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CLARENDON HILLS, IL 60514

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Sent To: **Jonathan Mendel**
Street, Apt. No.,
or PO Box No. **1 N. Prospect Avenue**
City, State, ZIP+4 **Clarendon Hills, IL 60514**

PS Form 3800, August 2006 See Reverse for Instructions

VILLA PARK, IL 60181
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JUN 17 2022
06/17/2022 USPS

Electronic Copy Of Application

Submitted via USPS Certified Mail

Postmarked June 17th, 2022



Crown Castle
8020 Katy Freeway
Houston, TX 77024

6/17/2022

Village of Clarendon Hills
1 N. Prospect Avenue
Clarendon Hills, IL
Attn: Jonathan Mendel
630-286-5400

RE: Application for Small Wireless Facility on Wood Utility Pole in the Village of Clarendon Hills

Dear Mr. Mendel,

Crown Castle Fiber LLC ("Crown Castle") submits the enclosed consolidated application for one (1) small wireless facility in the Village of Clarendon Hills right-of-way, in accordance with the Illinois Small Wireless Facilities Deployment Act¹ and with federal law.²

The IL Small Cell Law limits the authority of Illinois local governments (other than Chicago) over small wireless facilities. The IL Small Cell Law provides that "[e]xcept as provided in this Section, an authority may not prohibit, regulate, or charge for the collocation of small wireless facilities." 50 ILCS 840/15(b). Thus, local governments are prohibited from imposing any requirement on small wireless facilities other than those explicitly authorized in the IL Small Cell Law.

Section 50 ILCS 840/15 provides that an applicant cannot be required to provide more information than the authority requires of a communications service provider that is not a wireless provider, with the exception of seven (7) specific items that a local government can require for a small wireless facility application to collocate small wireless facilities on a utility pole or wireless support structure. Those seven (7) permissible items are:

- (A) site specific structural integrity and, for an authority utility pole, make-ready analysis prepared by a structural engineer, as that term is defined in Section 4 of the Structural Engineering Practice Act of 1989;
- (B) the location where each proposed small wireless facility or utility pole would be installed and photographs of the location and its immediate surroundings depicting the utility poles or structures on which each proposed small wireless facility would be mounted or location where utility poles or structures would be installed;
- (C) specifications and drawings prepared by a structural engineer, as that term is defined in Section 4 of the Structural Engineering Practice Act of 1989, for each proposed small wireless facility covered by the application as it is proposed to be installed;
- (D) the equipment type and model numbers for the antennas and all other wireless equipment associated with the small wireless facility;

¹ Enrolled as Public Act 100-0585, 50 ILCS 835/1(2018) was signed into law by Gov. Rauner on April 12, 2018, and took effect on June 1, 2018.

² 47 U.S.C. §253(a).

E) a proposed schedule for the installation and completion of each small wireless facility covered by the application, if approved;

(F) certification that the collocation complies with paragraph (6) to the best of the applicant's knowledge; and

(G) the wireless provider's certification from a radio engineer that it operates the small wireless facility within all applicable FCC standards.

Section 60.2(B) of the Clarendon Hills Code of Ordinances states "In the event that applicable Federal or State laws or regulations conflict with the requirements of this chapter, a wireless provider shall comply with the requirements of this chapter to the maximum extent possible without violating such Federal or State laws or regulations."

Application Requirements

Chapter 60 of the Clarendon Hills Code of Ordinances, Section 60.5, sets forth the following items to be included and/or actions to be taken when an applicant submits an application for the installation of a small wireless facility in the public right-of-way; Crown Castle's response to each requirement is as follows:

1. **Site specific structural integrity and, for a Village utility pole, make-ready analysis prepared by a structural engineer, as that term is defined in Section 4 of the Structural Engineering Practice Act of 1989, *that includes addressing the acceptability of the site for factors such as pole loading from existing utility equipment and conductors as well as the small wireless facility, and that specifically includes evaluations pursuant to American National Standards Institute (ANSI) standards relating to heavy loads and wind;***

Submitted, with the acknowledgment that the italicized portion of the requirement exceeds the authority granted to the Village by the IL Small Cell Law.

2. **The location where each proposed small wireless facility or utility pole would be installed and photographs of the location and its immediate surroundings depicting the utility poles or structures on which each proposed small wireless facility would be mounted or location where utility poles or structures would be installed. *The photographs shall include a digital photo simulation of the proposed location providing "before and after" views demonstrating the true visual impact of the proposed small wireless facilities on the surrounding environment;***

Submitted, with the acknowledgment that the italicized portion of the requirement exceeds the authority granted to the Village by the IL Small Cell Law.

3. **Specifications and drawings prepared by a structural engineer, as that term is defined in Section 4 of the Structural Engineering Practice Act of 1989, for each proposed small wireless facility covered by the application as it is proposed to be installed;**

Submitted.

4. **The equipment type and model numbers for the antennas and all other equipment associated with the small wireless facility;**

Submitted.

5. **To the extent commercially available, technologically compatible with the local network system, and already used in its national or regional wireless network system, the wireless provider is required to install small wireless facilities with antenna and other equipment that have the smallest visual profile;**

The requirement to use the smallest available antenna and equipment is dictating technology choices in violation of federal law; therefore Crown Castle is not required to meet this requirement. See *New York SMSA L.P. v. Town of Clarkstown*, 612 F.3d 97 (2d Cir. 2010) (local governments cannot dictate wireless technology choices).

6. **A proposed schedule for the installation and completion of each small wireless facility covered by the application, if approved;**

Submitted.

7. **Certification that, to the best of the applicant's knowledge, the collocation complies with the written design standards established by the Village, and with the various other requirements set forth in [Clarendon Hills Code of Ordinances];**

Submitted.

8. **Copies of all licenses, permits and approvals required by or from the Village (i.e. zoning approval, where required), other agencies and units of government with jurisdiction over the design, construction, location and operation of said small wireless facility. The applicant shall maintain such licenses, permits and approvals in full force and effect and provide evidence of renewal or extension thereof when granted; and**

Not submitted; this request exceeds the authority granted to the Village by the IL Small Cell Law.

9. **In the event the small wireless facility is proposed to be attached to an existing utility pole or wireless support structure owned by an entity other than the Village, legally competent evidence of the consent of the owner of such pole or wireless support structure to the proposed collocation.**

Not submitted; this request exceeds the authority granted to the Village by the IL Small Cell Law.

10. **Information on whether a pre-application review was conducted with Village staff. It is recommended that applicants arrange a review of the proposed location and design of small wireless facilities and new wireless support structures with the Director of Public Works and other applicable staff prior to application. Such review does not constitute approval, but is instead designed to promote administrative efficiency by identifying existing utility conflicts, consideration of possible alternative locations, and other issues that might be readily identified and/or resolved by communication between the applicant and Village staff.**

Not submitted; this request exceeds the authority granted to the Village by the IL Small Cell Law.

11. **A written affidavit signed by a radio frequency engineer certifying the small wireless facility's compliance with applicable FCC rules and regulations relative to radio frequency emissions, as well as technical data such as the frequencies in use, power output levels and antenna specifications, reasonably necessary to evaluate compliance with maximum permissible exposure levels set by the FCC, as well as a monitoring plan for the**

applicant's facility capable of tracking and recording the daily amounts or levels of radio frequency emissions produced by the equipment, in order to verify on an ongoing basis that the small wireless facility will not exceed applicable FCC radio frequency emissions. In addition, a baseline test of the radio frequency emissions of a small wireless facility shall be performed by the wireless provider, at its sole cost and expense, at the time of initial activation, and the results provided to the Director of Public Works. When a radio transceiver or antennas are replaced or added to an existing small wireless facility, the wireless provider shall provide certification from a radio engineer that the continuing operation of the small wireless facility complies with all applicable FCC standards, including, but not limited to, radio frequency emissions.

Non-italicized portion submitted, with the acknowledgment that the italicized portion of the requirement exceeds the authority granted to the Village by the IL Small Cell Law.

12. Proof of all applicable licenses or other approvals required by the FCC.

Not submitted; this request exceeds the authority granted to the Village by the IL Small Cell Law.

13. A written report that analyzes acoustic levels for the small wireless facility and all associated equipment including, without limitation, all environmental control units, sump pumps, temporary backup power generators and, and permanent backup power generators in order to demonstrate compliance with applicable Village noise regulations, including, but not limited to, chapter 44.8 and any codes adopted thereunder. The acoustic analysis must be prepared and certified by an engineer and include an analysis of the manufacturers' specifications for all noise-emitting equipment and a depiction of the proposed equipment relative to all adjacent property lines. In lieu of a written report, the applicant may submit evidence from the equipment manufacturer that the ambient noise emitted from all the proposed equipment will not, both individually and cumulatively, exceed the applicable limits.

Not submitted; this request exceeds the authority granted to the Village by the IL Small Cell Law.

14. Information showing the small wireless facility has received any required review (e.g., environmental assessment and review) by the FCC pursuant to the National Environmental Policy Act ("NEPA"), or is exempt from such requirements. If the applicant claims the small wireless facility is exempt, it must state the basis for the exemption and provide proof, including supporting documents that establish that the facility meets such exemption.

Not submitted; this request exceeds the authority granted to the Village by the IL Small Cell Law.

15. A written description and/or map identifying the geographic service area for the small wireless facility.

Not submitted; this request exceeds the authority granted to the Village by the IL Small Cell Law.

16. For work in the public right-of-way, evidence of posting of the security fund as required in section 56.10 of this code.

Submitted.

17. **Where installation is proposed in right-of-way, as defined in this chapter, that consists of an "easement for compatible use", a certified copy of the original easement documents and other supporting documentation demonstrating that the applicant has the right to install, mount, maintain and remove a small wireless facility and associated equipment in or on the easement for the length of the permit. If the applicant is claiming access to the easement as an assignee or successor in interest, the applicant shall, in addition, provide documents demonstrating that its assigned or successor rights in the easement are sufficient to allow it to install, mount, maintain and remove the small wireless facility and associated equipment for the length of the permit.**

Not submitted; this request exceeds the authority granted to the Village by the IL Small Cell Law.

18. **Applicants are required to include with any application a master plan which identifies the location of the proposed small wireless facility in relation to all existing and potential locations in the Village that are reasonably anticipated for construction within two (2) years of submittal of the application.**

Not submitted; this request exceeds the authority granted to the Village by the IL Small Cell Law.

19. **A sample of the proposed notice to be mailed pursuant to subsection B., below, and a list of intended recipients (including content and mailing envelope).**

Not submitted; this request exceeds the authority granted to the Village by the IL Small Cell Law.

(B) Notice: Within three (3) business days of submission of an application containing all information required by this chapter and any associated regulations, an applicant, at its sole cost and expense, shall provide written notice, by first class United States mail, to the owners and occupants of all real property at the addresses on file with the United States Postal office, and the residential manager for any multi-family dwelling unit that includes ten (10) or more units at the manager's business mailing address, any part of which is located within a two hundred and fifty foot (250') radius of the location of the applicant's proposed small wireless facility. Such notice shall be in a form provided by the Village, as may be revised from time to time, and shall be clearly marked as a notification of proposed small wireless facility installation, identify the applicant and wireless provider(s) who will utilize the facility, and include a plain language description of the proposed facility, photo simulations or illustrations depicting the proposed wireless facility, and the address where comments may be sent to the wireless provider within fifteen (15) calendar days of the date of the notice. The applicant shall supplement its application with proof of mailing of required notices no less than two (2) calendar days after mailing of the notices.

This request exceeds the authority granted to the Village by the IL Small Cell Law.

Design Standards

With respect to design standards, the IL Small Cell Law states the following:

An authority may require that... the wireless provider comply with written design standards that are generally applicable for decorative utility poles, or **reasonable stealth, concealment, and aesthetic requirements that are identified by the authority in an ordinance, written policy adopted by the governing board of the authority, a comprehensive plan, or other written design plan that applies to other occupiers of the rights-of-way...**³

³ 50 ILCS 840/15(d)(6)(H).

The Village sets forth the design, aesthetic, stealth, and concealment standards that apply to the placement of small wireless facilities within the Village (except where otherwise limited by State or federal law) in the Small Wireless Facility Design, Aesthetic, Stealth and Concealment Standards (the "Design Standards"). Crown Castle has adhered to these to the maximum extent possible, subject to state and federal law, and technical feasibility. Crown Castle draws particular attention to the following Design Standards:

- **Top mounted antennas and their enclosures shall... be mounted directly above the utility pole or wireless support structure, and shall not extend beyond the diameter of the utility pole... at the level of the antenna attachment.**

It is technically infeasible for the antenna to not extend beyond the diameter of the utility pole and to have a smooth transition between the utility pole and the antenna and enclosure. Crown Castle is utilizing three Ericsson 6705 radios with integrated antennas for this small cell. These radios must be installed in a tripod array in order to function properly. Due to the presence of ComEd primary power supply lines which are attached to the top of the pole, Crown Castle's antennas must be installed on an extension arm. Finally, any tapering "skirt" or other aesthetic device, installed for the purpose of creating a smooth transition, would endanger the primary power lines that are attached to the top of the pole.

Due to these factors, it is not physically possible to install the antennas directly above the utility pole, nor for their diameter to not extend beyond the diameter of the utility pole, nor to create a smooth transition between the utility pole and the antennas.

- **In order to minimize visual impact, the wireless provider shall install the smallest suitable wireless facilities then in industry use, regardless of location, for the particular application.**

The requirement to use the smallest suitable facilities then in industry use is dictating technology choices in violation of federal law. See *New York SMSA L.P. v. Town of Clarkstown*, 612 F.3d 97 (2d Cir. 2010) (local governments cannot dictate wireless technology choices).

- **Any Design Standards that do not apply to other occupiers of the right-of-way are preempted by the IL Small Cell Law.**

Application Enclosures

Included in this application are the following documents:

- A Village of Clarendon Hills Building Permit Application Form
- A complete drawing plan of the proposal, which includes coordinates of the location, photos of the proposed wireless facility on the existing pole, and equipment types and model numbers
- A Structural Analysis, which demonstrates that the proposed replacement pole is capable of handling the proposed small cell equipment
- A Certificate of Insurance
- A Cover Letter, List of Facilities, Statement of Compliance

Below you will also find a summary of information about the proposed installation, a proposed construction start date, and a statement of compliance. Crown Castle understands that the Village of Clarendon Hills has 120 days to review this application, and therefore the proposed construction start date can be moved if necessary.

If, during your review, you require any additional information, please feel free to contact me at (630) 480-5227. Thank you very much for your time and attention.

Sincerely,

Samuel Franklin

Supervisor, Network Permitting & Utilities

T: (630) 480-5227

westernsuburbs@crowncastle.com

Electronic Copy Of Application

Submitted via USPS Certified Mail

Postmarked June 17th, 2022

List of Wireless Facilities

(includes proposed schedule for installation)

(next page)

Small Cell Nickname / SCU	Latitude	Longitude	Pole Owner	Current Pole Height	Replacement Pole Height (feet)	Extension Arm Length (feet)	Equipment Volume (cubic feet)	Construction Start Date (tentative)	Construction Finish Date (tentative)
11 - 507683	N041° 47' 24.8"	W087° 57' 44.7	ComEd	25'	34'	n/a	3.75	10/10/2022	12/10/2022

Electronic Copy Of Application

Submitted via USPS Certified Mail

Postmarked June 17th, 2022

Building Permit Application

THIS CHECK PRINTED ON DOCUCHECK GHOST PAPER AND HAS A GRAPHIC WATERMARK ON REVERSE SIDE

CROWN CASTLE USA INC.
2000 CORPORATE DRIVE
CANONSBURG PA 15317
724-416-2000

JPMorgan Chase Bank, N.A.
DALLAS TX
32-61/1110

2786175

ONE THOUSAND AND 00/100*****

DATE 05/27/22

\$*****1,000.00

Pay To VILLAGE OF CLARENDON HILLS
The 1 N PROSPECT AVENUE
Order Of CLARENDON HILLS IL 60514

2027065

VOID AFTER 180 DAYS



Village of Clarendon Hills - Building Permit Application

(Reference: Chapter 19, Article 4 of the Village Municipal Code)

Address of Real Estate

SEC 10, T38N-R11E, ROW approx 110' north of the intersection of Ruby St. & Western Ave.

Permit ID (completed by VOCH CD Department)

Number _____ Date Assigned ____/____/____

Owner of Real Estate

Name Crown Castle Fiber LLC
Address 8020 Katy Fwy
City/State/Zip Houston / TX / 77024
Phone 630-480-5227
Fax _____
E-Mail westernsuburbs@crowncastle.com

Applicant

Name Crown Castle Fiber LLC
Address 8020 Katy Fwy
City/State/Zip Houston / TX / 77024
Phone 630-480-5227
Fax _____
E-Mail westernsuburbs@crowncastle.com

General contractor

Name To Be Determined
Address _____
City/State/Zip _____
Phone _____
Fax _____
E-Mail _____

Architect

Name CCSI Networks
Address 5101 Thatcher Road
City/State/Zip Downers Grove / IL / 60515
Phone 630-572-9999
Fax _____
E-Mail _____

Electrician

Name n/a
Address _____
City/State/Zip _____
Phone _____
Fax _____
E-Mail _____

Plumber

Name n/a
Address _____
City/State/Zip _____
Phone _____
Fax _____
E-Mail _____

Purpose of Permit (check all that apply):

1. SF Residence: ☐-New, ☐-Expansion, ☐-Alteration
2. MF & Non-Residence: ☐-New, ☐-Expansion, ☐-Alteration
3. Accessory Structure: ☐-New, ☐-Expansion, ☐-Alteration
4. Misc Construction: ☐-Deck, ☐-Porch, ☐-Canopy,
☐-Shelter, ☐-Fireplace, ☐-Roof Change, ☐-Driveway/Walk
5. Mechanical: ☐-Air Conditioner, ☐-Generator, ☐-Furnace,
☐-Boiler, ☐-Heating, Ventilation or Refrigerator Unit
6. Plumbing: ☐-Irrigation System
Installation of a small wireless facility on an existing
7. Other: ComEd wood utility pole.

Fee Calculation Data:

- Estimated construction Cost: \$ 10 000.00
- Square Feet of Improvement: _____ sf
- Cubic Feet of Improvement: _____ cf
- Number of New Plumbing Features: _____
- Number of Replacement Plumbing Fixtures: _____
- Number of New Electrical Circuits: _____
- Amp Service: _____

The undersigned applicant does hereby certify and agree that if granted the permit applied for herein, the aforesaid improvements will be constructed in accordance with the description set forth in this application and the plans and specifications accompanying this application and that the general and detailed work connected therewith will be done in strict compliance with the ordinances of the Village and the provisions of the permit. By this application, the applicant authorizes inspectors of the Village to enter the property to inspect the improvements for compliance with Village codes.

Applicant's Signature

Date

6/17/2022

Electronic Copy Of Application

Submitted via USPS Certified Mail

Postmarked June 17th, 2022

Certificate of Compliance with Clarendon
Hills Code of Ordinance



Crown Castle
8020 Katy Freeway
Houston, TX 77024

6/14/2022

Village of Clarendon Hills
19 E. Chicago Avenue
Clarendon Hills, Illinois 60521
Attn: Jonathan Mendel
630-2865400

RE: **Certification of compliance with written design standards and other requirements set forth in
Clarendon Hills Code of Ordinances**

Dear Mr. Mendel,

Crown Castle certifies that, to the best of its knowledge, the collocation complies with the written design standards established by the Village, and with the various other requirements set forth in the Clarendon Hills Code of Ordinances, to the extent that they do not conflict with State and/or Federal Law.

Sincerely,

A handwritten signature in blue ink, appearing to read 'S. Franklin', with a stylized flourish at the end.

Sam Franklin
Permitting Supervisor

Electronic Copy Of Application

Submitted via USPS Certified Mail

Postmarked June 17th, 2022

Certification of Compliance

(State & Federal Law)

(FCC Standards)

(next page)

Statement of Compliance with paragraph (6) of Illinois Public Act 100-0585

On behalf of Crown Castle Fiber LLC ("Applicant"), I hereby certify:

The Applicant certifies that the collocations proposed in its application will operate within all applicable FCC standards to the best of the applicant's knowledge. The information provided by Applicant in this application is hereby certified as true and correct as of the date submitted.

On behalf of Crown Castle Fiber LLC:

A handwritten signature in black ink, appearing to read "Shawn P. Dugan", with a stylized flourish at the end.

Shawn P. Dugan
Manager of RF Engineering, Central Region
T: (724) 416-9129
Shawn.Dugan@crowncastle.com

Electronic Copy Of Application

Submitted via USPS Certified Mail

Postmarked June 17th, 2022

Structural Analysis

(next page)

Structural Calculations

Permit 5/02/22

Project:

Wood Utility Pole Structural Analysis
Proposed Small Cell Node
Crown Castle ID: **CTRL_HINSDALE_11**
Customer ID: **539618**
55th St & Western Ave SC
Clarendon Hills, IL 60514

Client:

CCSI Networks
5101 Thatcher Rd.
Downers Grove, IL 60515

Structural Engineer:

Antonio S. Antonio, Jr., P.E., S.E.
S.E. 081 -004652
Exp. 11-30-2022
Project No. **20-04-110.1**
Tel. 773-769-2672



ANTONIO AND ASSOCIATES, P.C.
CONSULTING ENGINEERS



ANTONIO AND ASSOCIATES, P.C.
Consulting Engineers

Structural Calculations

Project:

Wood Utility Pole Structural Analysis
Proposed Small Cell Node
Crown Castle ID: **CTRL_HINSDALE_11**
Customer ID: **539618**
55th St & Western Ave SC
Clarendon Hills, IL 60514

Client:

CCSI Networks
5101 Thatcher Rd.
Downers Grove, IL 60515

Purpose:

Provide structural analysis of proposed replacement/ new utility pole designated for the installation of new small cell equipment.

Design Criteria:

Applicable Code:

- 2017 National Electric Safety Code (NESC)
- ANSI O5.1-2015 (Wood Pole Specifications & Dimensions)

NESC Construction Grade:

- Grade B

NESC Loading District:

- Heavy

NESC Loading:

- Rule 250B: Combined Ice and Wind District Loading
- Rule 250C (Not Applicable < 60ft)

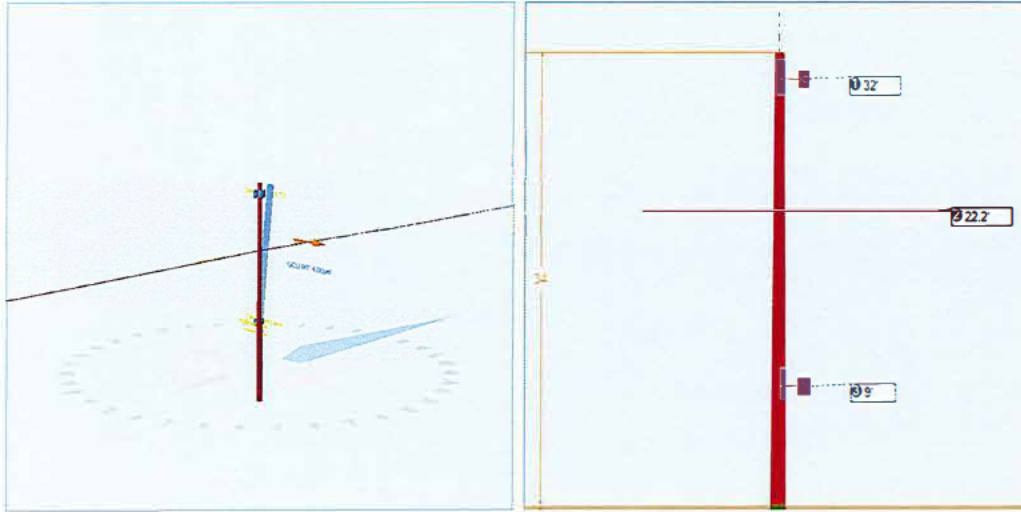
Proposed Small Cell Equipment:

Quantity	Description	Model Number	Attachment Ht.	Dimensions	Wt.
3	NR Antenna	Ericsson 6705 NR	See Node Drawing	14.4"x7.9"x5.9"	31 lbs (ea.)
1	T-12 Hoffman Box	Fiber Demarc	See Node Drawing	8.7"x11.7"x4.6"	13.7 lbs
1	AC Disc. Box	Load Center	See Node Drawing	10"x13"x4.5"	10 lbs

Conclusion:

Based on the Pole Loading Analysis performed, see attached **Ref.1**, the existing wood utility pole is **structurally adequate** to support the installation of the proposed small cell equipment.

