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

APPLICANT: Cellco Partnership, dba Verizon Wireless

LOCATION: Old and Historic Alexandria District

Dominion Energy utility pole near 501 Duke Street

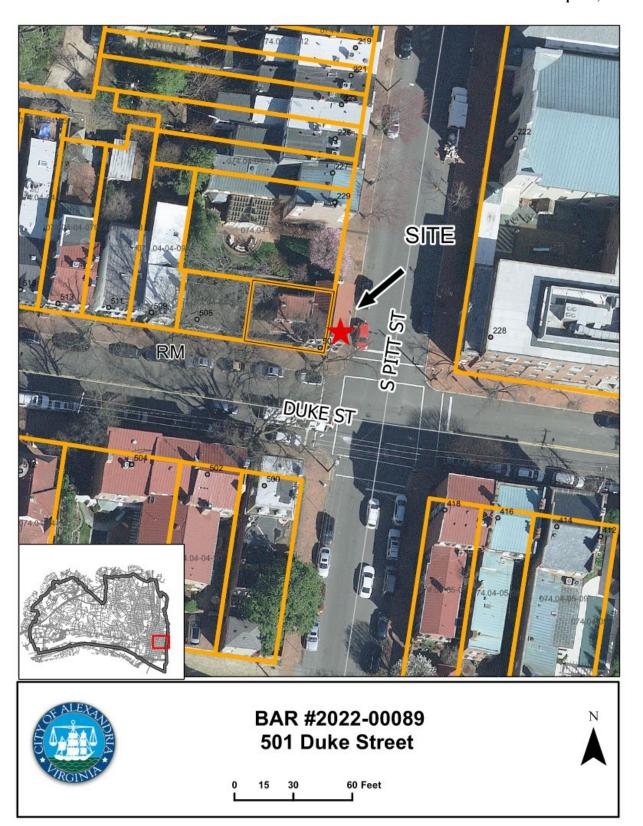
ZONE: RM/Residential Townhouse Zone

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 (<u>including signs</u>). 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 <u>Virginia Department of Historic Resources (VDHR)</u> prior to initiating any work to determine whether the proposed project may qualify for such credits.



I. <u>APPLICANT'S PROPOSAL</u>

The applicant is requesting a Certificate of Appropriateness to replace the existing wood utility pole in the right-of-way near the property at 501 Duke Street with a taller wood pole on top of which a 5G small cell facility will be installed along with the associated equipment which will be mounted to the pole.

Certificate of Appropriateness

- Replace the existing 28'-11" tall wood utility pole with a new 38'-6" wood utility pole.
- Install Samsung AU 5G small cell antennas on top of the pole
- Install a Prop Verizon Wireless load center panel at 6'-0" above grade
- Install a meter box on the pole at 4'-3" from grade
- Install a Prop Verizon Wireless weatherproof junction box at 3'-0" above grade
- Remove the existing pole

Site context

The subject wood utility pole is located near the northwest corner of the intersection of South Pitt and Duke streets (Figure 1).



Figure 1 - Existing pole

II. <u>HISTORY</u>

According to Ethelyn Cox in her book *Historic Alexandria Virginia Street by Street*, the property at 501 Duke Street was "built by Peter Wise, who bought the quarter block on which it stands in 1778. By 1791 the owner was William Hunter, Jr., founder of the St. Andrew's Society of Alexandria, and mayor of the town 1787-1788, and 1790-1791. Hunter sold the house to George Augustine Washington, a nephew of General Washington. After George Augustine's death, his widow, Fanny Bassett, niece of Martha Washington, married Tobias Lear, then serving as Washington's secretary. In September 1795 Washington dined here with the Lears. Used as the Custom House by Charles Simms, Collector of the Port 1799-1819."

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

A Certificate of Appropriateness is required in the historic districts under Section 10-103(A) of the Zoning Ordinance, which state that "No building or structure shall be erected, reconstructed, altered or restored within the Old and Historic Alexandria District unless and until an application for a certificate of appropriateness shall have been approved..."

The proposed pole design is the A-3 Wood Utility Pole Replacement with 5G antenna Configuration approved by the City Council in December 2020 (Figure 2).

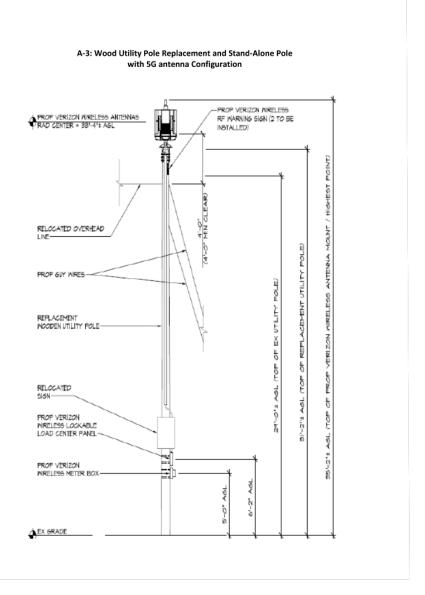


Figure 2 - Design A-3 approved by the City Council

The overall height of the new pole including the small cell facility is 42'-1". 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.

Existing pole height is 28' 11". The proposed pole height is 38' 6" feet and overall height is 42' 1".

F-2 Pole must be in the same general location as existing pole.

Pole will replace an existing pole currently in place.

F-3 The pole is not located in a manner that requires the removal of an existing tree or impacts of root zone.

Pole is not adjacent to tree well.





F-4 Pole 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 to be a wood pole

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. <u>ATTACHMENTS</u>

- 1 Application Materials
- 2 Supplemental Materials

ADDRESS OF PROJECT:
DISTRICT: ☐ Old & Historic Alexandria ☐ Parker – Gray ☐ 100 Year Old Building
TAX MAP AND PARCEL:ZONING:
APPLICATION 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:
Address:
City: State: Zip:
Phone: E-mail :
Authorized Agent (if applicable): Attorney Architect
Name: Phone:
E-mail:
Legal Property Owner:
Name:
Address:
City: State: Zip:
Phone: E-mail:
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?

BAR Case # _____

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

	BAR Case #
NATURE OF PROPOSED WORK: Please check all that apply	
NEW CONSTRUCTION EXTERIOR ALTERATION: Please check all that apply. awning fence, gate or garden wall HVAC doors windows siding lighting pergola/trellis painting other ADDITION DEMOLITION/ENCAPSULATION SIGNAGE	
DESCRIPTION OF PROPOSED WORK: Please describe the be attached).	proposed work in detail (Additional pages may
SUBMITTAL REQUIREMENTS: Items listed below comprise the minimum supporting materia request additional information during application review. Please Design Guidelines for further information on appropriate treatme	refer to the relevant section of the
Applicants must use the checklist below to ensure the application material that are necessary to thoroughly describe the project. In docketing of the application for review. Pre-application meetings All applicants are encouraged to meet with staff prior to submissi	ncomplete applications will delay the are required for all proposed additions.
Demolition/Encapsulation : All applicants requesting 25 square must complete this section. Check N/A if an item in this section does no	
N/A Survey plat showing the extent of the proposed demolitic Existing elevation drawings clearly showing all elements Clear and labeled photographs of all elevations of the but to be demolished. Description of the reason for demolition/encapsulation. Description of the alternatives to demolition/encapsulation considered feasible.	s proposed for demolition/encapsulation. uilding if the entire structure is proposed

BAR Case #	

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.

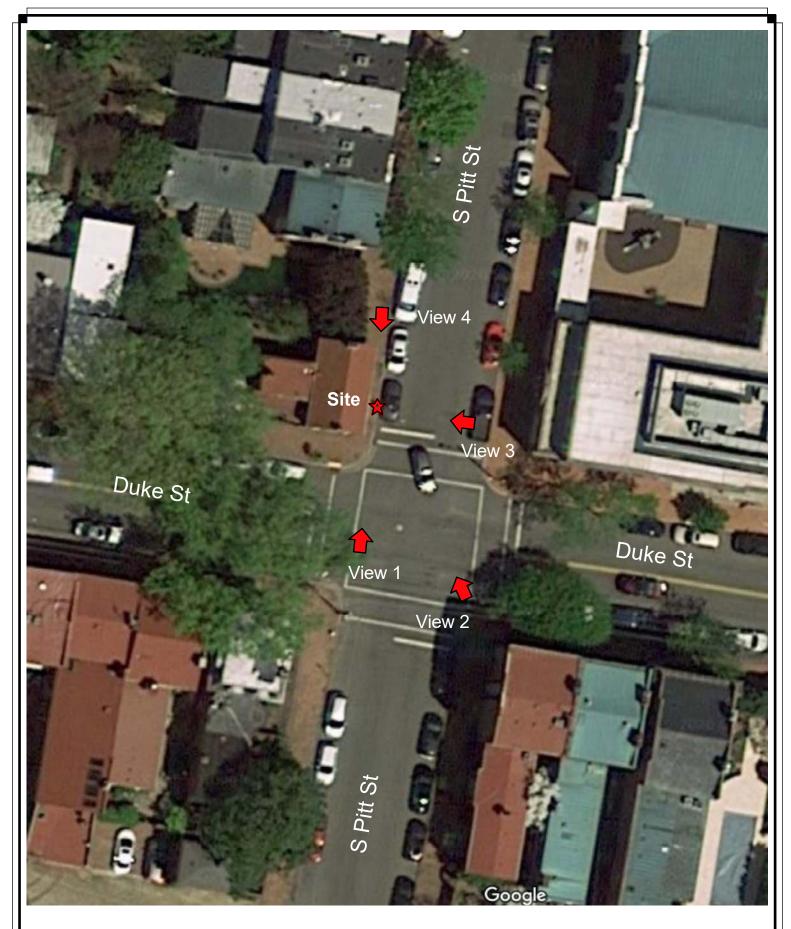
П	N/A	Scaled survey plat showing dimensions of lot and location of existing building and other
_	_	structures on the lot, location of proposed structure or addition, dimensions of existing structure(s), proposed addition or new construction, and all exterior, ground and roof mounted equipment.
		FAR & Open Space calculation form. Clear and labeled photographs of the site, surrounding properties and existing structures, if
П		applicable. Existing elevations must be scaled and include dimensions.
	H	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.
illun	ninat	& Awnings: One sign per building under one square foot does not require BAR approval unless ed. All other signs including window signs require BAR approval. Check N/A if an item in this section does y to your project.
		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.
Alt	erat	tions: 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.

