Small Wireless Communication Facility Regulation

of the

City of Conway, Arkansas ("City")

This Small Wireless Regulation (the "Regulation") dated _______, 2022 ("Effective Date") is made by the City of Conway, Arkansas ("City"), a municipal corporation duly created, organized, and existing as a political subdivision of the State of Arkansas, and regulator of Conway Corporation ("Utility"), supervisor and holder of public rights-of-way, and regulator of development within the City.

Table of Contents

RECITALS	S	3
Article 1.	Definitions	4
Article 2.	Purpose and Scope of Regulation	10
Article 3.	Fees and Charges	18
Article 4.	Specifications	21
Article 5.	Private and Regulatory Compliance	25
Article 6.	Permit Application Procedures.	26
Article 7.	Make-Ready Work/Installation	32
Article 8.	Post-Installation Inspections	34
Article 9.	Abandonment of Permit.	35
Article 10.	Rearrangements and Transfers on Utility Poles	35
Article 11.	Pole Replacements	36
Article 12.	Treatment of Multiple Requests for Same Pole	37
Article 13.	Equipment Attachments	37
Article 14.	Authorized Contractors	37
Article 15.	Guys and Anchor Attachments	38
Article 16.	Installation of Grounds	38
Article 17.	Change in Utility Facilities that Forfeits Attachment Accommodations	38
Article 18.	Inspection	39
Article 19.	Failure to Rearrange, Transfer or Correct	40
Article 20.	Physical Inventory	41
Article 21.	Unauthorized Attachments	41
Article 22.	Reporting Requirements.	42
Article 23.	Liability and Indemnification	42
Article 24.	Duties, Responsibilities, and Exculpation	45
Article 25.	Insurance	46
Article 26.	Assignment	48
Article 27.	Failure to Enforce	48
Article 28.	Receivership, Foreclosure or Act of Bankruptcy.	49
Article 29.	Removal of Attachments	49
Article 30.	Bonds.	49
Article 31.	Severability	50

Article 32	Governing Law	50
Article 33.	Incorporation of Recitals and Appendices	50
Article 34.	Force Majeure.	50
Article 35.	Casualty	50
Article 36.	Attachment of Wireline Backhaul Facilities on Utility Poles	51
APPENDIX	A – FEES	53
APPENDIX	B – DESIGN STANDARDS	54
APPENDIX	C – AESTHETIC IMPROVEMENT CORRIDORS	55

RECITALS

WHEREAS, City encourages wireless infrastructure investment and wishes to provide a fair and predictable process for the deployment of small wireless facilities while promoting proper management of the public rights-of-way in the overall interests of the public health, safety and welfare; and

WHEREAS, City recognizes that small wireless facilities – including facilities commonly referred to as small cells and distributed antenna systems -- can deliver wireless access to advanced technology, broadband, and 911 services to residences, businesses, and schools within the City; and

WHEREAS, City recognizes that small wireless facilities can often be effectively deployed in public rights-of-way; and,

WHEREAS, City intends to fully comply with state and federal law to the extent it may preempt local municipal control; and

WHEREAS, Utility operates a municipal utility within and about City performing the essential public service of distributing electric power and providing light and other important services; and

WHEREAS, Utility is responsible for safeguarding the integrity of its electric system and its employees, obtaining fair compensation for the use of its infrastructure through collection of fees and other charges, ensuring compliance with all applicable federal, state and local laws, rules and regulations, ordinances and standards and policies, and permitting fair and reasonable access to available capacity on Utility's infrastructure; and

WHEREAS, certain wireless providers propose to occupy City's public rights-of-way in order to install and maintain small wireless facilities and associated equipment on Utility's poles to provide wireless communication services;

WHEREAS, Utility is willing, when it may lawfully do so, to issue one or more permits authorizing the placement or installation of small wireless facilities on Utility's poles; and

WHEREAS, City is willing to permit wireless providers to occupy City's public rightsof-way for the placement or installation of poles, wireless support structures and wireless attachments; and

WHEREAS, City is willing to negotiate the placement of small wireless facilities, poles, wireless support structures and wireless attachments on City structures and property outside of the public right-of-way; such as buildings, parking lots, recreational field lighting, and the like; and

WHEREAS, City and Utility preserve their respective rights to own, operate, and manage property in a proprietary manner while fairly governing the conduct of business and access to public rights-of-way.

NOW THEREFORE, in consideration of the mutual covenants, terms and conditions set out below the parties agree as follows:

Article 1. Definitions

When used in this regulation, terms, phrases, words, and their derivations, shall have the meaning provided in this Article 1, unless more specifically defined within another Article or Section of this regulation. Defined terms may or may not be capitalized. When not inconsistent with the context, words used in the present tense include the future and past tense, and words in the singular number include the plural number. The words "shall" and "will" are mandatory and "may" is permissive. Words not defined shall be given their common and ordinary meaning.

- 1.1 <u>Affiliate</u>: means an entity that directly or indirectly controls, is controlled by, or is under common control with another party.
- 1.2 <u>Antenna</u>: means communications equipment that transmits or receives an electromagnetic radio frequency signal in the provision of wireless service.
- 1.3 <u>Antenna equipment</u>: means equipment, switches, wiring, cabling, power sources, shelters, or cabinets associated with an antenna, located at the same fixed location as the antenna, and when collocated on a structure is mounted or installed at the same time as the antenna. Antenna equipment does *not* include:
 - (A) The structure or improvements on, under, or within which the equipment is collocated: or
 - (B) Wireline backhaul facilities, coaxial or fiber optic cable that is between structures, or coaxial or fiber optic cable that is otherwise not immediately adjacent to or directly associated with an antenna.
- 1.4 **Antenna facility:** means an antenna and associated antenna equipment.
- 1.5 **Applicable codes:** means uniform electrical reliability, building, fire, electrical, plumbing, or mechanical codes, as adopted by a recognized national code organization, or local amendments to the codes that are of general application, or local ordinances that are of general

application, that address public health, safety, or welfare and are consistent with this regulation;

- 1.6 **Applicant:** means a person who applies for a permit under this regulation as or on behalf of a wireless provider.
- 1.7 **Application:** means a request submitted by an applicant to an authority for a permit:
 - (A) To collocate small wireless facilities; or
 - (B) To install, modify, or replace a pole on which a small wireless facility is or will be collocated, in the right-of-way;
- 1.8 **Attaching entity:** means any public or private entity, including a wireless provider, that pursuant to an agreement with Utility or other authority, places one more attachment on Utility's poles.
- 1.9 <u>Attachment(s)</u>: means both wireless communication facilities and wireline communications wires of wireless providers and other attaching entities that are lawfully affixed to or installed within a pole.
- 1.10 <u>Capacity</u>: means the ability of a pole to accommodate the installation of an attachment based on applicable codes, including space and loading considerations.
- 1.11 <u>City:</u> means the City of Conway, Arkansas, a municipal corporation duly created, organized, and existing as a political subdivision of the State of Arkansas.
- 1.12 <u>City facilities</u>: means all personal property and real property owned or controlled by City, including those used for the provision of public services and those used for other purposes.
- 1.13 <u>Collocate</u>: means the placement, mounting, replacement, or modification of a small wireless facility on, or of ground-mounted antenna equipment adjacent to, a structure. It includes collocated ground-mounted antenna equipment as a small wireless facility if it meets the requirements of A.C.A. § 23-17-503(25)(A)(iii)-(vi) and the associated facilities on the adjacent structure meet the requirements of A.C.A. § 23-17-503(25)(i)-(vi).
- 1.14 **Communications service:** means:
 - (A) A cable service, as defined in 47 U.S.C. § 522(6), as it existed on January 1, 2019;
 - (B) A telecommunications service, as defined in 47 U.S.C. § 153(53), as it existed on January 1, 2019;
 - (C) An information service, as defined in 47 U.S.C. §153(24), as it existed on January 1, 2019; or
 - (D) Wireless service.
- 1.15 **Communications service provider:** means:
 - (A) A cable operator, as defined in 47 U.S.C. § 522(5), as it existed on January 1, 2019;
 - (B) A provider of information service, as defined in 47 U.S.C. § 153(24), as it existed on January 1, 2019;
 - (C) A telecommunications carrier, as defined in 47 U.S.C. § 153(51); or
 - (D) A wireless provider.

- 1.16 <u>Communications space</u>: means the space on a pole designated for horizontal wireline communications attachments under the NESC and other applicable codes.
- 1.17 **Control:** means the direct or indirect:
 - (A) Ownership of at least fifty percent (50%) of the equity
 - (B) Ability to direct at least fifty percent (50%) of voting power; or
 - (C) Ability otherwise to direct management policies.
- 1.18 Controlled access facility: means a highway or street described in A.C.A. § 27-68-102.
- 1.19 <u>Correct</u>: means to perform work to bring an attachment into compliance with Applicable Standards in a workman like condition.
- 1.20 **Days:** means calendar days when referring to periods greater than ten (10) days and regular City workdays when referring to periods that are ten (10) days or less.
- 1.21 <u>Designated office:</u> means the office designated by the Mayor or the Utility CEO where wireless providers may apply for a permit.
- 1.22 <u>Electric supply space:</u> means the upper portion of a pole above the communications workers safety space dedicated to electric distribution facilities under the NESC and other applicable codes.
- 1.23 <u>Electric transmission structure:</u> means a vertical structure that is used to transmit electricity at voltages of 69kV and higher.
- 1.24 <u>Emergency:</u> means a situation exists which, in the reasonable discretion of a wireless provider, City or Utility, if not remedied immediately, poses an imminent threat to public health, life, or safety, damage to property or a service outage.
- 1.25 <u>Facility</u>: means an antenna facility or a structure that is used for the provision of wireless service.
- 1.26 **Fee:** means a one-time, nonrecurring charge.
- 1.27 **Equipment attachment:** means each power supply, amplifier, appliance or other single device or piece of equipment associated with a small wireless facility that is affixed to any City or Utility pole.
- 1.28 **<u>Historic district</u>**: means a group of buildings, properties, or sites that are either:
 - (A) Listed in the National Register of Historic Places or formally determined eligible for listing by the Keeper of the National Register of Historic Places, according to Section VI.D.1.a.i-v of the Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process, 47 C.F.R. Part 1, Appendix C, as it existed on January 1, 2019;
 - (B) A historic district designated under the Historic Districts Act, A.C.A. § 14-172-201 et seq.; or
 - (C) A historic district otherwise designated under a local ordinance as of January 1, 2019;

- 1.29 <u>Make-ready or make-ready work:</u> means all work that City or Utility reasonably determines to be required to accommodate a small wireless facility and/or to comply with all applicable codes. Such work includes, but is not limited to, field survey work, rearrangement and/or transfer of Utility facilities or existing attachments, inspections, engineering work, permitting work, tree trimming (other than tree trimming performed for normal maintenance purposes), pole replacement and construction, but does not include a wireless provider's routine maintenance.
- 1.30 <u>Micro-wireless facility</u>: means a wireless facility that:
 - (A) Is not larger in dimension than twenty-four inches (24") in length, fifteen inches (15") in width, and twelve inches (12") in height;
 - (B) Has an exterior antenna that is no longer than eleven inches (11"); and
 - (C) Is not placed any farther than ten feet (10') down the span as measured from the side of the pole.
- 1.31 Occupancy: means the use or reservation of space for attachments on a pole.
- 1.32 **Overhead:** means all organizational costs that are not directly related to the cost of performing a task, but incurred by the Utility as necessary operational expenses, including any specified payment in lieu of taxation or internal rate of return.
- 1.33 <u>Pedestals/vaults/enclosures:</u> means above- or below-ground housings that are not attached to poles but are used to enclose a cable/wire splice, power supplies, amplifiers, passive devices, and/or to provide a service connection point.
- 1.34 **Permit:** means an authorization, written or otherwise, required by an authority to perform an action or initiate, continue, or complete a project for the deployment of wireless service at a specified location.
- 1.35 **Person:** means an individual, corporation, limited liability company, partnership, association, trust, or other entity or organization that can sue or be sued, including the City.
- 1.36 **Pole:** means a long, slender structure that is generally cylindrical in shape and used to provide vertical support for wireline communications, electric distribution, lighting, traffic control, signage, or a similar function, or for collocation of small wireless facilities. The term "pole" does not include a wireless support structure or an electric transmission structure.

<u>Decorative pole</u>: means a pole that is owned by the City or Utility and specifically designed and placed for aesthetic purposes and on which limited appurtenances or attachments, such as a small wireless facility, lighting, specially designed informational or directional signage, or temporary holiday or special event attachments, have been placed or are permitted to be placed according to nondiscriminatory rules.

<u>Distribution pole</u>: means a pole owned or controlled by Utility that is primarily used to provide electricity and/or communications services.

Streetlight pole: means a non-decorative pole owned or controlled by City or Utility that is primarily used to provide lighting or ancillary services along rights-of-way.

<u>Traffic pole</u>: means a pole that is owned or controlled by City and primarily used to provide vertical support to traffic signals.

- 1.37 **Post-installation inspection:** means the inspection by Utility or, if permitted by Utility, inspection by a wireless provider or some combination of the Utility and wireless provider to verify that attachments have been made in accordance with applicable codes and the permit.
- 1.38 **Pre-construction survey:** means all work or operations required by applicable codes and/or Utility to determine the make-ready work necessary to accommodate small wireless facilities on a pole. Such work includes, but is not limited to, field inspection and administrative processing.
- 1.39 **Rate:** means a recurring charge.
- 1.40 **Right-of-way:** means an area on, below, or above a public utility easement, roadway, highway, street, sidewalk, alley, or similar property. The term "right-of-way" does not include a federal interstate highway, controlled-access facility, or a public utility easement that does not authorize the deployment sought by the wireless provider.
- 1.41 **Reserved capacity**: means capacity or space on a pole that City or Utility has identified and reserved for its own future utility requirements at the time of the permit grant pursuant to a projected need for such use, including the installation of communications circuits for operation of Utility's electric system and/or lighting services.
- 1.42 **Riser**: means metallic or plastic encasement materials placed vertically on the pole to guide and protect wires and cables.
- 1.43 <u>Small wireless facility</u>: means a wireless facility that meets all the specifications listed in sections 1.43.1 through 1.43.6 below. The term small wireless facility does not include the structure or improvements on, under, or within which the equipment is located or collocated or to which the equipment is attached. Nor does the term small wireless facility include any wireline backhaul facility or coaxial or fiber optic cable that is between wireless support structures or utility poles, or that is otherwise not immediately adjacent to or directly associated with an antenna.
 - 1.43.1 *Height restriction*. A small wireless facility must:
 - a. Be mounted on a structure fifty feet (50') or less in height, including the antennas;
 - b. Be mounted on a structure no more than ten percent (10%) taller than other adjacent structures; or
 - c. Not extend an existing structure on which it is located to a height of more than fifty feet (50') or by more than ten percent (10%), whichever is greater.
 - 1.43.2 Antenna size restriction. Each antenna associated with a small wireless facility, excluding associated antenna equipment, must not exceed three cubic feet (3 cu. ft.) in volume.

- 1.43.3 *Total size restriction*. All wireless equipment associated with a small wireless facility, including the wireless equipment associated with the antenna and any preexisting associated equipment on the structure, must not exceed twenty-eight cubic feet (28 cu. ft.) in volume.
- 1.43.4 Location restriction. A small wireless facility must be in a right-of-way.
- 1.44 **Structure:** means a pole or wireless support structure, without regard to an existing antenna facility, that is used or to be used for the provision of wireless service.
- 1.45 <u>Tag</u>: means an identification label ("tag") that is no smaller than 12 square inches and no larger than 64 square inches. Using font that is 12-point or larger, tags will be permanently imprinted with the following minimum information:
 - (A) Identity of permit holder;
 - (B) Permit holder's phone number used to respond to emergencies or planned work on a 24-hour basis;
 - (C) Serial identifier that is unique to each small wireless facility; and
 - (D) Any required safety information.
- 1.46 <u>Technically feasible</u>: means that by virtue of engineering or spectrum usage the proposed placement for a small wireless facility, or its design, concealment measures, or site location, can be implemented without a material reduction in the functionality of the small wireless facility.
- 1.47 <u>Unauthorized Attachment</u>: means any attachment placed on City's or Utility's poles without a permit as required by this regulation, provided the wireless provider's previously authorized attachments made pursuant to a prior written agreement between the parties shall not be considered unauthorized attachments.
- 1.48 <u>Utility</u>: means the Conway Corporation, a nonprofit corporation created by City to provide services, including electric and communication services, to residents in and about the City.
- 1.49 <u>Utility facilities</u>: means all personal property and real property owned or controlled by Utility, including poles, wires, equipment, and related facilities.
- 1.50 <u>Wireline backhaul facility:</u> means an aboveground or underground facility used to transport communications services from a wireless facility to a network.
- 1.51 <u>Wireless infrastructure provider</u>: means a person or an affiliate thereof, including a person authorized to provide communications service in the state, that builds or installs facilities for the provision of wireless service, but that is not a wireless service provider.
- 1.52 <u>Wireless provider</u>: means a wireless infrastructure provider or a wireless service provider.
- 1.53 <u>Wireless service</u>: means any service using licensed or unlicensed spectrum, including the use of Wi-Fi, whether at a fixed location or mobile, provided to the public.

- 1.54 <u>Wireless service provider</u>: means a person who provides wireless service.
- 1.55 <u>Wireless support structure</u>: means a construction, other than a pole, within the right-of-way that was not solely designed for the collocation of small wireless facilities, but is capable of supporting collocation of small wireless facilities, such as:
 - (A) A monopole;
 - (B) A tower, either guyed or self-supporting;
 - (C) A billboard;
 - (D) A building;
 - (E) Any other existing or proposed construction suitable for collocation of a small wireless facility.

Purpose and Scope of Regulation

- 2.1. <u>Purpose</u>: The purpose of this regulation is to provide policies and procedures for the placement of small wireless facilities in public rights-of-way within the jurisdiction of the City, and upon City and Utility facilities, which will preserve the integrity, safe usage, and visual qualities of public rights-of-way and the City as a whole. This regulation establishes uniform standards to be used and included in individual permits including, but not limited to:
 - 2.1.1. Prevention of interference with the use of streets, sidewalks, alleys, parkways, City poles, Utility poles, and other public ways and places;
 - 2.1.2. Prevention of the creation of visual and physical obstructions and other conditions that are hazardous to vehicular and pedestrian traffic;
 - 2.1.3. Prevention of interference with other facilities and operations of facilities lawfully located in City public rights-of-way or public property;
 - 2.1.4. Protection against environmental damage, including damage to trees or shrubbery including, but not limited, those items planted pursuant to City landscaping, zoning, tree preservation, or other City policies;
 - 2.1.5. Preservation of the character of neighborhoods in which facilities are installed;
 - 2.1.6. Preservation of the historical character of historic structures, or historic neighborhoods, including but not limited to such structures or neighborhoods listed on the National Register of Historic Places; and,
 - 2.1.7. Facilitation of the rapid deployment of small cell facilities to provide the citizens with the benefits of advanced wireless services.

2.2. **Permits**.

2.2.1. *City ROW Permit*. Upon proper application, City shall timely grant a wireless provider a revocable, nonexclusive permit authorizing the installation and maintenance of a small wireless facility and, if applicable, a pole that will be used to support a small wireless facility, within the City's public rights-of-way, as provided in this regulation.

- 2.2.1.1. <u>ARDOT ROW</u>. Applications to install small wireless facilities and/or poles used to support small wireless facilities in a right-of-way controlled by the Arkansas Department of Transportation must be approved by the Arkansas Department of Transportation prior to submission to the City or Utility.
- 2.2.1.2. <u>Outside ROW</u>. Applications to install small wireless facilities and/or poles used to support small wireless facilities outside of the right-of-way will be evaluated and processed according to City ordinances governing the zoning and development of property.
- 2.2.1.3. <u>Special Locations</u>. No application or permit shall be required under this regulation to install a small wireless facility that is located within an interior structure or upon the site of a campus, stadium, or athletic facility that is not controlled by the City or Utility
- 2.2.1.4. <u>Maintenance</u>. No permit shall be required for any person to perform routine maintenance on a previously permitted small wireless facility or to replace a previously permitted small wireless facility with one that is substantially similar or smaller, provided that a permit may be required for work requiring lane closure or excavation.
- 2.2.1.5. <u>Micro-wireless facilities</u>. No permit shall be required for any person to install, maintain or operate a micro-wireless facility that is suspended on cables that are strung between existing poles and comply with applicable codes, provided that a permit may be required for work requiring lane closure or excavation. However, special permitting is required for the wireline pole attachments that are adjacent to micro-wireless facilities as described in Article 36.
- 2.2.2. City Collocation Permits. Upon proper application, City shall timely grant a wireless provider a revocable, nonexclusive permit authorizing the attachment of a small wireless facility to a City pole, as provided in this regulation. A single permit form may be used to authorize the installation of a small wireless facility in the right-of-way and collocation on a City pole.
- 2.2.3. *Utility Collocation Permits*. Upon proper application, Utility shall timely grant a wireless provider a revocable, nonexclusive permit authorizing the attachment of a small wireless facility to a Utility pole, as provided in this regulation. A single permit form may be used to authorize the installation of a small wireless facility in the right-of-way and collocation on a Utility pole.
- 2.2.4. *Installation on Other City Property*. Upon proper application, City may grant a wireless provider a revocable, nonexclusive permit authorizing the installation and maintenance of a small wireless facility on property owned by the City, other than City property managed by the Utility, upon such terms and conditions as may be approved in accordance with Arkansas law.
- 2.2.5. *Installation on Other Utility Property*. Upon proper application, Utility may grant a wireless provider a revocable, nonexclusive permit authorizing the installation and

maintenance of a small wireless facility on property owned by the City, other than City property managed by the Utility, upon such terms and conditions as may be approved in accordance with Arkansas law.

- 2.2.6. *Duration of Permits*. Permits issued pursuant to this regulation shall terminate ten (10) years after the date the permit was issued. The holder of any permit so terminated shall be entitled to:
 - 2.2.6.1. <u>Renew</u> the permit for a successive ten (10) year term, provided that the permitted facilities and/or poles conform to all safety and appearance requirements at the time the permit terminated;
 - 2.2.6.2. <u>Replace</u> the permitted facilities and/or poles at the previously permitted location with facilities and/or poles that conform to all safety and appearance requirements at the time of renewal; or
 - 2.2.6.3. <u>Remove</u> the small wireless facilities and/or poles used to the support small wireless facilities within one year of the date that the permit lapsed.
- 2.2.7. Relinquishment and Abandonment. A permit issued under this regulation may be relinquished at any time. A City ROW permit issued for a small wireless facility and/or pole used to support a small wireless facility shall be deemed abandoned upon one year of non-use, unless the City determines that such non-use was due to circumstances that were beyond the control of the permit holder. Prior to relinquishment or abandonment, the permit holder shall remove the permitted small wireless facilities and/or poles and restore all City and Utility property to its previous functional and aesthetic condition. An administrative determination regarding relinquishment or abandonment shall be subject to appeal in accordance with Section 2.3.10.
- 2.2.8. *Design Standards*. Any permit granted in accordance with Section 2.2 for a new pole or collocation to an existing pole/structure shall be a pre-approved design (as indicated in Appendix B) or fully meet the requirements of Sections 2.3 and 2.4.
- 2.2.9. *Aesthetic Corridor*. Any permit granted in an Aesthetic Corridor (as indicated in Appendix C) shall be a pre-approved design as indicated in Appendix B.

2.3. New pole restrictions.

- 2.3.1. *ROW permit required*. No person shall install or maintain a new pole or other structure used to support a small wireless facility within a right-of-way without a City ROW permit as described in Section 2.2, or in violation thereof.
- 2.3.2. *ROW interference prohibited*. No person shall install a new pole in any location that materially interferes with the use of the right-of-way by any pedestrian, vehicle, traffic control device, utility service, communication service, or other existing lawful use of the right-of-way.