Pole Num:	507683 copy	Pole Length / Class:	40 / 2	Code:	NESC	Structure Type:	Unguyed Tangent
Aux Data 1	Unset	Species:	SOUTHERN PINE	NESC Rule:	Rule 250B	Status	Unguyed
Aux Data 2	Unset	Setting Depth (ft):	6.00	Construction Grade:	B	Pole Strength Factor:	0.65
Aux Data 3	Unset	G/L Circumference (in):	38.50	Loading District:	Heavy	Transverse Wind LF:	2.50
Aux Data 4	Unset	G/L Fiber Stress (psi):	8,000	Ice Thickness (in):	0.50	Wire Tension LF:	1.10
Aux Data 5	Unset	Allowable Stress (psi):	5,200	Wind Speed (mph):	39.53	Vertical LF:	1.50
Aux Data 6	Unset	Fiber Stress Ht. Reduc:	No	Wind Pressure (psf):	4.00		
Latitude:	41.790237 Deg		Longitude:	-87.962424 Deg		Elevation:	635.979947215426 Feet



Pole Capacity Utilization (%)	Height (ft)	Wind Angle (deg)
Maximum	13.6	0.0
Groundline	13.6	0.0
Vertical	3.8	17.0

Pole Moments (ft-lb)	Load Angle (deg)	Wind Angle (deg)
Max Cap Util	10,415	90.0
Groundline	10,415	90.0
GL Allowable	78,299	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 90.0°

	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)
Powers	181	34.7	4,092	39.3	5.2	273	152	1	274	5.3
Generic Equipments	55	10.5	1,371	13.2	1.8	92	175	1	93	1.8
Pole	286	54.8	4,948	47.5	6.3	330	1,730	15	345	6.6
Insulators	0	0.0	4	0.0	0.0	0	8	0	0	0.0
Pole Load	523	100.0	10,415	100.0	13.3	695	2,065	18	712	13.7
Pole Reserve Capacity			67,884		86.7	4,505			4,488	86.3

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 90.0°

	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)
<Undefined>	236	45.2	5,467	52.5	7.0	365	334	3	367	7.1
Pole	286	54.8	4,948	47.5	6.3	330	1,730	15	345	6.6
Totals:	523	100.0	10,415	100.0	13.3	695	2,065	18	712	13.7

Detailed Load Components:

Power	Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Secondary	DUPLEX 6 AWG	22.17	7.23	0.5370	1.64	0.071	145.0	0.0	145.0	393	-5	47	2,058	2,100
Secondary	DUPLEX 6 AWG	22.17	7.23	0.5370	1.56	0.071	138.0	180.0	138.0	393	5	45	1,959	2,009
Totals:											0	91	4,017	4,109

GenericEquipment	Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Box	Streetmacro 6705	32.00	9.16	0.0	0.0	31.00	16.20	6.10	—	8.10	0	351	351
Box	Streetmacro 6705	32.00	9.16	120.0	0.0	31.00	16.20	6.10	—	8.10	31	438	469
Box	Streetmacro 6705	32.00	9.16	240.0	0.0	31.00	16.20	6.10	—	8.10	-31	438	407
Box	Hoffman Box	9.00	9.56	180.0	0.0	13.70	16.00	6.00	—	10.00	0	96	96
Box	Disconnect Box	9.00	8.71	0.0	0.0	10.00	12.60	4.30	—	8.90	0	54	54
Totals:											0	1,377	1,377

Insulator	Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Bolt	Single Bolt	22.17	0.00	90.0	0.0	5.00	3.00	0.00	5	0	5
Totals:										5	0

Pole Buckling

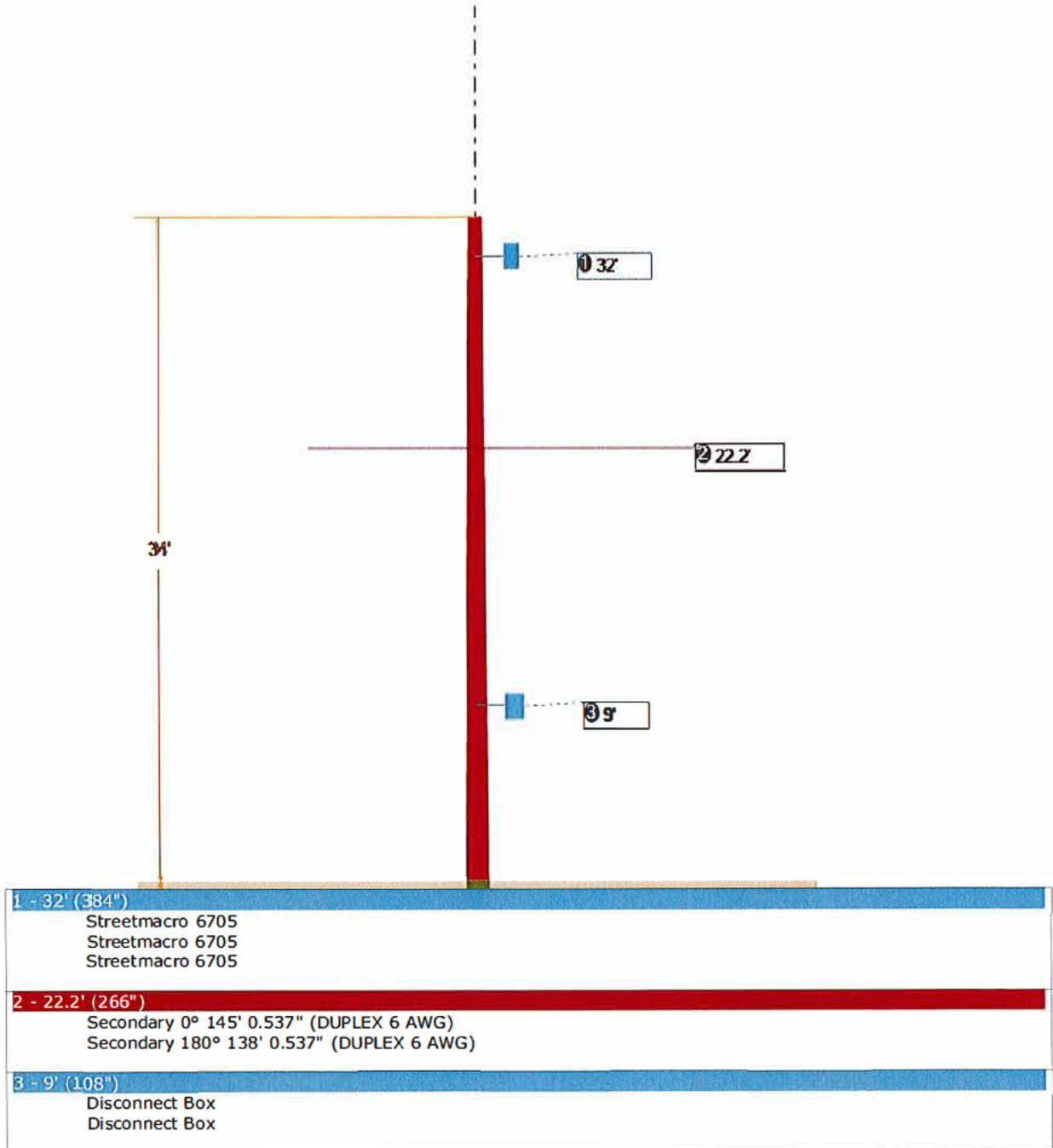
Buckling Constant	Buckling Column Height* (ft)	Buckling Section Height (% Buckling Col. Hgt.)	Buckling Section Diameter (in)	Minimum Buckling Diameter at GL (in)	Diameter at Tip (in)	Diameter at GL (in)	Modulus of Elasticity (psi)	Pole Density (pcf)	Ice Density (pcf)	Pole Tip Height (ft)	Buckling Load Capacity at Height (lbs)	Buckling Load Applied at Height (lbs)	Buckling Load Factor of Safety
2.00	16.96	32.62	11.56	10.82	7.96	12.26	1.60e+6	60.00	57.00	34.00	54,194	543.37	26.32

O-Calc® Pro Schematic View

Pole Identification: 507683 copy

Report Created: 4/30/2022

File: Pole 507683 copy pplx.pplx



Electronic Copy Of Application

Submitted via USPS Certified Mail

Postmarked June 17th, 2022

Specifications and Drawing Plans

(includes photographs of site location)

(equipment types and model numbers)

(next page)



PROPOSED SMALL CELL NODE

SCU:
507683

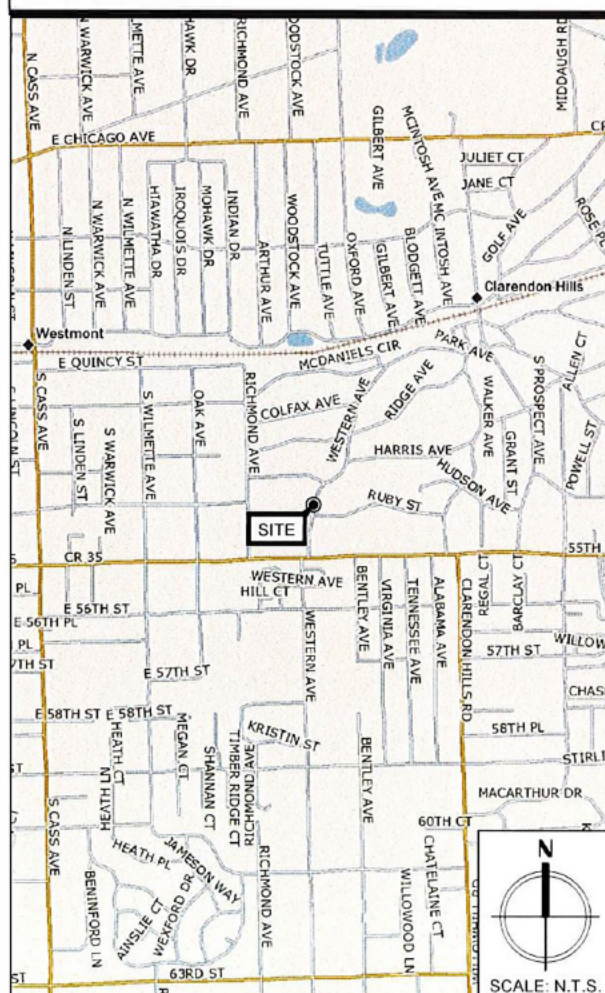
CROWN CASTLE ID:
CTRL_HINSDALEA_11

PSLOC:
539618

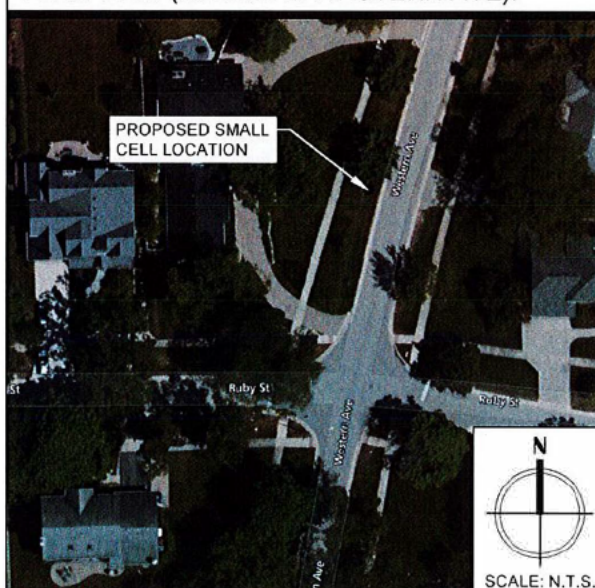
HUB:
CH VZB DOWNERS GROVE

SEC 10, T38N-R11E,
CLARENDON HILLS, DuPAGE COUNTY, ILLINOIS

LOCATION MAP:



PLAN VIEW (55TH ST & WESTERN AVE):



INDEX OF DRAWINGS:

SHEET	TITLE
SWF-1	COVER
SWF-2	EXISTING & PROPOSED POLE IMAGE
SWF-3	TRAFFIC CONTROL - TYPICALS
SWF-4	EXISTING & PROPOSED EAST ELEVATION
SWF-5	EXISTING & PROPOSED SOUTH ELEVATION
SWF-6	WIRING DIAGRAM & EQUIPMENT DETAILS
SWF-7	OVERHEAD POLE DETAIL
SWF-8	BREAKER PANEL W/ MAIN DISCONNECT SCHEMATIC
SWF-9	GROUNDING RISER DIAGRAM
SWF-10	COMED STANDARD C7526 NOTES & SPECS
SWF-11	COMED STANDARD C7526 DIAGRAMS
SWF-12	GENERAL AND SPECIFIC PROJECT NOTES

EQUIPMENT SPECIFICATIONS SUPPLEMENT
SWF-S.1 6705 ERICSSON NR ANTENNA SPECIFICATIONS

PROJECT DESCRIPTION:

PROJECT NO: 2211-005-U01-N011

PROPOSED INSTALLATION OF SMALL CELL EQUIPMENT AND ANTENNAS ON NEW WOOD POLE. NEW POLE IS TO REPLACE EXISTING. FIBER AND POWER CABLES VIA NEW CONDUIT (UNDER SEPERATE PERMIT SUBMISSION).

SITE COORDINATES:

LATITUDE: N 041° 47' 24.85" (DEGREE, MINUTES, SECONDS)
N 41.79024 (DECIMAL)

LONGITUDE: W 087° 57' 44.74" (DEGREE, MINUTES, SECONDS)
W 87.96243 (DECIMAL)

SITE ELEV.: 738.20' ± 3.0'

FAA 1A CERTIFICATION: MAY 11, 2022

POLE IMAGE (LOOKING NORTH)



ENGINEER CERTIFICATION



ENGINEER



A NETWORK COMPANY

5101 THATCHER RD.
DOWNERS GROVE, IL 60515
OFFICE 630.572.9999 • FAX 630.572.9998

OWNER



CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77604

CONTRACTOR

TBD

TITLE

PROPOSED
SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID

CTRL_HINSDALEA_11

HUB

CH VZB DOWNERS GROVE

SCU

507683

PSLOC

539618

PROJECT NUMBER

2211-005-U01-N011

DRAWN BY

JCS

DATE DRAWN

05/03/2022

NO.	DATE	DESCRIPTION	BY
05/14/22	PERMIT	JCS	

REVISIONS

SHEET NUMBER

SWF-1

1 OF 12



Know what's below.
Call before you dig.

REQUIRES 2 BUSINESS DAYS
NOTICE BEFORE YOU EXCAVATE



ENGINEER



A NETWORK LEVEL COMPANY

5101 THATCHER RD
DOWNERS GROVE, IL 60515
OFFICE 630.572.9999 • FAX 630.572.9998

OWNER



CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77604

CONTRACTOR

TBD

TITLE	PROPOSED SMALL CELL NODE
-------	-----------------------------

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID.
CTRL HINSDALEA 11

HUB	CH VZB DOWNERS GROVE
-----	----------------------

SCU	PSLOC
507683	539618

PROJECT NUMBER
2211-005-U01-N011

DRAWN BY:	DATE DRAWN
JCS	05/03/2022

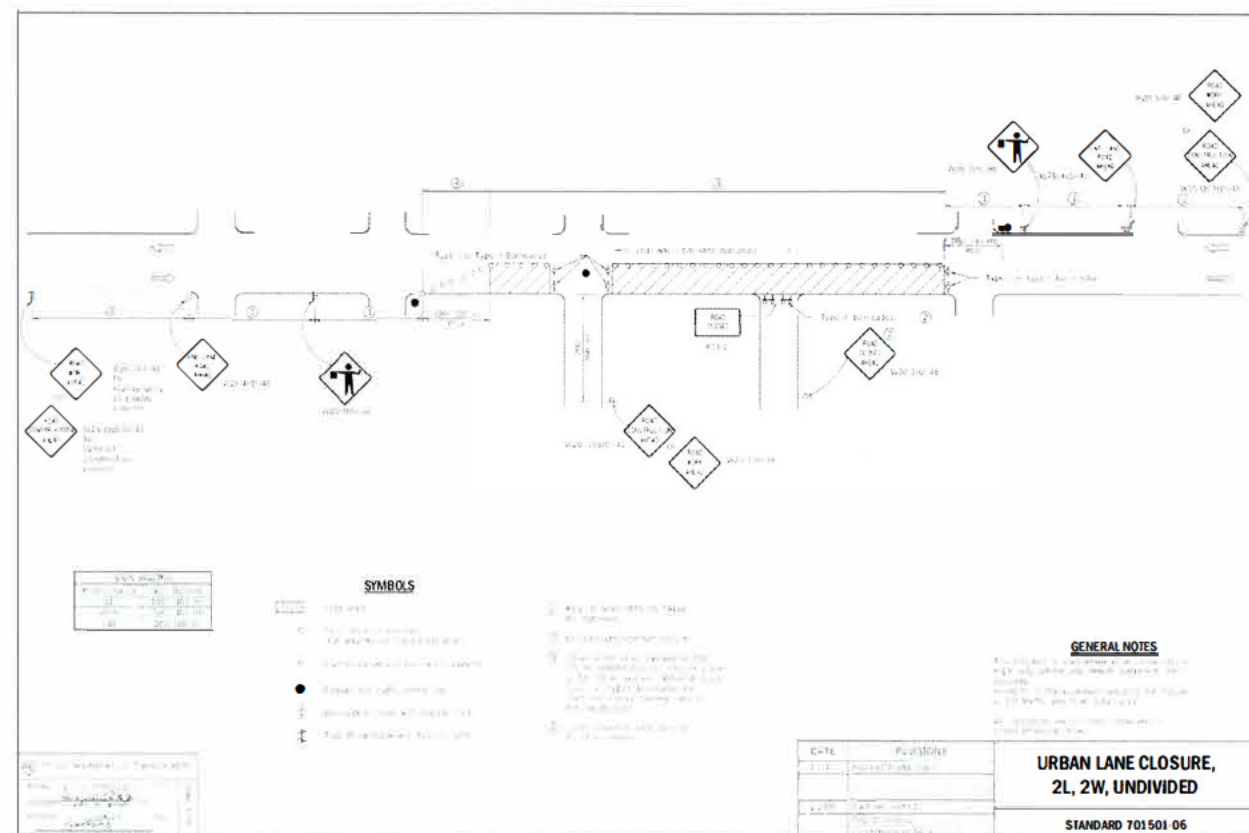
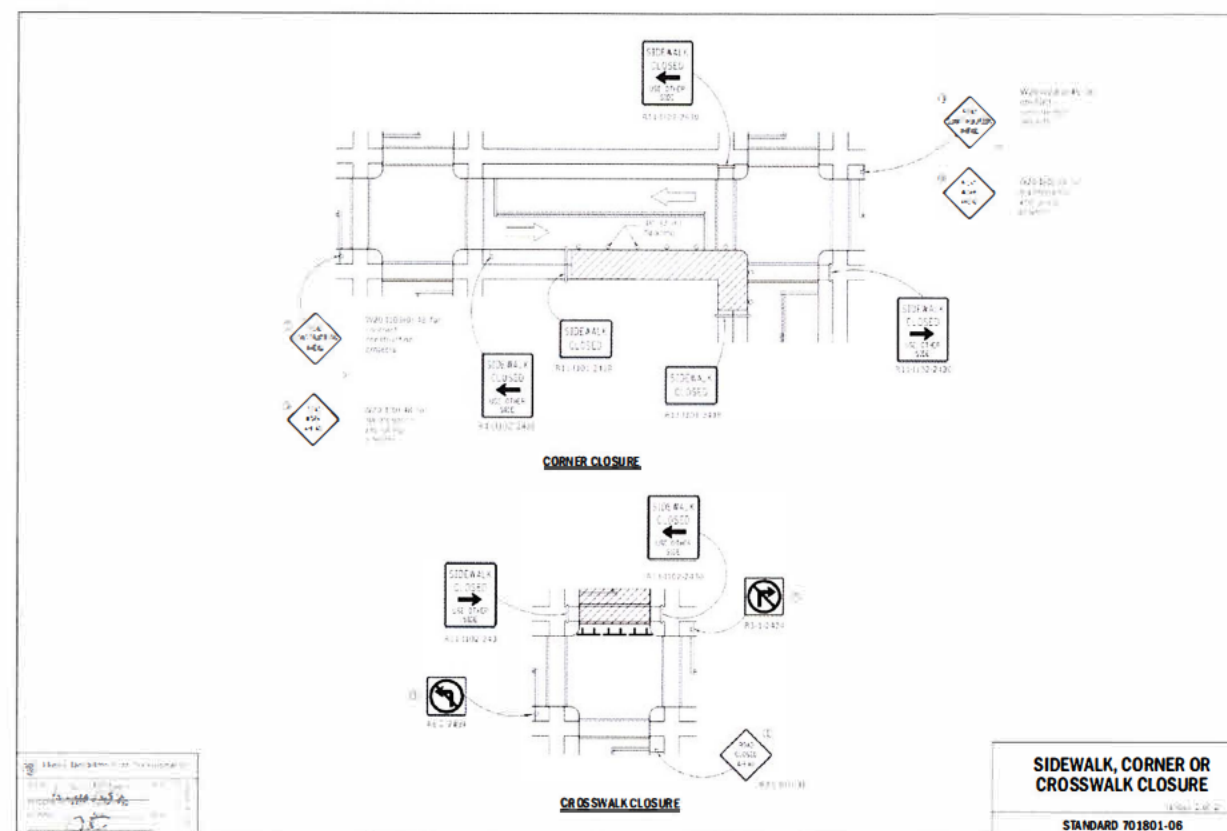
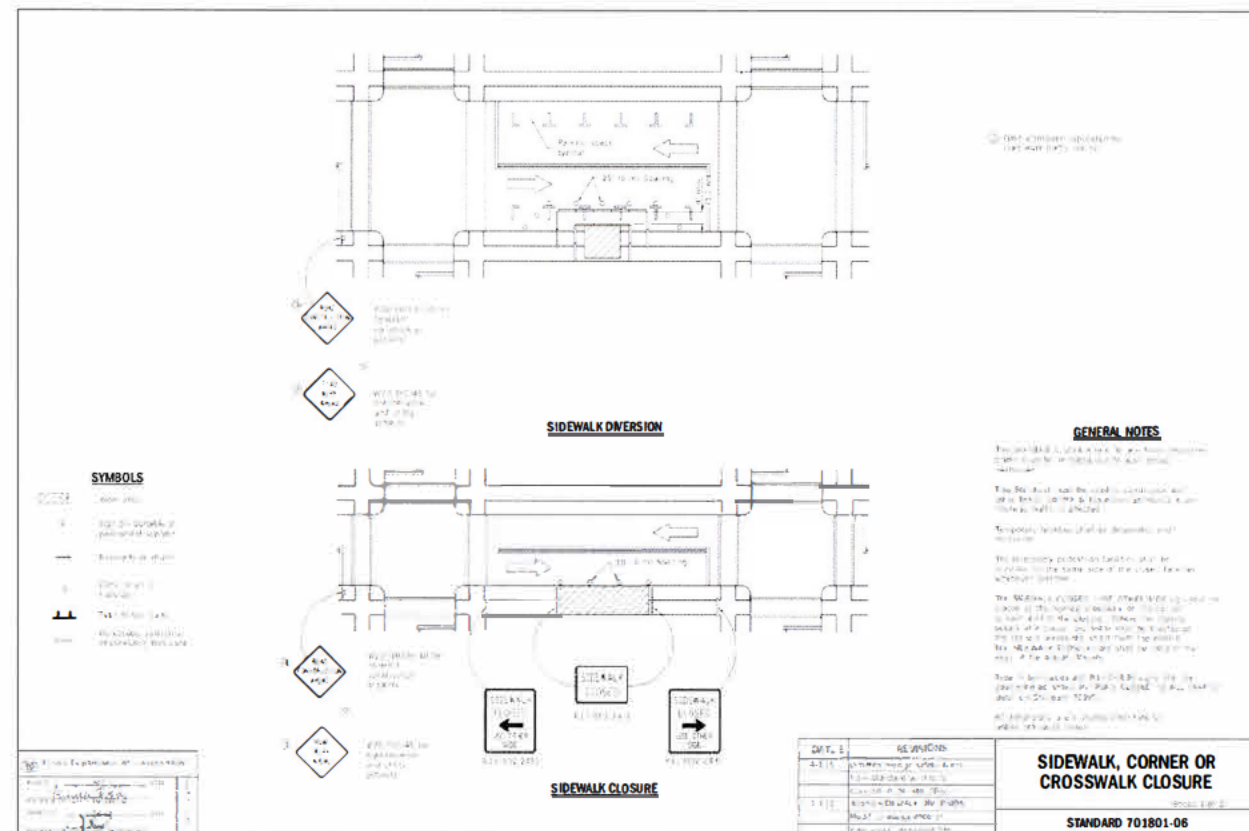
	06/14/22	PERMIT
NO	DATE	DESCRIPTION

SHEET NUMBER

SWF-2

2 OF 12

TRAFFIC CONTROL - TYPICALS



ENGINEER



A NETWORK CONNEX COMPANY

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DOWNERS GROVE IL 60515
OFFICE 630.572.9999 • FAX 630.572.9998

OWNER



CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77604

CONTRACTOR

TBD

TITLE	DATE	BY	NO.	PRICE	REMARKS
...