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

Signature: _	Qoshua Schakola
Printed Nan	ne:
Date:	

OWNERSHIP AND DISCLOSURE STATEMENT Use additional sheets if necessary

an interest in the applicant, ur case identify each owner of n	address and percent of ownership nless the entity is a corporat nore than three percent. The te interest held at the time of the	ion or partnership, in which rm ownership interest shall
Name	Address	Percent of Ownership
1.	Addiooo	1 croom of Gwildramp
2.		
3.		
an interest in the property locate entity is a corporation or partner percent. The term ownership in	ddress and percent of ownership ed at rship, in which case identify each terest shall include any legal or eal property which is the subject of	(address), unless the owner of more than three quitable interest held at the
Name	Address	Percent of Ownership
1.		
2.		
3.		
ownership interest in the applicationship business or financial relationship existing at the time of this applications.	ionships. Each person or entity listent or in the subject property is replay as defined by Section 11-350 cation, or within the 12-month perior of the Alexandria City Council, as of Architectural Review	equired to disclose any of the Zoning Ordinance, od prior to the submission of
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.	Zonnig Ordinance	Flamming Commission, etc.)
2.		
3.		
	relationships of the type descrion and before each public hea	
As the applicant or the applican the information provided above	t's authorized agent, I hereby atte is true and correct.	est to the best of my ability that
•		_ , , ,
Date Printed		<u>Schakola</u> Signature



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

Old Town 05
Overall Site Layout

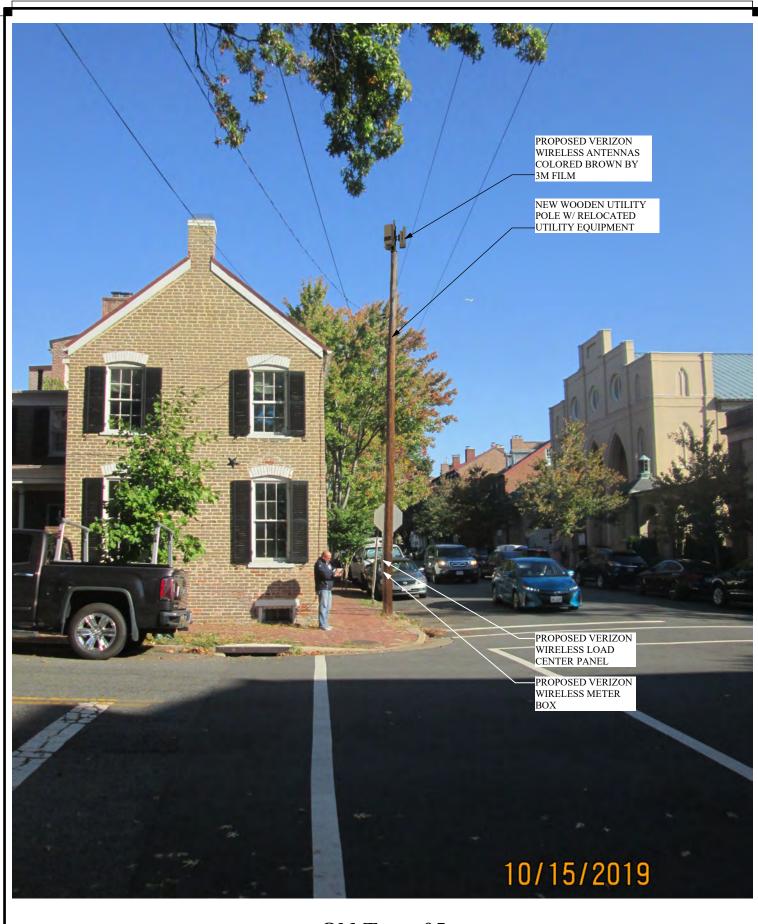
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Buildings Group

MORRIS & RITCHIE
ASSOCIATES, INC.
1220-C East Joppa Road, Suite 505
Towson, Maryland 21286
410-821-1690
410-821-1748 Old Town 05 Existing View 1

vertzon/



Buildings Group

MORRIS & RITCHIE
ASSOCIATES, INC.
1220-C East Joppa Road, Suite 505
Towson, Maryland 21286
410-821-1690
410-821-1748 Old Town 05 Proposed View 1

vertzon/





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

Old Town 05 Existing View 2





Old Town 05 Proposed View 2

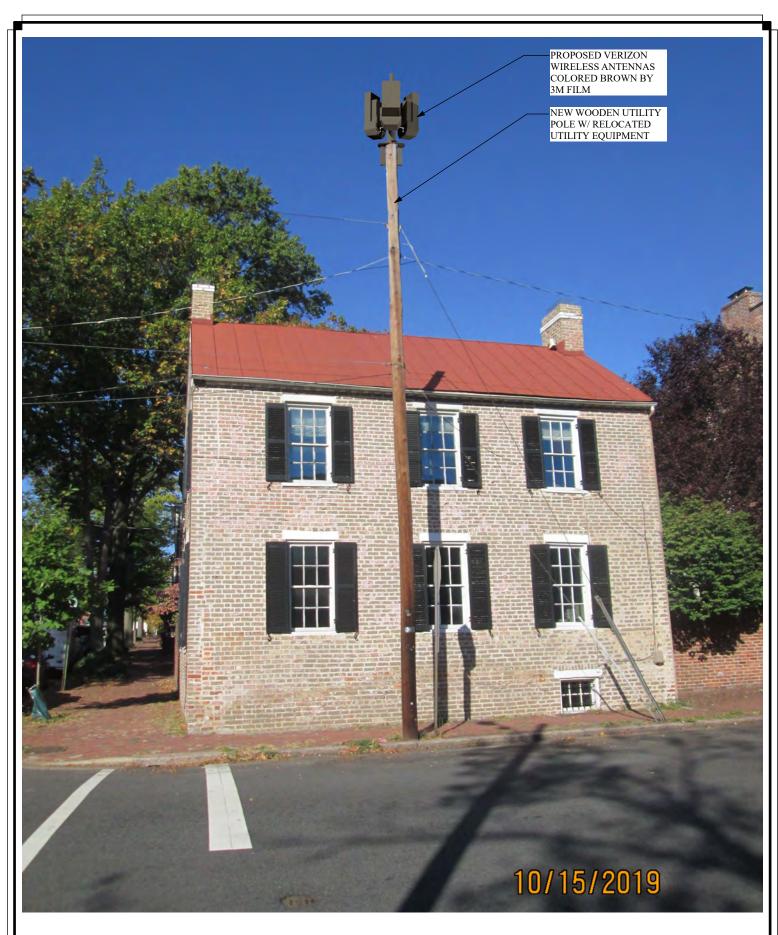
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Old Town 05 Existing View 3

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Old Town 05 Proposed View 3

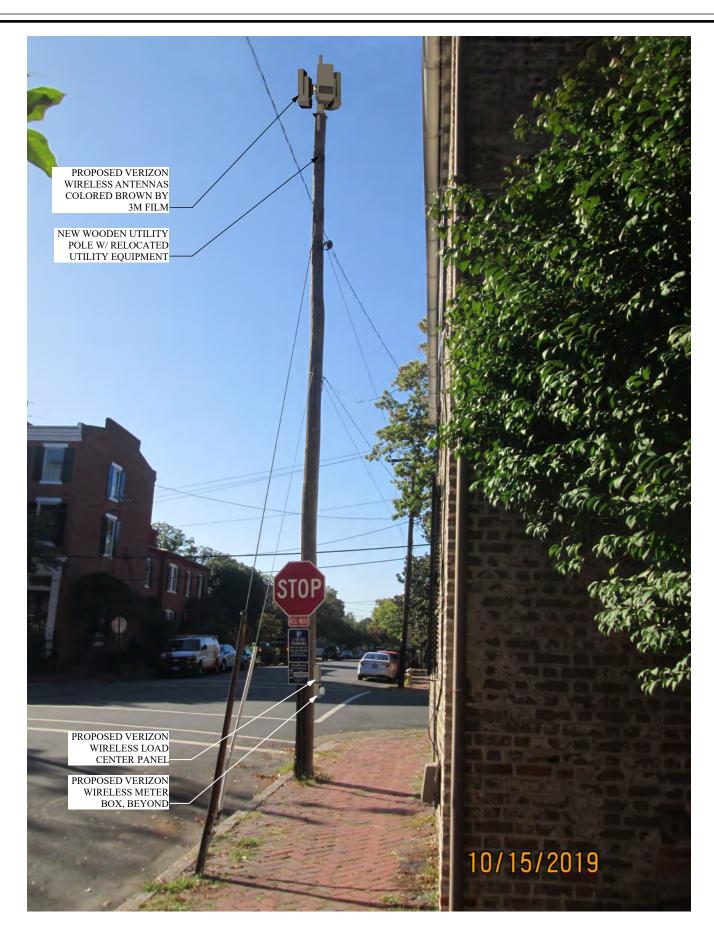
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Old Town 05 Existing View 4

vertzon/





Old Town 05 Proposed View 4



GENERAL NOTES

- THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
- 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 CAUTIONED THAT MINOR OMISSIONS OR ERRORS 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.
- THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE VERIZON REPRESENTATIVE OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
- 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.
- 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 CAN 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. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS OTHERWISE NOTED OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- 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.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- IO. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY, OR LOCAL GOVERNMENT AUTHORITY.
- THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, 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 AREA AS CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DEBRIS, TRASH, AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. DETAILS OF EQUIPMENT TO BE INCLUDED IN RFQ PACKAGE. PREMISES SHALL BE LEFT IN CLEAN 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.
- 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.
- I6. ALL UNISTRUT, HARDWARE, AND OUTDOOR JUNCTION BOXES SHALL BE GALVANIZED STEEL. FOR FIELD CUTS OF GALVANIZED ITEMS, FIRST COAT SHALL BE COLD 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
- 19. CONTRACTOR SHALL PERFORM A PUNCH WALK WITH VZW CONSTRUCTION & OPERATION REPRESENTATIVE PRIOR TO DECLARING CONSTRUCTION COMPLETE.
- 20. GENERAL CONTRACTOR SHALL PROVIDE A IOLBS.
 DRY-CHEMICAL FIRE EXTINGUISHER ON SITE DURING
 CONSTRUCTION. UPON COMPLETION OF ALL WORK,
 CONTRACTOR SHALL REMOVE FIRE EXTINGUISHER FROM

Verzon^V

OLD TOWN 5 - A - SMALL CEL RIGHT OF MAY ADJACENT TO 501 DUKE ST ALEXANDRIA, VIRGINIA 22314

INDEX OF DRAWINGS

- SITE LOCATION AND VICINITY PLAN, INDEX OF DRAWINGS, AND CODE ANALYSIS
- C-I SITE PLAN
- C-2 ENLARGED SITE PLAN
- C-3 SITE DETAILS
- C-4 ELECTRICAL SERVICE CONDUIT PROFILE
- TMP-I TRANSPORTATION MANAGEMENT PLAN NOTES
- TMP-2 TRANSPORTATION MANAGEMENT PLAN TMP-3 TRANSPORTATION MANAGEMENT PLAN
- STRUCTURAL SECTIONS AND DETAILS
- GENERAL NOTES
- ROUTING SITE PLAN
- E-2 SYMBOLS LIST, ELECTRICAL SPECIFICATIONS, AND DOMINION SPECIFICATIONS
- E-3 POLE UTILITY PLAN, POWER RISER DIAGRAM, EQUIPMENT PLAN AND NOTES
- GROUNDING DIAGRAM, DETAILS, AND NOTES
- E-5 DIAGRAMS
- DOMINION CHECKLIST, DOMINION DESIGN PRINT, AND DETAIL
- EQUIPMENT SCHEDULE, PANEL SCHEDULE, AND DETAILS
- E-8 ROUTING DETAILS

CODE ANALYSIS

APPLICABLE BUILDING CODE: IBC 2018 USE GROUP: UTILITY (U)

CONSTRUCTION TYPE: IIBUTILITY COMPANY: DOMINION



RAND MCNALLY LICENSE # R.L.04-S-97

THIS PROJECT CONSISTS OF THE INSTALLATION OF VERIZON WIRELESS TELECOMMUNICATIONS EQUIPMENT ON A PROPOSED WOOD POLE TO REPLACE EXISTING. THE ASSOCIATED ANTENNAS WILL BE MOUNTED ON THE PROPOSED WOOD POLE AT A RAD CENTER OF 40'-8".

