

ISSUE: Certificate of Appropriateness for alterations (small cell facility)

APPLICANT: Cello Partnership dba Verizon Wireless

LOCATION: Old and Historic Alexandria District
Dominion Energy utility pole near 300 North Lee Street

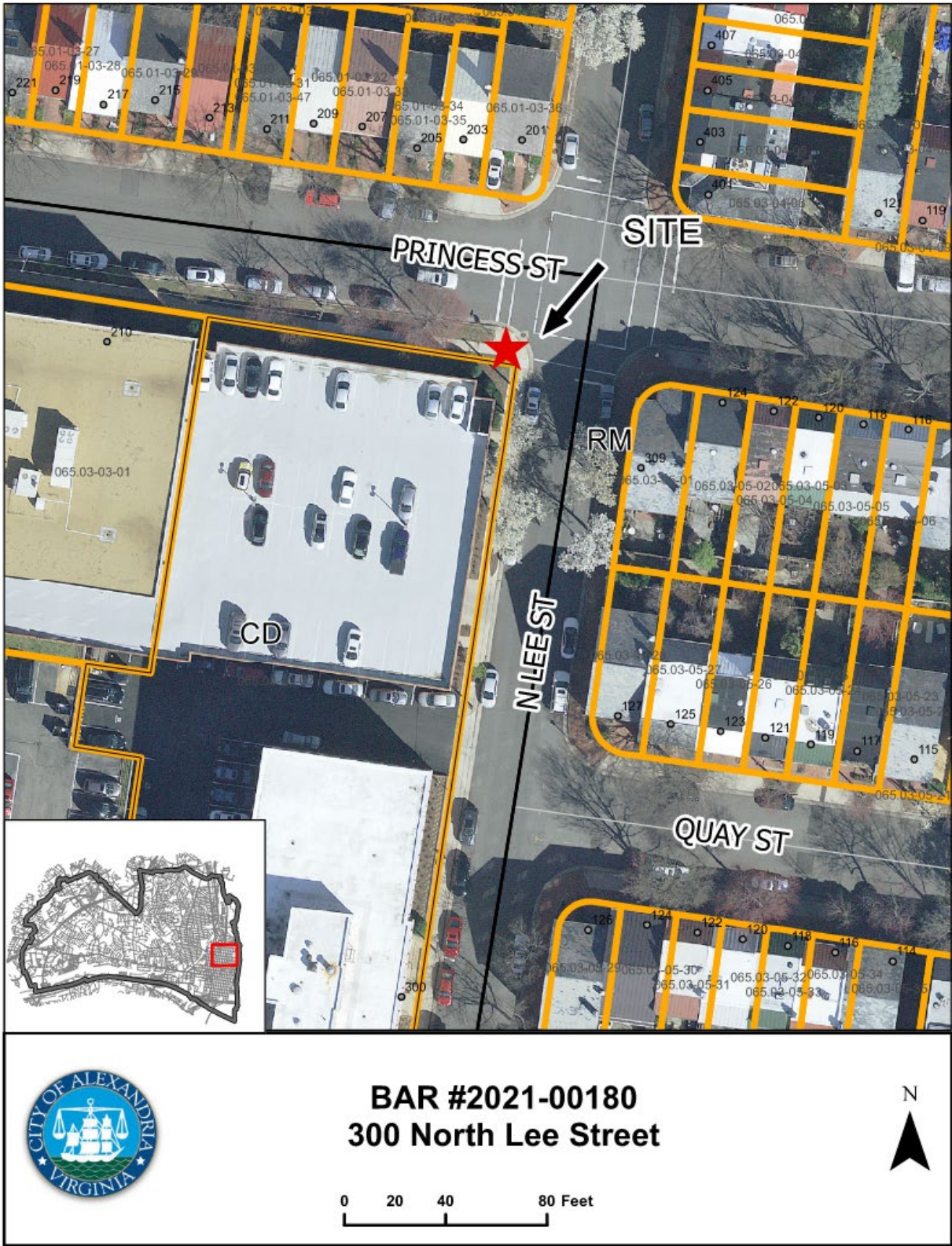
ZONE: CD/Commercial Downtown Zone

STAFF RECOMMENDATION

Staff recommends approval of the Certificate of Appropriateness, as submitted.

GENERAL NOTES TO THE APPLICANT

1. **APPEAL OF DECISION:** In accordance with the Zoning Ordinance, if the Board of Architectural Review denies or approves an application in whole or in part, the applicant or opponent may appeal the Board's decision to City Council on or before 14 days after the decision of the Board.
2. **COMPLIANCE WITH BAR POLICIES:** All materials must comply with the BAR's adopted policies unless otherwise specifically approved.
3. **BUILDING PERMITS:** Most projects approved by the Board of Architectural Review require the issuance of one or more construction permits by Department of Code Administration (including signs). The applicant is responsible for obtaining all necessary construction permits after receiving Board of Architectural Review approval. Contact Code Administration, Room 4200, City Hall, 703-746-4200 for further information.
4. **ISSUANCE OF CERTIFICATES OF APPROPRIATENESS AND PERMITS TO DEMOLISH:** Applicants must obtain a copy of the Certificate of Appropriateness or Permit to Demolish PRIOR to applying for a building permit. Contact BAR Staff, Room 2100, City Hall, 703-746-3833, or preservation@alexandriava.gov for further information.
5. **EXPIRATION OF APPROVALS NOTE:** In accordance with Sections 10-106(B), 10-206(B) and 10-307 of the Zoning Ordinance, any Board of Architectural Review approval will expire 12 months from the date of issuance if the work is not commenced and diligently and substantially pursued by the end of that 12-month period.
6. **HISTORIC PROPERTY TAX CREDITS:** Applicants performing extensive, certified rehabilitations of historic properties may separately be eligible for state and/or federal tax credits. Consult with the Virginia Department of Historic Resources (VDHR) prior to initiating any work to determine whether the proposed project may qualify for such credits.



I. APPLICANT'S PROPOSAL

The applicant is requesting a Certificate of Appropriateness to replace the existing wood utility pole in the right-of-way near the property at 300 North Lee Street with a taller wood pole on top of which a triple band 5G small cell facility and a 4G antenna will be installed along with the associated equipment which will be mounted to the pole. The new pole will be installed adjacent to the existing pole that will be removed once the existing utilities been moved to the new one.

Certificate of Appropriateness

- Replace the existing 24'-0" tall wood utility pole with a new 34'-0" wood utility pole
- Install a triple band Nokia AirScale AEUB 5G small cell antenna facility on top of the new utility pole, the overall height of the equipment is 3'-8". The antennas will be shrouded in color to match the pole
- Install a JMA CXI60MI236 -1C 4G antenna on top of the 5G facility, the 1'-2" diameter antenna is 3'-5" tall
- Install a prop Verizon wireless Charles SHRD60 cabinet 10'-0" above grade and required cabling to be bracket mounted to the pole
- Install a prop Verizon wireless lockable load center panel on the pole at 3'-11" from grade and required cabling
- Install a prop Verizon wireless meter box on the pole at 6'-0" from grade and required cabling
- Relocate the existing overhead lines and existing light fixture from the old pole to the new pole
- Remove the existing pole

Site context

The subject wood pole is located at the northwest corner of the intersection of North Lee and Queen streets.

II. HISTORY

The property at 300 North Lee Street is a five-story, brick office building built in **1968**. There is a one-story commercial building (ca.1900) on the southwest corner, a three-story townhouse on the northeast corner built in 1971, and a three-story townhouse built in 1998 on the southeast corner.

III. ANALYSIS

To address the growing demand for wireless services across the United States, telecommunication providers are increasing the capacity of their networks by deploying small cell antennas within the public right-of-way to reduce the data traffic load on roof-mounted equipment and larger cell towers. Small cell facilities are low-powered antennas that provide wireless service coverage to a limited geographic area (often with ranges of a few hundred feet) and are used to supplement and expand the coverage provided by the traditional, larger-scale network.

In the past three years, Federal and State legislation has been enacted to further streamline the local approval process for cellular facilities, shortening the approval time and limiting jurisdictions' authority. The laws can be contradictory between federal and state in some instances but do recognize that additional guidelines may be necessary in historic districts.

The City has adopted Interim Wireless Facility Aesthetic Guidelines for wireless infrastructure throughout the City which outline specific guidelines related to the replacement of existing utility poles, including:

- pole height may not increase more than 10 feet and may not exceed 50 feet without a special use permit
- replacement poles must be in the same general location as the existing pole
- replacement poles may not cause the removal of an existing tree or cause damaging impacts to trees located in the right-of-way
- wireless facilities must be shrouded, enclosing wires and equipment, and no separate ground mounted equipment is permitted
- wireless facilities must be painted to match the infrastructure

Many of the wireless carriers are working with Dominion Energy to deploy their facilities on replacement utility poles in the City right-of-way. Dominion's safety guidelines require that the existing poles be replaced with taller poles so that there is adequate separation between the utilities and the new cellular equipment. The wood poles come in 10-foot increments but must be buried deeper in the ground, so the net increase in height will be less.

A Certificate of Appropriateness is required in the historic districts under Section 10-203(A) of the Zoning Ordinance, which state that "No building or structure shall be erected, reconstructed, altered or restored within the Parker-Gray District unless and until an application for a certificate of appropriateness shall have been approved..."

The overall height of the new pole including the small cell facility is 41'-7". The antennas and equipment volumes are 5.48 CU FT and 13.17 CU FT respectively. BAR staff has no objection to the taller wood pole or the installation of the small cell facility in this location and finds that painting the equipment the same color as the pole will make them less obvious. The existence of utility poles and overhead wires, street signs, and light poles are part of the urban streetscape, and staff does not believe that the installation of the taller pole with the small cell equipment will adversely impact existing viewsheds.

Therefore, staff recommends approval of the Certificate of Appropriateness as submitted.

STAFF

Marina Novaes, Historic Preservation Planner, Planning & Zoning

Tony LaColla, AICP, Land Use Services Division Chief, Planning & Zoning

IV. CITY DEPARTMENT COMMENTS

Legend: C- code requirement R- recommendation S- suggestion F- finding

Zoning

- F-1 Height of the pole shall not exceed 50.00 feet without a Special Use Permit.
Pole indicated on the plans show a height of 34.0 and overall height with equipment 41.67feet
- F-2 Pole must be in the same general location as existing pole.
In Compliance
- F-3 The replacement pole is not located in a manner that requires the removal of an existing tree or impacts of root zone.
There are trees; however, the pole will replace one that is there that is approximately 3 to four feet apart.
- F-4 Replacement people shall be located that meets ADA requirements that do not impede or hinder pedestrian or vehicular travel.
In Compliance
- F-5 Wireless facility shall be painted to match similar infrastructure on the block or earth tone color.
Plans indicate facility will be wood



ZAP2021-00015

Code Administration

Code Administration has no comments

Transportation and Environmental Services

- R-1 The building permit must be approved and issued prior to the issuance of any permit for demolition, if a separate demolition permit is required. (T&ES)
- R-2 Applicant shall be responsible for repairs to the adjacent city right-of-way if damaged during construction activity. (T&ES)
- R-3 No permanent structure may be constructed over any existing private and/or public utility easements. It is the responsibility of the applicant to identify any and all existing easements on the plan. (T&ES)
- F-1 After review of the information provided, an approved grading plan is not required at this time. Please note that if any changes are made to the plan it is suggested that T&ES be included in the review. (T&ES)
- F-2 If the alley located at the rear of the parcel is to be used at any point of the construction process the following will be required:
For a Public Alley - The applicant shall contact T&ES, Construction Permitting & Inspections at (703) 746-4035 to discuss any permits and accommodation requirements that will be required.

For a Private Alley - The applicant must provide proof, in the form of an affidavit at a minimum, from owner of the alley granting permission of use. (T&ES)

- C-1 The applicant shall comply with the City of Alexandria's Solid Waste Control, Title 5, Chapter 1, which sets forth the requirements for the recycling of materials (Sec. 5-1-99). (T&ES)
- C-2 The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)
- C-3 All secondary utilities serving this site shall be placed underground. (Sec. 5-3-3) (T&ES)
- C-4 Any work within the right-of-way requires a separate permit from T&ES. (Sec. 5-2) (T&ES)
- C-5 All improvements to the city right-of-way such as curbing, sidewalk, driveway aprons, etc. must be city standard design. (Sec. 5-2-1) (T&ES)

Alexandria Archaeology

- F-1 No archaeological oversight necessary.

V. ATTACHMENTS

- 1 – Application Materials*
- 2 – Supplemental Materials*

ADDRESS OF PROJECT: 300 N Lee StDISTRICT: ☒ Old & Historic Alexandria ☐ Parker – Gray ☐ 100 Year Old BuildingTAX MAP AND PARCEL: 065.03-03-02 ZONING: CDAPPLICATION FOR: *(Please check all that apply)*☒ CERTIFICATE OF APPROPRIATENESS☐ PERMIT TO MOVE, REMOVE, ENCAPSULATE OR DEMOLISH
(Required if more than 25 square feet of a structure is to be demolished/impacted)☐ WAIVER OF VISION CLEARANCE REQUIREMENT and/or YARD REQUIREMENTS IN A VISION
CLEARANCE AREA (Section 7-802, Alexandria 1992 Zoning Ordinance)☐ WAIVER OF ROOFTOP HVAC SCREENING REQUIREMENT
*(Section 6-403(B)(3), Alexandria 1992 Zoning Ordinance)*Applicant: ☐ Property Owner ☒ Business *(Please provide business name & contact person)*Name: Cellco Partnership dba Verizon WirelessAddress: 10640 Iron Bridge Rd, Ste 2BCity: Jessup State: MD Zip: 20794Phone: 443-741-4810 E-mail: joshua.schakola@mastec.comAuthorized Agent *(if applicable)*: ☐ Attorney ☐ Architect ☒ AgentName: Joshua SchakolaPhone: 443-741-4810E-mail: joshua.schakola@mastec.com

Legal Property Owner:

Name: Dominion Virginia EnergyAddress: 3072 Centreville RdCity: Herndon State: VA Zip: 20171Phone: 571-203-5332 E-mail: jarred.t.lampe@dominionenergy.com

- ☐ Yes ☒ No Is there an historic preservation easement on this property?
- ☐ Yes ☐ No If yes, has the easement holder agreed to the proposed alterations?
- ☐ Yes ☐ No Is there a homeowner's association for this property?
- ☐ Yes ☐ No If yes, has the homeowner's association approved the proposed alterations?

If you answered yes to any of the above, please attach a copy of the letter approving the project.

NATURE OF PROPOSED WORK: *Please check all that apply*

- ☐ NEW CONSTRUCTION
☒ EXTERIOR ALTERATION: *Please check all that apply.*

☐ awning
☐ doors
☐ lighting
☒ other _____ antenna

☐ fence, gate or garden wall
☐ windows
☐ pergola/trellis

☐ HVAC equipment
☐ siding
☐ painting unpainted masonry

☐ shutters
☐ shed

☐ ADDITION
☐ DEMOLITION/ENCAPSULATION
☐ SIGNAGE

DESCRIPTION OF PROPOSED WORK: *Please describe the proposed work in detail (Additional pages may be attached).*

Install small cell antennas and associated equipment on a wood utility pole in the public right of way

SUBMITTAL REQUIREMENTS:

Items listed below comprise the **minimum supporting materials** for BAR applications. Staff may request additional information during application review. Please refer to the relevant section of the *Design Guidelines* for further information on appropriate treatments.

Applicants must use the checklist below to ensure the application is complete. Include all information and material that are necessary to thoroughly describe the project. Incomplete applications will delay the docketing of the application for review. Pre-application meetings are required for all proposed additions. All applicants are encouraged to meet with staff prior to submission of a completed application.

Demolition/Encapsulation : *All applicants requesting 25 square feet or more of demolition/encapsulation must complete this section. Check N/A if an item in this section does not apply to your project.*

- N/A
- ☐ ☒ Survey plat showing the extent of the proposed demolition/encapsulation.

☐ ☒ Existing elevation drawings clearly showing all elements proposed for demolition/encapsulation.

☐ ☒ Clear and labeled photographs of all elevations of the building if the entire structure is proposed to be demolished.

☐ ☒ Description of the reason for demolition/encapsulation.

☐ ☒ Description of the alternatives to demolition/encapsulation and why such alternatives are not considered feasible.

Additions & New Construction: *Drawings must be to scale and should not exceed 11" x 17" unless approved by staff. Check N/A if an item in this section does not apply to your project.*

- ☐ ☒ N/A Scaled survey plat showing dimensions of lot and location of existing building and other structures on the lot, location of proposed structure or addition, dimensions of existing structure(s), proposed addition or new construction, and all exterior, ground and roof mounted equipment.
- ☐ ☒ FAR & Open Space calculation form.
- ☐ ☒ Clear and labeled photographs of the site, surrounding properties and existing structures, if applicable.
- ☐ ☒ Existing elevations must be scaled and include dimensions.
- ☐ ☒ Proposed elevations must be scaled and include dimensions. Include the relationship to adjacent structures in plan and elevations.
- ☐ ☒ Materials and colors to be used must be specified and delineated on the drawings. Actual samples may be provided or required.
- ☐ ☒ Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
- ☐ ☒ For development site plan projects, a model showing mass relationships to adjacent properties and structures.

Signs & Awnings: *One sign per building under one square foot does not require BAR approval unless illuminated. All other signs including window signs require BAR approval. Check N/A if an item in this section does not apply to your project.*

- ☐ ☒ N/A Linear feet of building: Front: _____ Secondary front (if corner lot): _____.
- ☐ ☒ Square feet of existing signs to remain: _____.
- ☐ ☒ Photograph of building showing existing conditions.
- ☐ ☒ Dimensioned drawings of proposed sign identifying materials, color, lettering style and text.
- ☐ ☒ Location of sign (show exact location on building including the height above sidewalk).
- ☐ ☒ Means of attachment (drawing or manufacturer's cut sheet of bracket if applicable).
- ☐ ☒ Description of lighting (if applicable). Include manufacturer's cut sheet for any new lighting fixtures and information detailing how it will be attached to the building's facade.

Alterations: *Check N/A if an item in this section does not apply to your project.*

- ☒ ☒ N/A Clear and labeled photographs of the site, especially the area being impacted by the alterations, all sides of the building and any pertinent details.
- ☒ ☐ Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
- ☒ ☐ Drawings accurately representing the changes to the proposed structure, including materials and overall dimensions. Drawings must be to scale.
- ☐ ☒ An official survey plat showing the proposed locations of HVAC units, fences, and sheds.
- ☐ ☒ Historic elevations or photographs should accompany any request to return a structure to an earlier appearance.

ALL APPLICATIONS: *Please read and check that you have read and understand the following items:*

- ☒ I have submitted a filing fee with this application. (Checks should be made payable to the City of Alexandria. Please contact staff for assistance in determining the appropriate fee.)
- ☒ I understand the notice requirements and will return a copy of the three respective notice forms to BAR staff at least five days prior to the hearing. If I am unsure to whom I should send notice I will contact Planning and Zoning staff for assistance in identifying adjacent parcels.
- ☒ I, the applicant, or an authorized representative will be present at the public hearing.
- ☒ I understand that any revisions to this initial application submission (including applications deferred for restudy) must be accompanied by the BAR Supplemental form and revised materials.

The undersigned hereby attests that all of the information herein provided including the site plan, building elevations, prospective drawings of the project, and written descriptive information are true, correct and accurate. The undersigned further understands that, should such information be found incorrect, any action taken by the Board based on such information may be invalidated. The undersigned also hereby grants the City of Alexandria permission to post placard notice as required by Article XI, Division A, Section 11-301(B) of the 1992 Alexandria City Zoning Ordinance, on the property which is the subject of this application. The undersigned also hereby authorizes the City staff and members of the BAR to inspect this site as necessary in the course of research and evaluating the application. The applicant, if other than the property owner, also attests that he/she has obtained permission from the property owner to make this application.

APPLICANT OR AUTHORIZED AGENT:

Signature: Joshua Schakola

Printed Name: Joshua Schakola

Date: 4/8/21

OWNERSHIP AND DISCLOSURE STATEMENT

Use additional sheets if necessary

1. Applicant. State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1. Cellco Partnership dba Veri	10170 Junction Drive, Annapolist Junction, MD 20701	n/a
2.		
3.		

2. Property. State the name, address and percent of ownership of any person or entity owning an interest in the property located at _____ (address), unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1. Cellco Partnership dba Veri	10170 Junction Drive, Annapolist Junction, MD 20701	n/a
2.		
3.		

3. Business or Financial Relationships. Each person or entity listed above (1 and 2), with an ownership interest in the applicant or in the subject property is required to disclose any business or financial relationship, as defined by Section 11-350 of the Zoning Ordinance, existing at the time of this application, or within the 12-month period prior to the submission of this application with any member of the Alexandria City Council, Planning Commission, Board of Zoning Appeals or either Boards of Architectural Review.