- 2.3.3. *Historic districts*. No person shall install a new pole in any historic district unless and until issued a certificate of appropriateness by the historic district commission.
- 2.3.4. *Height limitation*. No person shall install a new pole in the right-of-way that is taller than the greater of fifty feet (50') in height or ten percent (10%) taller than the tallest existing pole in the same right-of-way within three hundred feet (300') of the proposed location of the new pole.
- 2.3.5. Appearance. No person shall install a new pole in the right-of-way unless the pole is similar in appearance to other poles in the same right-of-way within three hundred feet (300') of the proposed location of the new pole. Where different types of poles are present, new poles should appear like those that were most recently installed.
- 2.3.6. *Decorative poles*. No person shall replace a decorative pole unless the replacement pole reasonably conforms to the design of the original decorative pole. A pole that is identical in style, color and function to a decorative pole, but varies by diameter, is considered to reasonably conform in design.
- 2.3.7. Sight lines. Except when modifying or replacing an existing pole to accommodate a small wireless facility attachment, no person shall install a new pole within twenty-five (25) feet of the outer curbing of an intersection, or within eighteen inches (18") of a road surface.
- 2.3.8. *Underground areas*. No person shall install a new pole in areas where all electric and communication lines have been placed underground, unless no existing pole (such as, a streetlight) is available for attachment to provide wireless service. If a new pole is required in an underground area, the new pole will be constructed using a stealth design that fully conceals all small wireless facilities and associated equipment within the pole.
- 2.3.9. Additional restrictions for residential areas, aesthetic improvement corridors, and overlay districts. When installing new poles within or adjacent to property that is: (a) zoned or used for residential purposes; (b) along an aesthetic improvement corridor; or (c) within a development overlay district, the following additional rules shall apply:
 - 2.3.9.1. Collocation preference. No person shall install a new pole in a City right-of-way when there is a City or Utility pole located in the right-of-way within one hundred feet (100') of the proposed location that is reasonably suitable for collocation, unless collocation on the City or Utility pole will impose technical limits on the small wireless facilities to be installed or significant additional costs. If a City or Utility pole can structurally support the proposed small wireless facility, the suitability of a City or Utility pole shall be determined pursuant to the operational constraints of equipment used by the permit applicant. The purpose of this rule is to reduce the number of poles in the right-of-way.
 - 2.3.9.2. <u>Areas with Street Lights</u>. Where street light poles are present, no person shall install a new pole in a City right-of-way unless the pole is linearly aligned with the street light poles, unless such alignment will impose technical limits on the small wireless facilities to be installed or significant additional costs. New poles must, to the

extent technically feasible, substantially match the appearance of existing street light poles. If it is impossible or unreasonable to match the appearance of existing street light poles, new poles will be constructed using a stealth design that fully conceals all small wireless facilities and associated equipment within the pole. New poles will not vary from the height of existing street light poles by more than ten percent (10%). The purpose of this rule is to ensure uniformity in the appearance and height of poles.

- 2.3.9.3. Areas without Street Lights. Where street light poles are not present, no person shall install a new pole in a City right-of-way unless the pole substantially matches the appearance of existing poles within the right-of-way that are within three hundred feet (300') of the proposed location. New poles will not vary from the height of existing poles by more than ten percent (10%). Where poles of different heights are present, the new pole shall match the height of existing poles that are most closely aligned with the new pole. The purpose of this rule is to ensure uniformity in the appearance and height of poles.
- 2.3.9.4. <u>Placement</u>. No person shall install a new pole in a City right-of-way unless the pole is within ten feet (10') of a side lot line and at least eighteen inches (18") from the road surface. When compliance with this rule is not technically feasible, the new pole will be installed in a location that avoids obstructing the view from a home or occupiable structure and as close to the lot line as possible. This rule shall not apply when installing new poles in a median between roadways or within a right-of-way controlled by the Arkansas Department of Transportation. The purpose of this rule is to avoid obstructing views from the right-of-way or a residence.
- 2.3.9.5. <u>Aesthetic improvement corridors</u>. The provisions of Sections 2.3.9.1 through 2.3.9.4 shall apply to commercial corridors designated by the City for aesthetic enhancement as shown on the map attached as Appendix C to this regulation, which may be amended from time-to-time. However, no such amendment shall apply to any application submitted prior to the effective date of the amendment.
- 2.3.9.6. <u>Overlay district</u>. Within an overlay district, communication and utility infrastructure, including small wireless facilities, shall be installed in a manner that is harmonious with the aesthetic standard of the overlay district.
- 2.3.10. *Variance and appeal*. An applicant may request a variance from the requirements of this Section 2.3, or appeal an administrative decision made based upon this Section 2.3 or Section 21.1.1, to the Board of Zoning Adjustment. A variance will only be granted when necessary to avoid the prohibition of wireless service or otherwise comply with the law. The Board of Zoning Adjustment shall review such request or appeal and grant such relief as may be required to avoid the prohibition of wireless service or otherwise comply with the law.

2.4. Small Wireless Facility Restrictions.

2.4.1. *Permit required*. No person shall attach, install or maintain a small wireless facility in the right-of-way without a permit issued by the City, or in violation thereof.

- 2.4.2. *ROW interference*. No person shall install a small wireless facility in such a manner that impedes or prevents the provision of light, electricity, or operation of electrical equipment or other existing services in the right-of-way.
- 2.4.3. *Pole Safety*. No person shall install a small wireless facility on any pole or structure that will jeopardize the structural integrity of the pole or structure, or otherwise violate any applicable code.
- 2.4.4. *Electric service*. No person shall provide electric service to a small wireless facility unless and until the small wireless facility has passed post-installation inspection in accordance with Article 8.
- 2.4.5. *Appearance*. Appearance standards are intended to balance the affordable deployment of small cell technology with the aesthetic standards of the surrounding environs.
 - 2.4.5.1. <u>Concealment and enclosures</u>. Antennas, pole-mounted equipment, and wiring will be concealed within conduit, risers and enclosures that generally match the color of the pole. Concealment enclosures may be perforated to facilitate necessary air flow. Antennas that extend taller than the pole will be designed to appear as an extension of the pole.
 - 2.4.5.2. <u>Ground-mounted equipment</u>. Ground-mounted equipment shall not be placed closer than two feet (2') nor farther than five feet (5') from the pole on which the antenna is mounted, unless local conditions or technology used require otherwise. Ground-mounted equipment will be placed at least eighteen inches (18") from the roadway. This rule shall not apply to ground-mounted equipment installed in rights-of-way controlled by the Arkansas Department of Transportation.
 - 2.4.5.3. <u>Underground areas</u>. In areas where all electric and communication lines have been placed underground, small wireless facilities shall be placed underground or in ground-mounted cabinets, except that the antenna may be mounted to an existing pole or new pole installed in accordance with Section 2.3.8. Alternatively, the small wireless facility and associated equipment may be installed in a new pole using a stealth design that fully meets the appearance and size requirements of this ordinance and fully conceals the small wireless facility.
 - 2.4.5.4. <u>Extensions</u>. Small wireless facilities shall not extend more than thirty inches (30") from a pole unless camouflaged to appear as an integral part of a streetlight.
 - 2.4.5.5. <u>Attachments to decorative poles</u>. No person shall attach a small wireless facility or any other attachment to a decorative pole that is less than fully camouflaged to appear as a natural and consistent design element of the decorative pole.
 - 2.4.5.6. <u>Smallest reasonable size</u>. When installing small wireless facilities within or adjacent to property described in Section 2.3.9, the overall size of small wireless

facilities should be minimized as much as reasonably possible and technically feasible. Designs shown in Appendix B are deemed valid. The City Planning Director, and any employee of the City or Utility designated by the City Planning Director, may administratively approve designs that are consistent with, or found to be less obtrusive than, designs shown in Appendix B.

- 2.4.5.7. <u>Variance and appeal</u>. An applicant may request a variance from the requirements of this Section 2.4.5, or appeal an administrative decision made based upon this Section 2.4.5, to the Board of Zoning Adjustment. The Board of Zoning Adjustment shall review such request or appeal and grant such relief as may be required to avoid the prohibition of wireless service or otherwise comply with the law
- 2.4.6. *Historic Districts*. No person shall install a small wireless facility in any historic district unless and until issued a certificate of appropriateness by the historic district commission.

2.5. <u>Collocation on City and Utility Poles.</u>

- 2.5.1 *City collocation permit required*. No person shall attach, install or maintain a small wireless facility on any pole or other structure managed by the City without a permit issued by the City, or in violation thereof.
- 2.5.2 *Utility collocation permit required*. No person shall attach, install or maintain a small wireless facility on any pole or other structure that is managed by the Utility without a permit issued by the Utility, or in violation thereof.
- 2.5.3 Bucket Truck Access. No person shall install a small wireless facility on any City or Utility pole or structure that is inaccessible from a street with a bucket truck. The purpose of this rule is to protect the safety of City and Utility workers performing maintenance on City and Utility infrastructure.
- 2.5.4 *Electric Distribution Poles*. No person shall install, operate or maintain a small wireless facility or any other attachment to a Utility distribution pole within or above the electric supply space as designated by the National Electric Safety Code, except Utility personnel.
- 2.5.5 Streetlight and Traffic Poles. No person shall install a small wireless facility on or within a streetlight or traffic pole that, when combined with the existing lighting equipment and other existing City and Utility facilities, shall require more electricity than can be safely provided by the existing service line.
- 2.5.6 *General restrictions applicable*. All restrictions applicable to small wireless facilities in Section 2.4 shall apply when small wireless facilities are collocated on City and/or Utility poles.
- 2.5.7 *Reserved space*. City and/or Utility may reserve space on poles for future use according to a plan that has been documented and approved by the Mayor or Utility CEO, as appropriate, prior to the submission of application to occupy the space reserved.

- 2.5.7.1 <u>Notice of reserved space</u>. An applicant will be notified at the time an application is filed, or as soon thereafter as possible, that space on one or more poles within an application has been reserved for future use. A reservation of space shall not preclude placement of a pole or collocation of a small wireless facility. If replacement of the authority's pole is necessary to accommodate the collocation of the small wireless facility and the future use, the wireless provider shall pay for the replacement of the authority pole and the replaced pole shall accommodate future use.
- 2.5.7.2 Reclaiming reserved space. When notice was provided in accordance with Section 2.5.1, City or Utility may reclaim reserved space by giving the wireless provider at least ninety (90) calendar days prior notice. If reclaimed, City or Utility may at such time also install associated facilities, including the attachment of communications lines for internal operational or governmental communications requirements. City or Utility shall give the wireless provider the option to remove its attachment(s) from the affected poles or pay for the cost of any make-ready work needed to expand capacity for City and/or Utility service requirements, so that the wireless provider can maintain its attachment(s) on the affected poles. The allocation of the cost of any such make-ready work (including the transfer, rearrangement, or relocation of third-party attachments) shall be determined in accordance with Article 10.
- 2.5.7.3 <u>Third-party attachers</u>. Wireless provider shall not be required to bear any of the costs of rearranging or replacing its Attachment(s), if such rearrangement or replacement is required as a result of an additional attachment or the modification of an existing attachment sought by any other entity
- 2.6. **No Interest in Property.** No use, however lengthy, of any City or Utility property or facility, and no payment of any fees or charges required under this regulation, shall create or vest in any person any easement or other ownership or property right of any nature in any portion of such property or facility. Neither this regulation, nor any permit granted under this regulation, shall constitute an assignment of any rights of any nature by City or Utility. Notwithstanding anything in this regulation to the contrary, the rights of wireless provider shall be limited to only those rights described within their issued permit.
- 2.7. **Right to Attach.** Nothing in this regulation, other than a permit issued pursuant to this Article 2, shall be construed as granting any person any right to install attachments to any specific City or Utility Pole, or poles in general.
- 2.8. **Rights over Poles.** This regulation does not in any way limit City's or Utility's right to locate, operate, maintain, or remove its poles in the manner that will best enable it to fulfill its service requirements or to comply with any federal, state, or local legal requirement and policies, including undergrounding requirements.
- 2.9. **Purpose.** Nothing in this regulation shall be construed to require City or Utility to install, retain, extend, or maintain any pole for use when such pole is not needed for City's or Utility's own service requirements. The above, notwithstanding Utility will not unreasonably deny a request to extend or replace a pole upon request.

- 2.10. <u>Poles and Wireless Support Structures Owned by Wireless Provider</u>. Poles, wireless support structures, and their surrounding area, owned by wireless providers shall be maintained according to this regulation and the uniform standards of the City, as may be amended from time to time.
- 2.11. **Service Restoration.** Utility's service restoration requirements shall take precedence over any and all work operations of a wireless provider on Utility's poles.
- 2.12. Other Agreements. Except as expressly provided in this regulation, nothing in this regulation shall limit, restrict, or prohibit Utility from fulfilling any agreement or arrangement regarding Utility facilities into which Utility has previously entered, or may enter in the future, with other parties. Neither the City nor Utility shall enter into any exclusive arrangement with any person for the use of the right-of-way for the collocation of small wireless facilities or the installation, operation, marketing, modification, maintenance, or replacement of poles for collocation.
- 2.13. **Permitted Uses.** Application of this regulation is limited to the uses specifically stated in the recitals set forth above and no other use shall be allowed without the express written consent to such use by City and Utility.
- 2.14. **Electric Power**. To the extent a wireless provider requires electric service for its facilities it shall obtain and be responsible for payment of such power and extension of service pursuant to the applicable standard process for such service. Utility shall bill wireless providers for electric service in accordance with Section 3.6.
- 2.15. **Furnishing Electricity for Wireless Facilities**. No person shall furnish electricity for use by a small wireless facility or micro wireless facility except Utility or a public utility, as defined by A.C.A. § 23-1-101, that is authorized by law to furnish electricity to the public for compensation.

Article 3. Fees and Charges

- 3.1. **Payment of Fees and Charges.** As a condition of any permit issued under Article 2, wireless providers shall pay to City and Utility the fees and charges specified in Appendix A and shall comply with the terms and conditions specified in this regulation.
- 3.2. **Payment Period.** Unless otherwise expressly provided, wireless providers shall pay any invoice they receive from City and/or Utility pursuant to this regulation within sixty (60) calendar days of receipt of invoice. If a wireless provider pays any amount under protest or dispute, then such wireless provider shall make full payment consistent with the timeframe prescribed above and shall designate payment as "PAID UNDER PROTEST."
 - 3.2.1. Any charges payable by wireless providers and/or City or Utility hereunder shall be billed by a party within two (2) years from the end of the calendar year in which the charges were incurred; any such charges beyond such period shall not be billed by a party and shall not be payable by the other party.

- 3.3. <u>Application Fee</u>. Wireless providers shall pay a non-refundable application fee for each small wireless facility to be installed in the public right-of-way in the amount stated in Appendix A. The purpose of this fee is to reimburse City and Utility for all administrative, engineering, professional and other costs related to review of the application, except make-ready.
 - 3.3.1 A single application may include multiple small wireless facilities, with or without poles.
 - 3.3.2 The wireless attachment fee shall be subject to adjustment by a vote of the City Council. Any adjustment to the application fees shown on Appendix A will be publicized for thirty (30) days before the effective date.
 - 3.3.3 Failure to include appropriate application fees with permit applications will cause the application(s) to be deemed incomplete. Incomplete application(s) will not be processed until cured.
- 3.4. <u>Collocation Rate</u>. Wireless providers shall annually pay, in advance, an amount equal to the annual wireless collocation rate multiplied by the number of small wireless facilities installed on or within City or Utility poles, as set out in Appendix A. The first-year collocation rate shall be paid prior to the issuance of the associated collocation permit. The wireless collocation fee shall be subject to adjustment by a vote of the City Council. Any adjustment to the collocation fees shown on Appendix A will be publicized for thirty (30) days before the effective date.
- 3.5. **Right-of-Way Rate**. Wireless providers shall annually pay, in advance, an additional amount equal to the annual right-of-way permit rate multiplied by the number of small wireless facilities installed within the right-of-way, as set out in Appendix A. The first-year right-of-way rate shall be paid prior to the issuance of the associated right-of-way permit. The right-of-way rate shall be subject to adjustment by a vote of the City Council. Any adjustment to the right-of-way rate shown on Appendix A will be publicized for thirty (30) days before the effective date.
- 3.6. **Power Consumption**. In addition to all other applicable rates and fees, wireless providers shall pay for all electric services provided to facilities according to the electric rates approved by the City. Utility may determine power consumption by metering one or more facilities and multiplying the result by the total number of facilities or by estimating power consumption based on the electric load sheet submitted with the application; however, all wireless providers will be afforded fair and equal rate treatment.
- 3.7. <u>Billing of Collocation and Right-of-Way Rates</u>. Wireless providers shall be invoiced for the per-pole collocation rates and right-of-way rates annually. These amounts shall be payable in advance for each small wireless facility for which a permit was issued as of October 1 of the prior calendar year. The invoices shall set forth the total number of small wireless facilities of the wireless provider on October 1st of the preceding year.
 - 3.7.1. **Contesting Fee.** Wireless providers shall have sixty (60) days from receipt of invoice to contest the invoice or any quantity or calculation within the invoice.
- 3.8. **Refunds.** No fees and charges specified in Appendix A shall be refunded on account of any relinquishment or abandonment of a permit granted under this regulation.

- 3.9. <u>Late Charges</u>. If City and/or Utility does not receive payment for any amount owed within sixty (60) calendar days after it becomes due, wireless providers shall pay a late processing charge equal to two and one-half percent (2.5%) of the amount owed. In addition to assessing a late processing charge, if any fees or charges remain unpaid for a period exceeding ninety (90) days: (1) Wireless providers shall be charged interest at the rate of ten percent (10%) per year on the amount owed; (2) City and/or Utility may discontinue the processing of applications for new small wireless facilities and/or poles until such fees or charges are paid: and (3) City and/or Utility may disconnect electric service from wireless provider's small wireless facilities at wireless provider's expense.
- 3.10. <u>Make-Ready Charges</u>. In addition to other fees and charges, wireless providers shall reimburse the City and/or Utility for the actual and documented cost of evaluating, determining, and performing work that must be performed to make City and/or Utility poles ready for the collocation of small wireless facilities, if any.
 - 3.10.1. *Internal costs*. Make-ready charges shall be nondiscriminatory, competitively neutral, and commercially reasonable. Make-ready charges are intended to fully reimburse the City and Utility for all make-ready costs which shall include, but not necessarily be limited to, all design, engineering, administration, supervision, payments, labor, overhead, materials, equipment and applicable transportation used for work on, or in relation to such wireless provider's collocations as set out in this regulation or as requested by such wireless provider in writing, but shall not include any additional revenue for the City or Utility.
 - 3.10.2. *External costs*. Make-ready charges shall include the amount paid to a professional engineer registered in Arkansas to review a wireless provider's plans, if any. Make-ready charges shall not include any contingency-based consultant fees of any kind.
 - 3.10.3. Advance payment. City or Utility, in their sole reasonable discretion, will determine the extent to which a wireless provider will be required to pay in advance estimated makeready charges, in connection with the initial installation or rearrangement of such wireless provider's collocations pursuant to the procedures set forth in Articles 6 and 7 below.
 - 3.10.4. *True-up*. Whenever City or Utility requires advance payment of estimated expenses prior to undertaking an activity on behalf of a wireless provider and the actual cost of the activity exceeds the advance payment of estimated expenses, wireless providers must pay the difference in cost, provided that costs are documented with sufficient detail to enable a wireless provider to verify the charges. To the extent that City's or Utility's actual cost of the activity is less than the estimated cost, the difference in cost shall be refunded to the wireless provider.
- 3.11. <u>Determination of Charges.</u> Wherever this regulation requires a wireless provider to pay for work done or contracted by City or Utility, the charge for such work shall include all reasonable material, labor, engineering, administrative, and applicable overhead costs. City and Utility shall bill their services based upon actual costs, and such costs will be determined in accordance with the cost accounting systems used for recording capital and expense activities. Consistent with Article 19, if a wireless provider was required to perform work and fails to

perform such work within the specified timeframe, and City or Utility performs such work, the wireless provider may be charged for actual and documented costs for completing such work.

- 3.12. Work Performed by City or Utility. Wherever this regulation requires City or Utility to perform any make-ready work, City or Utility, at their sole discretion, may utilize its employees or contractors, or any combination of the two, to perform such work.
- 3.13. Charges for Incomplete Work. In the event that a permit is awarded to a wireless provider and then steps are taken by City and/or Utility to facilitate construction by performing necessary engineering and administrative work and the permit is subsequently relinquished, abandoned or otherwise canceled by the wireless provider, such wireless provider shall reimburse City and/or Utility for all of the actual and documented costs incurred by City and/or Utility through the date of cancellation, including engineering, clerical and administrative and makeready construction costs, and such additional costs as may be necessary to discontinue work in a clean and orderly fashion.

Article 4. Specifications

- 4.1. **Installation**. Every small wireless facility, pole and other structures in the right-of-way shall be erected and maintained in accordance with the requirements and specifications found in applicable codes, including the latest revision of the National Electric Code (NEC) and National Electrical Safety Code (NESC), as may be amended from time to time, and in compliance with any construction standards now in effect or that may hereafter be issued by City or Utility (provided such construction standards are not inconsistent with this Regulation and are applied on a non-discriminatory basis) or any rules or orders of a governmental authority having jurisdiction. The location of any small wireless facility may be reasonably re-designated from time to time to accommodate other pole attachments, for reasons of electrical service safety or reliability, with costs allocated in accordance with Article 10.2. Notwithstanding the foregoing, with respect to any small wireless facility that was in compliance with applicable codes, including NESC or Utility construction standards, at the time such small wireless facility was installed but has become noncompliant because of revisions to the NESC or Utility construction standards, wireless providers shall be required to bring their small wireless facilities into compliance with then-current standards only in connection with relocation, pole replacement, or rebuild affecting such attachment or in the event such noncompliance creates an imminent threat to public safety. When maintenance or repair work is needed with respect to noncompliance with applicable codes as set forth in this Section, the actual costs of maintenance, repair, and inspection shall be borne by wireless providers.
- 4.2. <u>Limitations on Utility Poles Attachments</u>. Absent Utility's prior written permission, the following limitations shall apply to small wireless facilities installed on Utility's poles:
 - 4.2.1. *Pole Top Installation*. Small wireless facilities will only be installed below the electric supply space on poles used for electric distribution, in compliance with applicable codes.
 - 4.2.2. *One Wireless Communication Facility Per Pole*. No more than one small wireless facility may be installed on a single Utility pole (a single facility installation consisting of

multiple antennas or nodes may be permissible). The purpose of this rule is to accommodate communication technologies that may be disruptive to other collocated communication technologies.

- 4.2.3. Poles with Distribution Equipment Installed. In determining whether a particular pole has sufficient capacity to accommodate a proposed small wireless facility, the Utility shall deny access if existing electric equipment installed on the pole (including without limitation: transformers, capacitors, reclosers, sectionalizers, voltage-regulators, voltage-regulator racks, primary metering, gang operated switches, and any other equipment being used by the Utility) would, in the Utility's reasonable judgment, preclude the attachment of additional facilities.
- 4.2.4. *Accessible by Bucket Truck*. In order to ensure a clear and safe climbing path for utility linemen, small wireless facilities may only be installed on Utility poles that are less than 50 feet above ground in height and that are accessible from the street by a Utility bucket truck.
- 4.2.6. <u>Installations within Certain Distance from Utility Substations</u>. No permit applications will be approved for the installation of small wireless facilities on Utility poles within three hundred (300) feet of any Utility electric substation's outer fence.

4.3. Request of a Variance or Waiver.

- 4.3.1. Variance from City requirements. Requests to vary from any City aesthetic requirements applicable to a new small wireless facility must be made in writing by a wireless provider to the City's Planning Department for submission to the Board of Zoning Adjustments, with notice to Utility, either before or at the time of permit application submission. The request must specifically identify the provision requested to be varied, justification for requesting the granting of the variance, and the proposed solution as a result of the variance. City shall notify the wireless provider in writing within forty-five (45) days of receiving a request for waiver as to whether the request is granted in whole or in part. The request will be considered according to the normal rules and procedures of the Board of Zoning Adjustments.
- 4.3.2. Waivers of Utility requirements. Requests to waive any other City requirement must be made in writing by the wireless provider to the Mayor or the Mayor's designee either before or at the time of permit application submission. Requests to waive any Utility requirement must be made in writing by the wireless provider to the Utility CEO or the Utility CEO's designee either before or at the time of permit application submission. The request must specifically identify the applicable code or provision requested to be waived, justification for requesting the granting of the waiver, and the proposed solution as a result of the waiver. City and/or Utility, as appropriate, shall notify the wireless provider in writing within thirty (30) days of receiving a request for a waiver as to whether the request is granted, which may be granted in whole or in part. Utility will not grant any waiver which in the sole opinion of Utility will result in a violation of the NESC or other applicable federal, state, or local law, regulation, or ordinance.