DIRECTIONS TO SITE

FROM JUNCTION DRIVE: - TURN LEFT ONTO HENKELS LANE - TAKE RAMP ON LEFT FOR MD-32 EAST

- TAKE EXIT #100 RAMP ON RIGHT FOR BALTIMORE
- WASHINGTON PARKWAY SOUTH TAKE EXIT #IA RAMP ON LEFT AND FOLLOW SIGNS FOR
- 1-295 SOUTH TAKE EXIT #IC RAMP ON RIGHT FOR I-495 SOUTH TAKE EXIT #177B-C RAMP ON RIGHT FOR US-1 NORTH TURN RIGHT ONTO VA-236/ DUKE STREET
- KEEP STRAIGHT ONTO DUKE STREET - DESTINATION WILL BE ON THE LEFT

/ERIZON WIRELESS REVIEW

BUILDING ONNER	DAIE
ENGINEERING	DATE
OPERATIONS	DATE
CONSTRUCTION	DATE

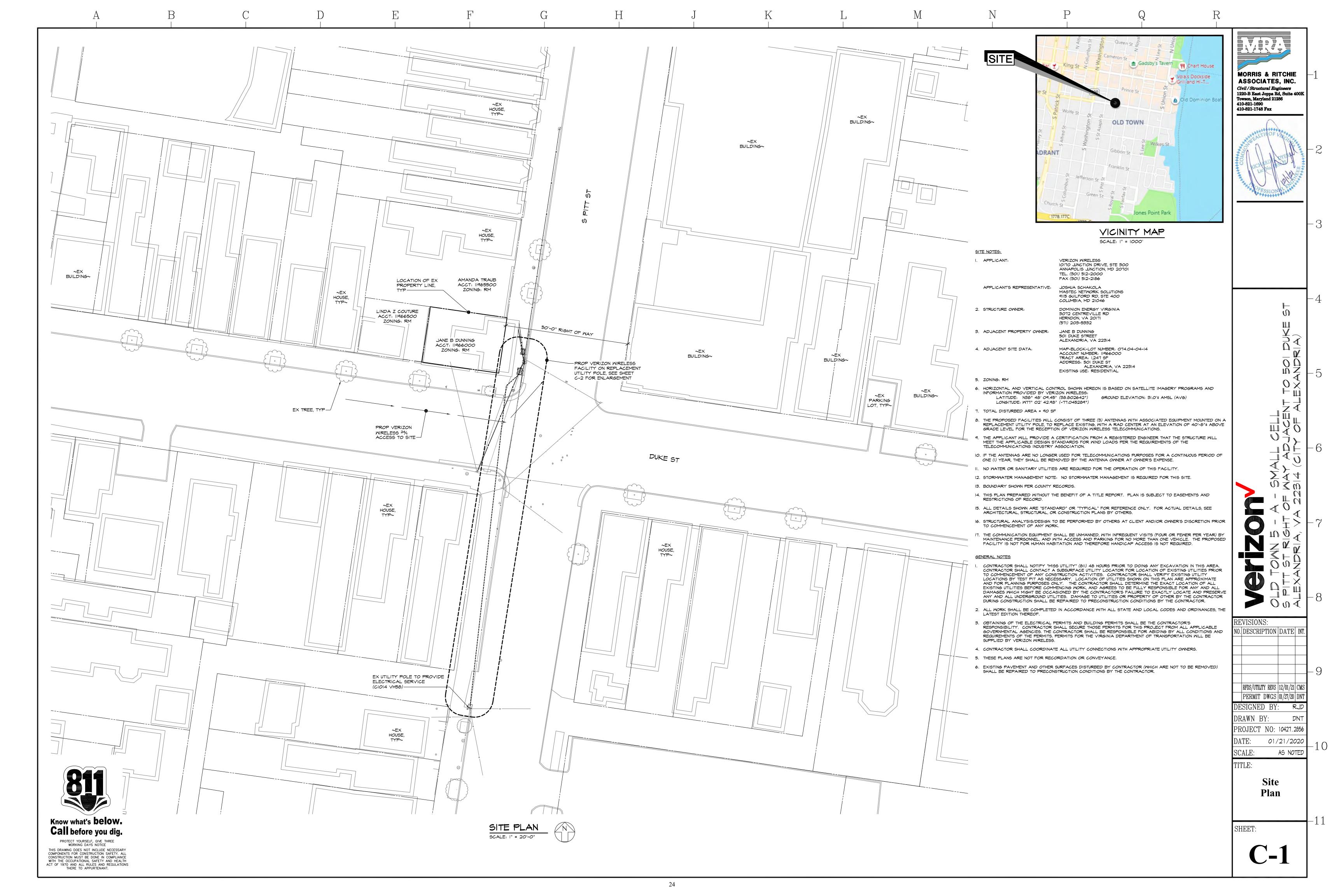
TELEGENT ENGINEERING IN 2216 Commerce Road, Suite 1 Forest Hill, MD 21050 410-692-5816 www.tel-eng.com TIM DITHY YOHN SMIDT 12/012021 U n u REVISIONS: NO. DESCRIPTION DATE |RFDS/UTILITY REVS|12/01/2 |PERMIT DW65.|01/27/2 LAST REV.:

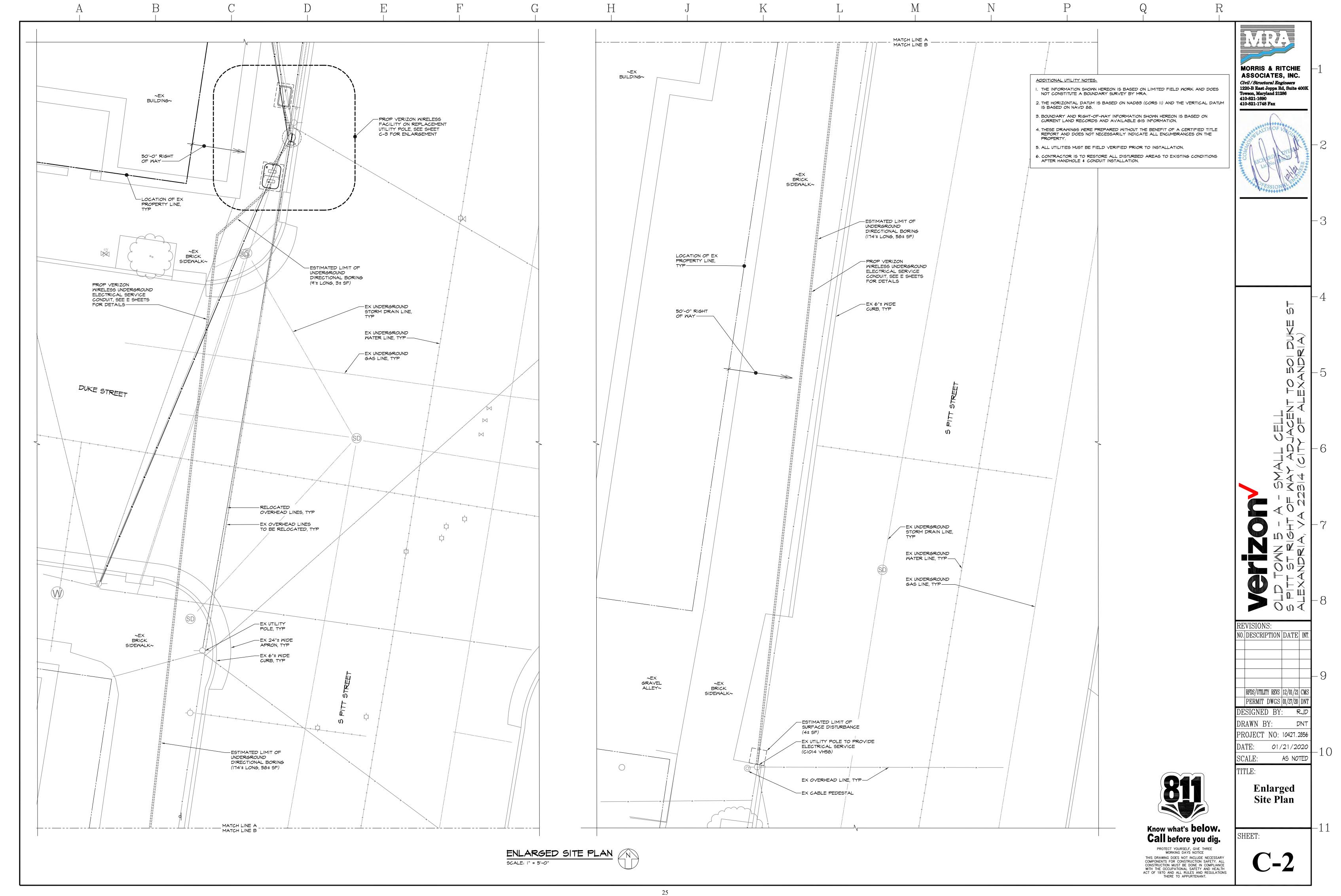
PROJECT NO:19154Q DATE: JANUARY 27, 2020

