



## PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

### STAFF REPORT

**DATE:** January 19, 2022

**TO:** Hearing Officer

**SUBJECT:** Conditional Use Permit #6930

**LOCATION:** 1200 E. California Boulevard

**APPLICANT:** California Institute of Technology (Caltech)

**ZONING DESIGNATION:** PS (Public/Semi-Public)

**GENERAL PLAN DESIGNATION:** Institutional

**CASE PLANNER:** Natsue Sheppard

**STAFF RECOMMENDATION:** Adopt the Environmental Determination and the Specific Findings in Attachment A to **approve** the application with the conditions in Attachment B.

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**PROJECT PROPOSAL:** Conditional Use Permit: To allow the demolition of an existing one-story building and construction of a new three-story, 80,000 square-foot academic laboratory building at the same location on the Caltech campus. The proposed project would deviate from the identified building setback, the rooftop appurtenance area, and appurtenance height specified in the approved Master Plan. The project also involves a relocation of a protected tree on the campus. A Conditional Use Permit is required for minor changes that are inconsistent with an approved Master Plan.

**ENVIRONMENTAL DETERMINATION:** Pursuant to California Environmental Quality (CEQA) Guidelines Sections 15162 and 15164, an Addendum to the previously certified Final Supplemental Environmental Impact Report was prepared for the subject project and reviewed by the Design Commission during Concept Design Review on March 23, 2021. It was found that there are no changed circumstances or new information, which would require further environmental review.

**BACKGROUND:**

**Site Characteristics:** The location of the proposed project is located on the east side of Wilson Avenue, just north of the San Pasqual Street intersection. This parcel (APN #5735-007-035) has a site area of approximately 18 acres and is developed as part of the Caltech campus, which consists of academic buildings, laboratory buildings, and an auditorium.

**Adjacent Uses:** North – College, Traditional Campus Setting (Caltech Campus)  
South – College, Traditional Campus Setting (Caltech Campus)  
East – College, Traditional Campus Setting (Caltech Campus)  
West – College, Traditional Campus Setting (Caltech Parking); Single- and Multi-Family Residences

**Adjacent Zoning:** North – PS (Public/Semi-Public)  
South – PS (Public/Semi-Public)  
East – PS (Public/Semi-Public)  
West – PS (Public/Semi-Public); RM-32 (Multi-Family Residential, 0-32 units per acre)

**Previous Cases:** A Master Plan, phased over 30 years, was adopted for Caltech in 1989, and since then a number of amendments and entitlements have been approved for the campus, with the latest amendment in 2006 with no specific sunset date.

**PROJECT DESCRIPTION:**

The applicant, California Institute of Technology (Caltech), proposes the demolition of an existing one-story building and construction of a new three-story, 80,000 square-foot academic laboratory building (Resnick Sustainability Center) at the same location on the Caltech campus. The setback required along Wilson Avenue is the existing setback line of the adjacent Braun Laboratory, which is approximately 90 feet from the existing curb line. The building setback of the proposed building would vary with a minimum of 82 feet due to its undulated façade. The Master Plan also requires that the rooftop appurtenance area to be a maximum of 25 percent of the ground area covered by the structure and the appurtenance height to be up to 15 feet above the maximum building height. The proposed rooftop appurtenance area is 35 percent and the proposed appurtenance height is a maximum of 25 feet above the maximum building height. Approval of a Conditional Use Permit is required for projects that are inconsistent with an approved Master Plan. In addition, a relocation of a protected tree within the Caltech campus is reviewed under the Conditional Use Permit application.

**ANALYSIS:**

Conditional Use Permit – To allow minor changes inconsistent with an existing Master Plan

The purpose of a Master Plan is to reduce processing time and uncertainty for some types of public, semi-public, and open space uses by consolidating multiple entitlements, typically several Conditional Use Permits over an extended period, into one process. After a Master Plan is approved, projects that are consistent with the plan do not require an additional entitlement as long as they comply with the Master Plan and other applicable requirements of the Zoning

Code. A Master Plan Amendment is required for a proposed project that is inconsistent with the approved Master Plan. However, for inconsistencies that are determined to be minor, the Director may allow an applicant to apply for a Conditional Use Permit as an alternative to an amendment to the Master Plan.

Caltech, founded in 1891, is a private university that specializes in science and technology. The first Master Plan for the institution was approved in 1989, in order to minimize uncertainty about Caltech's future development and at the same time to streamline development procedures. The first and second amendments to the Master Plan were approved in 1995 and 1999, respectively. The current Master Plan is the third amendment and was approved by City Council in December 2006 without a specific term or sunset date, and is in force indefinitely.