PROPOSED SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID:

CTRL HINSDALEA 11

HUB

CH VZB DOWNERS GROVE

SCU

507683

PROJECT NUMBER

2211-005-U01-N011

DRAWN BY

JCS

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06/14/2

DATE	
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NO.	DATE
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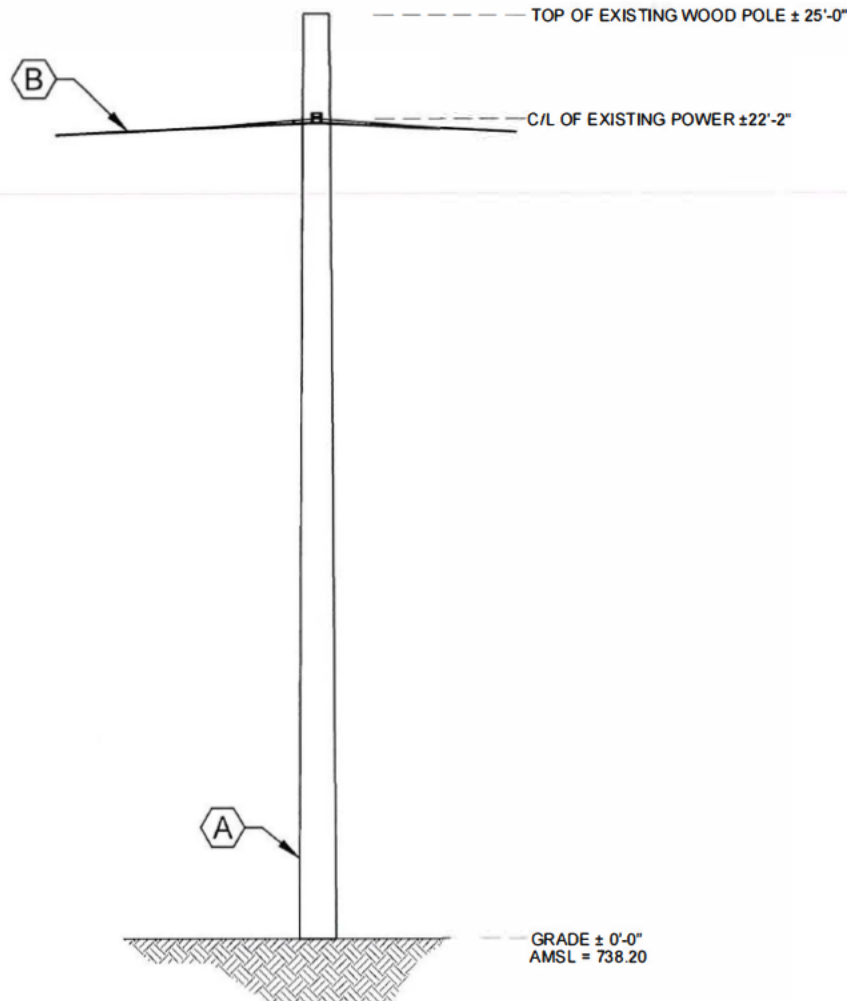
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SWF-3

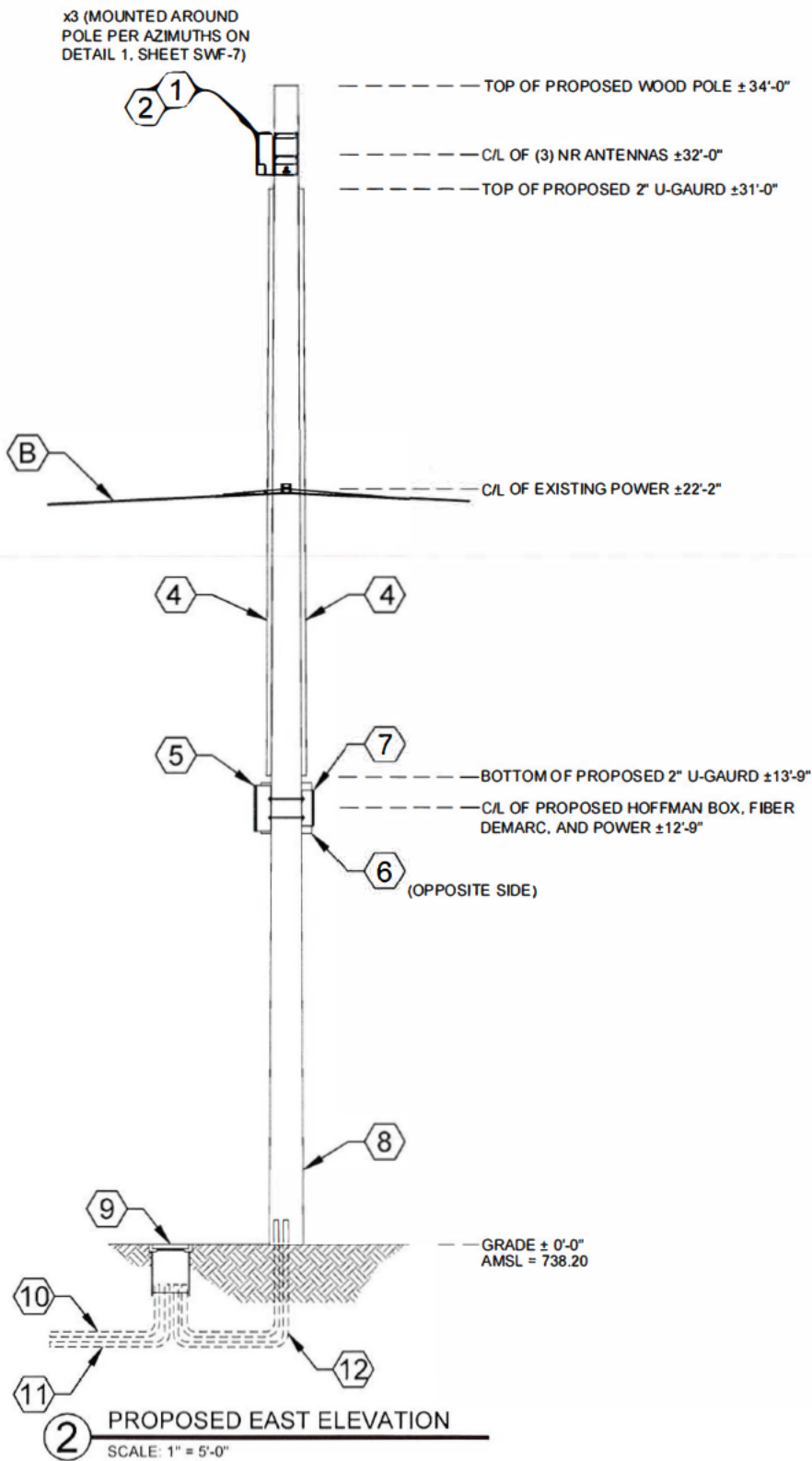
3 OF 12

POLE TO BE REPLACED WITH
40 FOOT, CLASS 2 POLE

FOR NORMAL SOIL CONDITIONS THE MINIMUM
POLE EMBEDMENT DEPTH WOULD BE 6-FEET
BELOW GRADE



1 EXISTING EAST ELEVATION
SCALE: 1" = 5'-0"



2 PROPOSED EAST ELEVATION
SCALE: 1" = 5'-0"

PROPOSED EQUIPMENT KEY:

- 1 (3) ERICSSON 6705 NR RADIOS w/ ANTENNAS, MODEL NO. 6705, 14.40" x 7.90" x 5.90" (HxWxD) - 31.00 lbs. ea.
- 2 (3) AIRSCALE - HORIZONTAL RADIO MOUNT BRACKET PART NO. ERICSSON - AIR BRACKET, 3.9" x 7.9" x 11.8" (HxWxD) - 13.7 lbs.
- 3 NOT USED
- 4 2" NON-METALLIC U-GAIRD ATTACHMENT FOR FIBER/COAXIAL CABLES
- 5 HOFFMAN BOX, PART NO. A161606 (OR EQUIVALENT), 16.0" x 10.0" x 6.0" (HxWxD) - 13.7 lbs.
- 6 CHARLES FIBER DEMARC, PART NO. CFIT-C (OR EQUIVALENT), 18.00" x 18.00" x 6.00" (HxWxD) - 15.0 lbs.
- 7 AC DISCONNECT BOX, PART NO. BA206 (OR EQUIVALENT), 12.60" x 8.90" x 4.30" (HxWxD) - 9.70 lbs.
- 8 PROPOSED 40' CLASS 2 WOOD POLE (TO REPLACE EXISTING)
- 9 PROPOSED BURIED QUARTZITE ENCLOSURE TO HOUSE GROUND ROD AND IN-LINE FUSES FOR SMALL CELL POWER DISCONNECT (QUARTZITE COVER SHALL CORRECTLY IDENTIFY OWNER ON LID "ID PLACARD") (TO BE INSTALLED BY OTHERS)
- 10 (1) PROPOSED UNDERGROUND POWER CONDUIT (TO BE INSTALLED BY OTHERS)
- 11 (1) PROPOSED FIBER CONDUIT (TO BE INSTALLED BY OTHERS)
- 12 (2) PROPOSED 2" RIGID CONDUIT FOR POWER & FIBER (TO BE INSTALLED BY OTHERS)

PROPOSED RF:

RADIO	AZIMUTH		
	A	B	C
5G	0°	120°	240°

TOTALS:

TOTAL WEIGHT	172.5 LBS
TOTAL VOLUME OF EQUIPMENT	3.75 ft³

EXISTING EQUIPMENT KEY:
(EQUIPMENT TO REMAIN)

- A EXISTING COMED WOOD POLE (TO BE REPLACED)
- B EXISTING SECONDARY POWER SUPPLY FEED ATTACHMENTS (RELOCATED AS SHOWN)

ENGINEER:



A NETWORK COMPANY

5101 THATCHER RD.
DOWNERS GROVE, IL 60515
OFFICE 630.572.9999 • FAX 630.572.9998

OWNER:



CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77604

CONTRACTOR:

TBD

TITLE:

PROPOSED
SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID:

CTRL HINSDALE_11

HUB:

CH VZB DOWNERS GROVE

SCU:

507683

PSLOC:

539618

PROJECT NUMBER:

2211-005-U01-N011

DRAWN BY:

JCS

DATE DRAWN:

05/03/2022

NO.

DATE

PERMIT

JCS

BY

DESCRIPTION

REVISIONS

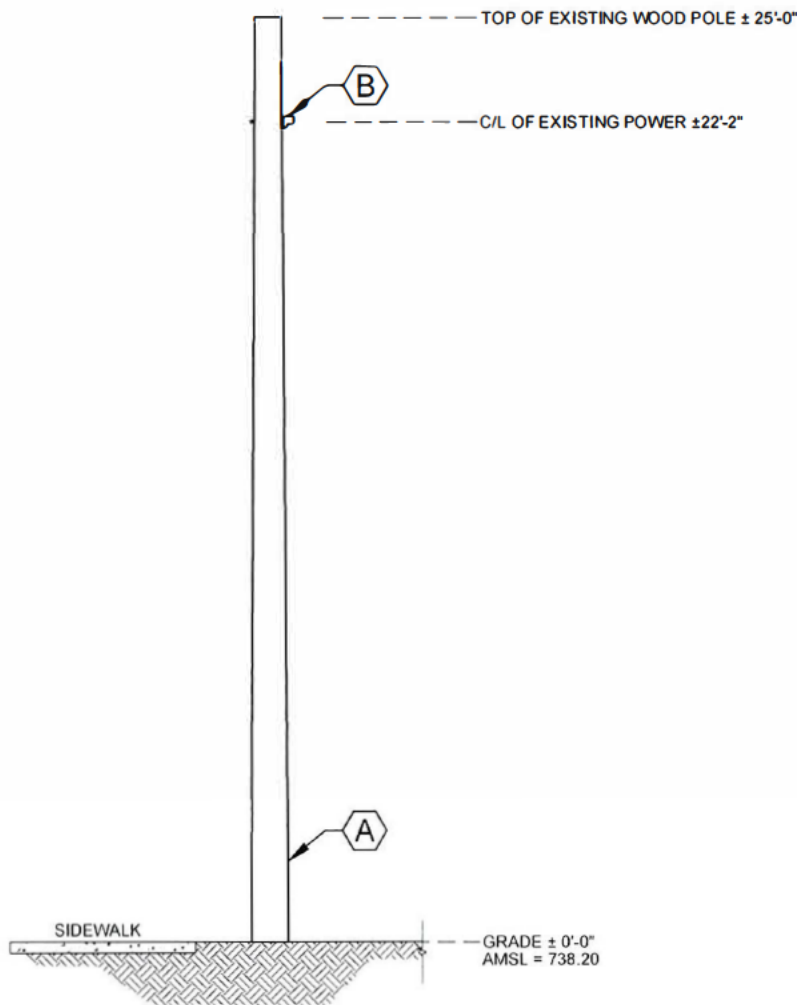
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SWF-4

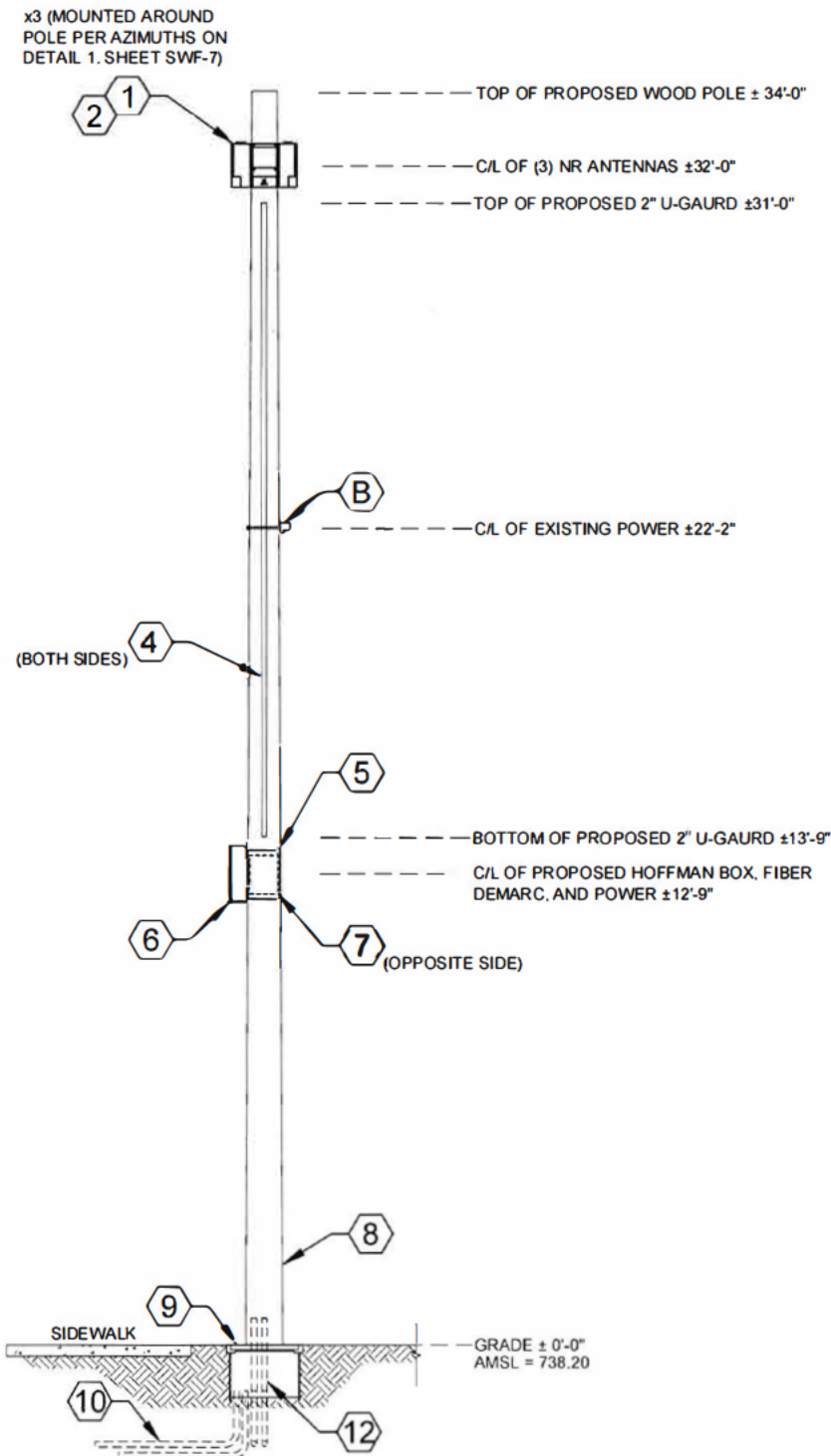
4 OF 12

POLE TO BE REPLACED WITH
40 FOOT, CLASS 2 POLE

FOR NORMAL SOIL CONDITIONS THE MINIMUM
POLE EMBEDMENT DEPTH WOULD BE 6-FEET
BELOW GRADE



1 EXISTING SOUTH ELEVATION
SCALE: 1" = 5'-0"



2 PROPOSED SOUTH ELEVATION
SCALE: 1" = 5'-0"

PROPOSED EQUIPMENT KEY:

- 1 (3) ERICSSON 6705 NR RADIOS w/ ANTENNAS.
MODEL NO. 6705
14.40" x 7.90" x 5.90" (HxWxD) - 31.00 lbs. ea.
- 2 (3) AIRSCALE - HORIZONTAL RADIO MOUNT BRACKET
PART NO. ERICSSON - AIR BRACKET
3.9" x 7.9" x 11.8" (HxWxD) - 13.7 lbs.
- 3 NOT USED
- 4 2" NON-METALLIC U-GAURD ATTACHMENT
FOR FIBER/COAXIAL CABLES
- 5 HOFFMAN BOX
PART NO. A161606 (OR EQUIVALENT)
16.0" x 10.0" x 6.0" (HxWxD) - 13.7 lbs.
- 6 CHARLES FIBER DEMARC
PART NO. CFIT-C (OR EQUIVALENT)
18.00" x 18.00" x 6.00" (HxWxD) - 15.0 lbs.
- 7 AC DISCONNECT BOX
PART NO. BA206 (OR EQUIVALENT)
12.60" x 8.90" x 4.30" (HxWxD) - 9.70 lbs.
- 8 PROPOSED 40' CLASS 2 WOOD POLE
(TO REPLACE EXISTING)
- 9 PROPOSED BURIED QUARTZITE ENCLOSURE TO
HOUSE GROUND ROD AND IN-LINE FUSES FOR
SMALL CELL POWER DISCONNECT
(QUARTZITE COVER SHALL CORRECTLY
IDENTIFY OWNER ON LID "ID PLACARD")
(TO BE INSTALLED BY OTHERS)
- 10 (1) PROPOSED UNDERGROUND POWER CONDUIT
(TO BE INSTALLED BY OTHERS)
- 11 (1) PROPOSED FIBER CONDUIT
(TO BE INSTALLED BY OTHERS)
- 12 (2) PROPOSED 2" RIGID CONDUIT FOR POWER
& FIBER (TO BE INSTALLED BY OTHERS)

PROPOSED RF:

RADIO	AZIMUTH		
	A	B	C
5G	0°	120°	240°

TOTALS:

TOTAL WEIGHT	172.5 LBS
TOTAL VOLUME OF EQUIPMENT	3.75 IP

EXISTING EQUIPMENT KEY:
(EQUIPMENT TO REMAIN)

- A EXISTING COMED WOOD POLE (TO BE REPLACED)
- B EXISTING SECONDARY POWER SUPPLY FEED
ATTACHMENTS (RELOCATED AS SHOWN)

ENGINEER



A NETWORK COMPANY

5101 THATCHER RD.
DOWNERS GROVE, IL 60515
OFFICE 630.572.9999 • FAX 630.572.9998

OWNER



CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77004

CONTRACTOR

TBD

TITLE

PROPOSED
SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID

CTRL_HINSDALEA 11

HUB

CH VZB DOWNERS GROVE

SCU

507683

PSLOC

539618

PROJECT NUMBER

2211-005-U01-N011

DRAWN BY

JCS

DATE DRAWN

05/03/2022

NO.

06/14/22

PERMIT

JCS

DATE

06/14/22

DESCRIPTION

PERMIT

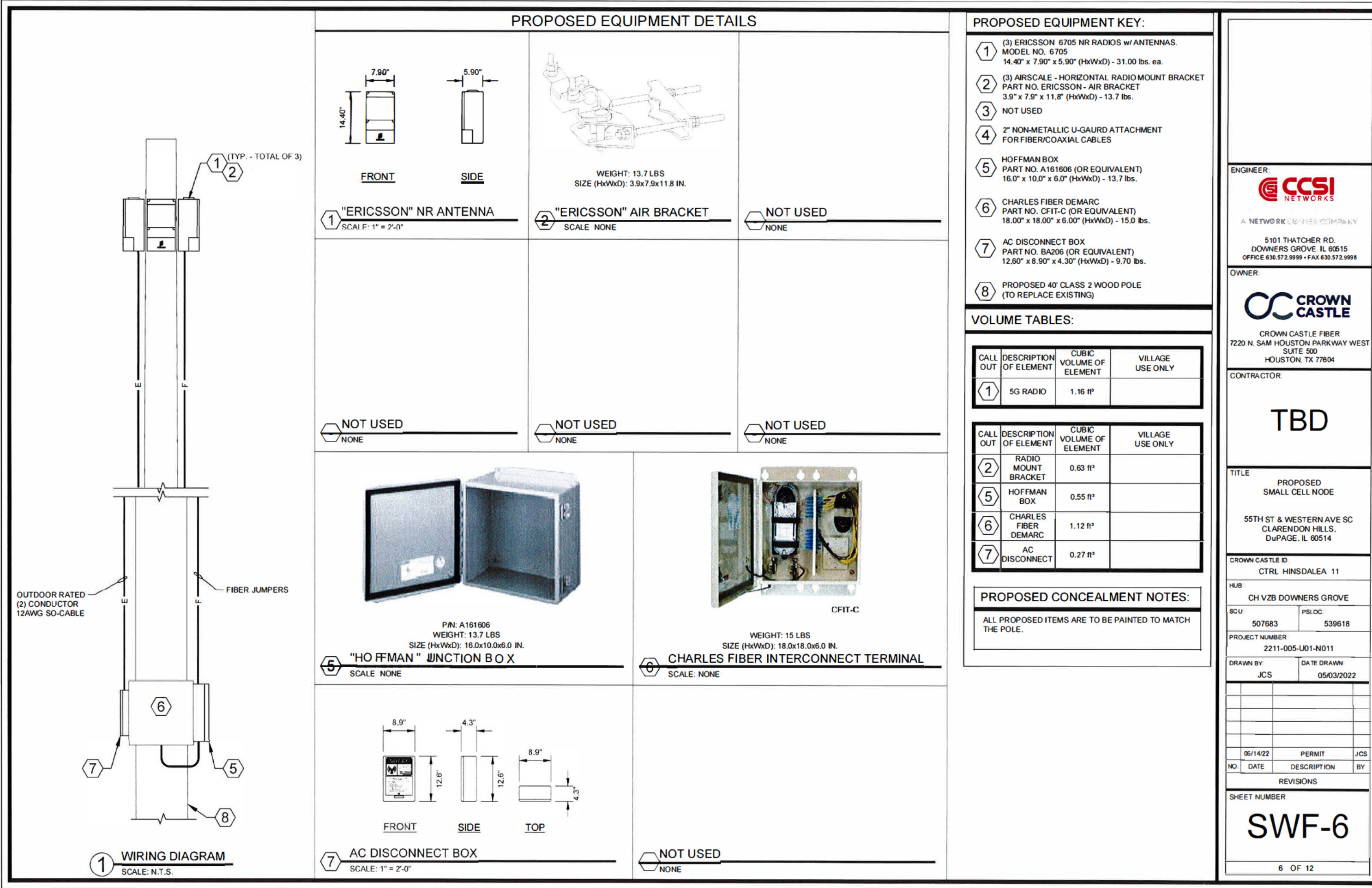
BY

JCS

REVISIONS

SHEET NUMBER

SWF-5



PROPOSED EQUIPMENT DETAILS

FRONT SIDE

1 "ERICSSON" NR ANTENNA
SCALE: 1" = 2'-0"

WEIGHT: 13.7 LBS
SIZE (HxWxD): 3.9x7.9x11.8 IN.

2 "ERICSSON" AIR BRACKET
SCALE: NONE

NOT USED
NONE

NOT USED
NONE

NOT USED
NONE

P/N: A161606
WEIGHT: 13.7 LBS
SIZE (HxWxD): 16.0x10.0x6.0 IN.

5 "HOFFMAN" JUNCTION BOX
SCALE: NONE

WEIGHT: 15 LBS
SIZE (HxWxD): 18.0x18.0x6.0 IN.

6 CHARLES FIBER INTERCONNECT TERMINAL
SCALE: NONE

FRONT SIDE TOP

7 AC DISCONNECT BOX
SCALE: 1" = 2'-0"

NOT USED
NONE

NOT USED
NONE

PROPOSED EQUIPMENT KEY:

- 1 (3) ERICSSON 6705 NR RADIOS w/ ANTENNAS. MODEL NO. 6705 14.40" x 7.90" x 5.90" (HxWxD) - 31.00 lbs. ea.
- 2 (3) AIRSCALE - HORIZONTAL RADIO MOUNT BRACKET PART NO. ERICSSON - AIR BRACKET 3.9" x 7.9" x 11.8" (HxWxD) - 13.7 lbs.
- 3 NOT USED
- 4 2" NON-METALLIC U-GAURD ATTACHMENT FOR FIBER/COAXIAL CABLES
- 5 HOFFMAN BOX PART NO. A161606 (OR EQUIVALENT) 16.0" x 10.0" x 6.0" (HxWxD) - 13.7 lbs.
- 6 CHARLES FIBER DEMARC PART NO. CFIT-C (OR EQUIVALENT) 18.00" x 18.00" x 6.00" (HxWxD) - 15.0 lbs.
- 7 AC DISCONNECT BOX PART NO. BA206 (OR EQUIVALENT) 12.60" x 8.90" x 4.30" (HxWxD) - 9.70 lbs.
- 8 PROPOSED 40' CLASS 2 WOOD POLE (TO REPLACE EXISTING)

VOLUME TABLES:

CALL OUT	DESCRIPTION OF ELEMENT	CUBIC VOLUME OF ELEMENT	VILLAGE USE ONLY
1	5G RADIO	1.16 ft³	

CALL OUT	DESCRIPTION OF ELEMENT	CUBIC VOLUME OF ELEMENT	VILLAGE USE ONLY
2	RADIO MOUNT BRACKET	0.63 ft³	
5	HOFFMAN BOX	0.55 ft³	
6	CHARLES FIBER DEMARC	1.12 ft³	
7	AC DISCONNECT	0.27 ft³	

PROPOSED CONCEALMENT NOTES:

ALL PROPOSED ITEMS ARE TO BE PAINTED TO MATCH THE POLE.