Name of person or entity	Relationship as defined by Section 11-350 of the Zoning Ordinance	Member of the Approving Body (i.e. City Council, Planning Commission, etc.)
1. n/a	n/a	n/a
2.		
3.		

NOTE: Business or financial relationships of the type described in Sec. 11-350 that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings.

As the applicant or the applicant's authorized agent, I hereby attest to the best of my ability that the information provided above is true and correct.

4/8/21

Date

Joshua Schakola

Printed Name

Joshua Schakola
Signature



MORRIS & RITCHIE
ASSOCIATES, INC.
1220-C East Joppa Road, Suite 505
Towson, Maryland 21286
410-821-1690
410-821-1748 Fax

Old Town N 2 - B Overall Site Layout

19 August 2020



Project# 10427.3001



EXISTING WOODEN UTILITY
POLE TO BE REPLACED



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Old Town N 2 - B Existing View 1

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Old Town N 2 - B Proposed View 1

19 August 2020



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EXISTING WOODEN UTILITY
POLE TO BE REPLACED



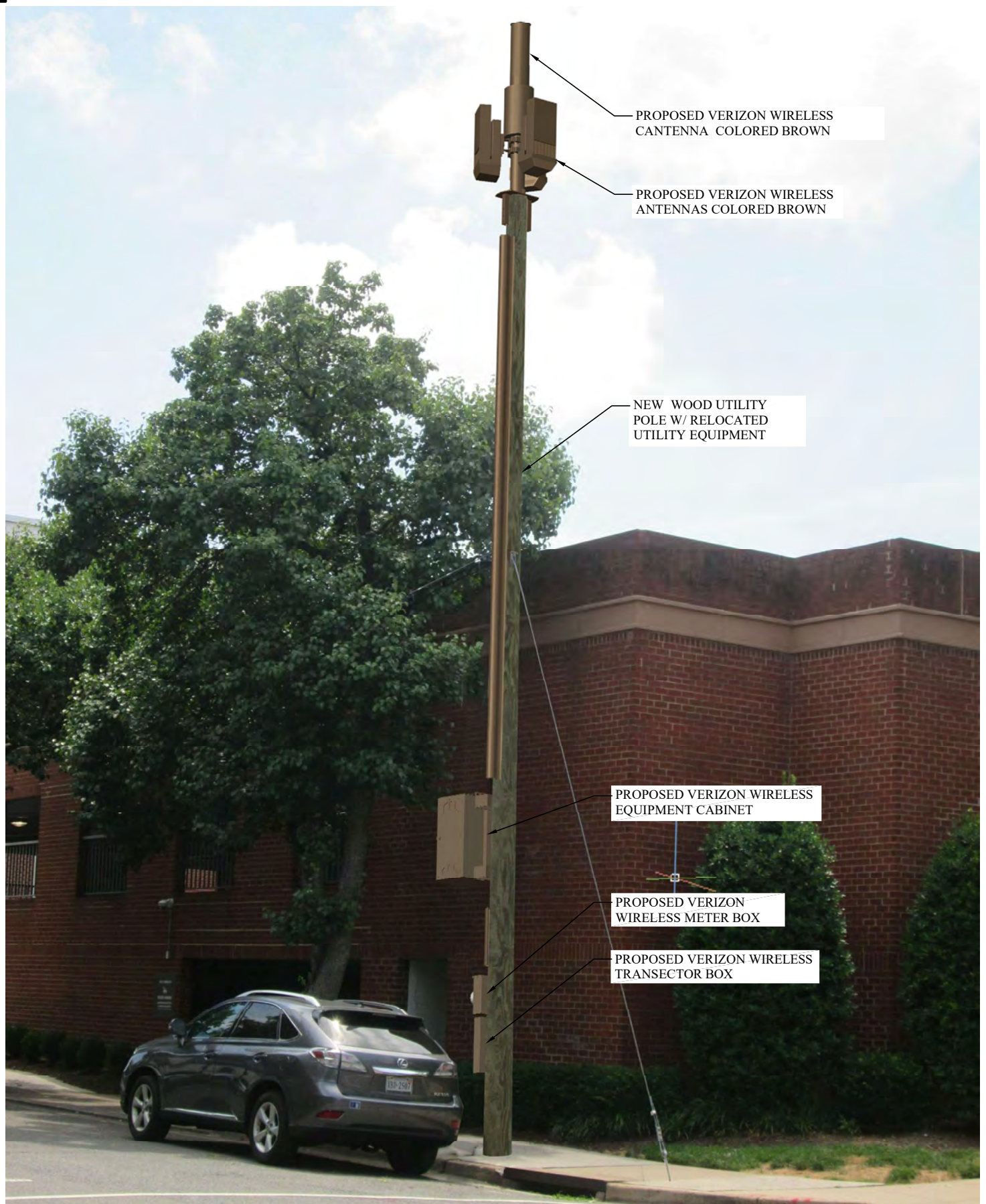
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Old Town N 2 - B Existing View 2

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Old Town N 2 - B Proposed View 2

19 August 2020



Project# 10427.3001



EXISTING WOODEN UTILITY
POLE TO BE REPLACED



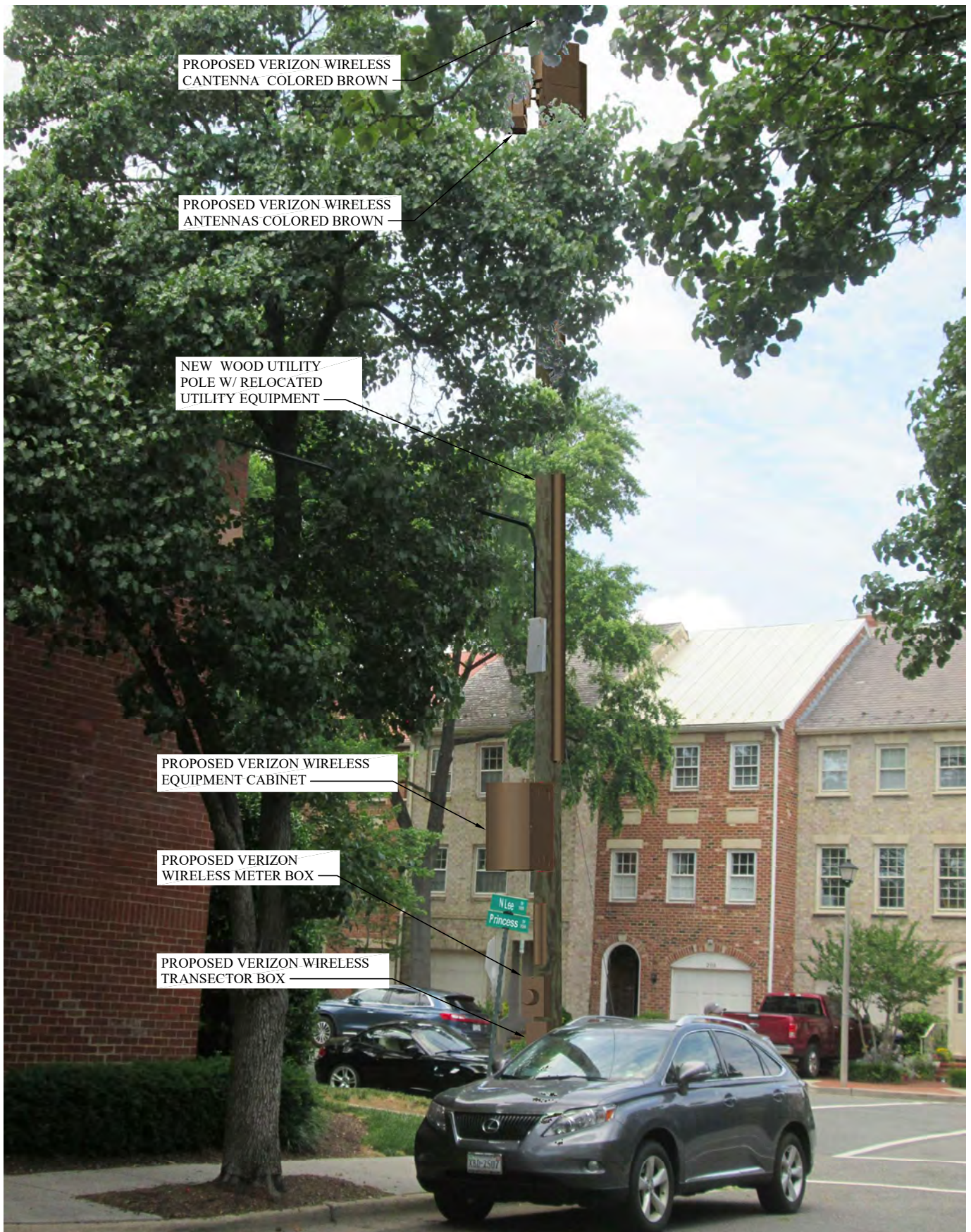
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Old Town N 2 - B Existing View 3

19 August 2020



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Old Town N 2 - B Proposed View 3

19 August 2020



Project# 10427.3001



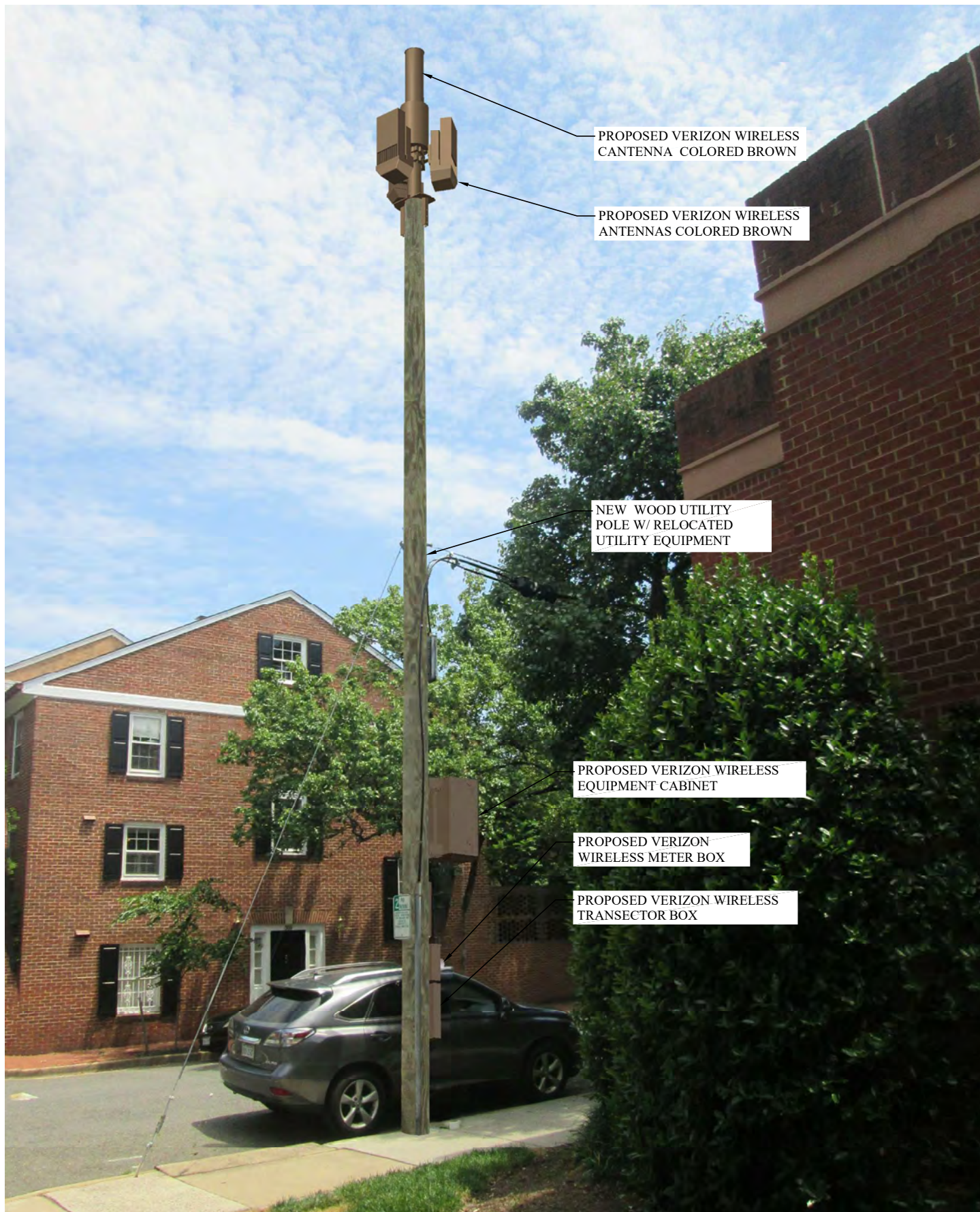
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Old Town N 2 - B Existing View 4

19 August 2020

verizon✓

Project# 10427.3001



PROPOSED VERIZON WIRELESS
CANTENNA COLORED BROWN

PROPOSED VERIZON WIRELESS
ANTENNAS COLORED BROWN

NEW WOOD UTILITY
POLE W/ RELOCATED
UTILITY EQUIPMENT

PROPOSED VERIZON WIRELESS
EQUIPMENT CABINET

PROPOSED VERIZON
WIRELESS METER BOX

PROPOSED VERIZON WIRELESS
TRANSECTOR BOX



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Old Town N 2 - B Proposed View 4

19 August 2020



Project# 10427.3001

1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND ANY/ALL ORDINANCES OF ANY PUBLIC AUTHORITY, MUNICIPAL, AND UTILITY COMPANY SPECIFICATIONS AND LOCAL AND STATE JURISDICTION CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS ADVISED THAT THERE MAY BE OMISSIONS IN THE DRAWINGS AND/OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING IN WRITING THE VERIZON REPRESENTATIVE OF ANY CONFLICTS, OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/ VENDOR'S SPECIFICATIONS UNLESS OTHERWISE NOTED OR PRECEDENCE.
8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK. THE CONTRACTOR/ENGINEER SHALL OBTAIN ALL PERMITS FROM THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
11. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO MAINTAIN THE EXISTING DRIVEWAYS, SIDEWALKS, PAVEMENTS, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
12. THE CONTRACTOR SHALL MAINTAIN THE GENERAL WORK AREAS AS CLEAN AND HAZARD FREE DURING CONSTRUCTION. THE CONTRACTOR SHALL REMOVE TRASH, AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. DETAILS OF EQUIPMENT TO BE INCLUDED IN REMOVAL PACKAGE PRICES SHALL BE IN EXCELLENT CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
13. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
14. THE CONTRACTOR SHALL NOTIFY THE VERIZON REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE VERIZON REPRESENTATIVE.
15. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.
16. ALL UNISTRUT, HARDWARE, AND OUTDOOR JUNCTION BOXES SHALL BE GALVANIZED STEEL FOR FIELD CUTS OF GALVANIZED ITEMS. GALVANIZED STEEL SHALL BE GALVANIZED AND SECOND COAT SHALL BE MARINE GRADE GALVANIZED.
17. RETURN ANY UNUSED MATERIALS WITH REQUIRED DOCUMENTATION TO THE VERIZON WAREHOUSE WITHIN 14 DAYS OF PROJECT COMPLETION. RETURNED MATERIAL NEEDS TO BE ACCOMPANIED WITH AN RMA FORM AND PACKAGING REQUIREMENTS STIPULATED BY THE VZW CONSTRUCTION ENGINEER.
18. CONTRACTOR IS RESPONSIBLE FOR STORAGE OF ALL MATERIALS PROVIDED BY VERIZON, AND IS LIABLE FOR THOSE MATERIALS ONCE PICKED UP FROM THE WAREHOUSE.
19. CONTRACTOR SHALL PERFORM A PUNCH WALK WITH VZW CONSTRUCTION & OPERATION REPRESENTATIVE PRIOR TO DECLARING CONSTRUCTION COMPLETE.
20. GENERAL CONTRACTOR SHALL PROVIDE A 10LB. DRY-CHEMICAL FIRE EXTINGUISHER ON SITE DURING CONSTRUCTION. UPON COMPLETION OF ALL WORK, CONTRACTOR SHALL REMOVE FIRE EXTINGUISHER FROM SITE.

CS-1	SITE LOCATION AND VICINITY PLAN, INDEX OF DRAWINGS, AND CODE ANALYSIS
C-1	SITE PLAN
C-2	SITE DETAILS
TMP-1	TRANSPORTATION MANAGEMENT PLAN NOTES
TMP-2	TRANSPORTATION MANAGEMENT PLAN
S-1	STRUCTURAL SECTIONS AND DETAILS
S-2	GENERAL NOTES
E-1	ROUTING SITE PLAN
E-2	ELECTRICAL SPECIFICATIONS, SYMBOLS LIST, PANEL SCHEDULE AND DETAILS
E-3	POWER PLANS, POWER RISER, DETAILS, AND NOTES
E-4	GROUNDING DIAGRAM, DETAILS, AND NOTES
E-5	DIAGRAMS

APPLICABLE BUILDING CODE:	IBC 2015
USE GROUP:	UTILITY (U)
CONSTRUCTION TYPE:	IIIB
UTILITY COMPANY:	DOMINION

A detailed street map of the Potomac River area in Washington, D.C. The map shows a grid of streets with a yellow callout box labeled 'SITE' pointing to a black dot on the Potomac River. The map includes labels for various streets, landmarks, and parks. A scale bar at the bottom indicates a distance of 1/2 mile.

