

Resolution No. 9847  
Resolution of the Council of the City of Palo Alto Amending  
Objective Aesthetic, Noise, and Related Standards for  
Wireless Communication Facilities in the Public Rights of Way

The Council of the City of Palo Alto RESOLVES as follows:

SECTION 1. Findings and Declarations.

- a. On April 15, 2019, the City Council adopted a resolution establishing objective aesthetic, noise, and related standards for Wireless Communication Facilities (WCFs) on Streetlight and Wood Utility Poles in the Public Rights-of-Way.
- b. The adopted standards for WCFs on Wood Utility Poles contain a provision that was included as a result of an administrative error.
- c. The City Council wishes to adopt amended standards for WCFs on Wood Utility Poles to correct this error.
- d. The City Council wishes to revise the pole location standards to clarify that WCFs shall not be located on poles outside of the public rights of way (e.g. along private rear or side lot lines).
- e. The City Council wishes to adopt a new interim standard setback from public schools for all WCFs on Streetlight Poles and Wood Utility Poles.

SECTION 2. Objective Standards for WCFs on Streetlight Poles in the Public Rights-of-Way Amended.

The City Council hereby adopts the standards in Exhibit 1, attached to and incorporated into this resolution as if fully set forth herein, for Wireless Communication Facilities on Streetlight Poles in the Public Rights-of-Way.

SECTION 3. Objective Standards for WCFs on Wood Utility Poles in the Public Rights-of-Way Amended.

The City Council hereby adopts the standards in Exhibit 2, attached to and incorporated into this resolution as if fully set forth herein, for Wireless Communication Facilities on Wood Utility Poles in the Public Rights-of-Way.

SECTION 4. If any section, subsection, clause or phrase of this resolution or the attached standards is for any reason held to be invalid, such decision shall not affect the validity of the remaining portion or sections of the resolution and exhibits. The Council hereby declares that it should have adopted the resolution and exhibits, and each section, subsection, sentence, clause or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid.

SECTION 5. Environmental Review. The Council finds that this resolution is exempt from

the provisions of the California Environmental Quality Act ("CEQA"), pursuant to Section 15061 of the CEQA Guidelines, because it does not authorize the construction of Wireless Communication Facilities in any locations where such facilities are not already permitted; therefore it can be seen with certainty that there is no possibility that the ordinance will have a significant effect on the environment. The resolution is further exempt under CEQA Guidelines sections 15301, 15302, 15303 and 15305 because it simply represents part of a comprehensive regulatory scheme governing minor alterations to existing facilities or small structures.

INTRODUCED AND PASSED: June 17, 2019

AYES: CORMACK, DUBOIS, FILSETH, FINE, KNISS, TANAKA

NOES: KOU

ABSENT:

ABSTENTIONS:

ATTEST:

DocuSigned by:  
*Beth Minor*  
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\_\_\_\_\_  
City Clerk

DocuSigned by:  
*Eric Filseth*  
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Mayor

APPROVED AS TO FORM:

DocuSigned by:  
*Aylin Bilin*  
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\_\_\_\_\_  
Deputy City Attorney

APPROVED:

DocuSigned by:  
*Ed Suikada*  
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City Manager

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*[Signature]*  
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Director of Planning and Community Environment

EXHIBIT 1

**Streetlight Poles**

**Standard designs for WCFs located on Streetlights** – An applicant proposing to attach to a Streetlight in the public right of way shall utilize one of the other designs specified herein.

