

Permit #: _____

CITY OF BROOKLYN PARK COMMUNICATIONS TECHNOLOGY SITE APPLICATION / MODIFICATION REQUEST FORM

Site Name & Address: (existing site or proposed new site build) _____

Wireless Carrier: _____
(Complete corporate name of Lessee)

Wireless Carrier Corporate Designation: _____

1. Name of Applicant: _____
2. Address of Applicant: _____
3. Contact person for Applicant: _____ Telephone: _____
Mobile: _____ Email: _____
4. Technical Advisor (A&E firm): _____ Telephone: _____
Mobile: _____ Email: _____
5. Certificate of Authority from Minnesota Public Utilities Commission? Y / N (Circle One) If Yes, provide copy.
6. Proposed Radio Band: _____
7. Propose Radio Frequency(s): _____
(Specify or attach a separate list)
8. If seeking new modifications, what is your current rent you are paying \$_____ per month/year
9. If this a sublet to an existing site agreement? Y / N (Circle One)
10. Type of Service (SMR, ESMR, PCS, Cellular, Two-Way Paging, Microwave, Wi-Fi, WiMAX, etc.)

11. Unlicensed spectrum? Y / N (Circle One)
If yes, identify in detail the portions of the project to use an unlicensed spectrum. Designate this as an Attachment.
Initial here ____ to indicate Attachment has been included.

If utilizing a Distributed Antenna System (DAS), provide Radio Frequency Coverage Maps prepared by the FCC Licensee(s).

12. Request for Small Cell Site in Utility Row of Way Y / N (Circle One)

If yes, include the provided requirements:

Coverage study to show gap in present system coverage.

- A. The study should include:
 - 1) Present coverage.
 - 2) Proposed coverage.
 - 3) The frequency band used for the analysis.
 - 4) Latitude/longitude and center of radiation for all of the sites used in the coverage analysis.
 - 5) The effective radiated power for each site.
 - 6) The values of the signal levels for each of the coverage levels used in the study.
- B. For loading sites, include all of the above and the following:
 - 1) The area and distance the design is proposing to provide service.
 - 2) Any data to support the loading need.
- C. The level of RF exposure predicted to occur for the general public.

13. Will this site be interconnected via radio frequency transmissions to any other site or sites now constructed, proposed or anticipated Y / N (Circle One)

Interconnection includes one or more radio frequency links for the purpose to provide for "back-haul" from this site to a switching center or centralized node location.

If yes, what will the method of interconnection be? _____

If yes, attach details and specifications.

14. Antenna equipment – Attach applicable specifications.

- A. Number of antennas _____
- B. Number of zones _____
- C. Antenna dimensions _____
- D. Antenna type, manufacture & model no. _____
- E. Number of Radio Units _____
- F. Radio Unit dimensions _____
- G. Radio Unit type, manufacture & model no. _____
- H. Transmission line or cable manufacture & model no. _____
- I. Size of cables _____ Number of cables _____
- J. Antenna location on the tower: _____
(N, S, E, W, NE etc. or specify the exact antenna azimuths)
- K. GPS Antenna Y / N (Circle One)
If yes, provide size, Dimensions and Weight: _____
- L. Total volume of equipment _____

15. Dish equipment – Attach applicable specifications

- A. Number of dishes ____ Dish dimension _____ Microwave? Y / N (Circle One) Satellite? Y / N (Circle One)
- B. Dish type, manufacture & model no. _____
- C. Transmission line or cable manufacture & model no. _____
- D. Size of cables _____ Number of cables _____
- E. Dish location on tower: _____
Initial here _____ to indicate specifications are attached.

16. Ground equipment – Attach applicable specifications

- A. Square feet required _____
- B. Inside Tower? Y / N (Circle One) Inside Lessee building? Y / N (Circle One) Outside? Y / N (Circle One)
- C. Number of cabinets _____ Cabinet dimensions _____
- D. Number of air conditioners _____ Air conditioner description _____

- E. Generator on site? Y / N (Circle One) If yes, provide type, size and where to be located. _____

- F. Isolator manufacturer & model no. _____
- G. Duplexer manufacture & model no. _____
- H. Filters manufacture & model no. _____
- I. Controls used in addition to the transmitter/receiver cabinet(s)? Y / N (Circle One)
 If yes, how many? _____ manufacture & model no. _____
 Initial here _____ to indicate specifications are attached.