Streets shown include: I-495, I-275, M Street, N Street, O Street, P Street, Q Street, R Street, S Street, T Street, U Street, V Street, W Street, X Street, Y Street, Z Street, AA Street, AB Street, AC Street, AD Street, AE Street, AF Street, AG Street, AH Street, AI Street, AJ Street, AK Street, AL Street, AM Street, AN Street, AO Street, AP Street, AQ Street, AR Street, AS Street, AT Street, AU Street, AV Street, AW Street, AX Street, AY Street, AZ Street, BA Street, BB Street, BC Street, BD Street, BE Street, BF Street, BG Street, BH Street, BI Street, BJ Street, BK Street, BL Street, BM Street, BN Street, BO Street, BP Street, BQ Street, BR Street, BS Street, BT Street, BU Street, BV Street, BW Street, BX Street, BY Street, BZ Street, CA Street, CB Street, CC Street, CD Street, CE Street, CF Street, CG Street, CH Street, CI Street, CJ Street, CK Street, CL Street, CM Street, CN Street, CO Street, CP Street, CQ Street, CR Street, CS Street, CT Street, CU Street, CV Street, CW Street, CX Street, CY Street, CZ Street, DA Street, DB Street, DC Street, DD Street, DE Street, DF Street, DG Street, DH Street, DI Street, DJ Street, DK Street, DL Street, DM Street, DN Street, DO Street, DP Street, DQ Street, DR Street, DS Street, DT Street, DU Street, DV Street, DW Street, DX Street, DY Street, DZ Street, EA Street, EB Street, EC Street, ED Street, EE Street, EF Street, EG Street, EH Street, EI Street, EJ Street, EK Street, EL Street, EM Street, EN Street, EO Street, EP Street, EQ Street, ER Street, ES Street, ET Street, EU Street, EV Street, EW Street, EX Street, EY Street, EZ Street, FA Street, FB Street, FC Street, FD Street, FE Street, FF Street, FG Street, FH Street, FI Street, FJ Street, FK Street, FL Street, FM Street, FN Street, FO Street, FP Street, FQ Street, FR Street, FS Street, FT Street, FU Street, FV Street, FW Street, FX Street, FY Street, FZ Street, GA Street, GB Street, GC Street, GD Street, GE Street, GF Street, GG Street, GH Street, GI Street, GJ Street, GK Street, GL Street, GM Street, GN Street, GO Street, GP Street, GQ Street, GR Street, GS Street, GT Street, GU Street, GV Street, GW Street, GX Street, GY Street, GZ Street, HA Street, HB Street, HC Street, HD Street, HE Street, HF Street, HG Street, HH Street, HI Street, HJ Street, HK Street, HL Street, HM Street, HN Street, HO Street, HP Street, HQ Street, HR Street, HS Street, HT Street, HU Street, HV Street, HW Street, HX Street, HY Street, HZ Street, IA Street, IB Street, IC Street, ID Street, IE Street, IF Street, IG Street, IH Street, II Street, IJ Street, IK Street, IL Street, IM Street, IN Street, IO Street, IP Street, IQ Street, IR Street, IS Street, IT Street, IU Street, IV Street, IW Street, IX Street, IY Street, IZ Street, JA Street, JB Street, JC Street, JD Street, JE Street, JF Street, JG Street, JH Street, JI Street, JJ Street, JK Street, JL Street, JM Street, JN Street, JO Street, JP Street, JQ Street, JR Street, JS Street, JT Street, JU Street, JV Street, JW Street, JX Street, JY Street, JZ Street, KA Street, KB Street, KC Street, KD Street, KE Street, KF Street, KG Street, KH Street, KI Street, KJ Street, KK Street, KL Street, KM Street, KN Street, KO Street, KP Street, KQ Street, KR Street, KS Street, KT Street, KU Street, KV Street, KW Street, KX Street, KY Street, KZ Street, LA Street, LB Street, LC Street, LD Street, LE Street, LF Street, LG Street, LH Street, LI Street, LJ Street, LK Street, LL Street, LM Street, LN Street, LO Street, LP Street, LQ Street, LR Street, LS Street, LT Street, LU Street, LV Street, LW Street, LX Street, LY Street, LZ Street, MA Street, MB Street, MC Street, MD Street, ME Street, MF Street, MG Street, MH Street, MI Street, MJ Street, MK Street, ML Street, MM Street, MN Street, MO Street, MP Street, MQ Street, MR Street, MS Street, MT Street, MU Street, MV Street, MW Street, MX Street, MY Street, MZ Street, NA Street, NB Street, NC Street, ND Street, NE Street, NF Street, NG Street, NH Street, NI Street, NJ Street, NK Street, NL Street, NM Street, NN Street, NO Street, NP Street, NQ Street, NR Street, NS Street, NT Street, NU Street, NV Street, NW Street, NX Street, NY Street, NZ Street, OA Street, OB Street, OC Street, OD Street, OE Street, OF Street, OG Street, OH Street, OI Street, OJ Street, OK Street, OL Street, OM Street, ON Street, OO Street, OP Street, OQ Street, OR Street, OS Street, OT Street, OU Street, OV Street, OW Street, OX Street, OY Street, OZ Street, PA Street, PB Street, PC Street, PD Street, PE Street, PF Street, PG Street, PH Street, PI Street, PJ Street, PK Street, PL Street, PM Street, PN Street, PO Street, PP Street, PQ Street, PR Street, PS Street, PT Street, PU Street, PV Street, PW Street, PX Street, PY Street, PZ Street, QA Street, QB Street, QC Street, QD Street, QE Street, QF Street, QG Street, QH Street, QI Street, QJ Street, QK Street, QL Street, QM Street, QN Street, QO Street, QP Street, QQ Street, QR Street, QS Street, QT Street, QU Street, QV Street, QW 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Street, UK Street, UL Street, UM Street, UN Street, UO Street, UP Street, UQ Street, UR Street, US Street, UT Street, UY Street, UZ Street, VA Street, VB Street, VC Street, VD Street, VE Street, VF Street, VG Street, VH Street, VI Street, VJ Street, VK Street, VL Street, VM Street, VN Street, VO Street, VP Street, VQ Street, VR Street, VS Street, VT Street, VU Street, VV Street, VW Street, VX Street, VY Street, VZ Street, WA Street, WB Street, WC Street, WD Street, WE Street, WF Street, WG Street, WH Street, WI Street, WJ Street, WK Street, WL Street, WM Street, WN Street, WO Street, WP Street, WQ Street, WR Street, WS Street, WT Street, WU Street, WV Street, WW Street, WX Street, WY Street, WZ Street, XA Street, XB Street, XC Street, XD Street, XE Street, XF Street, XG Street, XH Street, XI Street, XJ Street, XK Street, XL Street, XM Street, XN Street, XO Street, XP Street, XQ Street, XR Street, XS Street, XT Street, XU Street, XV Street, XW Street, XX Street, XY Street, XZ Street, YA Street, YB Street, YC Street, YD Street, YE Street, YF Street, YG Street, YH Street, YI Street, YJ Street, YK Street, YL Street, YM Street, YN Street, YO Street, YP Street, YQ Street, YR Street, YS Street, YT Street, YU Street, YV Street, YW Street, YX Street, YY Street, YZ Street, ZA Street, ZB Street, ZC Street, ZD Street, ZE Street, ZF Street, ZG Street, ZH Street, ZI Street, ZJ Street, ZK Street, ZL Street, ZM Street, ZN Street, ZO Street, ZP Street, ZQ Street, ZR Street, ZS Street, ZT Street, ZU Street, ZV Street, ZW Street, ZX Street, ZY Street, ZZ Street.

Landmarks and Parks shown include: George Washington University, Potomac River, Rock Creek Park, and various schools and businesses.

Scale: 1/2 mile

THIS PROJECT CONSISTS OF THE INSTALLATION OF VERIZON WIRELESS TELECOMMUNICATIONS EQUIPMENT ON A PROPOSED UTILITY POLE TO REPLACE EXISTING. THE ASSOCIATED ANTENNA WILL BE MOUNTED ON THE PROPOSED UTILITY POLE AT A RAD CENTER OF 40'-0" AND NOKIA ANTENNAS WILL BE MOUNTED AT A RAD CENTER OF 36'-2".

FROM JUNCTION DRIVE:

- TURN RIGHT ONTO DORSEY RUN ROAD
- TAKE RAMP ON LEFT FOR MD 32 EAST
- TAKE EXIT #10C RAMP ON RIGHT FOR BALTIMORE WASHINGTON PARKWAY SOUTH
- TAKE EXIT #1C RAMP ON RIGHT FOR I-495 SOUTH
- TAKE EXIT #17B RAMP ON RIGHT FOR US-1 NORTH
- TURN RIGHT ONTO QUEEN STREET
- TURN RIGHT ONTO NORTH LEE STREET
- DESTINATION WILL BE ON THE LEFT

BUILDING OWNER	DATE
ENGINEERING	DATE
OPERATIONS	DATE
CONSTRUCTION	DATE

NO.	DESCRIPTION	DATE
	PERMIT DWGS.	8/13/20

PROJECT NO: 20089T

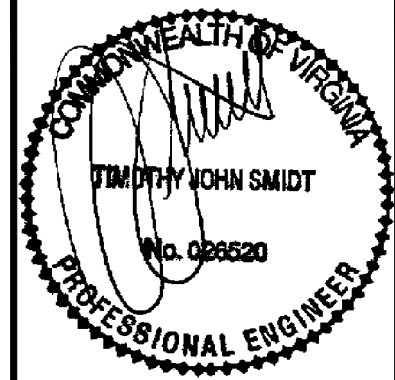
SCALE: AC NOTED

TITLE:

AND VICINITY PLAN INDEX OF

SHEET:

25 |



verizon
OLD TOWN N 2 - B - SMALL CELL
RIGHT OF WAY ADJACENT TO 300 N LEE STREET, ALEXANDRIA,
CITY OF ALEXANDRIA, VIRGINIA 22314



SITE NOTES:

- GENERAL NOTES
1. CONTRACTOR SHALL NOTIFY "MISS UTILITY" (BU) 48 HOURS PRIOR TO DOING ANY EXCAVATION IN THIS AREA. CONTRACTOR SHALL CONTACT A SUBSURFACE UTILITY LOCATOR FOR LOCATION OF EXISTING UTILITIES PRIOR TO ANY EXCAVATION. CONTRACTOR SHALL INSTRUCT AN UTILITY CONTRACTOR TO LOCATE, VERIFY EXISTING UTILITY LOCATIONS BY TEST PIT AS NECESSARY. LOCATION OF UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE AND FOR PLANNING PURPOSES ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES, DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE, AND ALL UNDERGROUND UTILITIES. DAMAGE TO UTILITIES OR PROPERTY OF OTHER BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPAIRED TO PRECONSTRUCTION CONDITIONS BY THE CONTRACTOR.
 2. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ALL STATE AND LOCAL CODES AND ORDINANCES, THE LATEST EDITION THEREOF.
 3. ANY PERMITS WHICH MUST BE OBTAINED SHALL BE THE CONTRACTOR'S RESPONSIBILITY. CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR THIS PROJECT FROM ALL APPLICABLE GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
 4. CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTIONS WITH APPROPRIATE UTILITY OWNERS.
 5. THESE PLANS ARE NOT FOR RECORDATION OR CONVEYANCE.
 6. EXISTING PAVEMENT AND OTHER SURFACES DISTURBED BY CONTRACTOR (WHICH ARE NOT TO BE REMOVED) SHALL BE REPAIRED TO PRECONSTRUCTION CONDITIONS BY THE CONTRACTOR.

REVISIONS:		
NO.	DESCRIPTION	DATE
	PERMIT DWGS	08/13/20

Site Plan

C-1



PROTECT YOURSELF, GIVE THREE
WORKING DAYS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY
COMPONENTS FOR CONSTRUCTION SAFETY. ALL
CONSTRUCTION MUST BE DONE IN COMPLIANCE
WITH THE OCCUPATIONAL SAFETY AND HEALTH
ACT OF 1970 AND ALL RULES AND REGULATION
THERE TO SUPPLEMENT

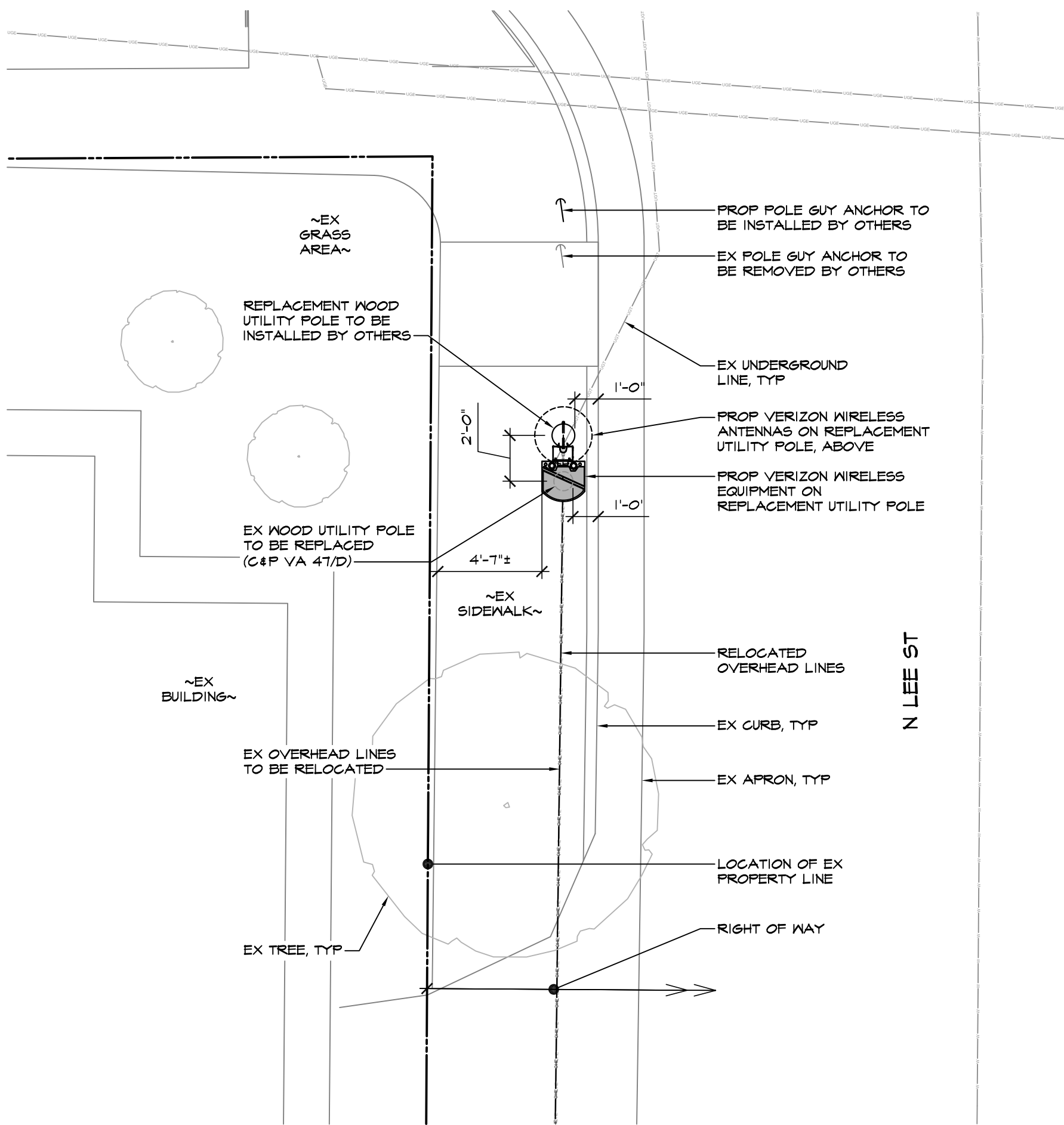
SITE PLAN
SCALE: 1" = 30'-0"



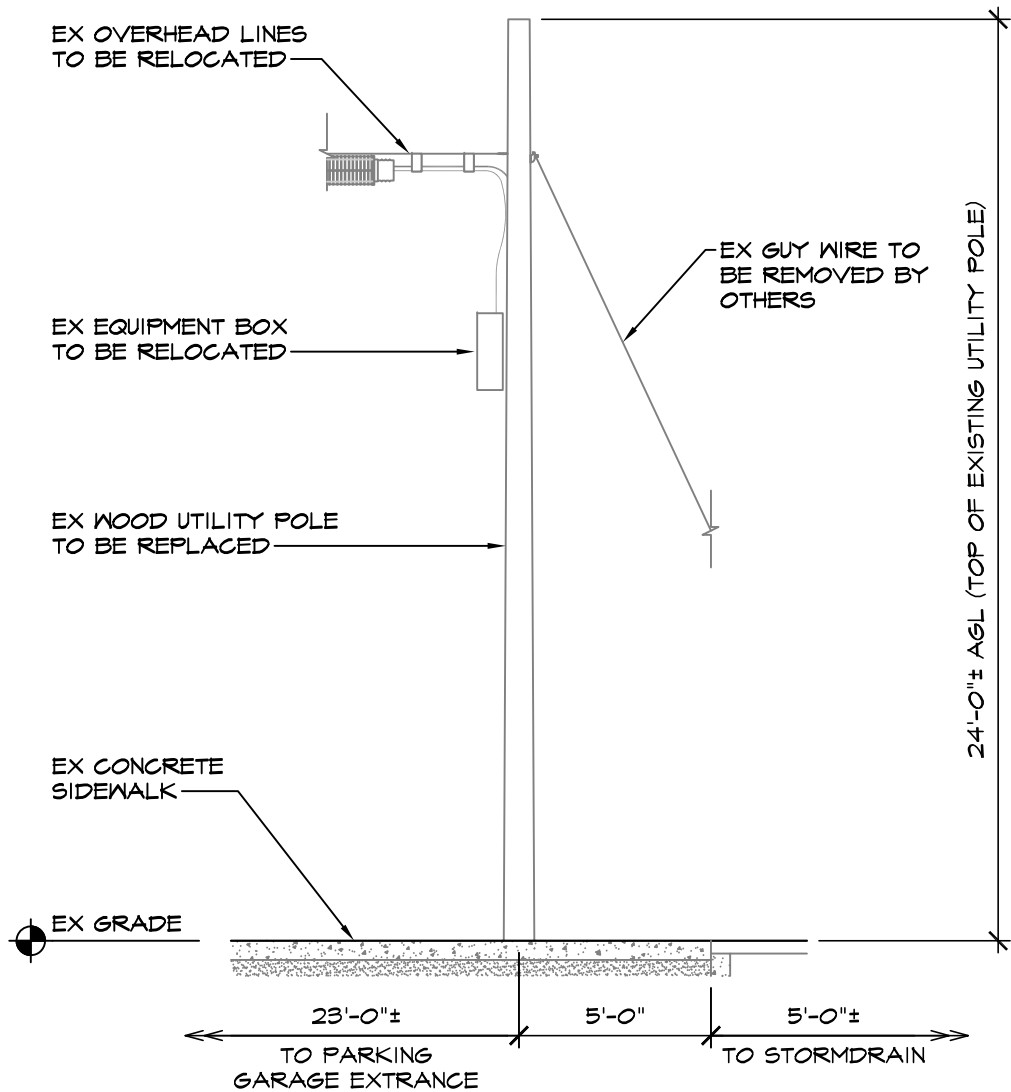


Know what's below.
Call before you dig.

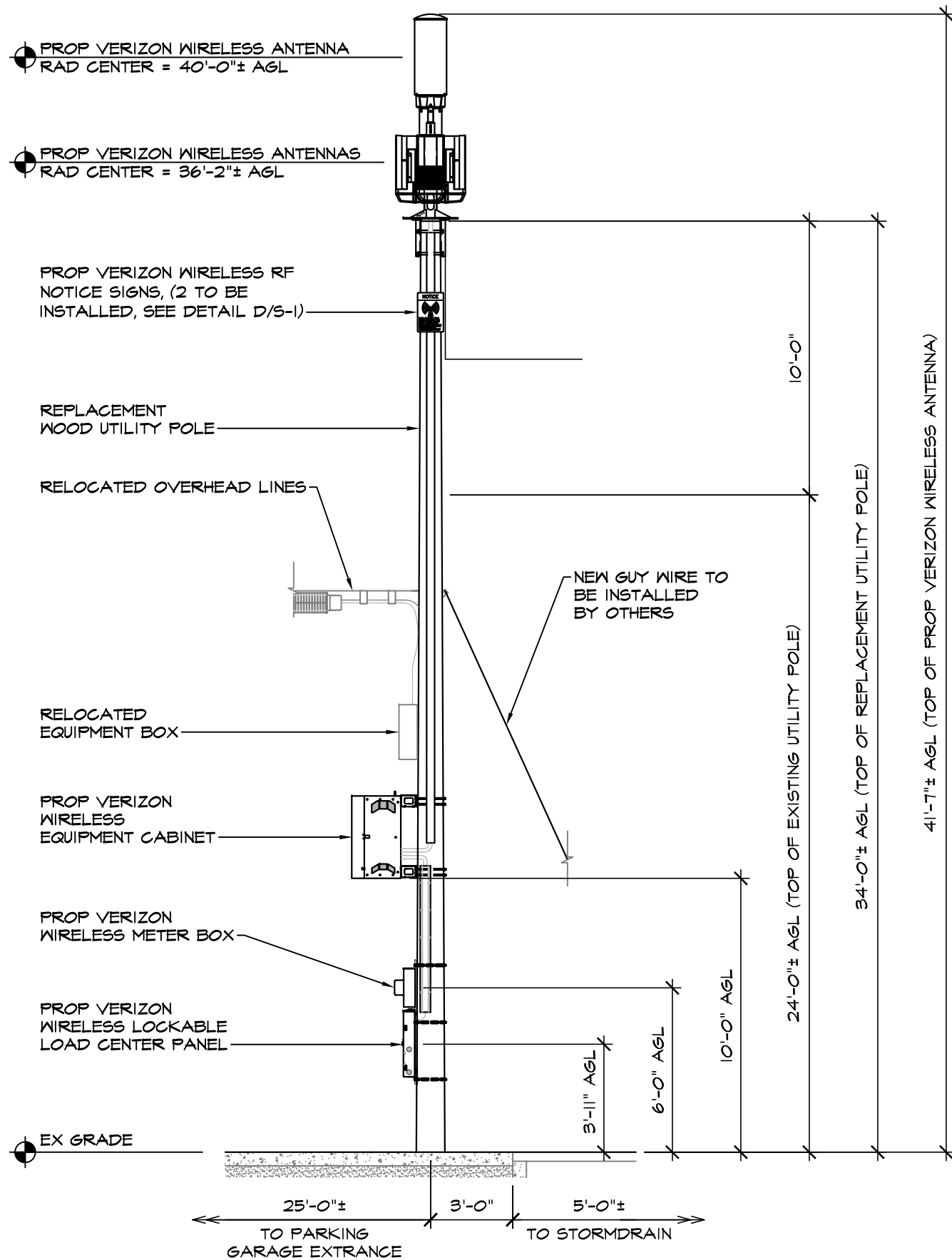
PROTECT YOURSELF, GIVE THREE
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THIS DRAWING DOES NOT INCLUDE NECESSARY
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ACT OF 1970 AND ALL RULES AND REGULATIONS
THERE TO APPURTENANT.



