

ORDINANCE NO. 19-04

**A TEMPORARY ORDINANCE OUTLINING REGULATIONS
AND STANDARDS REGARDING THE 5G NETWORK, CELL
SITING FOR THAT NETWORK, MICRO WIRELESS
FACILITIES, AND/OR SMALL WIRELESS FACILITIES FOR
WASATCH COUNTY, UTAH.**

RECITALS

WHEREAS, Pursuant to Federal Communications Commission (FCC) ruling 17-79 and Utah Chapter 54.21, and in order to provide for the health, safety, welfare, promote the prosperity, convenience, property values, and aesthetics of the county, Wasatch County desires to have provisions in place to address small wireless facilities and their siting; and

WHEREAS, it is the intent of the County to regulate aesthetics and how said facilities will fit in with the existing infrastructure;

WHEREAS, many areas of the County use decorative street lights and other structures within the right-of-way; and

WHEREAS, the County, is attempting to provide a reasonable way for the siting of these uses while impacting the County and residents as minimally as possible; and

WHEREAS, the County Legislative Body finds that there is a compelling public interest in having such a zoning ordinance for the orderly and appropriate regulation within the County; and

WHEREAS, it is the opinion of the County Legislative Body that this ordinance is necessary for the immediate preservation of the peace, health and safety of the county's inhabitants, and for this reason should, pursuant to Wasatch County Ordinance 3.03.01(E), take effect immediately upon publication; and

WHEREAS, Wasatch County Code and Utah Code allow for the County to enact Temporary Land Use Regulations without prior planning commission consideration.

NOW, THEREFORE, the County Legislative Body of Wasatch County ordains as follows:

SECTION I: Findings. The county legislative body hereby finds:

- 1) there is a compelling, countervailing public interest in having such a zoning ordinance for the orderly and appropriate regulation within the County pursuant to Utah Code 17-27a-504(a);

- 2) this ordinance is necessary for the immediate preservation of the peace, health and safety of the county's inhabitants, and for this reason should, pursuant to Wasatch County Ordinance 3.03.01(E), take effect immediately upon publication; and
- 3) the legislative body finds that expedited enactment of this land use ordinance is necessary for the preservation of the peace and welfare of the county and its inhabitants pursuant to Wasatch Code 16.02.05(A)(4).

SECTION II: Enactment:

The attached amendment to Wasatch Code 16.35 is hereby is enacted.

The attached amendment shall take effect immediately upon publication and shall be in effect for six months.

This ordinance shall take effect immediately and shall be in effect for six (6) months pursuant to the provisions of the Utah Code Section 17-27a-504(2).

SECTION III: Repealer. If any provisions of the County Code heretofore adopted are inconsistent herewith they are hereby repealed.

SECTION IV: Amendment of Conflicting Ordinances. To the extent that any ordinances, resolutions, or policies of Wasatch County conflict with the provisions of this ordinance, they are hereby amended to comply with the provisions hereof.

SECTION V: Effective Date. This ordinance shall become effective immediately upon execution by the Chair of the County Council, and the county clerk is directed to immediately complete public notice requirements.

SECTION VI: Severability. If any section, subsection, sentence, clause, or phrase of this ordinance is declared invalid or unconstitutional by a court of competent jurisdiction, said portion shall be severed and such declaration shall not affect the validity of the remainder of this ordinance.

SECTION VII: Public Notice. The Wasatch County Clerk, and ex officio Clerk of the Wasatch County Council, is hereby ordered, in accordance with the requirements of Section 17-53-208, Utah Code Annotated, 1953, as amended, to do as follows:

- a. Enter at length this ordinance in the ordinance book;
- b. Deposit a copy of this ordinance in the office of the County Clerk;
- c. Publish a short summary of this ordinance, together with a statement that a complete copy of the ordinance is available at the County Clerk's office and with the name of the members voting for and against the ordinance, for at least one publication in a newspaper published in and having general circulation in the county; or post a complete copy of this ordinance in nine (9) public places within the County.

DATED this 10 day of April 2019.

Danny Goode
Danny Goode, Wasatch County Council Chairman

Attest:
Michelle B. Crook
Michelle B. Crook – Wasatch County Clerk-Auditor



	VOTE
Danny Goode, Chairman	_____
Kendall Crittenden, Vice-Chair	y_____
Marilyn Crittenden	y_____
Jeff Wade	y_____
Mark Nelson vice chair	y_____
Steve Farrell	y_____
Spencer Park	y_____

ADOPTION OF ORDINANCE AFFIDAVIT

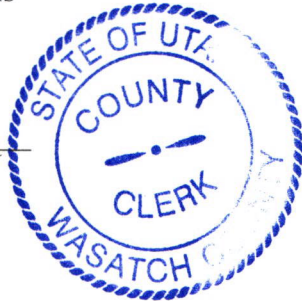
STATE OF UTAH)
): ss.
COUNTY OF WASATCH)