17. Desired date of operation: _____

18. Description of scope of Work for Macro Sites

(Example: _Install 3 new radio units, relocate 3 antenna, add new power plant)

19. Small Cell Site Summary: *By Statute, applicant may collocate up to 15 small wireless facilities if they are within a two mile radius, consist of substantially similar equipment, and are to be placed on similar types of wireless support structures.*

SITE	DESCRIPTION
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READ CAREFULLY BEFORE SIGNING

The undersigned agrees and acknowledges that in addition to the Antenna Site Application Fee, the applicant is responsible for all costs associated with the applicant's proposed system that is to be installed on City property, whether or not the application results in a lease.

Costs may include, but are not limited to the following:

1. Interference analysis and inter-modulation study by the Engineering/Communications Consultant of the City.
2. Review of construction plans by the Engineering/Communications Consultant of the City.
3. Review of lease agreement by the City's Attorney.
4. Inspection time by the Engineering/Communications Consultant of the City.
5. Site Coordination of any items (examples: antennas or utilities) performed by the City or its Engineering/Communications Consultant.
6. Surveying, if required.
7. Utility Service by local utilities to bring or upgrade electrical or telephone service to the property for the use by the applicant.
8. All required permitting and licensing fees in accordance to City Ordinance Chapter 102 for small cell or as otherwise specified in the signed agreements.

A check in the amount of _____ will be required at the time of submittal of the installation plans. These escrow funds will be utilized by the landlord to pay expenses related to professional services necessary for the review of the installation plans and construction (Items 1-6 of the list above) by the Engineering/ Communications Consultant of the City. Unused escrow funds will be returned to tenant at the completion of the antenna installation.

A check in the amount of _____ will be required at the time a completed application form is submitted for City administrative service fees.

For small cell facilities, a certified check in the total amount calculated below in the fee schedule will be required at the time a completed application form is submitted.

Small Cell Facility Fee Schedule:

<u>Computation of Fees</u>	<u>\$ Amount</u>	<u>Quantity</u>	<u>Subtotal</u>
Facility Fee per Site	\$200.00/facility	_____	_____
Rent per City Facility per year	\$150.00/facility	_____	_____
Maintenance per City Facility per year	\$25.00/facility	_____	_____
Electrical service for remainder of year:			
1. Radio node 100 max watts or fewer	\$876.00/month	_____	_____
2. Radio node over 100 max watts	\$2,184.00/month	_____	_____
Curb Cut	\$85.00	_____	_____
Excavation in boulevard	\$25.00/excavation	_____	_____
Excavation in street	\$50.00/excavation	_____	_____
Underground Trenching	\$0.50/LF	_____	_____
Overhead Placement	\$0.20/LF	_____	_____
 Total			\$ _____

Brooklyn Park Operations & Maintenance



Small Cell Aesthetic Standards

April 2019

Small Cell Aesthetic Standards

Purpose

The City of Brooklyn Park desires the most advanced and highest quality wireless services available. The City also wishes to minimize the negative impacts associated with wireless facility deployments including small wireless facilities. Such negative impacts may include interference with right-of-way sight lines, aesthetic impacts that are inconsistent with the surrounding area, fall zone and clear zone risks, navigation obstacles, interference with future right-of-way improvement or transportation improvement plans, interference with the installation or maintenance of other utilities, and increased visual or noise pollution.

To address such impacts, any person desiring to collocate small wireless facilities or place new wireless support structures in the right-of-way must first obtain a small wireless facility permit pursuant of the City code. Moreover, any person seeking to collocate small wireless facilities on an existing wireless support structure owned or controlled by the City must first enter a standard collocation agreement.

Principles

The following aesthetic standards and requirements are intended to maintain the City’s aesthetic environment while also allowing for the availability of wireless services, including broadband and “5G” services, using small wireless facilities. These standards are intended to establish clear and consistent aesthetic standards for small wireless facility placements in the City and establish a streamlined review and approval process.

These standards apply to all small wireless facility permit applications for placement of small wireless facilities on City-owned and non-City-owned support structures (poles), and the placement or replacement of small wireless support structures in the public right-of-way. Compliance with these standards is a requirement for, and condition of, issuance of a small wireless facility permit. Any installation that does not conform to these standards will be in violation of the associated permit and the City’s right-of-way ordinance.

In addition to the following standards, the placement of new support structures for small wireless facilities shall be subject to any conditions specified in the small wireless facility permit.

