Architectural Review Board
Staff Report (ID # 10838)

Report Type: Subcommittee Items **Meeting Date:** 12/5/2019

Summary Title: 250 Sherman: Subcommittee Review of Public Safety Building Tower Design

Title: 250 Sherman [17PLN-00256]: Subcommittee Review of a Previously Approved Project That was Conditioned to Return With Project Changes Related to the Tower Design for the Public Safety Building. Environmental Assessment: Certified Environmental Impact Report. Zone District: Public Facilities (PF). For More Information Contact Chief Planning Official Amy French at amy.french@cityofpaloalto.org.

From: Jonathan Lait

Recommendation
Staff recommends the Architectural Review Board (ARB) take the following action(s):

1. Discuss and provide direction to staff or approve the revised tower design and the attachments to the new Public Safety Building Communications Tower.

Background
On November 5, 2018, the City Council approved the Architectural Review application (file 17PLN-0056) for the new Public Safety Building. The ARB had recommended approval of the project on September 20, 2018. An excerpt from the minutes of the ARB meeting was included with the staff report to City Council, which is viewable here: https://www.cityofpaloalto.org/civicax/filebank/documents/67439

The ARB had recommended an approval condition requiring ARB subcommittee review of several project elements. The Council imposed this approval condition (condition number five) requiring ARB subcommittee review of, among other items, the attachments design for the communications tower. The video recording of the ARB's last meeting on this project is available online: https://midpenmedia.org/architectural-review-board-74-09202018/. The Council's Record of Land Use Action is attached to this report (Attachment A).

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The other items described in Approval Condition #5 included below, have been addressed. Item c is the subject of this report for the ARB subcommittee's consideration.

> #5. The following items shall return to a subcommittee of the ARB for further consideration/exploration:
>
> a. the lighting detail fixture E-1,
> b. the materials with respect to finishes, textures and color,
> c. the communications tower antenna attachments design, and
> d. the design of the community/multi-purpose room to make it flexible for use by the Police Department and as a City-managed civic meeting room (including the door to the plaza, additional windows, and signage).

The applicant provided a memo regarding the requested review (Attachment B) and drawings (Attachment C, hard copies for the ARB subcommittee). The communications tower height will be 135 feet above grade, as previously approved. The tower itself will be constructed of a galvanized steel, tapered pole, approximately 80 feet in length, with a 27" diameter mounting flange. The tower will be mounted onto the building's exterior wall at 55 feet above grade. Following deflection and constructability studies, the tower is now supported at the exterior of the building, rather than previously shown supported from within the building's interior. By shifting the communications tower support to the exterior, the brick tower structure's width was reduced by approximately 50% from the design the ARB reviewed in September 2018. The antennas shown on the communications tower may not all be required upon completion of the building and some of these may be added in the future. Plans are viewable on-line on the City's Building Eye application under the 250 Sherman address, file 17PLN-00256.

The ARB subcommittee is encouraged to provide direction to staff and the applicant as to whether the proposed design will meet ARB findings or will require further refinement. The applicant's memo (Attachment B) clarifies the tower is smaller in diameter than others in neighboring areas. The memo also notes alternative finish colors are available, for the ARB subcommittee's consideration.

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Attachments:

- Attachment A: RLUA with Condition 5 and October 18 Subcommittee.doc (PDF)
- Attachment B: PaloAltoPSBCommunicationsTower Description Final 20191104 (PDF)
- Attachment C: 20191104_PAPSB_Tower Package_11x17r (PDF)

[1] Emails may be sent directly to the ARB using the following address: arb@cityofpaloalto.org

ACTION NO. 2018-16
RECORD OF THE COUNCIL OF THE CITY OF PALO ALTO LAND USE ACTION FOR 250 SHERMAN AVENUE ARCHITECTURAL REVIEW 17PLN-00256: PUBLIC SAFETY BUILDING

On November 5, 2018, the Council approved the proposed Public Safety Building at 250 Sherman Avenue making the following findings, determination and declarations:

SECTION 1. Background. The City Council of the City of Palo Alto ("City Council") finds, determines, and declares as follows:

On November 5, 2018, Council conducted a public hearing to consider the Architectural Review application and conditional approval recommendation by the Architectural Review Board, for the Public Safety Building at 250 Sherman Avenue;

A. On October 19, 2017, the Architectural Review Board (ARB) conducted the first public hearing of the Public Safety Building (PSB) application, together with the application for the Sherman Avenue public parking garage, and continued its review of both applications to a date uncertain;

B. On January 18, 2018 the ARB reviewed the Draft Environmental Impact Report (EIR) for the PSB Project in a public hearing and provided comments, which were addressed in the Final EIR Council adopted on June 11, 2018;

C. On June 11, 2018, Council adopted modifications to the Public Facilities development and parking standards for public parking facilities and essential services facilities within the Downtown and California Avenue business districts;

D. On August 2, 2018, the ARB reviewed the PSB application in a second public hearing including a review of the Architectural Review approval findings and draft approval conditions, and continued the hearing to September 20, 2018;

E. On September 20, 2018, the ARB unanimously recommended that Council approve the proposed public parking garage, subject to subcommittee review as noted in approval condition #5; and

F. On October 18, 2018 the ARB Subcommittee reviewed and provided feedback on two of the items noted in Planning Condition of Approval #5.

SECTION 2. Environmental Review. On June 11, 2018, the City of Palo Alto City Council certified an Environmental Impact Report (EIR) prepared for the project in accordance with the California Environmental Quality Act (CEQA), and made related findings by Resolution 9772.

SECTION 3. Architectural Review Findings. The design and architecture of the proposed project, as conditioned, complies with the Findings for Architectural Review as required in

PAMC Chapter 18.76. The design and architecture of the proposed public safety building complies with the Six Findings for Architectural Review set forth in Palo Alto Municipal Code Chapter 18.76 Section 18.76.020.

(1) The design is consistent with applicable provisions of the Palo Alto Comprehensive Plan, Zoning Code, coordinated area plans (including compatibility requirements), and any relevant design guides. *The project is consistent with Finding #1 because:*

- With Council's recent adoption of amendments to the Public Facilities development and parking standards for essential services facilities and parking garages within the Downtown and California Avenue Business districts approval of the project, the project complies with the land use and development standards of the PF zone.
- The following policies and programs of the Comprehensive Plan (Plan) are relevant to the project:
    - Policy T-5.6, strongly encourage the use of below-grade or structured parking, and explore mechanized parking instead of surface parking for new developments of all types while minimizing negative impacts including on groundwater and landscaping where feasible,
    - Policy T-5.7, require new or redesigned parking lots to optimize pedestrian and bicycle safety,
    - Policy T-5.8, promote vehicle parking areas designed to reduce storm water runoff, increase compatibility with street trees and add visual interest to streets and other public locations. Encourage the use of photovoltaic panel or tree canopies in parking lots or on top of parking structures to provide cover, consistent with the Urban Forest Master Plan,
    - Policy N-2.3, enhance the ecological resilience of the urban forest by increasing and diversifying native species in the public right-of-way, protecting the health of soils and understory vegetation, encouraging property owners to do the same and discouraging the planting of invasive species,
    - Policy N-2.10, preserve and protect Regulated Trees on public and private property…and related program N2.10.1 continue to require replacement of trees including street trees lost to new development,
    - Policy N-4.12, encourage Low Impact Development (LID) measures to limit the amount of pavement and impervious surface in new development and increase the retention, treatment and infiltration of urban stormwater runoff. Include LID measures in major remodels, public projects and recreation projects where practical.
    - Policy L-1.10, hold new development to the highest development standards in order to maintain Palo Alto's livability and achieve the highest quality development with the least impacts,
    - Policy L-4.2, encourage street frontages that contribute to retail vitality in all Centers. Reinforce street corners in a way that enhances the pedestrian realm or that form corner plazas. Include trees and landscaping,

- Policy L-4.3, ensure all Regional Centers and Multi-Neighborhood Centers provide centrally located gathering spaces that create a sense of identity and encourage economic revitalization. Encourage public amenities such as benches, street trees, kiosks, restrooms and public art,
- Policy L-4.8, maintain the existing scale, character and function of the California Avenue business district as a shopping, service and office center intermediate in function and scale between the Downtown and the smaller neighborhood business areas,
- Policy L-5.2, provide landscaping, trees, sidewalks, pedestrian path and connections to the citywide bikeway system within Employment Districts,
- Policy L-5.3, design paths and sidewalks to be attractive and comfortable and consistent with the character of the area where they are located,
- Policy L-6.1, promote high quality design and site planning that is compatible with surrounding development and public spaces,
- Policy L-6.3, encourage bird-friendly design,
- Policy L-6.6, design buildings to complement streets and public spaces; to promote personal safety, public health and well-being; and to enhance a sense of community safety,
- Policy L-6.10, encourage high quality signage that is attractive, energy efficient, and appropriate for the location, and balances visibility needs with aesthetic needs. (no signage proposed with this application),
- Policy L-8.2, provide comfortable seating areas and plazas with places for public art,
- Policy L-70, enhance the appearance of streets by expanding and maintaining street trees,
- Policy L-8.4, create facilities for civic and intellectual life, such as better urban spaces for civic programs and speakers, cultural, musical and artistic events,
- Policy L-8.5, recognize public art … as a community benefit; encourage the development of new public and private art and ensure such projects are compatible with the character and identity of the neighborhood,
- Policy L-8.6, seek potential new sites for art and cultural facilities, public spaces, open space and community gardens,
- Policy L-9.2, encourage development that creatively integrates parking into the project, including locating it behind buildings or underground wherever possible, or by providing for shared use of parking areas. Encourage other alternatives to surface parking lots that minimize the amount of land devoted to parking while still maintaining safe streets, street trees, a vibrant local economy and sufficient parking to meet demand,
- Policy L-9.6, create…publicly accessible, shared outdoor gathering spaces within walking and biking distance of residential neighborhoods,
- Policy L-9.7 strengthen the identity of important community-wide gateways, including…entries to commercial districts,

- Policy L-9.8 Incorporate the goals of the Urban Forest Master Plan into the Comprehensive Plan by reference in order to assure that new land uses recognize the many benefits of trees in the urban context and foster a healthy and robust tree canopy throughout the city,
  - Related Program L-9.8.1, establish incentives to encourage native trees and low water use plantings in new development throughout the city,
- Policy L-9.9, involve the Urban Forester, or appropriate City staff, in development review,
- Policy L-9.11, design public infrastructure, including paving, signs, utility structures, parking garages and parking lots, to meet high-quality urban design standards and embrace technological advances. Look for opportunities to use art and artists in design of public infrastructure.
  - Related Program L9.11.2 Encourage the use of compact and well-designed utility elements, such as transformers, switching devices, backflow preventers and telecommunications infrastructure. Place these elements in locations that will minimize their visual intrusion.

(2) The project has a unified and coherent design, that:
(2a) creates an internal sense of order and desirable environment for occupants, visitors, and the general community; *The project is consistent with Finding 2(a), given:*

- The right-of-way improvements will improve circulation; employee automobile ingress from/egress onto Jacaranda Lane is compatible with the design concept and functions;
- The new facilities and amenities for pedestrians, bicyclists and vehicles are an improvement from the existing facilities as to safety and convenience;

(2b) preserves, respects and integrates existing natural features that contribute positively to the site and the historic character including historic resources of the area when relevant; *The project is consistent with Finding 2(b), given:*

- Although all existing on-site and street trees will be removed to allow for construction of the PSB, 15 new street trees (Chinese Elms, California Sycamores, and London Planes) in 24" box sizes (with post pavement support system and necessary soil volume for long-term health and separation for utilities) are proposed around the perimeter of the building on Sherman, Birch and Park *(plan sheet ARB AM08)*.
- On Birch Street, five additional 24" box sized Golden Rain trees will form an allee with the street trees; and one additional tree (Cork Oak) is proposed for the 'front yard' area;
- On Park Boulevard, four additional 24" box sized Strawberry trees are proposed behind the street trees;
- Six Strawberry trees are proposed in the employee courtyard near Jacaranda Lane;
- Plan sheet ARB AM11 provides technical details associated with the tree mitigation plan.

(2c) is consistent with the context-based design criteria of the applicable zone district; *Finding 2c is not applicable since the PF zone does not impose context based design criteria.*

(2d) provides harmonious transitions in scale, mass and character to adjacent land uses and land use designations; *The project is consistent with Finding 2(d), given:*

- The materials and architectural forms are intended to be compatible with the mid-century architecture of the area which includes:
    - A four story building across Sherman (the County courthouse and jail building), a mixed use (office-residential) building on the corner across Sherman, one- and two-story commercial buildings fronting California Avenue, and multi-story residential building on the opposite corner.