The Caltech Master Plan identifies "envelopes," or approximate locations, for development of new facilities on the campus. These envelopes do not define specific buildings, but areas within which new buildings may be constructed. Because the Master Plan was intended to accommodate Caltech's future programs rather than approving the specific design of each building, this Master Plan allows a measure of flexibility of a five-percent tolerance for development standards such as building height, setback and site coverage. This tolerance does not apply to the FAR, total building area, or number of dwelling units.

The proposal involves the demolition of an existing one-story laboratory building (Mead Lab) at the western portion of the campus along Wilson Avenue, and construction of a new, three-story, 80,000 square-foot academic laboratory building (Resnick Sustainability Center) as the replacement. The project was reviewed and approved under the 2006 Caltech Master Plan Amendment (Resolution #8691) as a future laboratory building project.

The Master Plan requires that the required building setback along Wilson Avenue be the same as the setback line of the adjacent Braun Laboratory, which is approximately 90 feet from the existing curb line. The setback of the proposed Resnick Sustainability Center would vary with a minimum of 82 feet due to its undulated façade. The Master Plan also requires the rooftop appurtenance area to be a maximum of 25 percent of the ground area covered by the structure and the appurtenance height to be up to 15 feet above the maximum building height. The proposed rooftop appurtenance covered area is 35 percent and the proposed appurtenance height is a maximum of 25 feet high. The proposal would exceed the allowed five-percent tolerance for these development standards; therefore, the project is considered to be inconsistent with the approved Master Plan.

Review and analysis of the applicable development standards are described below.

*FAR:*

The 2006 Master Plan Amendment requires that the proposed building not exceed a building floor area of 80,000 square feet. Based on the plans submitted, the total gross floor area of the proposed building is 79,727 square feet and is consistent with the development standards of the Master Plan.

*Building Height:*

According to the Master Plan, the maximum height of a new academic building at this location is 50 feet measured to the top of the top plate at the uppermost floor and up to three stories. The

proposed building is 50 feet in height and three above-ground levels with one basement level. The project is consistent with the height standards of the Master Plan.

*Setback:*

As previously noted, the required building setbacks for structures along Wilson Avenue are approximately 90 feet measured from the curb lines to match the front yard of the Braun Laboratory. The exterior of the proposed building would be treated with an undulating curving glass-curtain wall system with diagonally oriented metal shading fins on the north and west sides. The undulated design was originally applied only to the north façade; however, continuation of the flowing expression of the curtain wall to the west façade was recommended by the Design Commission in order to create unity in the publicly visible sides of the building. In order to implement the recommendation, a portion of the façade, where the furthest protrusion of the curtain wall occurs, would project into the required setback by 7'-6" feet, based on the information provided on the site plan. It is anticipated that the projection could be a maximum of 8 feet once the final engineering drawing is completed for the actual building permit. The proposed deviation from the setback requirements exceeds the allowable five-percent flexibility of up to 4.5 feet; therefore, the project is inconsistent with the approved Master Plan.

The applicant considered several different options, which would require redesigning by modifying or reducing the footprint of the entire building in order to comply with the setback requirements. However, it was found that these options were not feasible as the buildable area of the site is constrained by the existing building adjoining to the east (Noyes Lab) as well as the existing service drive/fire lane directly to the north. Moreover, reduction in footprint would substantially affect the purposes of the new research building as the proposed building floor plans and floor area would be necessary to fulfill the academic programing.

The proposed change in the Wilson Avenue setback is considered to be minor, as the majority of the west façade is consistent with the setback of the Braun Laboratory and only a portion of the façade would project into the allowable flexibility by 3.5 feet. The proposed setback for the undulation is 82 feet while the required setback with the five-percent flexibility is 85.5 feet; as such, the proposed deviation from the setback requirement is modest and practical.

*Appurtenance Covered Area and Appurtenance Height:*

According to the Master Plan, towers, spires, cupolas, chimneys, elevator penthouses, water tanks, flag poles, monuments, scenery lofts, radio and television antennas, fire towers, and similar structures or necessary mechanical appurtenances, covering not more than 25% of the ground area covered by the structure to which they are accessory, may exceed the basic maximum permitted heights by 15 feet.

Based on the information provided on the plans, the roof area covered by appurtenances would be 31.2% of the ground area covered by the structure. The applicant anticipates that the covered area could be up to 35% depending on the type of mechanical equipment and ducts necessary for the academic and research programs in the building. Further, while the height of most of the proposed rooftop appurtenances, such as mechanical penthouses, ducts, and equipment are within 15 feet measured from the maximum building height of 50 feet, some of the appurtenances, including exhaust stacks and an elevator/stair tower, would exceed the allowable height.

