Public Works Order No: 204901

REGULATIONS ADOPTING OBJECTIVE STANDARDS AS REQUIRED BY SAN FRANCISCO PUBLIC WORKS CODE ARTICLE 25

UTILITY POLES

- **General limitations:** No wireless equipment may be attached to utility poles that are within 9’ of a residential window measured on a horizontal plane.

- **General requirements for wooden utility poles (all Compatibility Standards):**
  - 4G antenna design preference ladder:
    - Preference One: Pole-top antenna without a taller replacement pole or pole-top extension. Re-arrange electric lines to meet CPUC General Order 95 separation requirements without increasing height of pole.
    - Preference Two: Side-mounted antenna. Location on pole as required by CPUC General Order 95.
    - Preference Three: Pole-top antenna with a taller replacement pole. Height of antenna after pole replacement does not exceed the lesser of: (a) 10’ above height limit for the applicable zoning district; or (b) 10’ above the height of the existing pole. A 12’ clearance is permitted if required by CPUC General Order 95.
    - Preference Four: Pole-top antenna with a pole-top extension. Height of antenna after pole extension does not exceed the lesser of: (a) 10’ above height limit for the applicable zoning district; or (b) 10’ above the height of the existing pole. A 12’ clearance is permitted if required by CPUC General Order 95.
    - Preference Five (disfavored designs): Pole-top antenna with a taller replacement pole or pole-top extension where the height of the antenna after the pole replacement or extension will exceed: (a) the height limit for the applicable zoning district by more than 10’; or (b) the height of existing pole by more than 10’. A 12’ clearance is permitted if required by CPUC General Order 95.

  - **Use of design preferences:** Applicant must use Preference One whenever feasible. If infeasible, Applicant must explain to Public Works the reasons for needing to move down each rung of the design preference ladder. Applications using Preference Five
(disfavored design) must be approved by the Planning Department. Approval will not be granted unless Applicant shows this design is the only feasible one.

- **Skirting:** For pole-top antenna, an antenna skirt is required to create a streamlined appearance.

- **4G antenna limitations:**
  - Pole-top 4G antenna shall not exceed 48” x 16” (length, diameter).
  - Side-mounted 4G antenna shall not exceed either three cubic feet in volume or 28” x 16” x 11” (length, width, depth).

- **5G antenna/radio unit size limitations:** A maximum of three combined 5G antenna/radio units may be used. The volume of each antenna/radio unit may not exceed three cubic feet. The volume limitation does not apply to: (a) any cross-arms or other fixtures that are necessary to attach the antenna/radio units to the pole; and (b) any necessary cabling.

- **Ancillary equipment**
  - **Multiple cabinets:**
    - Multiple cabinets for ancillary equipment shall appear to be no more than five distinctive components per pole.
    - Ancillary equipment cabinets shall be stacked and consolidated where feasible.
    - No single ancillary equipment cabinet may exceed 36” x 16” x 12” (length, width, depth).
  - **Single cabinet:**
    - Ancillary equipment may be placed within a single cabinet provided the single cabinet would not interfere with any authorized pole attachments.
    - The single cabinet shall not exceed 66” x 14” x 10” (length, width, depth).
  - **General requirements:**
    - All ancillary equipment shall be put into cabinets.
    - Ancillary equipment cabinets shall be flush-mounted where allowed, otherwise 6” to 8” from pole.
    - Total volume of all ancillary equipment cabinets may not exceed 28 cubic feet.
    - Location of ancillary equipment cabinet(s) shall be as required by CPUC General Order 95.

- **Clutter:** Existing pole clutter shall be reduced where feasible (i.e., unused cables, lines, equipment).

- **Equipment color:** All equipment, equipment cabinets, shrouds, and skirts (if necessary) shall be painted to match existing pole color.
• Special requirements for wood poles near parks (Tier C Compatibility Standard)
  o Antennas:
    ▪ Must be side-mounted
    ▪ Shall maintain a maximum 2’ horizontal clearance from the centerline of the pole.
  o Ancillary equipment:
    ▪ No piece of ancillary equipment may exceed 36” x 11” x 10” (length, width, depth).
    ▪ Ancillary equipment must be a minimum height of 8’ above the ground.
    ▪ Total volume of all ancillary equipment may not exceed 15 cubic feet in volume.

