

VILLAGE OF WESTERN SPRINGS

General Guidelines and Small Wireless Facility Design, Aesthetic, Stealth and Concealment Standards

The following general guidelines and design, aesthetic, stealth and concealment standards apply to the placement of small wireless facilities within the Village. Small Wireless Facilities are generally regulated by Chapter 8-13 (Small Wireless Facilities) of the Village Code and all terms used herein are as defined in that Chapter.

General Standards. Every small wireless facility collocation shall comply with the following standards.

A. Small wireless facilities:

1. Antennas and their related mounting equipment, including brackets, shall be mounted no less than twelve (12) feet above ground level.
2. All small wireless facilities installed on municipal infrastructure shall be on existing street lights, unless otherwise approved by the Director of Municipal Services. If new wireless support structures are proposed, the support structure shall be proposed as a street light, unless otherwise approved by the Director of Municipal Services.
3. Antennas shall, to the extent technically feasible, be designed and installed to appear hidden within the utility pole or to appear like an original part of the utility pole or wireless support structure.
4. Each antenna not hidden within a utility pole shall be located entirely within a shroud enclosure not more than six (6) cubic feet in volume that is capable of accepting paint to match the approved color of the small wireless facility.
5. Top-mounted antennas and their enclosures shall, in keeping with the additional design standards approved by the Village Board, and unless an alternative design is approved by the Director of Municipal Services or his or her designee, be mounted directly above the utility pole or wireless support structure, and shall not extend the diameter of the utility pole or wireless support structure at the level of the antenna attachment.
6. Side-mounted antennas are required in all collocations on Village top-mounted lights unless an alternative design is approved by the Director of Municipal Services. Side-mounted small wireless facility

antennas within a shroud enclosure and side-mounted small wireless facility equipment enclosures shall be, if possible, flush mounted to the utility pole or wireless support structure at the level of the attachment. If not flush-mounted, metal flaps or “wings” shall extend from the enclosure to the utility pole or wireless support structure to conceal any gap between the small wireless facility and the utility pole or wireless support structure. The design of the flaps shall be integrated with the design of the small wireless facility.

7. Small wireless facilities located on street light poles or traffic control structures shall not block light emanating from the street light fixture or otherwise interfere with the purpose of the street light fixture or traffic control structure.
8. Small wireless facilities shall be attached to the utility pole or wireless support structure using rigid steel clamping mounts or stainless steel banding to the exterior of any pole. All mounts and banding shall be of the same color as the utility pole or wireless support structure, except as otherwise approved by the Director of Municipal Services or his or her designee. Care should be taken to integrate the mounting elements into the small wireless facility design. Through-bolting or use of lag bolts on Village-owned utility poles is prohibited.
9. For attachments to existing Village utility poles, wires serving the small wireless facility shall be concealed within the hollow interior of the utility pole, or if concealment is not technically feasible, flush mounted to an existing utility pole in an enclosed wire chase which is painted or otherwise colored to match the existing pole on which the facilities are collocated. If concealment is not feasible on an existing Village utility pole, the Village’s preference is for the installation of a new pole which matches existing Village design standards. For new utility poles or wireless support structures, wires serving the small wireless facility shall be concealed within the hollow interior of the utility pole or wireless support structure.
10. All small wireless facilities shall be installed in accordance with all applicable Village codes. No wiring or cabling shall interfere with any existing wiring or cabling installed by the Village, a utility or a wireless services provider.
11. No guy or other support wires will be used in connection with a small wireless facility unless the small wireless facility is to be attached to

an existing utility pole or wireless support structure that incorporates guy wires prior to the date the applicant has applied for a permit.