I, the undersigned, the duly qualified and acting County Clerk of Wasatch County, Utah, and ex officio Clerk of the Wasatch County Council do hereby further certify, according to the records of said Council in my official possession, and upon my own knowledge and belief, that I have fulfilled the requirements of Section 17-53-208, Utah Code Annotated, 1953, as amended, by:

- [X] (a) Causing this ordinance to be entered at length in the ordinance book;
[X] (b) Causing three (3) copies of this ordinance to be deposited in the office of the County Clerk;
[X] (c) Causing a short summary of this ordinance, together with a statement that a complete copy of the ordinance is available at the County Clerk's office and with the name of the members voting for and against the ordinance to be published for at least one publication in The Wasatch Wave, a newspaper of general circulation within the geographical jurisdiction of Wasatch County; or posting a complete copy of this ordinance in nine (9) public places within the County.

IN WITNESS WHEREOF, I have hereunto subscribed my official signature and impressed hereon the official seal of the County Council of Wasatch County, Utah, this 10 day of April, 2019.

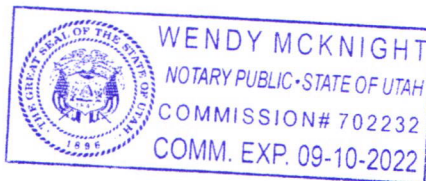
Michelle B. Crook
Michelle B. Crook
Wasatch County Clerk / Auditor



SUBSCRIBED AND SWORN to me, a Notary Public, this 10 day of April, 2019.

Wendy McKnight
Notary Public

Residing in: Wasatch
My commission expires:
09-10-2022



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Section 1: Background/Purpose

1.1 Background

On September 26, 2018 the Federal Communications Commission (FCC) issued its Declaratory Ruling and Third Report and Order (R&O).¹ Absent a judicial stay, Wasatch County (the “County) should publish design standards within 180 days of the R&O’s publication,² and incorporate FCC guidance on municipal utility pole aesthetics.

Municipal aesthetics requirements will not be preempted if they are: (1) reasonable; (2) no more burdensome than those applied to other types of infrastructure deployments; and (3) objective and published in advance.³

The following design standards provide design and aesthetic requirements and specifications that all small wireless facilities installed on a municipally-own utility pole and within a municipal right of way (ROW) must meet prior to installation

As with any pole attachments providers shall consider the aesthetics of the existing street lights and other County infrastructure near proposed small cell locations.

1.2 Definitions

ANTENNA: Communication equipment that transmits or receives an electromagnetic radio frequency signal used in the provision of wireless service.

APPLICABLE CODES: Wasatch County Land Use and Development Code, Utah Code 17-27a. Utah Code 54-21, The International Building Code, the International Fire Code, the National Electrical Code, the International Plumbing Code, and the International Mechanical Code, as adopted and amended under Utah Code Annotated, title 15A, State Construction and Fire Codes Act.

¹ Federal Communications Commission, Declaratory Ruling and Third Report and Order: *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, WT Docket No. 17-79 and WC Docket No. 17-84, FCC 18-133.

² *Id* at ¶ 89, p. 46.

³ *Id* at ¶ 86, p. 45.

APPLICABLE STANDARDS: The structural standards for antenna supporting structures and antenna, known as ANSI/TIA-222, from the American National Standards Institute and the Telecommunications Industry Association.

APPLICANT: A wireless provider or their authorized agent who submits an application.

APPLICATION: A request submitted by a wireless provider for a permit to co-locate a small wireless facility in a right-of-way or to install, modify or replace a utility pole or a wireless support structure.

BACKHAUL NETWORK: Means the lines that connect a provider's WCFs to one or more cellular telephone switching offices or long distance providers, or the public switched telephone network.

CANTENNA: is a waveguide antenna, directional in nature, used to better detect or broaden a wireless network's range generally in the shape of a can.

CO-LOCATE: To install, mount, maintain, modify, operate, or replace a small wireless facility on an existing wireless support structure.

COUNTY or Wasatch County Means Wasatch County Corporation

DESIGN DISTRICT: An area that is zoned or otherwise designated by Municipal ordinance or County Code, and for which the County maintains and enforces unique design and aesthetic standards on a uniform and nondiscriminatory basis.

ELIGIBLE SUPPORT STRUCTURE: Any monopole, utility pole, wireless support structure or related accessory equipment, as defined in this chapter, provided that it is existing at the time the relevant application is filed with the County.

FCC: Means the Federal Communications Commission, or any successor thereto.

LOCAL STREET: A right-of-way designed primarily to serve land-access functions and projected trip length less than one mile, with two (2) lanes of ten feet (10') to twelve feet (12') in width and a design speed of twenty (20) to thirty (30) miles per hour.