For the exhaust stacks, a dispersion analysis performed on the building indicates that a satisfactory dilution of laboratory exhaust can be achieved when exhaust stacks extend 20'-0" above the roof. In order to provide a safe environment in the vicinity of the building and to avoid re-entrainment of undiluted exhaust into its mechanical system, the applicant proposes the exhaust stacks to extend up to 20 feet above the roof.

The proposed project includes an open-to-sky solar panel testing lab on the rooftop of the building. New solar panels will be developed in the building then brought up to the testing lab using a service elevator at the southwest corner of the building. The elevator is essential to the climate research missions of Caltech, which is one of the specific purposes of this new building. A staircase abutting the elevator would be incorporated into one tower in order to achieve an integrated look. With a required interior elevator cab height of 10'-0" to accommodate solar panels and allowing for CalOSHA required clearances above the hoistway and overrun, the proposed height of the elevator tower is 21'-5" measured from the roof deck to the top of the tower. With an additional 3'-6" for a roof hatch with integrated guardrail on the top of the tower, the tallest portion of the elevator tower would be 24'-11" measured from the roof deck.

It is recognized that many research and development buildings would require additional mechanical equipment for extra air-conditioning or exhausts for fumes. A section of the zoning code considers similar issues for research and development facilities (Section 17.50.240) by allowing additional height and appurtenance roof coverage; however, this code section has not been incorporated into the Master Plan development standards, and it does not specifically address the unique needs and designs of the proposed building.

The proposed increase in the rooftop appurtenance coverage to 35% is primarily to support the research and development programs for the building, which requires a large quantity of fume hoods to support multiple teaching and research labs. The ducting for both makeup air and exhausts require a large footprint on the roof. All mechanical equipment, with an exception of the top five feet of the exhaust towers and some vents, will be concealed from view by an opaque mechanical screen and will not be visible from the ground. The design and materials of the screening have been reviewed and approved by the Design Commission.

As stated earlier, height and design of the exhaust towers and elevator tower are essential to support the research and development programs for the building. The rooftop appurtenances that are taller than 15 feet would comprise only 10 percent of all the rooftop appurtenances. As such, the proposed deviations are considered to be minor.

*Tree Relocation:*

As part of the project, an existing emergency generator serving Mead and Braun Laboratories is proposed to be demolished and replaced. The proposed location for a new emergency generator is currently improved with a landscaped island with a California sycamore tree (*Platanus racemosa*, Tree ID# 3212) and is directly adjacent to an existing emergency generator that serves Schlinger Laboratory and Beckman Behavioral Biology Building. In order to accommodate the new generator at this location, the applicant proposes to relocate the protected California sycamore tree approximately 35 feet to the northwest within an existing plaza surrounding the Beckman Auditorium.

The tree relocation proposal has been reviewed and assessed by Scott McAllaster of Carlberg Associates, a certified arborist. The California sycamore tree has three trunks (5.4", 5.8" & 8.9" measured at 4.5 feet above grade), a slightly asymmetric canopy spread of 25 feet, and an

approximate height of 35 feet. The tree is in very good biological health as evidenced by its full canopy of leaves and overall vigor. There is a structural defect related to the exudate (secretion) on the west-facing, 5.8-inch branch. It is likely associated with a pruning wound that did not close properly. The branches arising from this “knuckle” are thus weakly connected to the parent branch and at risk of breaking. In his professional opinion, Mr. McAllaster stated that the tree is a good candidate for relocation despite this one defect, with the understanding that pruning will be necessary every few years to reduce branch end weight on the weaker, west-facing branch.

As the protected tree would be relocated rather than removed, it would not be required to be replaced in accordance with the City Council-approved Tree Replacement Matrix. Instead, as required by the Tree Protection Ordinance (Chapter 8.52 of PMC), 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 (Condition #13) to reinforce this requirement. Compliance with the Condition of Approval will be reviewed by the Planning Department during the building permit plan check process.

#### **GENERAL PLAN CONSISTENCY:**

The land use classification for the project site is Institutional. This classification is for uses and facilities owned and operated by the City or by other public and/or private institutions such as schools, libraries, and hospitals. General Plan Policy 2.9 (Institutional Uses) calls for accommodation of the development of educational, religious, cultural, and similar facilities that enrich the lives of Pasadena’s residents. Caltech has operated a private university at its existing location for more than 100 years and has grown in a gradual manner. Additionally, the General Plan reaffirms the City’s commitment to provide a diverse educational system responsive to the needs of the community, including Goal 17 (Educational System), which promotes a strong and diverse educational system that is responsive to the life-long needs of the community and related to maintaining a high quality of life and a strong economy. The proposed laboratory building would meet the energy and safety codes and would support the world-class innovation and research conducted within the Caltech campus. As conditioned, the project will support a long-standing educational institution, thus is in conformance with the goals, policies and objectives of the General Plan.