(2e) enhances living conditions on the site and in adjacent residential areas;

- *There are no living units proposed on the site; the project is consistent with Finding 2(e), wherever feasible, with limited lighting proposed facing the multiple family residential building on Sherman Avenue, and with pedestrian friendly landscaping, lighting and sidewalks to enhance residents' experience walking to California Avenue.*

(3) The design is of high aesthetic quality, using high quality, integrated materials and appropriate construction techniques, and incorporating textures, colors, and other details that are compatible with and enhance the surrounding area; *the project is consistent with Finding 3, given:*

- The materials were selected for quality, durability and to convey warmth;
- The new structure's materials and construction techniques are appropriate for the use;
- Colors and textures will be compatible with nearby civic buildings and park landscaping;

(4) The design is functional, allowing for ease and safety of pedestrian and bicycle traffic and providing for elements that support the building's necessary operations (e.g. convenient vehicle access to property and utilities, appropriate arrangement and amount of open space and integrated signage, if applicable, etc.); *the project is consistent with Finding 4, given:*

- The 10' high security wall along Jacaranda is set back from the property line to provide a continuous sidewalk and meet the 10' PF zone setback requirement for a significant length of the alley;
- Sidewalk curb location adjustments and pedestrian crossing bulb-outs promote safe pedestrian traffic;

(5) The landscape design complements and enhances the building design and its surroundings, is appropriate to the site's functions, and utilizes to the extent practical, regional indigenous drought resistant plant material capable of providing desirable habitat that can be appropriately maintained; *the project is consistent with Finding 5, given:*

- Selected tree species will thrive in an urban environment, provide appropriate architectural emphasis and scale on each of the three frontages, and have relatively low maintenance and water requirements.

- Sherman and Park frontages receive raised planters with integral seating, an area of rain garden planting.
- Sherman Avenue and Birch Street receive wider sidewalks allowing for street trees and benches.
- The entry alignment of the Birch Street ramp connects with Jacaranda to allow a landscaped front yard plaza on Birch,
- The landscaped setbacks accommodate seating and shade for individual passive activities along Birch, Sherman and Park frontages;
- Low-level, focused pedestrian lighting will reinforce the intimate and small-scale aspects of the plazas/streets, avoid light-pollution, and reinforce the civic character of the facilities.

(6) The project incorporates design principles that achieve sustainability in areas related to energy efficiency, water conservation, building materials, landscaping, and site planning; *the project is consistent with Finding #6 given:*

- Suitable street tree planting environments and storm water design features are key features of the project.

SECTION 4. Architectural Review Approval Granted. Architectural Review Approval is hereby granted for the Public Parking Garage at 350 Sherman Avenue by the City Council pursuant to Chapter 18.77 of the Palo Alto Municipal Code.

SECTION 5. Plan Approval.

Public Safety Building

The plans for the Public Safety Building submitted for Building Permit shall be in substantial conformance with those plans prepared by RussDrulisCusenbery, consisting of 47 pages, updating the September 4, 2018 plans reviewed by the ARB on September 20, 2018, except as modified to incorporate the conditions of approval in Section 7. A copy of these plans is on file in the Department of Planning and Community Development.

SECTION 6. Conditions of Approval.

Impact Mitigation Measures Required for Both Project Components (250 and 350 Sherman)

- ***Air Quality Mitigation 5-1***. To reduce potential short-term adverse health risks associated with PM2.5 emissions, including emissions of diesel particulate matter (DPM), generated during project construction activities, the City and/or it's designated contractors, contractor's representatives, or other appropriate personnel shall:

1. Implement BAAQMD-recommended "Additional Construction Measures". The City shall implement the following BAAQMD recommended additional construction mitigation measures during construction activities: (1) All exposed

surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent, to be verified by lab samples or moisture probe, (2) All excavation, grading, and/or demolition activities shall be suspended when average winds speeds exceed 20 miles per hour, (3) Temporary wind breaks (e.g., fences) shall be installed on the windward (generally the north / northwest) of actively disturbed areas of construction. The wind breaks should have at maximum 50 percent air porosity, (4) Vegetative ground cover (e.g., fast germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established, (5) Simultaneous occurrence of excavation, grading, and ground-disturbing construction activities in the same area at any one time shall be limited and/or phased to reduce the amount of disturbed surfaces at any one time, (6) All trucks and equipment, including their tires, shall be washed off prior to leaving the site, (7) Site access to a distance of 100 feet from the paved road, or as much as feasible, shall be treated with a compacted layer of wood chips, mulch, gravel, or other cover as feasible to reduce track-out, (8) Minimize the idling time for diesel powered construction equipment to two minutes provided such idling restrictions are consistent with manufacturer's equipment specifications.

2. Apply construction equipment restrictions. The City shall apply the following construction equipment restrictions to the proposed project: (1) Electric-powered and liquefied or compressed natural gas equipment shall be employed instead of diesel powered equipment to the maximum extent feasible. (2) All construction equipment with a rated power-output of 25 horsepower or greater shall meet U.S. EPA and CARB Tier IV Final Emission Standards for particulate matter. This may be achieved via the use of equipment with engines that have been certified to meet Tier IV emission standards, or through the use of equipment that has been retrofitted with a CARB verified diesel emission control strategy (e.g., oxidation catalyst, particulate filter) capable of reducing exhaust PM emissions to levels that meet Tier IV standards.

3. Prepare Construction Risk Reduction Plan. Prior to the start of construction activity, the City and/or its contractor shall prepare a Construction Risk Reduction Plan for the project which: (1) Identifies the final planned construction phasing schedule and anticipated equipment operations. (2) Estimates the proposed project's construction emissions based on the final phasing and equipment plan. Any emission update shall be performed using the latest recommended emissions estimator model recommended by the BAAQMD or other standard, acceptable methodology (e.g., contractor-specific fleet emission factors and estimates of equipment operating hours). (3) Models the potential diesel particulate matter and total PM2.5 concentrations resulting from refined emissions estimates. Any modeling shall be performed using an accepted screening or refined dispersion model recommended for use by the BAAQMD. The modeling shall focus on discrete, residential receptors located at and near the proposed project site. (4) Estimates potential adverse health effects associated with exposure to DPM. Risk estimates shall follow the latest recommendations of the BAAQMD. The goal of the risk estimation shall be to identify the receptor(s) or areas of receptors where carcinogenic and non-carcinogenic risk thresholds may be exceeded. If risks are exceeded, the plan shall identify feasible on- and off-site measures to reduce risks to levels below BAAQMD thresholds. On-site measures may include the BAAQMD "Additional Construction Measures" and construction equipment restrictions included in Mitigation Measure 5-1, as well as phasing / activity restrictions. Off-site measures may include coordinating with all impacted receptors to replace and upgrade existing HVAC systems to provide high performance panel filters capable of reducing potential modeled outdoor PM2.5 concentrations / risks to levels that are below BAAQMD thresholds.

4. Implement Off-Site Mitigation. In-lieu of preparing the Construction Risk Reduction Plan identified above, the City may, prior to the start of construction activities, coordinate directly with impacted residential receptors to replace and upgrade existing residential HVAC systems with a high-performance panel filter with a rated minimum efficiency reporting value (MERV) for particles in the range of 0.3 to 1.0 µm of 70% (presumed to be a minimum MERV14), or equivalent system upgrade. This level of control would reduce risks to levels below current BAAQMD thresholds. Based on the results of the modeling conducted for the EIR, the City shall coordinate with residential receptors located in the area bound by Park Boulevard to the north, Ash Street to the south Sheridan Avenue to the east, and Sherman Avenue to the west.

- ***Nesting Birds Mitigation 6-1.*** To avoid impacts to nesting birds and violation of State and federal laws pertaining to birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation,

demolition, and grading) should occur outside the avian nesting season (that is, prior to February 1 or after August 31).

If construction and construction noise occurs within the avian nesting season (from February 1 to August 31), all suitable habitats located within the project's area of disturbance, including staging and storage areas plus a 150-foot buffer around these areas, shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than five days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed by more than five days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys shall be documented. If it is determined that birds are actively nesting within the survey area, the additional procedures below shall apply. Conversely, if the survey area is found to be absent of nesting birds, the additional procedures shall not be required.

Additional Procedures. If pre-construction nesting bird surveys result in the location of active nests, no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) shall take place within 150 feet of nests, or as determined by a qualified biologist, until the chicks have fledged. Monitoring shall be required to insure compliance with the MBTA and relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented.

- ***Removal of Trees Mitigation 6-2.*** Prior to removal of the protected trees and street trees, the applicant shall obtain a tree removal permit issued by the City of Palo Alto Urban Forestry Division for the removal of any and all protected, designated, or street trees (referred to collectively as "Regulated Trees"). In all cases, replacement trees would be required as a condition of the tree removal permit, and the project applicant must demonstrate to the satisfaction of the City that there is no alternative that could preserve the tree(s) on-site.

The project applicant must provide an evaluation and summary for any Regulated Tree (the collective term for any protected, designated, or street tree) proposed to be removed. The applicant shall be required, in accordance with the Tree Protection and Management Regulations (PAMC 8.10) and Tree Technical Manual (PAMC 8.10.130), to replace the tree canopy for the six (6) protected trees, in accordance with the tree canopy formula identified in the Tree Technical Manual (TTM, 3.20). If the tree canopy cannot be replaced on-site, the canopy shall be replaced off-site as close to the project site as feasible. If trees are being replaced off-site, the applicant must submit a Tree Planting Plan to the Urban Forestry Division and obtain the Urban Forestry Division's approval of the plan prior to issuance of a building permit. The Tree Planting Plan must include:

(a) The canopy calculation for trees removed and the number of trees planned to replace them, consistent with the formula identified in the Tree Technical Manual.
(b) The specific location where the new trees would be planted with specific baseline information about that proposed site (e.g., surrounding vegetation or development).
(c) The species of trees to be planted.
(d) Specific planting details (e.g., size of sapling, size of containers, irrigation plan).
(e) Success criteria,
(f) Monitoring and maintenance schedule
(g) Replacement tree planting will be monitored by a qualified arborist.

To verify the success of replacement trees, monitoring shall occur for two years after initial planting. After the two year period, the arborist will determine if the trees are capable of surviving without further maintenance.

- ***Archeo-Paleo Mitigation 7-1***. In the event of the unanticipated discovery of subsurface archaeological or paleontological resources during earth-moving operations, the following

measures are recommended to reduce potentially significant impacts on these resources to a less-than- significant level:

1. Conduct Archaeological/Paleontological Sensitivity Training for Construction Personnel. The City shall retain a qualified professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards, and a professionally qualified paleontologist, to conduct an Archaeological/Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training session will include a written handout and will focus on how to identify archaeological and paleontological resources that may be encountered during earth-moving activities, including the procedures to be followed in such an event, the duties of archaeological and paleontological monitors, and the general steps a qualified professional archaeologist or paleontologist would follow in conducting a salvage investigation if one is necessary.

2. Cease Ground-Disturbing Activities and Implement Treatment Plan if Archaeological Resources Are Encountered. In the event that archaeological resources are unearthed during ground-disturbing activities, the ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find, where construction activities will not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside the buffer area. All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. Should the newly discovered artifacts be determined to be prehistoric, Native American Tribes/Individuals shall be contacted and consulted, and Native American construction monitoring should be initiated. The City shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. The plan may include implementation of archaeological data recovery excavations to address treatment of the resources, along with subsequent laboratory processing and analysis.

3. Conduct Periodic Archaeological Resources Spot Checks During Grading and Earth-Moving Activities in All Sediments. The City shall retain a qualified professional archaeologist who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards, to conduct periodic Archaeological Spot Checks beginning at depths below two (2) feet to determine if construction excavations have exposed, or have a high probability of exposing, archaeological resources. After the initial Archaeological Spot Check, further periodic checks shall be conducted at the discretion of the qualified archaeologist. If the qualified archaeologist determines that construction excavations have exposed, or have a high probability of exposing, archaeological artifacts, construction monitoring for archaeological resources will be required. The City shall retain a qualified archaeological monitor, who meets the qualifications set forth by the U.S. Secretary of the Interior's Professional Qualifications and Standards, who will work under the guidance and direction of a professional archaeologist. The archaeological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into non-fill sediments. Multiple earth-moving construction activities may require multiple archaeological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus artificial fill soils), the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the project archaeologist.

If subsurface paleontological resources are encountered, excavation shall halt in the vicinity of the resources and a qualified paleontologist shall evaluate the resource and its stratigraphic context. The monitor shall be empowered to temporarily halt or redirect construction activities to ensure avoidance of adverse impacts to paleontological resources. During monitoring, if potentially significant paleontological resources are found, "standard" samples shall be collected and processed by the qualified paleontologist to recover micro vertebrate fossils. If significant fossils are found and collected, they shall be prepared to a reasonable point of identification. Excess sediment or matrix shall be removed from the specimens to reduce the bulk and cost of storage. Itemized catalogs of material collected and identified shall be provided to a museum repository with the specimens. Significant fossils collected during this work, along with the itemized inventory of these specimens, shall be deposited in a museum repository for permanent curation and storage. A report documenting the results of the monitoring and salvage activities, and the significance of the fossils, if any, shall be prepared. The report and inventory, when submitted to the lead agency, shall signify the completion of the program to mitigate impacts on paleontological resources.