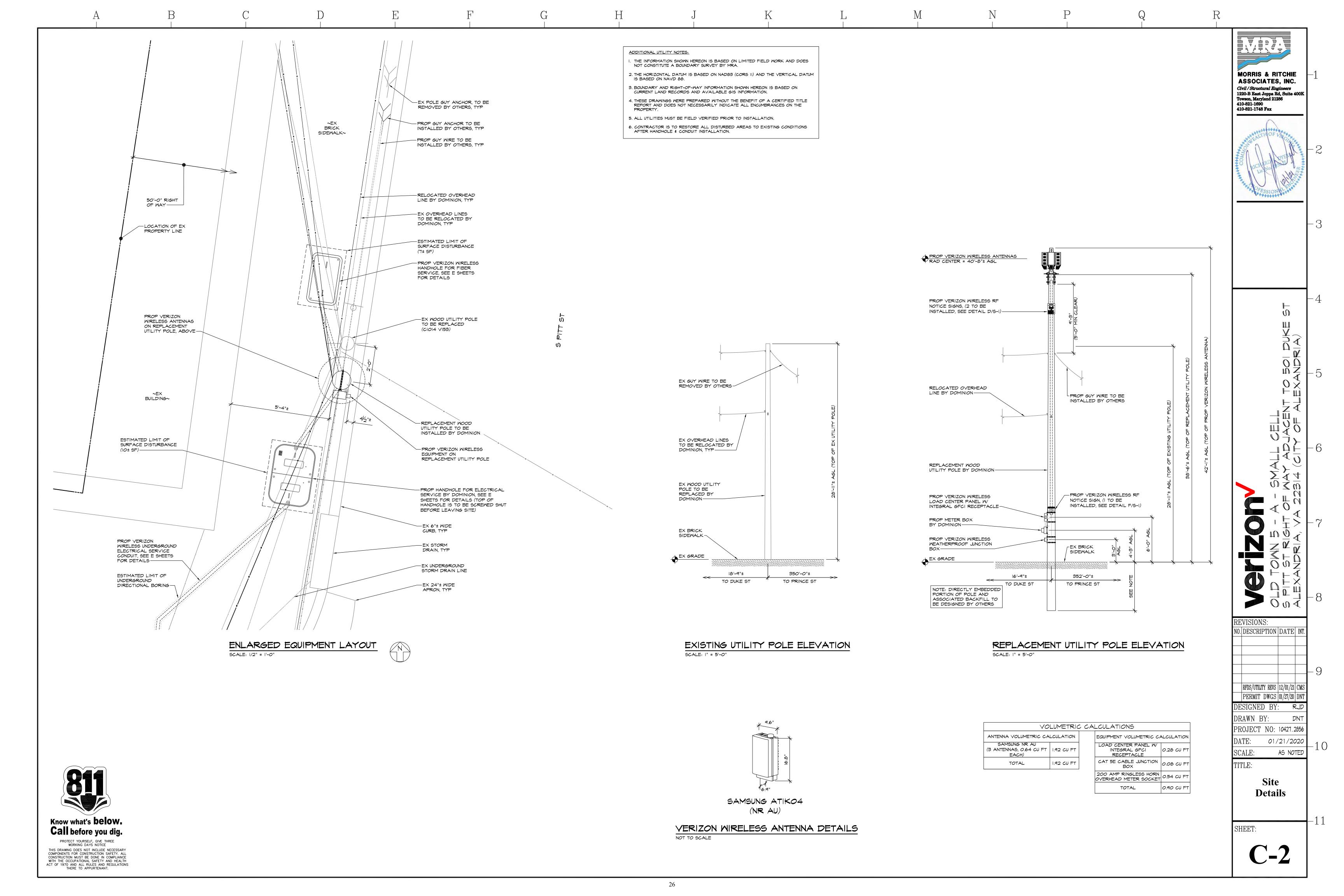
SCALE: AS NOTEI SITE LOCATION AND VICINITY PLAN, INDEX OF DRAWINGS, AND CODE ANALYSIS

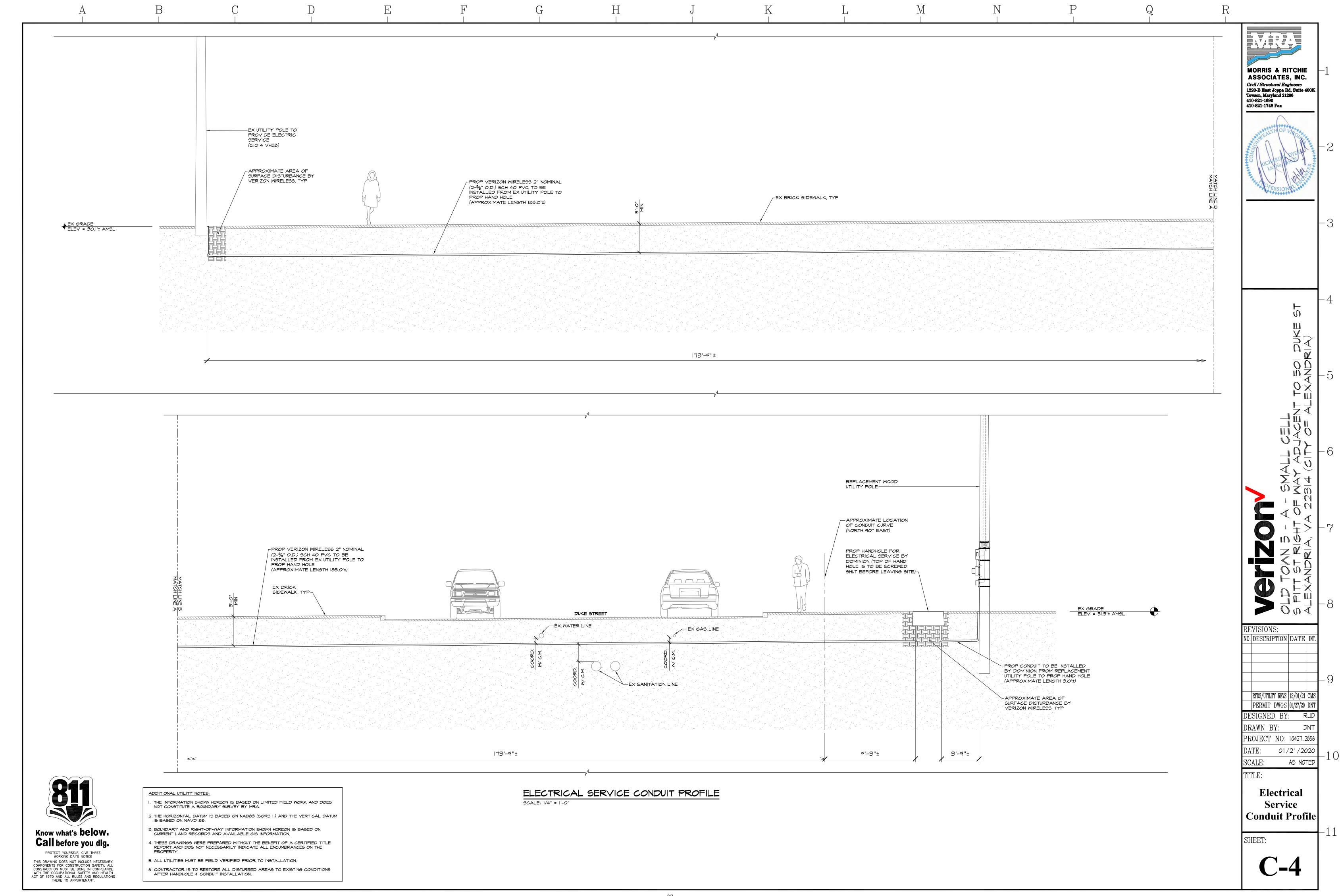
SHEET: **CS-**

TEI#19154Q









TRANSPORTATION MANAGEMENT PLAN

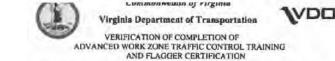
TEMPORARY TRAFFIC CONTROL PLAN NOTES & **WORK AREA PROTECTION MANUAL TTC'S**

September 2019

Lane Closure Operation in an Intersection

(Figure TTC-28.2)

SEE BOTTOM RIGHT FOR SIGN LAYOUT



This is to verify that Jon K. Erickson has successfully completed training and an examination by the Department on the proper practices and methods for the installation, maintenance, removal of temporary traffic control devices and flagging operations.

> RIMM State Truffic Engineer Verification No.: 092519410 Expiration Date: 9/30/2023

Page 6H-65

500' ±

SEE NOTE 5

SEE TABLE 6H-3 FLAGGER



OSTONAL

PROJECT INFORMATION

- 1. THE PROJECT'S TMP PLAN HAS BEEN DESIGNED IN CONFORMANCE WITH TMP TYPE A.
- 2. 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.
- 3. 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
- 4. EXISTING INTERSECTIONS: THE NEAREST INTERSECTIONS ARE DUKE ST AND S PITT ST. ALL EXISTING INTERSECTIONS ARE TO REMAIN OPEN AND FUNCTIONAL DURING CONSTRUCTION.

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 EXISTING ENTRANCES WITHIN THE CONSTRUCTION LIMITS.

- 5. THE TRAFFIC ON THE ROADWAY CONSIST PRIMARILY OF PASSENGER VEHICLES. THE SURROUNDING AREA IS RESIDENTIAL
- 6. 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 VDOT 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 VDOT'S WORK ZONE TRAFFIC CONTROL TRAINING GUIDELINES.

INFORM VDOT 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 VDOT 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.

- 7. 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 VDOT FOR REVIEW AND APPROVAL.
- 8. 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.
- 9. WHERE GROUP 2 CHANNELIZING DEVICES ARE USED TO SEPARATE THE CONSTRUCTION AREA AND TRAFFIC. A MINIMUM CLEAR ZONE AREA SUCH AS DEFINED IN THE VWAPM IS TO BE MAINTAINED.
- 10. CONTRACTOR IS TO COORDINATE WITH VDOT FOR LOCATION(S) OF THE CONSTRUCTION STAGING AREA. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS AND/OR EASEMENTS AS NECESSARY.
- 11. IMPLEMENTING THE TRANSPORTATION MANAGEMENT PLAN

DURING THE FIRST DAY OF THE NEW WORK ZONE TRAFFIC PATTERN, THE PROJECT'S MANAGER AND VDOT'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 VDOT 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 VDOT) WITHIN 48 HOURS OF ANY FATAL INCIDENT/CRASH WITHIN THE WORK ZONE.

- 12. PUBLIC COMMUNICATIONS PLAN
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR:
 - NOTIFYING THE MANAGER AND VDOT INSPECTOR TWO WEEKS IN ADVANCE OF ANY SCHEDULED WORK PLANS AND TRAFFIC DELAYS. B. NOTIFYING THE MANAGER, VDOT INSPECTOR, AND CORRESPONDING VDOT ENGINEER OF ANY UNSCHEDULED TRAFFIC DELAYS.
- 16. TRANSPORTATION OPERATIONS
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND PROVIDING THE FOLLOWING: A. 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. B. IMMEDIATELY REPORT ANY TRAFFIC INCIDENTS THAT MAY OCCUR IN THE WORK ZONE.
- C. NOTIFY THE PROJECT'S VDOT INSPECTOR AND VDOT ENGINEER OF ANY INCIDENTS AND EXPECTED TRAFFIC DELAYS. D. 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.

17. CONTACT NUMBERS

PROJECT MANAGER: TBD CITY INSPECTOR: 911 EMERGENCY CALL:

NON-EMERGENCY NUMBERS:

CITY OF ALEXANDRIA POLICE: 703-746-4444 CITY OF ALEXANDRIA FIRE & RESCUE: 703-777-4357

GENERAL CONSTRUCTION NOTES

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

1. 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.