#### **ENVIRONMENTAL REVIEW:**

Pursuant to California Environmental Quality (CEQA) Guidelines Sections 15162 and 15164, an Addendum to the previously certified Final Supplemental Environmental Impact Report was prepared for the subject project and reviewed by the Design Commission during Concept Design Review on March 23, 2021. It was found that there are no changed circumstances or new information that would require further environmental review.

#### **REVIEW BY OTHER CITY DEPARTMENTS:**

The application was circulated to the Department of Public Works, Department of Transportation, Fire Department, Building and Safety Division, and Design and Historic Preservation Section. The Design and Historic Preservation Section determined that the plans submitted for this application are substantially consistent with the approved Final Design Review (DHP2021-00128), which was subject to the review and approval of this Conditional Use Permit for the identified inconsistencies with the Master Plan. The Department of Public Works

provided recommended conditions of approval as specified in Attachment B. The remaining departments would review the plans through the building permit plan check process.

**CONCLUSION:**

It is staff's assessment that the findings to approve the Conditional Use Permit can be made. The conditions of approval from the approved Master Plan Amendment of 2006 would remain in effect, except as superseded by this entitlement. The proposed project would result in minor deviations from the street-front setback requirement, and the rooftop appurtenance area and height requirements. The site would remain as a private educational institution with traditional campus setting, and the development of the site would be required to adhere to the approved Master Plan. Further, additional conditions of approval are recommended to address issues associated with the construction and maintenance of the proposed research building. Therefore, staff recommends that the Hearing Officer approve the application with the findings in Attachment A and the conditions of approval in Attachment B.

Attachments:

Attachment A: Recommended Specific Findings

Attachment B: Recommended Conditions of Approval

**ATTACHMENT A**  
**SPECIFIC FINDINGS FOR CONDITIONAL USE PERMIT #6930**

Conditional Use Permit – To allow minor changes inconsistent with an existing Master Plan:

1. *The proposed use is allowed with a Conditional Use Permit within the applicable zoning district and complies with all applicable provisions of this Zoning Code.* The proposed project includes setbacks, appurtenance coverage areas, and appurtenance heights that deviate from the Caltech Master Plan, as approved by the City Council on December 11, 2006. Per Section 17.61.050.I (Conditional Use Permits and Master Plans) of the Zoning Code, projects that are inconsistent with an approved Master Plan may be processed through a Conditional Use Permit. The proposed changes are determined to be minor; thus, in lieu of a Master Plan Amendment, the proposed deviations from the approved 2006 Caltech Master Plan are allowed with a Conditional Use Permit. The proposed deviations do not include any changes of use, and the proposed use is consistent with the approved Master Plan.
2. *The location of the proposed use complies with the special purposes of this Zoning Code and the purposes of the applicable zoning district.* The subject site is located in the PS (Public and Semi-Public) Zoning District, the purpose of which is to provide a specific base zoning district for large public or semi-public land uses that may not be appropriate in other base zoning districts. While the project is inconsistent with the approved Master Plan, the proposed changes are considered minor, and do not result in a change of use that would be in conflict with the purposes of the Zoning Code or PS Zoning District. In addition to specific conditions of approval for the project, all conditions of approval for the Master Plan will remain in effect. As conditioned, the proposed changes to the Master Plan will be in conformance with the intent of the Master Plan; thus consistent with the special purposes of the Zoning Code.
3. *The proposed use is in conformance with the goals, policies, and objectives of the General Plan and the purpose and intent of any applicable specific plan.* The land use classification for the project site is Institutional. This classification is for uses and facilities owned and operated by the City or by other public and/or private institutions such as schools, libraries, and hospitals. General Plan Policy 2.9 (Institutional Uses) calls for accommodation of the development of educational, religious, cultural, and similar facilities that enrich the lives of Pasadena's residents. Caltech has operated a private university at its existing location for more than 100 years and has grown in a gradual manner. Additionally, the General Plan reaffirms the City's commitment to provide a diverse educational system responsive to the needs of the community, including Goal 17 (Educational System), which promotes a strong and diverse educational system that is responsive to the life-long needs of the community and related to maintaining a high quality of life and a strong economy. The proposed laboratory building would meet the energy and safety codes and would support the world-class innovation and research conducted within the Caltech campus. As conditioned, the project will support a long-standing educational institution, thus is in conformance with the goals, policies and objectives of the General Plan.
4. *The establishment, maintenance, or operation of the use would not, under the circumstances of the particular case, be detrimental to the health, safety, or general welfare of persons residing or working in the neighborhood of the proposed use.* The 80,000 square-foot laboratory building project was reviewed and approved under the 2006 Caltech Master Plan Amendment (Resolution #8691) as a future project. The Master Plan anticipates that