- **Tribal Mitigation 7-2.** In the event that cultural resources of Native American origin are identified during construction, all earth-disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and an appropriate Native American representative, based on the nature of the find, is consulted.

If the City determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with State guidelines and in consultation with Native American groups. The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the archaeologist and the appropriate Native American tribal representative.

- ***Geotech Mitigation 8-1.*** As recommended by the project's preliminary geotechnical investigation, prior to City issuance of grading permits for individual project construction components, the City shall be required to retain a registered engineering geologist or geotechnical engineer to prepare detailed, construction-level geotechnical investigations to guide the construction of all project grading and excavation activities.

The detailed, construction-level geotechnical investigations shall be performed for each of the structures proposed for the development site. Subsurface conditions shall be explored and laboratory tests conducted on selected soil samples to establish parameters for the design of excavations, foundations, shoring, and waterproofing. Recommendations from the investigations shall be incorporated into all plans for project grading, excavation, soil support (both temporary and long-term), and utility construction, to the satisfaction of the City Engineer. The detailed, construction-level investigations, relevant recommendations, and all associated project grading, excavation and foundation plans, shall be subject to review and approval by an independent engineering geologist or geotechnical engineer retained by the City Engineer. In addition, the project civil engineer shall certify to the City Engineer (e.g., through plan submittal for City review) that all relevant provisions of the investigations have been incorporated into the grading, excavation and construction plans, and all earthwork and site preparation shall be performed under the direct supervision of a registered engineering geologist or geotechnical engineer.

- ***Contamination Mitigation 10-1.*** Recommendations included in the Phase II ESA (Stantec, June 8, 2017) shall be implemented, based on construction level project plans when more specific and precise design and construction activities are formulated. The Phase II ESA recommends additional assessment of local and regional groundwater conditions in advance of dewatering activities, combined with, as necessary, evaluation of pertinent and cost effective water management strategies, including preparation of Site Management Plans. Likewise, the project must comply with the City's standard dewatering requirements. This assessment and mitigation process shall be subject to review and approval by the City Engineer.

- ***Noise Mitigation 13-1.*** To reduce potential noise levels associated construction of the proposed project, the City and/or it's designated contractors, contractor's representatives, or other appropriate personnel shall:

Restrict work hours/equipment noise. All work shall be subject to the construction noise and time limits contained in City Municipal Code Chapter 9.10. Construction activities (including deliveries) shall only occur during the following time periods: – 8 AM to 6 PM Monday through Friday; and – 9 AM to 6 PM on Saturday. Construction activities shall be prohibited on Sundays and holidays. The City and/or its contractor shall post a sign at all entrances to the construction site informing contractors, subcontractors, construction workers, etc. of these requirements in accordance with Section

9.10.060(c). The sign shall also provide a name (or title) and phone number for an appropriate on-site and City representative to contact to submit a noise complaint.

Construction equipment care, siting, and design measures. The following construction equipment care, siting, and design measures shall apply during construction activities: – Heavy equipment engines shall be covered and exhaust pipes shall include a muffler in good working condition. Pneumatic tools shall include a noise suppression device on the compressed air exhaust. – All stationary noise-generating equipment such as pumps, compressors, and welding machines shall be shielded and located as far from sensitive receptor locations as practical. At a minimum, such shielding shall consist of a three-sided sound enclosure (with a full or partial roof) that provides for proper ventilation, equipment operation, and effective noise control. The enclosure should be designed to achieve a 10 to 15 dB reduction in stationary equipment noise levels. The design of the enclosure shall be reviewed by a qualified acoustical consultant prior to installation to ensure the enclosure will achieve a minimum 10 dB reduction in stationary equipment noise levels. – The City shall connect to existing electrical service at the site to avoid the use of stationary, diesel- or other alternatively-fueled power generators. – No radios or other amplified sound devices shall be audible beyond the property line of the construction site.

Construction traffic. Construction truck traffic, including soil hauling, equipment deliveries, potential concrete deliveries, and other vendor deliveries shall follow designated delivery routes prepared for the project, which are anticipated to include travel on Oregon Expressway and Birch Road.

Construct/Install Temporary Noise Barrier: The City shall install and maintain throughout the duration of all site preparation, excavation, foundation construction, and building construction activities, one or more physical noise barriers capable of achieving a minimum reduction in predicted construction noise levels of 15.5 dB. Potential barrier options would include: – A concrete, wood, or other barrier installed at-grade (or mounted to structures located at-grade, such as KRail) along the project property line. Such a wall/barrier shall consist of material that have a minimum rated transmission loss value of 25.5 dB (or equivalent rating), and shall contain no gaps in the structure through which noise may pass. – Commercially available acoustic panels or other products such as acoustic barrier blankets installed along the project property line, building envelope or, if feasible and necessary, at or near sensitive residential receptor areas. – Any combination of noise barriers and commercial products capable of achieving a 15.5 dB reduction in construction noise levels at sensitive receptor locations. – Prior to the start of the project, the City may prepare an acoustical analysis that reflects the final site plan, construction activities, equipment use and duration, and refines potential construction noise reductions required for the project. The final type, placement, and design of the project's temporary noise barrier(s) shall be reviewed by a qualified acoustical consultant prior to installation to ensure proper function and a minimum attenuation of 15.5 dBs in construction noise levels.

Prepare Project Construction Noise Control Plan. Prior to the start of construction activity, the City or its contractor shall prepare a Construction Noise Complaint Plan for the project which: – Identifies the name and/or title and contact information (including phone number and email) of the Contractor and City-representatives responsible for addressing construction-noise related issues. Contains a detailed construction schedule and predicted noise levels associated with construction activities. – Includes procedures describing how the construction contractor will receive, respond, and resolve to construction noise complaints. At a minimum, upon receipt of a noise complaint, the Contractor and/or City representative described in the first sub-bullet above shall identify the noise source generating the complaint, determine the cause of the complaint, and take steps to resolve the complaint.
Prepare Construction Noise Monitoring Plan. Prior to the start of construction, the City or its contractor shall prepare a Construction Noise Monitoring Plan which identifies: – Construction activities, hours of operation, and predicted construction noise levels; and – Construction noise monitoring locations, duration, and frequency. The intent of the Construction Noise Monitoring Plan is to document updated ambient noise levels, monitor construction noise levels, and verify compliance with the noise reduction requirements in mitigation measure 13-1. If monitoring indicates temporary noise barriers are not achieving a minimum 15.5 dB reduction in construction noise levels or otherwise indicates construction noise is resulting a 10 dB increase in noise levels above ambient conditions, the City shall increase the height, size (length or width), density, and/or amount of noise barriers installed such that attenuation

requirements are achieved. The Construction Noise Monitoring Plan may be combined with and/or incorporated into the Construction Noise Complaint Plan described above.

- ***Vibrations Mitigation 13-2.*** To reduce potential groundborne vibration levels associated with construction of the proposed project, the City and/or it's designated contractors, contractor's representatives, or other appropriate personnel shall:

Prohibit Vibratory Equipment. The City shall prohibit the use of large vibratory rollers (small plate compactors are acceptable) and vibratory pile driving equipment during construction. Any deep foundation piers or caissons shall be auger drilled.

Provide Notice to Adjacent Property Owners / Occupants. Five (5) days advanced written notice shall be provided to adjacent property owners and building occupants before commencing all drilling and significant earthmoving activities within 65 feet of adjacent buildings. The notice shall provide the name (or title) and contact information (including phone number and email) of the Contractor and City representatives responsible for addressing construction vibration-related concerns.

Prepare Vibration Mitigation Plan. Prior to the start of construction activity, the City or its contractor shall prepare a Construction Vibration Response Plan for the project which: – Identifies the name and/or title and contact information (including phone number and email) of the Contractor and City-representatives responsible for addressing construction vibration-related issues. – Contains a detailed schedule of drilling and substantial earth moving activities expected to occur within 65 feet of adjacent buildings. – Includes procedures describing how the construction contractor will receive, respond, and resolve to construction vibration complaints. At a minimum, upon receipt of a vibration complaint, the Contractor and/or City representative described in the first sub-bullet above shall identify the vibration source generating the complaint, determine the cause of the complaint, and take steps to resolve the complaint by reducing groundborne vibration levels to less than 75 VdB and 0.04 in/sec PPV. Such measures may include the use of nonimpact drivers, use of rubber-tired equipment instead of track equipment, or other measures that limit annoyance from groundborne vibration levels.

Operational Noise Mitigation 13-3. To reduce potential stationary source noise levels associated with the operation of the proposed project, the City and/or its designated contractors, contractor's representatives, or other appropriate personnel shall:

Site equipment away from residential areas. Garage ventilation fans and public safety building generators, fire pumps, and heating and air conditioning equipment shall be located outside of setbacks and screened from view from residential areas.

Enclose and/or Shield Stationary Noise Generating Equipment. The City shall enclose, shield, baffle, or otherwise attenuate noise generated from garage ventilation fans and public safety building generators, fire pumps, and heating and air conditioning equipment. The attenuation achieved through such enclosure, shielding, and/or baffling shall be sufficient to comply with Section 9.10.050(a) of the Municipal Code, which is estimated to be 78.2 dBA.

Prepare Acoustical Study. In accordance with Chapters 9.10 and 18.23 of the Municipal Code, the City shall have an acoustical analysis prepared by a licensed acoustical engineer that demonstrates: – The proposed parking garage's generator would comply with the requirements of the City's Noise Ordinance (Section 9.10.050, as excepted). – The proposed parking garages ventilation fans would not result in a calculated Ldn of 63.0 at sensitive residential receptor locations. – The proposed public safety building fire pump, back-up generator, and heating and air conditioning equipment would comply with the requirements of the City's Noise Ordinance (Section 9.10.050, as excepted) and would not result in a calculated increase of more than 3.0 dB Ldn at sensitive receptor locations. The acoustical analysis shall be based on the final project design, reflect the actual equipment type and location at the project site, and the actual noise enclosure, shielding, or other attenuation measures included in the final project design. If the acoustical study demonstrates the noise levels from these sources would be at or within 5 dB less than the Noise Ordinance limits, the City shall demonstrate through monitoring that the equipment complies with the anticipated noise levels.

SECTION 7: Approval Conditions for Public Safety Building

Planning Conditions:

1. The project shall be in substantial conformance with the approved plans and related documents received September 5, 2018, except as modified to incorporate these conditions of approval.
2. The Conditions of Approval document shall be printed on all plans submitted for building permits related to this project.
3. All future signage for this site shall be submitted for Architectural Review.
4. The project approval shall be valid for a period of two years from the original date of approval. In the event a building permit(s), if applicable, is not secured for the project within the time limit specified above, the AR approval shall expire and be of no further force or effect. Application for extension of this entitlement may be made prior to the two year expiration.
5. The following items shall return to a subcommittee of the ARB for further consideration/exploration:
   a. the lighting detail fixture E-1,
   b. the materials with respect to finishes, textures and color,
   c. the communications tower antenna attachments design, and
   d. the design of the community/multi-purpose room to make it flexible for use by the Police Department and as a City-managed civic meeting room (including the door to the plaza, additional windows, and signage).

Transportation Conditions

A. The following comments are required to be addressed prior to Planning entitlement approval:

1. Planset Scale: The scale of the architectural sheets within the PDF copy of the latest planset does not match the scale bar shown on the sheets. Please correct.

2. BICYCLE PARKING: On revised plans, please identify the quantity, location, and design of proposed long and short term bicycle parking facilities. Short-term bicycle parking consists of bicycle racks and several options are available to provide secure, long-term bicycle parking including lockers and secure parking rooms. Detailed design standards may be found in Palo Alto Municipal Code (PAMC) Chapter 18.54.060. The following minimum bicycle parking supply standards apply for this project, but additional spaces may be desired to achieve trip reduction targets required as part of the Transportation Demand Management (TDM) program, encourage healthy commute alternatives, and serve the public.