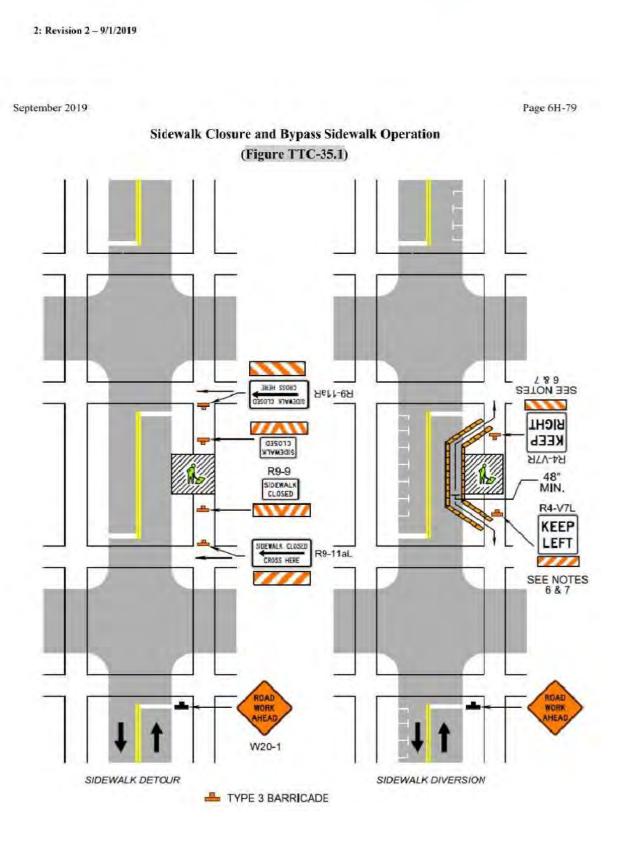
Page 6H-64 September 2019 **Typical Traffic Control** Lane Closure Operation in an Intersection (Figure TTC-28.2) 1. The control of traffic through the intersection in order of preference should be: a. Obtain the services of law enforcement personnel. b. Detour the effective routes to other roads and streets as approved and directed by the District Traffic c. Place a state certified flagger on each leg of the intersection controlling a single lane of traffic. Appropriate signing as shown should be used for law enforcement and flagging operations. For detour 2. Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, 500'-800' where the posted speed limit is greater than 45 mph. 3. To maintain efficient traffic flow in a flagging operation on a two-lane roadway the maximum time motorist should be stopped at a flagger station is 8 minutes for high volume roadways (average daily traffic of 500 or more vehicles per day) to a maximum of 12 minutes for low volume roadways (less than 500 vehicles per day). For additional information see Section 6E.07. 4. Channelizing device spacing shall be on 20' centers or less. 5. PTRS shall be used as noted in Section 6F.99. 6. If room permits, a shadow vehicle with at least one rotating amber light or high intensity amber flashing or oscilllating1 light should be parked 80'-120' in advance of the first work crew. 7. For emergency situations (any non-planned operation) of 30 minutes or less duration, two rotating amber lights or high intensity amber flashing or oscillating lights mounted on the vehicle and visible for 360° shall be required in addition to the channelizing devices shown around the vehicle. Also, vehicle hazard warning signals shall be used. 8. If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure TTC-36. 9. Turns can be prohibited as required by vehicular traffic conditions. Unless the streets are wide, it might be physically impossible to make certain turns, especially for large vehicles. 1: Revision 1 - 4/1/2015 2: Revision 2 - 9/1/2019 Page 6H-78 September 2019 **Typical Traffic Control**

(Figure TTC-35.1) 1. 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 2. 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. 3. 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. 4. Temporary markings should be considered for operations exceeding three days in duration.

Sidewalk Closure and Bypass Sidewalk Operation

- 5. Only the TTC devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS (W5-1) signs, may be used to control vehicular traffic. 6. For nighttime closures, Type A Flashing warning lights may be used on barricades that support signs and
- close sidewalks. 7. Signs, such as KEEP RIGHT (R4-V7R) and KEEP LEFT (R4-V7L), may be placed along a temporary sidewalk to guide or direct pedestrians.
- 8. 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



2: Revision 2 - 9/1/2019

Know what's **below. Call** before you dig. PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE THIS DRAWING DOES NOT INCLUDE NECESSARY CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

NO.|DESCRIPTION|DATE| | RFDS/UTILITY REVS | 11/24/21 | CMS | PERMIT DWGS | 01/27/20 | DN ESIGNED BY:)RAWN BY: PROJECT NO: 1*0*427.2856 01/21/2020 AS NOTED **TRANSPORTATION MANAGEMENT PLAN NOTES**

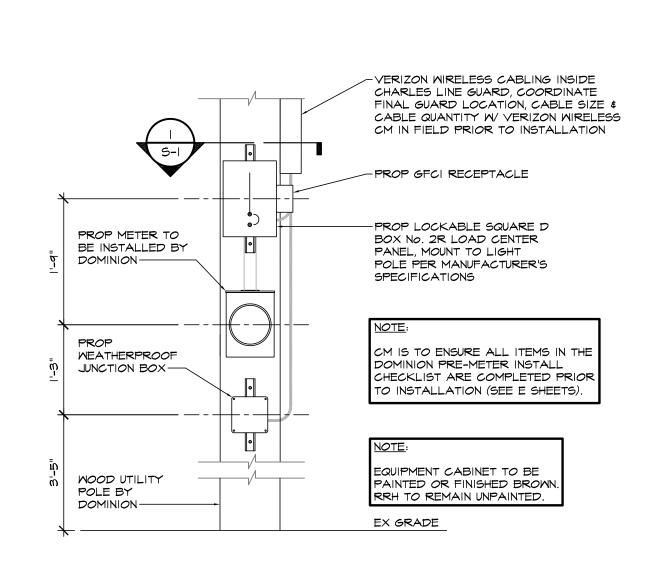
TMP-]

28

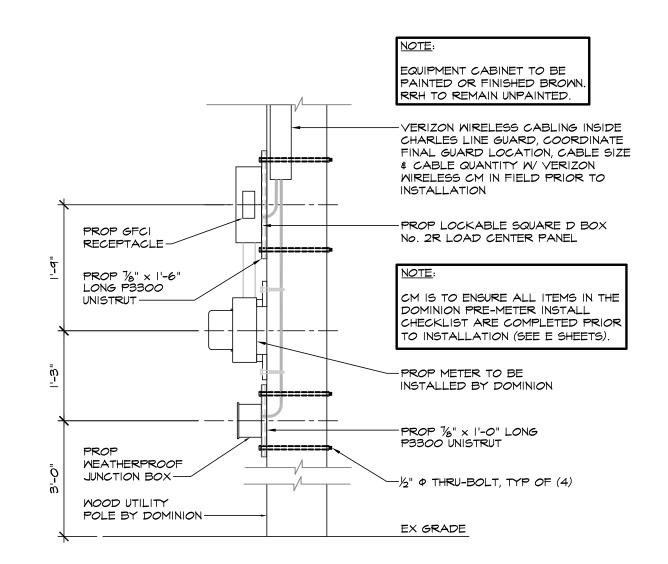
2: Revision 2 - 9/1/2019



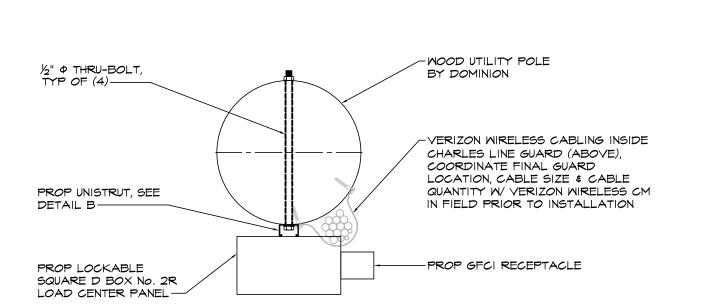




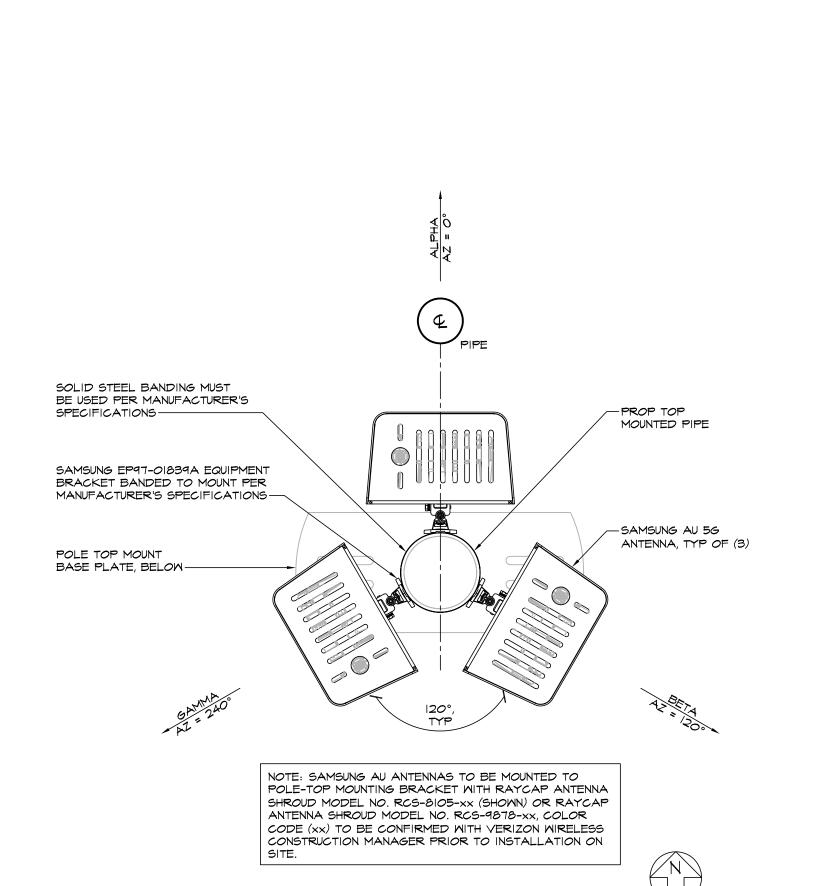
POLE EQUIPMENT FRONT ELEVATION



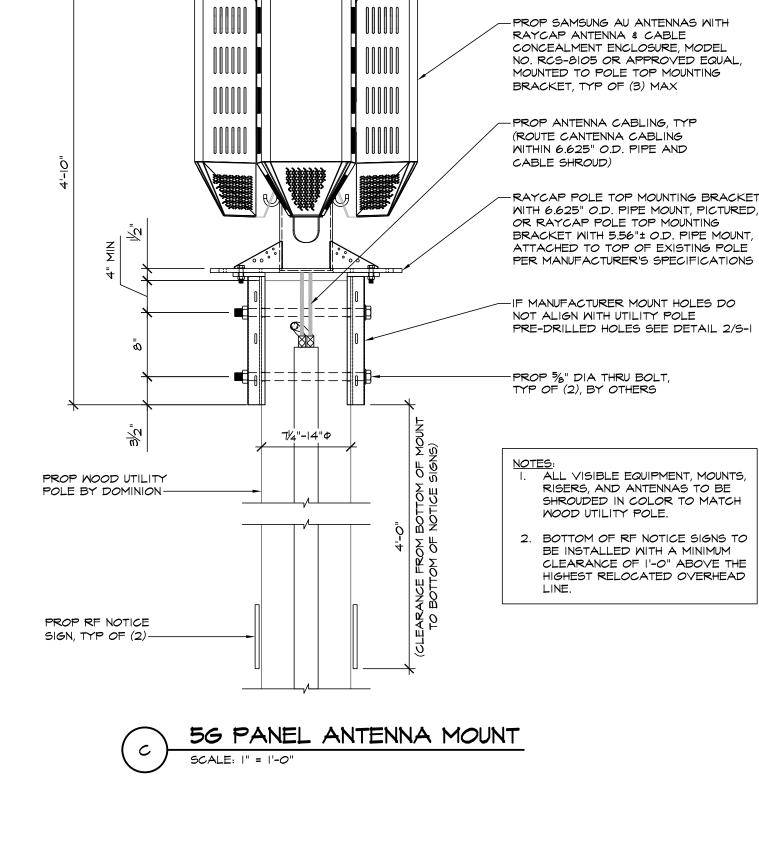
POLE EQUIPMENT SIDE ELEVATION



EQUIPMENT MOUNT SCALE: | |/2" = |'-0"