MICRO-WIRELESS FACILITY: Refers to a type of very small wireless facility that, not including any antenna is no larger in dimension than twenty four inches (24") in length, fifteen inches (15") in width, and twelve inches (12") in height, on which any exterior antenna is no longer than eleven inches (11"), and which only provides Wi-Fi service.

MONOPOLE: A structure in the right-of-way erected by an applicant or provider specifically to support SWFs.

NONDISCRIMINATORY: Describes the equal treatment of similar situated entities unless there is a reasonable, competitively neutral basis for different treatment.

PERMIT: Written authorization from the County Planner or their assign, issued as part of a Building Permit, allowing the provider to perform work pursuant to the installation of a small wireless facility.

PROVIDER: Means a wireless service provider or wireless infrastructure provider.

RELATED ACCESSORY EQUIPMENT: Refers to equipment used in conjunction with an antenna or other component of SWFs which may be attached to a wireless support structure or located on the ground at or near the base of a wireless support structure.

RF: Means radio frequency.

RIGHT-OF-WAY: Refers to any area within, on, below, or above a public road, highway, street or alley, and may include sidewalks, park-strips and other areas associated with them and controlled by the County.

SMALL WIRELESS FACILITY (SWF): A wireless facility on which each provider's antenna could fit within an enclosure of no more than six (6) cubic feet in volume and for which all related accessory equipment, whether mounted on the pole or the ground, is cumulatively no more than twenty eight (28) cubic feet in volume.

SUBSTANTIAL MODIFICATION: A modification to an eligible support structure which: a) increases the height of the structure by more than ten percent (10%) or more than ten feet (10'), whichever is greater; b) involves adding an appurtenance to the body of the structure that would protrude from the edge of the structure more than six feet (6'); c) involves the installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four (4) cabinets; involves the installation of any new equipment cabinets on the ground if there are no pre-existing ground cabinets associated with the structure; or involves the installation of ground cabinets that are more than ten percent (10%) larger in height or overall volume than any other ground cabinets associated with the structure; d) entails any excavation or deployment outside of the current site; or e) would defeat the concealment elements of the eligible support structure.

TECHNICALLY FEASIBLE: The demonstrated measure of the feasibility of a proposal as it relates specifically to projected constraints of engineering, impacts to the signal, spectrum, stability, or practical interference with other facilities or properties.

Section 2: General Standards

2.1 Small Cell Equipment Standards:

Aesthetics	Equipment should match the aesthetics of surrounding poles.
Internal Installs	Equipment shall be installed within an existing pole when technologically feasible and always on a new pole. Any equipment installed within a pole may not protrude from the pole except to the extent reasonably necessary to connect to power or a wireline.
External Shrouding	The antenna shall be contained in a cantenna and any other equipment shall be contained in an equipment cabinet, unless the visual impact can otherwise be reduced by its location on the pole.
Width	May not exceed in width the diameter of the pole by more than 3 inches on either side.
Sidearm Installs	If permitted, may not allow the furthest point of the enclosure to extend more than 18 inches from the pole.
Conduits	All cables shall be in conduits and shall be flush with the pole unless required to be installed inside the pole.
Hardware Attachment	All hardware attachments should be hidden. Welding onto existing equipment is not permitted.
Color	All equipment should be painted to match pole aesthetics. Paint should be powder coated over zinc paint. If a wood pole, the visible attachments and hardware shall be colored to match the wood.
Equipment Access Doors	Lockable access door sized to install, maintain, and remove all small cell equipment as needed shall meet provider's requirements. The County may require access, but provider must grant permission.
Cables	All cables should be clearly labeled for future identification.
Cantennas	Cantenna must be mounted directly on top of the pole, unless a side arm installation is required by a pole owner. A tapered transition between the upper pole and cantenna is required.