Public Safety Building Bicycle Parking Requirement	
Spaces	**Class: Long Term (LT); Short Term (ST)**
1 per 2,500 sf gross floor area	60% LT 40% ST

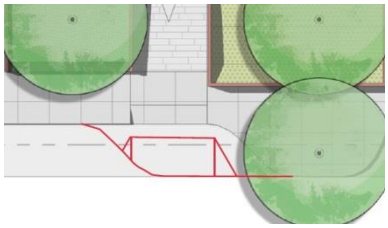
3. OFF SITE IMPROVEMENTS: Revise civil and architectural site plans to address the following:

   a. Show the shortening/modification of the Birch Avenue median on Civil plans to the extent necessary to remove vertical barriers within the marked crosswalk.
   b. Increase the curb corner radius of the Birch Street/Sheridan Avenue to at least 15-feet. Retain the directional curb ramps, if possible. The geometry should allow for an SU-30 design vehicle turning from WB Sherman Avenue to NB Birch at “crawl” speed. The vehicle may partially straddle the centerline of Sherman to complete the turn.
   c. Design the reverse curves for the bulb outs per the attached drawing.
   d. The Civil site plan appears to have some drafting errors where proposed curblines do not overlap with existing curb locations, implying a change in roadway geometry. This is particularly of concern on the Park Boulevard frontage, where the new curb appears to be offset 3-4 feet from

the existing curb. Please correct errors. The curb location on Park Boulevard should not be changed from existing conditions.

e. Consider removing the bulb-out within Jacaranda Lane which channelizes EB traffic into the garage and substitute with a device that achieves the intended traffic control but permits greater flexibility for potential future circulation changes.

f. At the one-way outbound service yard driveway to Sherman Avenue, adjust the curb line to maximize the width of level sidewalk area outside the sloped driveway apron. Example:



4. PARKING FACILITY DESIGN: Please revise the project plans to address the following parking facility design standards. Please refer to chapter 18.54 of the Palo Alto Municipal Code (PAMC) for a complete list of parking design requirements.

   a. Show typical parking lot aisle, driveway, and stall widths. Verify plans are drawn to the scale indicated on the sheet.

   b. Driveway Widths: Verify the proposed parking garage ramps meet minimum horizontal width requirements shown in PAMC 18.54. Exclusive of parking lot aisles adjacent to parking stalls, two-way garage ramps shall be at least 18-feet wide; two-way driveways 20-feet; and one-way driveways 12-feet. It appears the Sherman Avenue garage ramp may be less than 18-feet at the garage entry portal/door frame.

   c. Garage ramp grades and vertical clearances: Demonstrate the proposed garage ramps meet design standards for slopes and transition areas shown in PAMC 18.54.070 Figure 5. Label: grade break locations, and ramp slopes.

   d. Clear sight triangles. A 4-foot by 6-foot clear sight triangle is required at all site driveway exits to public streets per PAMC 18.54.070 Figure 6. The area of the triangle shall not contain any vertical obstruction greater than three feet, nor landscaping greater than two feet, above driveway grade. The driveways approaching Sherman Avenue do not appear to meet this requirement.

B. The following comments are required to be addressed prior to any future related permit application such as a Building Permit, Excavation and Grading Permit, Certificate of Compliance, Street Work Permit, Encroachment Permit, etc. These comments are provided as a courtesy and are <u>not</u> required to be addressed prior to the Planning entitlement approval:

1. TRANSPORTATION DEMAND MANAGEMENT: The applicant shall prepare a Transportation Demand Management (TDM) plan for review and approval by the Director of Planning and Community Environment prior to the issuance of building permits. The TDM plan shall include measures and strategies to achieve evening peak hour a trip reduction of target of 35%. The TDM plan shall include a monitoring plan to assess compliance with the required target. Where the monitoring reports indicate that performance targets are not met, the director may require program modifications and may impose administrative penalties if identified deficiencies are not addressed within six months.

Building Conditions

The following comments are required to be addressed prior to any future related permit application such as a Building Permit, Excavation and Grading Permit, Certificate of Compliance, Street Work Permit, Encroachment

Permit, etc.:

- site-specific soils report will be required to be submitted for the building construction permit.
- For new Non-Residential construction of any size, CALGreen Mandatory + Tier 2 requirements are required per PAMC16.14.430, Section A5.106.5.3.3. The following standards apply:
    - For the employee parking on Basement Level 2, the property owner shall provide Conduit Only, EVSE-Ready Outlet, or EVSE Installed for at least 25% of parking spaces, among which at least 5% and no fewer than one, shall be EVSE Installed. Please indicate on the plans the location of the EVSE-Ready and EVSE Installed spaces.
    - Accessible spaces. Projects shall comply with the 2016 California Building Code requirements for accessible electric vehicle parking. Show the location of the required EVSE accessible spaces. (CBC 11B-228.3, 11B-812)
    - Minimum total circuit capacity. The property owner shall ensure sufficient circuit capacity, as determined by the Chief Building Official, to support a Level 2 EVSE in every location where Circuit Only, EVSE-Ready Outlet or EVSE Installed is required.
    - Location. The EVSE, receptacles, and/or raceway required by this section shall be placed in locations allowing convenient installation of and access to EVSE. Location of EVSE or receptacles shall be consistent with all City guidelines, rules, and regulations.
- For new Non-Residential construction of any size, CALGreen Mandatory + Tier 2 requirements are required per PAMC 16.14.080. The Green Building Checklist "GB-1 Non-Residential Mandatory Plus Tier 2" sheet is required for the building permit. The GB-1 Mandatory + Tier 2 sheet can be downloaded from the City's website address: http://www.cityofpaloalto.org/gov/depts/ds/green_building/compliance.asp

Public Works Engineering Approval Conditions

The following comments are required to be addressed prior to any future related permit application such as a Building Permit, Excavation and Grading Permit, Certificate of Compliance, Street Work Permit, Encroachment Permit, etc.

1. STORM WATER TREATMENT: This project shall comply with the storm water regulations contained in provision C.3 of the NPDES municipal storm water discharge permit issued by the San Francisco Bay Regional Water Quality Control Board (and incorporated into Palo Alto Municipal Code Chapter 16.11). These regulations apply to land development projects that create or replace 10,000 square feet or more of impervious surface, and restaurants, retail gasoline outlets, auto service facilities, and uncovered parking lots that create and/or replace 5,000 square feet or more of impervious surface. In order to address the potential permanent impacts of the project on storm water quality, the applicant shall incorporate into the project a set of permanent site design measures, source controls, and treatment controls that serve to protect storm water quality, subject to the approval of the Public Works Department. The applicant shall identify, size, design and incorporate permanent storm water pollution prevention measures (preferably landscape-based treatment controls such as bioswales, filter strips, and permeable pavement rather than mechanical devices that require long-term maintenance) to treat the runoff from a "water quality storm" specified in PAMC Chapter 16.11 prior to discharge to the municipal storm drain system. Effective February 10, 2011, regulated projects, must contract with a qualified third-party reviewer during the Building permit review process to certify that the proposed permanent storm water pollution prevention measures comply with the requirements of Palo Alto Municipal Code Chapter 16.11. The certification form, 2 copies of approved storm water treatment plan, and a description of Maintenance Task and Schedule must be received by the City from the third-party reviewer prior to grading or building permit issuance by the Public Works department and MUST be submitted before 06/30/2019.

2. Within 45 days of the installation of the required storm water treatment measures and prior to the issuance of an occupancy permit for the building, third-party reviewer shall also submit to the City a certification for approval that the project's permanent measures were constructed and installed in accordance to the approved permit drawings.

3. BASEMENT SHORING: Shoring for the basement excavation, including tiebacks, must not extend onto adjacent private property or into the City right-of-way without having first obtained written permission from the private property owners and/or an encroachment permit from Public Works.

4. BASEMENT DRAINAGE: Due to high groundwater throughout much of the City and Public Works prohibiting the pumping and discharging of groundwater, perforated pipe drainage systems at the exterior of the basement walls or under the slab are not allowed for this site. A drainage system is, however, required for all exterior basement-level spaces, such as light-wells, patios or stairwells. This system consists of a sump, a sump pump, a backflow preventer, and a closed pipe from the pump to a dissipation device onsite at least 10 feet from the property line, such as a bubbler box in a landscaped area, so that water can percolate into the soil and/or sheet flow across the site. The device must not allow stagnant water that could become mosquito habitat. Additionally, the plans must show that exterior basement-level spaces are at least 7-3/4" below any adjacent windowsills or doorsills to minimize the potential for flooding the basement. Public Works recommends a waterproofing consultant be retained to design and inspect the vapor barrier and waterproofing systems for the basement.

5. DEWATERING: Proposed basement/underground garage excavation may require dewatering during construction. Public Works only allows groundwater drawdown well dewatering. Open pit groundwater dewatering is disallowed. Dewatering is only allowed from April 1 through October 31 due to inadequate capacity in our storm drain system. The geotechnical report for this site must list the highest anticipated groundwater level; if the proposed project will encounter groundwater, the applicant must provide all required dewatering submittals for Public Works review and approval prior to grading permit issuance. Public Works has dewatering submittal requirements and guidelines available at the Development Center and on our website: http://www.cityofpaloalto.org/gov/depts/pwd/forms_and_permits.asp

6. SWPPP: The proposed development will disturb more than one acre of land. Accordingly, the applicant will be required to comply with the State of California's General Permit for Storm Water Discharges Associated with Construction Activity. This entails filing a Notice of Intent to Comply (NOI), paying a filing fee, and preparing and implementing a site specific storm water pollution prevention plan (SWPPP) that addresses both construction-stage and post-construction BMP's for storm water quality protection. The applicant is required to submit two copies of the NOI and the draft SWPPP to the Public Works Department for review and approval prior to issuance of the building permit. Also, include the City's standard "Pollution Prevention - It's Part of the Plan" sheet in the building permit plan set. Copies are available from Public Works at the Development Center.

7. IMPERVIOUS SURFACE AREA: The project will be creating or replacing 500 square feet or more of impervious surface. Accordingly, the applicant shall provide calculations of the existing and proposed impervious surface areas with the building permit application. The *Impervious Area Worksheet for Land Developments* form and instructions are available at the Development Center or on our website.

8. PAVEMENT: Sherman, Birch, and Park were recently resurfaced -- these streets are under a moratorium. Any cutting into the pavement will trigger additional pavement requirements. Add the following note to the Site Plan: "Applicant and contractor will be responsible for resurfacing portions of Sherman, Birch and/or Park

based the roadway surface condition after project completion and limits of trench work. At a minimum pavement resurfacing of the full width of the street along the project frontage may be required." Plot and label the area to be resurfaced as hatched on the site plan.

9. Based on the City's GIS there may be plume monitoring wells within the project site. Typically these wells are maintained by Santa Clara Valley Water District (SCVWD). The proposed work shall not destroy any of the monitoring well or affect the function and use of these. Contact SCVWD to verify the well location. Plot and label them on the plans and provide notes to protect wells as required by the district.

10. STORMWATER MAINTENANCE AGREEMENT: The applicant shall designate a party to maintain the control measures for the life of the improvements and must enter into a **maintenance agreement** with the City to guarantee the ongoing maintenance of the permanent C.3 storm water discharge compliance measures. **The maintenance agreement shall be executed prior to grading and building permit issuance**. The City will inspect the treatment measures yearly.

Utilities Water Gas Wastewater Conditions

The following comments are required to be addressed prior to any future related permit application such as a Building Permit, Excavation and Grading Permit, Certificate of Compliance, Street Work Permit, Encroachment Permit, etc.:

1. The plans are to be updated per the WGW review comments issued 10/18/2017.

2. The applicant shall submit a completed water-gas-wastewater service connection application - loadsheet per unit for each unit on the property for City of Palo Alto Utilities. The applicant must provide all the information requested for utility service demands (water in fixture units/g.p.m., gas in b.t.u.p.h, and sewer in fixture units/g.p.d.). The applicant shall provide the new total loads

3. The applicant shall submit improvement plans for utility construction. The plans must show the **size** and location of all underground utilities within the development and the public right of way.

4. The applicant shall submit improvement plans for utility construction. The plans must show the **size** and location of all underground utilities within the development and the public right of way including meters, backflow preventers, fire service requirements, sewer mains, sewer cleanouts, sewer lift stations and any other required utilities. Plans for new wastewater lateral need to include new wastewater pipe profiles showing existing potentially conflicting utilities especially storm drain pipes electric and communication duct banks. Existing duct banks need to be daylighted by potholing to the bottom of the ductbank to verify cross section prior to plan approval and starting lateral installation. Plans for new storm drain mains and laterals need to include profiles showing existing potential conflicts with sewer, water and gas.

5. The applicant shall be responsible for upgrading the existing utility mains and/or services as necessary to handle anticipated peak loads. This responsibility includes all costs associated with the design and construction for the installation/upgrade of the utility mains and/or services.

6. The gas service, meters, and meter location must meet WGW standards and requirements

7. An approved reduced pressure principle assembly (RPPA backflow preventer device) is required for all existing and new water connections from Palo Alto Utilities to comply with requirements of California administrative code, title 17, sections 7583 through 7605 inclusive. The RPPA shall be installed on the

owner's property and directly behind the water meter within 5 feet of the property line. RPPA's for domestic service shall be lead free. Show the location of the RPPA on the plans.