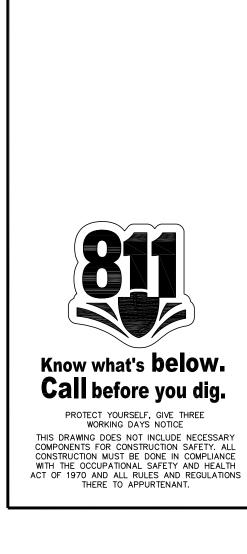


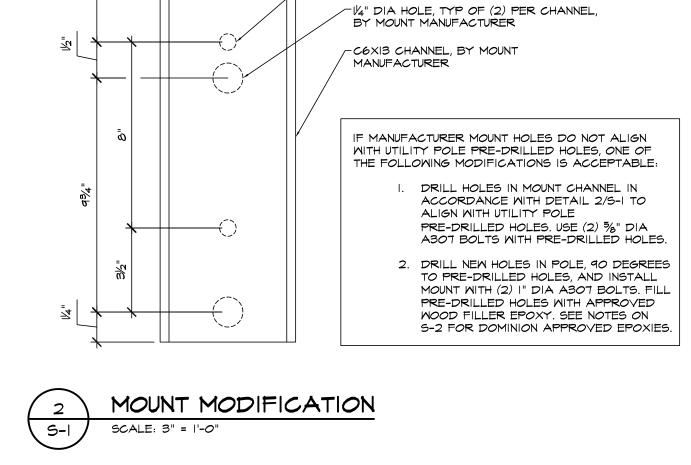
5G PANEL ANTENNA SECTION



RF NOTICE SIGN DETAIL

INFORMATION SIGN DETAIL



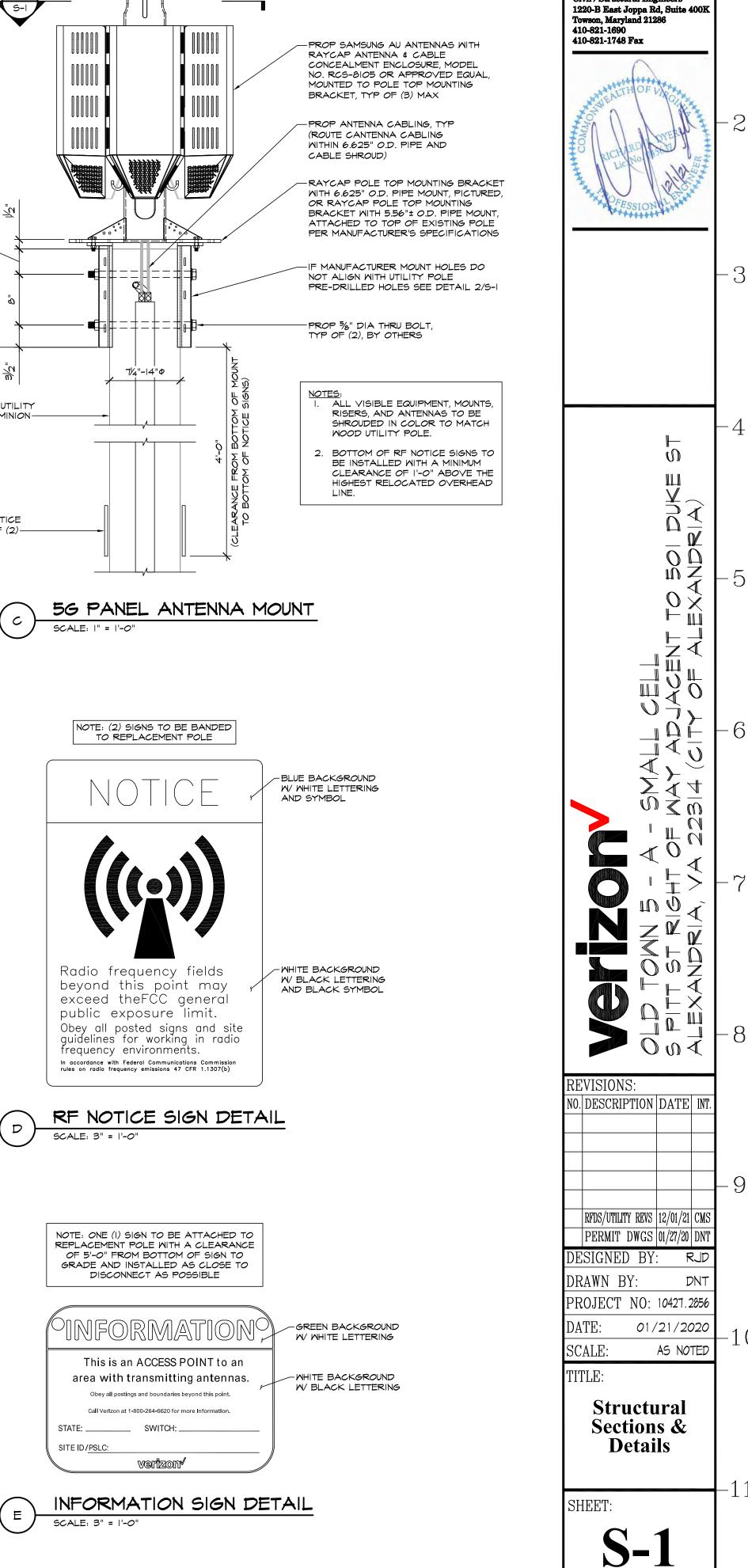


PROP "6" DIA FIELD-DRILLED HOLE IN

MOUNTING CHANNEL TO ALLIGN WITH

TYP OF (2) PER CHANNEL

PRE-DRILLED HOLES IN UTILITY POLE,



MORRIS & RITCHIE ASSOCIATES, INC. Civil / Structural Engineers

SCALE: |-|/2" = |'-0"

<u>DESIGN LOADS</u>

GENERAL STRUCTURAL NOTES

BUILDING CODES

A. ALL CONSTRUCTION SHALL CONFORM WITH THE 2015 VIRGINIA UNIFORM STATEWIDE BUILDING CODE, 2015 CONSTRUCTION CODE, THE TIA STANDARD (TIA-222-G) 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.

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

B. WIND LOAD DESIGN DATA

BASIC WIND SPEED (ULTIMATE 3-SECOND GUST): BASIC WIND SPEED (NOMINAL 3-SECOND GUST): RISK CATEGORY: WIND EXPOSURE CATEGORY:

C. SEISMIC LOAD DESIGN DATA

NOT APPLICABLE: 5s < 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
- 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.

A. ALL FOUNDATIONS HAVE BEEN DESIGNED FOR THE FOLLOWING MINIMUM SOIL CONDITIONS. SHOULD THE ACTUAL SOIL CONDITIONS DIFFER, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER:

BLOWS/FT

DEGREES

STANDARD PENETRATION VALUE, N: ANGLE OF INTERNAL FRICTION, P: EFFECTIVE UNIT WEIGHT OF SOIL, Y: COHESION, C:

- B. A REGISTERED GEOTECHNICAL ENGINEER SHALL BE ON SITE AT THE TIME OF CONSTRUCTION TO VERIFY THE ASSUMED SOIL PARAMETERS ABOVE. SOILS THAT DO NOT MEET THE INDICATED SOIL PARAMETERS SHALL BE EVALUATED AND FOUNDATION MAY NEED TO BE REDESIGNED.
- C. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING IMMEDIATELY THE GEOTECHNICAL ENGINEER OF RECORD IF GROUND WATER IS ENCOUNTERED DURING CONSTRUCTION.
- D. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING IMMEDIATELY THE GEOTECHNICAL ENGINEER OF RECORD IF IS ENCOUNTERED DURING CONSTRUCTION.

- A. ALL STRUCTURAL BACKFILL, BELOW AND AROUND THE ANNULUS OF THE EMBEDDED PORTION OF THE POLE, SHALL CONFORM TO THE GRADATION REQUIREMENTS OF SIZE NUMBER 57 COARSE AGGREGATE PER ASTM C33.
- B. ALL STRUCTURAL BACKFILL SHALL BE INSTALLED IN A CONTROLLED MANNER TO ENSURE NO VOIDS ARE PRESENT DURING BACKFILLING OPERATIONS (PREVENT OUTSIDE DEBRIS, REFUSE, ETC. FROM FALLING INTO
- C. ALL STRUCTURAL BACKFILL SHALL BE FREE FROM ORGANIC MATTER, REFUSE, DEBRIS, OR OTHER FOREIGN
- D. STONE SHALL BE DEPOSITED IN 6 INCH MAXIMUM LOOSE LIFTS AND COMPACTED TO THE SPECIFIED FINISHED
- E. STONE SHALL NOT BE REQUIRED TO SUPPORT WIND LOADING FOR A MINIMUM OF <u>6 HOURS</u> AND ALL TEMPORARY BRACING REQUIRED TO SUPPORT THE MONOPOLE STRUCTURE DURING CONSTRUCTION SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR. SHOP DRAWINGS, SIGNED AND SEALED BY A REGISTERED ENGINEER IN THE STATE OF MARYLAND, SHALL BE SUBMITTED FOR REVIEW. SHOP DRAWINGS SHALL INDICATE THE TYPE, EXTENT, SIZE, AND LOCATION OF ALL TEMPORARY BRACING, AS WELL AS THE SEQUENCE OF CONSTRUCTION.
- F. LOOSE MATERIAL SHALL BE REMOVED FROM BOTTOM OF EXCAVATION PRIOR TO BACKFILL PLACEMENT. SIDES OF EXCAVATION SHALL BE ROUGH AND FREE OF LOOSE CUTTINGS.
- G. ALL COMPACT BACKFILL PLACED ABOVE UNDERGROUND UTILITY CONDUIT SHALL BE COMPACTED TO A DRY DENSITY OF AT LEAST 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698.

