demolition and construction of new buildings) shall be subject to the review by the Pasadena Design Commission in order to assure its conformance with the Secretary of Interior's Standards with respect to its potential impacts on the Athenaeum, South Undergraduate Houses, and the landscape features.	Verification that Pasadena Design Commission and Historic Preservation Commission review and approval has occurred	Prior to issuance of building permit for North Undergraduate Hall	Once	CPDC, HPC, and CPPD		

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