12. The small wireless facility, including the antenna, and all related equipment when attached to an existing or new utility pole or wireless support structure, must be designed to withstand a wind force and ice loads in accordance with the applicable standards established in Chapter 25 of the National Electric Safety Code for utility poles, Rule 250-B and 250-C standards governing wind, ice, and loading forces on utility poles, in the American National Standards Institute (ANSI) in TIA/EIA Section 222-G established by the Telecommunications Industry Association (TIA) and the Electronics Industry Association (EIA) for steel wireless support structures and the applicable industry standard for other existing structures. For any small wireless facility attached to a Village-owned utility pole or, in the discretion of the Village, to a non Village-owned utility pole or wireless support structure, the operator of the small wireless facility must provide the Village with a structural evaluation of each specific location containing a recommendation that the proposed installation passes the standards described above. The evaluation must be prepared by a professional structural engineer licensed in the State of Illinois.
13. The Village will not authorize any attachments of small wireless facilities to a Village-owned utility pole that negatively impacts the structural integrity of the pole. The Village may conditionally approve of the collocation on replacement or modification of the Village-owned utility pole if necessary to meet Village standards.
14. Small wireless facilities shall be located in a manner that meets the Americans with Disabilities Act of 1990 and does not obstruct, impede or hinder the usual pedestrian or vehicular path of travel.
15. Small wireless facilities collocated on Village-owned utility poles may not use the same power or communication source providing power and/or communication for the existing infrastructure, except as otherwise approved by the Director of Municipal Services or his or her designee. The wireless provider shall coordinate, establish, maintain and pay for all power and communication connections.
16. A 2"x4" stamped stainless steel or aluminum plate with the wireless provider's name, location identifying information, and emergency

telephone number shall be permanently fixed to the small wireless facility equipment enclosure or shroud.

B. Replacement of Existing Street Light Poles

The following standards apply when replacing an existing street light pole with a combination small wireless facility and street light pole. Such replacements should only be located where an existing street light pole can be removed and replaced, or at a new location where it has been identified that a street light is necessary. All such replacements shall meet the following standards:

1. All replacement street light poles shall conform to a design or designs provided by the Village as part of its additional Village Design Standards, as amended from time to time. In areas where the Village-approved designs set forth in the additional Village Design Standards are not applicable, replacement street light poles shall be of a similar design, material, and color as the replaced existing street light pole and other poles within the immediate area as established by the additional Village Design Standards. The additional Village Design Standards may be amended from time to time.
2. All replacement street light poles and pole foundations shall conform to the Village's standards and specifications for street light design and construction, unless an alternative design is approved by the Director of Municipal Services or his or her designee.
3. Replacement street light poles shall be an equal distance from other street light poles based upon the average distance between existing street light poles within the designated area and shall adhere to the photometric standard established by the additional Village Design Standards, as amended from time to time.
4. Street light poles shall be designed and engineered to support a luminaire and, if applicable, a mast arm of length equal to that of the existing pole to be replaced or of a length approved by the Director of Municipal Services or his or her designee based upon the location of the replacement street light pole.
5. All luminaires and mast arms, if applicable, shall match the arc and style of the original luminaire and mast arm, unless otherwise approved by the Director of Municipal Services or his or her designee.

6. The replacement luminaire and mast arm shall be at the same height above the ground as the existing luminaire and mast arm.
7. All replacement street light poles shall have new light emitting diode (LED) light fixtures of the same manufacturer, model and light output as the removed fixture and nearby light fixtures, or as otherwise approved by the Director of Municipal Services or his or her designee.
8. Replacement street light poles, including but not limited to the pole itself, head, fixtures, mast arm (if applicable) and electrical components, shall have a five (5) year manufacturer's replacement warranty.
9. Replacement street light poles shall meet American Association of State Highway and Transportation Officials structural guidelines for roadway applications and the American National Standards Institute requirements for vibrations.
10. Street light pole height shall be measured from the ground to the top of the street light pole.
11. All replacement street light pole heights shall be consistent with those of existing street lights, in keeping with the additional Design Standards as approved by the Village Board, unless an alternative height is otherwise approved by the Director of Municipal Services.
12. The small wireless facility components shall be sized appropriately to the scale of the street light pole.
13. A decorative transition shall be installed over the equipment enclosure upper bolts, or a decorative base cover shall be installed to match the equipment enclosure size. All hardware connections shall be hidden from view. Each street light pole component shall be architecturally compatible to create a cohesive aesthetic.
14. Replacement or newly installed street light poles shall continue to be owned by the Village or shall be transferred to the Village upon completion of construction, inspection and acceptance by the Village.