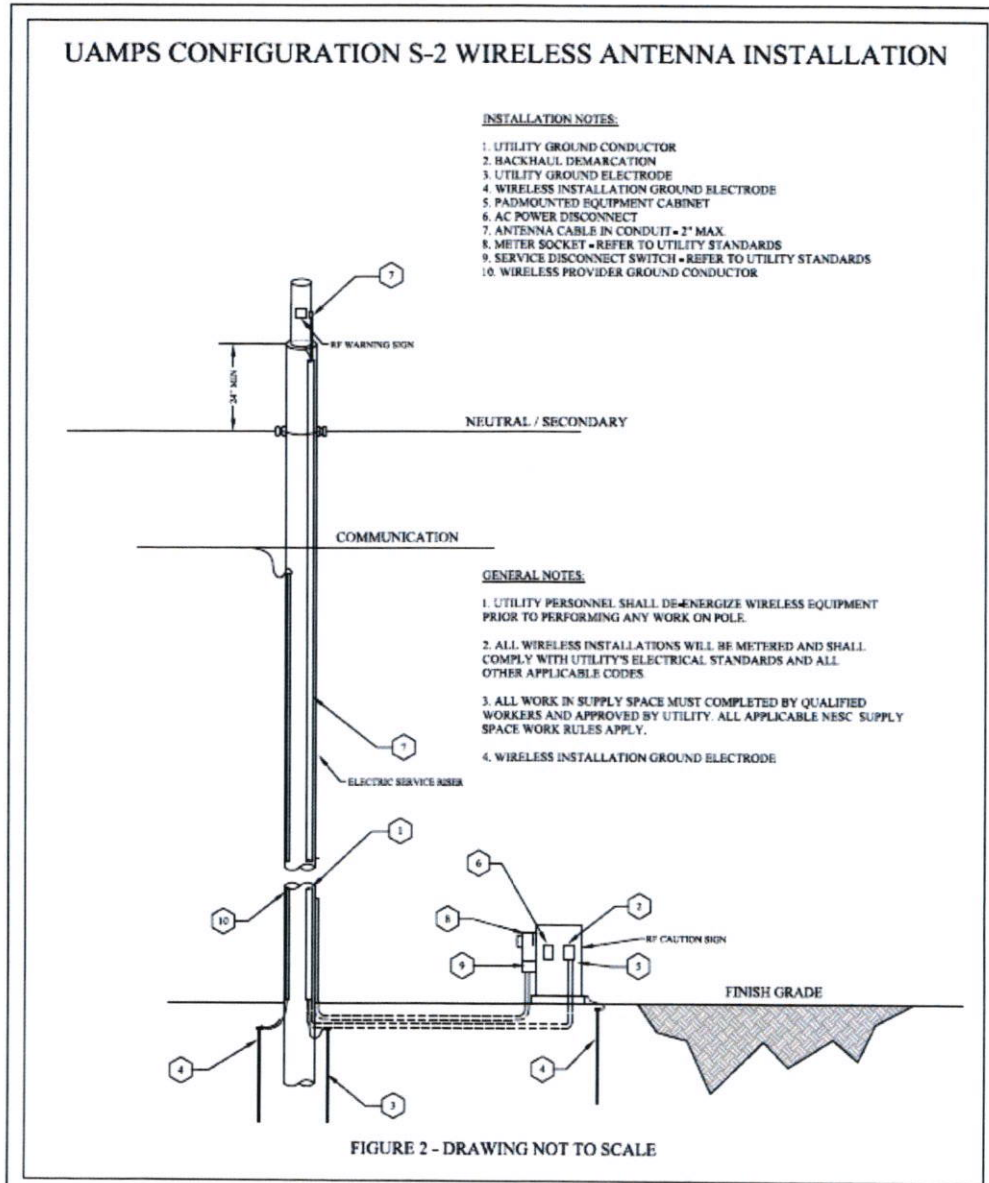
Stickers	Any on-pole cabinet and ground mounted utility box should be labeled a (1) RF warning sticker, background to match pole color, no larger than 4 x 6 inches. Facing to the street near the elevation of the antennae, (2) 4-inch by 6-inch (maximum) plate with the provider's name, location identifying information, and 24-hour emergency telephone number, and (3) No advertising, logos or decals.
Lights	There shall be no lights on the equipment unless required by federal law.
Ground Mounted Equipment Box	Must meet and follow existing County ordinances for ground mounted utility boxes and be attached to a concrete foundation and painted to match surroundings.
Height of Equipment on Pole	The lowest point may not be lower than 8 feet from the grade directly below the equipment enclosure.
Power Meter	Required by the County and in a location that (1) minimizes its interference with other users of the County's right-of-way including, but not limited to, pedestrians, motorists, and other entities with equipment in the right-of-way, and (2) minimizes its aesthetic impact.

2.2 General Requirements:

- Noise Limitation: The County included a noise limitation for ambient sound.
- Pole Aesthetics: Provider should provide proposed pole aesthetics as part of their application.
- Position: Poles should not significantly obstruct property sight lines, at the intersection of property lines, provide clearance for existing utilities, and preference that new poles be located in park strips.
- ROW Position: All equipment located within the public ROW shall be located such that it meets ADA requirements and does not obstruct, impede, or hinder usual pedestrian or vehicular travel or interferes with the operation and maintenance of signal lights, signage, street lights, street furniture, fire hydrants, or business district maintenance.
- Power and Ground Utility Box: Back up batteries must be in ground mounted utility box or underground where possible and separate meter and disconnect is required.