- 4.3.3. *Joint City and Utility issues*. Notwithstanding the foregoing, in the event a request for a variance or waiver for a particular small wireless facility requires approval by both City and Utility, City and Utility shall work together to coordinate a joint-response in order not to unreasonably delay or interfere with the wireless provider's permit application process.
- 4.4. Maintenance of Facilities. Wireless providers shall, at their own expense, make and maintain their small wireless facilities and any associated poles in safe condition and good repair, in accordance with all applicable codes. All maintenance work on small wireless facilities shall only be performed by qualified personnel. During the period described in Section 2.2.6, wireless providers shall not be required to update or upgrade its small wireless facilities if they complied with applicable codes at the time they were made; provided, however, wireless providers shall update or upgrade their small wireless facilities in connection with relocation, pole replacement or rebuild affecting such small wireless facilities or in the event such update or upgrade is required or necessary in order to resolve an imminent threat to the safety of any person or property.
- 4.5. <u>Tagging</u>. Upon installation, wireless providers shall affix a tag to any pole or structure upon which the wireless provider's small wireless facilities have been installed and to the exterior of any underground or ground-mounted small wireless facility equipment. The tag will be constructed of aluminum, plastic or other material of extended durability and maintained throughout the duration of the permit.
- 4.6. <u>Interference</u>. Wireless providers shall not allow their small wireless facilities to impair the ability of City, Utility or any third party to use Utility's poles including telecommunications already on the poles, nor shall any wireless provider allow its small wireless facilities to interfere with the operation of any City facilities, Utility facilities or third-party facilities. Neither City nor Utility will grant after the date of this regulation a permit, license or any other right to any third party, if at the time such third party applies for access to a pole Utility knows or has reason to know that such third party's use may in any way adversely affect or interfere with the wireless provider's existing small wireless facilities, wireless provider's use and operation of its facilities, or wireless provider's ability to comply with the terms and conditions of this regulation.
 - 4.6.1. **RF Responsibility**. Wireless providers are solely responsible for the radio frequency ("RF") emissions emitted by its small wireless facilities and associated equipment, ensuring that the RF exposure from its emissions are within the limits permitted under all applicable rules of the FCC. City and Utility are solely responsible for the RF emissions emitted by their equipment or facilities and ensuring that the RF exposure from its emissions are within the limits permitted under all applicable rules of the FCC.
 - 4.6.2. <u>Signage</u>. To the extent required by FCC rules and/or applicable local, state or federal law, wireless providers shall install appropriate signage to notify workers and third parties of the potential for exposure to RF emissions. The signage will be placed so that it is clearly visible to workers who climb the pole or ascend by mechanical means and maintained throughout the duration of the permit.

- 4.6.3. **Duty to Others**. Wireless providers shall be under a duty and obligation in connection with the operation of its facilities to protect against RF interference to the RF signals of City, Utility, all other wireless providers, and any other entities with attachments on poles with the wireless provider. Utility shall be under no obligation to remedy or resolve RF interference among wireless providers or other attaching entities and shall not be liable for any such RF interference among wireless providers or other attaching entities. Utility will, however, endeavor to have all attaching entities coordinate and cooperate with each other relating to the resolution of interference. Notwithstanding the foregoing, in the event City's or Utility's operations create RF interference to wireless providers or other attaching entities, City or Utility shall endeavor to correct such RF interference promptly and shall cooperate with the other parties relating to the correction.
- 4.7. Protective Equipment. Each wireless provider and its employees and contractors shall utilize and install adequate protective equipment to ensure the safety of people and facilities pursuant to FCC and Utility rules and requirements. Each wireless provider shall, at its own expense, install protective devices designed to handle the electric voltage and current carried by Utility's facilities. Every permit issued by the City or Utility pursuant to this regulation shall bear the warning and condition that NEITHER CITY NOR UTILITY SHALL BE LIABLE FOR ANY ACTUAL OR CONSEQUENTIAL DAMAGES TO SMALL WIRELESS FACILITIES, WIRELESS PROVIDER'S CUSTOMERS' FACILITIES, OR TO ANY OF WIRELESS PROVIDER'S EMPLOYEES, CONTRACTORS, CUSTOMERS, OR OTHER PERSONS, EXCEPT TO THE EXTENT CAUSED BY UTILITY'S GROSS NEGLIGENCE OR INTENTIONAL MISCONDUCT.
- 4.8. <u>Safety Briefing</u>. Wireless providers shall prepare a written "Safety Briefing" suitable for City and Utility employees and contractors who may be required to work near and/or around small wireless facilities. This safety briefing will be submitted as part of each permit application.
- 4.9. Signage and Cut-Off Switch. Each wireless provider shall install a lockable power cutoff switch as directed by City and/or Utility and consistent with applicable codes and Utility
 specifications for every pole to which the wireless provider has attached facilities that can emit
 RF energy. Utility will specify instances where these power cut-off facilities and associated
 equipment need to be pad mounted. The cut-off switch will allow for the power source and any
 back-up power sources to be disconnected. If required by City and/or Utility, the power source
 must also be equipped with an external indicator light to provide certainty that the power has
 been disconnected. Wireless providers shall provide Utility with access to disconnect switch by
 providing keys or combinations to the locks. Disconnects and meter sockets must be installed
 according the Utility's standards. RF caution signs shall be installed according to applicable
 codes.
- 4.10. <u>Cut-Off Procedure</u>. In ordinary circumstances, City and/or Utility's authorized field personnel will contact the applicable wireless provider's designated point of contact to inform a wireless provider of the need for a temporary power shut down. Upon receipt of the call, the wireless provider will power down its antenna remotely, the power-down will occur during normal business hours and City and/or Utility will endeavor to provide 24 hours' advance notice.

In the event of an unplanned power outage or other unplanned cut-off of power, or an emergency, the power-down will be with such advance notice as may be deemed appropriate in City's and/or Utility's sole discretion and, if circumstances warrant, employees and contractors of City and/or Utility may accomplish the power-down by operation of the power disconnect switch without advance notice to the wireless provider and shall notify the wireless provider as soon as possible. In all such instances, once the work has been completed and the worker(s) have departed the exposure area, the party who accomplished the power-down shall restore power and inform the other party as soon as possible that power has been restored.

- 4.11. <u>Emergency Contact Information</u>. Each wireless provider shall provide emergency after hours contact information to City and Utility to ensure proper notification in case of an emergency. Information will include 24/7 telephone, cell phone and/or pager information, a list of duty managers by district and escalation procedures. Wireless providers shall provide Utility with updated emergency contact information on an annual basis and whenever changes are made.
- 4.12. <u>Violation of Specifications</u>. If a wireless provider's small wireless facilities, or any part of them, are installed, used, or maintained in violation of this regulation, and the wireless provider has not corrected the violation(s) within thirty (30) days from receipt of written notice of the violation(s) from the City or Utility, the provisions of Article 19 shall apply. When City or Utility believes that any violation(s) by a wireless provider poses an imminent threat to the safety of any person, interfere with the performance of City's or Utility's service obligations, or present an imminent threat to the physical integrity of Utility poles or facilities, Utility may perform such work and/or take such action as it deems reasonably necessary without first giving written notice to any wireless provider. As soon as practicable afterward, the wireless provider will be advised of the work performed or the action taken. The wireless provider shall be responsible for all actual and documented costs incurred by City or Utility when acting pursuant to this Article 4.12.
- 4.13. Removal of Nonfunctional Attachments. At its sole expense, each wireless provider shall remove any of its small wireless facilities, or any part thereof, that becomes nonfunctional and no longer fit for service ("nonfunctional attachment") as provided in this Section 4.13. Except as otherwise provided in this regulation, each wireless provider shall remove nonfunctional attachments within one (1) year of the date that it became nonfunctional, unless the wireless provider receives written notice from City or Utility that removal is necessary to accommodate City's, Utility's or another attaching entity's use of the affected pole(s), in which case the wireless provider shall remove the nonfunctional attachment within ninety (90) days of receiving the notice. After the time designated for removal, Utility may, in its sole discretion, remove and dispose of the nonfunctional attachment and the wireless provider shall be responsible for the costs therefor.

Article 5. Private and Regulatory Compliance

5.1. Necessary Authorizations. Before a wireless provider occupies any of City's or Utility's poles, the wireless provider shall obtain from the appropriate public or private authority, or from any property owner or other appropriate person, any required authorization to construct, operate, or maintain its small wireless facilities on public or private property. City and Utility retain the right to require evidence that appropriate authorization has been obtained before any permit is issued to a wireless provider. A wireless provider's obligations under this Article 5 include, but

are not limited to, its obligation to obtain and pay for all necessary approvals to occupy public/private rights-of-way and easements from entities other than City, and all necessary licenses and authorizations to provide the services that it provides over its small wireless facilities from entities other than City. Every permit issued by the City and/or Utility pursuant to this regulation shall state, "WIRELESS PROVIDERS SHALL DEFEND, INDEMNIFY, AND REIMBURSE CITY AND UTILITY FOR ALL CLAIMS, DEMANDS, DAMAGES, LAWSUITS, JUDGMENTS, COSTS, LIENS, LOSSES, EXPENSES, AND ATTORNEY'S FEES, THAT CITY AND/OR UTILITY MAY INCUR AS A RESULT OF CLAIMS BY GOVERNMENTAL BODIES, OWNERS OF PRIVATE PROPERTY, OR OTHER PERSONS THAT A WIRELESS PROVIDER DOES NOT HAVE SUFFICIENT RIGHTS OR AUTHORITY TO OPERATE WIRELESS PROVIDER'S SMALL WIRELESS FACILITIES ON UTILITY'S POLES."

- 5.2. <u>Sufficiency of Public Rights-of-Way.</u> Neither City nor Utility makes any representation or warranty of any nature that its existing or future public rights-of-way, easements or other property rights, private or public, were, are or will be sufficient to permit the attachment, maintenance, replacement, relocation, repair, or modification of attachments on any City or Utility poles.
- 5.3. <u>Lawful Purpose and Use.</u> All small wireless facilities, poles and wireless support structures must always serve a lawful purpose, and the use of such small wireless facilities, poles and wireless support structures must comply with all applicable federal, state and local laws.
- 5.4. Forfeiture of City's or Utility's Rights. No permit granted under this regulation shall extend, or be deemed to extend, to any of City's or Utility's Poles or other City or Utility facilities, to the extent that a wireless provider's attachment would result in a forfeiture of City's or Utility's rights. Any permit that would result in forfeiture of City's or Utility's rights shall be deemed invalid as of the date that City and/or Utility granted it. Further, if any wireless provider's existing small wireless facilities, whether installed pursuant to a valid permit or not, would cause such forfeiture, such wireless provider shall remove its small wireless facility within sixty (60) days of receipt of written notice from City or Utility. If the wireless provider does not remove its small wireless facilities in question within sixty (60) days of receiving written notice from City or Utility, City or Utility may at its option perform such removal at the wireless provider's expense. Notwithstanding the forgoing, wireless providers shall have the right to contest any such forfeiture before any of its rights are terminated.
- 5.5. <u>Effect of Consent to Construction/Maintenance</u>. Consent by City or Utility to the construction or maintenance of any attachments by a wireless provider shall not be deemed consent, authorization, or acknowledgment that the wireless provider has obtained all required authorizations with respect to such attachment.

Article 6. Permit Application Procedures.

6.1. **Permit Required.**

6.1.1. Before installing any small wireless facility, pole or wireless support structure in a right-of-way, a wireless provider, or an affiliate duly authorized to act on behalf of a

wireless provider, shall submit an application to the designated office and receive a permit therefor, with respect to each such small wireless facility, pole or wireless support structure.

- 6.1.2. Subject to Section 7.7.3, before making any original attachment to any City or Utility pole or facility, a wireless provider or an affiliate duly authorized to act on behalf of a wireless provider, shall submit an application and receive a permit therefor from the City or Utility, with respect to each such City or Utility facility.
- 6.2. **Professional Engineer**. Unless otherwise waived in writing by City and Utility, as part of the permit application process, and at the wireless provider's sole expense, a qualified and experienced professional engineer, or an employee or contractor of the wireless provider who has been approved by City and Utility, must undertake and complete the engineering design and pole loading analyses calculations required in completing a permit application, participate in the preconstruction survey, conduct the post-construction inspection, and certify that the wireless provider's small wireless facilities can be and were installed on the identified poles in compliance with the applicable codes and in accordance with the permit. The professional engineer's qualifications must include experience performing such work, or substantially similar work, on electric transmission or distribution systems, and unless otherwise waived by City and Utility, such engineer must be licensed in the State of Arkansas. The City and/or Utility may allow a wireless provider's professional engineer, employee or contractor to conduct a post-construction inspection that the City and/or Utility will verify by means that it deems to be reasonable.
 - 6.2.1. **Pre-Existing Attachments.** Unless updates or upgrades are required by applicable codes, or unless Utility provides notice to the contrary, wireless providers shall not be required to obtain permits for authorized attachment(s) existing as of the effective date of this regulation. Such grandfathered attachments shall, however, be subject to the attachment fees specified in Appendix A. Wireless providers shall provide City and Utility a list of all such pre-existing attachments within six (6) months of the effective date of this regulation but shall be subject to notification requirements.
- 6.3. Submission of Application. Wireless providers applying for a City right-of-way permit or City collocation permit will submit a completed and signed application to City's designated office, which, unless otherwise agreed by City, shall include all information listed in Sections 6.3.1 through 6.3.10. Wireless providers applying for a Utility collocation permit will submit a completed and signed application to Utility's designated office, which, unless otherwise agreed by Utility, shall include all information listed in Sections 6.3.1 through 6.3.10. Wireless providers shall use the application form provided, which will require applicants to attest to certain requirements in this regulation. The application form may be amended from time to time, provided that any such changes are not inconsistent with the terms of this regulation and are applied to all attaching entities on a non-discriminatory basis. City's or Utility's acceptance of the submitted design documents does not relieve any wireless provider of full responsibility for any errors and/or omissions.
 - 6.3.1 *Identification of the applicant*. Applications will include:
 - (A) The true legal name of the applicant;
 - (B) The address of the applicant;

- (C) Emergency contact information specified in Section 4.11.
- 6.3.2 A map or description of the location of the facilities to be installed. Applications to install a new pole will specify the proposed location of the new pole with enough detail to allow a plan reviewer to identify the location within three (3) feet of accuracy. Applications to collocate a small wireless facility on an existing pole will include the serial number or other identifier that is affixed to the pole or, if no such identifier can be seen, a photograph of the pole.
- 6.3.3 An illustration that shows the final appearance of the facilities after installation. Applications will include a depiction that represents the final aesthetic appearance of the facility. A drawing or photograph of a substantially similar installation in a separate location will satisfy this requirement.
- 6.3.4 Engineering drawings of the facilities to be installed, including required makeready work to be performed. Applications will include engineering drawings of all work to be performed, including make-ready. Drawings submitted will only be made by persons authorized in Section 6.2. Drawings must be sufficiently detailed to allow independent verification that all proposed work and attachments will comply with this regulation and applicable codes.
- 6.3.5 *Electrical load information*. Applications will include an electrical load sheet that identifies all the equipment to be installed, the corresponding electrical load of each, and the sum of the electrical load of all equipment.
- 6.3.6 *Pole loading calculations*. Applications will include pole loading analysis using generally accepted industry standard software, such as SPIDA Calc.
- 6.3.7 Worker safety information related to the small wireless facility. Applications will include safety information as provided by the manufacturers of equipment and the wireless provider's safety personnel. Safety information should be organized as a safety briefing as described in Section 4.8.
- 6.3.8 Evidence of bonding. Applications will include evidence of adequate bonding, as required by Article 30.
- 6.3.9 *Evidence of insurance*. Applications will include evidence of adequate insurance, as required by Article 25.
- 6.3.10 Required application fees. Applications will include fees shown in Appendix A.
- 6.4. <u>Incomplete Applications</u>. If an application is determined to be incomplete, the City and/or Utility will notify the applicant as soon as possible with a written narrative identifying all missing information. Wireless providers are encouraged, but not required, to conduct a preapplication meeting with the City and/or Utility to ensure applications are complete prior to submission.

- 6.4.1 *Notice within Ten Days*. If the City and/or Utility provides notice to an applicant of an incomplete application within ten (10) days of the date that the application was submitted, all processing deadlines pertaining to the application shall restart at zero (0) on the date the applicant provides the missing information.
- 6.4.2 *Notice after Ten Days*. If the City and/or Utility provides notice to an applicant of an incomplete application more than ten (10) days after the date that the application was submitted, all processing deadlines pertaining to the application shall be tolled until the date the applicant provides the missing information.
- 6.4.3 *Batched applications*. When an applicant submits multiple applications simultaneously and some, but not all, are incomplete, those applications that are complete will continue to be processed according to timelines in this Article 6.
- 6.4.4 Abandoned applications. After notice is provided to an applicant that an application is incomplete as described in Sections 6.4.1 or 6.4.2, the applicant will be afforded thirty (30) days to provide missing information without submitting a new application or application fee. If incomplete for more than thirty (30) days, the application will be deemed abandoned and, if requested, the City and/or Utility will return all forms and information to the applicant. The application fee will not be refunded. The applicant may later resubmit the forms and information as a new application with an appropriate application fee.
- 6.5 **Review of City ROW Permit Applications.** City right-of-way permit applications will be reviewed in the order received and processed in a timely fashion. Designated City employees will approve applications that fully comply with this regulation as soon as practicable. If approved, the applicant will be notified, and a permit made available for issue under Section 6.9. If a designated City employee determines that one or more parts of an application does not comply with this regulation, the designated City employee, as soon as practicable, provide the applicant a written report identifying each noncompliant provision. The applicant may then:
 - 6.5.1 Cure the noncompliance. The applicant may cure the noncompliant provisions in the application within thirty (30) days without paying an additional application fee. If the application remains noncompliant for more than thirty (30) days after notice, the application will be deemed abandoned and the City, if requested, will return all forms and information to the applicant. The application fee will not be refunded. The applicant may later resubmit the forms and information as a new application with an appropriate application fee. The filing of an appeal under Section 6.5.2 or a variance under Section 6.5.3 shall toll the time allotted to cure noncompliance until the appeal or variance request is resolved.
 - 6.5.2 Appeal the determination. The applicant may appeal the City employee's determination that the application is noncompliant. Appeal will be made in writing to the City's Planning Department for submission to the Board of Zoning Adjustments, with notice to Utility, within thirty (30) days of the date that the applicant received notice that the application was noncompliant. The appeal will be considered during an open hearing according to the normal rules and procedures of the Board of Zoning Adjustment. City

shall notify the wireless provider in writing within forty-five (45) days of receiving the request for waiver as to whether the request is granted in whole or in part.

- 6.5.3 Variance request. The applicant may request a variance from one or more of the noncompliant provisions within the application. A variance request must specifically identify the provision requested to be varied, justification for requesting the granting of the variance, and the proposed solution as a result of the variance. A variance will only be granted when necessary to avoid the prohibition of wireless service or otherwise comply with the law. The variance request will be considered during an open hearing according to the normal rules and procedures of the Board of Zoning Adjustment. City shall notify the applicant in writing within forty-five (45) days of receiving a variance request as to whether the request is granted in whole or in part.
- 6.5.4 Simultaneous requests permitted. An applicant may simultaneously appeal the decision of a City employee while requesting a variance from the requirement that formed the basis of the appeal.
- 6.6 **Review of Collocation Permit Applications.** Collocation permit applications will be reviewed in the order received and processed in a timely fashion. The review of a collocation permit application will typically be conducted simultaneously with the review of the associated City right-of-way permit. Designated City employees will review applications to collocate small wireless facilities. Designated Utility employees will review applications to collocate small wireless facilities on poles that are owned or managed by Utility. Designated employees will, as soon as practicable, approve applications that fully comply with this regulation and applicable codes. If approved, the applicant will be notified, and a permit made available for issue under Section 6.9. If a designated employee determines that one or more parts of an application does not comply with this regulation, the designated employee will, as soon as practicable, provide the applicant a written report that identifies each noncompliant part of the application. The applicant may cure the noncompliant parts of the application within thirty (30) days without paying an additional application fee. If the application remains noncompliant for more than thirty (30) days after notice, the application will be deemed abandoned and, if requested, the City and/or Utility, as applicable, will return all forms and information to the applicant. The application fee will not be refunded. The applicant may later resubmit the forms and information as a new application with an appropriate application fee.
- 6.7 <u>Review of Proposed Make-Ready</u>. Except as provided in Section 6.8, each collocation permit application will include an engineering survey and proposed make-ready as described in Section 6.3.4. The designated City or Utility employee reviewing the application will take one of the following actions:
 - 6.7.1 *Approve*. Designated City and/or Utility employees will approve make-ready proposals that comply with applicable codes and industry standards. If approved, the designated City and/or Utility employees will provide the applicant a cost estimate for the City or Utility's portion of the make-ready within sixty (60) days of the date of application, or ninety (90) days when the application includes the installation, modification or replacement of a pole.

- 6.7.2 *Revise*. Designated City and/or Utility employees may revise the applicant's make-ready proposal to comply with applicable codes and industry standards. No revisions will be made that require more make-ready than is required by applicable codes or industry standards, or to repair pre-existing damage or noncompliance. Any such revisions will be clearly identified on documents provided to the applicant. The designated City and/or Utility employees will provide the applicant a cost estimate for the City or Utility's portion of the make-ready in the revised application.
- 6.7.3 Deny. Designated City and/or Utility employee will not approve proposed makeready that does not comply with applicable codes and industry standards. If a designated employee determines that one or more parts of the make-ready proposal do not comply with applicable codes or industry standards, and the designated employee does not elect to revise the make-ready proposal as described in Section 6.7.2, the designated employee will, as soon as practicable, provide the applicant a written denial that identifies each noncompliant part of the make-ready proposal. No denial will be based upon a requirement to repair pre-existing damage or noncompliance. The applicant may cure the noncompliant parts of the proposed make-ready within thirty (30) days without paying an additional application fee. If the application remains noncompliant for more than thirty (30) days after notice, the application will be deemed abandoned and the City, if requested, will return all forms and information to the applicant. The application fee will not be refunded. The applicant may later resubmit the forms and information as a new application with an appropriate application fee.
- 6.8 <u>City/Utility Survey and Make-Ready Determination</u>. City and/or Utility may determine in their sole discretion to authorize a wireless provider to apply for a permit without an engineering survey or proposed make-ready. In such case, City and/or Utility or their respective contracted engineer, shall review the application and perform the engineering survey and make-ready design at the cost of the wireless provider.
 - 6.8.1 *Field survey*. A field survey for each attachment requested to determine the adequacy of the pole to accommodate the proposed small wireless facility. City and/or Utility shall assess the wireless provider the actual and documented costs of the survey(s).
 - 6.8.2 *Report*. The City or Utility will, within ninety (90) days of the date of application, either: (i) provide a description of make-ready identified by City or Utility and a good-faith cost estimate for the City's or Utility's portion of that make-ready to be performed at the expense of the wireless provider; or (ii) provide a written explanation as to why the application is being denied, in whole or in part.
 - 6.8.3 *Timeliness*. If City or Utility does not meet the timeframe to complete the survey and make-ready design described in Section 6.8.2, the wireless provider may, at its option, hire a City or Utility approved professional engineer, or use an approved employee of the wireless provider employee or contractor to perform the survey and make-ready design. All such work shall by subject to review and approval in accordance with Section 6.7.

- 6.8.4 Acceptance. Upon receipt of a report described in Section 6.8.2(i), a wireless provider shall have sixty (60) days to accept the estimate of any proposed makeready work and, if advance payment is required, provide payment in accordance with this regulation and the specifications of the estimate.
- 6.9 **Permit Issuance.** Permits for applications that do not include make-ready work shall be issued upon approval, payments of all required fees, and payment of the rates applicable to the first year of use. Permits for applications that include make-ready work shall be issued upon the completion of necessary make-ready work, payment of all required fees, and payment of rates applicable to the first year of use. To evidence the issuance of the permit, City and/or Utility will sign and return the permit application, which shall serve as authorization for the wireless provider to make its attachment(s). Within thirty (30) days of completing the installation of an Attachment, each Wireless Service Provider shall provide written notice and as-builts, as required to City and/or Utility.
- 6.10 **Processing Deadlines.** Permit applications will be processed within sixty (60) days of the date of application for collocation permits, and ninety (90) days of the date of application for applications that include the installation, modification or replacement of a pole. These deadlines may be extended by agreement with an applicant. If a permit is not processed within the applicable deadline, the applicant may provide a written demand for completion to the City or Utility, as appropriate. Any permit that remains unprocessed for longer than ten (10) days after such written demand has been received will be deemed approved as submitted.

Article 7. <u>Make-Ready Work/Installation</u>

- 7.1. Who May Perform Make-Ready. Make-ready work on City poles shall only be performed by the City and/or a qualified contractor authorized by City to perform such work. Make-ready work on Utility poles shall only be performed by the Utility and/or a qualified contractor authorized by Utility to perform such work.
 - 7.1.1. *Make-ready by Utility*. Unless otherwise agreed by Utility, only Utility or its contractor will install or replace any Utility poles or poles to be owned or managed by Utility or perform make-ready in the electric supply space.
- 7.2. <u>Time Frame for Completion of Make-Ready</u>. If Utility, or its contractor, is performing make-ready work it will complete the make-ready work within sixty (60) days of receipt of the wireless provider's acceptance of the make-ready estimate and advance payment, if required. Completion time may be extended by agreement between the Utility and the wireless provider. If Utility does not complete the make-ready work within the time allotted, the wireless provider may demand a return of deposited funds and proceed with required make-ready work using authorized and qualified contractors who are approved by the Utility. The Utility shall not unreasonably withhold or delay approval of a contractor to perform required make-ready.
- 7.3. Scheduling of Make-Ready Work. In performing all make-ready work to accommodate a wireless provider's attachments, Utility will endeavor to include such work in its normal work schedule. If a wireless provider requests, and Utility agrees, to perform make-ready work on a priority basis or outside of Utility's normal work hours, the wireless provider will pay any

resulting increased actual and documented costs. Nothing in this regulation shall be construed to require Utility to perform a wireless provider's work before other scheduled work or Utility service restoration.