ENGINEER:

A NETWORK CONNEX COMPANY

5101 THATCHER RD.
DOWNERS GROVE, IL 60515
OFFICE 630.572.9999 • FAX 630.572.9998

OWNER:

CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77604

CONTRACTOR:

TBD

TITLE

PROPOSED
SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID

CTRL HINSDALEA 11

HUB

CH VZB DOWNERS GROVE

SCU	PSLOC
507683	539618

PROJECT NUMBER

2211-005-U01-N011

DRAWN BY:	DATE DRAWN
JCS	05/03/2022

NO.	DATE	DESCRIPTION	BY
	05/14/22	PERMIT	JCS

REVISIONS

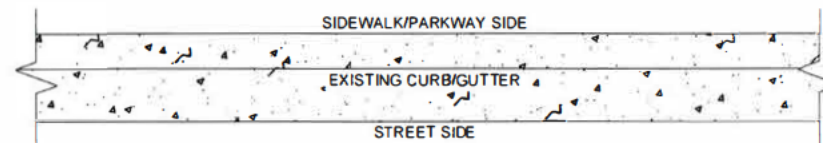
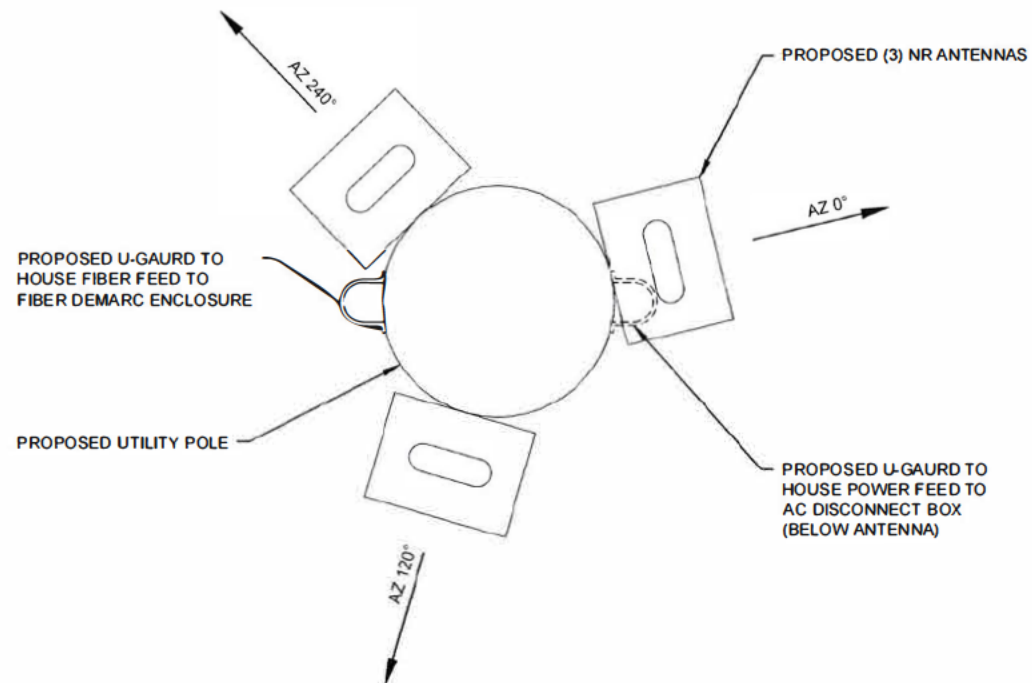
SHEET NUMBER

SWF-6

6 OF 12

NOTES:

1. ANY AND ALL DAMAGE TO POLE DUE TO CONSTRUCTION & INSTALLATION OF THIS APPLICATION SHALL BE REPAIRED AT THE COST OF THE CONTRACTOR
2. CONTRACTOR SHALL RESTORE OR REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION
3. FIBER DESIGN BY OTHERS



1 OVERHEAD POLE DETAIL
SCALE N.T.S



ENGINEER



A NETWORK COMPANY

5101 THATCHER RD
DOWNERS GROVE IL 60515
OFFICE 630.572.9999 • FAX 630.572.9998

OWNER



CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77604

CONTRACTOR

TBD

TITLE

PROPOSED
SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID

CTRL_HINSDALEA 11

HUB

CH VZB DOWNERS GROVE

SCU

507683

PSLOC

539618

PROJECT NUMBER

2211-005-U01-N011

DRAWN BY

JCS

DATE DRAWN

05/03/2022

05/14/22

PERMIT

JCS

NO.

DATE

DESCRIPTION

BY

REVISIONS

SHEET NUMBER

SWF-7

7 OF 12

CONDUCTOR	COLOR CODE
POSITIVE	RED
NEGATIVE	BLACK

CONDUCTOR	COLOR CODE
POSITIVE	BLACK
NEUTRAL	

CABLE TYPE	COLOR CODE
GROUND CABLE	GREEN

- NOTES:
1. ALL INSTALLED CABLES TO BE RUN WITHIN EXISTING POLE WHEREVER POSSIBLE
 2. ALL INSTALLED CABLES TO HAVE PROPER TAGGING IDENTIFICATION ASSIGNED

12/2 SOOW SPECIFICATIONS:



AWG SIZE: 12
NO. OF CONDUCTORS: 2
CONDUCTOR STRANDING: 65/30
NO. OF STRANDS: 65
STRAND SIZE: 30
NOMINAL INSULATION THICKNESS (in): 0.045
JACKET THICKNESS (in): 0.090
NOMINAL O.D. OF CABLE (in): 0.570
AMPS: 25
APPROXIMATE LBS/MFT: 195
UL STYLE: SOOW
CSA TYPE: SOOW
VOLTAGE: 600
MAXIMUM TEMPERATURE: 90°C
CONDUCTOR MATERIAL: BARE COPPER
INSUL. MATERIAL: ETHYLENE PROPYLENE DIENE MONOMER RUBBER (EPDM)
JACKET MATERIAL: CHLORINATED POLYETHYLENE (CPE)
JACKET COLOR: BLACK

LOAD CENTER EQUIPMENT SCHEDULE

EQUIPMENT	RATING	PART NO.
LOAD CENTER BOX	N/A	QC6-12L-100RB
RETAINING CLIP	N/A	PK2MB
MAIN BREAKER	60 AMP	Q0260
INDIVIDUAL BREAKER	15 AMP	Q0115

ENGINEER
CCSI
NETWORKS
A NETWORK CONNECTION COMPANY
5101 THATCHER RD.
DOWNERS GROVE, IL 60515
OFFICE 630.572.9999 • FAX 630.572.9998

OWNER:
CROWN CASTLE
CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77064

CONTRACTOR
TBD

TITLE:
PROPOSED
SMALL CELL NODE
55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID:
CTRL HINSDALEA 11

HUB:
CH VZB DOWNERS GROVE

SCU: 507683 PSLOC: 539618

PROJECT NUMBER:
2211-005-U01-N011

DRAWN BY: JCS DATE DRAWN: 05/03/2022

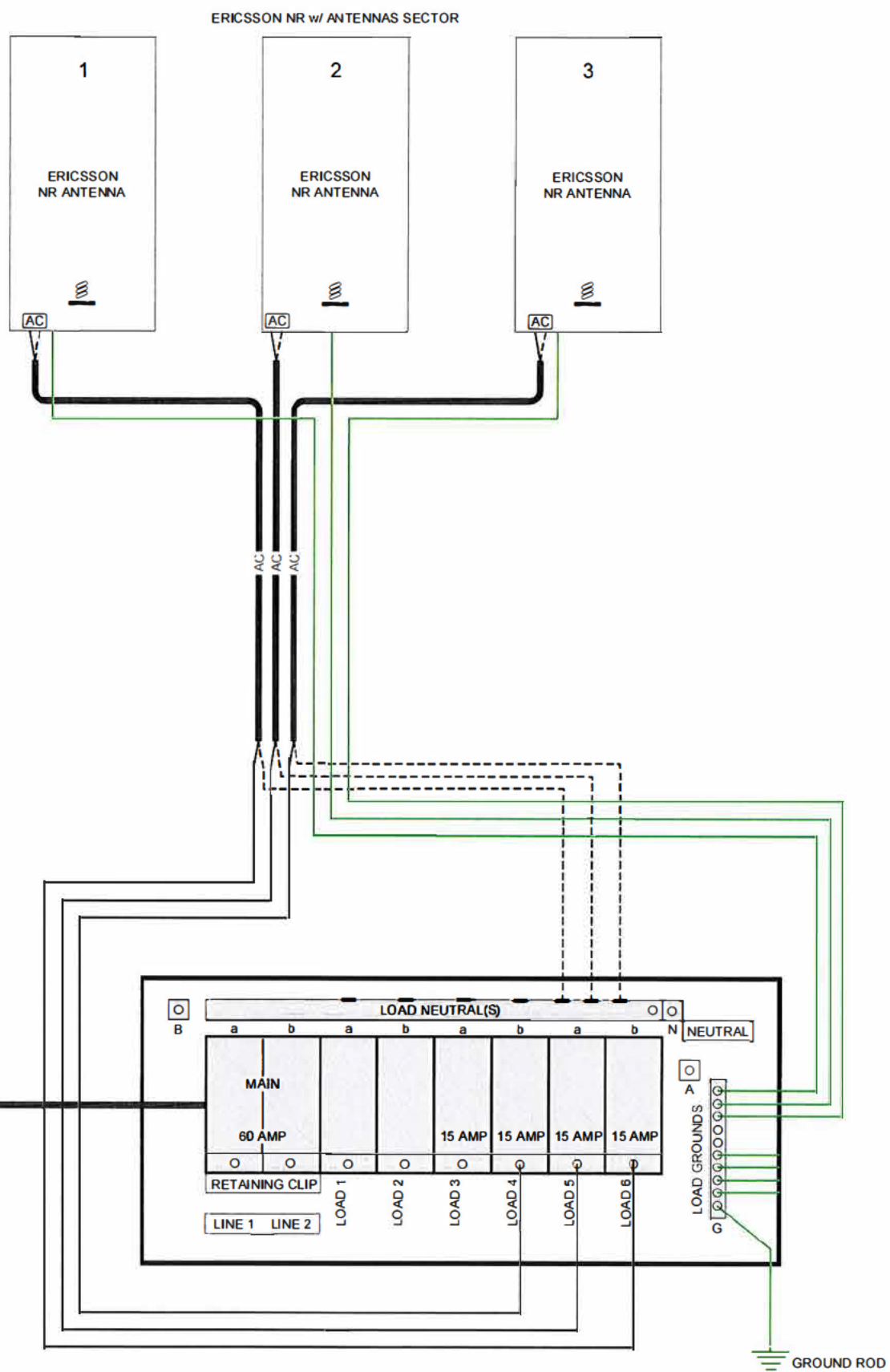
NO.	DATE	DESCRIPTION	BY

REVISIONS

SHEET NUMBER

SWF-8

8 OF 12



TO COMED POWER SUPPLY
120/208 OR 120/240 VAC

1 BREAKER PANEL W/ MAIN DISCONNECT SCHEMATIC
SCALE: N.T.S.

- NOTES:
1. GROUNDING RISER FOR DIAGRAMMATIC PURPOSES ONLY. SEE ELEVATION DRAWINGS FOR ACTUAL EQUIPMENT AND ANTENNA LOCATIONS.
 2. ALL GROUNDING CONDUCTORS TO BE PROTECTED FROM TAMPERING.

GROUNDING LEGEND:

MECHANICAL CONNECTION

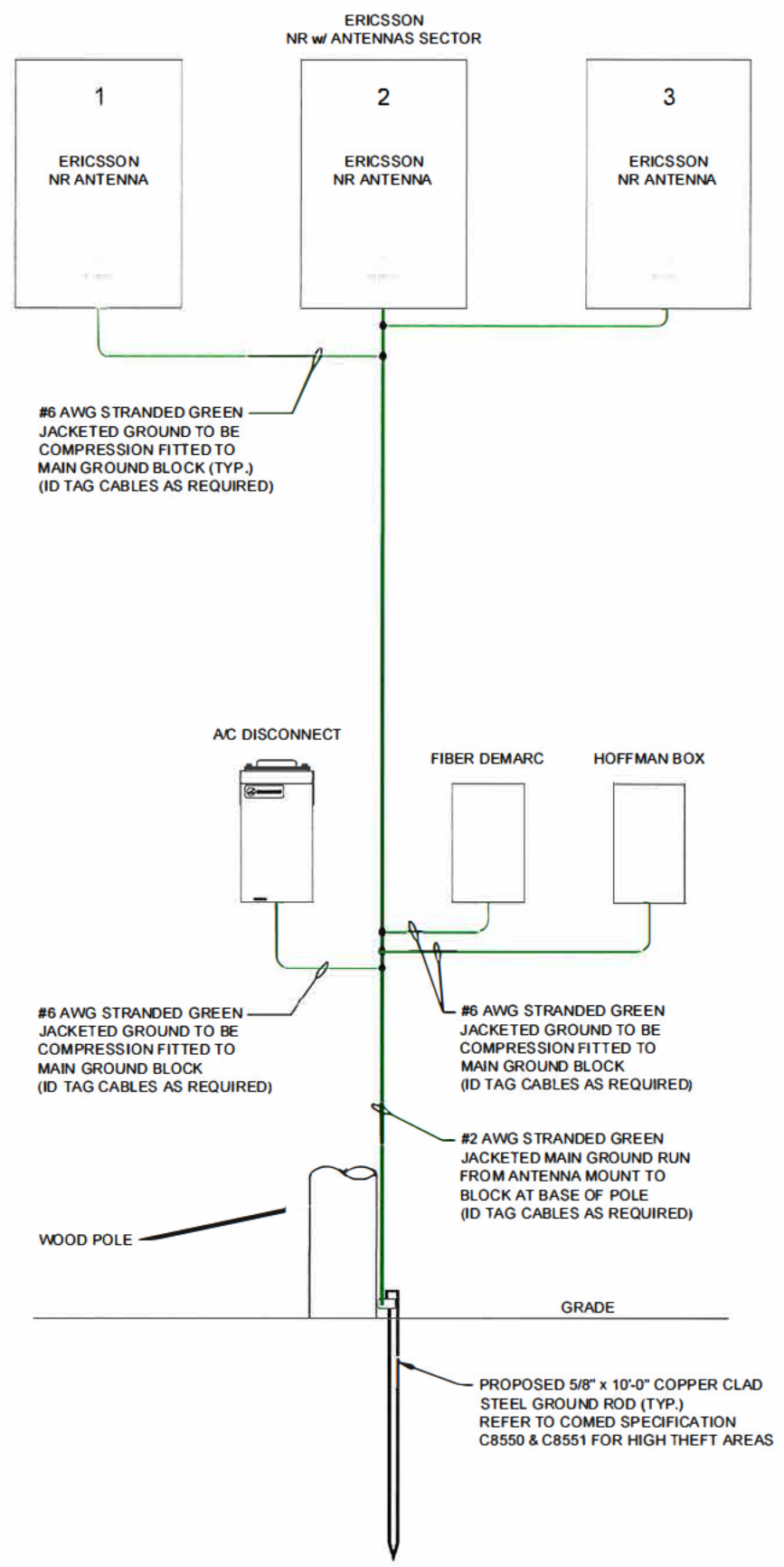
COMPRESSION CONNECTION

CABLE TYPE

COLOR CODE

GROUND CABLE

GREEN



1 GROUNDING RISER DIAGRAM
SCALE: N.T.S.

ENGINEER:

CCSI
NETWORKS

A NETWORK CONNEX COMPANY

5101 THATCHER RD.
DOWNERS GROVE, IL 60515
OFFICE 630.572.9999 • FAX 630.572.9998

OWNER:

CROWN CASTLE

CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77604

CONTRACTOR:

TBD

TITLE

PROPOSED
SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID:

CTRL HINSDALEA 11

HUB:

CH VZB DOWNERS GROVE

SCU:

507683

PSLOC:

539618

PROJECT NUMBER:

2211-005-U01-N011

DRAWN BY:

JCS

DATE DRAWN:

05/03/2022

NO.	DATE	DESCRIPTION	BY

REVISIONS

SHEET NUMBER

SWF-9

9 OF 12

COMMUNICATIONS ANTENNA OPERATED BY OTHERS

INSTALLED ON

34kV AND BELOW SYSTEMS

INSTALLATION CONFIGURATION

- C7526.A ANTENNA AND RADIO INSTALLATION POLE MOUNT (1)
.B ANTENNA AND RADIO INSTALLATION - FIBER STRAND MOUNT (20)

ITEM	CAT ID	DESCRIPTION	TABLE - 1	CAT ID	UNIT	QUANTITY
A	WEDGE CONNECTORS	C7724. --- (POWER SUPPLY CABLE - SEC)				1 1
B	WEDGE CONNECTORS	C7724. --- (POWER SUPPLY CABLE NEUT)				1 1
C	GROUNDING INSTALLATION	C8550. ---	(3)			1 1
D	CONNECTOR, COMPRESSION, 1/0 OR 2/0 STR RUN TO #8 SOL OR 2 STRD	(3) 0000368544	EA			1 1
E	WIRE, COPPER, CONTROL & INSTRUMENT, WEATHER RESISTANT, #4, SOLI	(3) 0000356408	FT			5 5
F	ANTENNA AND ALL RELATED HARDWARE AND CABLES	(2)				1 1
G	POWER SUPPLY/RADIO AND ALL RELATED HARDWARE AND CABLES	(2)				1 1

NOTES:

APPLICATION

- THIS STANDARD SHALL BE USED TO INSTALL NON ComEd COMMUNICATION ANTENNAS AND A SECONDARY SERVICE CONNECTION TO A POWER SUPPLY CABINET.
- A QUALIFIED ELECTRICAL CONTRACTOR APPROVED BY ComEd SHALL UNDERTAKE THE INSTALLATION OF THE COMMUNICATION ANTENNA IN THE ComEd SUPPLY SPACE. CONTRACTORS INSTALLING ONLY THE POWER SUPPLY CABINET IN THE COMMUNICATION SPACE, ARE NOT REQUIRED TO BE ComEd APPROVED. INSTALLATION SHALL BE AT CUSTOMER'S EXPENSE.
- CONTACT ANTENNA OWNER 60 DAYS BEFORE DISCONNECTING OR MOVING AN EXISTING WIRELESS ANTENNA. FOR CONTACT INFORMATION REFER TO LABEL AFFIXED TO THE BOTTOM OF THE POWER SUPPLY CABINET

SUPPLEMENTARY MATERIAL

- SPECIFY BY OTHER CONSTRUCTION STANDARD.
- ANTENNA, POWER SUPPLY/RADIO, ASSOCIATED BRACKETS AND SUPPORTS, RISERS AND INTERCONNECTING CABLES ARE INSTALLED, OWNED, AND MAINTAINED BY THE COMMUNICATION COMPANY.
- AT LOCATIONS WITH AN EXISTING POLE GROUND, BOND THE ANTENNA BRACKET AND POWER SUPPLY CABINET TO EXISTING GROUND LEAD AS FOLLOWS:
 - OMIT ITEM "C"
 - USE ITEMS "D" AND "E" TO CONNECT POWER SUPPLY CABINET TO EXISTING POLE GROUND LEAD.
 - ADD ONE ADDITIONAL COMPRESSION CONNECTOR (ITEM "D") AND ADEQUATE QUANTITY OF #4 COPPER WIRE (ITEM "E") TO CONNECT ANTENNA MOUNTING BRACKET TO EXISTING POLE GROUND LEAD.

INFORMATION

- THE POLE MOUNT ANTENNA AND POWER SUPPLY SHALL NOT BE INSTALLED ON POLES DESIGNATED BY ComEd AS AN EQUIPMENT POLE OR WHERE EXISTING COMMUNICATION CABINETS WILL CONFLICT.

EQUIPMENT POLES ARE DEFINED AS HAVING THE FOLLOWING ComEd EQUIPMENT: TRANSFORMERS, RECLOSERS, CAPACITORS, REGULATORS, GANG OPERATED SWITCHES, PRIMARY VOLTAGE CABLE RISERS, OR CONTROL CABINETS.

ANTENNA AND POWER SUPPLY SHALL NOT BE INSTALLED ONTO CORNER POLES, ONTO POLES WITH STATIC WIRE ATTACHMENTS, ONTO EXISTING FIBERGLASS POLE TOP EXTENSIONS, ONTO STREET LIGHT ONLY POLES, OR ONTO POLES WHERE THEY PRESENT AN UNUSUAL CLIMBING HAZARD

ALL CABINETS MUST BE INSTALLED WITH THROUGH-BOLTS ON SAME SIDE OF POLE TO MAINTAIN ABILITY TO CLIMB POLE WHEN REQUIRED. BAND-TYPE ATTACHMENTS SHALL NOT BE USED.

- MAINTAIN THE FOLLOWING CLEARANCES IN ANY DIRECTION BETWEEN AN ANTENNA IN THE ComEd SUPPLY SPACE AND ANY ENERGIZED LIVE PART.

0.750V PHASE TO PHASE 3 INCHES
4KV AND 12KV - PHASE TO PHASE - 8 INCHES
34KV PHASE TO PHASE - 17 INCHES

REFERENCE - NESC RULE 235I2.

MODIFY EXISTING CONSTRUCTION WHEN NECESSARY TO OBTAIN CLEARANCE BETWEEN PHASE CONDUCTOR AND ANTENNA MOUNTING BRACKET:

FOR THREE PHASE CONSTRUCTION WHEN EXISTING CENTER PHASE CONDUCTOR IS INSTALLED ON A POLE TOP PIN, INSTALL AN INSULATOR AND A PIN ON AN 8 FOOT OR 10 FOOT LINE ARM, AND MOVE PHASE CONDUCTOR FROM POLE TOP PIN TO INSULATOR ON ARM. SPECIFY CONDUCTOR TIES AS REQUIRED. REMOVE POLE TOP PIN AS NECESSARY. INSTALL ANTENNA MOUNTING BRACKET ON OPPOSITE SIDE OF POLE AS CENTER PHASE CONDUCTOR.

FOR EXISTING SINGLE PHASE CONSTRUCTION ON POLE TOP PIN, INSTALL A 40 INCH ARM AND INSULATOR PER C7432.C AND MOVE PHASE CONDUCTOR FROM POLE TOP PIN TO INSULATOR ON ARM. REMOVE POLE TOP PIN AS NECESSARY.

NO MODIFICATIONS ARE REQUIRED WHEN EXISTING CENTER PHASE CONDUCTOR IS INSTALLED ON INSULATOR ON ARM. INSTALL ANTENNA MOUNTING BRACKET ON OPPOSITE SIDE OF POLE AS CENTER PHASE CONDUCTOR.

- ANTENNA OWNER IS RESPONSIBLE FOR PERFORMING POLE LOAD CALCULATIONS AND DETERMINING IF A GIVEN STRUCTURE IS ADEQUATE FOR THE ADDITIONAL LOAD ADDED BY ANY SUCH INSTALLATION.
 - ANTENNA EQUIPMENT SHALL HAVE RADIO FREQUENCY (RF) WARNING LABELS ATTACHED THAT ARE CLEARLY MARKED AND VISIBLE FROM THE GROUND. THE LABELS SHALL CONTAIN THE COMPANY SITE NAME, AND A 24-HOUR CONTACT PHONE NUMBER.
 - ANTENNA DESIGN MUST PROVIDE MEANS OF DE-ENERGIZATION TO ALLOW ComEd PERSONNEL TO SAFELY WORK ON THEIR FACILITIES. REFERENCE - NESC RULE 4200.
- AFTER CONTACTING ANTENNA OWNER, ComEd TO DISCONNECT POWER TO ANTENNA BEFORE WORKING ON POLE IN AREA BEYOND RF WARNING SIGN

- ALL VERTICAL RUNS OF COMMUNICATION CONDUCTORS PASSING THROUGH THE ComEd SUPPLY SPACE SHALL BE INSTALLED AS FOLLOWS:

COMMUNICATION CABLES THAT ARE METAL SHEATHED MUST HAVE A NON METALLIC COVERING FROM 40 INCHES ABOVE TO 6 FEET BELOW THE SUPPLY CONDUCTORS.

INSULATED COMMUNICATION CONDUCTORS MUST HAVE A NON-METALLIC COVERING FROM 40 INCHES ABOVE TO 6 FEET BELOW THE SUPPLY CONDUCTORS.

- COMMUNICATION GROUNDING CONDUCTORS MUST HAVE A NON METALLIC COVERING FROM 40 INCHES ABOVE TO 6 FEET BELOW THE SUPPLY CONDUCTORS.

COMMUNICATION CONDUCTORS MUST MAINTAIN A CLEARANCE TO THROUGH-BOLTS AND OTHER METAL OBJECTS EQUAL TO 1/8 OF THE POLE CIRCUMFERENCE, BUT NOT LESS THAN 2 INCHES. THIS CLEARANCE CAN BE REDUCED TO 1 INCH FOR EFFECTIVELY GROUNDED CONDUCTORS.

REFERENCE - NESC RULE 239H.

- ANTENNA SHALL UTILIZE A WOOD OR FIBERGLASS MOUNTING BRACKET ATTACHED AT THE TOP OF POLE AS SHOWN. MAXIMUM HEIGHT OF ANTENNA AND MOUNTING BRACKET NOT TO EXCEED 8 FEET ABOVE TOP OF POLE.

WHEN POLE SELECTED FOR ANTENNA INSTALLATION NEEDS REPLACEMENT, A TALLER POLE MAY BE INSTALLED IN LIEU OF A SHORTER NEW POLE WITH AN ANTENNA MOUNTING BRACKET. HEIGHT OF NEW POLE NOT TO EXCEED HEIGHT OF PREVIOUS POLE PLUS HEIGHT OF MOUNTING BRACKET ComEd TO ATTACH TO TALLER NEW POLE AT SAME ELEVATION AS PREVIOUS SHORTER POLE, LEAVING TOP OF NEW POLE FOR 3rd PARTY ANTENNA INSTALLATION.

- ALL THIRD PARTY EQUIPMENT ON POLES SHALL BE CONSTRUCTED AND MAINTAINED TO PROVIDE AN UNOBSTRUCTED VERTICAL CLIMBING SPACE WITH MINIMUM HORIZONTAL DIMENSIONS OF 30 INCHES SQUARE FOR VOLTAGES 0-15kV, AND 40 INCHES SQUARE FOR VOLTAGES 15kV-38kV. CLIMBING SPACE OF THESE DIMENSIONS SHALL BE CONTINUED VERTICALLY 40 INCHES ABOVE AND BELOW THE LIMITING EQUIPMENT.

REFERENCE NESC RULE 236.

- ONLY POLES THAT ARE ComEd TRUCK ACCESSIBLE SHALL BE SELECTED FOR THIRD PARTY ANTENNA ATTACHMENTS.

- THE FIBER STRAND MOUNT ANTENNA AND ASSOCIATED POLE MOUNTED DISCONNECT SWITCH SHALL NOT BE INSTALLED ONTO POLES HAVING THE FOLLOWING ComEd EQUIPMENT: RECLOSERS, CAPACITORS, REGULATORS, GANG OPERATED SWITCHES, PRIMARY VOLTAGE CABLE RISERS, CONTROL CABINETS, STREET LIGHT ONLY POLES, AND ONTO POLES WHERE THEY PRESENT AN UNUSUAL CLIMBING HAZARD.