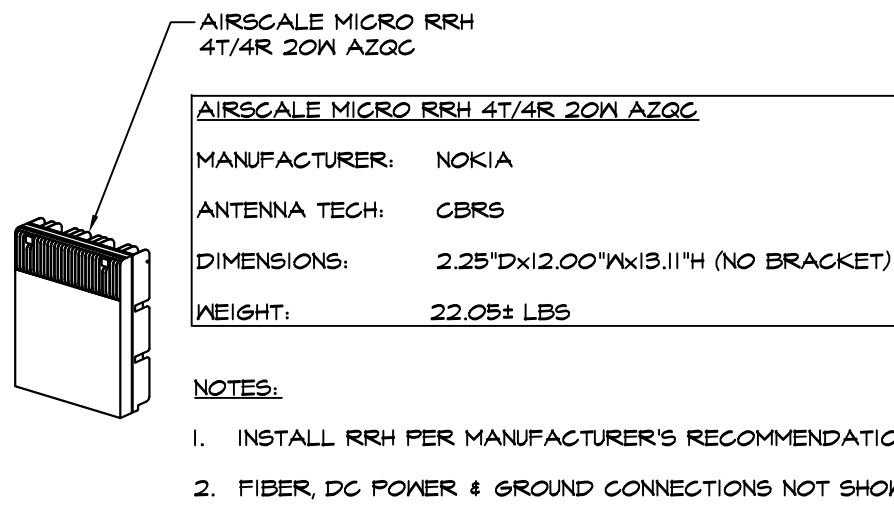
ENLARGED EQUIPMENT LAYOUT
SCALE: 1" = 5'-0"



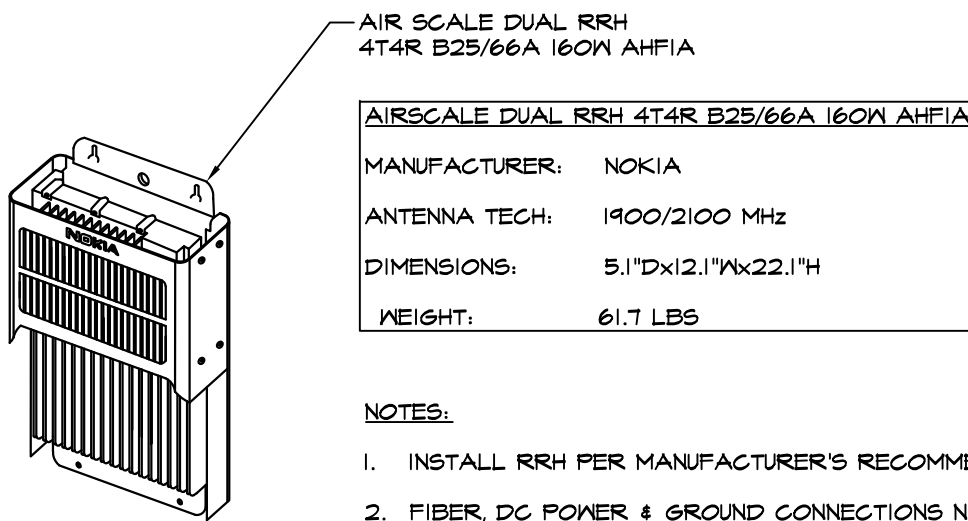
EXISTING UTILITY POLE ELEVATION
SCALE: 1" = 5'-0"



REPLACEMENT UTILITY POLE ELEVATION
SCALE: 1" = 5'-0"



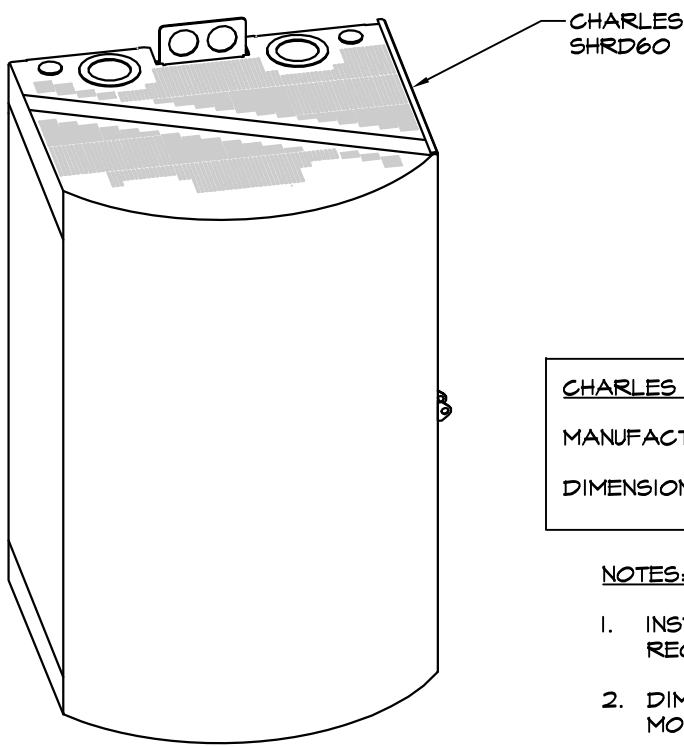
NOKIA AIRSCALE MICRO RRH 4T/4R 20W AZQC DETAIL
NOT TO SCALE



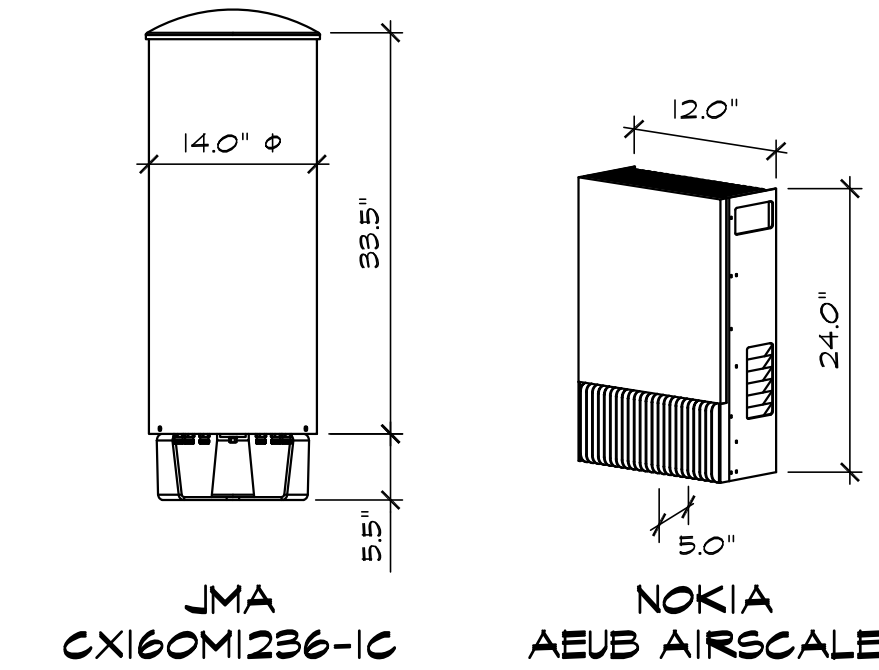
NOKIA AIRSCALE DUAL RRH 4T4R B25/66A 160W AHFIA - DETAIL
NOT TO SCALE

VOLUMETRIC CALCULATIONS			
ANTENNA VOLUMETRIC CALCULATION		EQUIPMENT VOLUMETRIC CALCULATION	
JMA CX160M1236-1C (1 ANTENNA, 2.98 CU FT EACH)	2.98 CU FT	CHARLES SHRD60	10.5 CU FT
NOKIA AEUB (3 ANTENNAS, 0.88 CU FT EACH)	2.50 CU FT	TRANSECTOR BOX W/ INTEGRAL GFCI RECTANGLE AND FIBER	1.17 CU FT
TOTAL	5.48 CU FT	200 AMP RINGLESS HORN OVERHEAD METER SOCKET	0.54 CU FT
		NOKIA ASOD/ASODA RRH (3 UNITS, 0.32 CU FT EACH)	0.96 CU FT
		TOTAL	13.17 CU FT

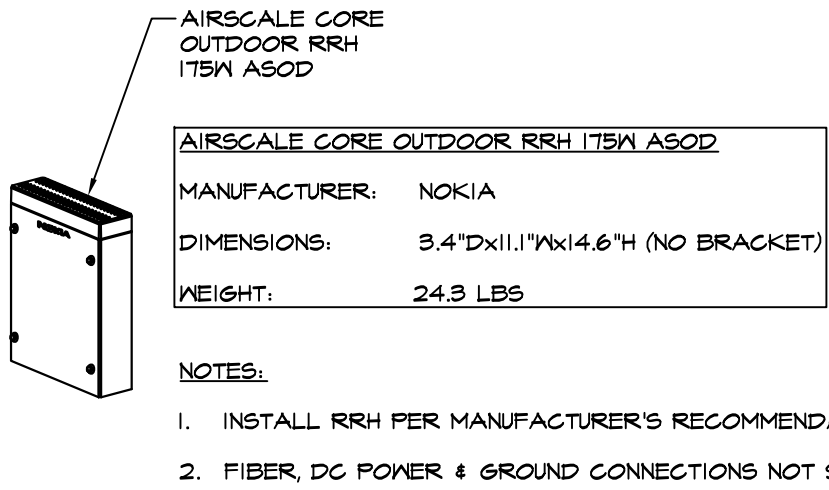
NOKIA AIRSCALE CORE OUTDOOR RRH 175 W ASOD DETAIL
NOT TO SCALE



EQUIPMENT CABINET DETAIL
NOT TO SCALE



VERIZON WIRELESS ANTENNA DETAILS
NOT TO SCALE



MORRIS & RITCHIE
ASSOCIATES, INC.
Civil / Structural Engineers
1320-C East Joppa Road, Suite 505
Towson, Maryland 21286
410-621-1600
410-621-1748 Fax



verizon
OLD TOWN N 2 - B - SMALL CELL
RIGHT OF WAY ADJACENT TO 300 N LEE STREET
ALEXANDRIA, VA 22314 (CITY OF ALEXANDRIA)

REVISIONS:		
NO.	DESCRIPTION	DATE
1	PERMIT DWGS	08/13/20

DESIGNED BY: RJD
DRAWN BY: DNT
PROJECT NO: 10427.3001
DATE: 07/27/2020
SCALE: AS NOTED
TITLE:

Site
Details

SHEET:

C-2

TRANSPORTATION MANAGEMENT PLAN

TEMPORARY TRAFFIC CONTROL PLAN NOTES & WORK AREA PROTECTION MANUAL TTC'S



PROJECT INFORMATION

- THE PROJECT'S TMP PLAN HAS BEEN DESIGNED IN CONFORMANCE WITH TMP TYPE A.
- WORK ZONE AREAS SHALL BE SETUP AS SHOWN ON TTC'S ON THIS PLAN SHEET. THE WORK ZONE LENGTHS AND WIDTHS MAY VARY BY LOCATION IN ACCORDANCE WITH APPLICABLE TTC.
- CONSTRUCTION HOURS: 9AM-3:30PM MONDAY-THURSDAY. 9AM-2PM FRIDAY.
NO WORK ON NIGHTS, WEEKENDS OR HOLIDAYS. NO LANE CLOSURES WILL BE ALLOWED FROM NOON ON THE DAY BEFORE A HOLIDAY UNTIL NOON ON THE WORKDAY FOLLOWING THE HOLIDAY.
HOLIDAYS INCLUDE ALL STATE AND FEDERAL HOLIDAYS.
- EXISTING INTERSECTIONS: THE NEAREST INTERSECTION IS PRINCESS ST AND N LEE ST.
- EXISTING PEDESTRIAN ACCESS POINTS: THERE IS EXISTING SIDEWALK LOCATED WITHIN THE PROJECT LIMITS.
EXISTING BUS STOPS: THERE ARE NO BUS STOPS NEAR THE PROJECT LIMITS.
EXISTING ENTRANCES: THERE ARE NO EXISTING ENTRANCES WITHIN THE CONSTRUCTION LIMITS.
- THE TRAFFIC ON THE ROADWAY CONSIST PRIMARILY OF PASSENGER VEHICLES AND PEDESTRIANS. THE SURROUNDING AREA IS RESIDENTIAL.
- THE CONTRACTOR SHALL:

DESIGNATE A PERSON ASSIGNED TO THE PROJECT WHO WILL HAVE THE PRIMARY RESPONSIBILITY, WITH SUFFICIENT AUTHORITY, FOR IMPLEMENTING THE TMP/SOC AND OTHER SAFETY AND MOBILITY ASPECTS OF THE PERMITTED WORK. THIS PERSON SHALL COORDINATE WITH THE INSPECTOR FOR THE DURATION OF CONSTRUCTION.

ENSURE THAT PERSONNEL IMPLEMENTING THE MOT ARE TRAINED IN TRAFFIC CONTROL TO A LEVEL COMMENSURATE WITH THEIR RESPONSIBILITY IN ACCORDANCE WITH VIRGINIA WORK ZONE TRAFFIC CONTROL TRAINING GUIDELINES.

INFORM COUNTY OF ANY WORK REQUIRING LANE SHIFTS, LANE CLOSURES, AND/OR PHASE CHANGES A MINIMUM OF TWO WORKING DAYS PRIOR TO IMPLEMENTING THIS ACTIVITY

PERFORM REVIEWS OF THE CONSTRUCTION AREA TO ENSURE COMPLIANCE WITH CONTRACT DOCUMENTS AT REGULARLY SCHEDULED INTERVALS AT THE DIRECTION OF COUNTY ENGINEERS. CONTRACTOR SHALL MAINTAIN A COPY OF THE TEMPORARY TRAFFIC CONTROL PLAN AT THE WORK SITE AT ALL TIMES.

COORDINATE WITH CITY OF ALEXANDRIA POLICE DEPARTMENT AND CITY OF ALEXANDRIA FIRE/RESCUE DEPARTMENT FOR ANY LANE CLOSURES AND ANY DETOURS OF ANY NATURE, AT NO ADDITIONAL COST TO THE PROJECT.

SCHEDULE ALL PHASES OF CONSTRUCTION IN SUCH A MANNER THAT WATER, SANITARY SEWER, CABLE, FIBER CABLE/OPTIC CABLE, ANY OVERHANGING UTILITIES, AND ANY UNDERGROUND UTILITIES SERVICES WILL NOT BE INTERRUPTED.

- THIS TMP PLAN IS INTENDED AS A GUIDE. IF THE CONTRACTOR IS TO DEVIATE FROM THE APPROVED TMP, A NEW OR REVISED TMP MUST BE SUBMITTED TO COUNTY FOR REVIEW AND APPROVAL.
- CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FOR THE DURATION OF THE PROJECT. CONTRACTOR SHALL ADD ANY ADDITIONAL TEMPORARY MEASURES NECESSARY TO FACILITATE PROPER, POSITIVE DRAINAGE FOR THE DURATION OF CONSTRUCTION.
- WHERE GROUP 2 CHANNELIZING DEVICES ARE USED TO SEPARATE THE CONSTRUCTION AREA AND TRAFFIC, A MINIMUM CLEAR ZONE AREA SUCH AS DEFINED IN THE VWPM IS TO BE MAINTAINED.
- CONTRACTOR IS TO COORDINATE WITH CITY FOR LOCATION(S) OF THE CONSTRUCTION STAGING AREA. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS AND/OR EASEMENTS AS NECESSARY.
- IMPLEMENTING THE TRANSPORTATION MANAGEMENT PLAN
DURING THE FIRST DAY OF THE NEW WORK ZONE TRAFFIC PATTERN, THE PROJECT'S MANAGER AND CITY'S INSPECTOR SHALL INSPECT THE WORK ZONE TO ENSURE COMPLIANCE WITH THE TMP. ON THE THIRD TO FIFTH DAY OF IMPLEMENTATION OF THE TMP'S NEW WORK ZONE TRAFFIC PATTERN THE CONSTRUCTION INSPECTOR SHALL CONDUCT AN ON-SITE REVIEW OF THE WORK ZONE'S PERFORMANCE IN COORDINATION WITH COUNTY AND RECOMMEND TO THE CONTRACTOR ANY REQUIRED CHANGES TO THE TMP TO ENHANCE THE WORK ZONE'S SAFETY AND MOBILITY. ALL SUCH CHANGES SHALL BE DOCUMENTED. AN ON-SITE REVIEW OF THE PROJECT'S WORK ZONE TRAFFIC CONTROL BY THE PROJECT MANAGER AND CONTRACTOR SHALL BE CONDUCTED (WITH COORDINATION FROM COUNTY) WITHIN 48 HOURS OF ANY FATAL INCIDENT/CRASH WITHIN THE WORK ZONE.
- PUBLIC COMMUNICATIONS PLAN
THE CONTRACTOR SHALL BE RESPONSIBLE FOR:
 - NOTIFYING THE PROJECT MANAGER AND CITY INSPECTOR TWO WEEKS IN ADVANCE OF ANY SCHEDULED WORK PLANS AND TRAFFIC DELAYS.
 - NOTIFYING THE PROJECT MANAGER, CITY INSPECTOR, AND CORRESPONDING COUNTY ENGINEER OF ANY UNSCHEDULED TRAFFIC DELAYS.
- TRANSPORTATION OPERATIONS
THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND PROVIDING THE FOLLOWING:
 - NOTIFY THE REGIONAL TRANSPORTATION OPERATIONS CENTER (TOC) 1 WEEK IN ADVANCE IN ORDER TO PLAN LANE CLOSURE INFORMATION ON THE 511 SYSTEM AND VA-TRAFFIC.
 - IMMEDIATELY REPORT ANY TRAFFIC INCIDENTS THAT MAY OCCUR IN THE WORK ZONE.
 - NOTIFY THE PROJECT'S CONSTRUCTION INSPECTOR AND COUNTY ENGINEER OF ANY INCIDENTS AND EXPECTED TRAFFIC DELAYS.
 - WITHIN 24 HOURS OF ANY INCIDENTS WITHIN THE CONSTRUCTION WORK ZONE, A REVIEW OF THE TRAFFIC CONTROLS SHALL BE COMPLETED AND NECESSARY ADJUSTMENT MADE TO REDUCE THE FREQUENCY AND SEVERITY OF ANY FUTURE INCIDENTS.
- CONTACT NUMBERS

PROJECT MANAGER: TBD
CITY INSPECTOR: TBD
EMERGENCY CALL: 911

NON-EMERGENCY NUMBERS:
CITY OF ALEXANDRIA POLICE: 703-746-4444
CITY OF ALEXANDRIA FIRE & RESCUE: 703-746-4357

GENERAL CONSTRUCTION NOTES

NOTE: VWPM VIRGINIA WORK AREA PROTECTION MANUAL (2011) INCLUDING REVISION 2 DATED SEPTEMBER 1, 2019.

- THE CONTRACTOR SHALL MAKE ANY NECESSARY ADJUSTMENTS DURING BOTH WORK AND NON-WORK HOURS TO ENSURE THE PROTECTION AND SAFETY OF PEDESTRIANS, VEHICULAR TRAFFIC, AND THE GENERAL PUBLIC FROM ANY CONSTRUCTION RELATED ACTIVITY, CONSTRUCTION EQUIPMENT, AND THE CONSTRUCTION SITE ITSELF.

Page 6H-40

September 2019

Typical Traffic Control Outside Lane Closure Operation on a Four-Lane Roadway (Figure TTC-16.2)

NOTES

Standard:

- On divided highways having a median wider than 8', right and left sign assemblies shall be required.

Guidance:

- Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.
- When closing a lane, a PCMS should be used in advance of the first warning sign if all of the left side signs cannot be installed.
- Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the transition, based on the posted speed limit and at least equal to or greater than the values in Table 6H-3. For Limited Access highways a minimum of 1000' is desired.
- All vehicles, equipment, workers, and their activities should be restricted to one side of the pavement.

Standard:

- Taper length (L) and channelizing device spacing shall be at the following:

Taper Length (L)											
Speed Limit (mph)	Lane Width (Feet)				Remarks	Speed Limit (mph)	Lane Width (Feet)				Remarks
	9	10	11	12			9	10	11	12	
25	95	105	115	125	L=SW/60	50	450	500	550	600	L=SW
30	135	150	165	180	L=SW/60	55	495	550	605	660	L=SW
35	185	205	225	245	L=SW/60	60	540	600	660	720	L=SW
40	240	270	295	320	L=SW/60	65	585	650	715	780	L=SW
45	405	450	495	540	L=SW	70	630	700	770	840	L=SW
Limited Access highways shall use a 1000' merging taper regardless of the posted speed.											
Shifting Tapers shall be Table 6H-23						Shoulder Taper = 1/2 L Minimum					

Limited Access highways shall use a 1000' merging taper regardless of the posted speed.
Shifting Tapers see Table 6H-2.2

Shoulder Taper = 1/2 L Minimum

- Channelizing device spacing shall be at the following:

Channelizing Device Spacing			
Location Spacing	Speed Limit (mph)	Location Spacing	Speed Limit (mph)
0-35	36+	0-35	36+
Transition	20 40 Travelway	40 80 Construction Access	80 120

*Construction access spacing may be increased to this distance, but shall not exceed one access per 1/2 mile.

- An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane (see Figure TTC-18).
- The buffer space length shall be shown in Table 6H-3 on Page 6H-5 for the posted speed limit.
- A shadow vehicle with either a Type B or C arrow board operating in the caution mode, or at least one high intensity amber rotating, flashing, or oscillating light shall be parked 80'-120' in advance of the first work crew. When the posted speed limit is 45 mph or greater, a truck-mounted attenuator shall be used.
- Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or oscillating lights but can be used to supplement the amber rotating, flashing, or oscillating lights.
- When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.