- a) **Underground design:** Radio equipment shall be placed in an underground vault in the pedestrian right of way. The antennae shall be placed in a shroud at the top of a nearby pole.
  - i) Underground vaults shall be the minimum volume necessary to house WCF equipment. Application materials should explain why the proposed dimensions are required. In no event shall vault dimensions exceed 5 feet 8-inches x 8 feet 2-inches x 5 feet 7-inches or 260 cu. ft., excluding space required for ventilation or sump pump equipment.
- b) **Top-mounted design:** All equipment shall be enclosed within a shroud at the top of the pole containing both radio and antenna equipment.
  - i) Top-mounted equipment shrouds shall not exceed 5.5 feet from the top of the streetlight pole and shall taper to meet the pole above the mast arm. The diameter of the antenna and shroud shall not exceed 15” at their widest.
- c) **Minimal sunshield design:** Radio equipment shall be enclosed within one or two sunshields not exceeding 8 inches wide nor 0.75 cubic feet in volume each, mounted directly to the side of the pole. Sunshields shall be attached at least 12 feet above ground level. To the extent separate antennae are required, antennae shall be placed in a shroud at the top of the pole.
- d) **Existing signage:** Radio equipment shall be attached to a pole behind existing signage under the following conditions:
  - i) Radio equipment shall be placed within a shroud that does not exceed the dimensions of the sign in height and width, nor 4 inches in depth, including any required mounting bracket.
  - ii) In no event shall WCF equipment obscure or interfere with the visibility or functioning of the signage.
  - iii) To the extent separate antennae are required, antennae shall be placed in a shroud at the top of the pole.

**General standards for all WCFs located on Streetlights in the public right of way**

WCF equipment and shrouds

- 1) Antennae shall be the smallest antennae possible to achieve the coverage objective. Except in the case of top-mounted designs, antennae shall not exceed 3 feet from the top of the streetlight pole and the associated “antenna skirt” shall taper to meet the pole above the mast arm. The diameter of the antenna and shroud shall not exceed 15” at their widest.
- 2) All shrouds and equipment shall be painted to match Public Works Department (PWD) standards or the existing pole, as applicable.
- 3) All shrouds and equipment shall be designed without gaps between materials or sky visible between component surfaces.
- 4) Equipment that cannot propagate an adequate signal within the shrouding required by the standard designs shall be attached to a streetlight pole at a height of 2 feet below the light mast or higher. Each instance of such equipment shall not exceed 0.85 cu. ft. nor shall the total volume of such equipment and any shrouding exceed 2.6 cu. ft. per streetlight pole.

Height

EXHIBIT 1

- 5) Except for top-mounted designs, poles and all attachments will not exceed the height of similar surrounding poles by more than 3 feet. For top-mounted designs, poles and all attachments shall not exceed the height of similar surrounding poles by more than 6 feet.
- 6) Replacement poles will conform to PWD style guidelines where the City has adopted standards and will match the pole being replaced where no standards exist. For integrated pole designs, poles shall incorporate decorative elements (e.g. fluting, decorative mast arm and luminaire, etc.) from PWD standards or existing poles, as applicable.

Landscaping

- 7) At the direction of the Urban Forestry division, Applicant shall provide street trees and/or smaller amenity trees that interrupt direct views of WCF equipment where Urban Forestry determines appropriate space exists within 35 feet of the pole.
- 8) Any existing landscaping removed or damaged by installation shall be replaced in kind.

Noise

- 9) Noise shall comply with PAMC Chapter 9.10 and shall be consistent with noise-related Comprehensive Plan goals and policies.
  - a) In residential areas with an average 24-hour noise level ( $L_{dn}$ ) at or below 60 decibels (dB), noise generated by WCF equipment shall not cause the  $L_{dn}$  exceed 60dB or to increase by 5.0 dB or more, even if the resulting  $L_{dn}$  would remain below 60 dB.
  - b) In residential areas with an  $L_{dn}$  above 60 dB, noise generated by WCF equipment shall not cause the average to increase by 3.0 decibels (dB) or more.

Curb clearances

- 10) If placed below 16' above ground level, attachments shall not be placed closer than 18" to the curb, nor shall they extend over the sidewalk (Caltrans Highway Design Manual Section 309).
- 11) WCF node equipment must be at least 3' from a curb cut.

Miscellaneous

- 12) WCF installations shall not require any changes in the City's existing banner marketing program.
- 13) All cabling shall be routed entirely within the pole or an attached shroud.
- 14) Safety signage shall be the smallest size possible to accomplish its purpose.
- 15) Power disconnects shall be placed in a vault near the base of the pole.
- 16) Except as provided in these standards, no equipment cabinets may be placed at grade.
- 17) Light mast orientation, height, color temperature and other photometric information shall comply with PWD standards.