- 7.4. Payment for Make-Ready Work. Upon completion of the make-ready work performed by Utility, Utility shall invoice the wireless provider for Utility's actual and documented cost of such make-ready work. The costs of the work shall be itemized in accordance with Article 3, and if Utility received advance payment, the costs shall be trued up in accordance with Article 3. Each wireless provider shall be responsible for entering into an agreement with other existing attaching entities to reimburse them for any costs that they incur in rearranging or transferring their facilities to accommodate the wireless provider's attachments.
- 7.5. Notification of Make-Ready Work. Before starting make-ready work, Utility shall notify all existing attaching entities of the date and location of the scheduled work and notify them of the need to rearrange and/or transfer their facilities at the wireless provider's cost within the specified time period. To the extent that Utility has the legal authority, it shall rearrange and/or transfer existing facilities of such other attaching entities that have not been moved in a timely manner. The wireless provider shall pay for any such rearrangement or transfer.
 - 7.5.1. Relocation of attachments by wireless provider. In instances where a wireless provider is performing make-ready, where an existing attaching entity has not relocated or otherwise undertaken work required to complete make-ready (such as repairing existing attachments not in compliance with applicable codes) within ninety (90) days of notice by Utility or the wireless provider to such other attaching entity, the wireless provider is authorized, to the extent that Utility has such authority, and the legal ability to delegate such authority, to relocate or repair the other attaching entity's attachments on behalf of Utility. The wireless provider shall pay the costs to relocate the other attaching entity's attachments as part of the wireless provider's make-ready.

7.6. <u>Wireless Provider's Installation/Removal/Maintenance Work.</u>

- 7.6.1. Quality workmanship required. All of the wireless provider's installation, removal, and maintenance work, by either the wireless provider's employees or authorized contractors, shall be performed at the wireless provider's sole cost and expense, in a good and workmanlike manner, and must not adversely affect the structural integrity of City's or Utility's poles or other facilities or other attaching entity's facilities or equipment. All such work is subject to the insurance requirements of Article 25.
- 7.6.2. Qualified workers required. All of a wireless provider's installation, removal, and maintenance work, either by its employees or authorized contractors, shall comply with all applicable regulations, codes, and the design specifications established by City and Utility. Wireless providers shall ensure that any person installing, maintaining, or removing its small wireless facilities is fully qualified and familiar with all applicable regulations, codes, and the design specifications established by City and Utility.

7.6.3. Authorization not required for maintenance. Notwithstanding anything to the contrary in this regulation, subsequent to the original installation of a wireless provider's small wireless facilities, the wireless provider may modify or replace the small wireless facilities without obtaining prior written consent of City or Utility so long as such modification or replacement does not substantially: (a) modify the external appearance of the small wireless facility; (b) increase the electric consumption of the small wireless facility; (c) increase the load on the applicable pole beyond the loading, if any, that was established in the approved permit application; or (d) involve placement of equipment outside the area designated in the approved permit application. A wireless provider may request, and City and/or Utility shall timely provide, a determination as to whether a modification or replacement made subsequent to original installation deviates from the original permit sufficiently to require the issuance of a permit. After modifying any installation, the wireless provider will provide updated as-built designs to Utility.

Article 8. Post-Installation Inspections

- 8.1. <u>No Use Before Inspection</u>. No person shall energize any small wireless facility unless and until the small wireless facility, and any new or modified poles or structures associated with the small wireless facility, has passed post-installation inspection.
- 8.2. Timing of Inspection and Delay. Within five (5) business days after the wireless provider notifies the City and/or Utility that the installation of a new pole, wireless support structure or small wireless facility has been completed, the City, Utility or their contractors shall perform a post-installation inspection to ensure all work was performed in accordance with the permit and applicable codes. If City and/or Utility fail to perform the post-installation inspection within the 5-day period, any affected pole, wireless support structure or small wireless facility may be used as if it had passed the inspection; provided, however, that if City and/or Utility identifies any violation when actually performing the post-installation inspection, the wireless provider shall have thirty (30) days from the date of receipt of such notice to correct such violation(s), or such other period as the parties may agree upon in writing, unless such violation creates an emergency in which case the wireless provider shall make all reasonable efforts to correct such violation immediately. A reinspection fee, as shown on Appendix A, will be charged to the wireless provider for each additional inspection of the facility.
- 8.3. <u>Violations</u>. If the post-installation inspection reveals that a wireless provider's facilities have been installed in violation of a permit or applicable code, City and/or Utility will notify the wireless provider in writing and the wireless provider shall have thirty (30) days from the date of receipt of such notice to correct such violation(s), or such other period as the parties may agree upon in writing, unless such violation creates an emergency in which case the wireless provider shall make all reasonable efforts to correct such violation immediately. Upon receipt of notice from wireless provider that such violation has been corrected, City and/or Utility shall promptly perform a reinspection of the facility. A reinspection fee, as shown on Appendix A, will be charged to the wireless provider for each additional inspection of the facility.
- 8.4. <u>Unresolved Violations</u>. If a wireless provider's attachments remain out of compliance with applicable codes or approved design after any three (3) subsequent inspections or a period of ninety (90) days, consistent with Article 19 City and/or Utility will provide notice of the continuing

violation and the wireless provider will have thirty (30) days from receipt of such notice to correct the violation, otherwise the provisions of Article 19 shall apply.

Article 9. Abandonment of Permit

City or Utility may deem a permit to be abandoned if a wireless provider does not request a post-installation inspection of completed work within one year of the date that the permit was initially issued, unless such time period is extended. A permit may be extended when delay has been caused by a lack of commercial power, communications, transport facilities to the site, or any other factor outside of the wireless provider's control. If a permit is deemed to be abandoned in accordance with this Article, City or Utility may, but shall have no obligation to, use the space allocated for a wireless provider's attachment(s) for its own needs or make the space available to other attaching entities. Fees, rates and charges associated with abandoned permits shall not be refunded.

Article 10. Rearrangements and Transfers on Utility Poles.

- Required Transfers of Wireless Communication Facilities. If Utility reasonably determines that a rearrangement or transfer of a small wireless facility is necessary, including as part of make-ready to accommodate another attaching entity's attachment, Utility will require the wireless provider who owns the small wireless facilities to perform such rearrangement or transfer within ninety (90) days after receiving notice from Utility, or other agreed upon notification. If the wireless provider fails to rearrange or transfer its attachment within ninety (90) days after receiving such notice from Utility, the provisions of Article 19 shall apply, including Utility's right to rearrange or transfer the small wireless facilities ninety (90) days after the wireless provider's receipt of original notification of the need to rearrange or transfer its facilities. The actual and documented costs of such rearrangements or transfers shall be apportioned as specified under Article 10.2. Utility shall not be liable for damage to small wireless facilities except to the extent provided in Article 23. In emergency situations, Utility may rearrange or transfer small wireless facilities as it determines to be necessary in its reasonable judgment. In emergency situations, Utility shall use reasonable efforts to provide such notice as is practical, given the urgency of the situation. If a wireless provider fails to rearrange and/or transfer its small wireless facilities within the prescribed time period, Utility may rearrange and/or transfer, or delegate its authority to rearrange and/or transfer, the small wireless facilities to an authorized attaching entity or its authorized contractors. In such case, said entity may rearrange or transfer the small wireless facilities ninety (90) days after the wireless provider's receipt of original notification of the need to rearrange or transfer its facilities.
- 10.2 <u>Allocation of Costs</u>. The costs for any rearrangement or transfer of any small wireless facilities or the replacement of a pole (including, without limitation, any related costs for tree cutting or trimming required to clear the new location of Utility's cables or wires) shall be allocated to Utility and/or the wireless provider that owns the small wireless facilities and/or other attaching entity on the following basis:
 - 10.2.1. Replacement for Utility. If Utility intends to modify or replace a pole solely for its own requirements, it shall be responsible for the Utility's costs related to the modification/replacement of the pole. The wireless provider shall be responsible for

costs associated with the rearrangement or transfer of the wireless provider's small wireless facilities. Prior to making any such modification or replacement, Utility shall make reasonable efforts to provide the wireless provider at least ninety (90) days written notification of its intent in order to provide the wireless provider a reasonable opportunity to modify. Should the wireless provider decide to do so, it must seek Utility's written permission in accordance with this regulation. If the wireless provider elects to add to or modify its small wireless facilities, the wireless provider shall pay its fair share of the costs incurred by Utility in making the space on the poles accessible to the wireless provider.

- 10.2.2. Replacement for wireless provider. If the modification or replacement of a pole is necessitated by the requirements of a wireless provider, the wireless provider shall be responsible for all costs caused by the modification or replacement of the pole as well as the costs associated with the transfer or rearrangement of any other attaching entity's facilities. At the time the wireless provider submits a permit application to Utility, the wireless provider shall submit evidence in writing that it has arranged to reimburse all affected attaching entities for their costs caused by the transfer or rearrangement of their facilities. Utility shall not be obligated in any way to enforce or administer the wireless provider's responsibility for the costs associated with the transfer or rearrangement of another attaching entity's facilities pursuant to this Article.
- 10.2.3. Replacement for additional attachment. If the modification or the replacement of a pole is the result of an additional attachment or the modification of an existing attachment sought by an attaching entity other than Utility or a wireless provider, the attaching entity requesting the additional or modified attachment shall bear the entire cost of the modification or replacement, as well as the costs for rearranging or transferring the wireless provider's small wireless facilities. The wireless provider shall cooperate with such third-party attaching entity to determine the costs of moving the wireless provider's facilities.
- 10.2.4. *No-Cause Replacement*. If the pole must be modified or replaced for reasons unrelated to the use of the pole by attaching entities or Utility (*e.g.*, storm, accident, deterioration), Utility shall pay the costs of such modification or replacement and the wireless provider shall pay the costs of rearranging or transferring its small wireless facilities.

Article 11. Pole Replacements

- 11.1. <u>Utility/City Not Required to Replace</u>. Nothing in this regulation shall be construed to require City or Utility to replace its poles for the benefit of a wireless provider.
- 11.2. <u>Ownership of Replacement Pole</u>. In all instances a replaced pole will remain the property of City or Utility, as prior to this regulation.
- 11.3. <u>Customized Poles.</u> Whenever a wireless provider uses a customized pole to install a small wireless facility on or within a streetlight pole and the customized pole is subsequently damaged or

must otherwise be replaced, Utility shall notify the wireless provider that a replacement customized pole is required.

- a. If wireless provider delivers a replacement customized pole to Utility within twenty-four (24) hours, Utility shall replace the customized pole at Utility expense and wireless provider shall only be responsible for transferring wireless provider's antenna, equipment and facilities.
- b. If wireless provider does not deliver a replacement customized pole within twenty-four (24) hours, or such longer time as may be agreed by Utility, Utility may install a standard streetlight pole in place of the customized pole. The wireless provider may, in accordance with the wireless provider's applicable permit, replace the standard streetlight pole with a customized pole within one year at the wireless provider's expense. Such replacement shall be deemed maintenance and no application or permit shall be required. If the wireless provider does not reinstall a customized pole at this location within one year, the applicable permit shall be deemed abandoned.
- c. A wireless provider may, but shall not be required to, provide one or more identical spares of customized poles to the Utility at no cost to the Utility to be held in reserve and used to facilitate the rapid replacement of the customized pole in case replacement is required.

Article 12. Treatment of Multiple Requests for Same Pole

If Utility receives a permit application for attachment of a small wireless facility from a wireless provider and a wireline attachment application from a third-party attaching entity for the same pole and has not yet completed the permitting of the initial applicant, and accommodating the respective requests would require modification of the pole or replacement of the pole, Utility will make reasonable and good faith efforts to allocate among the wireless provider and such third-party attaching entity the applicable costs associated with such modification or replacement.

Article 13. Equipment Attachments

- 13.1. **Reimbursement of City and Utility**. Each wireless provider shall compensate City and Utility for the actual and documented cost, including engineering and administrative cost, for rearranging, transferring, replacing and/or relocating Utility's poles to accommodate the wireless provider's attachments.
- 13.2. **Reimbursement of Third Parties**. Each wireless provider shall reimburse the owner or owners of other facilities attached to City or Utility poles for any actual and documented cost incurred by them for rearranging or transferring such facilities to accommodate the wireless provider's attachments.

Article 14. Authorized Contractors

Wireless providers shall only use authorized, qualified contractors approved by Utility to conduct make-ready work (or any other work), such approval not to be unreasonably withheld, conditioned or delayed.

Guys and Anchor Attachments

Utility shall install all guy wires and anchors at the wireless provider's sole cost to sustain any unbalanced loads caused by the wireless provider's attachments. The wireless provider shall bear all costs associated with the Utility's maintenance, replacement, or reinstallation of required guy wires and anchors.

Article 16. Installation of Grounds

When Utility is requested by a wireless provider to install grounds or make connections to Utility's system neutral, the wireless provider shall within sixty (60) days of demand reimburse Utility for the total actual and documented costs including engineering, clerical and administrative cost thereby incurred on initial installation only. All grounds installed by the wireless provider shall be in accordance with Utility's standard grounding practices.

Article 17. Change in Utility Facilities that Forfeits Attachment Accommodations.

17.1. Notice of Change in City or Utility Facilities that Forfeits Attachment

Accommodations. Prior to changing any City or Utility pole or other facility to which small wireless facilities are attached in such a manner that attachment will no longer be reasonably possible (including without limitation: abandonment, removal, relocation underground, replacement, or reconfiguration), the owner of such small wireless facilities will be provided at least ninety (90) calendar days prior written notice by City or Utility, as appropriate. Provided that, notice may be less than ninety (90) calendar days as a result of the action of a third party and the ninety-day notice period is not practical. If, following the expiration of the notice period, the owner of the small wireless facilities has not yet removed and/or transferred all of its small wireless facilities, City and/or Utility shall have the right, but not the obligation, to remove or transfer the small wireless facilities at the owner's expense and the owner shall be subject to the provisions of Article 19.

- 17.1.1. *Underground relocation*. If Utility is required to move any portion of its aerial system underground, wireless providers shall remove their small wireless facilities from any affected poles within the notice period as established in Section 17.1 and must either relocate its affected small wireless facilities (except antennas) underground with Utility or find other means to accommodate its small wireless facilities. If a wireless provider does not remove its small wireless facilities, the Utility shall have the right to remove or transfer the small wireless facilities at the owner's expense. A wireless provider's failure to remove its facilities as required under this Article 17.1 shall subject such wireless provider to the provisions of Article 19.
- 17.1.2. Replace/Reconfigure Utility Facilities without Attachment Accommodations. If Utility replaces or reconfigures any portion of its aerial facilities, Utility will make reasonable efforts to accommodate the existing attachments on the replaced/reconfigured

Utility facilities by utilizing all available make-ready procedures subject to allocation of costs described in Section 10.2. If the Utility, at its sole discretion, reasonably determines the attachments cannot be accommodated on the replaced/reconfigured Utility facilities, wireless providers must remove facilities from the affected poles, within the notice period as described in Section 17.1 and must, at their own expense, find other means to accommodate their facilities. When Utility can accommodate some, but not all, of the existing attachments, the Utility will allow reattachment in the order the attachments were originally installed, unless otherwise stipulated in this regulation. If a wireless provider does not remove its attachments within the notice period, Utility shall have the right to remove them at the wireless provider's expense. Failure to remove facilities as required under this Article 17.1.2 shall subject wireless providers to the provisions of Article 19.

Article 18. <u>Inspection</u>

- 18.1. <u>General Inspections</u>. City and Utility reserve the right to make periodic inspections, as conditions may warrant, of all small wireless facilities. Such inspections, or the failure to make such inspections, shall not operate to relieve any wireless provider of any responsibility or obligation or liability assumed under this regulation.
- 18.2. <u>Periodic Safety Inspections</u>. Utility may at its option and expense perform a safety inspection in all or in part of the territory covered by this regulation to identify any safety violations of all attachments and small wireless facilities on Utility poles ("safety inspection"). Wireless providers shall correct any and all safety violations at their own expense per Section 18.3.
- 18.3. **Corrections**. In the event any small wireless facilities are found to be in violation of applicable codes and such violation poses a potential emergency, the owner of such small wireless facilities must use all reasonable efforts to correct such violation immediately. Should the owner fail or be unable to correct such potential emergency immediately, City or Utility may correct the potential emergency and bill the owner for the actual and documented costs incurred, including overhead. If any small wireless facilities are found to be in violation of the applicable codes and such violations do not pose a potential emergency, City or Utility shall, consistent with Article 19, give notice to the owner of the small wireless facilities, whereupon the owner shall have thirty (30) days from receipt of notice to correct any such violation, or up to ninety (90) days by agreement with City or Utility. In the event City, Utility or another attaching entity prevents an owner of small wireless facilities from correcting a non-emergency violation, the timeframe for correcting such violation shall be extended one day for each day the owner was so delayed. No wireless provider will be responsible for the costs associated with violations caused by other attaching entities that are not affiliated with them or acting under their direction. In all circumstances, all of the attaching entities on each pole and City or Utility will work together to maximize safety while minimizing the cost of correcting deficiencies, but the entity responsible for the violation will be responsible for the actual and documented cost of any necessary or appropriate corrective measures, including removal and replacement of the pole and all transfers or other work incident thereto. If a wireless provider fails to correct a non-emergency violation within the specified time period, including any extensions, the provisions of Article 19 shall apply.

- 18.3.1. *Violations caused by City and/or Utility*. If any facilities of City and/or Utility are found to be in violation of the applicable codes or permit specifications, and City and/or Utility has caused the violation, then the parties will work together to minimize the cost of correcting any such deficiencies, but City and/or Utility shall be responsible for the full cost of any necessary or appropriate corrective measures, including removal and replacement of the pole; provided, however, that Utility shall not be responsible for a wireless provider's transfer or rearrangement costs.
- 18.3.2. *Violations caused by attaching entities*. If one or more attaching entity caused the violation, then such attaching entities shall pay the corrective costs incurred by all who have attachments on the pole, including any wireless provider, and Utility will make reasonable effort to cause the attaching entity to make such payment.
- 18.3.3. *No-Cause violations*. If there exists a violation of applicable codes and it cannot be determined which attaching entity on the pole caused such violation or there is a mixture of the attaching entities causing the violation, then the parties will work together to minimize the cost of correcting any such deficiencies, and all attaching entities who may have caused such violation will share equally in such costs.

Article 19. Failure to Rearrange, Transfer or Correct

- 19.1. Work performed by City and/or Utility. Unless otherwise agreed, as part of City's or Utility's written notice of a need for a wireless provider to rearrange, transfer, remove or correct violations, City or Utility will indicate whether it is willing to perform the required work.
- 19.2. When City and/or Utility Offers to Perform Work. If City or Utility indicates in the notice that it is willing to perform the work, the wireless provider shall have thirty (30) days to notify City or Utility in writing of its election to have City or Utility perform the work or that the work will be performed by an approved entity other than City or Utility.
 - 19.2.1. *City and/or Utility to perform work.* If the wireless provider requests that City or Utility perform the work, the wireless provider shall reimburse City or Utility for the actual and documented cost of such work, including overhead.
 - 19.2.2. Wireless provider to perform work. If the wireless provider either fails to respond or indicates that the work will be performed by an entity other than the City or Utility, then until such work is complete and City or Utility receives written notice of the completion of such work, the wireless provider shall be subject to a daily continuing violation fee as specified in Appendix A, per Attachment, per day commencing on the day after expiration of the time period for completion of the work as specified in this regulation.
 - 19.2.3. Failure to perform work. Notwithstanding a wireless provider's election under Article 19.2.2 to perform the required work by an entity other than City or Utility, commencing on the thirtieth (30th) day after expiration of the time period for completion of the work as specified in this regulation, City or Utility may perform the required work at the wireless provider's expense, or may delegate such authority to another attaching entity or a qualified contractor and impose all applicable penalties under Appendix A.

- 19.2.4. *Remedies*. If a wireless provider was required to perform work under this Article 19 and fails to perform such work within the specified timeframe, and City or Utility performs such work, City or Utility may charge the wireless provider its actual and documented costs, including overhead, for completing such work.
- 19.3. When City and/or Utility does not Offer to Perform Work. If City and/or Utility indicates in the notice that it is unwilling or unable to perform the work, then until such work is completed and Utility receives written notice of the completion of such work, the wireless provider shall be subject to a daily penalty as specified in Appendix A, per attachment, per day commencing on the day after expiration of the time period for completion of the work as specified in this regulation.
 - 19.3.1. *Notice of Completion*. Wireless providers shall provide timely written notification to City or Utility upon completion of work necessary to correct a violation or deficiency. All applicable daily penalties and fees will continue to accrue until City's or Utility's receipt of such notice of completion. Notice of completion shall be delivered by the same means as it was received from City or Utility.

Article 20. Physical Inventory

- 20.1. <u>Scheduled Inventory</u>. At intervals of three (3) years or more, City or Utility may inventory all attachments on City or Utility's facilities made by a wireless provider. Such inventory shall be made jointly by all parties and shall be at the cost of the wireless provider, such costs to be actual and documented, unless Utility is also performing an inventory of any other attaching entity with attachments on such poles, and then the actual and documented cost shall be shared proportionately among all such attaching entities based upon the number of attachments.
- 20.2. <u>Unscheduled Inventory</u>. Utility may at any time perform an inventory at its own expense to verify the number of reported attachments. Wireless providers shall pay the costs of such inventory if its unauthorized or unreported attachments exceeds five percent (5%) of the wireless provider's attachments that are authorized and reported.

Article 21. Unauthorized Attachments

- 21.1. <u>Discovery of Unauthorized Attachments</u>. If the City discovers unauthorized small wireless facilities, poles, or wireless support structures in the public right-of-way, or City or Utility discovers unauthorized attachments placed on its poles or other facilities, the following fees may be assessed, and procedures will be followed:
 - 21.1.1. *Notice*. City shall provide specific written notice of each violation and the owner of the unauthorized small wireless facility, pole, wireless support structure, or attachment shall be given thirty (30) days from receipt of notice to contest the determination that the small wireless facility, pole, wireless support structure, or attachment is unauthorized pursuant to Section 2.4.5.7. If the owner cannot be ascertained, the City or Utility will post a notice of violation on the small wireless facility, pole, wireless support structure, or attachment believed to be unauthorized.

- 21.1.2. Calculation of back rent. In addition to all other fines or penalties that may be assessed by a court of law, the owner of an unauthorized small wireless facility, pole, wireless support structure, or attachment shall pay double rent and fees for a period of three (3) years, or since the date of the last inventory of attachments (whichever period is shortest), at the rates in effect during such periods, until the earlier date of when the permit is issued or the attachment is removed.
- 21.1.3. Application required. The owner of an unauthorized small wireless facility, pole, wireless support structures or attachment shall submit a permit application in accordance with this regulation within thirty (30) days of receipt of the notice described in this Article 21, or such longer time as may be agreed by the City or Utility.
- 21.1.4. Failure to submit required application. In the event a wireless provider fails to submit a permit application within thirty (30) days, or such longer time as mutually agreed to by the parties after an inventory, the provisions of Article 19 shall apply.
- 21.2. <u>No Ratification of Unauthorized Use</u>. No act or failure to act by City or Utility regarding any unpermitted small wireless facility, pole, wireless support structure, or attachment shall be deemed as ratification or waiver of any requirement under this regulation. Unless the parties agree otherwise, a permit for a previously unauthorized attachment shall not operate retroactively or constitute a waiver by Utility of any of its rights or privileges under this regulation or otherwise, and the wireless provider shall remain subject to all obligations and liabilities arising out of or relating to its unauthorized use.

Article 22. Reporting Requirements.

- 22.1. **Annual report.** In addition to the inventory provisions described in Article 20 above, when a wireless provider pays its annual fees, the wireless provider shall also provide the following information to City and Utility:
 - 22.1.1. *Unused and nonfunctional facilities*. Wireless providers will annually report all facilities that have become unused or nonfunctional during the relevant reporting period. The report shall identify the pole on which the unused or nonfunctional attachment is located, indicate the approximate date the attachment became nonfunctional, and shall provide a schedule for removal, or repair and operation.
 - 22.1.2. Removed facilities. Wireless providers will annually report all facilities the wireless provider has removed from poles belonging to City or Utility during the relevant reporting period. The report shall identify the pole from which the equipment was removed and indicate the approximate date of removal. This requirement does not apply where a wireless provider is abandoning or surrendering a permit.