8. An approved reduced pressure detector assembly is required for the new water connection for the fire system to comply with requirements of California administrative code, title 17, sections 7583 through 7605 inclusive. Reduced pressure detector assemblies shall be installed on the owner's property adjacent to the property line, within 5' of the property line. Show the location of the reduced pressure detector assembly on the plans.

9. The applicant shall pay the capacity fees and connection fees associated with new utility service/s or added demand on existing services. The approved relocation of services, meters, hydrants, or other facilities will be performed at the cost of the person/entity requesting the relocation.

10. Each unit or place of business shall have its own water and gas meter shown on the plans. Each parcel shall have its own water service, gas service and sewer lateral connection shown on the plans.

11. All existing water and wastewater services that will not be reused shall be abandoned at the main per WGW utilities procedures.

12. Utility vaults, transformers, utility cabinets, concrete bases, or other structures cannot be placed over existing water, gas or wastewater mains/services. Maintain 1' horizontal clear separation from the vault/cabinet/concrete base to existing utilities as found in the field. If there is a conflict with existing utilities, Cabinets/vaults/bases shall be relocated from the plan location as needed to meet field conditions.

13. Trees may not be planted within 10 feet of existing water, gas or wastewater mains/services or meters; lesser distances require a permanent impermeable root-barrier a minimum of 3ft horizontal from water, gas and wastewater services/mains/meters .

14. All utility installations shall be in accordance with the City of Palo Alto current utility standards for water, gas & wastewater.

Utilities Electrical Conditions

1. Main electric panel shall be at grade and outdoor. The proposed design shall have the location of the main electric panel.
2. The proposed building is two stories deep which might require long tie-back to reinforce the shoring walls. Applicant shall work with Electric Utility prior to driving these tie-backs onto Jacaranda and part of Sherman and Birch to avoid hitting the high voltage electric conduits. Applicant shall pot hole where close to these conduits and electric equipment.
4. No tree drip-line near electric equipment (including conduits).
6. The point of electric power connection to feed the new building at 350 Sherman is one of the following: MH 1610 (manhole 1610), Vault 1609, LB3470 or SW 3469
8. The point of connection for fiber is a communication box near transformer 5264.

Public Works Water Quality (Storm water Management) Conditions

1. Submit and follow the "Pollution Prevention – It's Part of the Plan" construction BMP sheet during life of project with the building permit set.
2. Use rain capture device at the demonstration garden and include description in interpretative signage.
3. Highly consider using rain chains or similar along vines and other walls/building corners.
4. Storm drain/drop inlets
    - Inlets should be labeled with a 'Flows to Adobe Creek' message.
5. Stormwater treatment measures
    - Consider using low-maintenance permeable pavers in the plaza to be part of the demonstration area. Appropriate specs must be followed.
    - Installation vendor specs should be followed, though vendor specs should be reviewed by Parks Maintenance Staff before installation. Add this bullet as a note to the building plans.
    - Clear, detailed maintenance agreement must be drafted and agreed upon by all City staff in pertinent Departments (Public Works, Parks) before occupancy approval. Contact Pam Boyle Rodriguez, Stormwater Program Manager, at (650) 329-2421 to facilitate this agreement.
    - Must meet all Bay Regional Municipal Regional Stormwater Permit requirements.
    - Refer to the Santa Clara Valley Urban Runoff Pollution Prevention Program C.3 Handbook (download here: http://scvurppp-w2k.com/c3_handbook.shtml) for details
    - Staff from Stormwater Program (Watershed Protection Division) may be present during installation of stormwater treatment measures. Contact Pam Boyle Rodriguez, Stormwater Program Manager, at (650) 329-2421 before installation. Add this bullet as a note to building plans on Stormwater Treatment (C.3) Plan.
    - Install an interpretive sign regarding stormwater treatment and pollution prevention. Contact Pam Boyle Rodriguez, Stormwater Program Manager, at (650) 329-2421 regarding this text.
6. Bay-friendly Guidelines (rescapeca.org)
    - Do not use chemicals fertilizers, pesticides, herbicides or commercial soil amendment. Use Organic Materials Review Institute (OMRI) materials and compost. Refer to the Bay-Friendly Landscape Guidelines: http://www.stopwaste.org/resource/brochures/bay-friendly-landscape-guidelines-sustainable-practices-landscape-professional for guidance. Add this bullet as a note to the building plans.
    - Avoid compacting soil in areas that will be unpaved. Add this bullet as a note to the building plans. Add this bullet as a note to the building plans.
7. Stormwater quality protection
    - Trash and recycling containers must be covered to prohibit fly-away trash and having rainwater enter the containers.
    - Drain downspouts to landscaping (outward from building as needed).
    - Drain HVAC fluids from roofs and other areas to landscaping.
    - Establish a street sweeping maintenance plan in open parking lots. Contact Pam Boyle Rodriguez, Stormwater Program Manager, at (650) 329-2421 regarding this plan.

The following comments are required to be addressed prior to any future related permit application such as a Building Permit, Excavation and Grading Permit, Certificate of Compliance, Street Work Permit, Encroachment Permit, etc.:

1. PAMC 16.09.170, 16.09.040 Discharge of Groundwater

Prior approval shall be obtained from the city engineer or designee to discharge water pumped from construction sites to the storm drain. The city engineer or designee may require gravity settling and filtration upon a determination that either or both would improve the water quality of the discharge. Contaminated ground water or water that exceeds state or federal requirements for discharge to navigable waters may not be discharged to the storm drain. Such water may be discharged to the sewer, provided that the discharge limits contained in Palo Alto Municipal Code (16.09.040(m)) are not exceeded and the approval of the superintendent is obtained prior to discharge. The City shall be compensated for any costs it incurs in authorizing such discharge, at the rate set forth in the Municipal Fee Schedule.

2. PAMC 16.09.055 Unpolluted Water

Unpolluted water shall not be discharged through direct or indirect connection to the sanitary sewer system. And PAMC 16.09.175 (b) General prohibitions and practices Exterior (outdoor) drains may be connected to the sanitary sewer system only if the area in which the drain is located is covered or protected from rainwater run-on by berms and/or grading, and appropriate wastewater treatment approved by the Superintendent is provided. For additional information regarding loading docks, see section 16.09.175(k)

3. PAMC 16.09.180(b)(14) Architectural Copper
On and after January 1, 2003, copper metal roofing, copper metal gutters, copper metal down spouts, and copper granule containing asphalt shingles shall not be permitted for use on any residential, commercial or industrial building for which a building permit is required. Copper flashing for use under tiles or slates and small copper ornaments are exempt from this prohibition. Replacement roofing, gutters and downspouts on historic structures are exempt, provided that the roofing material used shall be prepatinated at the factory. For the purposes of this exemption, the definition of "historic" shall be limited to structures designated as Category 1 or Category 2 buildings in the current edition of the Palo Alto Historical and Architectural Resources Report and Inventory.

4. **PAMC 16.09.175(k) (2) Loading Docks**
(i) Loading dock drains to the storm drain system may be allowed if equipped with a fail-safe valve or equivalent device that is kept closed during the non-rainy season and during periods of loading dock operation.
(ii) Where chemicals, hazardous materials, grease, oil, or waste products are handled or used within the loading dock area, a drain to the storm drain system shall not be allowed. A drain to the sanitary sewer system may be allowed if equipped with a fail-safe valve or equivalent device that is kept closed during the non-rainy season and during periods of loading dock operation. The area in which the drain is located shall be covered or protected from rainwater run-on by berms and/or grading. Appropriate wastewater treatment approved by the Superintendent shall be provided for all rainwater contacting the loading dock site.

5. PAMC 16.09.180(b)(5) Condensate from HVAC
Condensate lines shall not be connected or allowed to drain to the storm drain system.

6. **PAMC 16.09.180(b)(b) Copper Piping**
Copper, copper alloys, lead and lead alloys, including brass, shall not be used in sewer lines, connectors, or seals coming in contact with sewage except for domestic waste sink traps and short lengths of associated connecting pipes where alternate materials are not practical. The plans must specify that copper piping will not be used for wastewater plumbing.

7. PAMC 16.09.175(a) Floor Drains
Interior (indoor) floor drains to the sanitary sewer system may not be placed in areas where hazardous materials, hazardous wastes, industrial wastes, industrial process water, lubricating fluids, vehicle fluids or vehicle equipment cleaning wastewater are used or stored, unless secondary containment is provided for all such materials and equipment

8. 16.09.180(12) Mercury Switches
Mercury switches shall not be installed in sewer or storm drain sumps.

SECTION 8. Term of Approval. Architectural Review Approval. The approval shall be valid for two years from the original date of approval, pursuant to Palo Alto Municipal Code Section 18.77.090.

PASSED: 9-0

AYES: DuBois, Filseth, Fine, Holman, Kniss, Kou, Scharff, Tanaka, Wolbach

NOES:

ABSENT:

ABSTENTIONS:

ATTEST:

APPROVED:

DocuSigned by:
Beth Minor
27523117DA804D7...
City Clerk

DocuSigned by:
293CF322E1294F6...
Director of Planning and Community Environment

APPROVED AS TO FORM:

DocuSigned by:
Albert Yang
15B6C45220134DC...
Senior Asst. City Attorney

PLANS AND DRAWINGS REFERENCED:
Those plans prepared by RossDrulisCusenbery entitled 'ARB Submittal City of Palo Alto Public Safety Building 250 Sherman Ave' received September 5, 2018.

NOVEMBER 4, 2019

PROJECT DESCRIPTION

City of Palo Alto

New Public Safety Building Communications Tower

Prepared for

City of Palo Alto Architectural Review Board (ARB)

Prepared by

Winbourne Consulting, LLC

RossDrulisCusenbery Architecture, Inc.

Palo Alto Public Safety Building, Palo Alto, CA

Communications Tower Description

OVERVIEW

The City of Palo Alto is constructing a new Public Safety Building (PSB) located on the current City-owned parking lot C-6 at 250 Sherman Avenue, in the California Avenue business district of Palo Alto. The new approximately 48,917 SF, multi-story facility constructed over two levels of secure basement parking, will house the City of Palo Alto Police Department, Fire Administration, Office of Emergency Services, 911 Dispatch Center and the City's Emergency Operations Center (EOC). The facility will be designed as an essential facility capable to operate on a standalone, 24/7 basis in the event of a major earthquake or disaster. The Construction Document phase will be completed and issued for Building Permit in December of 2019. Start of construction is scheduled for Fall of 2020. The project is currently scheduled for completion before the end of 2022. RossDrulisCusenbery Architecture, Inc. (RDC) is the project architect. Winbourne Consulting LLC, a specialist in the design of emergency communications systems was engaged by RDC to provide emergency radio system engineering services for the project. Winbourne Consulting LLC with RDC prepared the following communications tower description.

The new facility will include a 135' communications tower when measured from the ground plane to top of tower. The following provides a general description of the communications tower and its functionality.

FACILITY COMMUNICATION SYSTEM REQUIREMENTS

The new PSB will incorporate a variety of sophisticated emergency communication and data systems. The communications requirements of the facility will be supported by a variety of antennas mounted on an 80' unguided, monopole type tower attached to a surface mounted steel armature on the building's exterior wall (See Figures 1 & 2 and attached ARB Submittal Drawings). The antennas provide mission-critical voice and data communications to the city's first responders and emergency management personnel as well as meeting the city's need to integrate with other public safety agencies in the Silicon Valley Regional Interoperability Authority (SVRIA) area.

The SVRIA microwave network is the primary backhaul for radio communications and provides connectivity to the city's computer aided dispatch system (CAD) that is shared with Mountain View and Los Altos. The tower equipment also supports the 9-1-1 system and redundant radio communications.

The following description represents the currently estimated antenna loading scenario; it is possible that some of these antennas will not be required when the building is completed. It is also possible that additional antennas or equipment could be added in the future. The tower manufacturer

associated with the winning bidder may also propose minor deviations from the initial design based on their preferences, for example, proposing a round design vs. a polygonal one. The current conceptual design diagrams depict a round tower section.

TOWER HEIGHT & LOCATION

The communications tower's base is attached to a building mounted steel armature exterior to the building at 55' above ground, which results in the top of the monopole tower being at 135' (Figure 3) above the ground plane. This height is required to ensure the signal path of the microwave antennas are not attenuated to foliage, buildings, or other obstructions, and was determined by an engineering analysis.

Originally the building's monopole mounting armature was planned to be internal to the brick vertical tower chase on the building. Following additional study, it became apparent the amount of deflection estimated to be experienced from wind or seismic movements at the tower roof plane would be excessive and require a custom seismic expansion joint which would be problematic to design, waterproof and warranty. Consequently, the monopole mounting structure was shifted from the interior of the vertical brick tower to the exterior of the building similar to early images of the tower design presented to the City of Palo Alto. In so doing, the elevation of the brick tower structure facing Park Blvd was reduced in width by approximately 50% from that depicted in the prior ARB submittals. The overall brick tower height remains unchanged. The exterior surface mounted location avoids the expansion and deflection issues at the roof/monopole interface.