Pole location

- 18) Nodes shall utilize existing streetlight pole locations. Any new pole locations are prohibited unless approved through PWD/CPAU pole placement application.
- 19) Streetlight nodes at a designated gateway location or along a scenic corridor shall not utilize a top-mounted design.
- 20) WCF nodes shall not be placed in locations within 300 feet of any parcel containing a public school.

## EXHIBIT 2

## Wood Utility Poles

**Standard designs for WCFs located on Wood Utility Poles** – An applicant proposing to attach to a wood utility pole in the public right of way shall utilize one of the other designs specified herein.

- a) **Underground design:** Radio equipment shall be placed in an underground vault in the pedestrian right of way. The antennae shall be placed in a shroud at the top of a nearby pole.
  - i) Underground vaults shall be the minimum volume necessary to house WCF equipment. Application materials should explain why the proposed dimensions are required. In no event shall vault dimensions exceed 5 feet 8-inches x 8 feet 2-inches x 5 feet 7-inches or 260 cu. ft., excluding space required for ventilation or sump pump equipment.
- b) **Top-mounted design:** All equipment shall be enclosed within a shroud at the top of the pole containing both radio and antenna equipment.
  - i) Top-mounted equipment shrouds shall not exceed 5.5 feet from the top of the pole or bayonet attachment, if one is used, and shall taper to meet the pole above the mast arm. The diameter of the antenna and shroud shall not exceed 15” at their widest.
- c) **Minimal sunshield design:** Radio equipment shall be enclosed within one or two sunshields not exceeding 8 inches wide nor 0.75 cubic feet in volume each, mounted directly to the side of the pole. To the extent separate antennae are required, antennae shall be placed in a shroud at the top of the pole.
- d) **Existing signage:** Radio equipment shall be attached to a pole behind existing signage under the following conditions:
  - i) Radio equipment shall be placed within a shroud that does not exceed the dimensions of the sign in height and width, nor 4 inches in depth, including any required mounting bracket.
  - ii) In no event shall WCF equipment obscure or interfere with the visibility or functioning of the signage.
  - iii) To the extent separate antennae are required, antennae shall be placed in a shroud at the top of the pole.

### General standards for all WCFs located on Wood Utility Poles in the public right of way

WCF equipment and shrouds

- 1) Antennae shall be the smallest antennae possible to achieve the coverage objective. Antennae shall not exceed 5.5 feet from the top of the pole or bayonet attachment, if one is used. The diameter of the antenna and shroud shall not exceed 15” at their widest.
- 2) Bayonet attachments and equipment or antennae at the top of the shroud shall be covered by a single integrated shroud and “antenna skirt” that shall meet the pole without any gaps.
- 3) All conduit shall be mounted flush to the pole.
- 4) All shrouds and equipment shall be painted to match PWD standards or the existing pole, as applicable. Paint shall be maintained regularly and shrouds shall be repainted if necessary to match changes in pole color over time.
- 5) All shrouds and equipment shall be designed without gaps between materials or sky visible between component surfaces.
- 6) Equipment that cannot propagate an adequate signal within the shrouding required by the standard designs shall be attached to the top of the pole or on a cross arm or brace protruding from the pole to the minimum extent necessary to comply with safety

## EXHIBIT 2

standards including GO95. Such cross arm shall be placed as high on the pole as technically feasible. Each instance of such equipment shall not exceed 0.85 cu. ft. nor shall the total volume of such equipment exceed 2.6 cu. ft. per wood utility pole.

## Height

- 7) For wood utility poles carrying power lines, replacement poles and pole-top bayonet attachments shall be the minimum height necessary to provide GO-95 mandated clearance between WCF equipment and power lines.
- 8) For wood utility poles without power lines, any pole top equipment shall not increase the height of the pole by more than six feet.
- 9) In no event shall the total height of a pole or replacement pole, including all equipment exceed 55 feet.
- 10) Replacement poles will conform to all standards adopted by CPAU.

## Landscaping

- 11) At the direction of the Urban Forestry division, Applicant shall provide street trees and/or smaller amenity trees that interrupt direct views of WCF equipment where Urban Forestry determines appropriate space exists within 35 feet of the pole.
- 12) Any existing landscaping removed or damaged by installation shall be replaced in kind.