Article 23. Liability and Indemnification

23.1. <u>Liability.</u> City and Utility reserve to themselves the right to maintain and operate their poles in the manner that will best enable them to fulfill their service requirements. As a condition of every permit, wireless providers must agree that its use of City's and Utility's facilities is at

the sole risk of the wireless provider. Notwithstanding the foregoing, City and Utility shall exercise reasonable precaution to avoid damaging small wireless facilities and shall report to wireless providers the occurrence of any such damage caused by its employees, agents or contractors. Subject to Section 23.5, City and Utility will reimburse wireless providers for all reasonable costs incurred during the physical repair of facilities damaged by the gross negligence or willful misconduct of City and/or Utility.

- 23.2. <u>Indemnification</u>. As a condition of every permit, wireless providers, as well as their agents, contractors, and subcontractors, ("wireless provider indemnitors") shall be required to defend, indemnify, and hold harmless City and Utility and their respective officers, board members, council members, representatives, employees, and agents against any and all claims, demands, damages, lawsuits, judgments, costs, liens, losses, expenses, fines, taxes, special charges by others, penalties, payments (including payments made by Utility under any workers' compensation laws or under any plan for employees' disability and death benefits), and expenses (including reasonable attorney's fees of Utility and all other costs and expenses of litigation) ("covered claims") arising in any way or in connection with the negligence of the wireless provider or their officers, directors, employees, agents, contractors, or subcontractors, except when caused by the sole negligence of City or Utility, or their respective officers, board members, council members, representatives, employees, and agents. Covered claims shall include, but are not limited to, the following:
 - 23.2.1. *Communication-based torts*. Intellectual property infringement, libel and slander, trespass, unauthorized use of television or radio broadcast programs and other program material, and infringement of patents.
 - 23.2.2. Local compliance. Cost of work performed by Utility that was necessitated by a wireless provider's failure, or the failure of a wireless provider's officers, directors, employees, agents, contractors, or subcontractors to install, maintain, use, transfer, or remove their small wireless facilities in accordance with the requirements and specifications of this regulation, or from any other work this regulation authorizes Utility to perform on behalf of a wireless provider.
 - 23.2.3. *Harm to persons or property*. Damage to property, injury to or death of any person arising out of the performance or nonperformance of any work or obligation undertaken by a wireless provider, or its agents, contractors, or subcontractors, pursuant to this regulation.
 - 23.2.4. *Regulatory violations*. Liabilities incurred as a result of a wireless provider's violation, or a violation by a wireless provider's officers, directors, employees, agents, contractors, or subcontractors of any law, rule, or regulation of the United States, any state, or any other governmental entity or administrative agency.
 - 23.2.5. *Environmental compliance*. Environmental harm arising from or due to the release, threatened release or storage of hazardous substances on, under, or around Utility's poles and facilities or City public rights-of-way attributable to a wireless provider indemnitor.

23.3. Procedure for Indemnification.

- 23.3.1. *Notice of claim*. City and/or Utility shall give prompt written notice of any claim or threatened claim to the appropriate wireless provider indemnitors, specifying the factual basis for such claim and the amount of the claim. If the claim relates to an action, suit, or proceeding filed by a third party against City and/or Utility, City and/or Utility shall give the notice to wireless provider indemnitors no later than fifteen (15) calendar days after City and/or Utility receives written notice of the action, suit, or proceeding.
- 23.3.2. *Failure of notice*. City and/or Utility failure to give the required notice will not relieve any wireless provider indemnitor from its obligation to indemnify City and/or Utility unless, and only to the extent, that a wireless provider indemnitor is materially prejudiced by such failure.
- 23.3.3. Assumption of defense. Wireless provider indemnitors will have the right at any time, by notice to City or Utility to participate in or assume control of, the defense of the claim with counsel of its choice, which counsel must be reasonably acceptable to the indemnified party. City and/or Utility will cooperate in good faith with wireless provider indemnitor. If wireless provider indemnitor assumes control of the defense of any third-party claim, City and/or Utility will have the right to participate in the defense at its own expense.
- 23.3.4. Settlement authority. If wireless provider indemnitor does not assume control or otherwise participate in the defense of any third-party claim, wireless provider indemnitor shall be bound by the results obtained by City and/or Utility with respect to the claim, to include any reasonable settlement of the claim. If wireless provider indemnitor assumes the defense of a third-party claim as described above, then in no event will City and/or Utility admit any liability with respect to, or settle, compromise or discharge, any third-party claim without wireless provider indemnitor's prior written consent.
- 23.4. Environmental Hazards. As a condition of every permit, Wireless Service Providers shall represent and warrant that their use of Utility's Poles and/or Facilities and/or City public rights-of-way will not generate any Hazardous Substances, that it will not store or dispose on or about City's or Utility's Poles and/or Facilities or transport to City's or Utility's Facilities any hazardous substances and that no Wireless Communication Facilities or Wireless Support Structures will constitute or contain or generate any hazardous substance in violation of federal, state, or local law now or hereafter in effect, including any amendments. "Hazardous Substance" shall be interpreted broadly to mean any substance or material designated or defined as hazardous or toxic waste, hazardous or toxic material, hazardous or toxic or radioactive substance, dangerous radio frequency radiation, or other similar terms by any federal, state, or local laws, regulations or rules now or hereafter in effect, including any amendments. As a condition of every permit, wireless providers must further represent and warrant that in the event of breakage, leakage, incineration, or other disaster, its small wireless facilities would not release any hazardous substances.
- 23.5. <u>Mutual Damage Limitation.</u> As a condition of every permit, wireless providers shall be required to agree that, notwithstanding any other provision of this regulation, neither any entity

receiving a permit or any entity issuing a permit shall be liable to one another for any consequential, incidental, indirect, liquidated, or special damages or lost revenue or lost profits to any person arising out of this regulation, or any permit issued under this regulation, or any performance or nonperformance of any provision of this regulation, even if such entity has been informed of the possibility of such damages.

23.6. <u>Municipal Liability Limits</u>. No provision of this regulation is intended, or shall be construed, to be a waiver for any purpose by City or Utility of any applicable state limits on municipal liability or governmental immunity. No indemnification provision contained in this regulation under which a wireless provider indemnifies City and/or Utility shall be construed in any way to limit any other indemnification provision contained in this regulation or constitute insurance under state law.

Article 24. <u>Duties, Responsibilities, and Exculpation</u>

- 24.1. <u>Duty to Inspect.</u> As a condition of every permit, wireless providers must acknowledge and agree that City and Utility do not warrant the condition or safety of Utility's facilities and City's public rights-of-way, or the premises surrounding the facilities, and that all wireless providers have an obligation to inspect Utility's poles and surrounding premises, prior to commencing any work on Utility's poles or entering the surrounding premises.
- 24.2. <u>Knowledge of Work Conditions</u>. As a condition of every permit, wireless providers must warrant that it has acquainted, or will fully acquaint, itself and its employees and/or contractors and agents with the conditions relating to the work that the wireless provider will undertake and that it fully understands or will acquaint itself with the facilities, difficulties, and restrictions attending the execution of such work.
- 24.3. **Duty of Competent Supervision and Performance.** As a condition of every permit authorizing attachment to a distribution pole, wireless providers shall acknowledge that its agents, employees, contractors, and subcontractors will work near electrically energized lines, transformers, or other City or Utility facilities, that energy generated, stored, or transported by Utility facilities will not be interrupted except in emergencies, and that wireless service providers have the duty to ensure that their employees, agents, contractors, and subcontractors have the necessary qualifications, skill, knowledge, training, and experience to protect themselves, their fellow employees, agents, contractors, and subcontractors; employees, agents, contractors, and subcontractors of Utility; and the general public, from harm or injury while performing work permitted pursuant to this regulation, or a permit issued thereunder. Wireless providers must furnish or ensure that its employees, agents, contractors, and subcontractors have competent supervision and enough and adequate tools and equipment for the work to be performed in a safe manner. In the rare instance that circumstances necessitate de-energization any part of Utility's equipment, wireless providers must ensure that work is suspended until the equipment has been de-energized and that no such work is conducted unless and until the equipment is made safe.
- 24.4. <u>Requests to De-energize</u>. Typically, Utility shall only de-energize its electric facilities in response to emergency situations, and any such de-energizations shall be at Utility's sole discretion. wireless providers shall be responsible for all costs related to any request to de-energize any equipment or lines in accordance with Article 3.11.

- 24.4.1. *Nonemergency de-energization*. Wireless providers may request nonemergency de-energization with 24 hours' notice. Wireless providers shall be responsible for all costs related to any request to de-energize any equipment or lines in accordance with Article 3.11. Before Utility de-energizes any equipment or line, it shall provide, upon request, an estimate of all costs and expenses to be incurred in accommodating a wireless provider's request.
- 24.5. <u>Interruption of Service</u>. If a wireless provider causes an interruption of service by damaging or interfering with any equipment of Utility, such wireless provider shall, at its own expense, immediately do all things reasonable to avoid injury or damages, direct and incidental, resulting therefrom and shall notify Utility immediately.
- 24.6. <u>Duty to Inform</u>. As a condition of every permit to attach to a Utility Pole, wireless providers shall warrant that they understand the imminent dangers (INCLUDING SERIOUS BODILY INJURY OR DEATH FROM ELECTROCUTION) inherent in the work necessary to make installations on Utility's poles and other facilities by such wireless provider's employees, agents, contractors, or subcontractors, including the inherent danger in working in close proximity to electric facilities.

Article 25. Insurance

- 25.1. **Policies Required.** As a condition of every permit, wireless providers shall keep in force and effect all insurance policies as described below:
 - 25.1.1. Workers' Compensation and Employers' Liability Insurance. Statutory workers' compensation benefits and employers' liability insurance with a limit of liability no less than that required by Arkansas law at the time of the application of this provision for each accident. Wireless providers shall require subcontractors and others not protected under its insurance to obtain and maintain such insurance.
 - 25.1.2. Commercial General Liability Insurance. Policy on form ISO CGL 00 01 or equivalent will be written to provide coverage for, but not limited to, the following: premises and operations, products and completed operations (not excluding injury or harms caused by RF emissions), personal injury, blanket contractual liability coverage, broad form property damage, independent contractor's coverage with limits of liability of \$2,000,000 general aggregate, \$2,000,000 products/completed operations aggregate, \$2,000,000 personal injury, \$2,000,000 each occurrence.
 - 25.1.3. *Automobile Liability Insurance*. Business automobile policy covering all owned, hired and non-owned private passenger autos and commercial vehicles. Limits of liability of \$1,000,000 each occurrence, \$1,000,000 aggregate.
 - 25.1.4. *Umbrella Excess Liability Insurance*. Coverage is to be in excess of employers' liability, commercial general liability, and automobile liability insurance required above. Limits of liability of \$5,000,000 each occurrence, \$5,000,000 aggregate. Wireless provider may use any combination of primary and excess to meet required total limits.

- 25.1.5. *Property Insurance*. Wireless providers shall be responsible for maintaining property insurance on its own facilities, buildings, and other improvements, including all equipment, fixtures, and utility structures, fencing, or support systems that may be placed on, within, or around Utility facilities to protect fully against hazards of fire, vandalism and malicious mischief, and such other perils as are covered by policies of insurance commonly referred to and known as "extended coverage" insurance or self-insure such exposures.
- 25.1.6. *Changes in coverage*. Wireless providers shall immediately notify City and Utility of any change in its insurance status that results in coverage less than the limits described in Sections 25.1.1 through 25.1.5.
- 25.1.7. Self-insurance by wireless providers with assets over \$500M. A wireless provider with assets over \$500,000,000 according to an independent audit or report (such as, Dun & Bradstreet) may, in its sole discretion, self-insure any of the required insurance under the same terms as required by this regulation. In the event a wireless provider elects to self-insure one or more obligations under this regulation, the following conditions apply: (i) City and Utility shall promptly and no later than thirty (30) days after notice thereof provide wireless provider with written notice of any claim, demand, lawsuit, or the like for which it seeks coverage pursuant to this Section and provide wireless provider with copies of any demands, notices, summonses, or legal papers received in connection with such claim, demand, lawsuit, or the like; (ii) City or Utility shall not settle any such claim, demand, lawsuit, or the like without the prior written consent of wireless provider; and (iii) City and Utility shall fully cooperate with wireless provider in the defense of the claim, demand, lawsuit, or the like. A wireless provider that self-insures shall immediately notify City and Utility of any change in its self-insured status as to any required coverage and of any change in the ability of the wireless provider to cover the risk of loss under this regulation.
- 25.2. Qualification; Priority; Contractors' Coverage. Insurance required by this Article 25 must be provided by an insurer that is eligible to do business under the laws of the state of Arkansas and have an "A minus" or better rating in Best's Guide. Such required insurance will be primary. All contractors and all of their subcontractors who perform work on behalf of a wireless provider shall carry, in full force and effect, workers' compensation and employers' liability, commercial general liability, and automobile liability insurance coverages of the type that wireless providers are required to obtain under this Article 25 with reasonable and prudent limits.
- 25.3. <u>Certificate of Insurance</u>; <u>Other Requirements</u>. As a condition of every permit, wireless providers will furnish Utility with a certificate of insurance ("certificate"). The certificate shall reference this regulation and workers' compensation and property insurance waivers of subrogation required by this regulation. Utility and City shall be given thirty (30) calendar days advance notice of cancellation or nonrenewal of required insurance if not replaced during the term of this regulation. All policies, other than workers' compensation, shall be written on an occurrence and not on a claims-made basis. All policies may be written with deductibles or self-insured retentions. Upon request, wireless service providers shall obtain certificates from its agents, contractors, and their subcontractors working hereunder and provide a copy of such certificates to Utility.

- 25.4. <u>Limits</u>. The limits of liability set out in this Article 25 may be increased or decreased by consent, which consent will not be unreasonably withheld by either Utility or any wireless provider, in the event of any factors or occurrences, including substantial increases in the level of jury verdicts or judgments or the passage of state, federal, or other governmental compensation plans, or laws that would materially increase or decrease a wireless provider's exposure to risk.
- 25.5. **Prohibited Exclusions.** No policies of insurance required to be obtained by a wireless provider or its contractors or subcontractors shall contain provisions that: (1) exclude coverage of liability assumed by this regulation with City or Utility except as to infringement of patents or copyrights or for libel and slander in program material, (2) exclude coverage of liability arising from excavating, collapse, or underground work, (3) exclude coverage for injuries to City's or Utility's employees or agents, or (4) exclude coverage of liability for injuries or damages caused by the wireless provider's contractors or the contractors' employees, or agents. This list of prohibited provisions shall not be interpreted as exclusive.
- 25.6. <u>Deductible/Self-insurance Retention Amounts</u>. Wireless providers shall be fully responsible for any deductible or self-insured retention amounts contained in their insurance or for any deficiencies in the amounts of insurance maintained.

Article 26. <u>Assignment</u>

- 26.1. <u>Limitations on Assignment</u>. Wireless providers shall not assign any permits granted under this regulation, nor any part of such permits, without the prior written consent of Utility and City, which consent shall not be unreasonably withheld; provided, however, a wireless provider may assign its rights and obligations to an affiliate without consent upon prior written notice.
- 26.2. Obligations of Assignee/Transferee and Permittee. No assignment or transfer under this Article 26 shall be allowed until the assignee or transferee becomes a signatory to the permit issued under this regulation and assumes all associated obligations arising under this regulation. Wireless providers who seek to assign or transfer a permit shall furnish Utility or City with prior written notice of the transfer or assignment, together with the name and address of the transferee or assignee.
- 26.3. <u>Sub-permitting</u>. Wireless providers shall not sub-permit, sub-license, lease, or otherwise allow any third parties to place attachments on Utility's facilities. Any such action shall constitute a violation of this regulation and any permit held by such wireless provider. The authorized use of small wireless facilities by third parties that involves no additional attachment is not subject to this Article 26.3.

Article 27. Failure to Enforce

Failure of City, Utility or a wireless provider to take action to enforce compliance with any of the terms or conditions of this regulation or to give notice or declare this regulation or any permit granted hereunder terminated shall not constitute a waiver or relinquishment of any term or condition of this regulation, but the same shall be and remain at all times in full force and effect until terminated, in accordance with this regulation.

Article 28. Receivership, Foreclosure or Act of Bankruptcy.

As a condition to every permit, wireless providers shall consent to termination by Utility and/or City of any and every permit one hundred twenty (120) days after the filing of bankruptcy or the appointment of a receiver or receivers or trustee or trustees to take over and conduct the business of the wireless provider whether in a receivership, reorganization, bankruptcy or other action or proceeding unless such receivership or trusteeship shall have been vacated prior to the expiration of said one hundred twenty (120) days, or unless such receivers or trustees shall have, within one hundred twenty (120) days after their election or appointment, fully complied with all the terms and provisions of this regulation granted pursuant hereto, and the receivers or trustees within said one hundred twenty (120) days shall have remedied all violations and deficiencies under this Regulation.

Article 29. Removal of Attachments.

Wireless providers may at any time remove their attachments from any facility of City or Utility, but any such removal must be done with prior written notice and in coordination with Utility to disconnect a power supply. No refund of any fee will be due on account of such removal.

Article 30. Bonds.

- 30.1. **Purpose and Amount of Bond**. As a condition to permitting, wireless providers shall furnish a performance bond executed by a surety company reasonably acceptable to City and Utility which is duly authorized to do business in the state of Arkansas in the amount of one thousand dollars (\$1,000.00) per small wireless facility for the duration of permits issued under this regulation as security for the faithful performance of obligations under this regulation including, without limitation, the removal of abandoned or improperly maintained small wireless facilities, and the payment of rates and fees that are unpaid after more than twelve (12) months.
 - 30.1.1. *Prior notice required*. Neither City nor Utility shall seek payment against a bond until the wireless provider has been afforded reasonable notice of noncompliance and an opportunity to cure.
 - 30.1.2. *Total bond limit*. Neither City nor Utility shall require a wireless provider to maintain total bonds under this regulation in an amount greater than ten thousand (\$10,000) dollars, which may be combined in a single instrument.
 - 30.1.3. *Cash bonds*. Neither City nor Utility shall require a cash bond unless the wireless provider has failed to obtain or maintain a bond, or the bond surety has defaulted or otherwise failed to perform on behalf of a wireless provider.
- 30.2. <u>Waiver</u>. Bond requirements may be waived by the City and/or Utility for a wireless provider that maintains bonding for other operations that would meet or exceed the requirements of this Article 30.

Article 31. Severability.

If any provision or portion thereof of this regulation is or becomes invalid under any applicable statute or rule of law, and such invalidity does not materially alter the essence of this regulation to either party, such provision shall not render unenforceable this entire regulation. Rather, the parties intend that the remaining provisions shall be administered as if the Regulation did not include the invalid provision.

Article 32 Governing Law

As a condition of each permit, wireless providers shall consent that all actions or proceedings arising directly or indirectly from this regulation shall be commenced and litigated only in the Circuit Court of Faulkner County, Arkansas or the Eastern District of Arkansas federal court with jurisdiction over Conway, Arkansas, and consent to the jurisdiction over the above-listed courts, in all actions or proceeding arising directly or indirectly from this regulation with all disputes based on Arkansas law.

In the event that any legislative, regulatory, judicial, or other action ("new law") affects the rights or obligations of any party described herein, or establishes rates, terms or conditions for the construction, operation, maintenance, repair or replacement of attachments on Utility poles or in the public right-of-way, that differ, in any material respect from the terms of this regulation, then any such party may, upon thirty (30) days' written notice, petition for the terms of this regulation to be amended to conform to the new law on a going forward basis for all existing and new attachments, unless the new law requires retroactive application.

Article 33. Incorporation of Recitals and Appendices.

The recitals stated above and all appendices to this regulation are incorporated into and constitute part of this regulation.

Article 34. Force Majeure.

If City, Utility, or any wireless provider is prevented or delayed from fulfilling any term or provision of this regulation by reason of fire, flood, earthquake, or like acts of nature, wars, revolution, civil commotion, explosion, acts of terrorism, embargo, acts of the government in its sovereign capacity, material changes of laws or regulations, labor difficulties, including without limitation, strikes, slowdowns, picketing or boycotts, unavailability of equipment of vendor, or any other such cause not attributable to the negligence or fault of the party delayed in performing the acts required by the regulation, then performance of such acts shall be excused for the period of the unavoidable delay, and the affected party shall endeavor to remove or overcome such inability as soon as reasonably possible.

Article 35. Casualty.

A wireless provider may at any time remove its attachments or small wireless facilities from City and/or Utility poles in the event of a casualty, fire or other harm affecting such City and/or Utility poles ("casualty event"). City or Utility will provide notice to wireless providers of any

casualty event as soon as reasonably possible thereafter. In the event of damage by a casualty event to a City or Utility pole or facility that cannot reasonably be expected to be repaired within forty-five (45) days following such casualty event or which City or Utility elects not to repair, or if such casualty event is reasonably expected to disrupt a wireless provider's operations on a City or Utility pole for more than forty-five (45) days, then the wireless provider may, at any time following such casualty or harm; (i) terminate the applicable permit upon fifteen (15) days' written notice to City or Utility; (ii) place a temporary facility, if feasible, at a location equivalent to wireless provider's current use of the City or Utility pole until such time as the pole is fully restored to accommodate the wireless provider's attachment or small wireless facility; or (iii) permit the wireless provider to submit a new application for a permit at an alternate location equivalent to the wireless provider's current use of the City or Utility pole, and City and Utility shall waive the application fee and transfer all remaining rights to the new City or Utility pole so long as such relocation was due to a casualty event not directly caused by the wireless provider. Any such notice of termination shall cause the applicable permit to expire with the same force and effect as though the date set forth in such notice were the date originally set as the expiration date of the applicable permit. The attachment fees shall abate during the period of repair following such casualty event in proportion to the degree to which wireless provider's use of the City or Utility pole is impaired. The wireless provider will be entitled to collect all insurance proceeds payable to the wireless provider on account thereof and to be reimbursed for any prepaid attachment fees on a pro rata basis.

Article 36. <u>Attachment of Wireline Backhaul Facilities on Utility Poles.</u>

- 36.1. <u>Agreement Required</u>. No communication service provider shall attach a wireline backhaul facility to a City or Utility pole, without authority from the pole owner.
- 36.2. <u>Attachments Adjacent to Mid-span Facilities</u>. After the effective date of this regulation, any communication service provider that attaches wireline backhaul facilities to a City or Utility pole with facilities or equipment larger than one cubic foot installed on the span of the wireline backhaul facilities shall be subject to the following requirements:
 - 36.2.1. *Permit Required*. Each pole attachment of a wireline backhaul facility that is adjacent to mid-span facilities larger than one cubic foot must be separately permitted. Pole attachment permit applications must include the information described in Sections 6.3.1, 6.3.2, 6.3.4, 6.3.6, 6.3.8, 6.3.9, and 6.3.10, and will be processed under the same procedures and requirements in this regulation applicable to small wireless facilities.
 - 36.2.2. Each pole attachment of a wireline backhaul facility that is adjacent to mid-span facilities larger than one cubic foot shall be subject to the attachment rate shown on Appendix A.
- 36.3. <u>Previous Agreements</u>. The provisions in this Article 36 shall not apply to communication service providers that previously entered an agreement to attach wireline backhaul facilities to City or Utility poles that expressly included the authority to install facilities or equipment larger than one cubic foot in size.

APPENDIX A – FEES

Small wireless facility application fee
New/modified/replaced pole and small wireless facility application fee
ROW Fee
Attachment Fee
Reinspection Fee
Unauthorized Attachment Fee
Continuing Violation Fee

APPENDIX B – DESIGN STANDARDS

Wireless providers may submit designs for small wireless facilities and poles to be preapproved by resolution or ordinance of City Council. When so approved, designs will be administratively attached to this Appendix B.

Small wireless facility designs that have not been approved by City Council may only be approved when fully compliant with Sections 2.3 and 2.4, as appropriate.

City of Conway Arkansas Small Cell Pole Deployment Specification



Velturis Project No.: 22-065

Date Prepared: November 23, 2022

Revision: 2

Velturis City of Conway, AR Small Cell Specifications

Table of Contents

0.0	Table	of Contents	2			
1.0	Small	Cell Pole Specifications				
	1.1	Background and Purpose	3			
	1.2	Definition of Pole Classifications	3			
2.0	Small	Cell Pole Configurations and Basis of Design				
	2.1	Purpose	4			
	2.2	Design Basis, Structural	4			
	2.3	Specifications	4			
	2.4	Design Criteria, Soils	6			
	2.5	Vibration Disclaimer	6			
	2.6	Design Basis Aesthetics	7			
3.0	Small	Cell Precast and Poured In-Place Foundations				
	3.1	Purpose	8			
	3.2	Performance Standards for Small Cell precast Concrete Foundations	8			
4.0	Small	Small Cell Pole manufacturing Specifications				
	4.1	Purpose	25			
	4.2	Information Submittal	25			
	4.3	Material Specifications	26			
	4.4	Manufacturing Processes	26			
	4.5	Fit and Assembly	27			
	4.6	Welding	27			
	4.7	Shop Assembly	27			
	4.8	Finishes	28			
	4.9	Documentation	29			
	4.10	Handling, Storage and Delivery	30			
5.0	Shrou	d Design				
	5.1	Purpose	32			
	5.2	Design Criteria	32			
	5.3	Design	32			
	5.4		32			
	5.5	Mounting	32			
	5.6	Finish	32			
	5.7	Testing	33			
6.0	Small	Cell Pole Configurations				
	6.1	Small Cell Poles	34			
	6.2	Small Cell Foundations	42			

1.0 Small Cell Pole Specification Overview:

1.1 Background and Purpose:

These Small Cell Guidelines are for providing a uniform standard for the City's new wireless Small Cell deployments within the Cities' Right-of-Way.