With respect to City-owned support structures, these standards additionally seek to:

1. establish a menu of design options for providers to select from when applying for new small wireless facility permits associated with City support structures.

2. minimize unnecessary placement of new poles by encouraging co-location of small wireless facilities.
3. in situations where City support structures will be replaced, require that the structures be of a stealth design such that the maximum amount of facilities, including any wiring, are concealed inside the structure.
4. in situations where attachments will be made to existing poles, require that facilities, equipment, cabling, and conduit be concealed through the use of approved shrouding or camouflaging.

Application Requirements

The City of Brooklyn Park may develop new or additional permit application forms, checklists, updated aesthetic standards, and other related materials as required to optimally meet the goals of Brooklyn Park, its residents, and its leadership. To avoid unnecessary delay in application processing, applicants are strongly encouraged to check the City website at www.brooklynpark.org before submitting an application in order to confirm that the applicant is completing and following the most up-to-date application and requirements.

Section 1. Site Plans

Applicants must submit site plans, elevation drawings and structural calculations prepared and signed by a Professional Engineer licensed by the State of Minnesota as detailed below. Site plans must depict any adjoining or nearby existing wireless facilities, with all existing transmission equipment identified; neighboring public improvements; the proposed small wireless facility, with all proposed transmission equipment and other improvements, and; the boundaries of the area surrounding the proposed facility and any associated access or utility easements and setbacks. Site plans must further include:

1. Photo Simulations: For all applications, photo simulations must be included. Such photo simulations must be from at least three line-of-site locations near the proposed project site depicting the viewpoints of the greatest pedestrian or vehicular traffic.
2. Equipment Specifications: For all equipment depicted on the plans, the applicant must include:
 - a. the manufacturer's name and model number.
 - b. physical dimensions including, without limitation, height, width, depth, volume and weight with mounts and other necessary hardware.

- c. technical rendering of all external components, including enclosures and all attachment hardware.
- d. a selection from the City's approved aesthetic standards.

Section 2. Design Standards

The City desires to promote aesthetically acceptable and area conforming wireless facilities using the smallest and least intrusive means available to provide small wireless services to the community. All facilities in the public right-of-way must comply with all applicable provisions in this section.

Antennas: Antennas must be top-mounted and concealed within a radome (a structural, weatherproof enclosure that protects an antenna and is constructed of material that minimally attenuates the signal transmitted/received by such antenna) or otherwise concealed to the extent feasible. Cable connections, antenna mounts and other hardware must also be concealed. The radome or other concealment must be non-reflective and painted or otherwise colored to match the existing support structure. The size of the antenna shall not exceed 6 Cubic Feet in volume.

Collocation: Collocations between wireless service providers on the same support structure is required wherever feasible. If an applicant chooses to not collocate in areas where options are or appear to be available, the applicant must document that collocation is infeasible. The City requires a copy of the collocation agreement between wireless service providers. The City will also require a copy of the collocation agreement from the owner of the support structure(s), e.g. Xcel Energy, granting permission to the wireless service provider to attach to their facility.

Concealment: Concealment elements must be incorporated into the proposed design of the small wireless facility installation and must include approved camouflaging or shrouding techniques.

Pole-Mounted Equipment Cages/Shrouds: When facilities are permitted to be pole-mounted, facilities other than the antenna(s), electric meter and disconnect switch must be concealed within an equipment shroud. The facilities must be installed at a height that presents the least aesthetic impact, but in no event lower than 20 feet above ground level. The equipment shroud must be non-reflective and painted, wrapped or otherwise colored to match the support structure. Shrouds must be mounted flush to the support where feasible. Standoff mounts must provide the minimum separation distance from the support structure necessary for feasibility.

Existing Street Light Poles: Most of the existing street light poles are not capable of accepting new equipment. Therefore, the provider is required to remove and replace those poles with a combination street light/antenna pole.

New Poles: New support structures must be the same color as neighboring, similar support structures and of the same design characteristics. See Section 4 of this document.

Foundations: Concrete bases and equipment pads shall be pre-cast or cast-in-place per the manufacturers requirements. A complete foundation includes the concrete, reinforcing steel, anchor bolts, leveling nuts, conduit stubs, ground rod and wire, excavation and backfill, restoration, accessories as required to provide a complete unit. Wind load shall be incorporated into the structural design.