C. Installation of new wireless support structures, where allowed.

1. In the interest of administrative efficiency, the proposed location and design of new wireless support structures shall be reviewed with the

Director of Municipal Services or his or her designee prior to application.

2. A new wireless support structure shall be designed to minimize the visual and aesthetic impact of the new vertical element and associated small wireless facilities upon the surrounding area and shall blend in with the surrounding streetscape with minimal visual impact. The Village may require a new wireless support structure to be constructed of a specific material that will enhance the stealth and concealment of the structure.
3. New wireless support structures shall be metal unless otherwise approved by the Director of Municipal Services or his or her designee as appropriate for the immediate area. New wireless support structures shall conform to a design or designs provided by the Village as part of its additional Village Design Standards, as amended from time to time. In areas where the Village-approved designs set forth in the additional Village Design Standards are not applicable, new wireless support structures shall otherwise match the design, type, material and color of existing utility poles, including street light poles, within the immediate area, except as otherwise approved by the Director of Municipal Services or his or her designee.
4. Within residentially zoned areas, new wireless support structure installations shall be located at intersections or where the shared property line between two residential parcels intersect the right-of-way whenever possible, unless an unsafe condition, cluttered appearance, or other violation of these standards will result.
5. New wireless support structures with street lights shall be equal distance from other utility or street light poles based upon the average distance between existing utility or street light poles within the designated area, unless an alternative location is approved by the Director of Municipal Services. If a new wireless support structure cannot be located the average distance from other utility poles, a new wireless support structure may be approved if such wireless support structure is designed and placed as a stealth pole so as to be inconspicuous and blend with the surroundings. The utility provider shall coordinate with the Village to identify a mutually agreed upon location.

6. The centerline of a new wireless support structure shall be in alignment with existing utility poles where present, or with street or parkway trees along the same side of the right-of-way. If no such centerline currently exists, the utility provider shall coordinate with the Village to identify a mutually agreed upon location.
7. New wireless support structures shall be located a minimum of twelve (12) feet from driveway aprons.
8. New wireless support structures shall be sited outside the critical root zone of existing trees having a six (6) inch diameter at breast height located in the immediate vicinity, unless placement within a critical root zone is otherwise approved by the Director of Municipal Services. No proposed installation shall remove any parkway tree unless otherwise approved by the Director of Municipal Services.
9. The outside diameter of any new wireless support structure shall not exceed the diameter of existing utility poles located within 300 feet of the location of the new wireless support structure.
10. New wireless support structures shall not exceed the heights as authorized by Section 8-13-8 of the Village Code.
11. New wireless support structures shall be designed to match existing pole design and aesthetics.
12. New wireless support structures incorporating pole-mounted small wireless facilities shall be tapered in diameter from the base to the top, with a maximum diameter of twelve (12) inches at the base and a maximum diameter of eight (8) inches at the top or shall seamlessly blend into the diameter of the top of the existing or proposed utility pole.
13. New wireless support structures incorporating small wireless facilities in an equipment enclosure within a base may utilize poles tapered in diameter or poles having a consistent outside diameter.
14. All new wireless support structures must be supported with a reinforced concrete foundation designed, stamped, sealed and signed by a professional engineer licensed and registered in the State of Illinois, and subject to the approval of the Director of Municipal Services or his or her designee.

15. All anchor bolts must be concealed from public view, with an appropriate pole boot or cover powder-coated to match the wireless support structure color.
16. If multiple requests are received to install two (2) or more wireless support structures in approximately the same location, in a manner that would violate these requirements or other Village requirements, the Village shall resolve such conflict through whatever reasonable and nondiscriminatory manner it deems appropriate.