ENGINEER



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CONTRACTOR

TBD

TITLE

PROPOSED
SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID

CTRL HINSDALEA 11

HUB

CH VZB DOWNERS GROVE

SCU

507683 PSLOC: 539618

PROJECT NUMBER

2211-005-U01-N011

DRAWN BY

JCS

DATE DRAWN

05/03/2022

05/14/22

NO. DATE

PERMIT

DESCRIPTION

JCS

BY

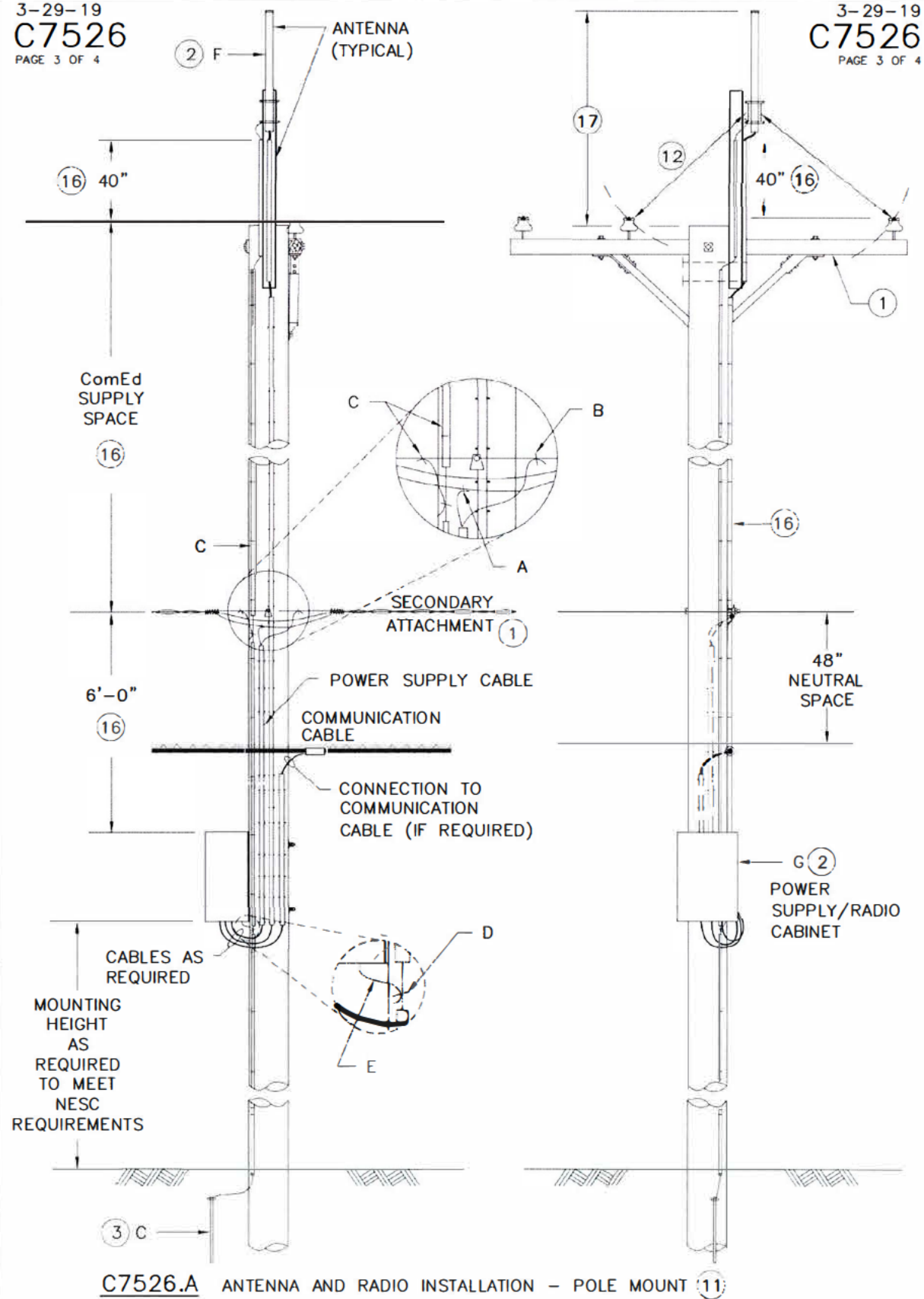
REVISIONS

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C7526
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STRUCTURAL NOTES:

1. ALL WOOD LUMBER SHALL BE SOUTHERN YELLOW PINE OR EQUIVALENT, NO WITH A MINIMUM FB=1,000 PSI. LUMBER SHALL CONFORM TO THE LATEST NFPA SPECIFICATIONS.
2. ALL WOOD SHALL BE TREATED WOOD AS PER THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA). DRILLED HOLES AND CUT ENDS SHALL BE TREATED WITH A PRESERVATIVE, COPPER NAPHTHENATE OR OXINE COPPER OR EQUIVALENT.
3. ALL THRU-BOLTS, HEX NUTS & WASHERS SHALL BE HOT-DIP GALVANIZED AND CONFORM TO ASTM A307 SPECIFICATIONS.

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SHEET NUMBER

SWF-11

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GENERAL NOTES:

1. THESE NOTES SHALL BE CONSIDERED A PART OF THE WRITTEN SPECIFICATIONS.
2. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED IN THE CONTRACT DOCUMENTS.
3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTOR(S) SHALL VISIT THE JOB SITE(S) AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED PER THE CONTRACT DOCUMENTS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION CONSTRUCTION/PROJECT MANAGER AND ENGINEER/CONSTRUCTION/PROJECT MANAGER.
4. THE CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED ON ANY WORK NOT CLEARLY DEFINED OR IDENTIFIED IN THE CONSTRUCTION DOCUMENTS BEFORE STARTING ANY WORK.
5. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES, INCLUDING APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS.
6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. IF THESE RECOMMENDATIONS ARE IN CONFLICT WITH THE CONTRACT DOCUMENTS AND/OR APPLICABLE CODES OR REGULATIONS, REVIEW THE CONFLICT FOR DIRECTION WITH THE IMPLEMENTATION CONSTRUCTION/PROJECT MANAGER AND ENGINEER/CONSTRUCTION/PROJECT MANAGER PRIOR TO PROCEEDING.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATION OF ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE IMPLEMENTATION CONSTRUCTION/PROJECT MANAGER AND WITH THE AUTHORIZED REPRESENTATIVE OF ANY OUTSIDE POLE OR PROPERTY OWNER.
8. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, PAVING, CURBS, SIDEWALKS, ADA RAMPS, VEGETATION, GALVANIZED SURFACE OR OTHER EXISTING ELEMENTS AND UPON COMPLETION OF THE WORK, REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION TO THE SATISFACTION OF MUNICIPALITY OR PROPERTY OWNER.
9. KEEP THE GENERAL AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH, AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION DAILY.
10. PLANS ARE INTENDED TO BE DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED UNLESS OTHERWISE NOTED. RELY ONLY ON ANNOTATED DIMENSIONS AND REQUEST INFORMATION IF ADDITIONAL DIMENSIONS ARE REQUIRED.
11. THE EXISTENCE AND LOCATION OF UTILITIES AND OTHER AGENCY'S FACILITIES ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. OTHER FACILITIES MAY EXIST BEYOND WHAT IS NOTED. CONTRACTOR SHALL VERIFY LOCATIONS PRIOR TO START OF CONSTRUCTION AND USE EXTREME CARE AND PROTECTIVE MEASURES TO PREVENT DAMAGE TO THESE FACILITIES. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF UTILITIES OR OTHER AGENCY'S FACILITIES WITHIN THE LIMITS OF THE WORK, WHETHER THEY ARE IDENTIFIED IN THE CONTRACT DOCUMENTS OR NOT.
12. ALL MOUNTING HARDWARE SUCH AS BOLTS, NUTS, LAG SCREWS, CLEVIS, CONDUIT STRAPS, STAPLES, (ANYTHING EXPOSED AND CONNECTING EQUIPMENT TO THE POLE) SHALL BE HOT DIPPED GALVANIZED, UNLESS OTHERWISE STATED. ANY DAMAGE CAUSED TO PAINTED AREAS SHALL BE TOUCHED-UP AS REQUIRED.

WIRELESS CARRIER CONSTRUCTION NOTES:

1. CONTRACTOR IS TO FOLLOW MOST CURRENT WIRELESS CARRIER NADV/STANDARDS DOCUMENTS PROVIDED TO COMPLETE THIS INSTALLATION.
2. CONTRACTOR TO REFER TO THE MOST CURRENT WIRELESS CARRIER NADV FOR APPROVED COAXIAL PROVIDERS AND LINE SWEEP TESTING PROCEDURES.
3. CONTRACTOR SHALL INCLUDE AT LEAST ONE "ANRITSU" CERTIFIED LINE SWEEP TECHNICIAN ON SITE DURING ANY WIRELESS CARRIER JOB RELATED TO INSTALLATION OR MAINTENANCE OF COAXIAL CABLE, ANTENNAS, TT-LNA, RF CONNECTORS, JUMPERS, OR DIPLEX FILTERS.
4. CONTRACTOR SHALL COMPLETE WIRELESS CARRIER PROVIDED "SMALL CELL SWEEP REPORT" WITH ALL INFORMATION FILLED IN ACCURATELY AND COMPLETELY.
5. CONTRACTOR TO REFER TO THE MOST CURRENT WIRELESS CARRIER NADV FOR APPROVED "PIM" TEST EQUIPMENT AND GUIDELINES.
6. CONTRACTOR IS TO USE BATTERY POWERED "PIM" EQUIPMENT TO VALIDATE THE FINAL LOCATION OF THE COAXIAL JUMPER AND ANTENNA ARE FREE OF INTERNAL AND EXTERNAL "PIM" SOURCES.
7. CONTRACTOR SHALL PROVIDE AT LEAST ONE TECHNICAL LEAD THAT IS CERTIFIED AND PROFICIENT IN EXECUTING, INTERPRETING, AND RECORDING "PIM" MEASUREMENTS.
8. ALL CABLE AND CABLE EQUIPMENT IDENTIFICATION TAGGING SHALL BE PLASTIC TAGS WITH WAX STRINGS FOR "FIBER" AND "POWER" WITHIN THE QUAZITE ENCLOSURE AND ON THE LIGHT POLE. AND SHALL COMPLY WITH THE LATEST WIRELESS CARRIER STANDARDS.
9. THE LOGO PLACARD ON THE COVER OF THE QUAZITE ENCLOSURE SHALL CLEARLY IDENTIFY OWNER.

ROW POWER CONSTRUCTION NOTES:

1. 120/240 POWER OR 120/208 SECONDARY REQUIRED FOR 3-WIRE SERVICE.
2. SECONDARY POWER SHALL BE DEPENDANT ON CURRENT AVAILABILITY(@ 3% DROP MIN. 60 AMPS), OR ESTABLISHED BY LOCAL POWER COMPANY DURING ACTUAL POWER WALK.
3. POWER ROUTE, WIRE, AND RACEWAY SIZE WILL BE DETERMINED DURING UNDERGROUND OR OVERHEAD ENGINEERING PROCESS.
4. GENERAL CONTRACTOR TO REMOVE/CLEAN ALL DEBRIS, NAILS, STAPLES, OR NON-USED VERTICALS OFF THE POLE.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH MUNICIPAL, COUNTY, STATE, AND FEDERAL REGULATIONS.
6. CALL CHICAGO DIGGERS HOTLINE AT 1-312-744-7000 48 HOURS PRIOR TO EXCAVATING.
7. ALL LANDSCAPING TO BE RESTORED TO ORIGINAL CONDITION OR BETTER.
8. ALL EQUIPMENT TO BE BONDED AS REQUIRED BY LOCAL CODES AND CLIENT REQUIREMENTS.
9. ALLOW 3' CLEARANCE AT METERING CABINET DOOR OPENING (IF REQUIRED).

STANDARD GROUNDING NOTES:

1. GROUND TESTED AT 5 OHMS OR LESS.
2. 5/8" x 10' OR 12' ROD, CAD WELD BELOW GRADE.
3. MINIMUM # 6 GROUND AND BOND WIRE.
4. GROUNDS ROD TO BE PLACED (1) WITHIN NEW POLE FOUNDATION .
5. ALL GROUND FASTENERS AND RELATED HARDWARE SHALL BE OF STAINLESS STEEL AND DILECTRIC GREASE SHALL BE USED AT ALL CONNECTIONS. ALL GROUNDING MUST MEET OR EXCEED NESC AND WIRELESS CARRIER STANDARDS.

PROPOSED CONCEALMENT NOTES:

ALL PROPOSED ITEMS ARE TO BE PAINTED TO MATCH THE POLE.

ENGINEER:



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OFFICE 630.572.9999 • FAX 630.572.9998

OWNER:



CROWN CASTLE FIBER
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SUITE 500
HOUSTON, TX 77604

CONTRACTOR

TBD

TITLE

PROPOSED
SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID:
CTRL HINSDALEA 11

HUB:
CH VZB DOWNERS GROVE

SCU: 507683 PSLOC: 539618

PROJECT NUMBER:
2211-005-U01-N011

DRAWN BY: JCS DATE DRAWN: 05/03/2022

05/14/22	PERMIT	JCS
NO.	DATE	DESCRIPTION
		BY

REVISIONS

SHEET NUMBER

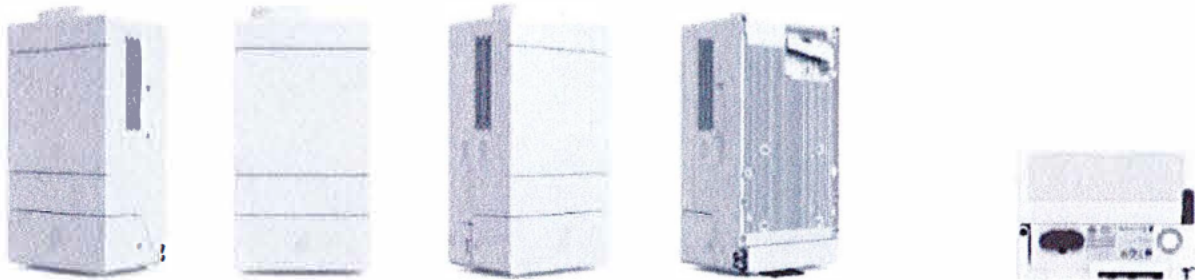
SWF-12

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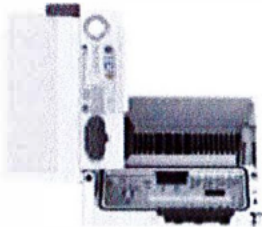
PROPOSED CONCEALMENT NOTES:

ALL PROPOSED ITEMS ARE TO BE PAINTED TO MATCH THE POLE.

Streetmacro 6705 Mechanical

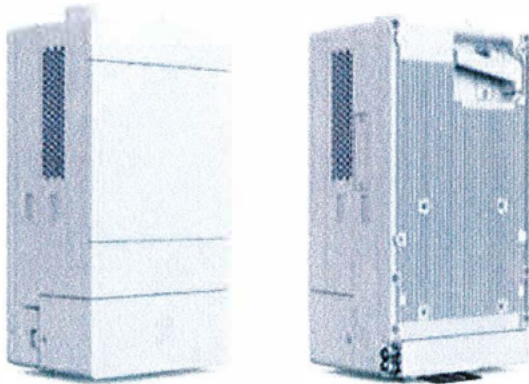


SM 6705	Height	Width	Depth	Weight
without protruding items	366 mm 14.4 In	200 mm 7.9 In	150 mm 5.9 In	~31 lbs (~13 Kg)
with protruding items including GNSS antenna	409 mm 16.2 In	204 mm 8.1 In	154 mm 6.1 In	



Streetmacro 6705

Spectrum	28GHz (n261/257) 39 GHz (n260) 24GHz (n258)
IBW	Full band
Total Carrier BW	800 MHz, continuous/non-continuous carriers
EIRP	59 dBm (CM1, 800MHz config), 62dBm (CM2, 400MHz)
EIS	-116/-113 dBm (CM1, 800MHz config)
Layers	2 @ 800 MHz, 4 @ 400MHz
Modulation	64/64 (256) QAM UL/DL
Service Angular Range:	± 60°, ± 15°
Total Antenna BW	1600 MHz
Throughput	~ 5 Gbps DL/ 1 Gbps UL
Synchronization	1588v2, GNSS
Power Consumption	<350 W typical, <500 W Max
Weight	~ 13 kg
Dimensions	366x150x200 mm w/protrusions 409x154x204 mm w/protrusions (eg GNSS)
Operational conditions	-40 to +55 degrees
Cooling	Active
Power	AC, 100-250 V
IP Class	IP 65



EQUIPMENT SPECIFICATIONS SUPPLEMENT
INDEX OF DRAWINGS:

SHEET	TITLE
SWF-S.1	6705 ERICSSON NR ANTENNA SPECIFICATIONS

ENGINEER



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TITLE

PROPOSED
SMALL CELL NODE

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CROWNCASTLE ID

CTRL HINSDALEA_11

HUB:

CH VZB DOWNERS GROVE

SCU

507683

PSLOC:

539618

PROJECT NUMBER:

2211-005-U01-N011

DRAWN BY:

JCS

DATE DRAWN

05/03/2022

06/14/22

PERMIT

JCS

NO.

DATE

DESCRIPTION

BY

REVISIONS

SHEET NUMBER

SWF-S.1

OF 12

Specifications and Drawing Plans

(includes photographs of site location)

(equipment types and model numbers)

(next page)

(SECOND IDENTICAL SET)



PROPOSED SMALL CELL NODE

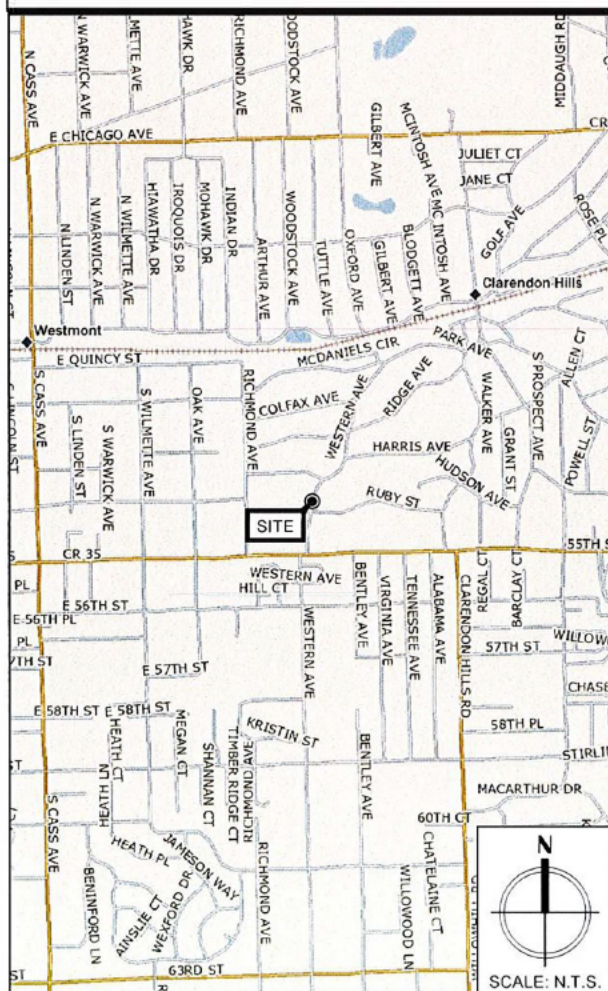
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CROWN CASTLE ID:
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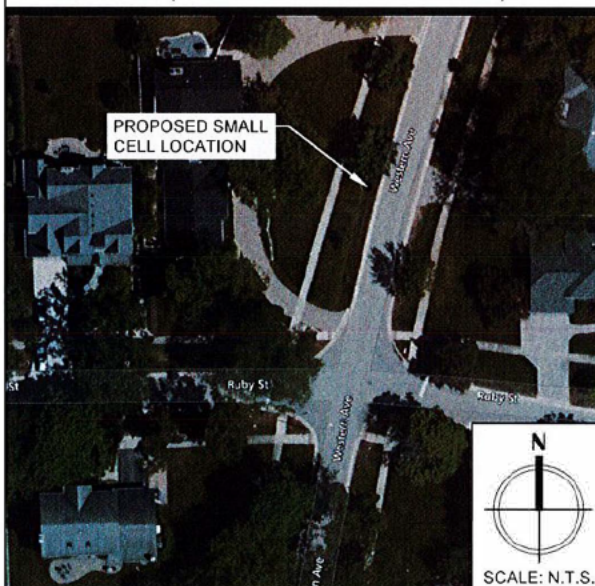
PSLOC:
539618

HUB:
CH VZB DOWNERS GROVE
SEC 10, T38N-R11E,
CLARENDON HILLS, DuPAGE COUNTY, ILLINOIS

LOCATION MAP:



PLAN VIEW (55TH ST & WESTERN AVE):



INDEX OF DRAWINGS:

SHEET	TITLE
SWF-1	COVER
SWF-2	EXISTING & PROPOSED POLE IMAGE
SWF-3	TRAFFIC CONTROL - TYPICALS
SWF-4	EXISTING & PROPOSED EAST ELEVATION
SWF-5	EXISTING & PROPOSED SOUTH ELEVATION
SWF-6	WIRING DIAGRAM & EQUIPMENT DETAILS
SWF-7	OVERHEAD POLE DETAIL
SWF-8	BREAKER PANEL W/ MAIN DISCONNECT SCHEMATIC
SWF-9	GROUNDING RISER DIAGRAM
SWF-10	COMED STANDARD C7526 NOTES & SPECS
SWF-11	COMED STANDARD C7526 DIAGRAMS
SWF-12	GENERAL AND SPECIFIC PROJECT NOTES

EQUIPMENT SPECIFICATIONS SUPPLEMENT

SWF-S.1	6705 ERICSSON NR ANTENNA SPECIFICATIONS
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PROJECT DESCRIPTION:

PROJECT NO: 2211-005-U01-N011

PROPOSED INSTALLATION OF SMALL CELL EQUIPMENT AND ANTENNAS ON NEW WOOD POLE. NEW POLE IS TO REPLACE EXISTING. FIBER AND POWER CABLES VIA NEW CONDUIT (UNDER SEPERATE PERMIT SUBMISSION).

SITE COORDINATES:

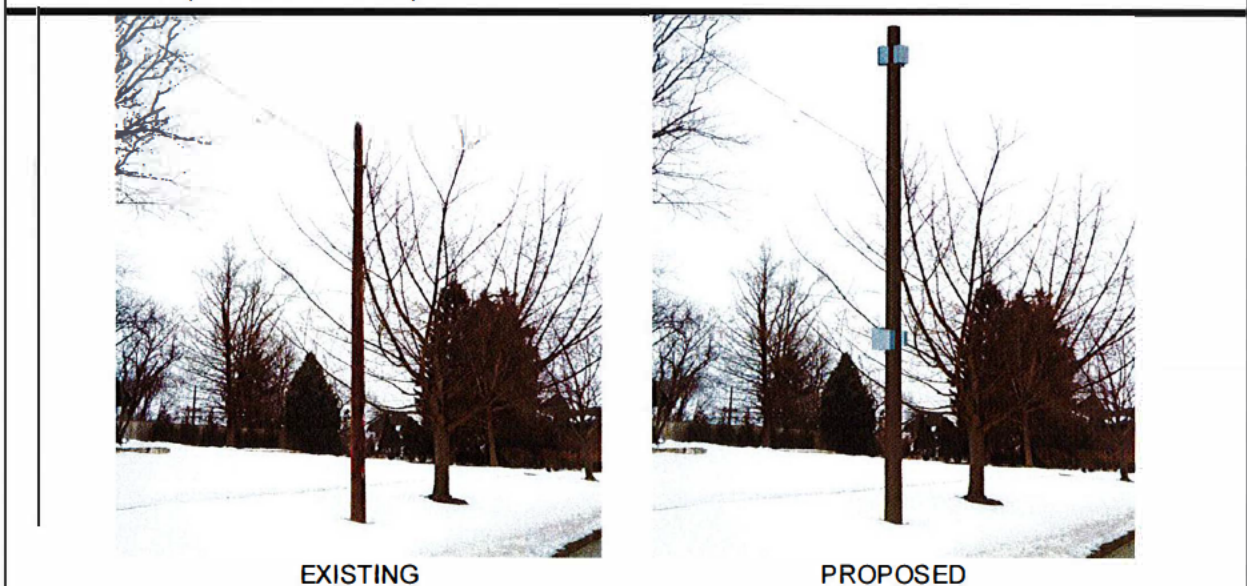
LATITUDE: N 041° 47' 24.85" (DEGREE, MINUTES, SECONDS)
N 41.79024 (DECIMAL)

LONGITUDE: W 087° 57' 44.74" (DEGREE, MINUTES, SECONDS)
W 87.96243 (DECIMAL)

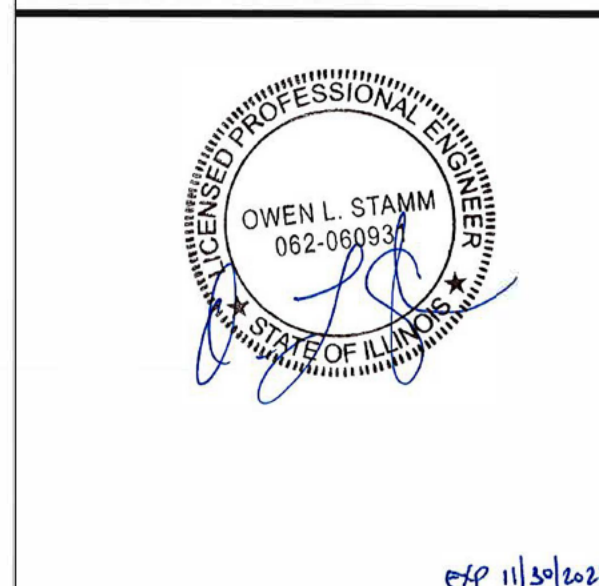
SITE ELEV.: 738.20' ± 3.0'

FAA 1A CERTIFICATION: MAY 11, 2022

POLE IMAGE (LOOKING NORTH)



ENGINEER CERTIFICATION



ENGINEER

CCSI
NETWORKS

A NETWORK COMPANY

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OWNER

CROWN CASTLE

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CROWN CASTLE ID:
CTRL_HINSDALEA_11

HUB
CH VZB DOWNERS GROVE

SCU: 507683 PSLOC: 539618

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06/14/22		PERMIT	JCS

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SWF-1

1 OF 12



Know what's below.
Call before you dig.