Section 3: Attachments to Utility Poles

3.1 Typical Configuration



UAMPS

**UAMPS
WIRELESS ANTENNA INSTALLATION
SPECIFICATION S-2
WOOD SECONDARY POLE**

S-2
WOOD SECONDARY POLE
SCALE: NONE
DATE: 11.14.2018
REV: B
REV DATE: 03.12.2019

3.2 General Requirements

- All attachments to existing utility poles within the County right of way require an encroachment permit, prior to installation.
- A maximum of three enclosures including the disconnect and antenna shall be installed at each utility pole location. No ground-mounted enclosures, including backup power supply, shall be allowed.
- All carrier equipment shall be removed and relocated at no cost to the County, if the County decides to underground the utility lines in the future.
- No strand-mounted small cell devices shall be installed on poles with mounted street lights.
- Provider shall submit evidence that the existing poles are appropriately sized and have sufficient strength to accommodate the additional small cell equipment loads. Provider shall also submit a letter of approval from the power provider for the small cell equipment to be installed on the specific pole.
- Provider shall certify that radiation is at safe levels by a non-ionizing radiation electromagnetic radiation report (NIER). The NIER report shall be endorsed by a qualified professional. Report shall be submitted to the County and power provider. It shall specify minimum approach distances to the general public as well as electrical and communication workers that are not trained for working in an RF environment (uncontrolled) when accessing the pole by climbing or bucket.
- Provider shall provide a disconnect so that the County has the ability to easily shut off radio signals and power while working on the pole.

3.3 Equipment Color

- Equipment should be colored to match pole or surroundings as determined by the County.

3.4 Equipment Shroud

- 38" H x 16" W x 12" D maximum for pole-mounted equipment shroud. Strand-mounted equipment enclosures may not exceed 5.5 cubic feet.
- All hardware attachments shall be hidden to the maximum extent possible.
- Only one equipment shroud, containing all required small cell equipment, shall be installed per pole. Except, one additional equipment shroud shall be allowed per pole if the antenna is located within the second equipment shroud.
- If technically feasible, only one strand-mount equipment shroud shall be installed per permit location