D. Stealth and Concealment Requirements.

Wireless providers shall comply with the design and construction standards that are generally applicable to utility installations in the public right-of-way, as set forth in Chapter 8-11 of the Village Code (Standards For Construction Of Utility Facilities On Rights-Of-Way), as well as these standards, any other written design standards for decorative utility poles, or reasonable stealth, concealment, and aesthetic requirements that are otherwise identified by the Village in an ordinance, written policy adopted by the Village Board of Trustees, in the Village's comprehensive plan, or in another written design plan that applies to other occupiers of the rights-of-way, including on a historic landmark or in a historic district. In addition:

1. The use of stealth technology in the location and construction of small wireless facilities is required whenever and wherever possible. Stealth technology means using the least visually and physically intrusive design and equipment that is not technologically or commercially impracticable under the facts and circumstances, to employ methods that blend into surroundings and not be visible; and to minimize adverse aesthetic and visual impacts on the right-of-way, property, building and/or other facilities adjacent to, surrounding and in generally the same area as the requested location of such small wireless facilities.
2. Small wireless facilities, including but not limited to antennas, equipment enclosures, mounting brackets and hardware, mounting posts, cables, and shrouds, shall be of a color that is identical to the utility pole or of a neutral color compatible with the color of the utility pole and any surrounding elements so as to camouflage or conceal their appearance, create consistency among right-of-way infrastructure, and to make such small wireless facilities as unobtrusive as possible. The Director of Municipal Services or his or

her designee may approve compatible color schemes for antennas and small wireless facilities. A clear, color digital photo simulation of the utility pole or wireless support structure location providing “before and after” views demonstrating the true visual impact of the proposed small wireless facility on the surrounding environment shall be included in the application.

3. Mechanical equipment and devices shall be concealed underground, mounted within a concealment box designed as a decorative pole base or within unobtrusive equipment enclosures or other devices mounted directly to the pole a minimum of eight (8) feet above ground level and screened by means of Village-approved banners or other approved concealment methods.
4. Small wireless facilities must be located and oriented in such a way as to minimize view blockage as established by Village Code requirements and additional Village Design Standards.
5. The wireless provider shall use the smallest suitable wireless facilities then in industry use, regardless of location, for the particular application.
6. Additional landscaping and fencing shall be required to help mitigate the effects of the installation of any ground-mounted equipment. The utility shall coordinate with the Director of Municipal Services to identify a mutually agreed upon solution.
7. Small wireless facilities shall not be artificially lighted or marked, except as required by law.
8. Small wireless facilities, other than top-mounted antennas, shall be mounted on the side of the utility pole or wireless support structure opposite the direction of vehicular traffic along the same side of the right-of-way.
9. Alternative measures for concealment may be proposed by the wireless provider and approved by the Director of Municipal Services or his or her designee, if the Director of Municipal Services or designee determines that the optional measures will be at least as effective in concealing the small wireless facilities as the measures required above.

E. Historic Districts and Landmarks:

For areas designated as historic districts or on buildings or structures designated as historic landmarks, in addition to the stealth, concealment and design requirements referenced above, the following additional restrictions/conditions apply to the installation of small wireless facilities:

1. Small wireless facilities shall be comprised of materials that are consistent with the surrounding elements so as to blend architecturally with any buildings or structures designated as historic landmarks or located within a designated historic district, and shall be designed to blend with the surrounding historical landmarks and/or district in design and color.
2. Small wireless facilities shall not be mounted upon any structure designated as a historic landmark, including but not limited to the Village's historic water tower.

F. Historic District or Historic Landmark Limitations:

1. The above design or concealment measures with respect to a historic district or historic landmark, including restrictions on a specific category of utility poles, may not have the effect of prohibiting any provider's technology. Such design and concealment measures shall not be considered a part of the small wireless facility for purposes of the size restrictions of a small wireless facility.
2. This subsection shall not be construed to limit the Village's enforcement of historic preservation in conformance with the requirements adopted pursuant to the Illinois State Agency Historic Resources Preservation Act or the National Historic Preservation Act of 1966, 54 U.S.C. Section 300101 et seq., and the regulations adopted to implement those laws.