REQUIRES 2 BUSINESS DAYS
NOTICE BEFORE YOU EXCAVATE




① EXISTING POLE
SCALE: NONE



② PROPOSED POLE
SCALE: NONE

ENGINEER

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CROWN CASTLE ID
 CTRL HINSDALEA 11

HUB
 CH VZB DOWNERS GROVE

SCU	PSLOC
507683	539618

PROJECT NUMBER
 2211-005-U01-N011

DRAWN BY	DATE DRAWN
JCS	05/03/2022

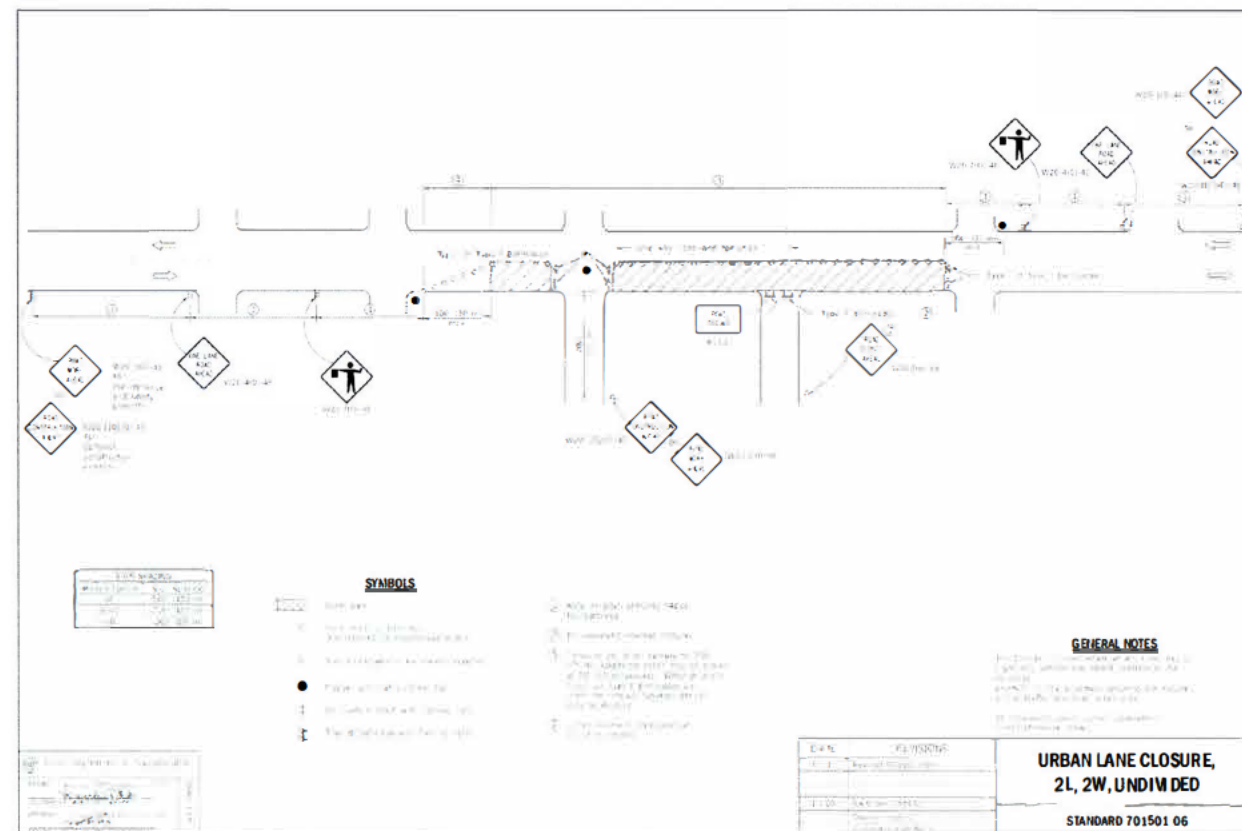
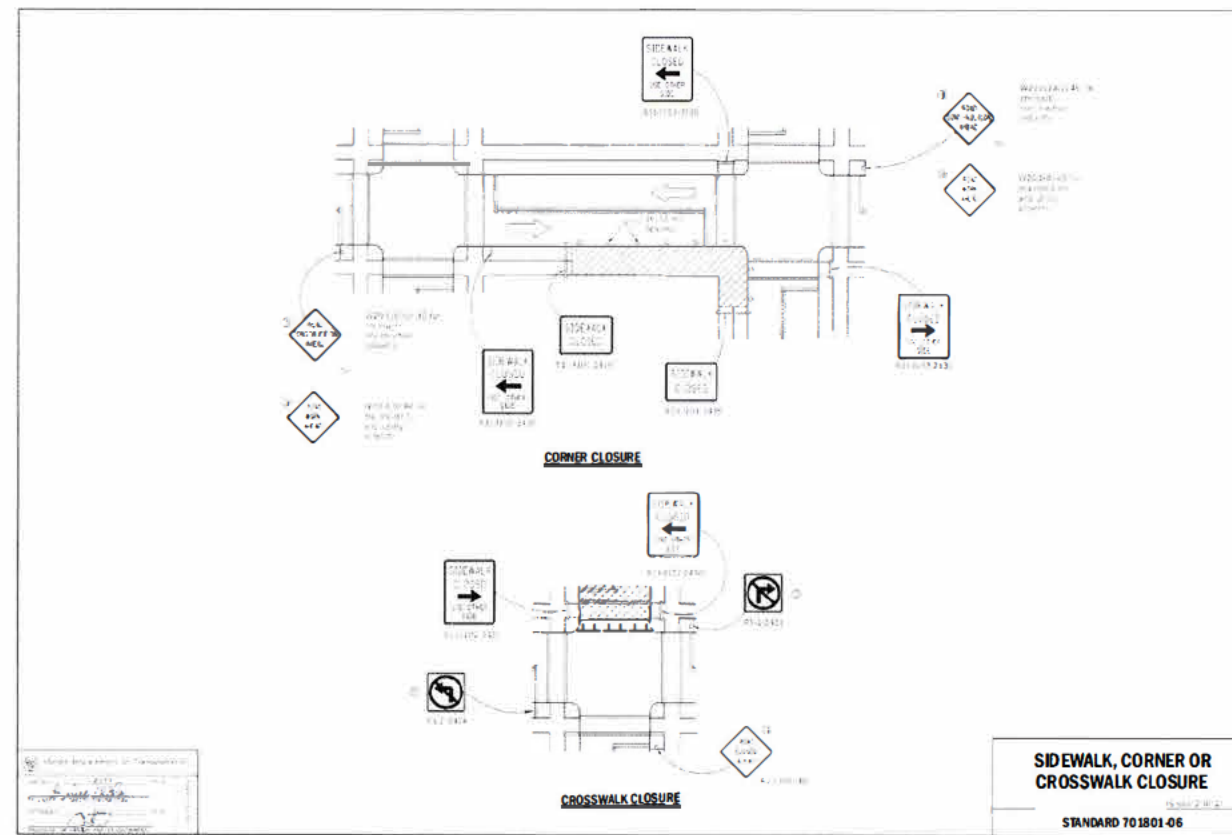
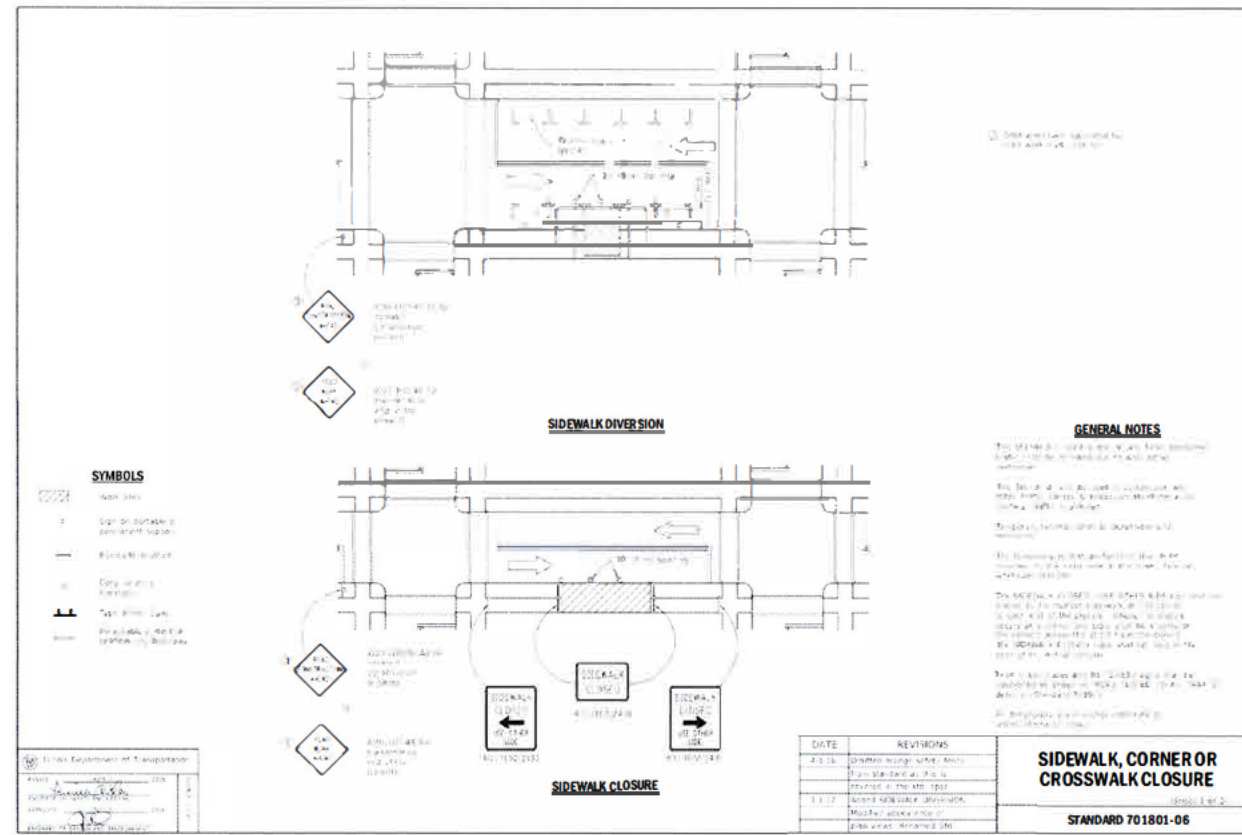
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NO.	DATE	DESCRIPTION
BY		

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SHEET NUMBER

 SWF-2

TRAFFIC CONTROL - TYPICALS



ENGINEER:

CCSI
NETWORKS

A NETWORK CONCEPT COMPANY

5101 THATCHER RD
DOWNERS GROVE, IL 60515
OFFICE 630.572.9999 • FAX 630.572.9998

OWNER:

CROWN CASTLE

CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77604

CONTRACTOR:

TBD

TITLE

PROPOSED
SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID

CTRL_HINSDALEA_11

HUB

CH VZB DOWNERS GROVE

SCU: 507683 PSLOC: 539618

PROJECT NUMBER

2211-005-U01-N011

DRAWN BY: JCS DATE DRAWN: 05/03/2022

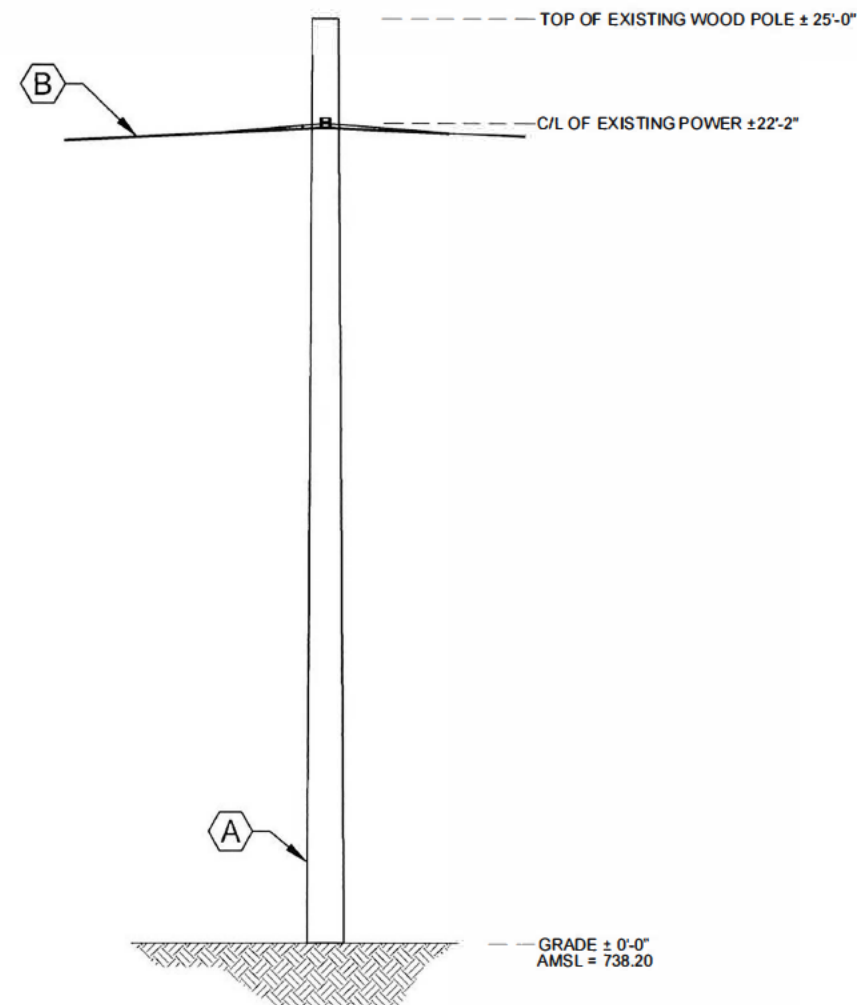
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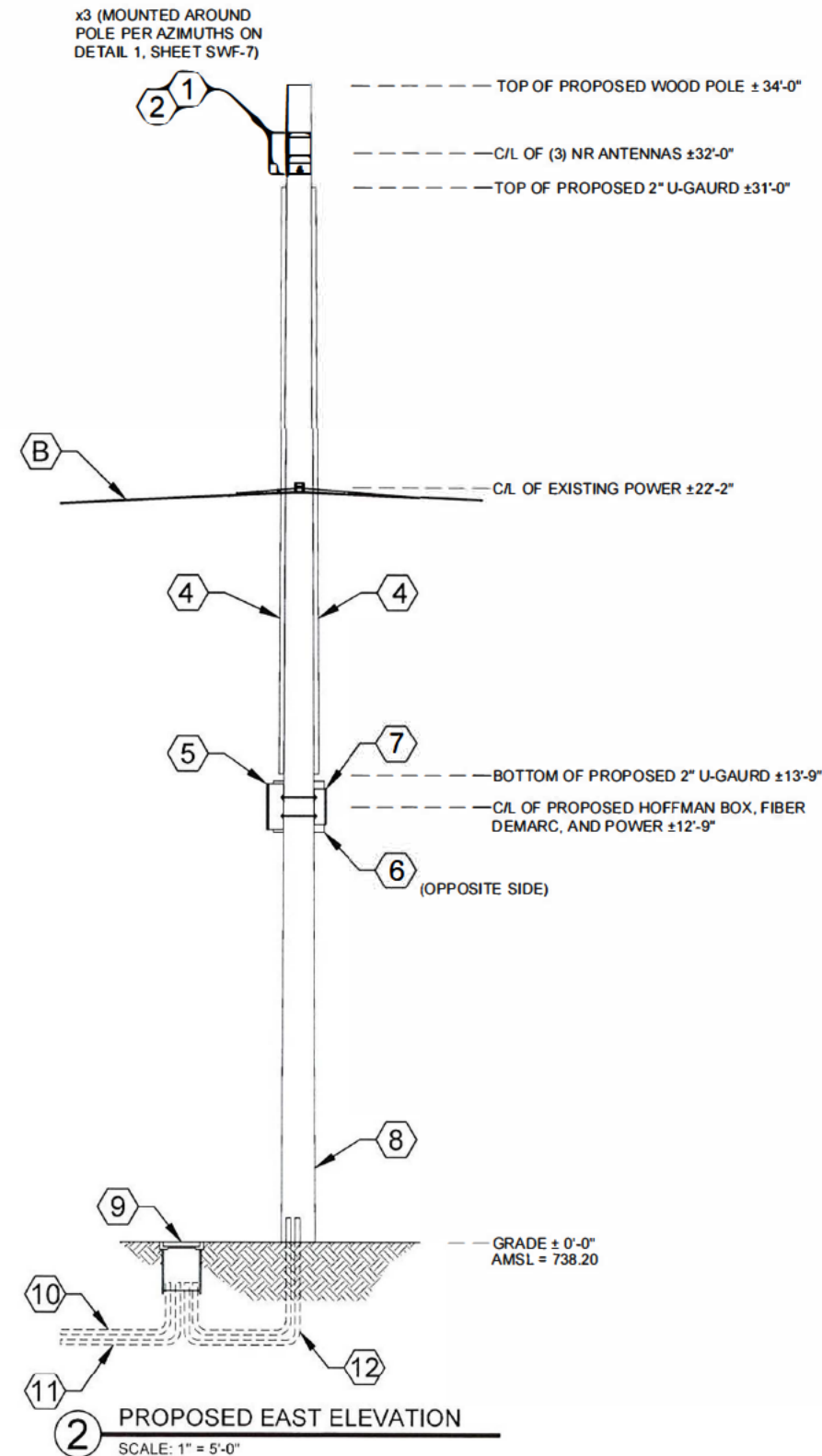
SHEET NUMBER

SWF-3

FOR NORMAL SOIL CONDITIONS THE MINIMUM
POLE EMBEDMENT DEPTH WOULD BE 6-FEET
BELOW GRADE



1 EXISTING EAST ELEVATION
SCALE: 1" = 5'-0"



- 1 (3) ERICSSON 6705 NR RADIOS w/ ANTENNAS.
MODEL NO. 6705
14.40" x 7.90" x 5.90" (HxWxD) - 31.00 lbs. ea.
- 2 (3) AIRSCALE - HORIZONTAL RADIO MOUNT BRACKET
PART NO. ERICSSON - AIR BRACKET
3.9" x 7.9" x 11.8" (HxWxD) - 13.7 lbs.
- 3 NOT USED
- 4 2" NON-METALLIC U-GAURD ATTACHMENT
FOR FIBER/COAXIAL CABLES
- 5 HOFFMAN BOX
PART NO. A161606 (OR EQUIVALENT)
16.0" x 10.0" x 6.0" (HxWxD) - 13.7 lbs.
- 6 CHARLES FIBER DEMARC
PART NO. CFIT-C (OR EQUIVALENT)
18.00" x 18.00" x 6.00" (HxWxD) - 15.0 lbs.
- 7 AC DISCONNECT BOX
PART NO. BA206 (OR EQUIVALENT)
12.60" x 8.90" x 4.30" (HxWxD) - 9.70 lbs.
- 8 PROPOSED 40' CLASS 2 WOOD POLE
(TO REPLACE EXISTING)
- 9 PROPOSED BURIED QUAZITE ENCLOSURE TO
HOUSE GROUND ROD AND IN-LINE FUSES FOR
SMALL CELL POWER DISCONNECT
(QUAZITE COVER SHALL CORRECTLY
IDENTIFY OWNER ON LID "ID PLACARD")
(TO BE INSTALLED BY OTHERS)
- 10 (1) PROPOSED UNDERGROUND POWER CONDUIT
(TO BE INSTALLED BY OTHERS)
- 11 (1) PROPOSED FIBER CONDUIT
(TO BE INSTALLED BY OTHERS)
- 12 (2) PROPOSED 2" RIGID CONDUIT FOR POWER
& FIBER (TO BE INSTALLED BY OTHERS)

RADIO	AZIMUTH		
	A	B	C
5G	0°	120°	240°

TOTAL WEIGHT	172.5 LBS
TOTAL VOLUME OF EQUIPMENT	3.75 ft ³

(A) EXISTING COMED WOOD POLE (TO BE REPLACED)

(B) EXISTING SECONDARY POWER SUPPLY FEED ATTACHMENTS (RELOCATED AS SHOWN)

ENGINEER:



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OWNER:



CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77604

CONTRACTOR

TBD

TITLE:

PROPOSED SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID.

CTRL HINSDALEA 11

HUB:

CH VZB DOWNERS GROVE

SCU

507683

PROJECT NUMBER:

2211-005-U01-N011

DRAWN BY:

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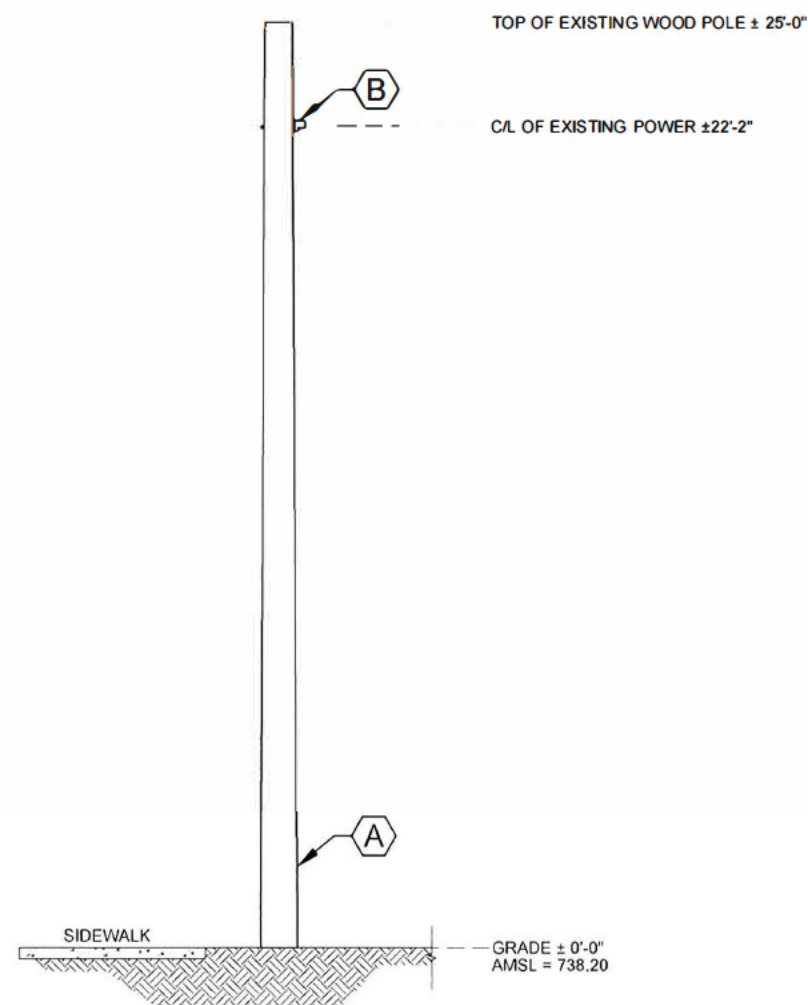
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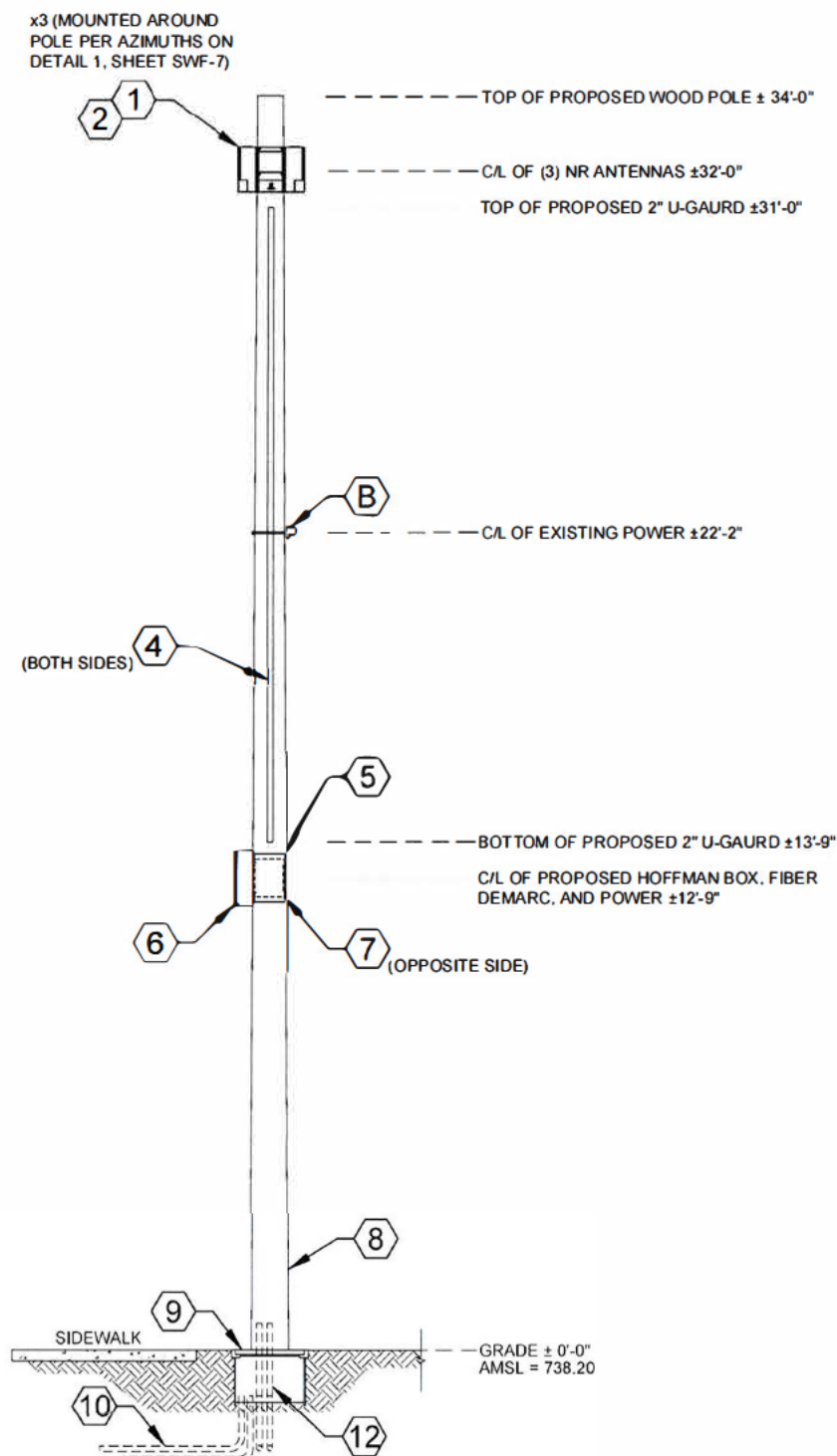
SWF-4

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FOR NORMAL SOIL CONDITIONS THE MINIMUM
POLE EMBEDMENT DEPTH WOULD BE 6-FEET
BELOW GRADE