## Noise

- 13) Noise shall comply with PAMC Chapter 9.10 and shall be consistent with noise-related Comprehensive Plan goals and policies.
  - a) In residential areas with an average 24-hour noise level ( $L_{dn}$ ) at or below 60 decibels (dB), noise generated by WCF equipment shall not cause the  $L_{dn}$  exceed 60dB or to increase by 5.0 dB or more, even if the resulting  $L_{dn}$  would remain below 60 dB.
  - b) In residential areas with an  $L_{dn}$  above 60 dB, noise generated by WCF equipment shall not cause the average to increase by 3.0 decibels (dB) or more.

## Curb clearances

- 14) If placed below 16' above ground level, attachments shall not be placed closer than 18" to the curb, nor shall they extend over the sidewalk (Caltrans Highway Design Manual Section 309).
- 15) WCF node equipment must be at least 3' from a curb cut.

## Miscellaneous

- 16) Safety signage shall be the smallest size possible to accomplish its purpose.
- 17) Power disconnects shall be placed on the wood pole or in a vault near the base of the pole.
- 18) Except as provided in these standards, no equipment cabinets may be placed at grade.
- 19) If applicable, light mast orientation, height, color temperature and other photometric information shall comply with PWD standards.

## Pole location

- 20) Nodes shall utilize existing wood utility pole locations. Any new pole locations are prohibited unless approved through PWD/CPAU pole placement application.
- 21) Wood utility poles at a designated gateway location or along a scenic corridor shall not utilize a top-mounted design.
- 22) WCF nodes shall utilize only wood utility poles located in the public rights of way.
- 23) WCF nodes shall not be placed in locations within 300 feet of any parcel containing a public school.

## Certificate Of Completion

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Source Envelope:	
Document Pages: 6	Signatures: 5
Certificate Pages: 2	Initials: 0
AutoNav: Enabled	Envelope Originator:
Envelopeld Stamping: Enabled	Kim Lunt
Time Zone: (UTC-08:00) Pacific Time (US & Canada)	250 Hamilton Ave
	Palo Alto , CA 94301
	kimberly.lunt@cityofpaloalto.org
	IP Address: 12.220.157.20

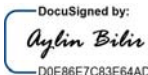
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## Signer Events

Aylin Bilir  
 Aylin.Bilir@CityofPaloAlto.org  
 Deputy City Attorney  
 Security Level: Email, Account Authentication (None)

## Signature


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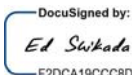
Jonathan Lait  
 Jonathan.Lait@CityofPaloAlto.org  
 Interim Director Planning and Community Environment  
 City of Palo Alto  
 Security Level: Email, Account Authentication (None)

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### Electronic Record and Signature Disclosure: Not Offered via DocuSign

Ed Shikada  
 ed.shikada@cityofpaloalto.org  
 City Manager  
 City of Palo Alto  
 Security Level: Email, Account Authentication (None)

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 Signed: 7/29/2019 8:59:23 AM


### Electronic Record and Signature Disclosure: Not Offered via DocuSign

Eric Filseth  
 eric.filseth@cityofpaloalto.org  
 Mayor  
 Security Level: Email, Account Authentication (None)

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 64244717295F422...  
 Signature Adoption: Pre-selected Style  
 Using IP Address: 12.220.157.20

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### Electronic Record and Signature Disclosure: Not Offered via DocuSign

Signer Events	Signature	Timestamp
Beth Minor Beth.Minor@CityofPaloAlto.org City Clerk City of Palo Alto Security Level: Email, Account Authentication (None)	 Signature Adoption: Pre-selected Style Using IP Address: 12.220.157.20	Sent: 7/29/2019 9:53:34 AM Viewed: 7/29/2019 9:57:31 AM Signed: 7/29/2019 9:57:39 AM

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Agent Delivery Events	Status	Timestamp
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Intermediary Delivery Events	Status	Timestamp
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Certified Delivery Events	Status	Timestamp
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Witness Events	Signature	Timestamp
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Notary Events	Signature	Timestamp
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