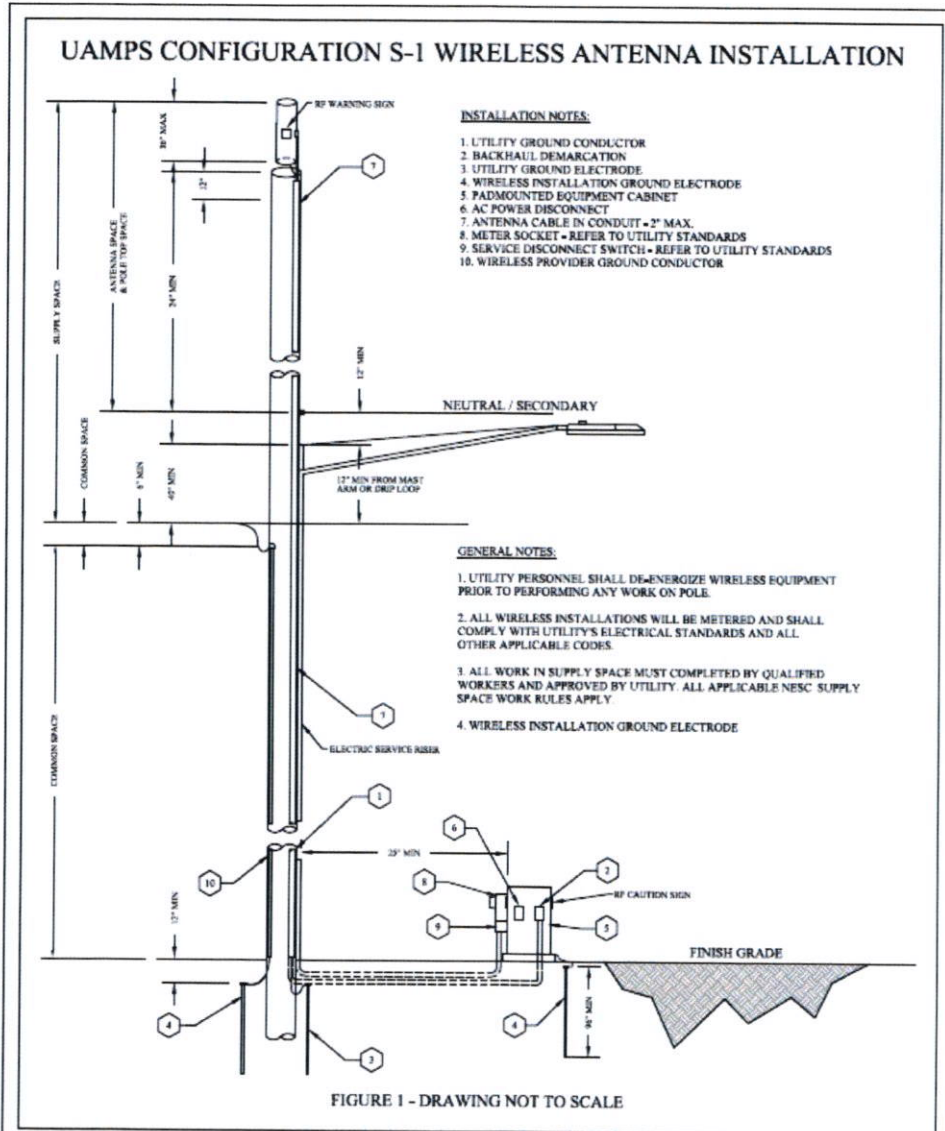
3.5 Cantenna

- If a cantenna is located on top of the pole the outer diameter shall be 14" maximum and the cantenna shall be no more than 5 feet tall, including antenna, radio head, mounting bracket, and all other hardware necessary for a complete installation.
- If the cantenna is mounted to the side of the pole it shall be located inside a shroud of 5.5 cubic feet maximum. The width, depth, or diameter of the shroud size shall not be greater than 16" (maximum).

Section 4: Attachments to Street Lights

4.1 Typical Configuration (Wood and Steel)

Wood



UAMPS

**UAMPS
WIRELESS ANTENNA INSTALLATION
SPECIFICATION S-1
WOOD STREET LIGHT POLE**

S-1
STREET LIGHT WOOD POLE
SCALE: NONE
DATE: 11.14.2018
REV: B
REV DATE: 03.12.2019

Steel

UAMPS CONFIGURATION S-4 STEEL STREET LIGHT POLE

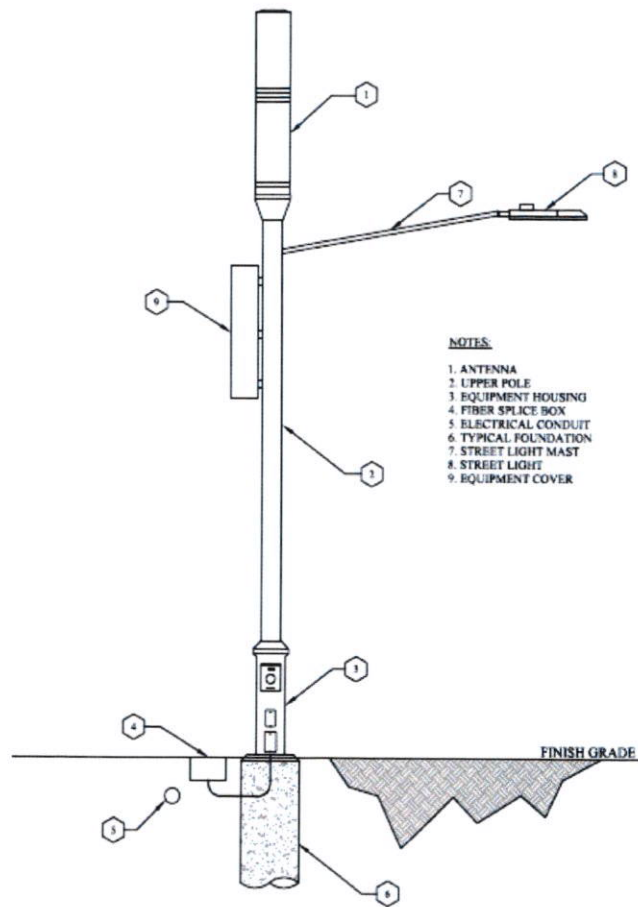


FIGURE 4 - DRAWING NOT TO SCALE

UAMPS

UAMPS WIRELESS ANTENNA INSTALLATION SPECIFICATION S-4 STEEL STREET LIGHT POLE

S-4
STEEL STREET LIGHT POLE
SCALE: NONE
DATE: 03.12.2019
REV: A
REV DATE: 03.12.2019

4.2 General Requirements

- The same small cell pole aesthetic is to be used to match existing streetlights in the area and maintain a cohesive appearance. The provider shall perform a visual inspection (online street images are acceptable) prior to submitting a permitting application to determine existing aesthetics.
- All small cell carrier equipment shall be housed internal to the pole or hidden behind an exterior shroud.
- The small cell components shall be sized to be visually pleasing. For a combination pole to be considered visually pleasing, the transition between the equipment cabinet and upper pole should be considered. A decorative transition shall be installed over the equipment cabinet upper bolts, or decorative base cover shall be installed to match the equipment cabinet size.
- Each pole component shall be architecturally compatible to create a cohesive aesthetic.
- All pole mounted enclosures shall be securely attached with hardware (not strapped).
- Provider shall certify that radiation is at safe levels by a non-ionizing radiation electromagnetic radiation report (NIER). The NIER report shall be endorsed by a qualified professional. Report shall be submitted to the County and power provider. It shall specify minimum approach distances to the general public as well as electrical and communication workers that are not trained for working in an RF environment (uncontrolled) when accessing the pole by climbing or bucket.
- Provider shall provide a disconnect so the County has the ability to easily shut off radio signals and power while working on the pole

4.3 Equipment Color

- Equipment should be colored to match pole or surroundings as determined by the County.