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 (Fy = 36 KSI).
- C. ALL HSS SQUARE OR RECTANGULAR SHAPES SHALL CONFORM TO ASTM A500, GRADE B (FY = 46 KSI).
- D. ALL PIPES SHALL CONFORM TO ASTM A53, GRADE B (Fy = 35KSI)
- E. ALL THRU BOLTS SHALL CONFORM TO ASTM A307 (Fu = 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 DI.I. 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 AI23 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 I-1/6" 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 COPES, 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

DOMINION NOTES:

- A. AN RF NOTICE SIGN MUST BE INSTALLED ON BOTH SIDES OF THE POLE A MINIMUM OF 4'-O" FROM BOTTOM OF ANTENNA MOUNT TO BOTTOM OF SIGNS AND A MAXIMUM OF ONE (I) FOOT ABOVE THE UPPERMOST EQUIPMENT APPURTENANCE TO BOTTOM OF SIGNS. 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. THE SIGN SHALL BE 60 MIL LEXAN WITH U.V. INHIBITORS AND SIGNS SHALL ADHERE TO IEEE C95.2 STANDARDS.
- B. 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 C95.2 STANDARDS.
- C. 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 I' 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-I)
- D. ANTENNA EQUIPMENT IS PERMISSIBLE ON WOOD POLES ONLY.
- E. 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 239B, AND NESC
- F. THE INSTALLATION MUST MEET ALL NESC REQUIREMENTS.
- 6. 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,
- H. INSTALLERS WORKING IN THE AREA OF THE POLE ABOVE THE NORMAL COMMUNICATIONS SPACE MUST MEET OSHA 1910.269 REQUIREMENTS.
- I. VERIZON TO LEAVE MINIMUM 3' LEADS COILED AND SECURED TO PREVENT ACCIDENTAL CONTACT WITH SECONDARY CONDUCTORS.
- J. LINE ARRESTER INSTALLATIONS ARE REQUIRED ON POLES WITH PRIMARY CONDUCTORS.
- K. THE METER BASE, EQUIPMENT CABINET AND DISCONNECT SHALL BE MOUNTED AT AN OPERATIONAL HEIGHT AS DETAILED ON THE CONSTRUCTION DOCUMENTS:
- I. 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.
- L. FOR SAFETY PURPOSES DEVICES WITH LEAD ACID BATTERIES SHALL NOT BE USED.
- M. 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
- N. THE WEATHERHEAD WILL BE INSTALLED PER DOMINION PROVIDED DESIGN.
- O. DOMINION APPROVED WOOD EPOXIES:
- I. MOODPECKER HOLE REPAIR KIT EPOXY AS MANUFACTURED BY IPOLE
- 2. UPR UTILITY POLE REPAIR EPOXY AS MANUFACTURED BY POLYWATER

POST-INSTALLATION INSPECTION

SOON AS A PO IS RECEIVED.

- 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.

THAT THE CONTRACTOR AND POST-INSTALLATION INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS

- 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

MORRIS & RITCHIE ASSOCIATES, INC. Civil / Structural Engineers 1220-B East Joppa Rd, Suite 400K Towson, Maryland 21286 410-821-1690 410-821-1748 Fax ESIGNED BY:)RAWN BY:

NO.|DESCRIPTION|DATE| |RFDS/UTILITY|REVS|12/01/21|CMS

| PERMIT DWGS | 01/27/20 | DN PROJECT NO: 1*0*427.2856 01/21/2020 AS NOTED

General Notes



ELECTRICAL SYMBOLS LIST

NOTE: ALL MOUNTING HEIGHTS ARE TO CENTER LINE OF THE OUTLET BOX UNLESS OTHERWISE INDICATED.

120/240V, ΙΦ, LOAD CENTER

DRAWING NOTE

ELECTRIC FEEDERS ---T----TELEPHONE SERVICE OF THE WORK, THE CUSTOMARY CERTIFICATIONS OF APPROVAL SHALL BE FURNISHED.

-----BRANCH CIRCUIT

---E----

GROUND CONDUCTOR

BURIED GROUND ROD

DESIGNATES FRONT

DOMINION GENERAL NOTES

- ONLY NON METALLIC ELECTRICAL GRADE CONDUIT OR RISERS CAN BE USED FOR ROUTING OF OBSTRUCT CLIMBING SPACE OR WORKING SPACE ON POLE AND SHALL NOT OBSTRUCT SUPPLY EQUIPMENT A. REFERENCE NESC 239B AND 239H4.
- SERVICE HEAD TO BE INSTALLED 6" ABOVE NEUTRAL. A DRIP LOOP 8" BELOW SERVICE HEAD IS
- SERVICE CONDUCTORS TO BE A MINIMUM #12 COPPER. NEUTRAL WIRE IS WHITE
- GROUND WIRE IS GREEN LINE WIRES ARE BLACK AND RED.
- COMMUNICATION COMPANY TO LEAVE MINIMUM 3'-O" LEADS COILED AND SECURED TO PREVENT ACCIDENTAL CONTACT WITH SECONDARY CONDUCTORS. SERVICE WILL BE CONNECTED BY THE COMPANY IN COMPLIANCE WITH FILED RATE PLAN.
- SERVICE CONDUCTORS TO BE IN RIGID PVC CONDUIT
- IN NON-CONTAMINATED AREAS, SERVICE CONDUCTORS ENTER THE TOP CENTER OF THE METER BASE. THE TRANSITION TO METER BASE MAY BE IN LFNC CONDUIT.

 IN CONTAMINATED AREAS, THE SERVICE CONDUCTORS ARE TO ENTER THE BOTTOM SIDE KNOCKOUT WITH A WEATHER PROOF CONNECTION.
- THE METER BASE IS TO BE MOUNTED 4'-O" TO 6'-O" ABOVE GRADE PROVIDED THAT: A. IT DOES NOT OBSTRUCT A WALKWAY, OTHERWISE 9'-O" OF GROUND CLEARANCE IS REQUIRED. THE POLE IS NOT CLIMBABLE AS DEFINED IN NESC 232-2.
- METER BASE TO BE MOUNTED USING BRACKET FOR ROUND POLE.
- A POWER DISCONNECT MUST BE INSTALLED. THE DEVICE MUST PROVIDE DISCONNECTING MEANS FOR DE-ENERGIZED POWER TO THE ANTENNA. THE DISCONNECT SHOULD BE A STANDARD NEMA TYPE ENCLOSURE AND IS SUBJECT TO COMPANY APPROVAL. THE DISCONNECT SHALL BE CLEARLY LABELED AS THE ANTENNA POWER DISCONNECT. THE COMPANY MUST HAVE ACCESS TO THE DISCONNECT AT ALL TIME. IF THE DISCONNECT MUST BE LOCKABLE. THE LOCK MUST BE AN EXPENDABLE, TWIST OFF TYPE LOCK.
- THE DISCONNECT MUST ALSO INCLUDE THE COMMUNICATION COMPANY NAME AND A 24-HOUR CONTACT PHONE NUMBER. THE LABEL SHALL ADHERE TO IEEE C95.2 STANDARDS.
- IO. ANTENNAS WITH BATTERY BACKUP ARE NOT PERMITTED.
- A SEPARATE ANTENNA GROUND WIRE AND GROUNDING ELECTRODE IS REQUIRED. A. THIS GROUND SHALL BE BONDED TO THE COMPANY GROUND WIRE (IF AVAILABLE) AT LEAST 6" ABOYE GROUND LEVEL USING A #6 COPPER CONDUCTOR. CONNECTION TO THE COMPANY'S GROUND ROD OR CONNECTOR IS NOT PERMITTED.
- 12. 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 POLE. BOND TO THE POWER SUPPLY/SWITCH SHALL BE EXTERNAL AND VISIBLE FROM WHEN A COMPANY GROUND WIRE EXISTS ON A POLE. THE EQUIPMENT CASE BONDING WIRE NEED EXTEND ONLY FROM THE SMITCH TO THE COMPANY GROUND WIRE.
- 13. THE INSTALLATION MUST MEET ALL NESC REQUIREMENTS

ELECTRICAL SPECIFICATIONS

SECTION 16010 - BASIC ELECTRICAL REQUIREMENTS

- A. THE WORK INCLUDES FURNISHING AND INSTALLING THE MATERIAL, EQUIPMENT AND SYSTEMS COMPLETE AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS. THE ELECTRICAL INSTALLATIONS, WHEN FINISHED, SHALL BE COMPLETE AND COORDINATED AND READY FOR SATISFACTORY SERVICE.
- B. ALL WORK UNDER THIS CONTRACT SHALL BE DONE IN STRICT ACCORDANCE WITH ALL APPLICABLE MUNICIPAL, STATE, BOCA, AND LOCAL ELECTRICAL CODES THAT GOVERN EACH PARTICULAR TRADE
- C. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL EQUIPMENT INSTALLATION WITH ALL TRADES. D. THE CONTRACTOR SHALL MAKE APPLICATION AND PAY ALL CHARGES FOR ALL NECESSARY PERMITS, LICENSES, AND INSPECTIONS AS REQUIRED UNDER THE ABOVE CODES. UPON COMPLETION
- E. NO MATERIALS OR EQUIPMENT SHALL BE USED IN THE WORK UNTIL APPROVED. ALL MATERIALS
- F. THE CONTRACTOR SHALL EXAMINE ALL DRAWINGS AND SHALL INSPECT THE EXISTING CONDITIONS OF THE SITE. FAILURE TO COMPLY WITH THIS REQUIREMENT WILL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR COMPLYING WITH THE CONTRACT DOCUMENTS.
- G. THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF THE ELECTRICAL INSTALLATIONS. DETAILS OF PROPOSED DEPARTURES DUE TO ACTUAL FIELD CONDITIONS OR OTHER CAUSES SHALL BE SUBMITTED FOR APPROVAL PRIVATE TO INSTALLATION, REWORK OF COMPLETED ITEMS DUE TO IMPROPER FIELD COORDINATION SHALL BE AT THE CONTRACTOR'S EXPENSE.
- H. PROVIDE SUFFICIENT ACCESS AND CLEARANCE FOR ALL ITEMS OF EQUIPMENT REQUIRING SERVICING
- I. UPON COMPLETION OF THE ELECTRICAL INSTALLATION, THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF PRINTS OF THE ELECTRICAL CONTRACT DRAWINGS WHICH SHALL BE LEGIBLY MARKED IN RED TO SHOW ALL CHANGES AND DEPARTURES OF THE INSTALLATIONS COMPARED WITH THE ORIGINAL DESIGN. THEY SHALL BE SUITABLE FOR USE IN PREPARATION OF RECORD DRAWINGS.
- J. GUARANTEE: ALL NEW ELECTRICAL INSTALLATIONS SHALL BE GUARANTEED FOR A PERIOD OF ONE (I) YEAR BEGINNING THE DAY OF THE FINAL ACCEPTANCE OF THE WORK OR BENEFICIAL OCCUPANCY OF THE OWNER, WHICHEVER OCCURS FIRST. THE ABOVE SHALL NOT IN ANY WAY VOID OR ABROGATE EQUIPMENT MANUFACTURED SHALL BE DELIVERED TO THE OWNER. UPON RECEIPT OF NOTICE FROM THE OWNER OF FAILURE OF ANY PART OF THE ELECTRICAL INSTALLATION DURING THE GUARANTEE PERIOD, NEW REPLACEMENT PARTS SHALL BE FURNISHED AND INSTALLED PROMPTLY AND AT NO COST TO VERIZON
- K. SUPPORTS, HANGERS, AND FOUNDATIONS: PROVIDE ALL SUPPORTS, HANGERS, BRACES, ATTACHMENTS, AND FOUNDATIONS REQUIRED FOR THE WORK. SUPPORT AND SET THE WORK IN A THOROUGHLY SUBSTANTIAL AND WORKMANLIKE MANNER WITHOUT PLACING STRAINS ON THE MATERIALS, OR EQUIPMENT. SUPPORTS, HANGLES, BRACES AND ATTACHMENTS SHALL BE STANDARD MANUFACTURED ITEMS OR FABRICATED STRUCTURAL STEEL SHAPES
- THERE SHALL BE NO INTERRUPTION OF POWER TO EXISTING ELECTRICAL SYSTEMS WITHOUT PRIOR CONSENT FROM VERIZON. SUCH INTERRUPTIONS SHALL BE KEPT TO A MINIMUM. ANY COST FOR WORK THAT MUST BE DONE ON AN OVERTIME BASIS SHALL BE INCLUDED IN THE BID.
- M. MOUNTING AND SUPPORTING OF ALL EQUIPMENT PROVIDED BY THIS CONTRACTOR SHALL BE COORDINATED WITH VERIZON IN THE FIELD PRIOR TO CONSTRUCTION.