1 EXISTING SOUTH ELEVATION
SCALE: 1" = 5'-0"



2 PROPOSED SOUTH ELEVATION
SCALE: 1" = 5'-0"

- 1 (3) ERICSSON 6705 NR ANTENNAS w/ ANTENNAS, MODEL NO. 6705
14.40" x 7.90" x 5.90" (HxVxD) - 31.00 lbs. ea.
- 2 (3) AIRSCALE - HORIZONTAL RADIO MOUNT BRACKET
PART NO. ERICSSON - AIR BRACKET
3.9" x 7.9" x 11.8" (HxVxD) - 13.7 lbs.
- 3 NOT USED
- 4 2" NON-METALLIC U-GAURD ATTACHMENT
FOR FIBER/COAXIAL CABLES
- 5 HOFFMAN BOX
PART NO. A161606 (OR EQUIVALENT)
16.0" x 10.0" x 6.0" (HxVxD) - 13.7 lbs.
- 6 CHARLES FIBER DEMARC
PART NO. CFIT-C (OR EQUIVALENT)
18.00" x 18.00" x 6.00" (HxVxD) - 15.0 lbs.
- 7 AC DISCONNECT BOX
PART NO. BA206 (OR EQUIVALENT)
12.60" x 8.90" x 4.30" (HxVxD) - 9.70 lbs.
- 8 PROPOSED 4" CLASS 2 WOOD POLE
(TO REPLACE EXISTING)
- 9 PROPOSED BURIED QUARTZ ENCLOSURE TO
HOUSE GROUND ROD AND IN-LINE FUSES FOR
SMALL CELL POWER DISCONNECT
(QUARTZ COVER SHALL CORRECTLY
IDENTIFY OWNER ON LID "ID PLACARD")
(TO BE INSTALLED BY OTHERS)
- 10 (1) PROPOSED UNDERGROUND POWER CONDUIT
(TO BE INSTALLED BY OTHERS)
- 11 (1) PROPOSED FIBER CONDUIT
(TO BE INSTALLED BY OTHERS)
- 12 (2) PROPOSED 2" RIGID CONDUIT FOR POWER
& FIBER (TO BE INSTALLED BY OTHERS)

RADIO	AZIMUTH		
	A	B	C
5G	0°	120°	240°

TOTAL WEIGHT	172.5 LBS
TOTAL VOLUME OF EQUIPMENT	3.75 ft ³

(A) EXISTING COMED WOOD POLE (TO BE REPLACED)

(B) EXISTING SECONDARY POWER SUPPLY FEED ATTACHMENTS (RELOCATED AS SHOWN)

ENGINEER:



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5101 THATCHER RD.
DOWNERS GROVE IL 60515
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OWNER



CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77604

CONTRACTOR

TBD

TITLE: PROPOSED
SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS.
DuPAGE, IL 60514

CROWN CASTLE ID:
CTRL HINSDALEA 11

HUB	CH VZB DOWNERS GROVE
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SCU:	PSLOC:
507683	539618

PROJECT NUMBER	2211-005-U01-N011
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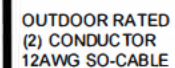
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SHEET NUMBER

SWF-5

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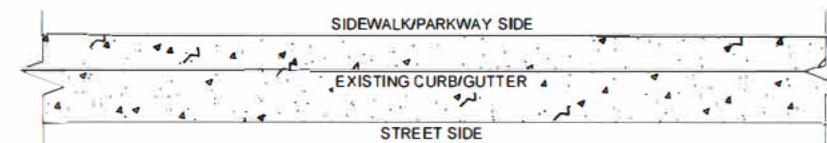
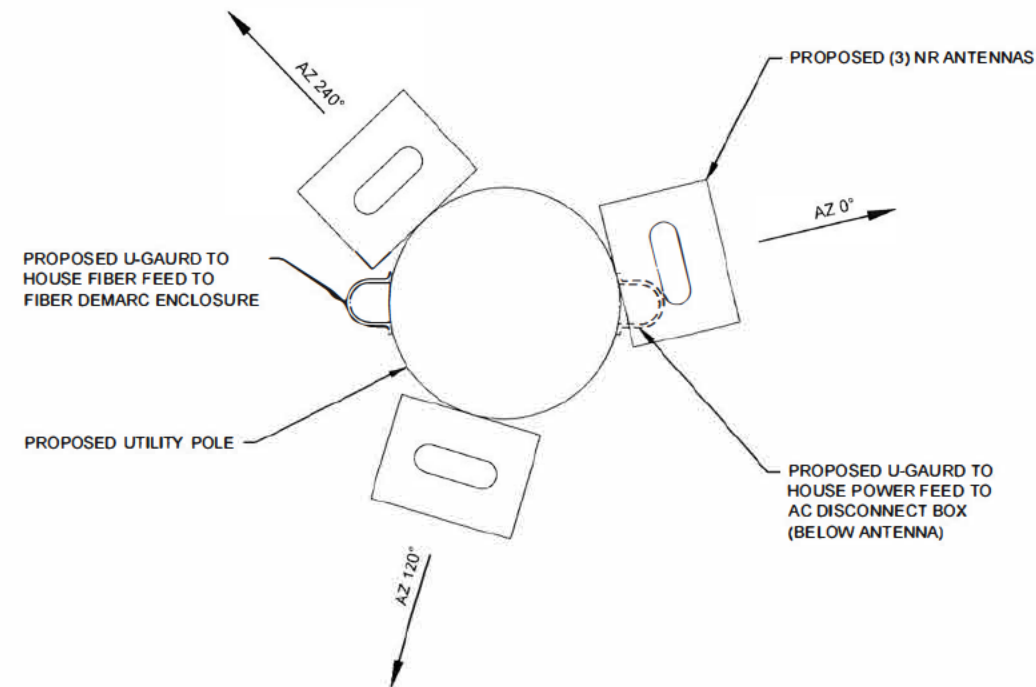
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NOT USED

NONE

1 WIRING DIAGRAM
SCALE: N.T.S.

1. ANY AND ALL DAMAGE TO POLE DUE TO CONSTRUCTION & INSTALLATION OF THIS APPLICATION SHALL BE REPAIRED AT THE COST OF THE CONTRACTOR
2. CONTRACTOR SHALL RESTORE OR REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION
3. FIBER DESIGN BY OTHERS



1 OVERHEAD POLE DETAIL
SCALE: N.T.S.



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CONTRACTOR

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NO.	DATE	DESCRIPTION	BY

SWF-7

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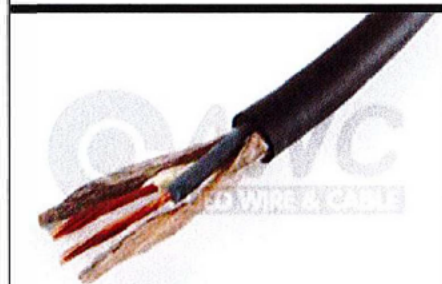
CONDUCTOR	COLOR CODE
POSITIVE	RED
NEGATIVE	BLACK

CONDUCTOR	COLOR CODE
POSITIVE	BLACK
NEUTRAL	

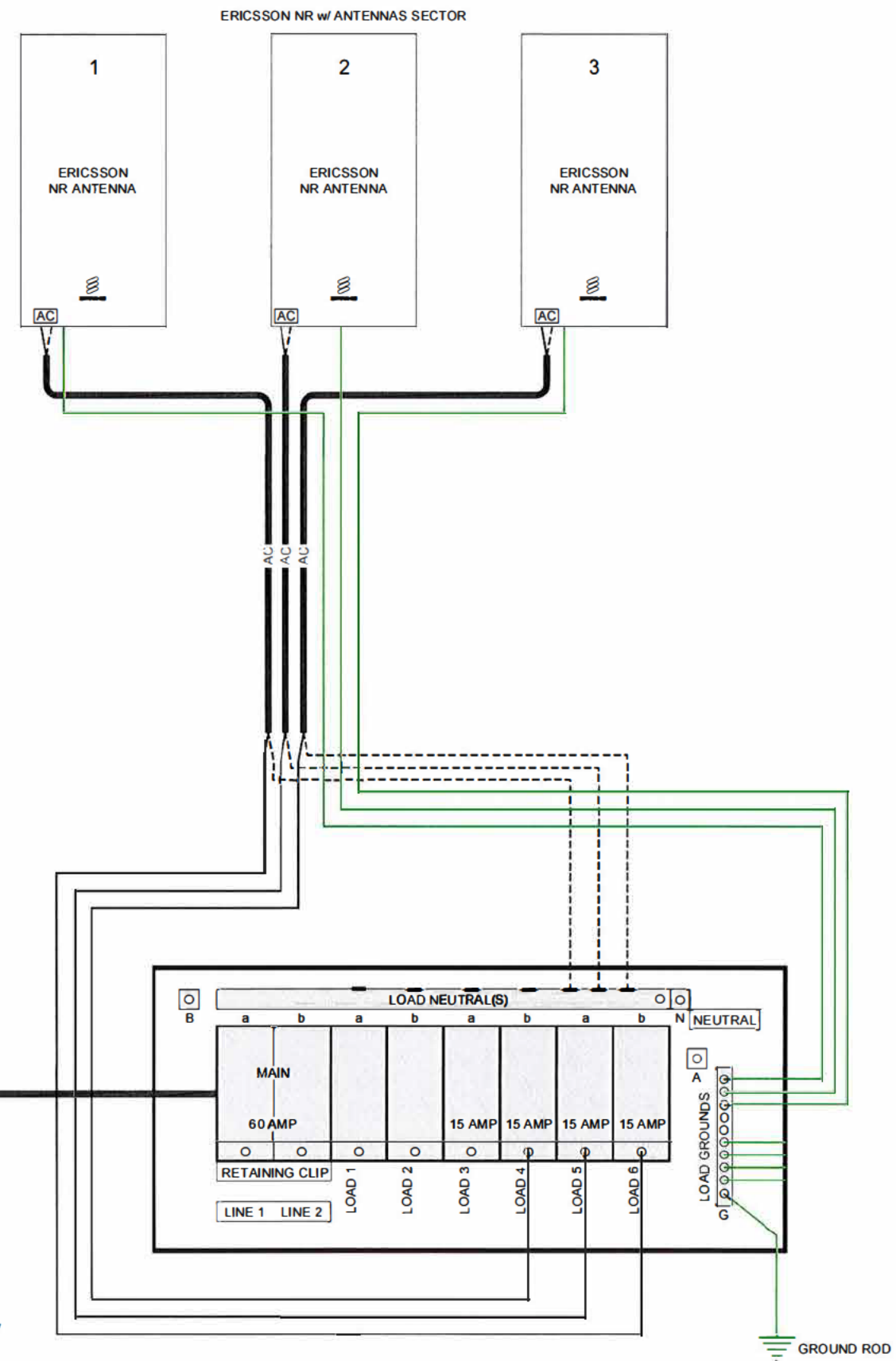
CABLE TYPE	COLOR CODE
GROUND CABLE	GREEN

- NOTES:
1. ALL INSTALLED CABLES TO BE RUN WITHIN EXISTING POLE WHEREVER POSSIBLE
 2. ALL INSTALLED CABLES TO HAVE PROPER TAGGING IDENTIFICATION ASSIGNED

12/2 SOOW SPECIFICATIONS:



AWG SIZE: 12
NO. OF CONDUCTORS: 2
CONDUCTOR STRANDING: 65/30
NO. OF STRANDS: 65
STRAND SIZE: 30
NOMINAL INSULATION THICKNESS (in): 0.045
JACKET THICKNESS (in): 0.090
NOMINAL O.D. OF CABLE (in): 0.570
AMPS: 25
APPROXIMATE LBS/MFT: 195
UL STYLE: SOOW
CSA TYPE: SOOW
VOLTAGE: 600
MAXIMUM TEMPERATURE: 90°C
CONDUCTOR MATERIAL: BARE COPPER
INSUL. MATERIAL: ETHYLENE PROPYLENE DIENE MONOMER RUBBER (EPDM)
JACKET MATERIAL: CHLORINATED POLYETHYLENE (CPE)
JACKET COLOR: BLACK



LOAD CENTER EQUIPMENT SCHEDULE		
EQUIPMENT	RATING	PART NO.
LOAD CENTER BOX	N/A	QC6-12L-100RB
RETAINING CLIP	N/A	PK2MB
MAIN BREAKER	60 AMP	Q0260
INDIVIDUAL BREAKER	15 AMP	Q0115

ENGINEER:
CCSI NETWORKS
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DOWNERS GROVE IL 60515
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OWNER:
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CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77604

CONTRACTOR:
TBD

TITLE
PROPOSED
SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID
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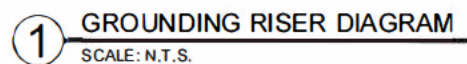
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NO.	DATE	DESCRIPTION	BY

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SHEET NUMBER
SWF-8
8 OF 12

1 BREAKER PANEL W/ MAIN DISCONNECT SCHEMATIC
SCALE: N.T.S.

1. GROUNDING RISER FOR DIAGRAMMATIC PURPOSES ONLY. SEE ELEVATION DRAWINGS FOR ACTUAL EQUIPMENT AND ANTENNA LOCATIONS.
2. ALL GROUNDING CONDUCTORS TO BE PROTECTED FROM TAMPERING.



☐ MECHANICAL CONNECTION

☒ COMPRESSION CONNECTION

CABLE TYPE	COLOR CODE
GROUND CABLE	GREEN

ENGINEER



A NETWORK CONNEX COMPANY

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OWNER



CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77604

CONTRACTOR

TBD

TITLE	PROPOSED SMALL CELL NODE
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55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID:
CTRL HINSDALEA_11

HUB
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507683	539618

PROJECT NUMBER:
2211-005-U01-N011

DRAWN BY JCS	DATE DRAWN 05/03/2022
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NO.	DATE	DESCRIPTION	BY

REVISIONS

SHEET NUMBER

SWF-9

COMMUNICATIONS ANTENNA OPERATED BY OTHERS INSTALLED ON 34kV AND BELOW SYSTEMS

INSTALLATION CONFIGURATION

- C7526.A ANTENNA AND RADIO INSTALLATION - POLE MOUNT (1)
B ANTENNA AND RADIO INSTALLATION - FIBER STRAND MOUNT (20)

ITEM	CAT ID DESCRIPTION TABLE-1	CAT ID	UNIT	QUANTITY	
				A	B
A	WEDGE CONNECTORS C7724. --- (POWER SUPPLY CABLE - SEC)			1	1
B	WEDGE CONNECTORS C7724. --- (POWER SUPPLY CABLE NEUT)			1	1
C	GROUNDING INSTALLATION C8550. ---	(3)		1	1
D	CONNECTOR, COMPRESSION, 1/0 OR 2/0 STR RUN TO #8 SOL OR 2 STRD	(3)	0000368544 EA	1	1
E	WIRE, COPPER, CONTROL & INSTRUMENT, WEATHER RESISTANT, #4, SOLI	(3)	0000356408 FT	5	5
F	ANTENNA AND ALL RELATED HARDWARE AND CABLES	(2)		1	1
G	POWER SUPPLY/RADIO AND ALL RELATED HARDWARE AND CABLES	(2)		1	1

NOTES:

APPLICATION

- THIS STANDARD SHALL BE USED TO INSTALL NON ComEd COMMUNICATION ANTENNAS AND A SECONDARY SERVICE CONNECTION TO A POWER SUPPLY CABINET
- A QUALIFIED ELECTRICAL CONTRACTOR APPROVED BY ComEd SHALL UNDERTAKE THE INSTALLATION OF THE COMMUNICATION ANTENNA IN THE ComEd SUPPLY SPACE. CONTRACTORS INSTALLING ONLY THE POWER SUPPLY CABINET IN THE COMMUNICATION SPACE, ARE NOT REQUIRED TO BE ComEd APPROVED. INSTALLATION SHALL BE AT CUSTOMER'S EXPENSE.
- CONTACT ANTENNA OWNER 60 DAYS BEFORE DISCONNECTING OR MOVING AN EXISTING WIRELESS ANTENNA. FOR CONTACT INFORMATION REFER TO LABEL AFFIXED TO THE BOTTOM OF THE POWER SUPPLY CABINET

SUPPLEMENTARY MATERIAL

- SPECIFY BY OTHER CONSTRUCTION STANDARD.
- ANTENNA, POWER SUPPLY/RADIO, ASSOCIATED BRACKETS AND SUPPORTS, RISERS AND INTERCONNECTING CABLES ARE INSTALLED, OWNED, AND MAINTAINED BY THE COMMUNICATION COMPANY.
- AT LOCATIONS WITH AN EXISTING POLE GROUND, BOND THE ANTENNA BRACKET AND POWER SUPPLY CABINET TO EXISTING GROUND LEAD AS FOLLOWS:
 - OMIT ITEM "C"
 - USE ITEMS "D" AND "E" TO CONNECT POWER SUPPLY CABINET TO EXISTING POLE GROUND LEAD.
 - ADD ONE ADDITIONAL COMPRESSION CONNECTOR (ITEM "D") AND ADEQUATE QUANTITY OF #4 COPPER WIRE (ITEM "E") TO CONNECT ANTENNA MOUNTING BRACKET TO EXISTING POLE GROUND LEAD.

INFORMATION

- THE POLE MOUNT ANTENNA AND POWER SUPPLY SHALL NOT BE INSTALLED ON POLES DESIGNATED BY ComEd AS AN EQUIPMENT POLE OR WHERE EXISTING COMMUNICATION CABINETS WILL CONFLICT.

EQUIPMENT POLES ARE DEFINED AS HAVING THE FOLLOWING ComEd EQUIPMENT: TRANSFORMERS, RECLOSERS, CAPACITORS, REGULATORS, GANG OPERATED SWITCHES, PRIMARY VOLTAGE CABLE RISERS, OR CONTROL CABINETS.

ANTENNA AND POWER SUPPLY SHALL NOT BE INSTALLED ONTO CORNER POLES, ONTO POLES WITH STATIC WIRE ATTACHMENTS, ONTO EXISTING FIBERGLASS POLE TOP EXTENSIONS, ONTO STREET LIGHT ONLY POLES, OR ONTO POLES WHERE THEY PRESENT AN UNUSUAL CLIMBING HAZARD

ALL CABINETS MUST BE INSTALLED WITH THROUGH-BOLTS ON SAME SIDE OF POLE TO MAINTAIN ABILITY TO CLIMB POLE WHEN REQUIRED. BAND-TYPE ATTACHMENTS SHALL NOT BE USED.

ACAD

- ALL VERTICAL RUNS OF COMMUNICATION CONDUCTORS PASSING THROUGH THE ComEd SUPPLY SPACE SHALL BE INSTALLED AS FOLLOWS:

COMMUNICATION CABLES THAT ARE METAL SHEATHED MUST HAVE A NON-METALLIC COVERING FROM 40 INCHES ABOVE TO 6 FEET BELOW THE SUPPLY CONDUCTORS.

INSULATED COMMUNICATION CONDUCTORS MUST HAVE A NON-METALLIC COVERING FROM 40 INCHES ABOVE TO 6 FEET BELOW THE SUPPLY CONDUCTORS.

- COMMUNICATION GROUNDING CONDUCTORS MUST HAVE A NON-METALLIC COVERING FROM 40 INCHES ABOVE TO 6 FEET BELOW THE SUPPLY CONDUCTORS

- COMMUNICATION CONDUCTORS MUST MAINTAIN A CLEARANCE TO THROUGH BOLTS AND OTHER METAL OBJECTS EQUAL TO 1/8 OF THE POLE CIRCUMFERENCE, BUT NOT LESS THAN 2 INCHES. THIS CLEARANCE CAN BE REDUCED TO 1 INCH FOR EFFECTIVELY GROUNDED CONDUCTORS.

REFERENCE - NESC RULE 239H.

- ANTENNA SHALL UTILIZE A WOOD OR FIBERGLASS MOUNTING BRACKET ATTACHED AT THE TOP OF POLE AS SHOWN. MAXIMUM HEIGHT OF ANTENNA AND MOUNTING BRACKET NOT TO EXCEED 8 FEET ABOVE TOP OF POLE.

WHEN POLE SELECTED FOR ANTENNA INSTALLATION NEEDS REPLACEMENT, A TALLER POLE MAY BE INSTALLED IN LIEU OF A SHORTER NEW POLE WITH AN ANTENNA MOUNTING BRACKET. HEIGHT OF NEW POLE NOT TO EXCEED HEIGHT OF PREVIOUS POLE PLUS HEIGHT OF MOUNTING BRACKET. ComEd TO ATTACH TO TALLER NEW POLE AT SAME ELEVATION AS PREVIOUS SHORTER POLE, LEAVING TOP OF NEW POLE FOR 3rd PARTY ANTENNA INSTALLATION.

- ALL THIRD PARTY EQUIPMENT ON POLES SHALL BE CONSTRUCTED AND MAINTAINED TO PROVIDE AN UNOBSTRUCTED VERTICAL CLIMBING SPACE WITH MINIMUM HORIZONTAL DIMENSIONS OF 30 INCHES SQUARE FOR VOLTAGES 0.15kV AND 40 INCHES SQUARE FOR VOLTAGES 15kV-38kV. CLIMBING SPACE OF THESE DIMENSIONS SHALL BE CONTINUED VERTICALLY 40 INCHES ABOVE AND BELOW THE LIMITING EQUIPMENT.

REFERENCE - NESC RULE 236.

- ONLY POLES THAT ARE ComEd TRUCK ACCESSIBLE SHALL BE SELECTED FOR THIRD PARTY ANTENNA ATTACHMENTS.

- THE FIBER STRAND MOUNT ANTENNA AND ASSOCIATED POLE MOUNTED DISCONNECT SWITCH SHALL NOT BE INSTALLED ONTO POLES HAVING THE FOLLOWING ComEd EQUIPMENT RECLOSERS, CAPACITORS, REGULATORS, GANG OPERATED SWITCHES, PRIMARY VOLTAGE CABLE RISERS, CONTROL CABINETS, STREET LIGHT ONLY POLES, AND ONTO POLES WHERE THEY PRESENT AN UNUSUAL CLIMBING HAZARD.

ACAD

ENGINEER:



A NETWORK CONNEX COMPANY

5101 THATCHER RD.
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OWNER:



CROWN CASTLE FIBER
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SUITE 500
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CONTRACTOR:

TBD

TITLE

PROPOSED
SMALL CELL NODE

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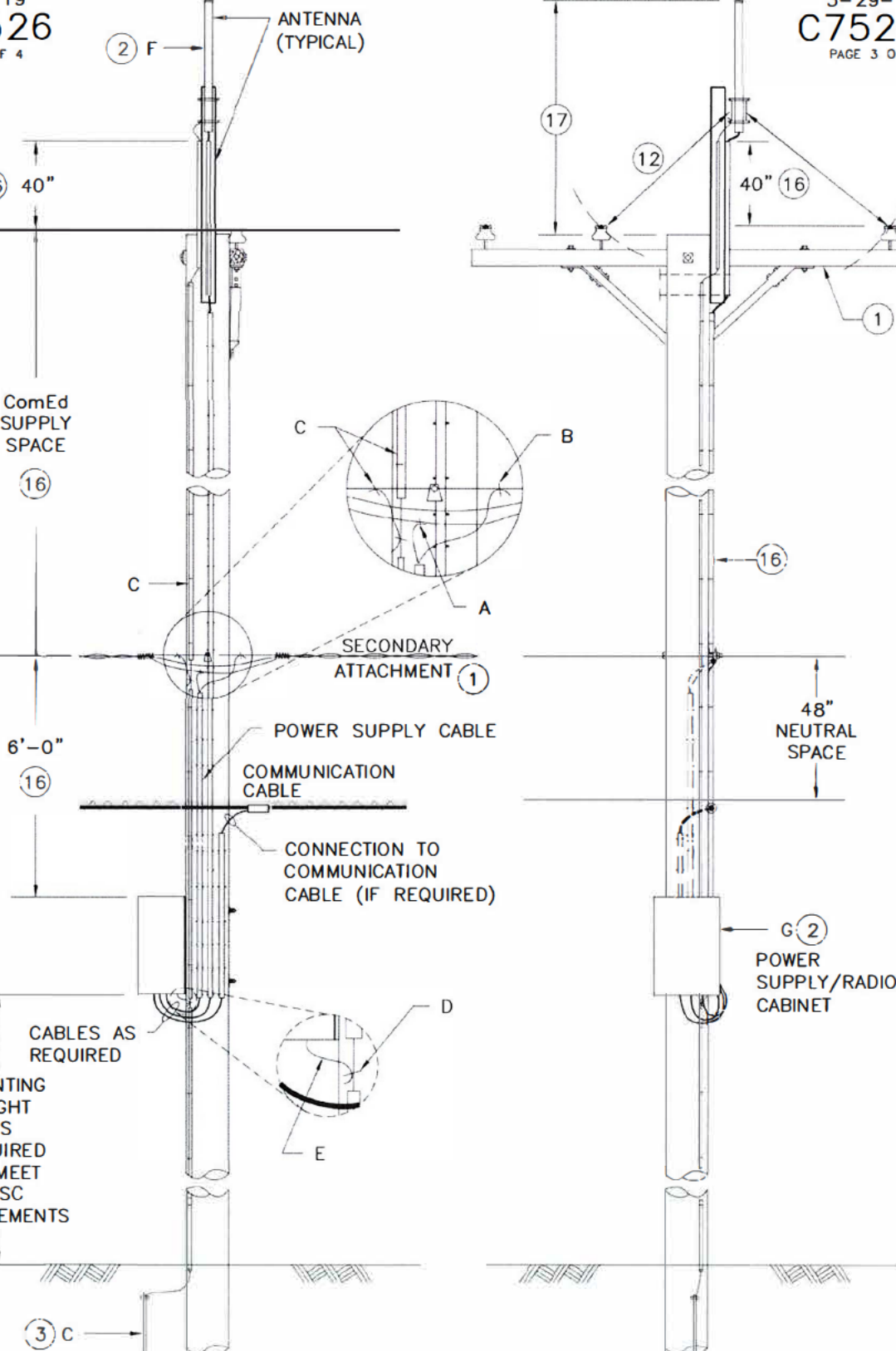
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REVISIONS			

SHEET NUMBER

SWF-10

3-29-19
C7526

3-29-19
C7526



1. ALL WOOD LUMBER SHALL BE SOUTHERN YELLOW PINE OR EQUIVALENT. NO WITH A MINIMUM FB=1,000 PSI. LUMBER SHALL CONFORM TO THE LATEST NFPA SPECIFICATIONS.
2. ALL WOOD SHALL BE TREATED WOOD AS PER THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA). DRILLED HOLES AND CUT ENDS SHALL BE TREATED WITH A PRESERVATIVE. COPPER NAPHTHENATE OR OXINE COPPER OR EQUIVALENT.
3. ALL THRU-BOLTS, HEX NUTS & WASHERS SHALL BE HOT-DIP GALVANIZED AND CONFORM TO ASTM A307 SPECIFICATIONS.