the academic buildings on the campus would undergo a continuous process of interior remodeling to update spaces for new or changing experimental programs, and at times, expansions or exterior alterations of existing facilities are made necessary by programmatic requirements. The proposed project would result in minor deviations from the street-front setback requirement, and the rooftop appurtenance area and height requirements. The site would remain as a private educational institution with traditional campus setting, and the development of the site would be required to adhere to the approved Master Plan. Conditions of approval will ensure that the continued operation of the campus will not be detrimental to the health, safety, or general welfare of the residents in the surrounding area.

5. *The use, as described and conditionally approved, would not be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the City.* The proposed changes to the approved 2006 Caltech Master Plan are considered minor. The existing Master Plan was designed in consideration of Caltech's future expansion and harmonious coexistence with surrounding residential uses. The proposed deviations are minor in nature and all the conditions of approval of the Master Plan will still be in effect; thus the proposed project would not be detrimental or injurious to the site and the neighborhood. In addition, the project must adhere to the City's and State's law that ensure the continuity of the compatible coexistence of this use with surrounding use.
  
6. *The design, location, operating characteristics, and size of the proposed use would be compatible with the existing and future land uses in the vicinity, in terms of aesthetic values, character, scale, and view protection.* The proposed project has completed a design review process with the Design Commission's approval. The applicant must adhere to specific conditions of approval under the Concept and Final Design Review approvals. The location and size of the proposed use are consistent with the approved 2006 Caltech Master Plan, with the exception of the minor deviations that are subject to this Conditional Use Permit. Operation of the proposed use would be subject to all existing conditions of approval for the Master Plan. For these reasons, the design, location, operating characteristics, and size of the proposed use would be compatible with the existing and future land uses in the

**ATTACHMENT B**  
**CONDITIONS OF APPROVAL FOR CONDITIONAL USE PERMIT #6930**

The applicant or successor in interest shall meet the following conditions:

General

1. The site/floor plans submitted for building permits and/or future development shall substantially conform to the site/floor plans submitted with this application and dated, "Approved at Hearing, January 19, 2022," except as modified herein.
2. The approval of this application authorizes the deviations from the building setback along Wilson Avenue, the rooftop appurtenance area, and appurtenance height requirements specified in the Master Plan, as shown on the plans for the new academic laboratory building. It also authorizes a relocation of a protected California sycamore tree (*Platanus racemosa*, Tree ID# 3212) within the campus.
3. The Caltech Master Plan and all Conditions of Approval of the Caltech Master Plan Amendment approved on December 11, 2006 (Resolution 8691) shall remain in full effect, with the exception of modifications made by Conditions of Approval related to this approval.
4. In accordance with Section 17.64.040 of the Pasadena Municipal Code, the exercise of the right granted under this application must be commenced within three years of the effective date of the approval. This approval is eligible for two one-year extensions. Each one-year extension is required to be reviewed and approved by the Hearing Officer at a noticed public hearing. In order for a project to be eligible for a time extension, the applicant is required to submit the required fee and time extension application to the Permit Center prior to the expiration date of the land use entitlement. The right granted by this approval may be revoked if the entitlement is exercised contrary to the conditions of approval or if it is exercised in violation of the Zoning Code.
5. Any change to these Conditions of Approval or changes to the plans shall be subject to review and require a modification of this Conditional Use Permit, new Conditional Use Permit, or amendment to the Master Plan.
6. The Zoning Administrator, at any time, may call for a review of the approved conditions at a duly noticed public hearing. At his/her discretion, the conditions herein may be modified or new conditions applied to reduce any unforeseen impacts during construction or operation of the use.
7. The applicant or successor in interest shall meet the applicable code requirements of all other City Departments.
8. The final decision letter and Conditions of Approval shall be incorporated in the building plans as part of the building plan check process.
9. The proposed project, Activity Number **ZENT2021-00121**, is subject to a Final Zoning Inspection. A Final Zoning Inspection is required for the project prior to the issuance of a Certificate of Occupancy. Contact the Planning Case Manager, Natsue Sheppard at (626) 744-7527 to schedule an inspection appointment time.