Options:

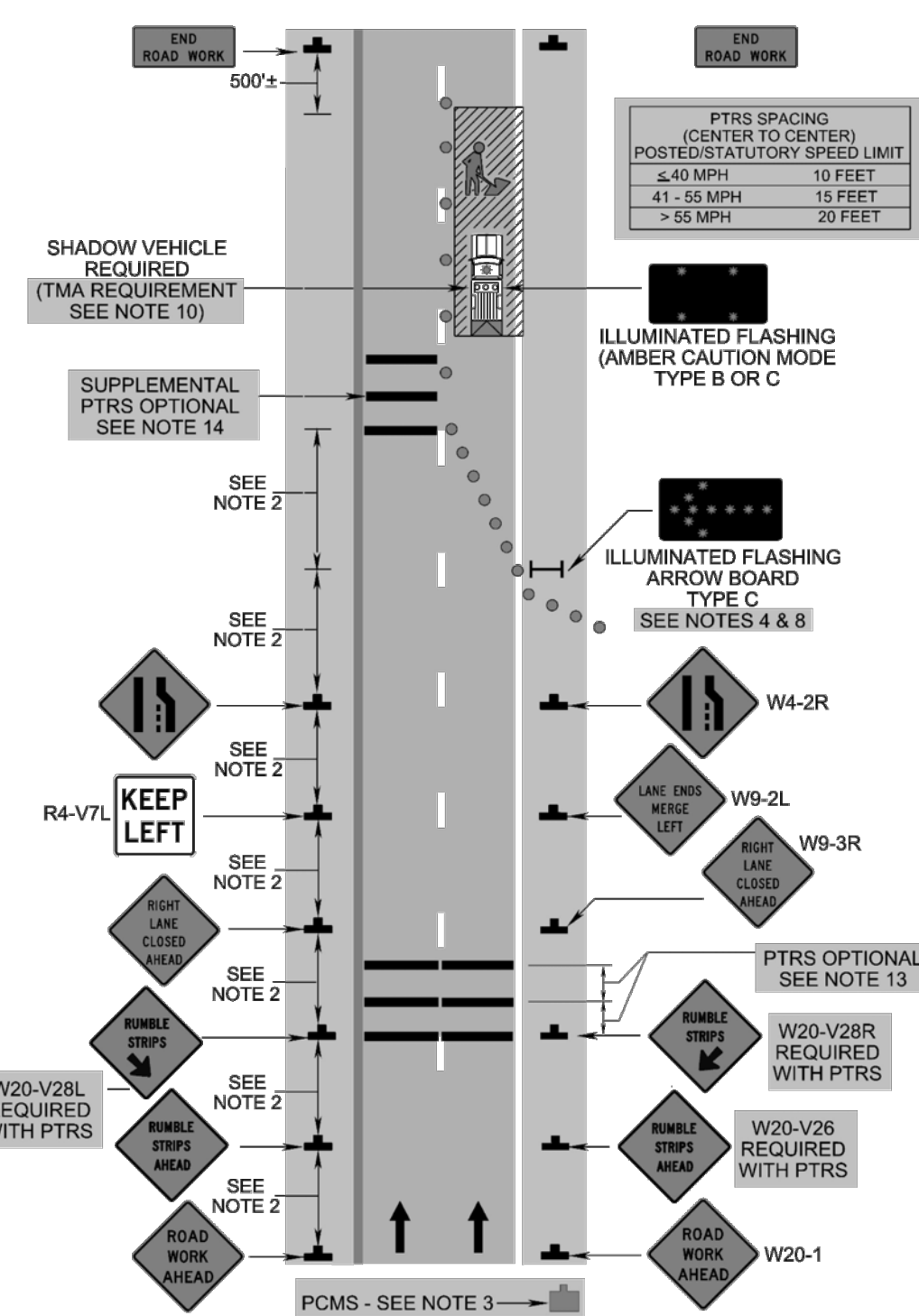
- PTRS and their supporting signs may be used, see Sections 6F-99 and 6G-25. Long-term transverse rumble strips may be used in long-term situations, see Section 6F-99 and TTC-20.
- The supplemental PTRS may be eliminated.

1: Revision 1 - 4/1/2015
2: Revision 2 - 9/1/2019

September 2019

Page 6H-41

Outside Lane Closure Operation on a Four-Lane Roadway (Figure TTC-16.2)



2: Revision 2 - 9/1/2019

Page 6H-78

September 2019

Typical Traffic Control Sidewalk Closure and Bypass Sidewalk Operation (Figure TTC-35.1)

NOTES

Standard:

- When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.

Guidance:

- Where high speeds are anticipated, a temporary traffic barrier and, if necessary, a crash cushion should be used to separate the temporary sidewalks from vehicular traffic.
- Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.
- Temporary markings should be considered for operations exceeding three days in duration.

Options:

- Only the TTC devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS (WS-1) signs, may be used to control vehicular traffic.
- For nighttime closures, Type A Flashing warning lights may be used on barricades that support signs and close sidewalks.
- Signs, such as KEEP RIGHT (R4-V7R) and KEEP LEFT (R4-V7L), may be placed along a temporary sidewalk to guide or direct pedestrians.

Standard:

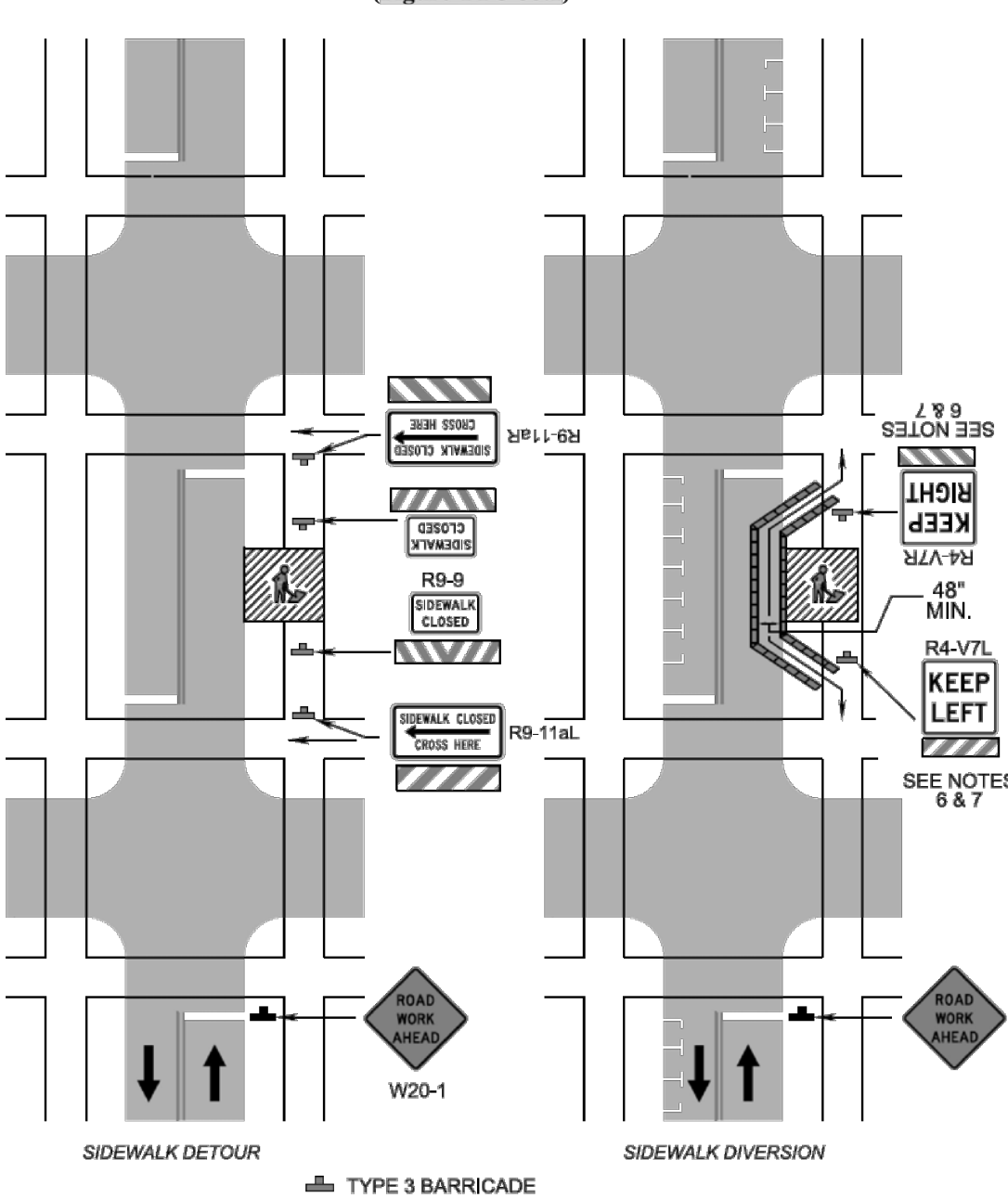
- All sidewalk closures shall be closed with Type 3 Barricades. The SIDEWALK CLOSED (R9-9) sign and the SIDEWALK CROSS HERE (R9-11) sign shall be installed above the Type 3 barricade. The KEEP RIGHT sign can cover the top rail of the Type 3 Barricade.

2: Revision 2 - 9/1/2019

September 2019

Page 6H-79

Sidewalk Closure and Bypass Sidewalk Operation (Figure TTC-35.1)



2: Revision 2 - 9/1/2019

REVISIONS:	
NO.	DESCRIPTION
1	PERMIT DWGS
2	DATE
3	08/06/20

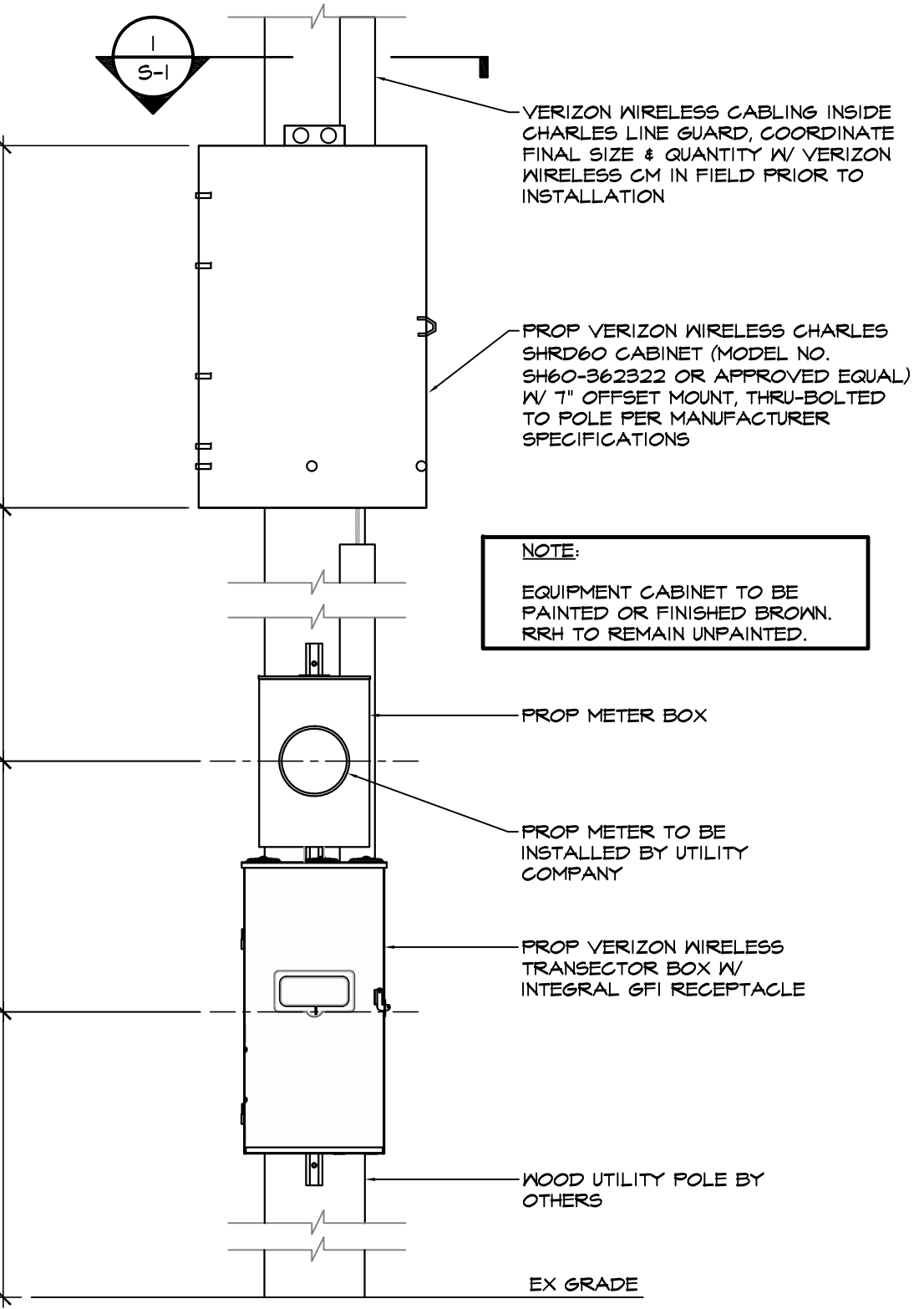
DESIGNED BY:	JKE
DRAWN BY:	ML
PROJECT NO:	10421.3001
DATE:	07/21/2020
SCALE:	AS NOTED
TITLE:	TRANSPORTATION MANAGEMENT PLAN

SHEET:

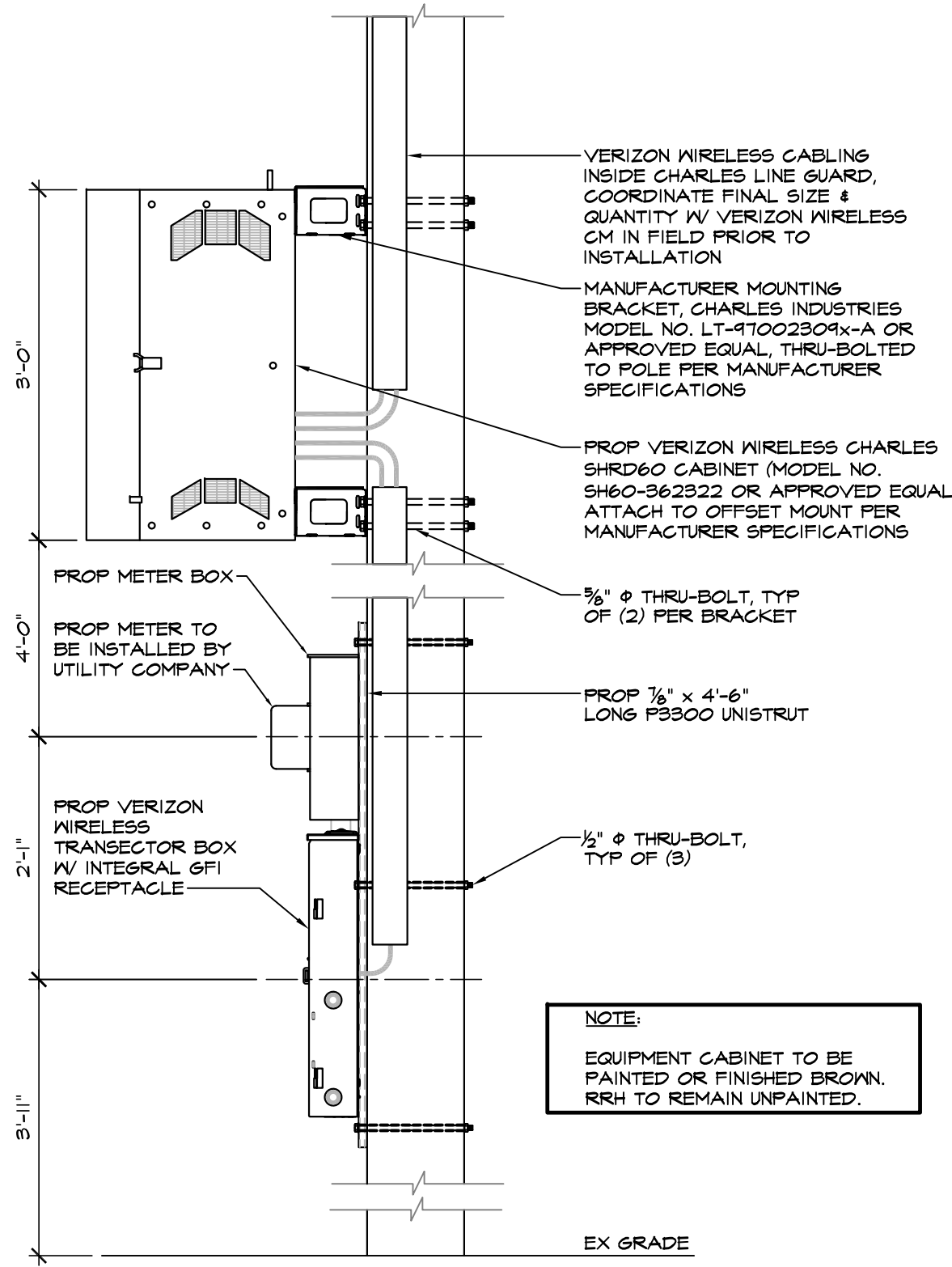
TMP-1



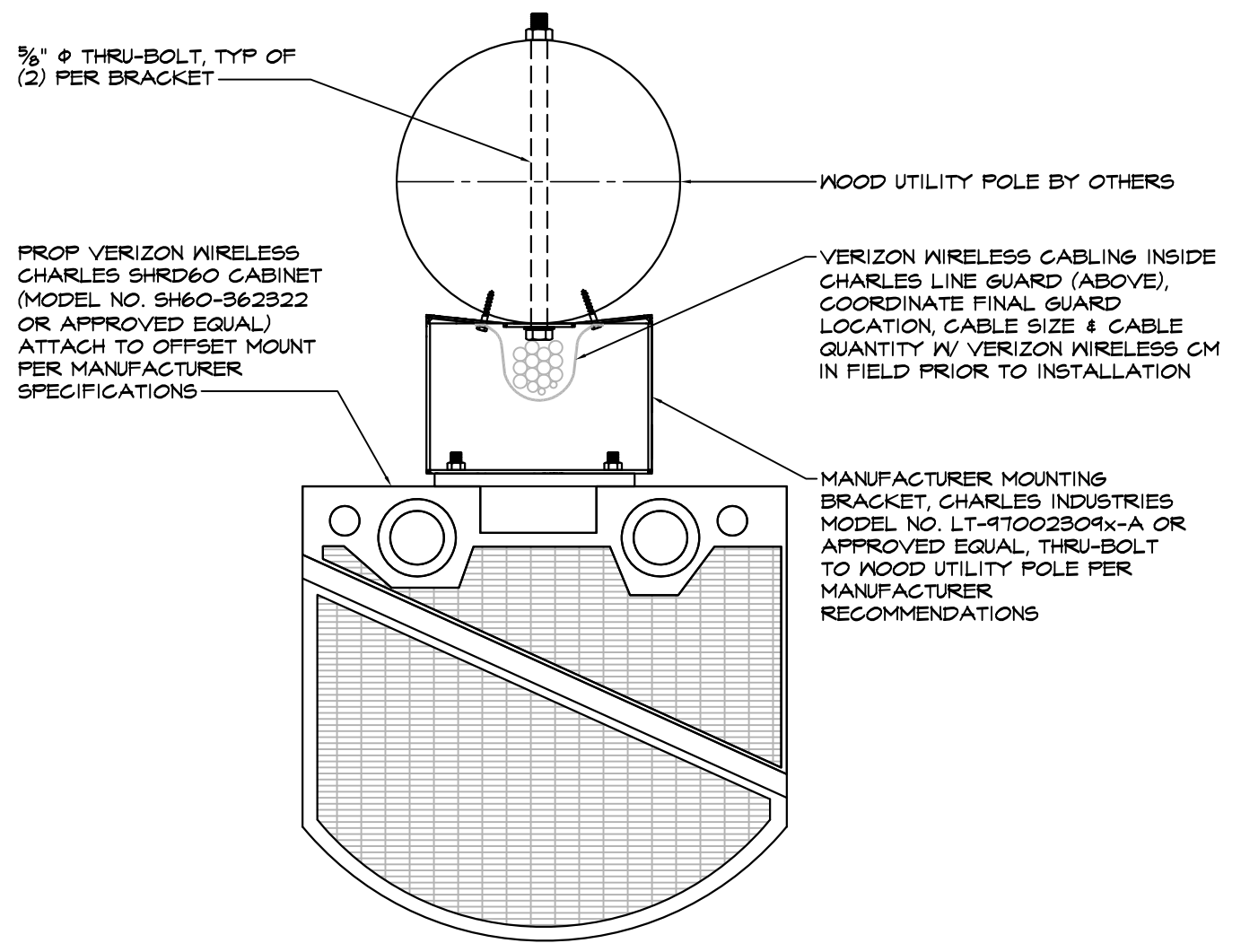
A B C D E F G H J K L M N P Q R



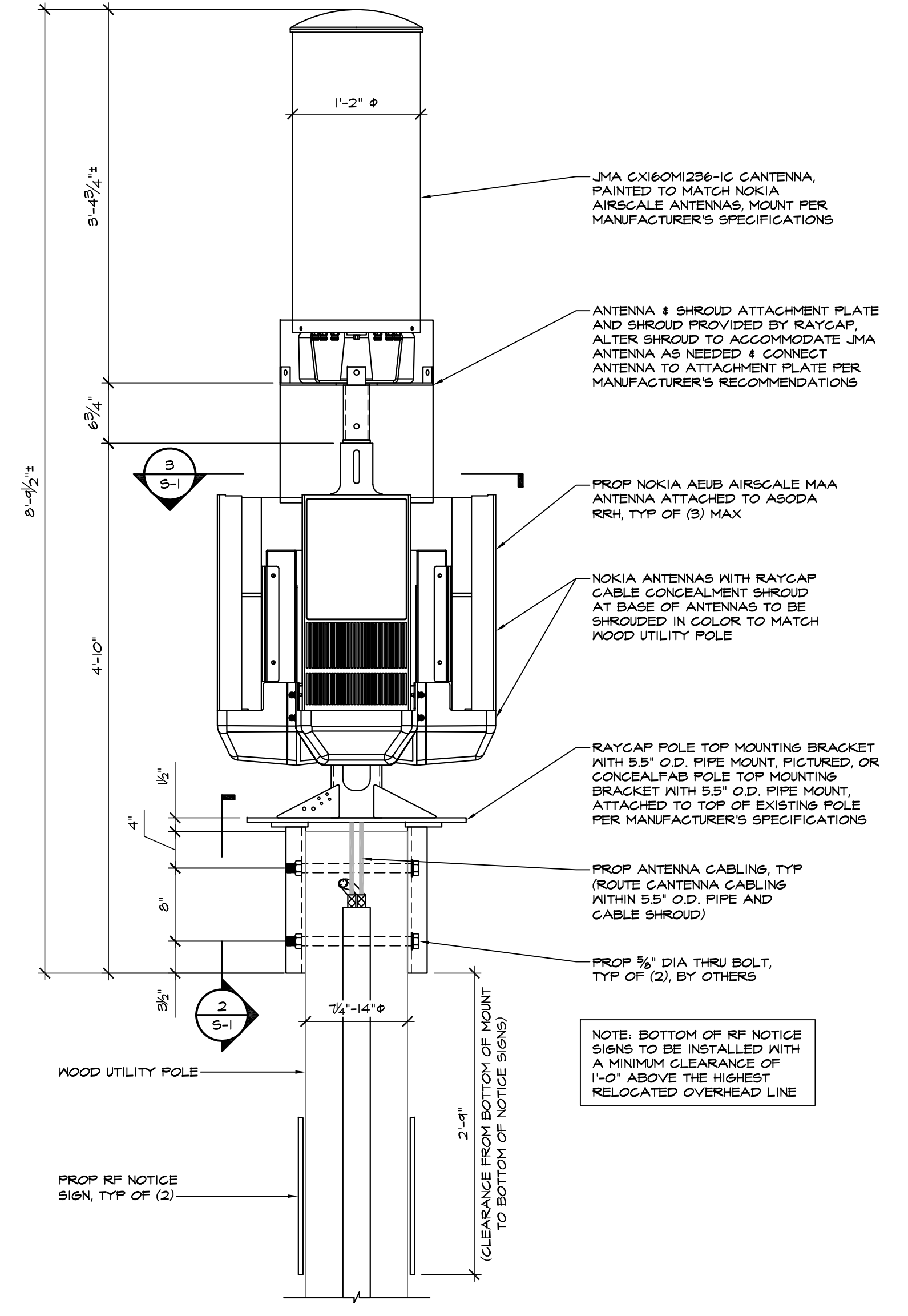
A POLE EQUIPMENT FRONT ELEVATION
SCALE: 3/4" = 1'-0"



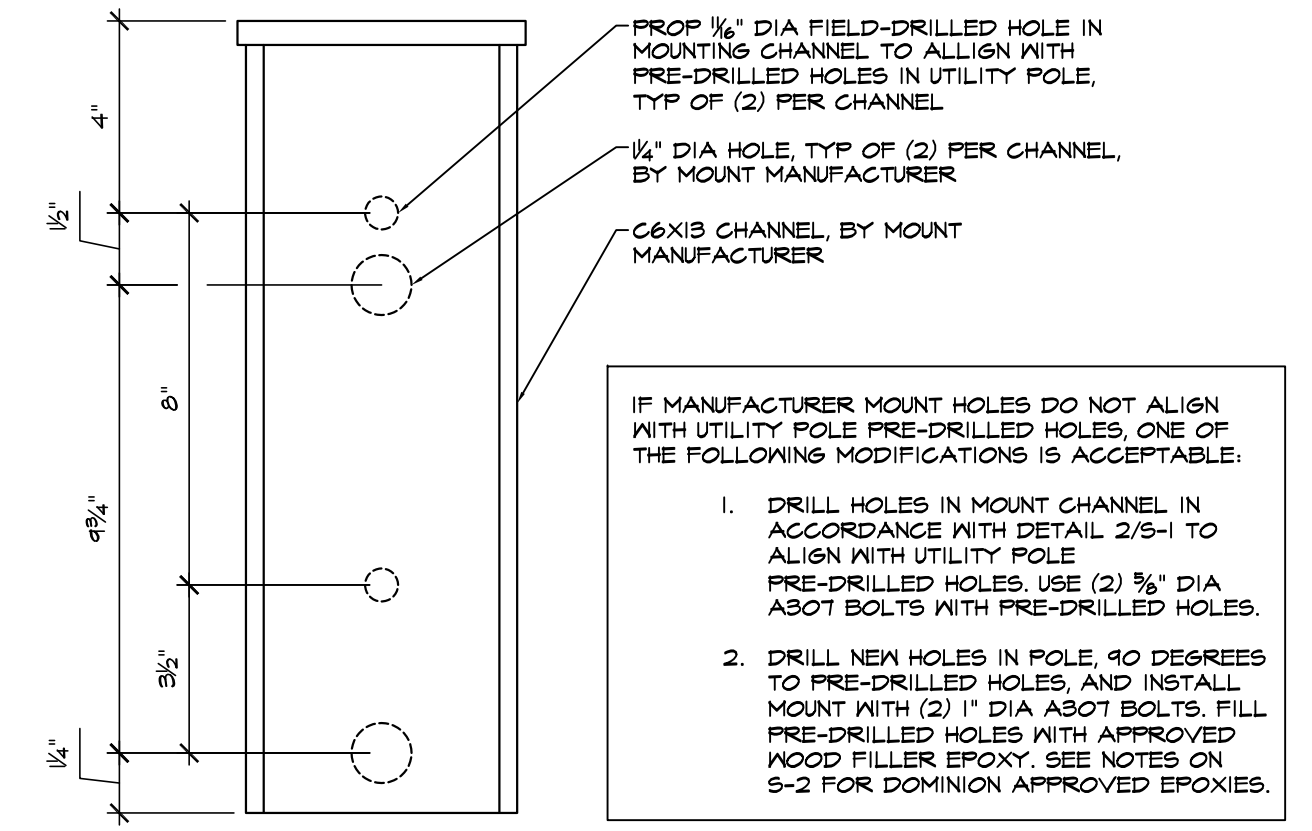
B POLE EQUIPMENT SIDE ELEVATION
SCALE: 3/4" = 1'-0"



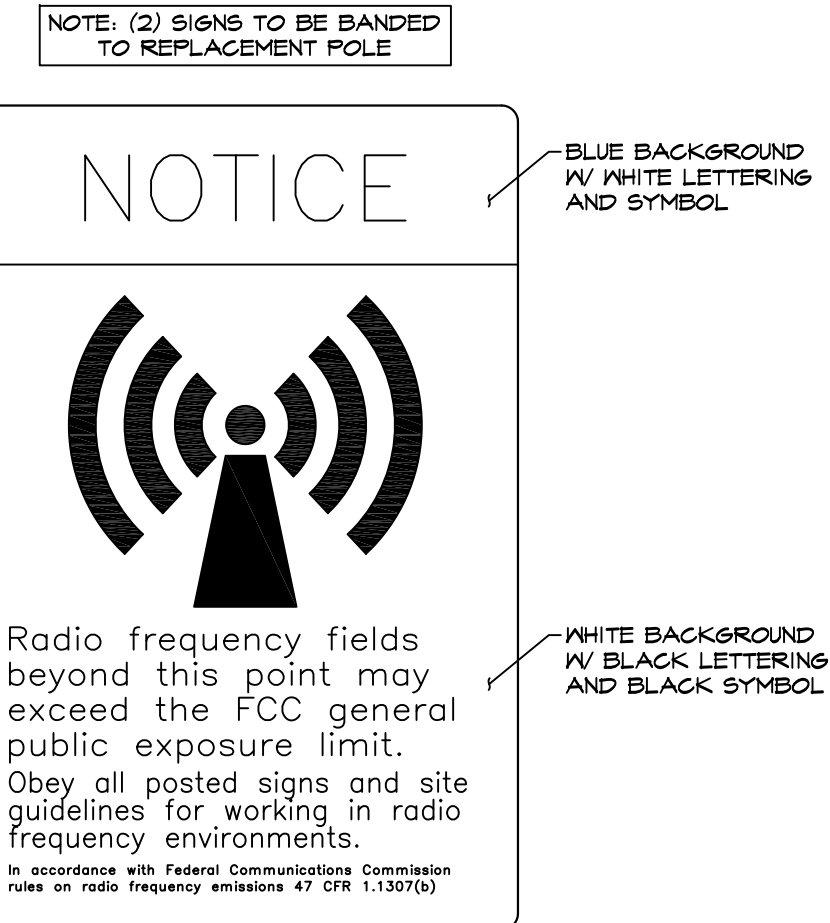
I EQUIPMENT CABINET
SCALE: 1 1/2" = 1'-0"



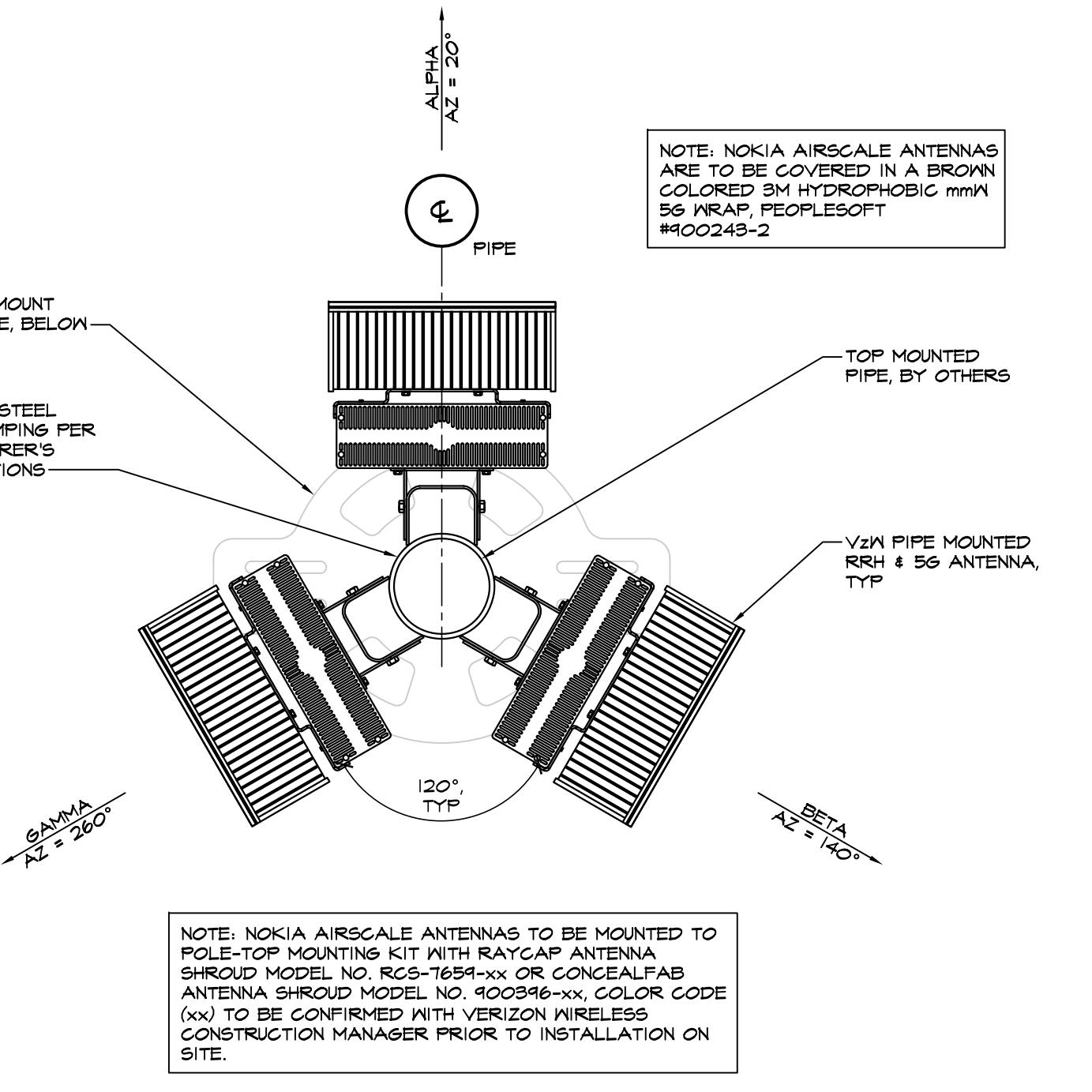
C ANTENNA & 5G PANEL ANTENNA MOUNT
SCALE: 1" = 1'-0"



2 MOUNT MODIFICATION
SCALE: 1 1/2" = 1'-0"



D RF NOTICE SIGN DETAIL
SCALE: 3" = 1'-0"



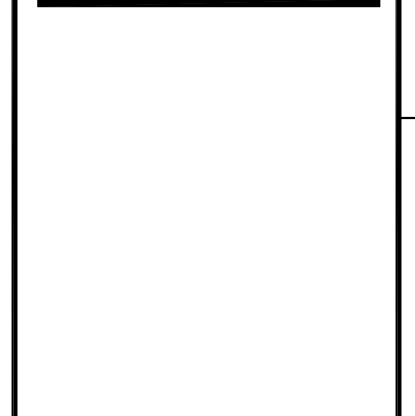
3 5G PANEL ANTENNA SECTION
SCALE: 1 1/2" = 1'-0"



Know what's below.
Call before you dig.

PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE.
THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

MRA
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410-621-1748 Fax



verizon
OLD TOWN N 2 - B - SMALL CELL
RIGHT OF WAY ADJACENT TO 300 N LEE STREET
ALEXANDRIA, VA 22314 (CITY OF ALEXANDRIA)

REVISIONS:		
NO.	DESCRIPTION	DATE
1	PERMIT DWGS	08/13/20
2		
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4		
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11		

DESIGNED BY: RJD
DRAWN BY: DNT
PROJECT NO: 10427.3001
DATE: 07/27/2020
SCALE: AS NOTED
TITLE: Structural Sections & Details
SHEET: S-1

GENERAL STRUCTURAL NOTES

BUILDING CODES

- A. ALL CONSTRUCTION SHALL CONFORM WITH THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE 2015 CONSTRUCTION CODE, THE TIA STANDARD (TIA-222-S) AND ALL SUBSEQUENT SUPPLEMENTS, THE INTERNATIONAL BUILDING CODE (IBC 2015) AND ALL SUBSEQUENT SUPPLEMENTS & DOCUMENTS.
- B. IN ADDITION, ALL CONSTRUCTION SHALL CONFORM WITH ANY LOCAL CODES AND REQUIREMENTS.

DESIGN LOADS

- A. THE DESIGN DEAD LOADING FOR ALL FRAMING IS BASED ON THE CONSTRUCTION MATERIALS SHOWN ON THE DRAWINGS. ALL FRAMING IS DESIGNED FOR THE HEIGHT OF THE EQUIPMENT INDICATED ON THE DRAWINGS.

B. WIND LOAD DESIGN DATA

BASIC WIND SPEED (ULTIMATE 3-SECOND GUST): 116 MPH
BASIC WIND SPEED (NOMINAL 3-SECOND GUST): 90 MPH
RISK CATEGORY: II
WIND EXPOSURE CATEGORY: C

C. SEISMIC LOAD DESIGN DATA

NOT APPLICABLE: S_e < 1.0

MISCELLANEOUS

- A. SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS MUST BE SUBMITTED BY THE CONTRACTOR OR OWNER FOR REVIEW BY THE ENGINEER. IF THE CONTRACTOR OR OWNER FAILS TO SUBMIT THE SHOP DRAWINGS, THE ENGINEER WILL NOT BE RESPONSIBLE FOR STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT. THE SHOP DRAWINGS SHALL INDICATE ANY DEVIATIONS OR OMISSIONS FROM THE CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMISSION AND MAKE ALL CORRECTIONS DEEMED NECESSARY.
- B. SEE CIVIL AND MEP CONTRACT DOCUMENTS FOR ADDITIONAL INFORMATION RELATING TO THE COORDINATION OF STRUCTURAL COMPONENTS.
- C. THE CONTRACTOR SHALL NOT SUBMIT REPRODUCTIONS OF THE STRUCTURAL CONTRACT DOCUMENTS AS SHOP DRAWINGS.
- D. SCALES SHOWN ON THE STRUCTURAL CONTRACT DRAWINGS ARE FOR GENERAL INFORMATION ONLY. DIMENSIONAL INFORMATION SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.
- E. APPLY DETAILS, SECTIONS AND NOTES ON THE DRAWINGS WHERE CONDITIONS ARE SIMILAR TO THOSE INDICATED BY DETAIL, DETAIL TITLE OR NOTE.

STRUCTURAL AND MISCELLANEOUS STEEL

- A. ALL STEEL CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE AISC STEEL CONSTRUCTION MANUAL "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" (ANSI/AISC 360) AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
- B. ALL MISCELLANEOUS STEEL (CHANNELS AND PLATES) SHALL CONFORM TO ASTM A36 (F_y = 36 KSI).
- C. ALL HSS SQUARE OR RECTANGULAR SHAPES SHALL CONFORM TO ASTM A500, GRADE B (F_y = 46 KSI).
- D. ALL PIPES SHALL CONFORM TO ASTM A53, GRADE B (F_y = 35KSI)
- E. ALL THRU BOLTS SHALL CONFORM TO ASTM A307 (F_u = 60 KSI).
- F. ALL NUTS SHALL CONFORM TO ASTM A563. ALL WASHERS SHALL CONFORM TO ASTM F436.
- G. ALL SHOP WELDS SHALL BE PERFORMED BY CERTIFIED WELDERS AND CONFORM TO THE AMERICAN WELDING SOCIETY CODE FOR BUILDINGS AWS D1.1. WELDS SHALL DEVELOP THE FULL STRENGTH OF MATERIALS BEING WELDED UNLESS OTHERWISE INDICATED.
- H. AN INDEPENDENT INSPECTION AGENCY SHALL INSPECT ALL STRUCTURAL STEEL AND VERIFY THAT IT CONFORMS TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. FIELD INSPECTION REPORTS SHALL BE SUBMITTED TO THE ENGINEER WITHIN 5 DAYS OF THE INSPECTION. THE CONTRACTOR SHALL NOTIFY THE INSPECTION AGENCY OF ALL PHASES OF STEEL CONSTRUCTION AND WELDING.
- I. STEEL MEMBERS, FABRICATIONS AND ASSEMBLIES EXPOSED TO WEATHER OR INDICATED TO BE GALVANIZED SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 AFTER FABRICATION. ALL BOLTS, SCREWS, WASHERS & NUTS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM F2329.
- J. PROVIDE HOLES IN STEEL AS REQUIRED TO PREVENT ANY ACCUMULATION OF WATER. ALL PENETRATIONS THROUGH MAIN MEMBERS SHALL NOT EXCEED 1/8" DIA. AND SHALL BE GROUND SMOOTH. THESE DRAINS MUST BE KEPT CLEAN AND OPEN.
- K. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS INDICATING THE SIZES, EXTENT, AND LOCATION OF ALL STRUCTURAL AND MISCELLANEOUS STEEL FRAMING INCLUDING ALL CONNECTIONS, FASTENERS, AND BEARINGS.
- L. SHOW ALL COPIES, HOLES, OPENINGS AND MODIFICATIONS REQUIRED IN STRUCTURAL STEEL MEMBERS FOR ERECTION OR THE WORK OF OTHER TRADES ON THE SHOP DRAWINGS FOR APPROVAL BY THE STRUCTURAL ENGINEER.