The City's Guidelines provide the details on all new small cell replacement installations either through redevelopment or small cell deployment. These guidelines provide aesthetics requirements and specifications for the replacement of existing city's streetlight poles or at a new location where it has been identified that a streetlight is required. Contractor shall provide all documentation required by these standards at the time of permitting. Special conditions will require special considerations of deviations from the guide.

1.2 Definition of Pole Classifications:

The following Poles Designation definitions for clarification for the specifications:

- a. Downtown Pole:
 - Any roadway/pedestrian Acorn light in the downtown area of Conway.
- b. Residential:
 - Any roadway light in residential neighborhoods.
- c Main Corridor Pole:
 - Any roadway light in main corridors outside of residential neighborhoods that are not in the downtown area. Single or double arm depending on location.

2.0 Small Cell Pole Configurations and Basis of Design:

2.1 Purpose:

The following section describes in detail the design standard and criteria for the small cell pole configuration and foundation design for the City's specifications.

2.2 Design Basis (Structural):

a. Code Compliance:

All work and materials shall be performed and in installed in accordance with the current editions of the following codes as adopted by the local governing authorities. Nothing in the plans are to be construed to permit work not conforming to the codes.

- 1. ASCE7-10, Minimum Design Loads for Building and Other Structures
- 2. All City Ordinances
- 3. International Mechanical Code (IMC) 2018
- b. Design Criteria (Structural):

Wind Velocity: 90 mph
 Gust Factor: 1.14
 Risk Category: II
 Exposure Category: D

5. Ice: Included

c. Small Cell Poles Overview, Type 1, 2, 3A, 3B and 4 for Small Cel Definitions:

Type 1 Pole: Downtown Pole: 20' Light Height Pole with Small Cell Cabinet
 Type 2 Pole: Residential Pole: 18' Light Height Pole with Small Cell Cabinet
 Type 3A Pole: Main Corridor Pole: 30' Light Height Pole, Single Light Arm

with Small Cell Cabinet

4. Type 3B Pole: Main Corridor Pole: 30' Height Pole, Double Light Arm with

Small Cell Cabinet

5. Type 4 Pole: Standard Pole: No light with Small Cell Cabinet

2.3 Specifications:

General Specification Overview:

Luminaire	All existing luminaires are to be saved and reinstalled on the new small cell sites
Luminaire Mast Arm	Mast arms to match the small cell details for the various areas within the City
Electrical Service	New metered service to be located as per Conway Corp. requirements. Locatio s to be
	determined at permitting. City Streetlights, 110 VAC, to be on a separate breaker for
	servicing. Meter box used to be to local utility specifications
Pole Requirements	At least 15% of the pole design structural capacity shall be reserved for future City
	device installations.
Pole Type	Round, straight, galvanized steel.

Pole Color	Equipment cabinet, pole and luminaire arm shall be galvanized in accordance with			
	AASHTO M111. If the pole is painted to match existing streetlight aesthetics, pain			
	be powder coated Matte Black, Gloss 20% RAL 9017 Traffic Black			
Combination Pole Height	The pole height shall be measured from the top of the foundation to the top of the			
at the Luminaire	mast arm where the light is mounted. The top of the shroud shall be no higher than			
	shown on the pole specification drawings.			
	All luminaires shall be the same height as adjacent streetlights. Luminaires shall be			
	installed as shown in Pole Configurations.			
	Downtown Main Corridor Residential			
	14 feet 30 feet 18 feet			
Foundation	Precast concrete as per Performance Standards for small cell precast foundations			
	Section 3.0 and section 6.2 details as applicable. The connection to the pole base shall			
	be designed to allow for breakaway connection where noted on the drawings. Special			
	foundation can be reviewed if special installations circumstances arise.			
Conduit Sweeps in	Steel 90 deg. conduit sweeps shall be installed as per section 3.0. Conduit shall			
Precast	accommodate electric power, fiber and ground			
Break Away Systems	On the main corridor roadways, all small cell deployments are to have a anchorage and			
	electrical break away mechanism that engages when the pole is hit so that the			
	structure disengages from the foundation and that simultaneously the power is shut			
	off			
Anchor Bolt Shroud	Anchor bolts shall either be hidden from view, preferred, or treated and painted to			
	match the pole color with City of Conway's approval.			
Attachments	All attachments (i.e. signage, cameras, banners, planters etc.) on existing poles are to			
be saved and reinstalled on the new replacement small cell structure				
Equipment Cabinet Specification Overview				
Equipment Cabinet Style	18" x 18" Square. The City shall approve other shapes.			
Size	18" x 18" is preferred, The City shall approve other sizes			
Height	6'-8" maximum, Interior size 17-3/8" W x 17-3/8" D x 80" H, 14.18 cu. Ft. Ft for Radios,			
	internal Metering and power management			
Shroud/Cover	All hardware attachments shall be hidden. Equipment cabinet and/or equipment			
	cabinet cover shall not have a flat, horizontal surface larger than 1.5 inches.			
Color	Equipment cabinet and pole shall be galvanized in accordance with AASHTO M 111.			
	Painted to match existing streetlight aesthetics, paint shall be powder coated Matte			
	Black, Gloss 20% RAL 9017 Traffic Black.			
Access Doors	Lockable access door 15" W x 5'-10" H sized to install, maintain, and remove all small			
	cell equipment as needed.			
Ventilation	Passive louvers and/or other passive ventilation systems shall be provided as the			
	primary means of temperature control.			
Motorized Ventilation	If required, fan(s) shall not emit noise greater than 40dBa at one meter (3.28 feet).			
Upper Pole Specification (Overview			
Upper Pole Type	Round, straight, galvanized steel. Pole shall be architecturally compatible with the			
	equipment cabinet.			
Shroud	All fixed connections shall be hidden from view.			
Siliouu				

Upper Pole Diameter	The upper pole shall be scaled to 0.5 to 0.75 times the size of the equipment cabinet		
	with 8" 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.		
Hand Holes	Various hand holds shall be provided as per the configuration drawings to provide		
	access and for mounting future equipment/ devices.		
Antenna Enclosure Specifi	ication Overview:		
Antenna Shroud, Dia.	20-inch maximum outer diameter RF PIM reduction shroud.		
Antenna Shroud, Height	The shroud height - including antenna, radio equipment, conduit or wires, brackets,		
	transition shroud, and all other hardware required for a complete installation - from		
	the top of the mast arm connection to the top of the shroud shall not exceed 7 feet.		
	shroud shall provide 5.25 cu. Ft. of min. volume.		
Antenna Shroud,	The antenna and antenna pole attachment shall be shrouded to meet the City's		
Connection	aesthetics. A tapered transition between the upper pole and shroud shall be included.		
Color	Antenna shroud shall be colored to match pole.		
Warning Label	If required, radio frequency warning labels shall be mounted exterior to the pole.		
Owner Identification	A 4-inch by 6-inch (maximum) plate with the Carrier's name, location identifying		
	information, and emergency telephone number shall be permanently fixed to the pole.		

2.4 Design Criteria for Soils:

Design is based on assumption of the soil properties. The site must be verified to meet or exceed these properties of the actual in-place soil parameters by the contractor. Soil parameters:

- a. Non-saturated cohesive soils with a minimum cohesion value c = 100 lb./ sq. ft. and no organic material.
- b. Granular soils located above the water table with a minimum unit weight of 110 bl./ sq. ft.
- c. Assumes soil loading of 1500 lbs/ sq. ft.

Foundation designs are based on the water table being below the bottom of the precast foundation. If the water table is encountered at the time of excavation, the Board of Public Service is to be notified. If there is an issue that doesn't allow for the installation of the standard precast foundation, It will be the responsibility of the contractor doing the installation to design and engineer a resolution to the issue and submit it for review and approval.

2.5 Vibration Disclaimer:

Although rare, vibrations severe enough to cause damage can occasionally occur in structures of all types. Because they are influenced by many interacting variables, vibrations are generally unpredictable. The user's maintenance program should include observation for excessive vibrations and examination for any structural damage or bolt losing. This design specifically excludes fatigue failure or similar phenomena resulting from induced vibration, harmonic oscillation or resonance associate with the movement of air current around the poles.

2.6 Design Basis Aesthetics:

The design of the poles are to match the aesthetic of the streetlights installed adjacent to the poles. The small cell components shall be sized to be visually pleasing. For a pole to be considered visually pleasing, the transition between the pole's equipment base cabinet and the upper pole shall be considered. A decorative base cover shall be installed to cover the equipment base cabinet's upper bolts, or decorative base cover shall be installed to match the equipment base cabinet size. The upper pole shall be scaled to be 0.5 to 0.75 the size of the equipment cabinet with a 8" minimum diameter. All hardware connections shall be hidden from view. No horizontal flat spaces greater than 1.5 inches shall exist on the equipment base cabinet to prevent trash, cuts and other items being placed on the equipment base cabinet. Each pole component shall be architecturally compatible to create a cohesive aesthetic.

All conduit, wires and other hardware shall be internal to the upper pole body and shall not be exposed.

3.0 Small Cell Precast and Poured In-Place Foundations:

3.1 Purpose:

The purpose of this section to outline the standards and configurations to be used in the manufacturing of the City's Small Cell Foundations.

3.2 Performance Standards for Small Cell Precast Concrete Foundations:

a. References:

Where applicable, the latest editions of the following standards shall form a part of this specification to the extent referenced. The publications are referenced to in the text of this guide specification by the basic designation only.

- 1. American Association of State Highway and Transportation Officials (AASHTO)
- 2. Standard Specification for Transportation Materials and Methods of Sampling and Testing ACI INTERNATIONAL (ACI)
- 3. ACI 211.1 Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete
- 4. ACI 211.2 Standard Practice for Selecting Proportions for Structural Lightweight Concrete
- 5. ACI 211.3 Guide for Selecting Proportions for No-Slump Concrete
- 6. ACI 304R Guide for Measuring, Mixing, Transporting, and Placing Concrete
- 7. ACI 305R Hot Weather Concreting
- 8. ACI 306R Cold Weather Concreting
- 9. ACI 309R Consolidation of Concrete
- 10. ACI 517.2R Accelerated Curing of Concrete at Atmospheric Pressure
- 11. ASTM C31 Standard Practice for Making and Curing Concrete Test Specimens in the Field
- 12. ASTM C33 Specification for Concrete Aggregates
- 13. ASTM C39 Test Method for Compressive Strength of Cylindrical Concrete Specimens
- 14. ASTM C40 Test Method for Organic Impurities in Fine Aggregates for Concrete
- 15. ASTM C70 Standard Test Method for Surface Moisture in Fine Aggregate
- 16. ASTM C78 Standard Test Method for Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)
- 17. ASTM C150 Specification for Portland Cement
- 18. ASTM C172 Standard Practice for Sampling Freshly Mixed Concrete
- 19. ASTM C173 Test Method for Air Content of Freshly Mixed Concrete by Volumetric Method
- 20. ASTM C231 Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
- 21. ASTM C403 Test Method for Time of Setting of Concrete Mixtures by Penetration Resistance
- 22. ASTM C494 Standard Specification for Chemical Admixtures for Concrete

- 23. American Welding Society (AWS) AWS D 1.1 Structural Welding Code Steel
- 24. AWS D 1.4 Structural Welding Code Reinforcing Steel

b. Forms:

Forms for manufacturing precast concrete units shall be of the type and design consistent with industry standards and practices. They should be capable of consistently providing uniform products and dimensions. Forms shall be constructed so that the forces and vibrations to which the forms will be subjected cause no damage to the precast concrete unit.

Forms shall be cleaned of concrete build-up after each use.

Form release agents shall be applied according to the manufacturer's recommendations and shall not be allowed to build up on the form casting surfaces.

c. Reinforcing Steel:

This work consists of furnishing and placing of reinforcing steel in accordance with these specifications and conformity with the plans.

1. Reinforcing Steel:

Reinforcing Steel shall conform to the requirements of the following specifications:

Deformed and Plain Billet-Steel Bars for Concrete Reinforcement ASTM A615

Axle-steel Deformed and Plain Bars for Concrete Reinforcement ASTM A996

Low-Alloy Steel Deformed Bars for Concrete Reinforcement (to be welded) ASTM A706

Fabricated Deformed Steel Bar mats for Concrete Reinforcement ASTM A184

All reinforcing steel shall be grade 60 or equal.

2. Protection of Materials:

Reinforcing steel shall be protected at all times from damage. When placed in the work, the reinforcing steel shall be free from dirt, loose mill scale, paint, oil, loose rust, or other foreign substances.

3. Bending:

Unless otherwise permitted, all reinforcing bars shall be bent cold. Bar partially embedded in concrete shall not be field bent as shown on the plans or permitted. Bars shall not be bent or straightened in a manner that will injure the material. Should the City approve the application of the heat for the field bending of reinforcing bars,

precautions shall be taken to assure that the physical properties of the steel will not be materially altered.

4. Placing and fastening:

Applicable ASTM International and/or ACI 318 standards for placement and splicing Cages of reinforcement shall be fabricated either by tying the bars, wires or welded wire reinforcement into rigid assemblies or by welding, where permissible, in accordance with AWS D1.4.

The minimum spacing center to center of parallel bars shall be 2-1/2 times the diameter of the bar. However, the clear distance between the bars shall not be less than 1-1/2 times the maximum size of the coarse aggregate or 1-1/4 inches, whichever is greater.

All reinforcement shall have a minimum of 2" of coverage unless noted otherwise on the plans. Clear coverage shall be measured from the surface of the concrete to the outside of the reinforcement. Positive means shall be taken to assure that the reinforcement does not move significantly during the casting operations.

All reinforcement shall be tied at all intersections except where the spacing is less than 1 foot in each direction, in which case alternate intersections shall be tied. The placing and fastening, splicing, and supporting of reinforcing steel reinforcement shall be in accordance with the plans and the latest addition of the "CRSI Recommended Practice for Placing Reinforcing Bars." In the case of a discrepancy between the plans and the CRSI publication above, the plans shall govern. Automated tie wire may be used. The total cross section of the tie wrap shall roughly equal the total cross sectional area of the manually installed tie wire wrap.

d. Embedded Items:

1. Steel:

Embedded items shall be positioned at locations specified in the design documents. Welding shall be performed in accordance with AWS D1.1 when necessary. Inserts, plates, weldments, lifting devices and other items to be embedded in precast concrete units shall be held rigidly in place so that they do not move significantly during casting operations.

a. Materials:

1. Anchor Bolts: ASTM F1553 Gr 55mm

2. Heavy Hex Nuts: ASTM A5633. Structural Washer: ASTM F4364. Embedded Plates: ASTM A36

b. Finish:

1. Plates: Galvanized as per ASTM A123

2. Bolts: Galvanized as per ASTM F2329

Conduit:

- a. Conduit shall be a SCH. 40 PVC rated for application in underground, encased or exposed application in a accordance with the National Electrical Code (Article 352). Except sweeps that are to be steel.
- b. Conduit shall be rated for 90 deg. C conductors, ETL listed to UL 651 or approved.
- The color shall be gray unless mutually agreed upon by all parties and/or any regulatory or inspection agency involved in the specific project.
- d. Conduit to have minimum radius bends, 5-3/4" for 1" and 9-1/2" for 2" with 2" tangents.
- e. Concrete:

Specification:

All concrete that is used in the making of precast caissons is to have the following properties:

Table 3.1

Required Compressive	Cementitious Material	Air Content %	Water/Cementitious
Strength (psi)	Content: Min. or Range	Range (total)	Material Ratio: Max. or
	in lbs/cu. Yds.		Range
4500 at 28 days	N.A.	5-8	0.45

The contractor shall provide protection against sulfate attach on the concrete by providing concrete manufactured according to the following requirements:

Table 3.2

Water Soluble (SO4) in	Sulfate (SO4) in Water	Maximum Water to	Cementitious material
dry soil percent	PPM	Cementitious Material	Requirements
		Ratio	
0.21 to 2.00	1501 to 10,000	0.40	Class 2

Class 2 requirements for sulfate resistance shall be one of the following:

- 1. ASTM C150 Type V with a minimum of a 20 percent substitution of Class F fly ash by weight.
- 2. ASTM C150 Type II or III with a minimum of a 20 percent substitution of Class F fly ash by weight. The Type II or III cement shall have no more than 0.040 percent expansion at 14 days when tested according to ASTM C452.
- 3. ASTM C1157 Type HS, Class C fly ash shall not be substituted for cement.
- 4. ASTM C1157 Type MS plus Class F fly ash where the blend has less than 0.05 percent expansion at 6 months or 0.10 percent expansion at 12 months when tested according to ASTM C1012.

- 5. A blend of Portland cement meeting ASTM C150 Type II or III with a minimum of 20 percent Class F fly ash by weight, where the blend has less than 0.05 percent expansion at 6 months or 0.10 percent expansion to 12 months when tested according to ASTM C1012.
- 6. ASTM C595 Type IP(HS); Class C fly ash shall not be substituted for cement.

f. Proportioning:

The Contractor shall submit a Concrete Mix Design for each class of concrete being placed on the project. Concrete shall not be placed on the project before the Concrete Mix Design Report has been reviewed and approved by the City. The Concrete Mix Design will be reviewed and approved following the procedures of CP 62. The Concrete Mix Design will not be approved when the laboratory trial mix data are the results from tests performed more than two years in the past or aggregate data are the results from tests performed more than two years in the past. The concrete mix design shall show the weights and sources of all ingredients including cement, pozzolan, aggregates, water, additives and the water to cementitious material ratio (w/cm). When determining the w/cm, the weight of cementitious material (cm) shall be the sum of the weights of the cement, fly ash and silica fume.

The laboratory trial mix data shall include results of the following:

- 1. AASHTO T 119 (ASTM C 143) Slump of Hydraulic Cement Concrete.
- 2. AASHTO T 121 (ASTM C 138) Weight per Cubic Foot, Yield, and Air Content (Gravimetric) of Concrete.
- 3. AASHTO T 152 (ASTM C 231) Air Content of Freshly Mixed Concrete by the Pressure Method
- 4. ASTM C 39 Compressive Strength of Cylindrical Concrete Specimens shall be performed with at least two specimens at 7 days and three specimens at 28 days. Three additional specimens tested at 56 days shall be required for Class H concrete.
- 5. Class H concrete shall include a measurement of permeability by ASTM C 1202 Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration.
- 6. Class H concrete shall include a measurement of cracking by AASHTO T334 Standard Practice for Estimating the Cracking Tendency of Concrete. The sample shall be cured at a temperature of 65 to 75 °F and relative humidity not exceeding 40 percent.
- 7. Class P concrete shall include AASHTO T 97 (ASTM C 78) Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading) performed with at least two specimens at seven days and four specimens at 28 days.

The Contractor shall provide maturity meters and all necessary wires and connectors. The Contractor shall be responsible for the placement and maintenance of the maturity meters and wires. Placement shall be as directed by the City.

The maximum slump of the delivered concrete shall be the slump of the approved concrete mix design plus 1½ inch. The laboratory trial mix must produce an average compressive strength at least 115 percent of the required field compressive strength specified in Table A-5.

The laboratory trial mix shall have a relative yield of 0.99 to 1.02. If the produced concrete does not have a relative yield of 0.99 to 1.02 for two consecutive yield determinations, concrete production shall cease and the Contractor shall present a plan to correct the relative yield to the City.

Aggregate data shall include the results of the following:

- 1. AASHTO T 11 (ASTM C 117) Materials Finer Than 75 um (No. 200) Sieve in Mineral Aggregates by Washing.
- 2. AASHTO T 19 (ASTM C 29) Unit Weight and Voids in Aggregate.
- 3. AASHTO T 21 (ASTM C 40) Organic Impurities in Fine Aggregate for Concrete.
- 4. AASHTO T 27 (ASTM C 136) Sieve Analysis of Fine and Coarse Aggregates.
- 5. AASHTO T 84 (ASTM C 128) Specific Gravity and Absorption of Fine Aggregate.
- 6. AASHTO T 85 (ASTM C 127) Specific Gravity and Absorption of Coarse Aggregate.
- 7. AASHTO T 96 (ASTM C 131) Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.
- 8. AASHTO T 104 (ASTM C 88) Soundness of Aggregate by Use of Sodium Sulfate or Magnesium Sulfate.
- 9. CP 37 Plastic Fines in Graded Aggregates and Soils by use of the Sand Equivalent Test.
- 10. ASTM C 535 Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.
- 11. ASTM C1260 Determining the Potential Alkali Reactivity of Aggregates (Accelerated Mortar-Bar Method). When an aggregate source is known to be reactive, ASTM C1567 results may be submitted in lieu of ASTM C1260 results.

Any aggregate tested by ASTM C1260 with an expansion of 0.10 percent or more, or that is known to be reactive, shall not be used unless mitigative measures are included in the mix design.

Test results from ASTM C1293 Standard Test Method for Determination of Length Change of Concrete Due to Alkali-Silica Reaction may be substituted for ASTM C1260 test results. The ASTM C1293 test shall be run on an individual source of aggregate. The ASTM C1293 test shall not use fly ash or slag as part of the cementitious material content. Any aggregate source tested by ASTM C1293 with an expansion greater than or equal to 0.04 percent at one year shall not be used unless mitigative measures are included in the mix design.

Mitigative measures shall be tested using ASTM C1567 and exhibit an expansion less than 0.10 percent by one of the following methods:

- Combined Aggregates. The mix design sources of aggregates, cement and mitigative measures shall be tested. The proportions of aggregates, cement and mitigative measures shall be those used in the mix design.
- Individual Aggregates. Each source and size of individual aggregates shall be tested. The source of cement and mitigative measures shall be those used in the mix design. The highest level of mitigative measures for any individual aggregate shall be the minimum used in the mix design.

The Concrete Mix Design Report shall include Certified Test Reports showing that the cement, fly ash and silica fume meet the specification requirements and supporting this statement with actual test results. The certification for silica fume shall state the solids content if the silica fume admixture is furnished as slurry.

Approved fly ash may be substituted for ASTM C150 cement up to a maximum of 20 percent Class C or 30 percent Class F by weight of total cementitious material.

For all concrete mix designs with ASTM C595 or C1157 cements, the total pozzolan content shall not exceed 30 percent by weight of the cementitious material content.

When the Contractor's use of fly ash results in any delay, necessary changes in admixture quantities or source, or unsatisfactory work, the cost of such delays, changes, or corrective actions shall be borne by the Contractor.

The Contractor shall submit a new Concrete Mix Design Report meeting the above requirements when a change occurs in the source, type, or proportions of cement, fly ash, silica fume or aggregate. When a change occurs in the source of approved admixtures, the Contractor shall submit a letter stamped by the

Concrete Mix Design Engineer approving the changes to the existing mix design. The change must be approved by the City prior to use.

The use of approved accelerating, retarding or hydration stabilizing admixtures to existing mix designs will be permitted at the discretion of the City when documentation includes the following:

- 1. Manufacturer's recommended dosage of the admixture
- 2. A letter stamped by the Concrete Mix Design Engineer approving the changes to the existing mix design.

Unless otherwise permitted by the City, the product of only one type of hydraulic cement from one source of any one brand shall be used in a concrete mix design.

Review and approval of the Concrete Mix Design by the City does not constitute acceptance of the concrete. Acceptance will be based solely on the test results of concrete placed on the project.

g. Batching:

Measuring and batching of materials shall be done at a batching plant in accordance with AASHTO M157.

The Contractor shall furnish a batch ticket with each load for all classes of concrete. The City shall have access to the batch tickets at any time during the project. The following information shall be provided on each batch ticket:

- 1. Project number and location
- 2. Concrete class designation and item number
- 3. Cubic yards batched
- 4. Time batched
- 5. Mix design number
- 6. Type, brand, and amount of each admixture
- 7. Type, brand, and amount of cement and fly ash
- 8. Weights of fine and coarse aggregates
- 9. Moisture of fine and coarse aggregate
- 10. Gallons (Pounds) of batch water (including ice)
- 11. Gallons of water added by truck operator plus quantity of concrete in the truck each time water is added
- 12. Number of revolutions of drum at mixing speed (for truck mixed concrete)
- 13. Discharge time
- 14. Location of batch in placement
- 15. Water to cementitious material ratio (required for deck concrete only)

The drum on each truck mixer shall be reversed prior to charging to eliminate any wash water remaining in the mixer.