Ground-Mounted Equipment: Ground-mounted equipment must be installed below grade or, if technically necessary, concealed in a ground-mounted cabinet. In addition to any applicable requirements in the City's right-of-way ordinance, ground mounted cabinets must:

1. be installed flush to the ground.
2. be the same color as neighboring, similar support cabinets or other ground-mounted structures.
3. not be on or within 2 feet of adjoining sidewalks, trails, or other similar passageways, not interfere in any way with the flow of pedestrian, bicycle or vehicular traffic.
4. conform to the American's with Disabilities Act (ADA) including with respect to appropriate sidewalk spacing.
5. not create a safety hazard.

Lights: Unless otherwise required for compliance with FAA or FCC regulations, small wireless facilities shall not include any lights or lighting. This subsection does not prohibit installation of luminaires or additional street lighting on new support structures if and where required by the City.

Health and Safety Regulations: All facilities shall be designed, constructed, operated and maintained in compliance with all generally applicable health and safety standards, regulations, and laws, including without limitation to all applicable regulations for human exposure to RF emissions.

Section 3. Location Criteria

Traffic Signal Systems: The City of Brooklyn Park, Hennepin County and MnDOT prohibits small cell attachments to all their traffic signal systems.

Privately Owned Poles: There are more than 3400 street lights within the City's right-of-way and over half of those poles are owned by Xcel Energy. Most of the street light poles are not capable of accepting new equipment and are required to remove and replace those with a combination street light/antenna pole. Therefore, the City understands that each company must reach a final agreement with Xcel Energy for collocating and work with Xcel to review and approve individual pole locations. The provider is still responsible to acquire a right-of-way permit through the City.

Decorative Lights: The City has many neighborhoods with decorative street lights that were installed as part of the development. In these neighborhoods, the existing decorative street lights are not capable to support small cell equipment, so the City requires the provider to install new small cell facilities only at intersections as combination poles with street lights. The purpose of this is to eliminate the removal of decorative street lights mid-block and to preserve the intended decorative aesthetics of the neighborhood.

Obstructions: Any new support structure or other facilities associated with a new or existing support structure must not obstruct access to:

1. any existing above-ground or underground right-of-way user facilities, or public facilities.
2. any public infrastructure for traffic control, streetlight or public transportation purposes, including without limitation any curb control sign, parking meter, vehicular traffic sign or signal, pedestrian traffic sign or signal, barricade reflectors.
3. any public transportation vehicles, shelters, street furniture or other improvements at any public transportation stop (including, without limitation, bus stops, streetcar stops, and bike share stations).
4. fire hydrants.
5. any doors, gates, sidewalk doors, passage doors, stoops or other ingress and egress points to any building appurtenant to the right-of-way.
6. any fire escapes.

Section 4. New and Replacement Support Structures

Smart Poles: The provider shall purchase a Smart Pole or Replacement Pole and shall be responsible for the maintenance of the pole during the period of occupancy by the provider.

The City strongly suggests the provider to purchase an Xcel Energy approved small cell CityPole by Comptek. This is to ensure uniformity of poles used within the City by all providers.

New Support Structures: Any new support structures shall be placed:

1. using the City's Street Lighting Policy as a reference to spacing and lighting requirements.
2. as functional streetlights as the City may require, in its reasonable discretion.
3. a minimum of 250 feet from any existing support structure or pole.
4. at a distance which is the same as the prevailing separation distance among existing structures and poles in the surrounding vicinity as agreed upon by the applicant and City, or determined by the City where agreement cannot be reached using the City's Street Lighting Policy minimum spacing requirements.
5. in alignment with existing trees, utility poles, and streetlights.
6. an equal distance between trees when possible, with a minimum of 15 feet separation such that no proposed disturbance shall occur within the critical root zone of any tree.
7. with appropriate clearance from existing utilities.
8. outside of a 20-foot equipment clear zone (for base cabinets less than 18-inches in diameter) or 30-foot clear sight triangle (for base cabinets equal to or greater than 18-inches in diameter) at intersection corners.
9. so as not to be located along the frontage of a Historic building, deemed historic on a federal, state, or local level.
10. so as not to significantly create a new obstruction to property sight lines.
11. at shared property lines if feasible.
12. not within 50 feet of the apron of a fire station or other emergency service responder facility.
13. outside of the clear zone for trails, sidewalks, and streets as appropriate.