## Planning Division

10. An undulated portion of the new academic laboratory building may project into the required street front yard setback by not more than eight feet; or shall have a minimum setback of 82 feet measured from the curb line along Wilson Avenue, as shown on the approved plans.
11. The area of the roof covered by rooftop appurtenances as defined in the Master Plan shall not exceed 35 percent of the ground area covered by the structure.
12. The height of rooftop appurtenances may exceed the height limit by a maximum of 25 feet, as shown on the approved plans.
13. Prior to relocation of the protected California sycamore tree (*Platanus racemosa*, Tree ID# 3212), 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, as required in Section 8.52.077 of Pasadena Municipal Code. Evidence of compliance with this condition shall be submitted to staff for review and approval prior to issuance of an associated building permit. The relocation process, including the removal of the tree from the existing location, shall not commence until this condition is satisfied.
14. Landscaping shall be provided and maintained in the project area, in compliance with the provisions of Chapter 17.44 (Landscaping).
15. A final tree inventory prepared by a certified arborist shall be submitted with a building permit application for any construction that requires removal of trees. If additional protected private trees are proposed to be removed, pursuant to Pasadena Municipal Code Chapter 8.52, the applicant shall submit an application for Private Tree Removal Permit indicating which of the Tree Protection Ordinance findings apply to the removal(s), including the possibility of requiring a new or revised conceptual landscaping plan indicating the location of required replacement trees.
16. Prior to removal of any protected private trees, the applicant or successor in interest shall submit final landscape plans, demonstrating adherence to the replacement matrix adopted by resolution the City Council and included in the associated administrative guidelines and/or alternative requirements, to the Zoning Administrator for review and approval. Compliance with the Tree Protection Ordinance will be monitored through the approved landscape plan depicting replacement trees during the building plan check phase of the project.
17. Prior to the issuance of a building permit, the applicant shall submit a Tree Protection Plan with a final landscape plan to the Zoning Administrator for review and approval. The Tree Protection Plan shall be prepared by a licensed landscape architect and/or certified arborist in compliance with the City's Tree Protection Guidelines.
18. The applicant or successor in interest shall submit landscape and irrigation plans as part of any building, grading or zoning permits. Where proposing more than 2,500 square feet of new landscaping, the project shall meet the threshold for state-mandated water-efficient

landscaping. Accordingly, the final landscape plans (inclusive of planting and hardscape plans, the planting pallet, drainage plan, and irrigation system plan(s) and specifications), shall be reviewed by Planning and Community Development Department staff for conformance with the standards and requirements specified within the 2015 California Model Water Efficient Landscape Ordinance (MWELO) prior to the issuance of a building permit. No certificate of occupancy shall be issued until such plans have been deemed compliant with the MWELO and the landscaping has been installed per such approved MWELO-compliant plans to the satisfaction of the Director of Planning and Community Development or his/her designee.

#### Department of Public Works

19. No private improvements may be placed within the public right-of-way, including, but not limited to, soldier beams, tie-backs, utility conduits, backflow preventers, transformers, fire sprinkler valve, decorative sidewalk and applicable parade post holes on Colorado Boulevard per Standard Drawing S-419. Private improvements may only be placed in the public right-of-way by submitting a license agreement, which must be approved by the City. The license agreement application for any private improvement within the public right-of-way shall be submitted to the Department of Public Works for review and shall be approved by the City before any permits are granted.

The applicant shall submit the application, plan and processing fee/deposit, associated with processing the license agreement, at least three to four (3-4) months prior to the issuance of any building or demolition permits. An approved license agreement will allow the applicant to install and maintain the private improvements within the public right-of-way with conditions.

A license agreement for shoring requires an indemnity bond in order to guarantee that shoring and tie-backs are free from defect due to faulty material, workmanship and failure. Upon review of the license agreement exhibits, an indemnity bond estimate will be prepared and forwarded to the applicant. The estimated amount is equivalent to the cost of reconstructing the public right of way, including all affected utilities, public facilities, and infrastructures, based on the plane of failure at a 45-degree angle from the lowest point of excavation. The indemnity bond shall be submitted to the City prior to the execution of the agreement and the issuance of any building or demolition permits.

All steel rods in every tie-back unit shall be relieved of all tension and stresses, and any portion of soldier beams and any portion of the tie-backs located be removed entirely from the public right-of-way. A monthly monitoring report stamped and certified by a licensed surveyor shall be submitted to indicate that the deflection from any piles or soldier beams does not exceed one inch. Upon completion of construction, the developer or his contractor shall remove all tie-back rods within the public right-of-way. The removal shall be documented by a report certified by a licensed deputy inspector. The report shall be submitted to the City for review and approval. The applicant will be charged a penalty of \$7,000 for each tie-back rod not removed from the public right-of-way. For temporary tie-backs or shoring, the maximum width of the license area fronting the development frontage(s) shall only extend to the centerline of the public right-of-way.