DOMINION NOTES:

- A. A 4"x11" RF NOTICE SIGN MUST BE INSTALLED ON BOTH SIDES OF THE POLE A MINIMUM OF ONE FOOT ABOVE THE UPPERMOST ELECTRIC SUPPLY FACILITIES. THIS SIGN MARKS THE POINT WHERE RF EXPOSURE LEVELS MAY EXCEED FCC OET-65 APPENDIX A' LIMITS FOR UNCONTROLLED GENERAL POPULATION EXPOSURE. WORKING ABOVE THIS POINT REQUIRES DE-ENERGIZING THE ANTENNA. THIS SIGN MUST INCLUDE THE STANDARD RF SYMBOL AND STATE "NON RF WORKERS MUST POWER DOWN DEVICE WHEN WORKING ABOVE THIS POINT." THE SIGN SHALL BE 60 MIL LEXAN WITH UV INHIBITORS AND SIGNS SHALL ADHERE TO IEEE C48.2 STANDARDS.
- B. A POWER DISCONNECT MUST BE INSTALLED. THIS DEVICE MUST PROVIDE DISCONNECTING MEANS FOR DE-ENERGIZING AC AND DC (BATTERY BACK UP) POWER TO THE ANTENNA. THE DISCONNECT SHOULD BE A STANDARD NEMA TYPE HINGED ENCLOSURE AND IS SUBJECT TO COMPANY APPROVAL. THE DISCONNECT SHALL BE CLEARLY LABELED AS THE ANTENNA POWER DISCONNECT.
- C. AN ADDITIONAL RF LABEL ON THE EQUIPMENT MUST INCLUDE COMMUNICATION COMPANY NAME, AND A 24-HR CONTACT PHONE NUMBER. THE LABEL SHALL ADHERE TO IEEE C48.2 STANDARDS.
- D. THE ANTENNA SHALL BE MOUNTED THE GREATER VALUE OF NESC MINIMUM CLEARANCE OR THE MINIMUM CLEARANCE REQUIRED TO MEET OET UNCONTROLLED EXPOSURE GUIDELINES AT A POINT 1' ABOVE THE ELECTRIC FACILITIES. THE ANTENNA INCLUDING ATTACHING HARDWARE SHALL BE MOUNTED A MINIMUM OF 45" ABOVE PRIMARY INSTALLATIONS AND 40" ABOVE SECONDARY INSTALLATIONS. (NESC TABLE 238-1)
- E. ANTENNA EQUIPMENT IS PERMISSIBLE ON WOOD POLES ONLY.
- F. ONLY NON METALLIC ELECTRIC GRADE CONDUIT OR RISERS CAN BE USED FOR ROUTING THE COMMUNICATION CABLES THROUGH THE SUPPLY SPACE. THE CONDUIT INSTALLATION SHALL NOT OBSTRUCT THE CLIMBING SPACE OR WORKING SPACE ON THE POLE AND SHALL NOT OBSTRUCT SUPPLY EQUIPMENT. (NESC 234B, AND NESC 234H4).
- G. THE INSTALLATION MUST MEET ALL NESC REQUIREMENTS.
- H. A DOMINION DISTRIBUTION REPRESENTATIVE MUST APPROVE ALL ANTENNA ATTACHMENT POLES. ANTENNAS ARE NOT ALLOWED ON POLES FREQUENTLY VISITED BY OPERATIONS PERSONNEL. THESE INCLUDE EQUIPMENT POLES SUCH AS RECLOSERS, THREE PHASE TRANSFORMER BANKS, THREE PHASE TERMINALS, CAPACITORS, SWITCHES, ETC.
- I. INSTALLERS WORKING IN THE AREA OF THE POLE ABOVE THE NORMAL COMMUNICATIONS SPACE MUST MEET OSHA 1910.264 REQUIREMENTS.
- J. AN ANTENNA GROUND WIRE AND GROUNDING ELECTRODE IS REQUIRED. THIS GROUND SHALL BE BONDED TO THE COMPANY GROUND WIRE.
- K. VERIZON TO LEAVE MINIMUM 3' LEADS COILED AND SECURED TO PREVENT ACCIDENTAL CONTACT WITH SECONDARY CONDUCTORS.

- L. SERVICE WILL BE CONNECTED BY VERIZON IN COMPLIANCE WITH FILED RATE PLAN.
- M. LINE ARRESTER INSTALLATIONS ARE REQUIRED ON POLES WITH PRIMARY CONDUCTORS.
- N. VERIZON'S GROUND MAY NOT BE USED TO SATISFY NEC REQUIREMENTS FOR THE EQUIPMENT BRACKET AC SERVICE GROUND. THE EQUIPMENT AND ITS AC SERVICE GROUND ARE REQUIRED TO BE BONDED TO THE COMPANY GROUND CONDUCTOR ON THE POLE AT LEAST 6" ABOVE GROUND LEVEL USING A NO. 6 CU CONDUCTOR. CONNECTION TO THE COMPANY'S GROUND ROD OR CONNECTOR IS NOT APPROVED.
- O. BONDS SHALL BE MADE BETWEEN THE GROUND WIRE AND THE EQUIPMENT CABINET (NOT NEUTRAL BUS) OF THE POWER SUPPLY/SWITCH. THESE CONNECTIONS ARE TO AVOID POTENTIAL DIFFERENCES BETWEEN DEVICES ON THE POLES. BOND TO THE POWER SUPPLY/SWITCH SHALL BE EXTERNAL AND VISIBLE FROM THE GROUND. WHEN A COMPANY DRIVEN GROUND EXISTS ON THE POLE, THE EQUIPMENT CASE BONDING WIRE NEED EXTEND ONLY FROM THE SWITCH TO THE COMPANY GROUND WIRE.
- P. THE METER BASE, EQUIPMENT CABINET AND DISCONNECT SHALL BE MOUNTED AT AN OPERATIONAL HEIGHT AS DETAILED ON THE CONSTRUCTION DOCUMENTS:
1. THE METER BASE, EQUIPMENT CABINET OR DISCONNECT SHALL NOT OBSTRUCT A WALKWAY OR BE SUBJECT TO VEHICULAR TRAFFIC.
 2. THE EQUIPMENT BRACKET SHALL NOT BE USED ALONE OR IN CONJUNCTION WITH A FENCE, PEDESTAL, ETC. AS A CLIMBING AID.
- Q. FOR SAFETY PURPOSES DEVICES WITH LEAD ACID BATTERIES SHALL NOT BE USED.
- R. DUE TO OPERATIONAL CONCERNS, SECONDARY POLES OR GUY STUB POLES ARE PREFERRED FOR ANTENNA ATTACHMENTS. PRIMARY POLES SHOULD ONLY BE CONSIDERED WHEN THERE IS NO OTHER SUITABLE POLE IN THE AREA.
- S. THE WEATHERHEAD WILL BE INSTALLED 4" ABOVE THE NEUTRAL.
- T. DOMINION APPROVED WOOD EPOXIES:
1. WOODPECKER HOLE REPAIR KIT EPOXY AS MANUFACTURED BY IPOLE
 2. UPR UTILITY POLE REPAIR EPOXY AS MANUFACTURED BY POLYNATER

POST-INSTALLATION INSPECTION

- A. A POST-INSTALLATION INSPECTION REPORT IS REQUIRED AND SHALL BE INCLUDED IN THE CONTRACTOR'S BID. A POST-INSTALLATION INSPECTION IS A VISUAL INSPECTION OF TOWER INSTALLATIONS AND A REVIEW OF CONSTRUCTION INSPECTIONS AND OTHER REPORTS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NAMELY THE INSTALLATION DRAWINGS.
- B. THE POST-INSTALLATION INSPECTION REPORT SHALL BE COMPLETED BY A PROFESSIONAL ENGINEER LICENSED IN THE JURISDICTION IN WHICH THE PROJECT IS LOCATED.
- C. THE INTENT OF THE POST-INSTALLATION INSPECTION REPORT IS TO CONFIRM INSTALLATION AND CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE INSTALLATION DESIGN ITSELF.
- D. TO ENSURE THAT THE REQUIREMENTS OF THE POST-INSTALLATION INSPECTION REPORT ARE MET, IT IS VITAL THAT THE CONTRACTOR AND POST-INSTALLATION INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PO IS RECEIVED.



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verizon
OLD TOWN N 2 - B - SMALL CELL
RIGHT OF WAY ADJACENT TO 300 N LEE STREET
ALEXANDRIA, VA 22314 (CITY OF ALEXANDRIA)

REVISIONS:

NO.	DESCRIPTION	DATE
	PERMIT DWGS	08/13/20

DESIGNED BY: RJD

DRAWN BY: DNT

PROJECT NO: 10427.3001

DATE: 07/27/2020

SCALE: AS NOTED

TITLE:

General Notes

SHEET:

S-2



**Know what's below.
Call before you dig.**

PROTECT YOURSELF. GIVE THREE
WORKING DAYS NOTICE.
THIS DRAWING DOES NOT INCLUDE NECESSARY
COMPONENTS FOR CONSTRUCTION SAFETY. ALL
CONSTRUCTION MUST BE DONE IN COMPLIANCE
WITH THE OCCUPATIONAL SAFETY AND HEALTH
ACT OF 1970 AND ALL RULES AND REGULATIONS
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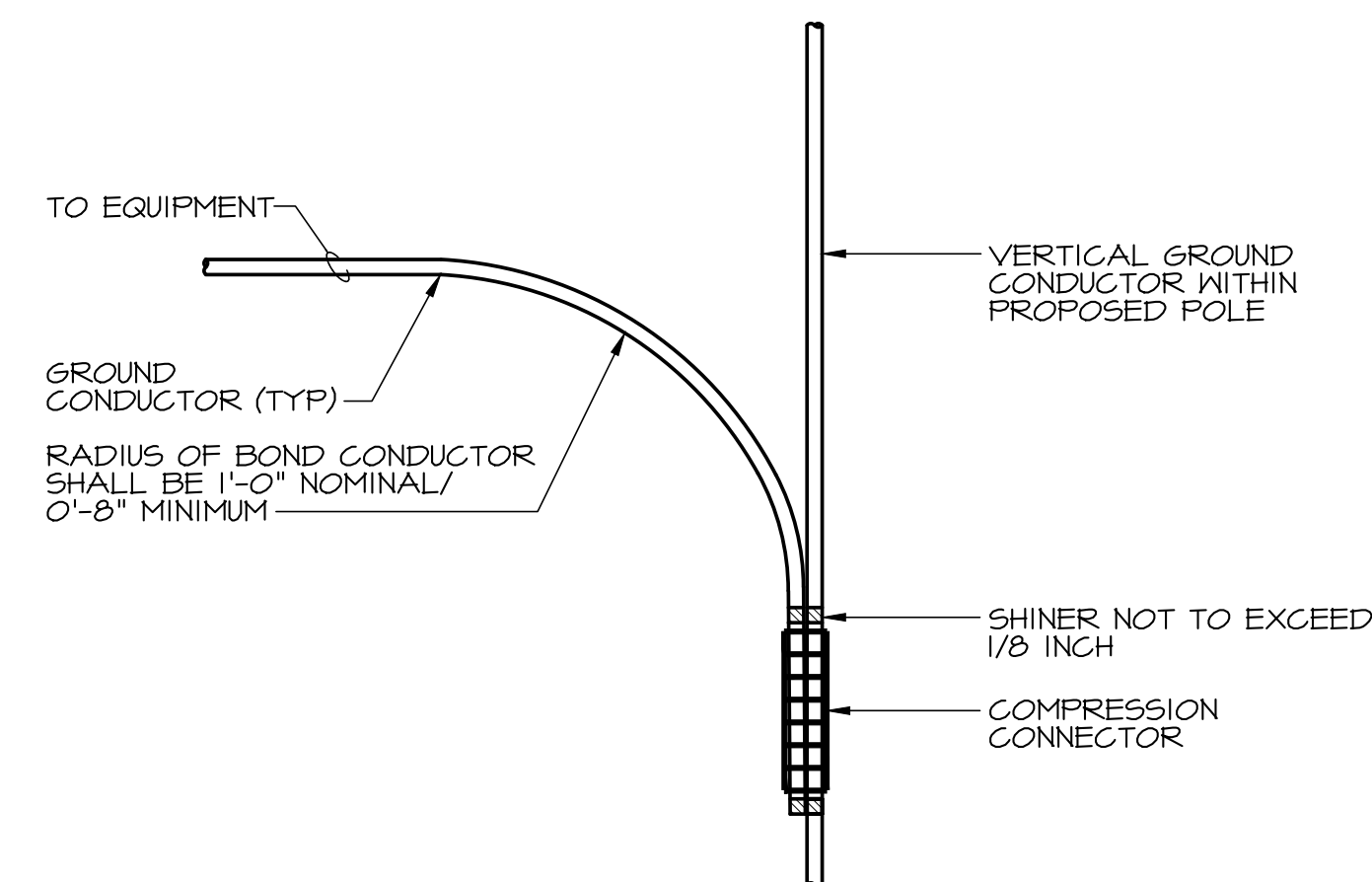
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
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GROUNDING GENERAL NOTES

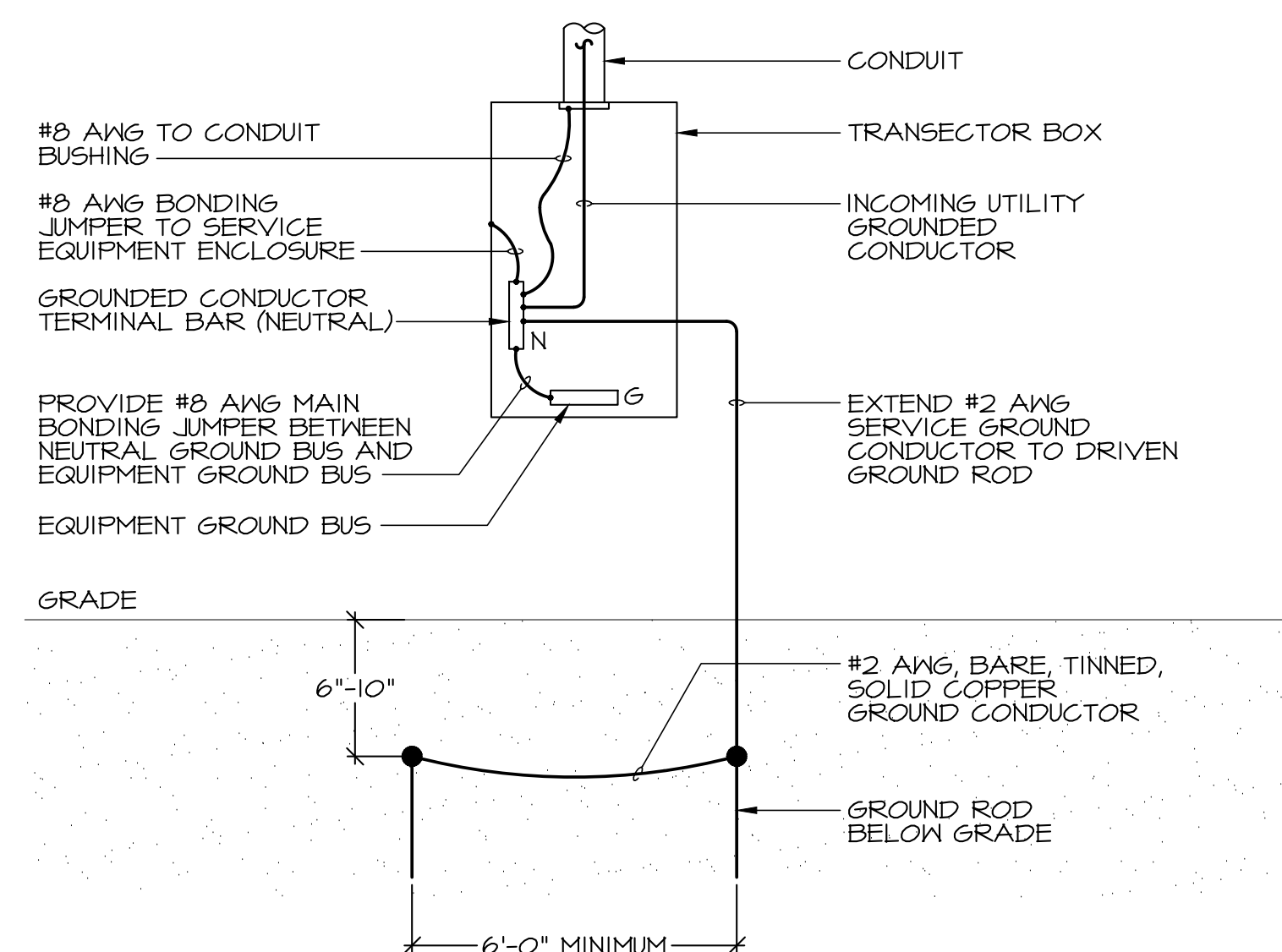
1. ALL GROUND CONNECTIONS ABOVE GRADE SHALL BE EXOTHERMIC (CADWELD) TO NEAREST REINFORCING BAR USING ERICO CADWELD "ONE-SHOT" CONNECTIONS.
2. ALL EXTERIOR GROUND CONDUCTORS SHALL BE #2 AWG BARE, TINNED SOLID COPPER, UNLESS NOTED OTHERWISE.
3. ALL GROUND CONNECTIONS ABOVE GRADE SHALL BE TWO-HOLE COPPER COMPRESSION TYPE WITH STANDARD LENGTH BARREL (BURNDY # 2A2CL- 2TIC4EI). SINGLE HOLE LUGS ARE NOT ACCEPTABLE.
4. ALL MOUNTING HARDWARE FOR EXTERIOR LOCATIONS SHALL BE GALVANIZED INCLUDING NUTS, BOLTS, FLAT AND LOCK WASHERS.
5. ALL EXTERIOR MECHANICAL CONNECTIONS SHALL BE MADE USING OXIDE-INHIBITING JOINT COMPOUND. THE COMPOUND SHALL BE APPLIED TO ALL SURFACES OF BOLTS, WASHERS, NUTS AND CONDUITS AND TO ALL END BAR FLATES. ALL BARE COPPER SURFACES OF CONDUCTORS SHALL BE COATED PRIOR TO LUGGING. JOINT COMPOUND FOR GROUNDING SHALL BE NO-OX. KOPR-SHIELD SHALL NOT BE PERMITTED.
6. TYPICAL BI-DIRECTIONAL BONDING CONNECTIONS TO THE INTERIOR GROUND RISER SHALL BE MADE USING DOUBLE GRIMP TYPE "C" TAP CONNECTORS.
7. ALL EXOTHERMIC WELD CONNECTIONS AND FIELD CUTS OF METALLIC OBJECTS EXPOSED TO WEATHER SHALL BE FIRST GRATED TO REMOVE GALVANIZING (AFTER COOL DOWN) THEN BE TOPPED WITH BRUSH ON MARINE GRADE GALVANIZING.
8. ALL CONDUIT USED AS SLEEVES FOR GROUNDING OR BONDING CONNECTIONS SHALL BE PVC.
9. ALL GROUND RODS SHALL BE DRIVEN VERTICALLY USING A GROUND ROD SHIFTER TO PREVENT THE ENDS FROM "MUSHROOMING".
10. JOINT COMPOUND FOR GROUNDING SHALL BE NO-OX. KOPR-SHIELD SHALL NOT BE PERMITTED.