Replacement of City-Owned Support Structures:

1. Any replaced support structures shall remain in their existing location unless otherwise permitted by the City.
2. Ownership of the new pole will be vested with the City, but the provider shall be responsible for maintenance during occupancy.

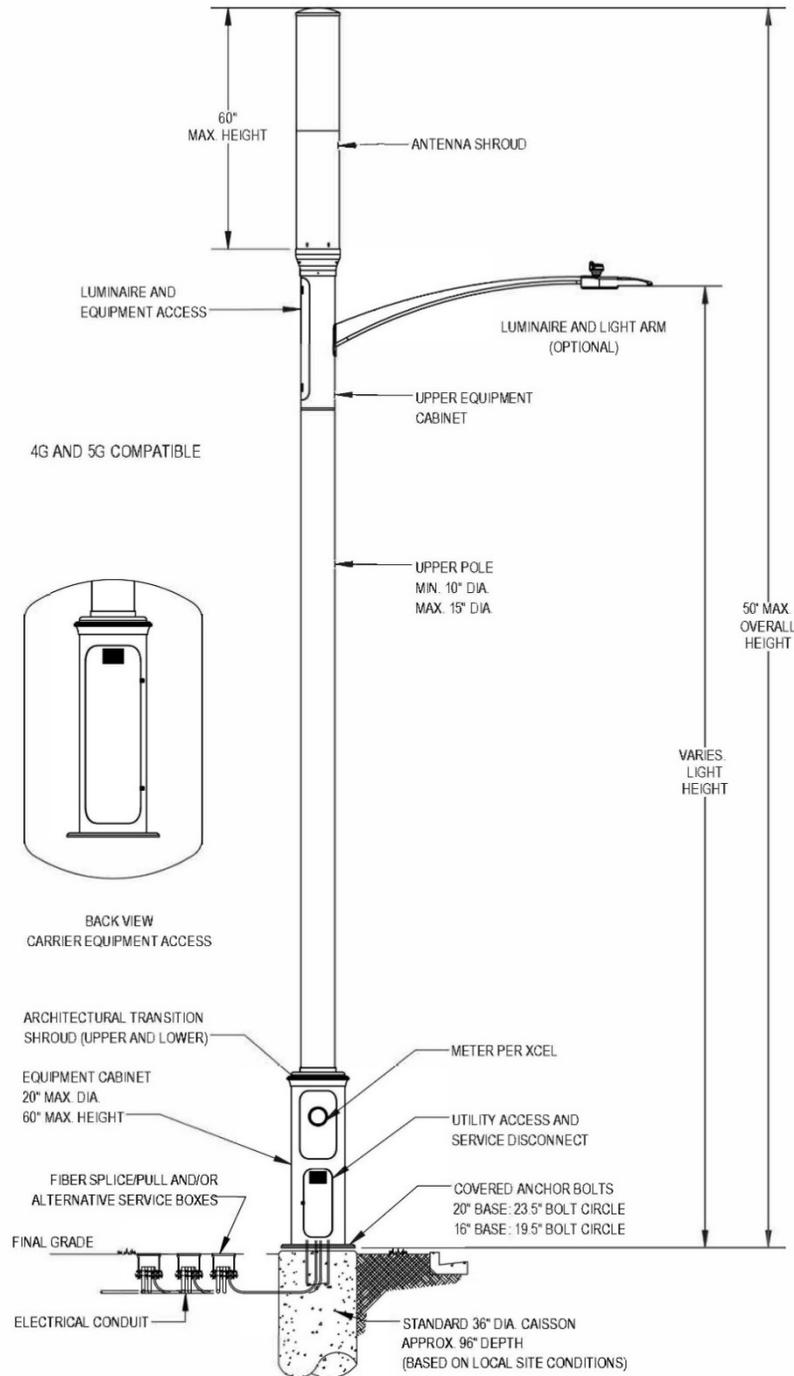
New and Replacement Structures. All support structures must:

1. be constructed of aluminum or galvanized steel and must be round in shape. Wood poles are not allowed.
2. not exceed 50 feet in total height, or 10 feet above the height of the existing pole, whichever is greater.
3. where constructed as a light pole, luminaire(s) and luminaire arm(s) must match adjacent City lighting standard and must contain an LED fixture in accordance with the City's Street Lighting Policy.
4. be dark bronze in color using Xcel Energy color RAL8009.
5. have an equipment cabinet diameter at 16 inches (preferred), but not to exceed 20 inches, and 60 inches in height.
6. have an upper pole diameter at 10 inches minimum (preferred) and to exceed 15 inches.