• General requirements for steel and concrete utility poles (all Compatibility Standards):
  o Maximum antenna size:
    ▪ 4G antenna shroud: 48” x 16” (length, diameter).
    ▪ 5G hexagonal shroud: 24” x 25” (length, diameter), but radio/antenna bulb out portion may be 28” in diameter.
    ▪ Volume: No antenna may exceed six cubic feet in volume.
  o Number of antennas: No more than three antennas per pole.
  o Maximum ancillary equipment size:
    ▪ Multiple cabinets: If ancillary equipment will be placed in more than one cabinet, no single cabinet shall exceed 36” x 16” x 9” (length, width, depth) (spaced as close as possible).
    ▪ Single cabinet: Ancillary equipment may be placed within a single cabinet provided the single cabinet would not interfere with any authorized pole attachments. The single cabinet shall not exceed 66” x 14” x 10” (length, width, depth).
    ▪ Volume: Total volume of all ancillary equipment may not exceed 28 cubic feet.
  o Antenna and equipment locations and clearances:
    ▪ 4G antenna to be at top of pole.
    ▪ 5G equipment to be as close as possible to streetlight arm without interfering with banners.
    ▪ Other side-mounted equipment must be at a minimum height of 20’1” or as otherwise required by PG&E.
  o Equipment shape:
    ▪ 4G antenna: Cone-shaped cylinder is preferred.
    ▪ 5G antenna: Hexagonal shroud; no preference for shape of bottom.
  o Equipment color: All equipment, equipment cabinets, shrouds, and skirts (if necessary) must match existing pole color.
  o Cabling: No exposed cabling. Only conductors may be installed inside the street light pole.
  o Replacement pole: Must be comparable to existing pole design but meet structural requirements.
  o Signage:
- Identification plate: One identification plate with a maximum dimension of 4” x by 6” (length, width) (to specify facility owner’s name and contact information) shall be attached directly to pole.
- Warning signs: Other signage that may be required by federal law.
  - **Recreation & Park Department requirements.** For streetlight poles fronting City parks or open spaces, no antenna may exceed 2.5 cubic feet in volume.

**General requirements for all utility poles:**
- **Design approval:** Design approval from Recreation & Park Department staff may be required for utility poles fronting City parks or open spaces and located in: (i) S.F. Planning Code Article 10 landmark districts or in front of Article 10 designated landmarks; (ii) S.F. Planning Code Article 11 conservation districts or in front of Article 11 designated buildings; or (iii) front of any of the parks and natural areas identified in Exhibit A attached hereto.
  - **Permit application materials:** As may be required by Article 25 of the Public Works Code and any applicable Public Works Order.

**Modification of permitted wireless service facilities:** The Objective Standards contained in this order apply only to applications to install new Personal Wireless Service Facilities. They do not apply to applications to modify existing permitted Personal Wireless Service Facilities that meet the requirements of Public Works Code section 1522(c)(1).
EXHIBIT A

CITY PARKS AND NATURAL AREAS

The City Parks and Natural Areas listed below could be sensitive to the installation of fronting Personal Wireless Service Facilities. Additional review by Recreation and Park Department staff for consistency with historic, architectural, scenic or natural elements is required.

City Parks

- Alamo Square
- Alta Plaza Park
- Bayview Playground
- Civic Center
- Embarcadero Plaza, including Sue Bierman Park
- Franklin Square
- Francisco Park
- Fay Park
- Garfield Square
- Golden Gate Park
- Holly Park
- India Basin Shoreline Park
- Jackson Playground
- Japantown Peace Plaza
- Lafayette Park
- Lake Merced
- Lincoln Park
- Marina Green & Yacht Harbor
- McKinley Square
- McLaren Park, including Herz Playground, Crocker Amazon and Louis Sutter
- Mission Dolores Park
- Palace of Fine Arts
- Pioneer Park/Telegraph Hill, including Coit Tower
- Portsmouth Square
- South Park
- Stern Grove
- Sunnyside Conservatory
- Union Square
- Washington Square
Recreation and Park Department-defined Natural Areas, identified in the Natural Areas Management Plan, 2018

- 15th Avenue Steps Park
- Balboa Natural Area (parcel 4 at northeast corner of Balboa Avenue and Great Highway) □ Bay View Hill
- Bernal Heights Park
- Billy Goat Hill
- Brooks Park
- Buena Vista Park
- Castro-Duncan Open Space
- Corona Heights Park
- Dorothy W. Erskine Park
- Edgehill Mountain
- Fairmount Plaza
- Glen Park/Glen Canyon, including O’Shaughnessy Hollow
- Golden Gate Heights
- Grandview Park
- Hawk Hill Park
- India Basin Open Space
- Interior Greenbelt
- Kite Hill
- Lakeview/Ashton Mini Park
- Mount Davidson
- Mount Olympus
- Palou Phelps Mini Park
- Pine Lake Park
- Portola Open Space □ Ridgetop Plaza
- Rocky Outcrop Park
- Tank Hill
- Topaz Open Space
- Twin Peaks
Huff, Nicolas  
Bureau Manager

Ko, Albert J  
Deputy Director and City Engineer

Degrafinried, Alaric  
Acting Director