MATERIAL & FINISH

The tower design is based on either a round section or an 18-sided polygonal, slightly tapered pole constructed of galvanized, grade A585-55 steel. The diameter of the round tower at the mounting flange is approximately 27". The diameter of the mounting flange will be approximately 4' allowing for bolted connections between the monopole base the building armature. According to the City, similar communication towers in Los Altos and Mountain View have larger diameter towers. Another rooftop communication tower array exists on the neighboring County courthouse.

Rungs will be installed on the side to provide access for maintenance. The 80' tower above the roof line will have a galvanized metal finish to provide the best lifespan and minimize maintenance requirements. Below the roof line connection flange, the supporting pole and its attachments to the building will match the galvanized tower finish. Alternately the entire tower assembly could be painted to match the dark steel trim color of the Sherman Street canopy steel if a long-term durable finish was specified. The color of the communications tower will be discussed with the ARB. Dishes and antennae at the top of the tower will have typical manufacturer finishes that range from bare aluminum to protective coatings with colors that range from gray to white.

LIGHTNING PROTECTION

The tower includes a lighting protection system. A ¾" diameter, approximately 5' lightning rod extends beyond the top of the tower and is attached to the side of the tower.

MICROWAVE ANTENNAS

Below the lightning rod and the top of tower are two microwave dish antennas. These antennas provide line-of-sight, point-to-point, communications supporting CAD among the Emergency Communication Centers in the area as well as radio backhaul for the regional radio system. The microwave network is also a critical backup communications path to fiber optic links that are used for the 9-1-1 system.

Each of the dish antennas are approximately 3' in diameter. These appear at different heights on the tower diagram and are pointed in different directions to make the point-to-point connections to other facilities and to maintain the integrity of the regional microwave ring. The tower diagram indicates a third future micro wave dish antenna that may be added in the future. The exact requirements or need for this future dish is not known at this time. The microwave antennas included on the monopole tower are:

- PAPSB to Mountain View 9-1-1 Center, 134' above ground, azimuth = 123 degrees
- PAPSB to the Palo Alto Civic Center, 126' above ground, azimuth = 321 degrees
- Future Microwave dish antenna, height and azimuth T.B.D.

The dish antennas will be spaced apart to allow a future third dish (should it be required) to target a new station in the foothills that is still in the planning stages.

WHIP ANTENNAS

Below the microwave dishes, mounted on a tower crossarm are two whip antennas. These provide voice communications to first responders on both UHF and VHR radio systems. Each antenna is approximately 20' in height with a 2-3/4 "diameter. The top of these whip antennas must be lower than the top of the lighting rod. Approximately 10 - 12 other additional whip antennas will be roof mounted in the center of the PSB roof. It is unlikely these additional roof mounted whip antennas will be visible from the street.

PANEL ANTENNAS

Just below the top two microwave dishes are approximately six small panel antennas, arrayed to provide 360 degrees of coverage. These antennas provide communications to the City's mobile emergency operations center (MEOC) vehicle. This ensures that the MEOC has access to the necessary data communications when it is deployed in response to disasters or other major emergencies. Each panel measures approximately 14" w x 9"h x 4" d.

CABLING

All cabling to the antennas will be run internal to the monopole, exiting through the open center of the ground plate, and will home run to equipment rooms inside the PSB.