Section 5. Details and Pictures

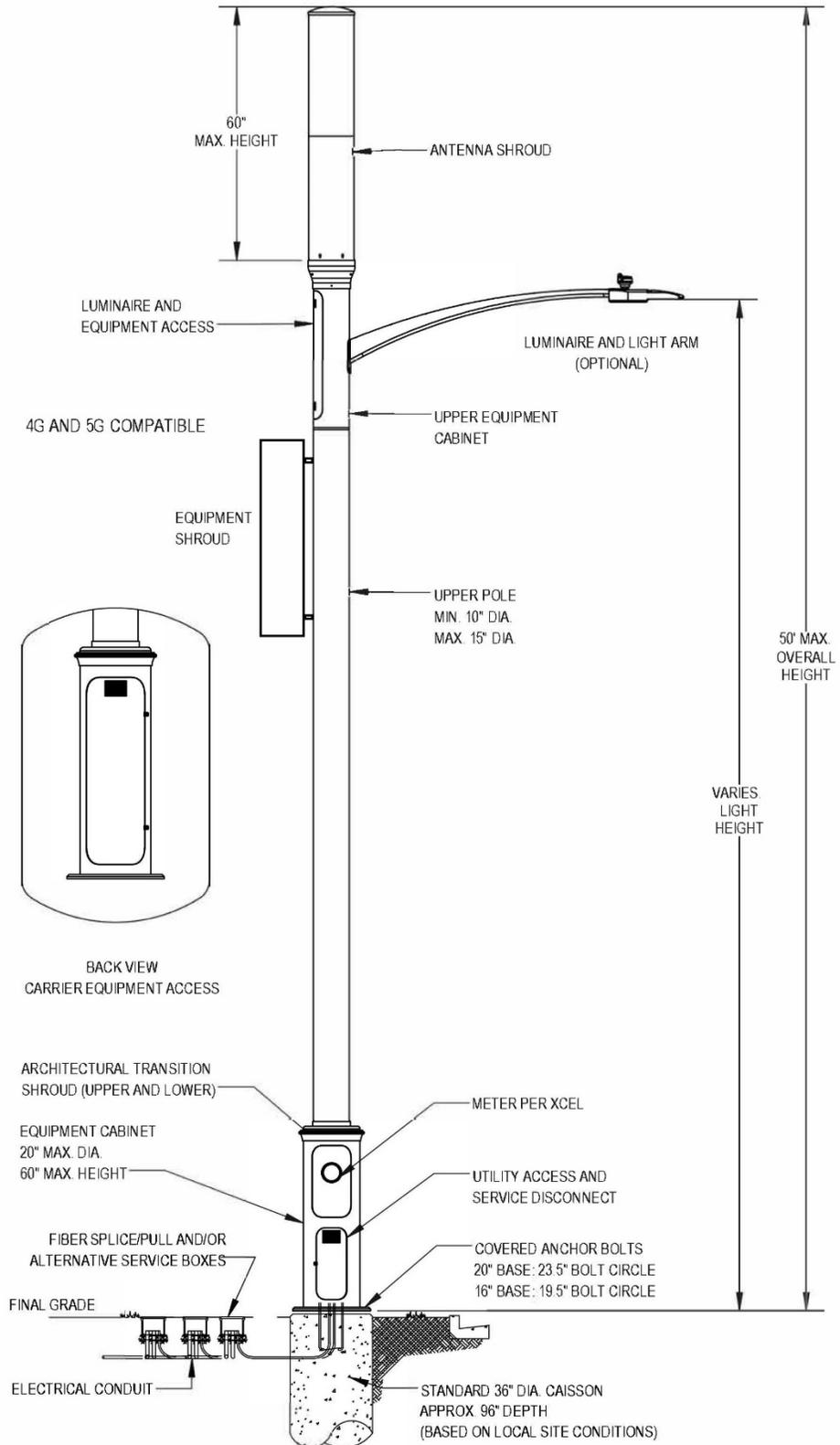
The pictures and profile drawings below represent appropriate installation designs for small wireless facility installations on new support structures in the right-of-way.