20. The existing street lighting fronting the subject site are substandard. In order to improve pedestrian and traffic safety, the applicant shall replace/renovate the following with LED lights, per the City requirements and current standards two (2) existing street lighting along Wilson Avenue. The renovation shall include but not limited to repainting, new LED light(s),

conductors, lamp socket, fuse, globe/lantern, globe holder, photo cell, and miscellaneous related parts.

In the event where the existing street light pole determined, by the City, to be deteriorated and/or damaged, the applicant shall replace the existing street light pole with a new street light pole in kind. The replacement shall include but not limited to new pole, new footing, new LED light(s), conduit, conductors, lamp socket, fuse, globe/lantern, globe holder, photo cell, and other miscellaneous related parts. The applicant shall schedule a street lighting pre-inspection with the Public Works inspector to determine the details/scope of the replacement/renovation of the existing street lighting. Please contact 626-744-4195 or via email: [pw-permits@cityofpasadena.net](mailto:pw-permits@cityofpasadena.net) to schedule a street lighting pre-inspection, prior to the issuance of any permits.

21. The applicant shall demolish existing and construct all new public improvements along the subject development frontage of Wilson Avenue, including concrete drive approach per Standard Plan S-403; concrete sidewalk per Standard Plan S-421; concrete curb and gutter per Standard Plan S-406. All public improvements shall be completed prior to the issuance of Certificate of Occupancy.
22. Wilson Avenue restoration, fronting the subject development, shall be a full width (from gutter to gutter) cold milling and resurfacing of asphalt concrete roadway per Standard Plan S-415. The street restoration shall be completed prior to the issuance of Certificate of Occupancy.
23. The proposed development shall connect to the public sewer with one or more new six-inch diameter house sewers laid at a minimum slope of two percent. In accordance with PMC Chapter 13.24.010, house sewer “means that part of the horizontal piping beginning 24 inches from the exterior wall of the building or structure and extending to its connection with the public sewer.” The section of house sewers within the public right-of-way - from the property line to the public sewer, or within easement, shall be vitrified clay or cast iron pipe. The house sewer shall meet City Standards as determined by the Department of Public Works, and a permit issued by the Department of Public Works is required for work within the public right-of-way. The construction of all new house sewers shall be completed prior to the issuance of Certificate of Occupancy.
24. The applicant is responsible for the design, preparation of plans and specifications, and construction of all required public improvements. Plans for the above improvements shall be prepared by a civil engineer, registered in the State of California. Upon submittal of improvement plans to the Departments of Public Works for review, the applicant will be required to place a deposit with the department to cover the cost of plan checking. The amount of deposit will be based on the current City’s General Fee Schedule. Note that building plans approved by the City’s Planning (Building) Department do not constitute approvals for work in the public right-of-way. Separate plans shall be submitted to the Department of Public Works – Engineering Division – at 175 North Garfield Avenue Window 6. The applicant shall submit public improvements plans and the plan check deposit at least two (2) months prior to the issuance of any building or demolition permits.
25. To protect existing City trees during construction, the applicant shall fully conformed to the Tree Protection Guidelines signed by the City Manager. The full guidelines is available at the following link: <https://www.cityofpasadena.net/public-works/engineering-and-construction/engineering/>.

26. Any existing street tree(s) proposed to be removed are subject to the approval of the Urban Forestry Advisory Committee (UFAC).
27. A Tree Protection Zone (TPZ) shall be established for all existing City trees within the scope of a construction project. The TPZ extends from the base of the tree to four (4) radial feet beyond the dripline of a tree and applies to the entirety of the tree – from the roots to the canopy of the tree.

The applicant is prohibited from the following within a designated TPZ: construction vehicle access, construction vehicle operation, staging of materials, and trenching without the consent of the Department of Public Works.

The applicant shall at minimum provide the following within a designated TPZ: mulching, irrigation, and protective fencing.