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TBD

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NO	DATE	DESCRIPTION	RY

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GENERAL NOTES:

1. THESE NOTES SHALL BE CONSIDERED A PART OF THE WRITTEN SPECIFICATIONS.
2. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED IN THE CONTRACT DOCUMENTS.
3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTOR(S) SHALL VISIT THE JOB SITE(S) AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED PER THE CONTRACT DOCUMENTS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION CONSTRUCTION/PROJECT MANAGER AND ENGINEER/CONSTRUCTION/PROJECT MANAGER.
4. THE CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED ON ANY WORK NOT CLEARLY DEFINED OR IDENTIFIED IN THE CONSTRUCTION DOCUMENTS BEFORE STARTING ANY WORK.
5. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES, INCLUDING APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS.
6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. IF THESE RECOMMENDATIONS ARE IN CONFLICT WITH THE CONTRACT DOCUMENTS AND/OR APPLICABLE CODES OR REGULATIONS, REVIEW THE CONFLICT FOR DIRECTION WITH THE IMPLEMENTATION CONSTRUCTION/PROJECT MANAGER AND ENGINEER/CONSTRUCTION/PROJECT MANAGER PRIOR TO PROCEEDING.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATION OF ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE IMPLEMENTATION CONSTRUCTION/PROJECT MANAGER AND WITH THE AUTHORIZED REPRESENTATIVE OF ANY OUTSIDE POLE OR PROPERTY OWNER.
8. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, PAVING, CURBS, SIDEWALKS, ADA RAMPS, VEGETATION, GALVANIZED SURFACE OR OTHER EXISTING ELEMENTS AND UPON COMPLETION OF THE WORK, REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION TO THE SATISFACTION OF MUNICIPALITY OR PROPERTY OWNER.
9. KEEP THE GENERAL AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH, AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION DAILY.
10. PLANS ARE INTENDED TO BE DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED UNLESS OTHERWISE NOTED. RELY ONLY ON ANNOTATED DIMENSIONS AND REQUEST INFORMATION IF ADDITIONAL DIMENSIONS ARE REQUIRED.
11. THE EXISTENCE AND LOCATION OF UTILITIES AND OTHER AGENCY'S FACILITIES ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. OTHER FACILITIES MAY EXIST BEYOND WHAT IS NOTED. CONTRACTOR SHALL VERIFY LOCATIONS PRIOR TO START OF CONSTRUCTION AND USE EXTREME CARE AND PROTECTIVE MEASURES TO PREVENT DAMAGE TO THESE FACILITIES. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF UTILITIES OR OTHER AGENCY'S FACILITIES WITHIN THE LIMITS OF THE WORK, WHETHER THEY ARE IDENTIFIED IN THE CONTRACT DOCUMENTS OR NOT.
12. ALL MOUNTING HARDWARE SUCH AS BOLTS, NUTS, LAG SCREWS, CLEVIS, CONDUIT STRAPS, STAPLES, (ANYTHING EXPOSED AND CONNECTING EQUIPMENT TO THE POLE) SHALL BE HOT DIPPED GALVANIZED, UNLESS OTHERWISE STATED. ANY DAMAGE CAUSED TO PAINTED AREAS SHALL BE TOUCHED-UP AS REQUIRED.

WIRELESS CARRIER CONSTRUCTION NOTES:

1. CONTRACTOR IS TO FOLLOW MOST CURRENT WIRELESS CARRIER NADV/STANDARDS DOCUMENTS PROVIDED TO COMPLETE THIS INSTALLATION.
2. CONTRACTOR TO REFER TO THE MOST CURRENT WIRELESS CARRIER NADV FOR APPROVED COAXIAL PROVIDERS AND LINE SWEEP TESTING PROCEDURES.
3. CONTRACTOR SHALL INCLUDE AT LEAST ONE "ANRITSU" CERTIFIED LINE SWEEP TECHNICIAN ON SITE DURING ANY WIRELESS CARRIER JOB RELATED TO INSTALLATION OR MAINTENANCE OF COAXIAL CABLE, ANTENNAS, TT-LNA, RF CONNECTORS, JUMPERS, OR DIPLEX FILTERS.
4. CONTRACTOR SHALL COMPLETE WIRELESS CARRIER PROVIDED "SMALL CELL SWEEP REPORT" WITH ALL INFORMATION FILLED IN ACCURATELY AND COMPLETELY.
5. CONTRACTOR TO REFER TO THE MOST CURRENT WIRELESS CARRIER NADV FOR APPROVED "PIM" TEST EQUIPMENT AND GUIDELINES.
6. CONTRACTOR IS TO USE BATTERY POWERED "PIM" EQUIPMENT TO VALIDATE THE FINAL LOCATION OF THE COAXIAL JUMPER AND ANTENNA ARE FREE OF INTERNAL AND EXTERNAL "PIM" SOURCES.
7. CONTRACTOR SHALL PROVIDE AT LEAST ONE TECHNICAL LEAD THAT IS CERTIFIED AND PROFICIENT IN EXECUTING, INTERPRETING, AND RECORDING "PIM" MEASUREMENTS.
8. ALL CABLE AND CABLE EQUIPMENT IDENTIFICATION TAGGING SHALL BE PLASTIC TAGS WITH WAX STRINGS FOR "FIBER" AND "POWER" WITHIN THE QUARTZITE ENCLOSURE AND ON THE LIGHT POLE. AND SHALL COMPLY WITH THE LATEST WIRELESS CARRIER STANDARDS.
9. THE LOGO PLACARD ON THE COVER OF THE QUARTZITE ENCLOSURE SHALL CLEARLY IDENTIFY OWNER.

ROW POWER CONSTRUCTION NOTES:

1. 120/240 POWER OR 120/208 SECONDARY REQUIRED FOR 3-WIRE SERVICE.
2. SECONDARY POWER SHALL BE DEPENDANT ON CURRENT AVAILABILITY (@ 3% DROP MIN. 60 AMPS), OR ESTABLISHED BY LOCAL POWER COMPANY DURING ACTUAL POWER WALK.
3. POWER ROUTE, WIRE, AND RACEWAY SIZE WILL BE DETERMINED DURING UNDERGROUND OR OVERHEAD ENGINEERING PROCESS.
4. GENERAL CONTRACTOR TO REMOVE/CLEAN ALL DEBRIS, NAILS, STAPLES, OR NON-USED VERTICALS OFF THE POLE.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH MUNICIPAL, COUNTY, STATE, AND FEDERAL REGULATIONS.
6. CALL CHICAGO DIGGERS HOTLINE AT 1-312-744-7000 48 HOURS PRIOR TO EXCAVATING.
7. ALL LANDSCAPING TO BE RESTORED TO ORIGINAL CONDITION OR BETTER.
8. ALL EQUIPMENT TO BE BONDED AS REQUIRED BY LOCAL CODES AND CLIENT REQUIREMENTS.
9. ALLOW 3' CLEARANCE AT METERING CABINET DOOR OPENING (IF REQUIRED).

STANDARD GROUNDING NOTES:

1. GROUND TESTED AT 5 OHMS OR LESS.
2. 5/8" x 10' OR 12' ROD, CAD WELD BELOW GRADE.
3. MINIMUM # 6 GROUND AND BOND WIRE.
4. GROUNDS ROD TO BE PLACED (1) WITHIN NEW POLE FOUNDATION.
5. ALL GROUND FASTENERS AND RELATED HARDWARE SHALL BE OF STAINLESS STEEL AND DIELECTRIC GREASE SHALL BE USED AT ALL CONNECTIONS. ALL GROUNDING MUST MEET OR EXCEED NESC AND WIRELESS CARRIER STANDARDS.

PROPOSED CONCEALMENT NOTES:

ALL PROPOSED ITEMS ARE TO BE PAINTED TO MATCH THE POLE.

ENGINEER



A NETWORK CONNEX COMPANY

5101 THATCHER RD.
DOWNERS GROVE, IL 60515
OFFICE 630.572.9999 • FAX 630.572.9998

OWNER



CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77604

CONTRACTOR

TBD

TITLE

PROPOSED
SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID:

CTRL HINSDALEA 11

HUB:

CH VZB DOWNERS GROVE

SCU:

507683

PSLOC:

539618

PROJECT NUMBER:

2211-005-U01-N011

DRAWN BY:

JCS

DATE DRAWN

05/03/2022

	05/14/22	PERMIT	JCS
NO.	DATE	DESCRIPTION	BY

REVISIONS

SHEET NUMBER

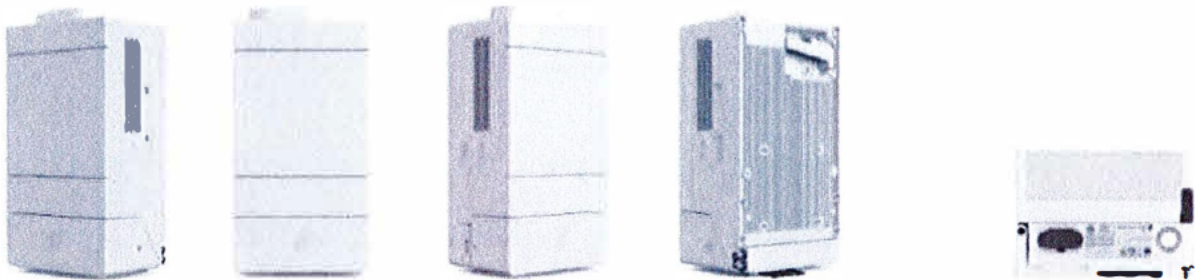
SWF-12

12 OF 12

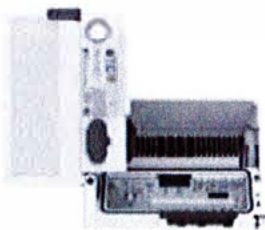
PROPOSED CONCEALMENT NOTES:

ALL PROPOSED ITEMS ARE TO BE PAINTED TO MATCH THE POLE.

Streetmacro 6705 Mechanical

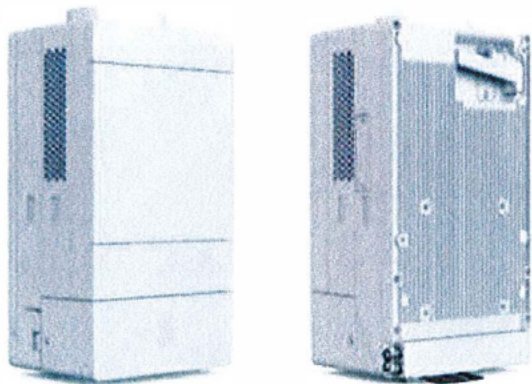


SM 6705	Height	Width	Depth	Weight
without protruding items	366 mm 14.4 In	200 mm 7.9 In	150 mm 5.9 In	~31 lbs (~13 Kg)
with protruding items including GNSS antenna	409 mm 16.2 In	204 mm 8.1 In	154 mm 6.1 In	



Streetmacro 6705

Spectrum	28GHz (n261/257) 39 GHz (n260) 24GHz (n258)
IBW	Full band
Total Carrier BW	800 MHz, continuous/non-continuous carriers
EIRP	59 dBm (CM1, 800MHz config), 62dBm (CM2, 400MHz)
EIS	-116/-113 dBm (CM1, 800MHz config)
Layers	2 @ 800 MHz, 4 @ 400MHz
Modulation	64/64 (256) QAM UL/DL
Service Angular Range:	± 60°, ±15°
Total Antenna BW	1600 MHz
Throughput	~ 5 Gbps DL/ 1 Gbps UL
Synchronization	1588v2, GNSS
Power Consumption	<350 W typical, <500 W Max
Weight	~ 13 kg
Dimensions	366x150x200 mm w/o protrusions 409x154x204 mm w protrusions (eg GNSS)
Operational conditions	-40 to +55 degrees
Cooling	Active
Power	AC, 100-250 V
IP Class	IP 65



EQUIPMENT SPECIFICATIONS SUPPLEMENT
INDEX OF DRAWINGS:

SHEET	TITLE
SWF-S.1	6705 ERICSSON NR ANTENNA SPECIFICATIONS

ENGINEER:



A NETWORK LOGIX COMPANY

5101 THATCHER RD
DOWNERS GROVE, IL 60515
OFFICE 630.572.9999 • FAX 630.572.9998

OWNER:



CROWN CASTLE FIBER
7220 N. SAM HOUSTON PARKWAY WEST
SUITE 500
HOUSTON, TX 77604

CONTRACTOR:

TBD

TITLE:

PROPOSED
SMALL CELL NODE

55TH ST & WESTERN AVE SC
CLARENDON HILLS,
DuPAGE, IL 60514

CROWN CASTLE ID:

CTRL HINSDALEA 11

HUB:

CH VZB DOWNERS GROVE

SCU:

507683

PSLOC:

539618

PROJECT NUMBER:

2211-005-U01-N011

DRAWN BY:

JCS

DATE DRAWN:

05/03/2022

NO.

DATE

06/14/22

PERMIT

JCS

DESCRIPTION

BY

REVISIONS

SHEET NUMBER

SWF-S.1

OF 12

Electronic Copy Of Application

Submitted via USPS Certified Mail

Postmarked June 17th, 2022

Crown Castle Certificate of Insurance

(next page)



CERTIFICATE OF LIABILITY INSURANCE

Page 1 of 2

DATE (MM/DD/YYYY)
03/28/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Willis Towers Watson Northeast, Inc. c/o 26 Century Blvd P.O. Box 305191 Nashville, TN 372305191 USA	CONTACT NAME: Crown Castle International	
	PHONE (A/C, No, Ext):	FAX (A/C, No):
INSURED Crown Castle International See Attached Named Insured List 8020 Katy Freeway Houston, TX 77024	E-MAIL ADDRESS: COIRequest@crowncastle.com	
	INSURER(S) AFFORDING COVERAGE	
	INSURER A: Continental Casualty Company	
	INSURER B: Berkshire Hathaway Specialty Insurance Com	
	INSURER C: Continental Insurance Company	
	INSURER D:	
INSURER E:		
INSURER F:		
NAIC #		

COVERAGES

CERTIFICATE NUMBER: W24289097

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY				04/01/2022	04/01/2023	EACH OCCURRENCE	\$ 2,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 1,000,000
							MED EXP (Any one person)	\$ 5,000
							PERSONAL & ADV INJURY	\$ 2,000,000
	GENL AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$ 4,000,000
	<input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						PRODUCTS - COMP/OP AGG	\$ 4,000,000
	OTHER:							
A	AUTOMOBILE LIABILITY				04/01/2022	04/01/2023	COMBINED SINGLE LIMIT (Ea accident)	\$ 2,000,000
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person)	\$
	<input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS ONLY						BODILY INJURY (Per accident)	\$
	<input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	\$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> EXCESS LIAB			04/01/2022	04/01/2023	EACH OCCURRENCE	\$ 5,000,000	
	<input type="checkbox"/> CLAIMS-MADE					AGGREGATE	\$ 5,000,000	
	DED <input checked="" type="checkbox"/> RETENTION \$ 25,000						\$	
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			04/01/2022	04/01/2023	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER		
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> No	N/A			E.L. EACH ACCIDENT	\$ 1,000,000	
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000	
						E.L. DISEASE - POLICY LIMIT	\$ 1,000,000	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Re: Utility Occupying Right of Way

Certificate Holder is included as an Additional Insured under the General Liability, Auto Liability and Umbrella/Excess Liability policies as their interest may appear and as required by written agreement and only with respect to the liability arising out of the operations performed by or on behalf of the Named Insured.

CERTIFICATE HOLDER**CANCELLATION**

Village of Clarendon Hills, IL
Attn: Zachary Creer Assistant
to the Village Administrator
1 N Prospect Avenue
Clarendon Hills, IL 60514

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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ADDITIONAL REMARKS SCHEDULE

Page 2 of 2

AGENCY Willis Towers Watson Northeast, Inc.		NAMED INSURED Crown Castle International See Attached Named Insured List 8020 Katy Freeway Houston, TX 77024	
POLICY NUMBER See Page 1			
CARRIER See Page 1	NAIC CODE See Page 1	EFFECTIVE DATE: See Page 1	

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 FORM TITLE: Certificate of Liability Insurance

General Liability, Auto Liability, Umbrella/Excess Liability and Workers Compensation policies include a Waiver of Subrogation in favor of the Additional Insured when agreed in written contract prior to the loss, but always subject to the policy terms, conditions and exclusions as permitted by law.

Additional Insureds: The Village, and its elected and appointed officers, officials, agents, and employees.

Umbrella policy is following form.

Crown Castle International Corp.
Consolidated Subsidiaries as Named Insureds

Edition Date: 10/2021

Name	Name
AirComm of Avon, LLC	Crown Castle Solutions LLC
Atlantic Coast Communications LLC	Crown Castle South LLC
CC Edge LLC	Crown Castle Towers 05 LLC
CC Holdings GS V LLC	Crown Castle Towers 06-2 LLC
CC Site Acquisitions II LLC	Crown Castle Towers 09 LLC
CC Strategic Investment Corp.	Crown Castle Towers LLC
CC TM PA LLC	Crown Castle USA Inc.
CC Towers Guarantor LLC	Crown Communication LLC
CC Towers Holding LLC	Crown Communication New York, Inc.
CCATT Holdings LLC	Fibertech Facilities Corp.
CCATT LLC	Global Signal Acquisitions II LLC
CCATT PR LLC	Global Signal Acquisitions III LLC
CCGS Holdings Corp.	Global Signal Acquisitions IV LLC
CCPR VI Tower Newco LLC	Global Signal Acquisitions LLC
CCS & E LLC	Global Signal GP LLC
CCTM Holdings LLC	Global Signal Holdings III LLC
CCTM1 LLC	Global Signal Operating Partnership, LP
CCTM2 LLC	GoldenState Towers LLC
CCTMO LLC	GS Savings Inc.
ComSite Venture, Inc.	GSPN Intangibles LLC
Coverage Plus Antennas Systems LLC	High Point Management Co. LLC
Crown Atlantic Company LLC	ICB Towers LLC
Crown Castle AS LLC	Interstate Tower Communications LLC
Crown Castle Atlantic LLC	Intracoastal City Towers LLC
Crown Castle CA Corp.	Light Tower Clearinghouse LLC
Crown Castle Fiber Enterprise LLC	Md7 Capitol One, LLC
Crown Castle Fiber Holdings Corp.	MW Cell Reit 1 LLC
Crown Castle Fiber LLC	MW Cell TRS 1 LLC
Crown Castle GS III Corp.	OP LLC
Crown Castle GT Company LLC	OP 2 LLC
Crown Castle GT Corp.	Pinnacle Towers Acquisition Holdings LLC
Crown Castle GT Holding Sub LLC	Pinnacle Towers Acquisition LLC
Crown Castle International Corp.	Pinnacle Towers Asset Holding LLC
Crown Castle International LLC	Pinnacle Towers Canada Inc.
Crown Castle Investment Corp.	Pinnacle Towers III LLC
Crown Castle Investment II Corp.	Pinnacle Towers Limited
Crown Castle MU LLC	Pinnacle Towers LLC
Crown Castle MUPA LLC	Pinnacle Towers V Inc.
Crown Castle NG East LLC	PR Site Development Corporation
Crown Castle Operating Company	Radio Station WGLD LLC
Crown Castle Operating LLC	Shaffer & Associates, Inc.
Crown Castle Orlando Corp.	Sidera Networks UK Limited (UK)
Crown Castle PR LLC	Sierra Towers, Inc.
Crown Castle PR Solutions LLC	Tower Development Corporation
Crown Castle Puerto Rico Corp.	Tower Systems LLC

Crown Castle International Corp.
Consolidated Subsidiaries as Named Insureds

Edition Date: 10/2021

Name
Tower Technology Company of Jacksonville LLC
Tower Ventures III LLC
TowerOne Partners, LLC
TriStar Investors LLC
TVHT LLC
WCP Wireless Lease Subsidiary, LLC
WCP Wireless Site Funding LLC
WCP Wireless Site Holdco LLC
WCP Wireless Site Non-RE Funding LLC
WCP Wireless Site Non-RE Holdco LLC
WCP Wireless Site RE Funding LLC
WCP Wireless Site RE Holdco LLC

Electronic Copy Of Application

Submitted via USPS Certified Mail

Postmarked June 17th, 2022

Bond

(Clarendon Hills – Site Specific)

PERFORMANCE BOND

Bond Number: 20BSBIW4440

KNOW ALL BY THESE PRESENTS, That we Crown Castle Fiber LLC, as Principal, hereinafter called Principal, and Hartford Fire Insurance Company, a CT corporation, as Surety, hereinafter called Surety, are held and firmly bound unto Village of Clarendon Hills, IL, as Obligee, hereinafter called Obligee, in the amount of Ten Thousand Dollars and 00/100 Dollars (\$ 10,000.00) for the payment of which sum, well and truly to be made, the said Principal and Surety bind themselves, and their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, as a condition of said Permit requires Principal to provide a Bond Restoration of Right of Way after Construction.

NOW, THEREFORE, THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, That if Principal shall promptly and faithfully perform said agreement, then this obligation is void, otherwise to remain in full force and effect.

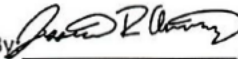
PROVIDED, HOWEVER, That:

1. It shall be a condition precedent to any right of recovery hereunder, that in event of any default on the part of the Principal, a written statement of the particular facts of such default shall be forwarded to the Surety, within sixty (60) days of the occurrence of such default, delivered by registered mail to Surety at its Home Office in Hartford, CT.
2. That no action, lawsuit or proceeding shall be had or maintained against the Surety on this Bond unless the same be filed and properly served upon the Surety within one year from the effective date of the cancellation of the Bond.
3. That no right of action shall accrue under this Bond to or for the use of a person or entity other than the Obligee, and its successors and assigns.
4. This Bond shall become effective June 2, 2022.
5. This Bond shall continue in full force and effect until canceled by the Surety by providing thirty (30) days written notice to the Obligee.
6. The liability of the Surety shall in no event exceed the aggregate penal sum of the Bond penalty.
7. If any conflict or inconsistency exists between the Surety's obligation or undertakings as described in the Bond and as described in the underlying document, then the terms of the Bond shall prevail.

IN WITNESS WHEREOF, The said Principal has signed and sealed this instrument on this 2nd day of June 2022.



Crown Castle Fiber LLC

By: 

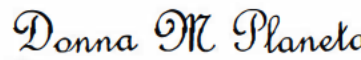
Digitally signed by Jessica R Chiniewicz
Date: 2022.06.03 08:22:19 -04'00'

Name/Title Jessica R. Chiniewicz Risk & Surety Bond Manager

IN WITNESS WHEREOF, The said Surety has signed and sealed this instrument on this 2nd day of June 2022.



Hartford Fire Insurance Company

By: 

Digitally signed by Donna M

Planeta

Date: 2022.06.02 18:58:02-04'00'

Donna M Planeta

,Attorney-in-Fact

POWER OF ATTORNEY

Direct Inquiries/Claims to:

THE HARTFORD

BOND, T-11

One Hartford Plaza

Hartford, Connecticut 06155

BondClaims@thehartford.com

call: 888-266-3488 or fax: 860-757-5835

KNOW ALL PERSONS BY THESE PRESENTS THAT:

Agency Code: SurePath

- ☒ Hartford Fire Insurance Company, a corporation duly organized under the laws of the State of Connecticut
☐ Hartford Casualty Insurance Company, a corporation duly organized under the laws of the State of Indiana
☐ Hartford Accident and Indemnity Company, a corporation duly organized under the laws of the State of Connecticut
☐ Hartford Underwriters Insurance Company, a corporation duly organized under the laws of the State of Connecticut
☐ Twin City Fire Insurance Company, a corporation duly organized under the laws of the State of Indiana
☐ Hartford Insurance Company of Illinois, a corporation duly organized under the laws of the State of Illinois
☐ Hartford Insurance Company of the Midwest, a corporation duly organized under the laws of the State of Indiana
☐ Hartford Insurance Company of the Southeast, a corporation duly organized under the laws of the State of Florida

having their home office in Hartford, Connecticut (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint

Donna M Planeta of Knoxville, TN

their true and lawful Attorney-in Fact, to sign its name as surety(ies) only as delineated above by ☒, and to execute, seal and acknowledge the following bond, undertaking, contract or written instrument:

Bond No. 20BSBIW4440

on behalf of

Crown Castle Fiber LLC

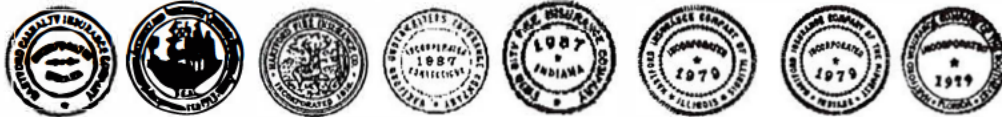
naming

Village of Clarendon Hills, IL

as Oblige in the amount of See Bond Form

on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, and as authorized by a Resolution of the Board of Directors of the Companies on May 23, 2016 the Companies have caused these presents to be signed by its Assistant Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.



Shelby Wiggins

Shelby Wiggins, Assistant Secretary

Joelle L. LaPierre

Joelle L. LaPierre, Assistant Vice President

STATE OF FLORIDA

COUNTY OF SEMINOLE

ss. Lake Mary

On this 20th day of May, 2021, before me personally came Joelle LaPierre, to me known, who being by me duly sworn, did depose and say: that (s)he resides in Seminole County, State of Florida; that (s)he is the Assistant Vice President of the Companies, the corporations described in and which executed the above instrument; that (s)he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that (s)he signed his/her name thereto by like authority.



Jessica Ciccone

Jessica Ciccone
My Commission III1122280
Expires June 20, 2025

I, the undersigned, Assistant Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of June 2, 2022.

Signed and sealed in Lake Mary, Florida.



Keith D. Dozois

Keith D. Dozois, Assistant Vice President