DRAWING NOTES

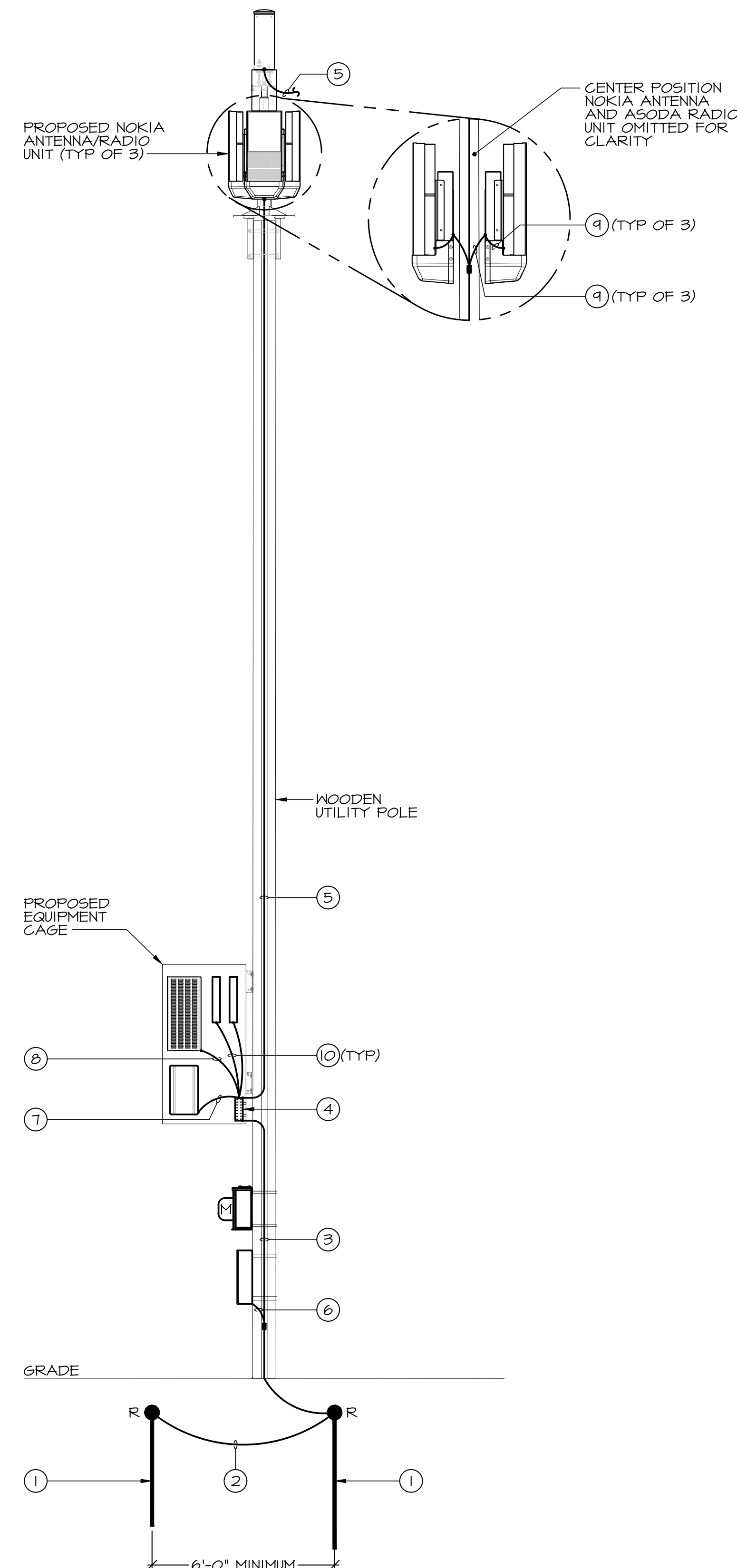
- (1) PROVIDE 8'-0" (MINIMUM) X 5/8" COPPER CLAD STEEL GROUND ROD.
- (2) BURIED GROUND RING SHALL BE #2 AWG, BARE, TINNED, SOLID COPPER.
- (3) EXTEND #12 AWG, GREEN INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM BURIED GROUND ROD AND BOND TO EXISTING GROUND BAR PROVIDED WITH EQUIPMENT CASE, GROUND CONDUCTOR SHALL BE HOUSED WITHIN 1/2" GROUND WIRE MOLDING, SECURE GROUND WIRE MOLDING TO UTILITY POLE VIA GALVANIZED 2"x5/8" STAPLES.
- (4) EXISTING 14X2 POSITION GROUND BAR PROVIDED WITH ENCLOSURE FOR GROUNDING OF TELECOMMUNICATIONS EQUIPMENT.
- (5) EXTEND #12 AWG, GREEN INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM GROUND BAR VERTICALLY UP EXTERIOR OF POLE TO PROPOSED ANTENNA/ NOKIA ANTENNAS/ ASODA RADIO UNITS, GROUND CONDUCTOR SHALL BE HOUSED WITHIN SCHEDULE 40 PV MOLD, SECURE POLE RISER TO UTILITY POLE VIA GALVANIZED LAG BOLTS.
- (6) EXTEND #12 AWG, GREEN INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM ENCLOSURE OF PROPOSED PANELBOARD AND BOND TO GROUND CONDUCTOR EXTENDING TO BURIED GROUND ROD. REFER TO SERVICE GROUNDING DETAIL, THIS SHEET.
- (7) EXTEND #16 AWG, INSULATED, STRANDED, COPPER GROUND CONDUCTOR FROM POWER SUPPLY UNIT (PSU) AND BOND TO EQUIPMENT GROUND BAR.
- (8) EXTEND #16 AWG, INSULATED, STRANDED, COPPER GROUND CONDUCTOR FROM REMOTE RADIO HEAD AND BOND TO EQUIPMENT GROUND BAR.
- (9) EXTEND #16 AWG, GREEN INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM EACH NOKIA ANTENNA/RADIO UNIT/ASODA AND BOND TO GROUND PIGTAIL CONDUCTOR, EXTEND TO GROUND RING AND FUSE TO GROUNDING CONDUCTOR, EXTENDING DOWN LIGHT POLE TO BURIED GROUND ROD. REFER TO DIRECTIONAL SPLICE DETAIL, THIS SHEET.
- (10) EXTEND #16 AWG, INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM EACH AIRSCALE MICRO RRH AND BOND TO EQUIPMENT GROUND BAR.
- (11) REFER TO DOMINION SPECIFICATIONS FOR ADDITIONAL GROUNDING REQUIREMENTS.



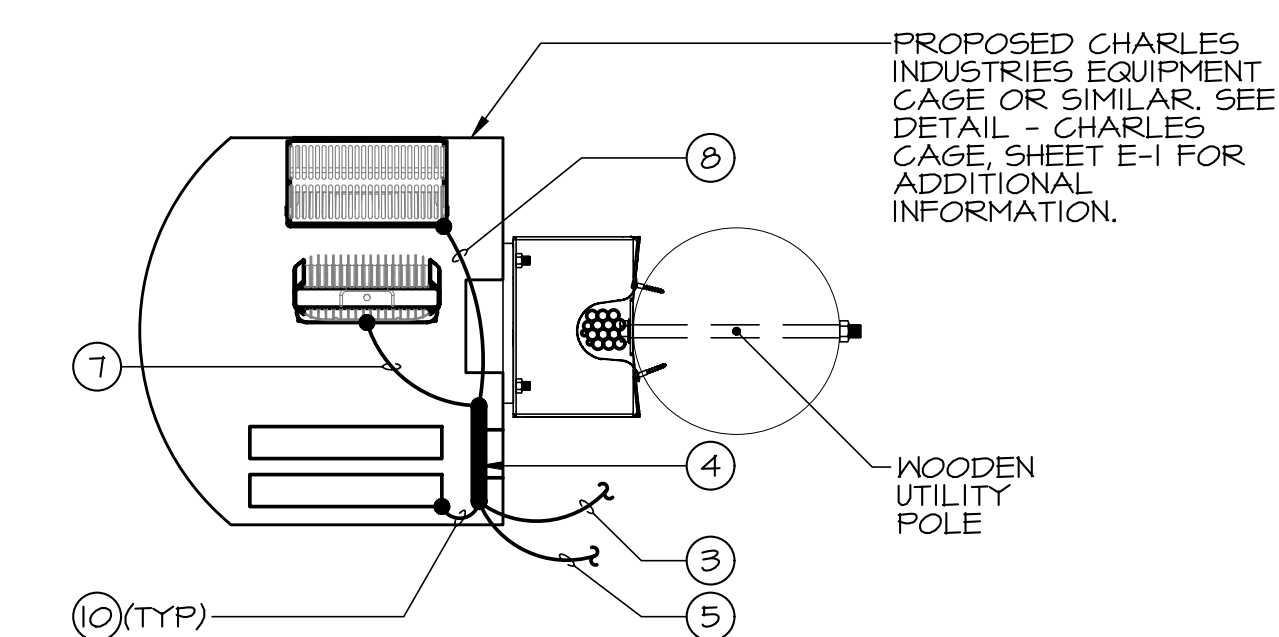
DETAIL - DIRECTIONAL SPLICE
NO SCALE



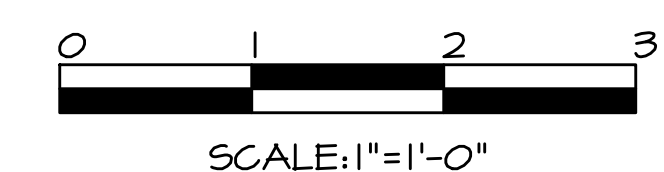
DETAIL - ELECTRIC SERVICE
GROUNDING ELECTRODE
NO SCALE



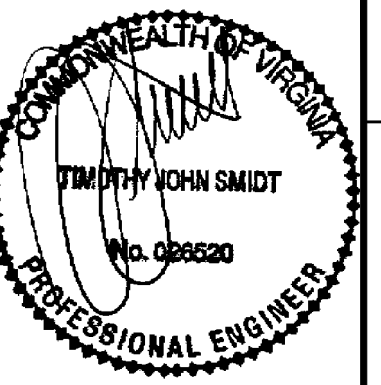
② UTILITY POLE GROUNDING DIAGRAM



GROUNDING PLAN
SCALE: 1" = 1'-0"



TELECENT ENGINEERING INC.
2216 Commerce Road, Suite 1
Forest Hill, MD 21050
410-692-5816
www.tel-eng.com



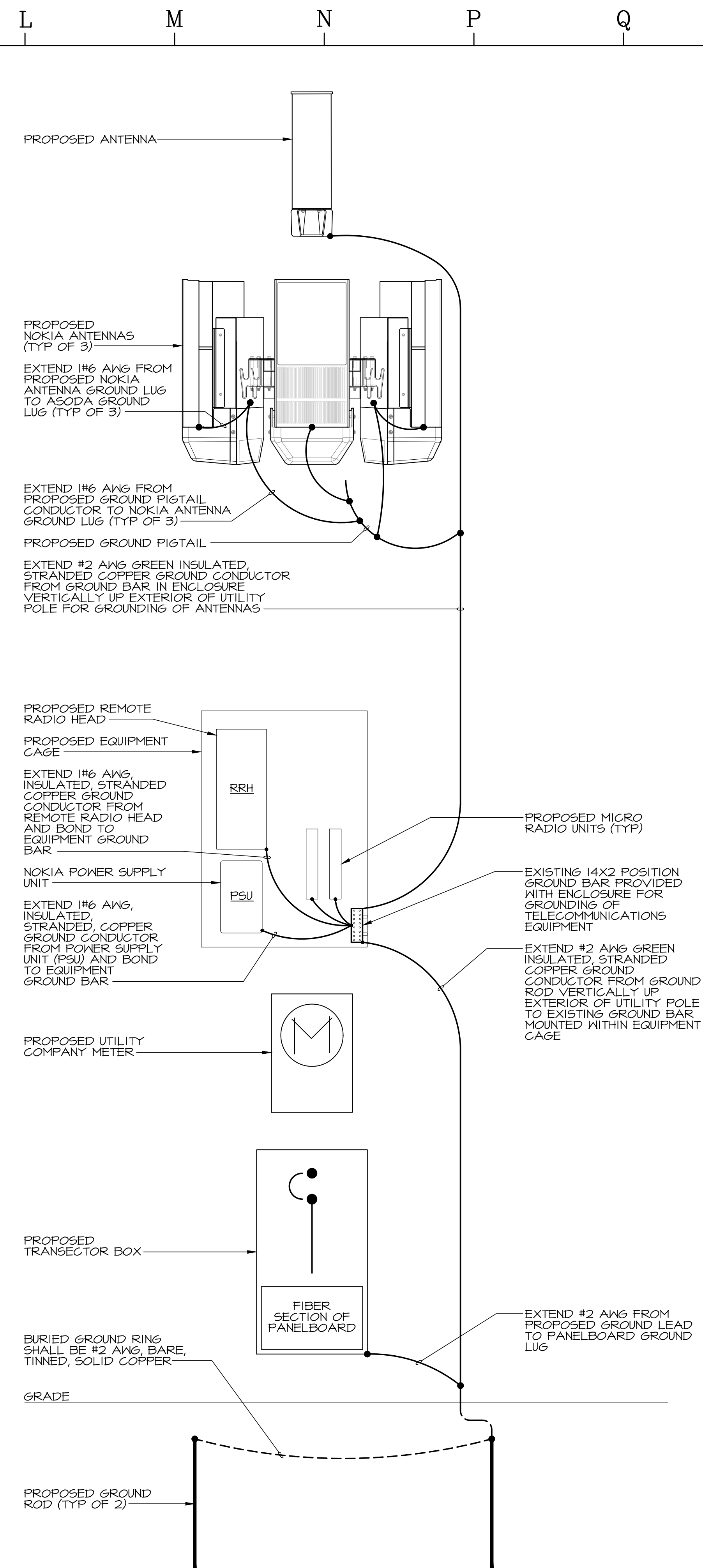
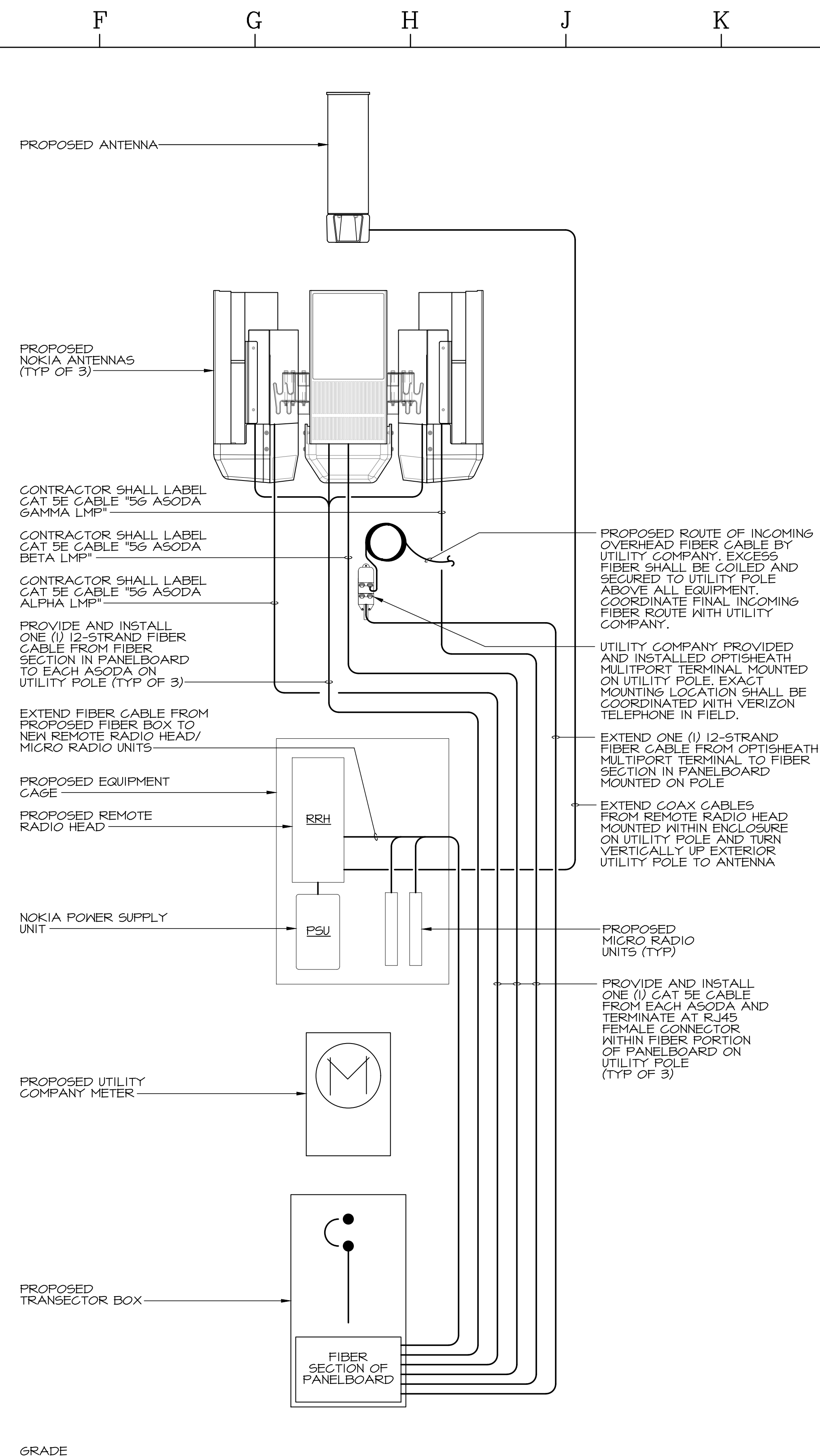
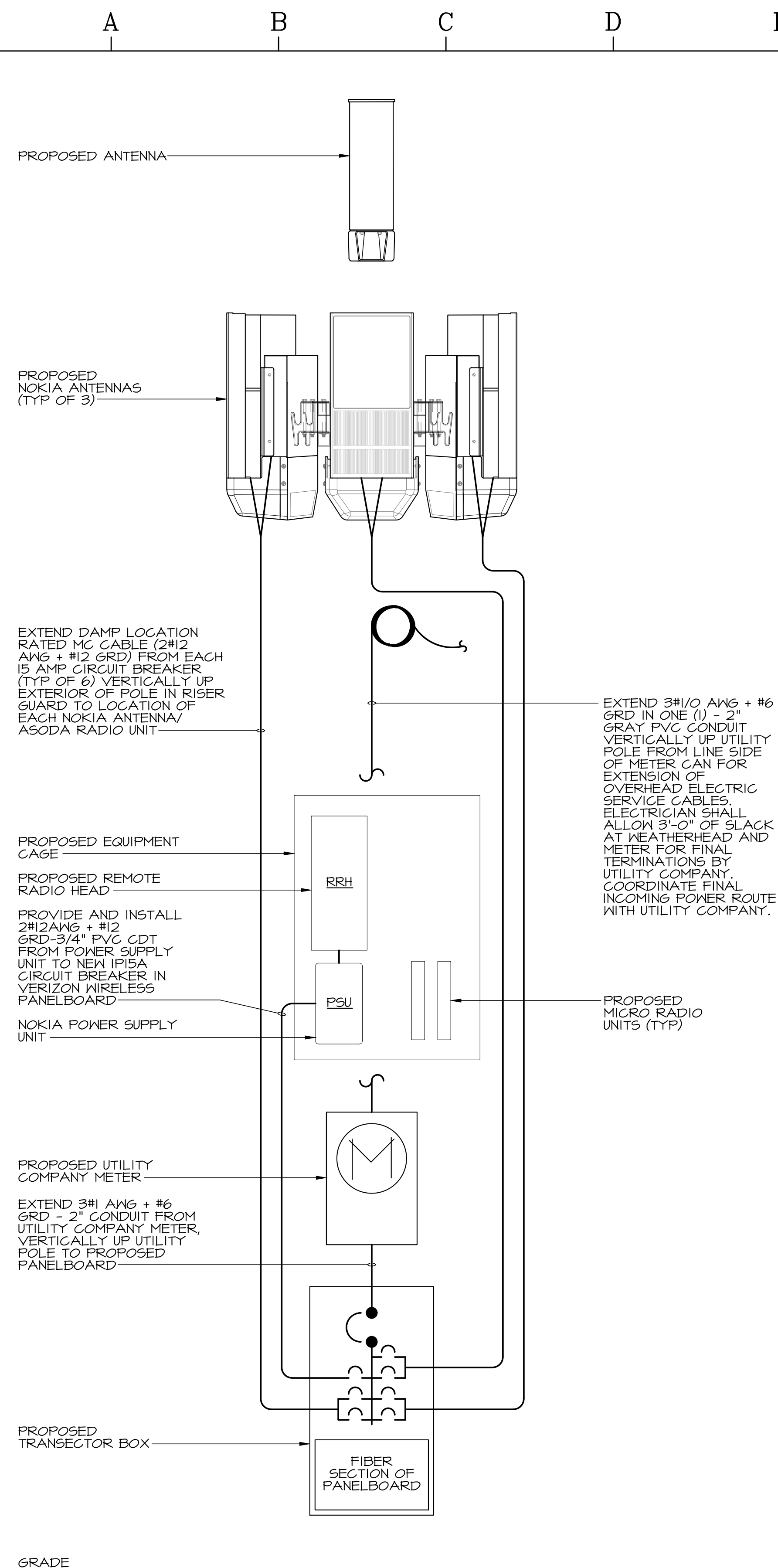
verizon
OLD TOWN N 2 - B - SMALL CELL
RIGHT OF WAY ADJACENT TO 300 N LEE STREET, ALEXANDRIA,
CITY OF ALEXANDRIA, VIRGINIA 22314

REVISIONS:		
NO.	DESCRIPTION	DATE
PERMIT DWGS.		8/13/20

LAST REV.:	
PROJECT NO: 20089T	
DATE: AUGUST 13, 2020	
SCALE: AS NOTED	
TITLE:	
GROUNDING DIAGRAM, DETAILS, AND NOTES	

SHEET:

III-3

[illegible]