28. Prior to the issuance of any permit, the applicant shall submit a Preliminary Tree Protection Plan (PMC Ch. 8.52 – City Trees and Tree Protection Ordinance), prepared by a Landscape Architect or certified Arborist, showing the TPZ and all structures, footings, and grading that may impact City trees shall be submitted to the Department of Public Works, for review and approval. Given that each construction project poses unique conditions, it is the responsibility of the applicant to develop a Tree Protection Plan based off the TPZ standards to the extent feasible. The Plan shall conform to the Tree Protection Standards, which specifically require showing the locations of all existing trees, their diameters, canopies, whether the tree is a public tree or private tree, as well as any trees to be planted with their canopy at mature size. The final conditions of the Tree Protection Plan shall be approved by the Forestry Superintendent. A non-refundable flat fee, per the current General Fee Schedule, will be required for staff time to review the Tree Protection Ordinance compliance.
29. Prior to any construction, tree protections including the installation of fencing to protect public trees must be in place. The fencing material shall be chain-link attached to posts inserted into the ground at the edge of the dripline and shall be a minimum of 6' in height. See Standard Plan S-642 – Tree Protection Chain Link Fencing. Fencing shall maintain visual lines of sight in order to avoid vehicle and pedestrian hazards. Fencing shall include a minimum 8.5" x 11" warning sign with the following information: 'Tree Protection Zone'; name and contact information of project owner or authorized representative; "Please contact the City of Pasadena Citizen Service Center to report any concerns (626) 744-7311." All protective fencing must be permitted, inspected and approved by Public Works prior to the commencement of any construction.
30. Prior to issuance of any permit, the applicant shall submit a valuation assessment report of the existing public tree(s) along the boundary of their project. The report shall be prepared by a registered Arborist and submitted to PNR for review and approval. If it is determined that the applicant has failed to care for any City tree within their Tree Protection Plan, and the health of the tree(s) was critically compromised requiring its removal, the applicant shall be liable for the following costs: assessed value of tree determined by a PNR Arborist using a current ISA assessment methodology; the removal cost determined by PNR; and any applicable infraction or administrative fines determined by Code Compliance.
31. Prior to issuance of any permit, a deposit in the amount of the applicant's total liabilities based on the aforementioned approved tree assessment report shall be submitted to the

City. The deposit is fully refundable, less administrative fees, upon the satisfaction of Public Works prior to the issuance of a Certificate of Occupancy.

32. On-site drainage, such as roof drain, area drain and subterranean garage discharge, shall be contained on-site per LA County Regional Water Quality Control Board's current permit.
33. In order to ensure that the developer maintains a clean and safe site during the construction phase of development, the applicant shall place a \$20,000 refundable deposit with the Department of Public Works prior to the issuance of any permit. This deposit is a guarantee that the applicant will keep the site clean and safe, and will make permanent repairs to the abutting street improvements that are damaged, including striping, slurry seal/ resurfacing, street trees, curb, gutter, and sidewalk, either directly or indirectly, by the construction on this site. This deposit may also be used for charges due to damage to existing street trees and for City personnel to review traffic control plans and maintain traffic control.
34. Prior to the start of construction or the issuance of any permits, the applicant shall submit a Construction Staging and Traffic Management Plan to the Department of Public Works for review and approval. The template for the Construction Staging and Traffic Management Plan can be obtained from the Department of Public Works webpage at: <https://www.cityofpasadena.net/public-works/engineering-and-construction/engineering/> . A non-refundable flat fee, based on the current General Fee Schedule, is required for plan review and on-going monitoring during construction. This plan shall show the impact of the various construction stages on the public right-of-way (and the private street) including all street occupations, lane closures, detours, staging areas, and routes of construction vehicles entering and exiting the construction site. An occupancy permit shall be obtained from the department for the occupation of any traffic lane, parking lane, parkway, or any other public right-of-way. All lane closures shall be done in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) and California Supplement. If the public right-of-way occupation requires a diagram that is not a part of the MUTCD or California Supplement, a separate traffic control plan must be submitted as part of the Construction Staging and Traffic Management Plan to the department for review and approval. No construction truck idling or staging, material storage, or construction trailer are allowed in the public right-of-way.

In addition, prior to the start of construction or issuance of any permits, the applicant shall conduct a field meeting with an inspector from the Department of Public Works for review and approval of construction staging, parking, delivery and storage of materials, final sign-off procedure, and any of the specifics that will affect the public right-of-way. An appointment can be arranged by calling 626-744-4195.

35. All costs associated with these conditions shall be the applicant's responsibility. Unless otherwise noted in this memo, all costs are based on the General Fee Schedule that is in effect at the time these conditions are met.
36. In addition to the above conditions, the requirements of all applicable Pasadena Municipal Code (PMC) will apply and be implemented during the corresponding plan review and permitting. They may include but not limited to:
  - Sidewalk Ordinance - Chapter 12.04
  - Sewer Facility Charge – Chapter 4.53
  - Residential Impact Fee – Chapter 4.17

- City Trees and Tree Protection Ordinance - Chapter 8.52
- Construction and Demolition Waste Ordinance - Chapter 8.62
- Holiday Moratorium of activities within public right-of-way – Chapter 12.24.100

If you have questions regarding the above conditions and requirements of the ordinances, please contact me at (626) 744-3762 or email [YWu-Bowman@cityofpasadena.net](mailto:YWu-Bowman@cityofpasadena.net).