Portland Cement and Fly Ash:

Either sacked or bulk cement may be used. No fraction of a sack of cement shall be used in a batch of concrete unless the cement is weighed. All bulk cement shall be weighed on an approved weighing device. The bulk cement weighing hopper shall be sealed and vented to preclude dusting during operation. The discharge chute shall be so arranged that cement will not lodge in it or leak from it. Separate storage and handling equipment shall be provided for the fly ash. The fly ash may be weighed in the cement hopper and discharged with the cement.

Water:

Unless water is to be weighed, the water-measuring equipment shall include an auxiliary tank from which the measuring tank shall be filled. The measuring tank shall be equipped with an outside tap and valve to provide for checking the calibration unless other means are provided for readily and accurately determining the amount of water in the tank. The volume of the auxiliary tank shall be at least equal to that of the measuring tank. In lieu of the volume method specified above, the Contractor will be permitted to use a water metering device that is accurate within the prescribed limits.

Aggregates:

Aggregates from different sources and of different gradings shall not be stockpiled together. Aggregate shall be handled from stockpiles or other sources to the batching plant in such manner as to secure a uniform grading of the material. Aggregates that have become segregated, or mixed with earth or foreign material, shall not be used. All aggregates produced or handled by hydraulic methods, and washed aggregates, shall be stockpiled or binned for draining at least 12 hours before being batched. Rail shipment requiring more than 12 hours will be accepted as adequate binning only if the car bodies permit free drainage. In case the aggregates contain high or non-uniform moisture content, storage or stockpile period in excess of 12 hours may be required.

Bins and Scales:

The batching plant may include bins, weighing hoppers, and scales for the fine aggregate and for each size of coarse aggregate. If cement is used in bulk, a bin, hopper, and scale for cement shall be included. A single weighing hopper with an accumulative scale will be permitted, provided a separate scale is used for weighing cement.

h. Mixing:

Concrete may be mixed in stationary mixers, in a central-mix plant, in truck mixers, or in self-contained mobile mixers. Mixing time shall be measured from the time all materials, except water, are in the drum.

Silica fume, when specified, shall be added to the mix during initial batching.

Mixing General:

The concrete shall be deposited in place within 90 minutes after batching when concrete is delivered in truck mixers or agitating trucks, and within 60 minutes when delivered in non-agitating trucks.

- 1. The 90 minute time limit for mixer or agitating trucks may be extended to 120 minutes if:
 - a. No water is added after 90 minutes.
 - b. The concrete temperature prior to placement is less than 90 °F
- 2. The 90 minute time limit for mixer or agitating trucks may be extended to 180 minutes if:
 - a. No water is added after 90 minutes.
 - b. The concrete temperature prior to placement is less than 90 °F.
 - c. The approved concrete mix contains a water reducing and retarding admixture which conforms to AASHTO M194, Type D.

Stationary Mixing:

When mixed in a central mixing plant, the mixing time shall be between 50 and 90 seconds. Four seconds shall be added to the specified mixing time if timing starts the instant the skip reaches its maximum raised position. Mixing time ends when the discharge chute opens. Transfer time in multiple drum mixers is included in mixing time. The contents of an individual mixer drum shall be removed before a succeeding batch is emptied therein.

The volume of concrete mixed per batch may exceed the mixer's nominal capacity, as shown on the manufacturer's standard rating plate on the mixer, up to 10 per cent provided concrete test data for strength, segregation, and uniform consistency are satisfactory, and provided spillage of concrete does not occur.

The batch shall be so charged into the drum that a portion of the mixing water shall enter in advance of the cement and aggregates. The flow of water shall be uniform and all water shall be in the drum by the end of the first 15 seconds of the mixing period. The throat of the drum shall be kept free of such accumulations as may restrict the free flow of materials into the drum. The timing device on stationary mixers shall be equipped with a bell or other suitable warning device adjusted to give a clearly audible signal each time the lock is released. In case of failure of the timing device, the Contractor will be

permitted to operate while it is being repaired, provided the Contractor furnishes an approved timepiece equipped with minute and second hands. If the timing device is not placed in good working order within 24 hours, further use of the mixer will be prohibited until repairs are made.

Truck Mixing:

Truck mixed concrete shall conform to one of the following:

- Concrete mixed entirely in a truck mixer equipped with a mechanical counter shall be partially mixed at the plant or in transit for not less than 20 revolutions of the drum at mixing speed. The revolutions of the drum at charging speed shall not be counted as mixing revolutions. The concrete shall be mixed between 50 and 100 revolutions of the mixer drum at mixing speed at the delivery site before discharge of the concrete.
- 2. Concrete partially mixed in a stationary central mixing plant with mixing brought to completion in a truck mixer (known as shrink mixing) shall be mixed for a minimum of 30 seconds in the stationary mixer. Mixing shall be completed in the truck mixer for at least 20 but not more than 100 revolutions of the mixer drum at mixing speed at the delivery site before discharge of the concrete.
- 3. Concrete mixed entirely in a stationary mixer and delivered to the job in a truck mixer shall be remixed for a minimum of 20 revolutions of the mixing drum at mixing speed at the job site prior to discharge. When water is added at the delivery site to control the consistency of the concrete, the concrete shall be mixed for at least 20 revolutions of the mixer drum at mixing speed for each addition of water before discharge. These revolutions are in addition to the minimum revolutions required for mixing at the delivery site. Water from all sources shall be documented by the ready mix producer on the delivery slip for each load of concrete.

The Contractor shall provide a Concrete Truck Mixer Certification. This certification shall show the various pick-up and throw-over configurations and wear marks so that the wear on the blades can be checked. Blades shall be replaced when any part or section is worn 1 inch or more below the original height of the manufacturer's design. A copy of the manufacturer's design, showing the dimensions and arrangement of blades, shall be available to the City at all times.

The Contractor shall furnish a water-measuring device in good working condition, mounted on each transit mix truck, for measuring the water added to the mix after the truck has left the charging plant. Each measuring device

shall be equipped with an easy-to-read gauge. Water shall be measured to the accuracy prescribed in AASHTO M 157.

Self-Contained Mobile Mixer:

Proportioning and mixing equipment shall be of the self-contained, mobile, continuous mixing type subject to the following:

- 1. The mixer shall be self-propelled and be capable of carrying sufficient unmixed dry, bulk cement, fine aggregate, coarse aggregate, admixtures and water to produce on the site not less than 6 cubic yards of concrete. The mixer shall have one bin for each size aggregate.
- 2. The mixer shall be capable of positive measurement of cement being introduced into the mix. A recording meter visible at all times and equipped with a ticket printout shall indicate the quantity of total concrete mix.
- 3. The mixer shall provide positive control of the flow of water into the mixing chamber. Water flow shall be indicated by flow meter and be readily adjustable to provide for minor variations in the aggregate moisture.
- 4. The mixer shall be capable of being calibrated to automatically proportion and blend all components of indicated composition on a continuous or intermittent basis as required by the finishing operation, and shall discharge mixed material through a conventional chute directly in front of the finishing machine.
- 5. The Contractor shall perform calibration tests according to the equipment manufacturer's recommendations at the beginning of each project, and when there is a change in the mix design proportions or source of materials. The City may require a calibration test or yield check whenever a change in the characteristics of the mixture is observed. The tolerances in proportioning the various ingredients shall be according to subsection 6.8 of AASHTO M 241.

i. Concrete Placing:

Conventional concrete shall be deposited into forms as near to its final location as practical. Self-consolidating concrete shall be placed in a manner in which it flows and consolidates without segregation or air entrapment. The free fall of the concrete shall be kept to a minimum. Concrete shall be consolidated in such a manner that segregation of the concrete is minimized and honeycombed areas are kept to a minimum. Consolidation efforts are often not required when using self-consolidating concrete. Vibrators used to consolidate concrete shall have frequencies and amplitudes sufficient to produce well-consolidated concrete.

1. Cold Weather Concreting:

Recommendations for cold weather concreting are given in detail ACI 306 R. Adequate equipment shall be provided for heating concrete materials and protecting concrete during freezing or near-freezing

weather. All concrete materials and all reinforcement, forms, fillers, and ground with which concrete is to come in contact shall be free from frost. Frozen materials or materials containing ice shall not be used. In cold weather the temperature of concrete at the time of placing shall not be below 45° F. Concrete that freezes before its compressive strength reaches 500 psi shall be discarded.

2. Hot Weather Concreting:

Recommendations for hot weather concreting are given in ACI 305 R. During hot weather, proper attention shall be given to constituents, production methods, handling, placing, protection, and curing to prevent excessive concrete temperatures or water evaporation that could impair required strength or serviceability of the member or structure. The temperature of concrete at the time of placing shall not exceed 90° F.

3. Concrete Curing:

Commence curing operations immediately following the initial set of the concrete and completion of surface finishing.

- a. Curing by Moisture Retention:
 - Moisture shall be prevented from evaporating from exposed surfaces until adequate strength for stripping the precast concrete unit from the forms is reached by one of the following methods:
 - 1. Cover with polyethylene sheets a minimum of 6 mils thick (ASTM C 171)
 - 2. Cover with burlap or other absorptive material and keep continually moist.
 - 3. Use of a membrane-curing compound applied at rate not to exceed 200 sq. ft. per gallon, or per manufacturers' recommendations (ASTM C309)
 - 4. [Surfaces that will be exposed to weather during service shall be cured as above a minimum of 7 days. Forms shall be considered effective in preventing evaporation from the contact surfaces. If air temperature is below 50°F the curing period shall be extended.]
- b. Curing with Heat and Moisture: Concrete shall not be subjected to steam or hot air until after the concrete has attained its initial set. Steam, if used, shall be applied within a suitable enclosure, which permits free circulation of the steam in accordance with ACI 517.2R. If hot air is used for curing, precautions shall be taken to prevent moisture loss from the concrete. The temperature of the concrete shall not be permitted to exceed 150° F. These requirements do not apply to products cured with steam under pressure in an autoclave.

4. Surface Finish: Unformed surfaces of wet-cast precast concrete products shall be finished as specified. If no finishing procedure is specified, such surfaces shall be finished using a strike-off to level the concrete with the top of the form.

a. Unformed Surfaces:

Surfaces shall be finished with a vibrating screed, or by hand with a float. Normal color variations, minor indentations, minor chips and spalls will be accepted. Major imperfections, excessive honeycombing or other major defects shall not be permitted.

5. Stripping Precast Concrete Units from Forms:

Precast concrete units shall not be removed from the forms until the concrete reaches the compressive strength for stripping required by the design. If no such requirement exists, products may be removed from the forms after the final set of concrete provided that stripping damage is minimal. Stripping strengths shall be routinely measured to ensure product has attained sufficient strength for safe handling.

6. Shipping Precast Concrete Units:

Precast concrete units shall not be shipped until they are at least 7 days old, unless it can be shown that the concrete strength has reached at least 75% of the specified 28-day strength, or that damage will not result, impairing the performance of the product.

j. Concrete Repair:

1. Patching and Repair:

No repair is required to formed surfaces that are relatively free of air voids and honeycombed areas, unless the surfaces are required by the design to be finished.

2. Repairing Minor Defects:

Defects that will not impair the functional use or expected life of a precast concrete unit may be repaired by any method that does not impair the product.

3. Repairing Honeycombed Areas:

When honeycombed areas are to be repaired, all loose material shall be removed and the areas cut back into essentially horizontal or vertical planes to a depth at which coarse aggregate particles break under chipping rather than being dislodged. Proprietary repair materials shall be used in accordance with the manufacturer's instructions. If a proprietary repair material is not used, the area shall be saturated with water. Immediately prior to repair, the area should be damp, but free of

excess water. A cement-sand grout or an approved bonding agent shall be applied to the chipped surfaces, followed immediately by consolidating an appropriate repair material into the cavity.

4. Repairing Major Defects:

Defects in precast concrete products which impair the functional use or the expected life of products shall be evaluated by qualified personnel to determine if repairs are feasible and, if so, to establish the repair procedure.

k. Testing:

- 1. Test Reports:
 - Upon request, the precast concrete producer shall supply copies of material certifications and/or laboratory test reports, including mill tests and all other test data, for portland cement, blended cement, pozzolans, ground granulated blast-furnace slag, silica fume, aggregate, admixtures, and curing compound proposed for use on this project.
 - b. Upon request, the precast concrete producer shall submit copies of test reports showing that the mix has been successfully tested to produce concrete with the properties specified and will be suitable for the project conditions. Such tests may include compressive strength, flexural strength, plastic or hardened air content, freeze-thaw durability, abrasion and absorption. Special tests for precast concrete items shall be clearly detailed in the specifications.
 - c. Upon request, the precast concrete producer will supply copies of in-plant QA/QC inspection reports.

2. Certificates:

Submit quality control procedures established in accordance with NPCA Quality Control.

I. Quality Assurance:

Precast concrete producer shall demonstrate adherence to the standards set forth in the NPCA Quality Control Manual for Precast Concrete Plants. The precast concrete producer shall meet requirements written in subparagraph [1.5.1 or 1.5.2.]

1. NPCA Plant Certification:

The precast concrete producer shall be certified by the NPCA Plant Certification Program prior to and during production of the products for this project.

2. Qualifications:

The precast concrete producer shall have been in the business of producing precast concrete units similar to those specified for a minimum of [] years. The precast concrete producer shall maintain a permanent quality control department or retain an independent testing agency on a continuing basis. The agency shall issue a report, signed by a licensed professional engineer, detailing the ability of the precast concrete producer to produce quality units consistent with industry standards.

3. Quality Control:

The precast concrete producer shall show that the following quality control tests are performed as required and in accordance with the ASTM International standards indicated.

- a. Slump: A slump test shall be performed for each 150 cu yd of concrete produced per mix design, or once a day, whichever comes first. Slump tests shall be performed in accordance with ASTM C143. Slump flow tests on self-consolidating concrete mixes shall be performed in accordance with ASTM C1611.
- Temperature: The temperature of fresh concrete shall be measured when slump or air content tests are made and when compressive test specimens are made in accordance with ASTM C1064.
- c. Compressive Strength: At least four compressive strength specimens shall be made for each 150 cubic yards of concrete of each mix design in accordance with the following applicable ASTM standards; C31, C39, C192, C497 [no-slump concrete].
- d. Air Content: Tests for air content shall be made on airentrained, wet-cast concrete for each 150 cu yd of concrete, per mix design, but not less often than once each day when airentrained concrete is used. The air content shall be determined in accordance with either ASTM C231 or ASTM C173 for normal weight aggregates and ASTM C173 for lightweight aggregates.
- e. Density (Unit Weight): Tests for density shall be performed a minimum of once per week to verify the yield of batch mixes. Density tests shall be performed for each 100 cu yd of lightweight concrete in accordance with ASTM C 138. Density tests shall be performed for each 100 cu. yds. of concrete per mix design, but not less often than once per day when volumetric batch equipment is used. The precast concrete producer shall submit documentation demonstrating compliance with the above subparagraphs.

f. Inspection: The customer or customer's agent (specifier) may place an inspector in the plant when the units covered by this specification are being manufactured. The precast concrete producer shall give notice of [] days prior to the time the precast concrete units will be available for plant inspection.

m. Handling, Storage and Delivery:

Handling:

Precast concrete units shall be handled and transported in a manner to minimize damage. Lifting devices or holes shall be consistent with industry standards. Lifting shall be accomplished with methods or devices intended for this purpose as indicated on shop drawings. Upon request, the precast concrete producer shall provide documentation on acceptable handling methods for the product.

2. Storage:

Precast concrete units shall be stored in a manner that will minimize potential damage.

3. Delivery:

Precast concrete units shall be delivered to the site in accordance with the delivery schedule to avoid excessive build-up of units in storage at the site. Upon delivery to the jobsite all precast concrete units shall be inspected by the customer or customer's agent for quality and final acceptance.

4. Final Acceptance:

Upon final acceptance, the customer or customer's agent acknowledges and understands the appropriate methods for handling the accepted precast concrete unit(s). Upon acceptance by the customer or customer's agent, the precast concrete manufacture is not responsible for replacing damaged product resulting from improper handling practices on the job site.

4.0 Small Cell Pole Manufacturing Specifications:

4.1 Purpose:

The purpose of this section is to detail the specification of the materials, manufacturing requirement and shop details for the City of Conway Streetlight Pole Guidelines. All work and materials shall be performed and in installed in accordance with the current editions of the following codes as adopted by the local governing authorities. Nothing in the plans are to be constructed to permit work not conforming to the codes.

- a. AWS D1.1 Welding Codes
- b. AASHTO, 2009
- c. ANSI for Non-Destructive Testing
- d. City Ordinances

4.2 Information Submittal:

The manufacture of the streetlight poles shall make the following submittals to the owner prior to the commencement of work on the project.

- a. Shop Drawings:
 - 1. The manufacturer shall submit a shop drawing package showing the following:
 - a. Configuration of each individual pole with all components to be mounted to the pole to include, carrier radios, antenna, lights, shrouds, cameras, foundation detail, etc.
 - Each pole configuration shall be individually designated so as the location and configuration can be tracked and the pole identified.
 - c. The size of all materials, finishes and details for review.
 - d. The mounting details for the individual carrier's equipment. The manufacture is to coordinate this with the owner or the owner's representative to assure all carriers requirements are met.
 - e. Bolt and torquing requirement for assembly.
 - The owner or the owner's representative shall review or have the carrier review the drawings to assure compliance with their requirements.
- b. Qualification Data for Manufacture:

Manufacture to have a minimum of (10) years of fabricating structures experience of similar size and complexity.

- c. Welding Information:
 - 1. Welding Procedure Specifications (WPSs)
 - 2. Procedure Qualification Records (PQRs)

- a. Provide according to AWS D1.1/D1.1M, "Structural Welding
 Code Steel," for each welded joint whether prequalified or qualified by testing, including the following:
 - 1. Power Source (constant current or constant voltage).
 - 2. Electrode manufacturer and trade name, for demand critical welds.
- 3. Mill Test reports for structural steel, including chemical and physical properties.
- 4. Product test reports: For the following: Bolts, Nuts, and washers including mechanical properties and chemical analysis.

4.3 Material Specifications:

a. Plates and Bar: ASTM A572, Gr. 50
 b. Cold Formed Hollow Structural Sections: ASTM A500/A500M, Gr. B
 c. Steel Pipe: ASTM A 53/A 53M, Type E or Type S, Grade B.
 d. Welding electrodes: Comply with AWS

requirements.

- e. Pole Connection Hardware:
 - 1. High strength bolts, nuts, and washers: ASTM A 325, Type 1, heavy-hex steel structural bolts: ASTM A 563, Grade C, heavy-hex carbon steel nuts; and ASTM F 436, Type 1, hardened carbon steel washers; all with Galvanized finish.
 - 2. All non-structural bolts to be hot-dipped galvanized Gr. 5

f. Anchor Rods: ASTM F 1554 Gr. 55

1. Configuration: Straight.

2. Nuts: ASTM A 563 heavy-hex carbon

steel

Plate Washers: ASTM A36/A36M carbon steel.
 Washers: ASTM F436, Type 1, Hardened

steel.

5. Finish: Galvanized

g. Decorative Trim Details: ASTM A27/A27M Cast Steel

4.4 Manufacturing Processes:

a. Material Preparation:

All materials shall be fabricated with exposed surfaces smooth, square, and free of surface blemishes including pitting, rust, scale, seam marks, roller marks, rolled trade names, and roughness from the preparation process. All materials are to have the material grade and thickness and/or size verified prior to cutting.

- 1. Sawing and/or Thermal Cutting:
 - a. Perform cutting by CNC machine to greatest extent possible.
 - b. Remove blemishes by filling or grinding or by welding and grinding, before assembly and welding to comply with requirements in AWS D1.1/D1.1M.
- 2. Bolt Holes: Cut, drill, mechanically thermal cut or punch standard bolt holes perpendicular to metal surfaces. Do not thermally cut bolt holes or enlarge holes by hand.
- 3. Accurately finish ends of pipes and other members transmitting bearing loads. Assure ends are perpendicular.

4.5 Fit and Assembly:

- a. Prior to the assembly of the components into an assembly, the following shall be verified:
 - 1. Weld sizes
 - 2. Fabrication sequence, equipment and fixating used for exposed components that will limit distortions to allowable tolerances.
 - 3. Grind butt welds flush
 - 4. Grind or fill exposed fillet welds to smooth profile. Dress exposed welds.
- b. Fabricate and assemble in the shop to the greatest extent possible. All items are to be fit and welded to be plumb and true with an L/360 ratio over the overall length.
- c. Components and attachments to be fit within +/- 0.5 degree of location shown
- d. All components shall be marked and match-mark materials for field assembly by Pole I.D.

4.6 Welding:

- Weld connections: Comply with AWS D1.1/D1.1M and AWS D1.1/D1.18M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.
- b. All welds are to be seal welded inside and out. No cracks or crevasses can be allow for moisture to form in the field and create a potential rust issue.

4.7 Shop Assembly:

- a. All items to be shop assembled are to be verified to be plumb and true prior to bolting to final torque.
- b. Bolted Connections:
 - 1. All bolted connections are to be torqued to the proper setting once

configuration is verified.

- Once tensioned no bolts used for the bolting of the pole's structural components (base cabinet, pole body, luminaire mast arm, or the cantenna) shall be reused.
- 3. Internal component hardware may be reused if the fastener is not visually damaged.
- 4. Torque Requirements:

All equipment attached to the poles shall be torqued using the manufactures specifications specified on the drawings.

4.8 Finishes:

- a. Base Cabinet, Pole Body and Mast Arm:
 - 1. Standard Finish:

Poles, Base Cabinets, and Luminaire Mast Arm shall be galvanized steel. Galvanizing will be performed in accordance with ASTM A123/ A123M. 123M. Fill vent and drain holes that are exposed in the finished work unless they function as well holes, by plugging with zinc solder and filing off smooth.

2. Optional Color Finish (DOT Spec.):

If a pole assembly is going to be coated with an option color, the recommended procedure for the coatings as follows:

- a. Parts are sweep blasted prior to powder coating with a 80 grit media.
- b. Parts should be coated within 5 hours of the blasting process.
- 3. Parts are to be primed with Cardinal H304-GR312 anti-gassing powder, primer, or an approved equivalent, 2 to 4 mils thick. Parts are then baked at 425 deg. F. oven temperature. The parts are to be removed from the oven when they reach a temperature of 400 deg. F.
- 4. Parts are to be top coated with Cardinal Super Durable powder coat, or an approved equivalent, 2 to 4 mils thick. Color to be RAL 9017, Traffic Black, 20% Gloss. Parts are then baked at 425 deg. F. oven temperature. Parts are baked until they reach a temperature of 400 deg. F. for 10 to 15 minutes to ensure full cure of the powder finish.

Note: This finish has passed a 2000 QUV/2000 salt spray/ 200 lbs. Dollies pull test for adhesion.

b. Fasteners:

1. Structural Connections:

All anchor bolts and pole connection fasteners are to be galvanized as per ASTM F2329

2. Equipment Connections:

All fasteners to connect internal equipment boxes, mounting hardware, electrical components are to be ASME B18.2.1, Grade 5

c. Concrete Embedded Plates:

All embedded plates are to be hot dipped galvanized as per ASTM A123

d. Finish Repairs:

- 1. Touch up painting:
 - a. Aerosol touch up should be used for coverage on areas that were masked by a hanging device (Hanging hook or chain, etc.) or used to repair small scratches or imperfections.
 - b. Temperature shall be above 50 deg. F.
 - Paint Color shall match RAL 9017 Traffic Black and it should be compatible with polyester TGIC powder coat finish or labels of any kind.
 - d. If painting the cantennas, the paint should be FAA/FCC approved.
 - e. Do not paint over color coding or on equipment model numbers.
- 2. Galvanizing Repair Paint: Use a coating meeting ASTM A780/A 780M.

4.9 Testing and Documentation:

a. Inspection:

The manufacture shall provide inspection of the final pole assemblies to assure that the manufactured item meets the specifications. The manufacture shall inspect and document the following:

- 1. Welded Connections:
 - Visually inspect all shop-welded fillet connections according to AWS D1.1/D1.1M
 - Provide one of the following inspection procedures for all full penetration or partial penetration connections according to AWS D1.1/D1.1M
 - 1. Liquid Penetrant Inspection: ASTM E 165

 Magnetic Particle Inspection: ASTM E 709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration are not accepted.

2. Bolted Connections:

All bolts are to be torque to the proper specifications:

b. The Owner can engage a qualified testing agency to perform shop tests inspections.

The manufacture shall provide testing agency with access to places where manufacturing work is being fabricated or produced to perform tests and inspections.

c. Test and inspection reports:

All reports are to be retained by the manufacture and made available to the owner or the owner's representative at their request. Test report will be tracked by Pole I.D. unless other requested.