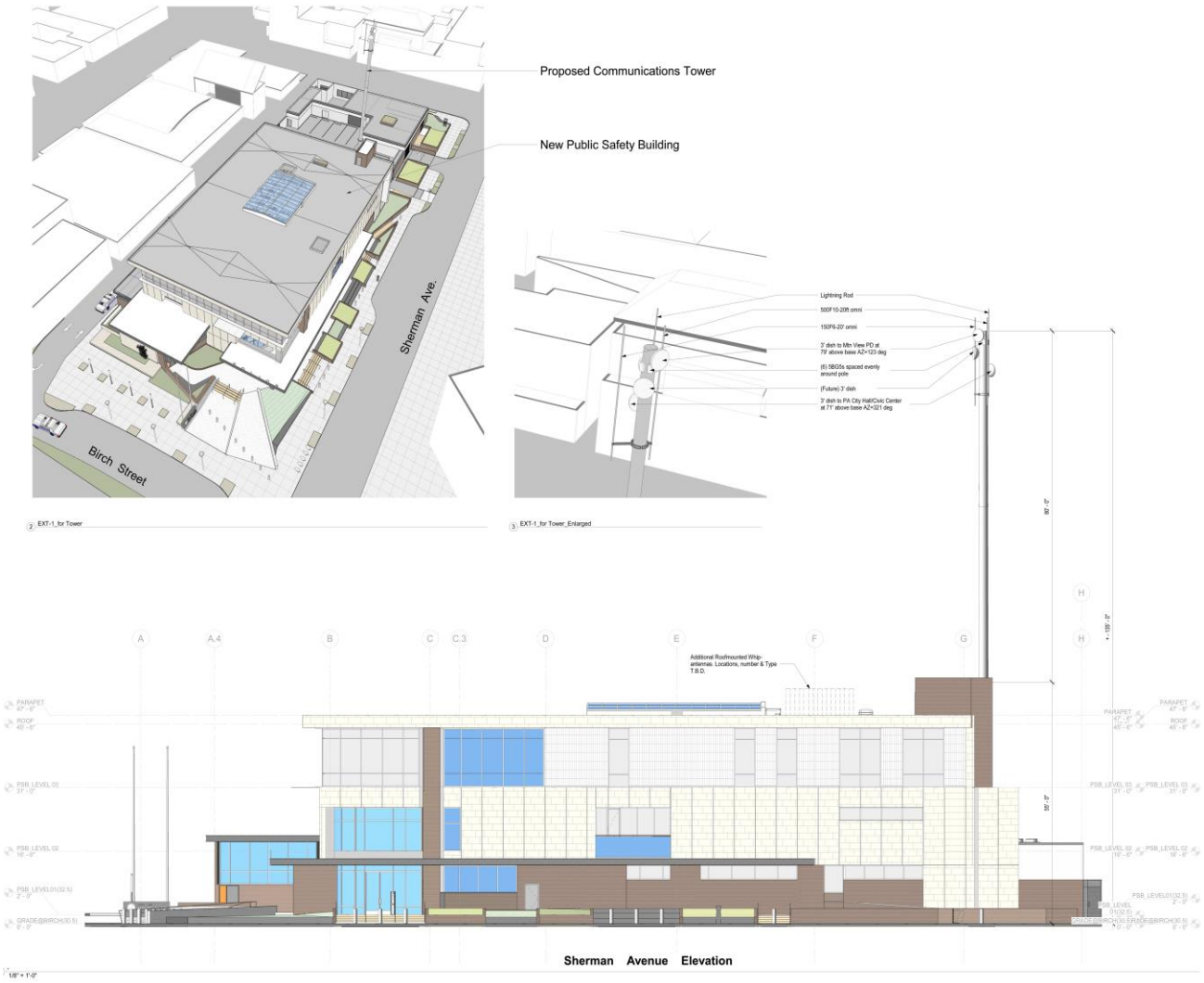


Figure 1. Sherman Avenue Elevation

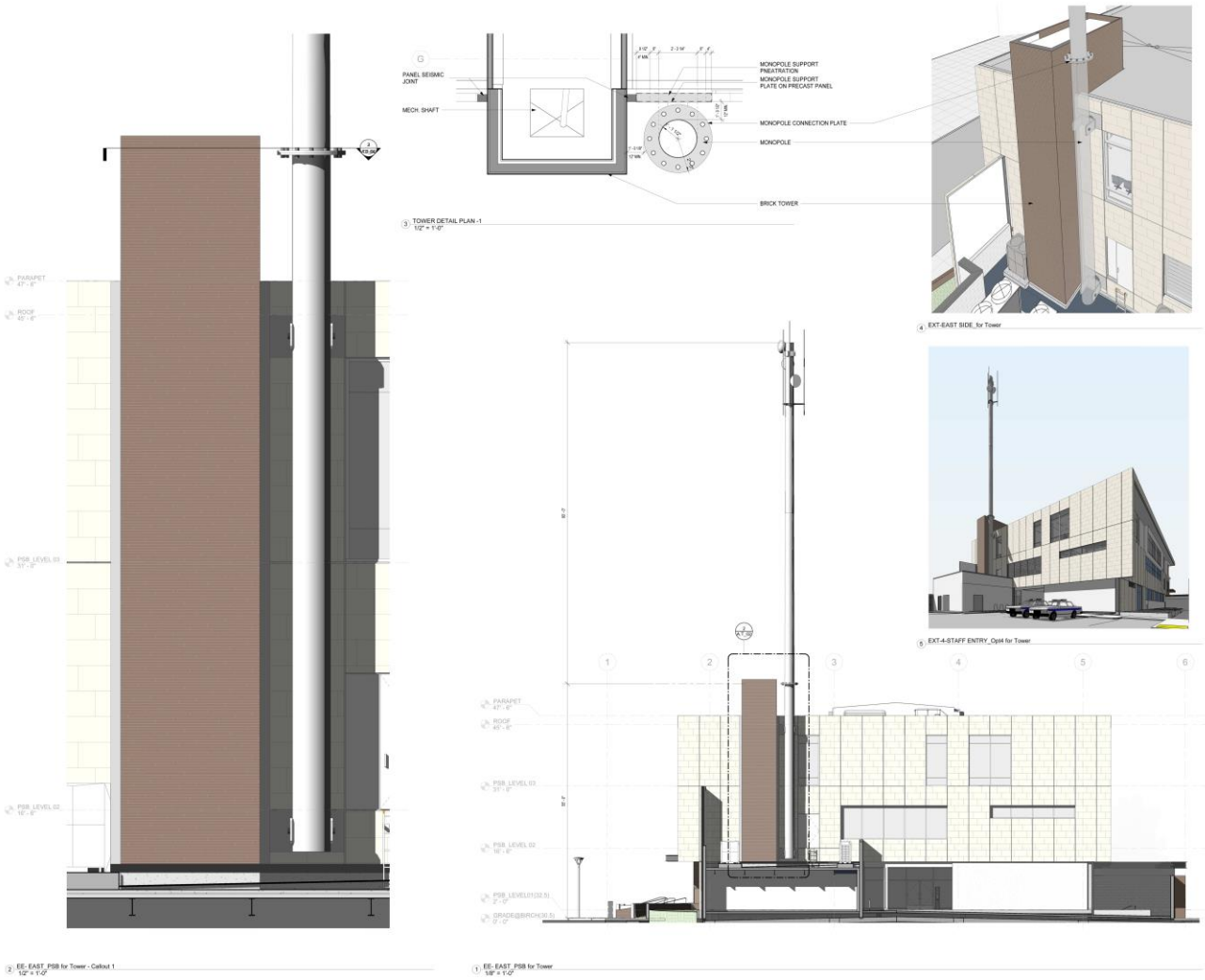


Figure 2. Additional Tower Views

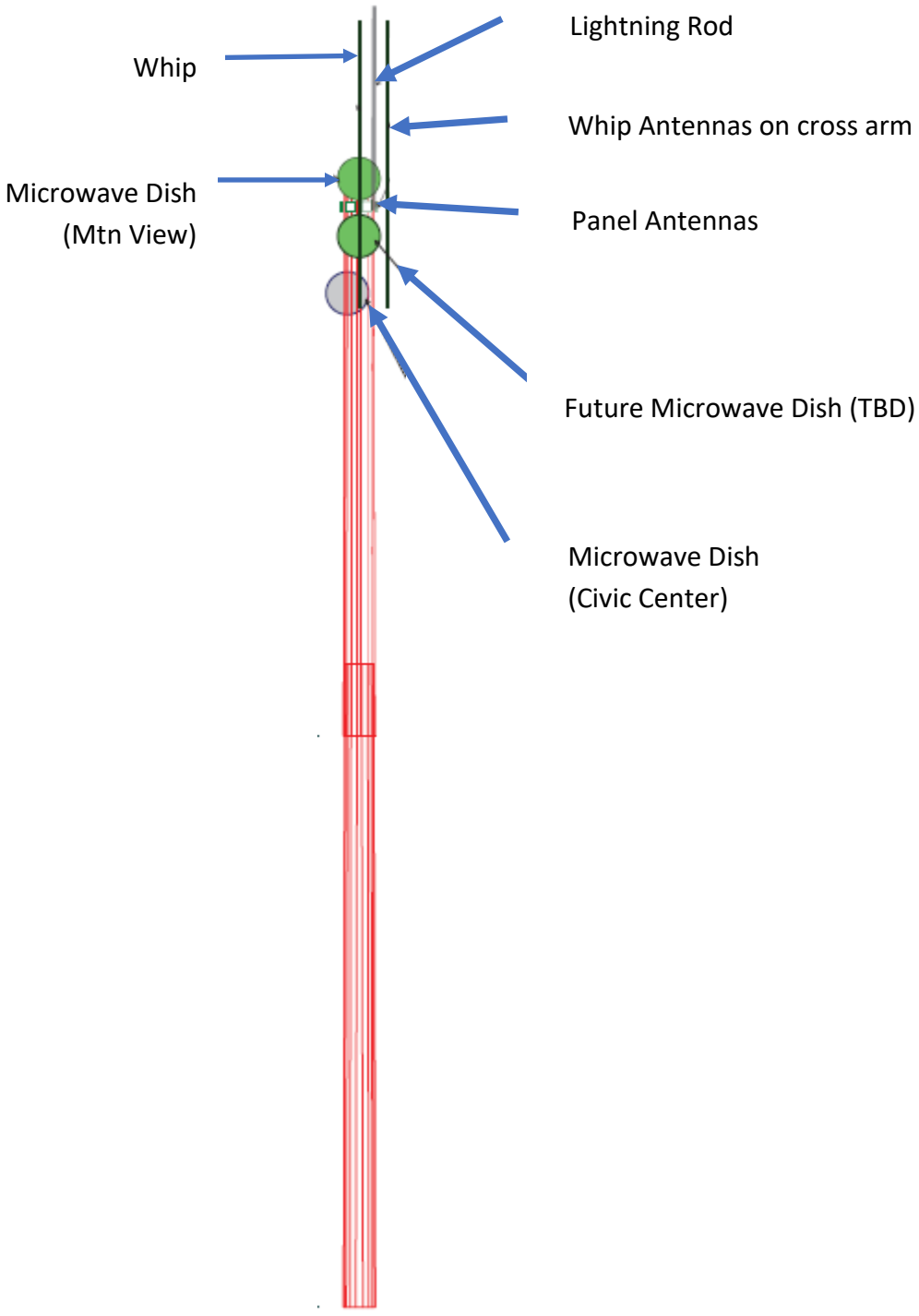
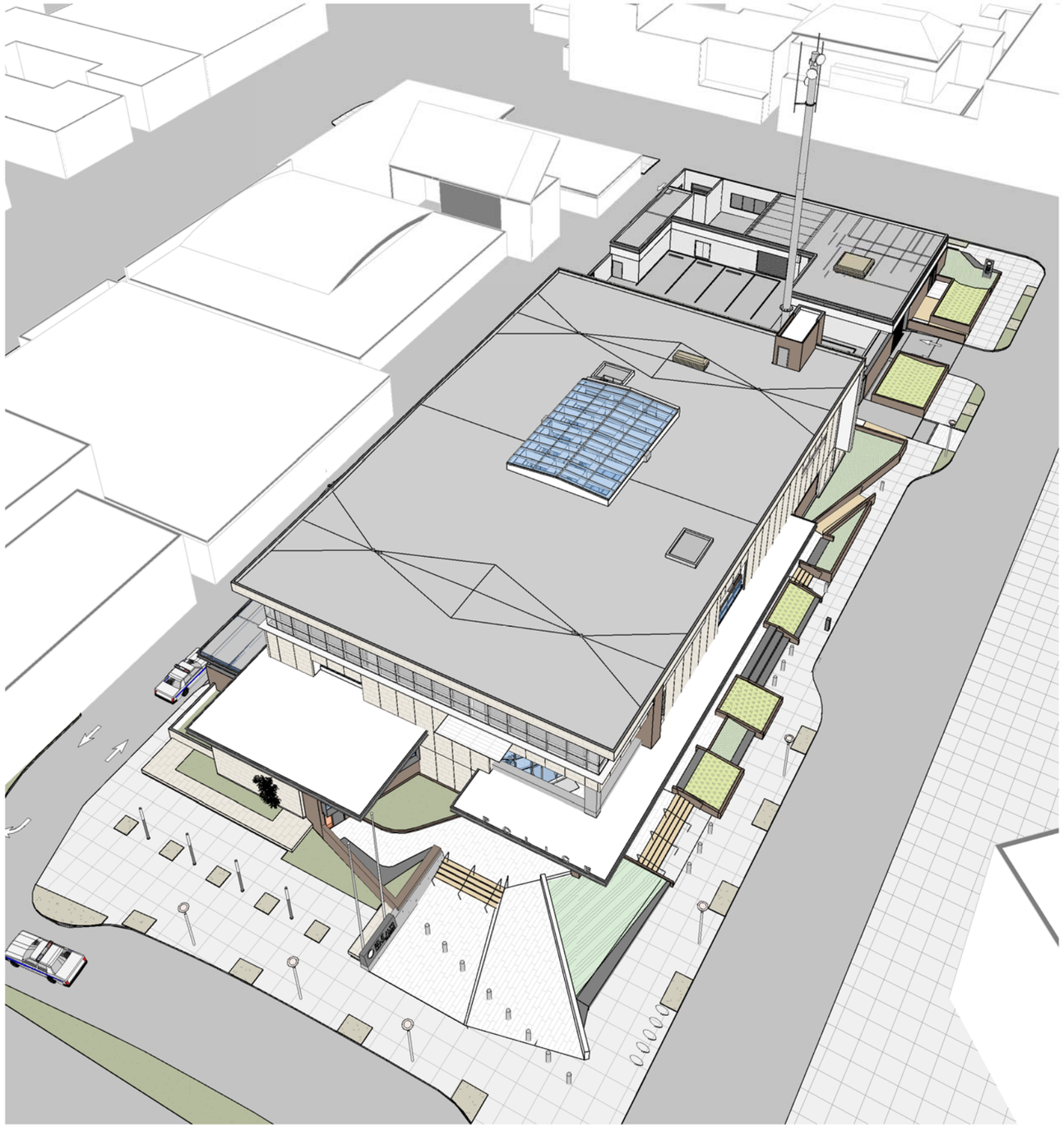


Figure 3. 80’ PAPSB Monopole attached to new PSB at 55’ above ground plane. Total height of building and monopole tower is 135’.



ARB SUBMITTAL

for

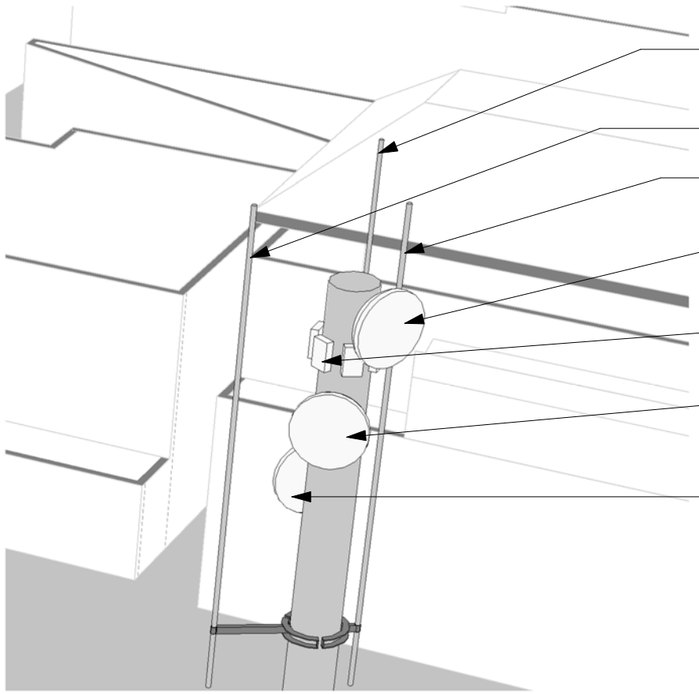
Communication Tower Design

CITY OF PALO ALTO
PUBLIC SAFETY BUILDING
250 Sherman Ave.

LOT C6 - PROPOSED PUBLIC SAFETY BUILDING

Zoning designation:	PF
Land use designation:	Major Institutional Special Facility (MISP)
Maximum site coverage:	30%
Maximum FAR:	1:1
Maximum building height:	50'-0"; 35'-0" @ SW corner
Lot Area:	1.27 acres (55,164 sf)
Existing lot coverage:	Zero, the lot is undeveloped
Proposed lot coverage:	29.20%
Existing floor area ratio (FAR):	Zero the lot is undeveloped
Total floor area	48,917 sf (Building) 83,344 sf (Garage) 4,488 sf (Utility Yard)
Proposed floor area ratio (FAR):	0.74
Building foot print:	17,208 sf
Site area:	55,164 sf
Proposed building height:	49 feet
Existing onsite parking:	155 Spaces
Required new onsite parking:	162 Spaces
Proposed new onsite parking:	149 (Basement) + 12 (Surface)= 161 parking stalls
Existing easements	None

SHEET INDEX*



Lightning Rod

500F10-20ft omni

150F6-20' omni

3' dish to Mtn View PD at 79' above base AZ=123 deg

(6) 5BG5s spaced evenly around pole

(Future) 3' dish

3' dish to PA City Hall/Civic Center at 71' above base AZ=321 deg

5' - 0"

80' - 0"

140' - 0"

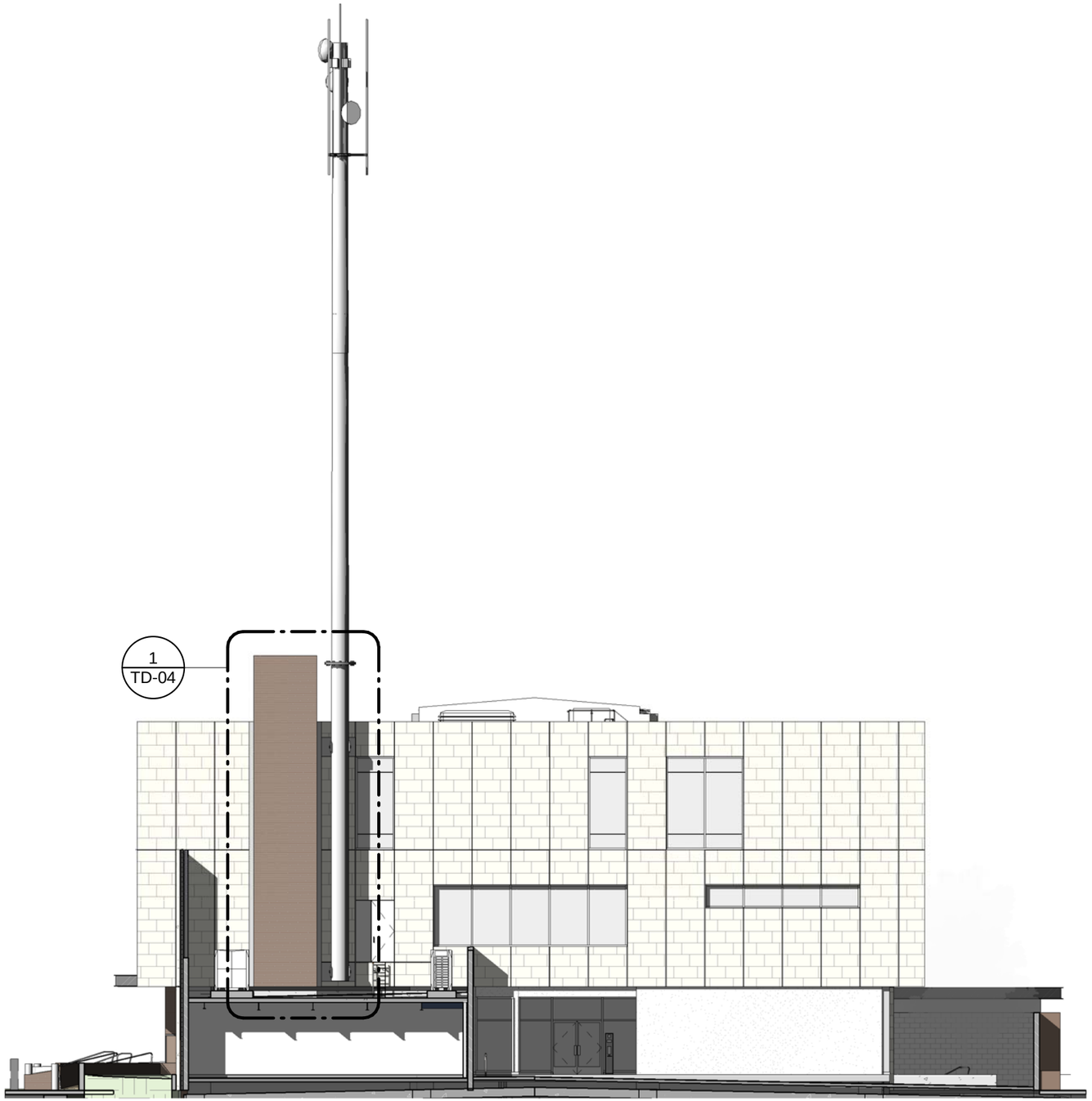
55' - 0"