Figure 5-1: Combination Pole with Antenna



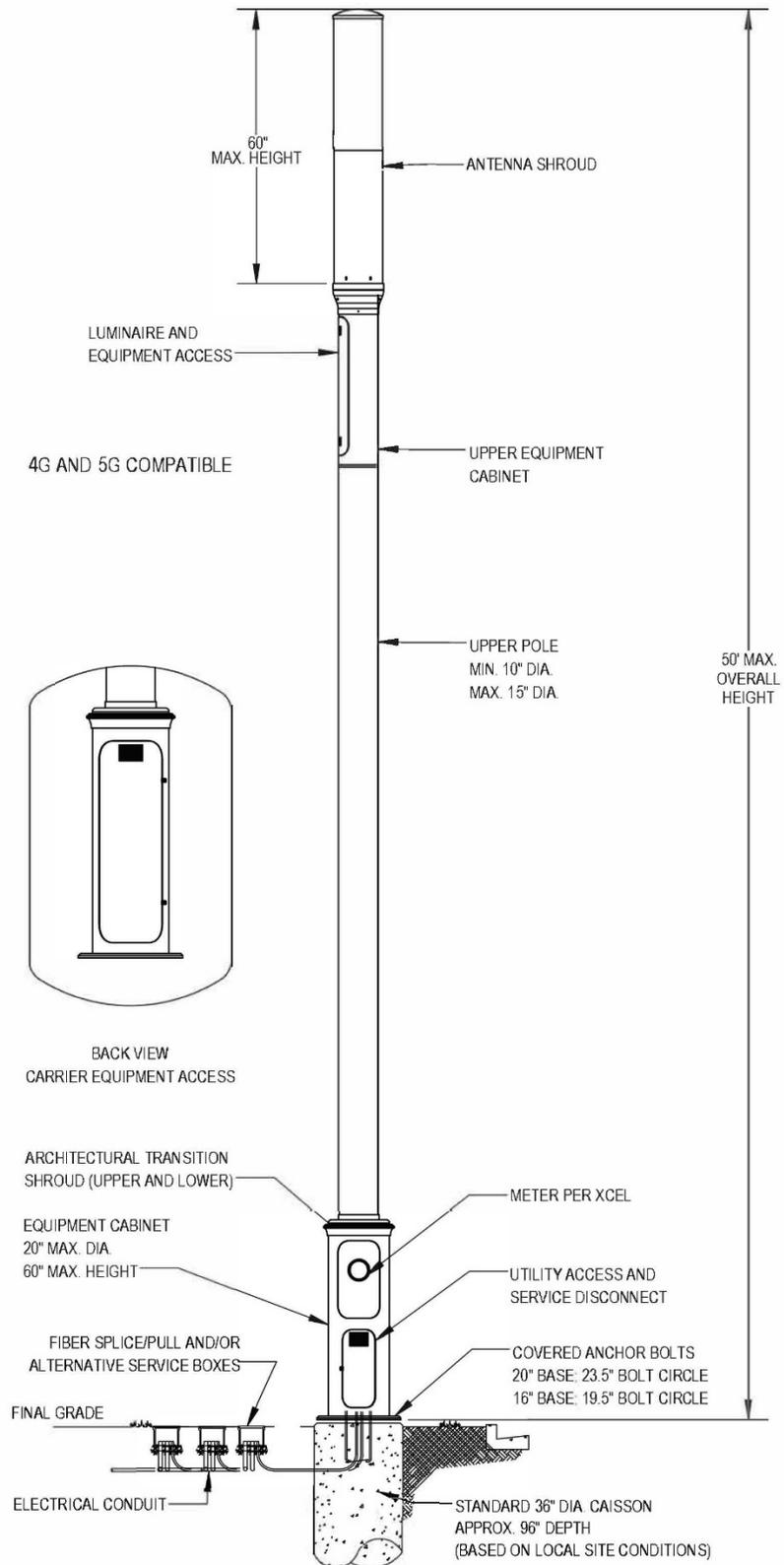
Detail courtesy of Aero Wireless Group/Comptek Technologies

Figure 5-2: Combination Pole with Antenna and Equipment Shroud



Detail courtesy of Aero Wireless Group/Comptek Technologies

Figure 5-3: Freestanding Small Cell Assembly



Detail courtesy of Aero Wireless Group/Comptek Technologies

Figure 5-4: Picture of Combination Pole with Antenna



Figure 5-5: Picture of Freestanding Small Cell Assembly