4.10 Handling, Storage and Delivery:

- a. Storage:
 - Store materials to permit easy access for inspection and identification.
 Keep assemblies off the ground and spaced by using pallets, dunnage,
 or other supports and spacers. Protect assemblies, members and
 packaged materials from corrosion and deterioration.
 - Do not store materials on structure in a manner that might cause distortion, damage, or overload of assemblies or supporting structures.
 Repair or replace damages materials or structures as directed.
 - 3. Store fasteners in protected place in sealed containers with manufacturer's labels intact. Fasteners may be repackaged provided reference to original heat number and MTR's are attached. Clean and re-lubricate bolts and nuts that become dry or rusty before use. Comply with manufacturers' written recommendations for cleaning and lubricating ASTM F 1852 fasteners and for retesting fasteners after lubrication.

b. Handling:

Pole Assemblies units shall be handled and transported in a manner to minimize damage to the materials and the coatings. Lifting devices or holes shall be consistent with industry standards. Lifting shall be accomplished with methods

Velturis City of Conway, AR Small Cell Specifications

or devices intended for this purpose as indicated on shop drawings. Upon request, the manufacture shall provide documentation on acceptable handling methods for the product.

c. Delivery:

Pole assemblies shall be delivered to the site in accordance with the delivery schedule to avoid excessive build-up of units in storage at the site. Upon delivery to the jobsite all pole assemblies units shall be inspected by the customer or customer's agent for quality and final acceptance.

d. Final Acceptance:

Upon final acceptance, the customer or customer's agent acknowledges and understands the appropriate methods for handling the accepted pole assemblies unit(s). Upon acceptance by the customer or customer's agent, the pole manufacture is not responsible for replacing damaged product resulting from improper handling practices on the job site.

5.0 Shroud Design

5.1 Purpose:

The purpose of this section is to specify the design requirements for the radio antenna shrouds for the City's Small Cell Poles.

5.2 Design Criteria:

a.	V _{asd} (3-sec Gust)=	90 mph
b.	V _{ult} (3-sec Gust)=	103 mph
c.	Exposure:	D
d.	Structure Class/ Risk Category:	II
e.	Topography Category:	1
f.	Max. EPA (sq. ft.):	6.6
g.	Max. Weight (lbs.)	65
£	It is to be designed in accordance with	ANCI/TIA 222 Day C

f. It is to be designed in accordance with ANSI/TIA-222-Rev. G

5.3 Design:

- a. Two-piece clamshell shroud design manufactured from RF transparent materials.
- b. Assemblies to have multiple upper and lower fastening points for attachment to internal mounts.
- c. Design has multiple fastening points to attach shroud halves together.
- d. Integrated cable concealment skirt to prevent access from bugs, bird etc. from accessing the internals of the shroud.
- e. Shroud to field trim to fit pole diameter.
- f. Upper and lower ventilation ports with internal screen mesh.

5.4 Size:

- a. 20-inch diameter maximum outer diameter with shroud. The height, including antennas, radio equipment, brackets and transition shroud shall not exceed 7'-0"
- b. Final design shall be such to encompass the carrier's antennas and relays for each individual installation configuration.

5.5 Mounting:

- a. All mounting hardware is to be heavy duty top mounting design..
- b. All fasteners are to be stainless steel.

5.6 Finish:

a. The enclosure and mounting hardware is to be paint with a finish to minimize passive intermodulation (PIM).

Velturis City of Conway, AR Small Cell Specifications

- The color of the shroud and the mounting hardware are to be "grey" if the pole is galvanized and "black" if the pole is finished coated RAL 9017 Traffic Black.
- c. Finish is UV resistant

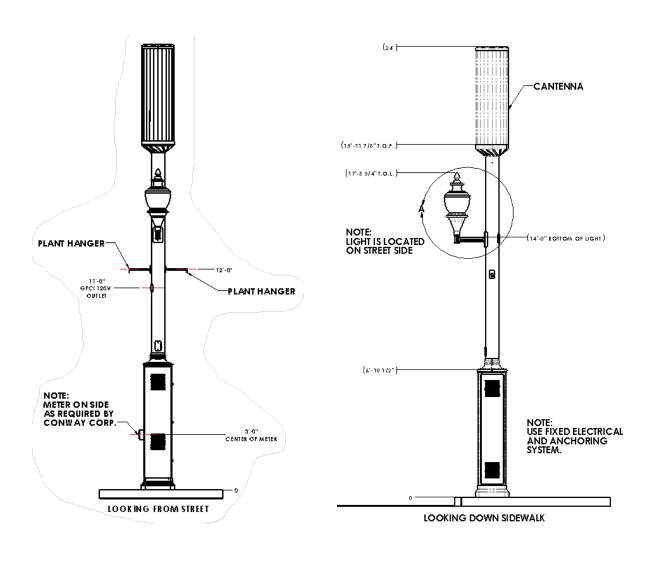
5.7 Testing:

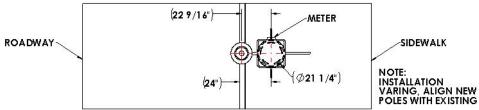
Shrouds materials shall be tested up to 40GHz to assure proper performance

6.0 Small Cell Pole Configurations:

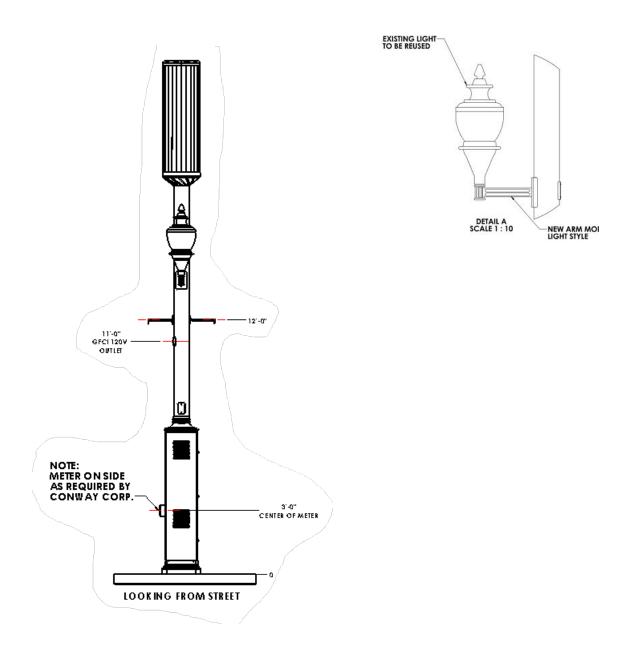
6.1 Small Cell Poles:

a. Type 1: Downtown Pole: 14' Light Height Pole with Small Cell Cabinet

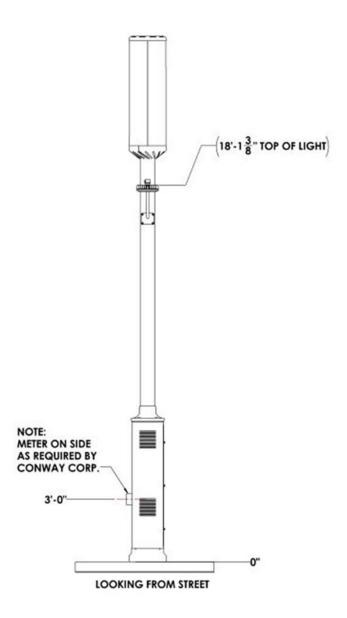


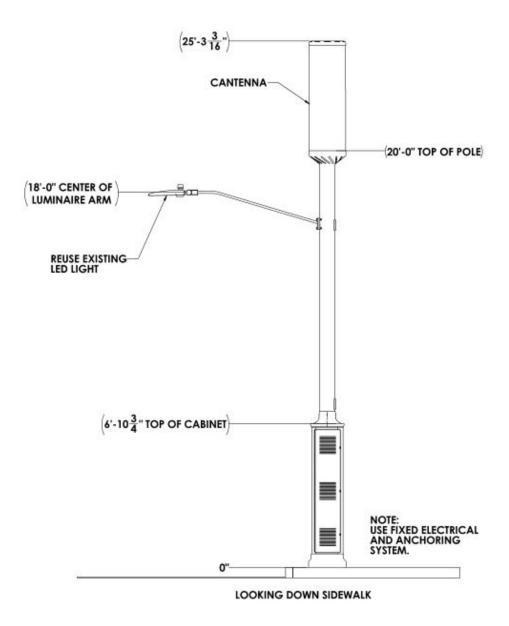


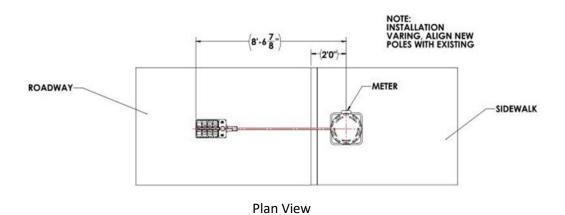
Plan View



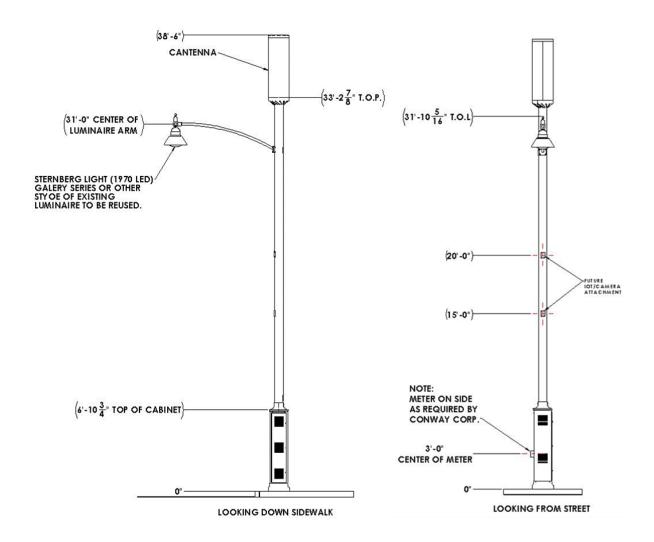
b. Type 2: Residential Pole: 18'Light Height Pole with Small Cell Cabinet

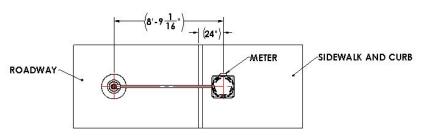






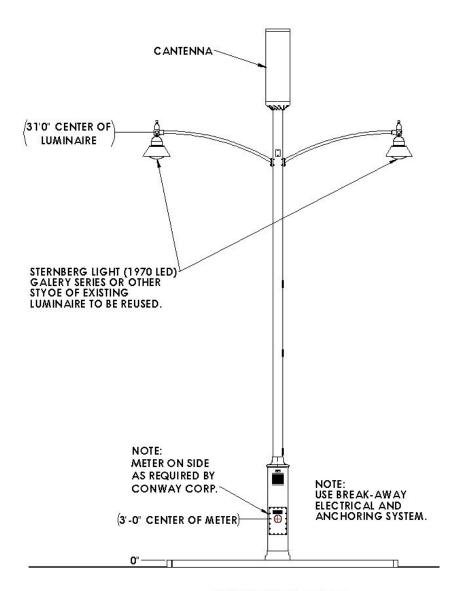
c. Type 3A: Main Corridor Pole: 30' Light Height Pole, Single Light Arm with Small Cell Cabinet



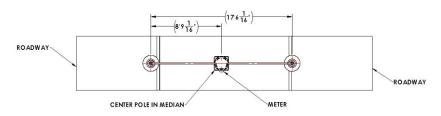


Plan View

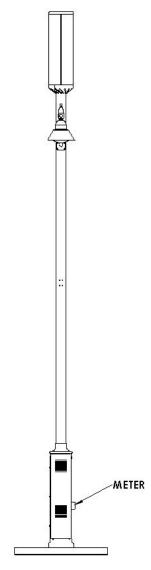
d. Type 3B: Main Corridor Pole: 30' Height Pole, Double Light Arm with Small Cell Cabinet



LOOKING DOWN MEDIAN

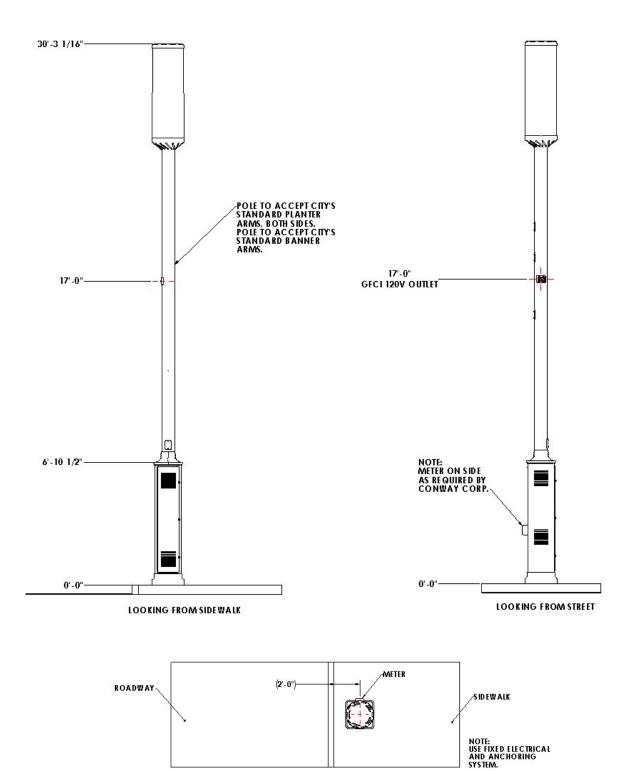


Plan View



LOOKING FROM ROADWAY

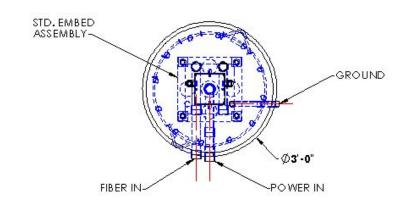
e. Type 4: Standard Pole: No light with Small Cell Cabinet

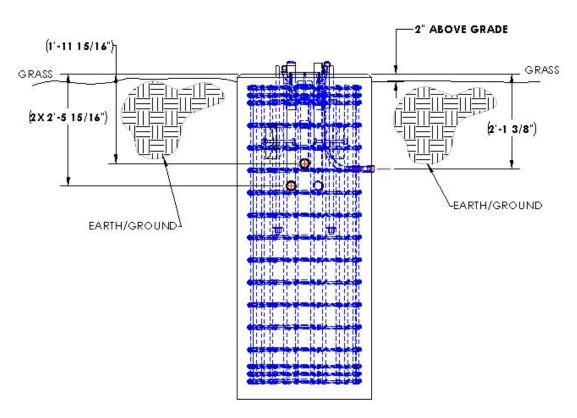


PLAN VIEW

6.2 Small Cell Foundations:

a. Type F1: Standard Caisson for Soil Installations

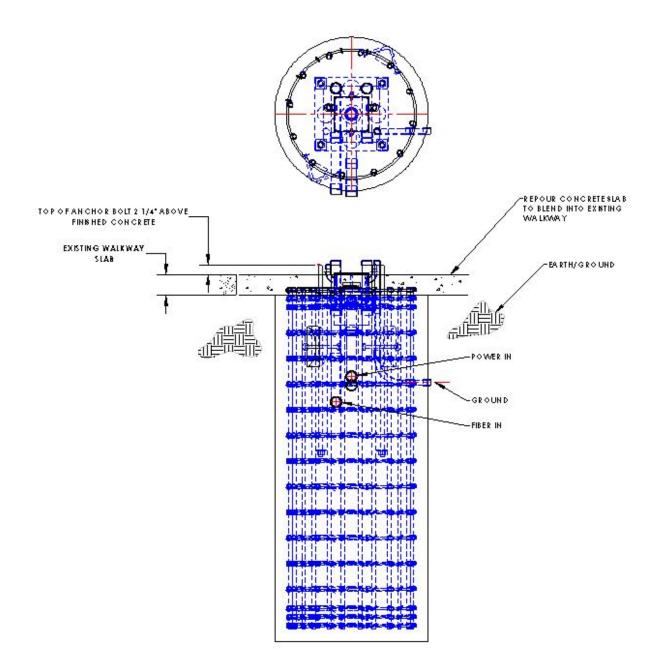




TYPE F1 FOUNDATION, STANDARD CAISSON

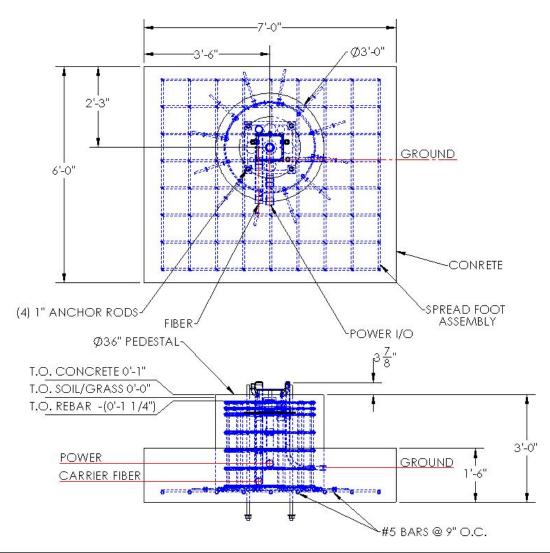
USE CASE FOR GRASS INSTALL

b. Type F2: **Short Caisson for Installation in Sidewalks**



TYPE F2 FOUNDATION, SHORT CAISSON USE CASE: ASSEMBLY FOR WALKWAY INSTALLATION

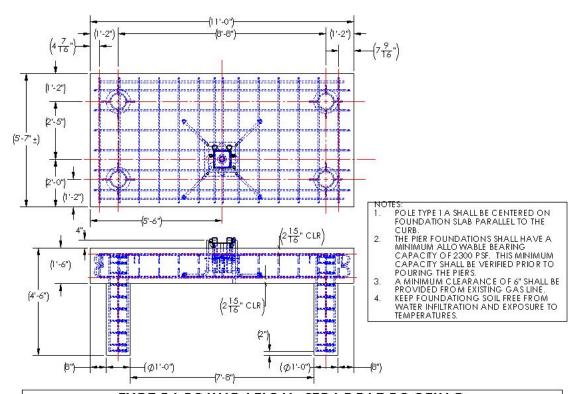
c. Type F3: Pad and Pier for Interference Installation



TYPE F3 FOUNDATION, PAD & PIER

USE CASE: FOR USE WHEN THERE IS AN OBSTRUCTION THAT WON'T ALLOW FOR STANDARD CAISSON INSTALLATION.

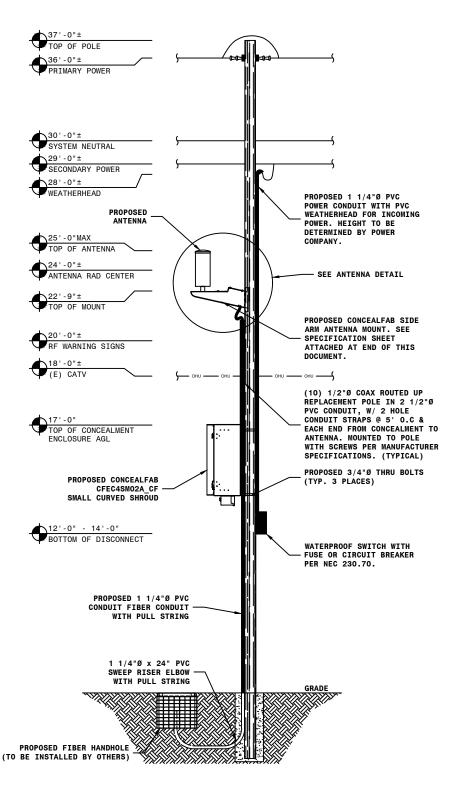
d. Type F4: Straddle for Interference Installation



TYPE F4 FOUNDATION, STRADDLE FOOTING

USE CASE: FOR INSTALLATIONS WHERE FOOTING NEEEDS TO STRADDLE EXISTING UTILITIES. DRAWING IS FOR GENERAL ARRANGEMENT ONLY. ACTUAL DIMENSIONS DETERMINED BY SITE.

WIRELESS COMMUNICATION FACILITY STANDARD 45 FOOT CLASS 2 POLE

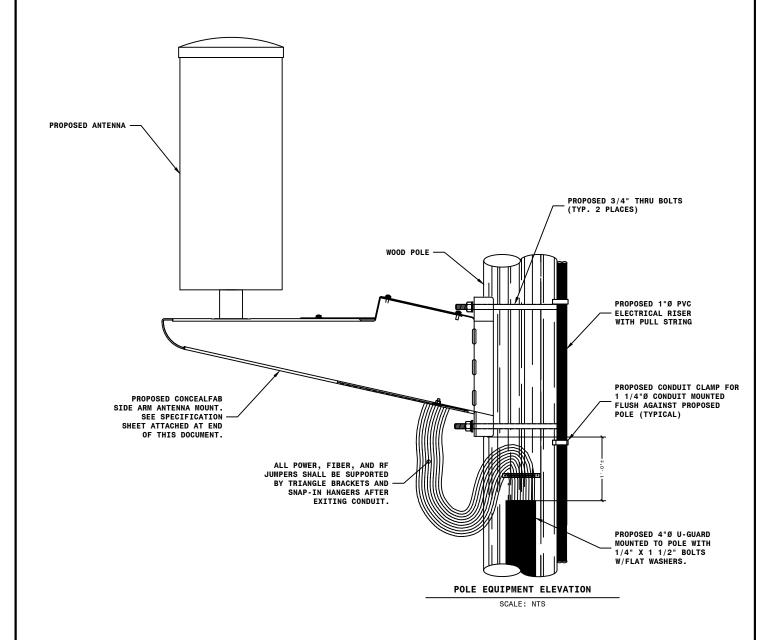


POLE ELEVATION



		APPR BY:	DWG	NO. OH-JI	J-WIF	1004A			
					CHECKED BY:	DG	1101 011 00 111 100 17		
NO.	DATE:	REVISION	BY:	APPR:	DRAWN BY:	RS	PLOT: NONE	SH. 1	OF 2

WIRELESS COMMUNICATION FACILITY ANTENNA DETAIL



NOTES

- 1. ANTENNA MUST BE INSTALLED BY A QUALIFIED CONTRACTROR TO WORK IN THE COMMUNICATION SPACE.
- 2. POLE LOCATION MUST BE APPROVED BY CONWAY CORP. <u>DO NOT</u> INSTALL ANTENNA ON EQUIPMENT POLES SUCH AS CAPACITOR BANKS, RECLOSERS, SWITCHES, TRANSFORMERS, U.G. RISERS, POWER SUPPLIES, AMI COLLECTORS, ETC. POLE LOCATIONS MUST BE BUCKET TRUCK ACCESSIBLE.
- 3. ONLY ONE ANTENNA PER POLE ALLIED.
- 4. ONE RF CAUTION SIGN, MEETING IEEE C95.2, MUST BE INSTALLED ON WI-FI EQUIPPED POLES.
- $5. \ A \ MINIMUM \ CLASS \ 2 \ POLE \ IS \ REQUIRED. \ POLE \ HEIGHTS \ EXCEEDING \ 35' \\ \underline{ABOVE \ GROUND} \ ARE \ NOT \ ALLOWED.$
- 6. ALL ANTENNA DESIGNS MUST BE APPROVED BY CONWAY CORP.
- 7. ALL ANTENNAS AND ANCILLARY EQUIPMENT SHALL BE LABELED WITH THE OWNER'S NAME AND CONTACT INFORMATION, INCLUDING AN EMERGENCY CONTACT NUMBER.
- 8. ANTENNA LOCATIONS CANNOT VIOLATE EXISTING JOINT USE ALLOCATIONS OR AGREEMENTS WITH OTHER JOINT USE PARTIES.
- ALL WI-FI EQUIPMENT (INCLUDING ANTENNA) SHALL MAINTAIN A MINIMUM OF FORTY-TWO (42) INCHES OF SEPERATION BELOW ALL CONWAY CORP CONDUCTORS, INCLUDING DRIP LOOPS.

						ConwayCorp				
					APPR BY:	DWG	NO OH-J	U-WIFI004B		
					CHECKED BY:	DG	110.0110	- TVII 100 1B		
NO.	DATE:	REVISION	BY:	APPR:	DRAWN BY:	RS	PLOT: NONE	SH. 2 OF 2		

APPENDIX C – AESTHETIC IMPROVEMENT CORRIDORS

New poles and small wireless facilities installed in areas that are: (a) zoned or used for residential purposes; (b) along an aesthetic improvement corridor; or (c) within a development overlay district will meet heightened aesthetic requirements described in Sections 2.3.9 and 2.4.5.6. Aesthetic improvement corridors may be designated for aesthetic enhancement by resolution or ordinance of City Council at any time. When so designated, a map of the commercial corridor will be administratively attached to this Appendix C. Overlay districts may be identified in the City Zoning Ordinance.