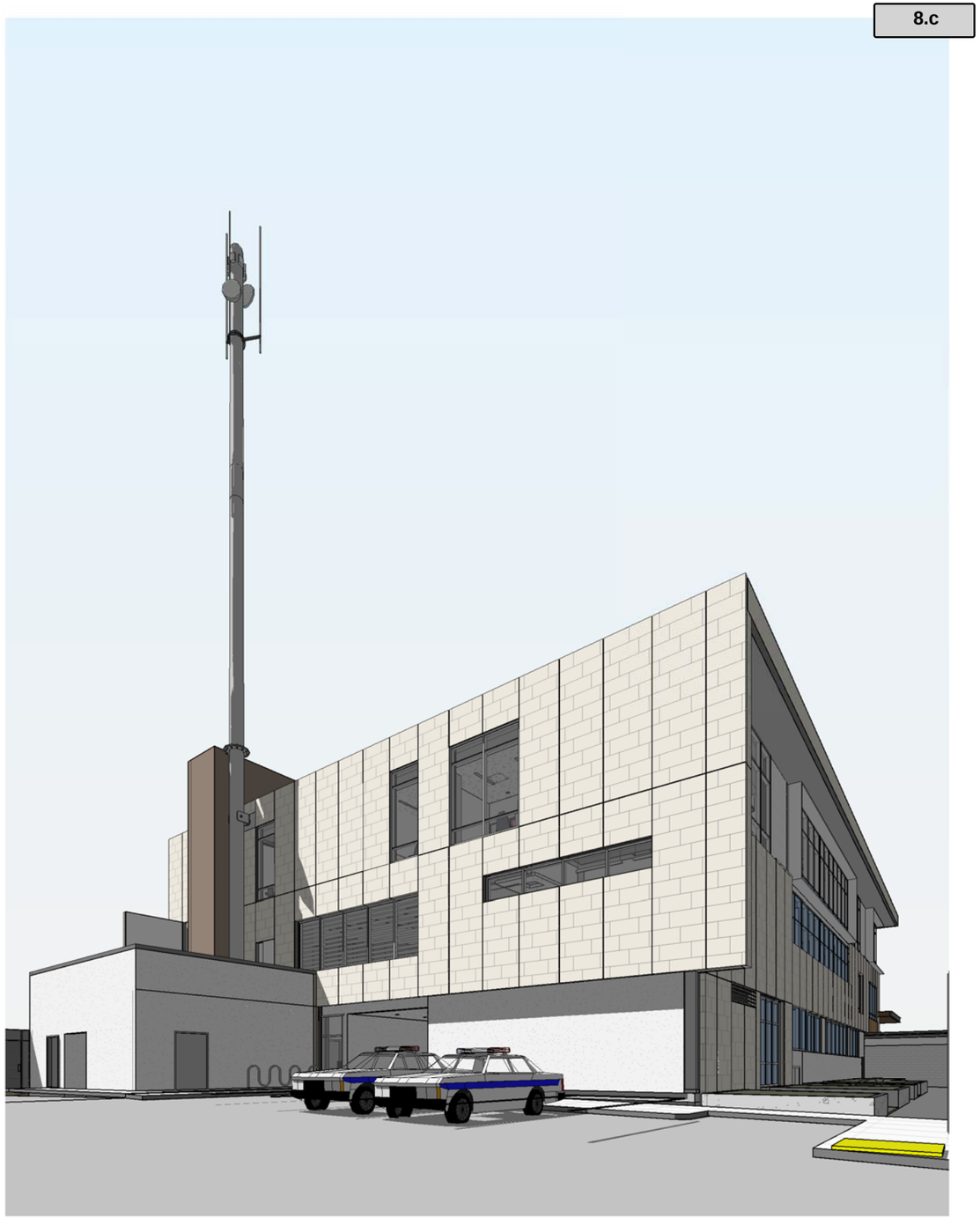
Ross Drulis Cusenbery ARCHITECTURE

12/5/2019

TD-02
SOUTH ELEVATION - SHERMAN AVE.

PALO ALTO PUBLIC SAFETY BUILDING



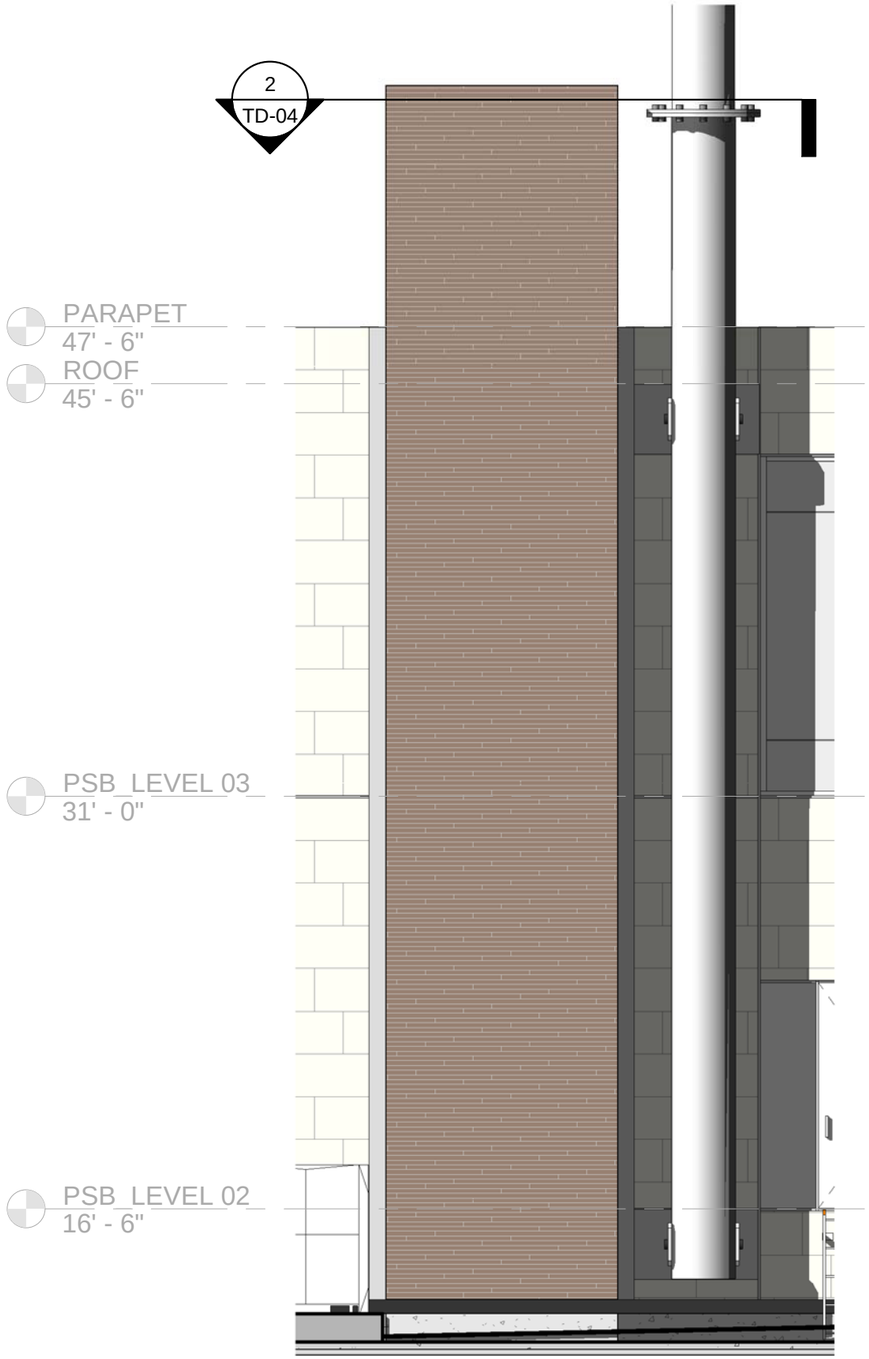


RossDrulisCusenbery ARCHITECTURE

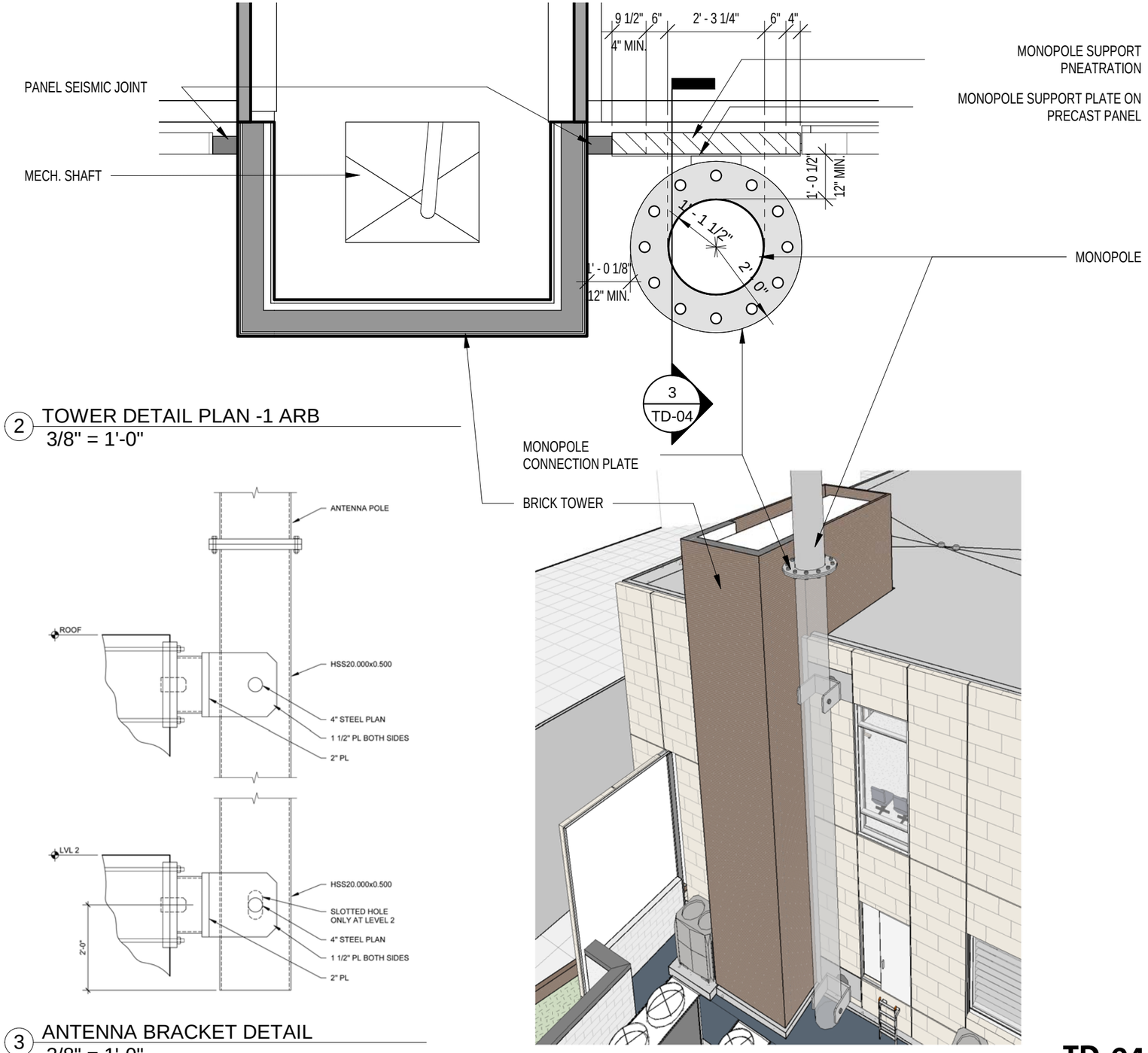
12/5/2019

TD-03
EAST ELEVATION - PARK BLVD.

PALO ALTO PUBLIC SAFETY BUILDING



1 EE- EAST_PSB for Tower - Callout 1 ARB
3/16" = 1'-0"



2 TOWER DETAIL PLAN -1 ARB
3/8" = 1'-0"

3 ANTENNA BRACKET DETAIL
3/8" = 1'-0"

RossDrulisCusenbery ARCHITECTURE

12/5/2019

TD-04
ENLARGED TOWER ELEVATION & PLAN SECTION

PALO ALTO PUBLIC SAFETY BUILDING

As indicated

RossDrulisCusenbery ARCHITECTURE

12/5/2019

TD-05
PERSPECTIVE FROM SHERMAN & PARK

PALO ALTO PUBLIC SAFETY BUILDING