4.4 Equipment Shroud

- 16 inches (preferred), 20 inches maximum diameter. Maximum height of cabinet is 5'-8". Cabinet to be round and installed below the pole.
- If an antenna is located on the side of the pole, the antenna, radio equipment, brackets, and all other hardware required for a complete installation shall fit behind a 38"H x 16"W x 12"D maximum shroud, securely mounted (not strapped) to the pole.
- Equipment cabinet and/or equipment cabinet cover shall not have a flat, horizontal surface larger than 1.5 inches.
- All hardware attachments shall be hidden to the maximum extent possible.

4.6 Cantenna

- The antenna and antenna pole attachment shall be shrouded to meet the County's aesthetics. A tapered transition between the upper pole and cantenna shall be included.
- 14-inch maximum outer diameter x 5' 8" maximum length. Antenna shroud shall be colored to match pole.

4.7 Luminaire/Luminare Mast Arm

- Luminaire shall meet the County's construction standards and specifications and shall match existing luminaires adjacent to permit location.
- Luminaire mast arms shall match on adjacent streetlights or match aesthetics of adjacent streetlights. In any case, mast arms will be decorative.

4.8 Pole Size, Type and Foundation

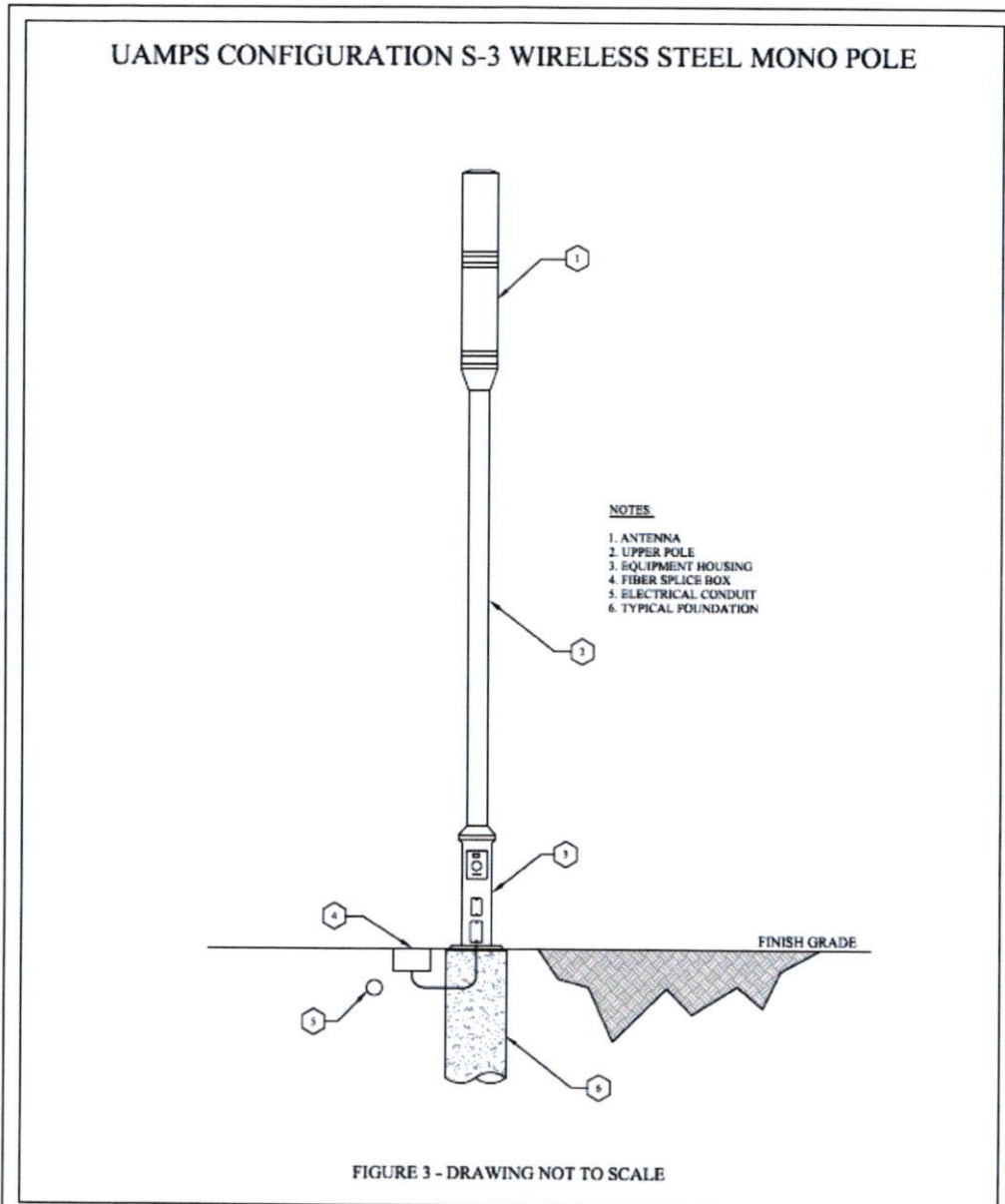
- Round, straight, galvanized steel. Pole shall be architecturally compatible with the equipment cabinet. At least 15% of the pole design structural capacity shall be reserved for future County IOT installations.
- The upper pole shall be scaled to 0.5 to 0.75 times the size of the equipment cabinet with 10" minimum outer diameter. The pole diameter shall be scaled such that no flat, horizontal surface larger than 1.5 inches exists between the equipment cabinet and upper pole.
- Precast concrete or cast-in-place pole foundations shall be designed per the County standard to meet ACI 318. While the County accepts cast-in-place foundations, precast concrete foundations are preferred and should be installed whenever possible.
- Bolt circles should be 19.5-inch bolt circle when installing a 16-inch equipment cabinet and 23.5-inch bolt circle when installing a 20-inch equipment cabinet.

4.9 Access Doors

- Lockable doors to be provided as needed in the equipment cabinet to maintain equipment.
- A hand hole shall be provided at the top and bottom of the pole to maintain electrical service for streetlights and future IOT attachments.

Section 5: Installation of Monopoles

5.1 Typical Configuration



UAMPS

**UAMPS
WIRELESS ANTENNA INSTALLATION
SPECIFICATION S-3
STEEL MONO POLE INSTALLATION**

S-3

STEEL MONO POLE

SCALE: NONE

DATE: 03.12.2019

REV: A

REV DATE: 03.12.2019

5.2 General Requirements

- The same small cell pole aesthetic is to be used to match existing streetlights in the area and maintain a cohesive appearance. The provider shall perform a visual inspection (online street images are acceptable) prior to submitting a permitting application to determine existing aesthetics.
- All small cell carrier equipment shall be housed internal to the pole or hidden behind an exterior shroud.
- The small cell components shall be sized to be visually pleasing. For a combination pole to be considered visually pleasing, the transition between the equipment cabinet and upper pole should be considered. A decorative transition shall be installed over the equipment cabinet upper bolts, or decorative base cover shall be installed to match the equipment cabinet size.
- Each pole component shall be architecturally compatible to create a cohesive aesthetic.
- All pole mounted enclosures shall be securely attached with hardware (not strapped).
- Provider shall certify that radiation is at safe levels by a non-ionizing radiation electromagnetic radiation report (NIER). The NIER report shall be endorsed by a qualified professional. Report shall be submitted to the County and power provider. It shall specify minimum approach distances to the general public as well as electrical and communication workers that are not trained for working in an RF environment (uncontrolled) when accessing the pole by climbing or bucket.
- Provider shall provide a disconnect so County has the ability to easily shut off radio signals and power while working on the pole

5.3 Equipment Color

- Equipment should be colored to match pole or surroundings as determined by the County.

5.4 Equipment Shroud

- 16 inches (preferred), 20 inches maximum diameter. Maximum height of cabinet is 5'-8". Cabinet to be round and installed below the pole.
- If an antenna is located on the side of the pole, the antenna, radio equipment, brackets, and all other hardware required for a complete installation shall fit behind a 38"H x 16"W x 12"D maximum shroud, securely mounted (not strapped) to the pole.
- Equipment cabinet and/or equipment cabinet cover shall not have a flat, horizontal surface larger than 1.5 inches.
- All hardware attachments shall be hidden to the maximum extent possible.

5.5 Cantenna

- The antenna and antenna pole attachment shall be shrouded to meet County's aesthetics. A tapered transition between the upper pole and cantenna shall be included.
- 14-inch maximum outer diameter x 5' 8" maximum length. Antenna shroud shall be colored to match pole.

5.6 Pole Size, Type and Foundation

- Round, straight, galvanized steel. Pole shall be architecturally compatible with the equipment cabinet. At least 15% of the pole design structural capacity shall be reserved for future County IOT installations.
- The upper pole shall be scaled to 0.5 to 0.75 times the size of the equipment cabinet with 10" minimum outer diameter. The pole diameter shall be scaled such that no flat, horizontal surface larger than 1.5 inches exists between the equipment cabinet and upper pole.
- Precast concrete or cast-in-place pole foundations shall be designed per the County standard to meet ACI 318. While the County accepts cast-in-place foundations, precast concrete foundations are preferred and should be installed whenever possible.
- Bolt circles should be 19.5-inch bolt circle when installing a 16-inch equipment cabinet and 23.5-inch bolt circle when installing a 20-inch equipment cabinet.

5.7 Access Doors

- Lockable doors to be provided as needed in the equipment cabinet to maintain equipment.
- A hand hole shall be provided at the top and bottom of the pole to maintain electrical service for streetlights and future IOT attachments.