2. <u>SECTION 16050 - BASIC ELECTRICAL MATERIALS & METHODS</u>

A. CONDUIT & BOXES:

- ALL CONDUIT BELOW GRADE SHALL BE SCHEDULE 40 PVC. ALL CONDUIT ABOVE GRADE SHALL BE NON METALLIC ELECTRIC GRADE.
- 2. JUNCTION AND PULL BOXES SHALL BE FURNISHED AND INSTALLED AS SHOWN OR WHERE REQUIRED TO FACILITATE PULLING OF WIRES OR CABLES. SUCH BOXES SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS. GASKETED COVER PLATES SHALL BE FURNISHED FOR OUTDOOR
- 3. ALL BOXES, WHETHER OUTLET, JUNCTION, PULL, OR EQUIPMENT SHALL BE FURNISHED WITH APPROPRIATE COVERS.
- 4. NO SECTIONALIZED BOXES SHALL BE USED.
- 5. ALL FIELD CUTS OF GALVANIZED ITEMS SHALL BE BRUSHED WITH MARINE GRADE GALVANIZING.
- 6. ALL METALLIC OBJECTS EXPOSED TO WEATHER SHALL BE GALVANIZED.

B. <u>MIRES & CABLE</u>

- CONDUCTORS, UNLESS OTHERWISE INDICATED, SHALL BE 600 VOLT, TYPE THWN INSULATION FOR INTERIOR AND EXTERIOR USE. CONDUCTORS SHALL BE SOFT DRAWN COPPER OF NOT LESS THAN 98% CONDUCTIVITY. NO ROMEX OR AC (BX) CABLE WILL BE ALLOWED ON THE PROJECT.
- 2. NO WIRE SMALLER THAN NO. TWELVE (12) AWG SHALL BE USED UNLESS OTHERWISE INDICATED. CONDUCTORS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET AND FROM TERMINAL BOARD TO POINT OF FINAL CONNECTION, AND NO SPLICE SHALL BE MADE EXCEPT WITHIN OUTLET OR JUNCTION BOXES, ALL CONDUCTORS SHALL BE OF THE SIZES AS INDICATED. ALL WIRES NO. EIGHT (8) AWG AND LARGER SHALL BE STRANDED. THE CONTRACTOR SHALL MAKE WIRING CONNECTIONS OF ALL ELECTRICAL EQUIPMENT REQUIRING ELECTRICAL SERVICE. WIRES AND CABLES SHALL BE AS MANUFACTURED BY PIRELLI, ROYAL, AND TRIANGLE OR EQUIVALENT.
- 3. ALL WIRING SHALL BE COLOR CODED. MATCH EXISTING SYSTEM COLOR CODING WHERE

C. <u>DISCONNECTS:</u>

FURNISH AND INSTALL SAFETY SWITCHES WHERE INDICATED AND AS REQUIRED FOR MOTOR OUTLETS OR OTHER EQUIPMENT. SWITCHES SHALL BE OF SIZE, NUMBER OF POLES AND FUSED OR NON-FUSED, AS REQUIRED FOR JOB CONDITIONS AND THE NATIONAL ELECTRICAL CODE.

D. <u>GROUNDING:</u>

- PROVIDE GROUND FOR ALL RACEWAYS, DEVICES, AND UTILIZATION EQUIPMENT PERMANENTLY AND EFFECTIVELY IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, AS HEREINAFTER SPECIFIED. ALL GROUNDING AND BONDING CONNECTIONS SHALL BE SOLDERLESS.
- 2. PROVIDE INSULATED GROUNDING CONDUCTORS FOR FEEDER AND BRANCH CIRCUIT WIRING AS CALLED FOR ON THE PLANS. PROVIDE GROUNDING BLOCKS, TERMINALS, ETC., FOR CONNECTION OF GROUND WIRE IN ALL DISTRIBUTION EQUIPMENT.

SECTION 16400 - SERVICE & DISTRIBUTION

A. ELECTRICAL SERVICE:

ELECTRICAL POWER TO THE NEW EQUIPMENT SHALL BE EXTENDED FROM THE PROPOSED UTILITY METER AND SERVICE ENTRANCE RATED LOAD CENTER MOUNTED ON NEW POLE. LABEL METER WITH PHENOLIC NAMEPLATE READING "VERIZON WIRELESS". LABEL PANEL WITH PHENOLIC NAMEPLATE READING "VERIZON WIRELESS SERVICE DISCONNECT".

B. <u>COMMUNICATIONS SERVICE:</u>

- TELEPHONE SERVICE SHALL BE EXTENDED BY THE TELEPHONE COMPANY. PROVIDE SERVICE CONDUITS, SLEEVES, AND OTHER EQUIPMENT SHOWN ON THE DRAWINGS FOR USE BY THE TELEPHONE COMPANY. ALL CHARGES BY THE UTILITY COMPANY SHALL BE PAID BY THE OWNER.
- 2. ALL ELBOWS IN CONDUIT RUNS SHALL BE WIDE SWEEP FIELD BENDS. INSTALL PULL BOXES AS REQUIRED AND WHERE DIRECTED BY THE TELEPHONE COMPANY AND/OR AS REQUIRED BY THE

DOMINION SPECIFICATIONS

- RF NOTICE SIGNS MUST BE INSTALLED ON BOTH SIDES OF POLE 4'-O" FROM BOTTOM OF ANTENNA MOUNT WITH A MINIMUM I'-O" 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. THE SIGN SHALL BE 60 MIL LEXAN WITH U.V. INHIBITORS AND SIGNS SHALL ADHERE TO IEEE C95.2 STANDARDS. ONE (I) SIGN TO BE INSTALLED NEAREST TO DISCONNECT AS POSSIBLE WITH A CLEARANCE OF 5'-O" FROM BOTTOM OF SIGN TO FINISHED GRADE
- THE POWER DISCONNECT IS INTREGAL TO THE LOAD CENTER ASSEMBLY. THIS DEVICE IS PROVIDED FOR DISCONNECTING MEANS FOR DE-ENERGIZING AC POWER TO THE ANTENNA. THE DISCONNECT SHALL BE CLEARLY LABELED AS THE ANTENNA POWER DISCONNECT.
- 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 C95.2 STANDARDS.
- 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 I'-O" 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
- 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 239B, AND NESC 239H4).
- 6. THE INSTALLATION MUST MEET ALL NESC REQUIREMENTS.

TO THE COMPANY GROUND WIRE.

- 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 SWITCHES PECLOSERS, THREE PHASE TRANSFORMER BANKS, THREE PHASE TERMINALS, CAPACITORS, SWITCHES, ETC.
- INSTALLERS WORKING IN THE AREA OF THE POLE ABOVE THE NORMAL COMMUNICATIONS SPACE MUST
- AN ANTENNA GROUND WIRE AND GROUNDING ELECTRODE IS REQUIRED. THIS GROUND SHALL BE BONDED
- IO. VERIZON TO LEAVE MINIMUM 3' LEADS COILED AND SECURED TO PREVENT ACCIDENTAL CONTACT WITH
- II. SERVICE WILL BE CONNECTED BY VERIZON IN COMPLIANCE WITH FILED RATE PLAN.
- LINE ARRESTER INSTALLATIONS ARE REQUIRED ON POLES WITH PRIMARY CONDUCTORS.
- 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.
- 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 REPORT OF THE CONTRACT OF THE CONTRACT OF THE POLES. WIRE NEED EXTEND ONLY FROM THE SWITCH TO THE COMPANY GROUND WIRE.
- THE METER BASE, EQUIPMENT BRACKET, AND DISCONNECT SHOULD BE MOUNTED PROVIDING DOMINION BLUE BOOK AND NEC CLEARANCE. THEY MAY BE MOUNTED AT OPERATIONAL HEIGHT THAT:

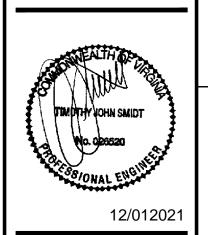
 A. THE EQUIPMENT BRACKET DOES NOT OBSTRUCT A WALKWAY OR IS SUBJECT TO VEHICULAR TRAFFIC. THE EQUIPMENT BRACKET CAN NOT BE USED ALONE OR IN CONJUNCTION WITH A FENCE, PEDESTAL,
- 17. FOR SAFETY PURPOSES DEVICES WITH LEAD ACID BATTERIES SHALL NOT BE USED.
- 18. DUE TO OPERATIONAL CONCERNS, SECONDARY POLES 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.
- ONE RADIO CABINET, A SERVICE DISCONNECT AND THE METER BASE MAY BE POLE MOUNTED.

 ADDITIONAL EQUIPMENT, OR LARGE CABINETS SHALL BE PAD MOUNTED. PAD MOUNTED EQUIPMENT MUST BE LOCATED A MINIMUM OF IO' FROM THE BASE OF THE POLE.

DOMINION CONDUIT SPECIFICATIONS

- CUSTOMER INSTALLED CONDUITS SHOULD BE INSTALLED IN ACCORDANCE WITH THE GUIDELINES OUTLINED BY DOMINION ENERGY AND LOCAL GOVERNMENT AGENCIES AND CONFORM TO THE LATEST EDITION OF THE NATIONAL ELECTRIC SAFETY CODE AND APPLICABLE VDOT LAND USE MANUAL.
- 2. THE CUSTOMER IS RESPONSIBLE FOR INSTALLING THE PROPER DIAMETER SIZE CONDUIT, AT THE SPECIFIED DEPTH AS DETERMINED BY DOMINION ENERGY IN THE EVENT THAT DOMINION ENERGY FIND THE CUSTOMER INSTALLED CONDUIT UNSUITABLE, IT IS UNDERSTOOD THAT THE CONNECTION OF SERVICE MAY BE
- ALL CUSTOMER INSTALLED CONDUITS INSTALLED FOR THIS PROJECT ARE TO BE EITHER OF THE OPTIONS SPECIFIED BELOW. THE INSTALLER SHOULD MAINTAIN AS STRAIGHT A PATH AS POSSIBLE WITH NO MORE THAN A TOTAL OF 270 DEGREE BENDS UNLESS SPECIFIED BY DOMINION ENERGY
- PVC STICK CONDUIT, ELECTRICAL GRADE, GRAY IN COLOR, AND MEET THE REQUIREMENTS OF THE NEMA TC2 FOR SCHEDULE 40 OR THICKER. CONDUIT SIZE REFERS TO THE INSIDE DIAMETER.
- HDPE CONDUIT MUST BE ELECTRICAL GRADE, BLACK IN COLOR AND MEET THE REQUIREMENTS OF NEMA TC7 FOR EACH TRADE SIZE. HDPE CONDUIT IS NOT APPROVED FOR METER RISERS. CONDUIT SIZE REFERS TO THE OUTSIDE DIAMETER.
- HDPE COILABLE CONDUIT WITH TRADE SIZES 2" OR SMALLER SHALL FOLLOW SCHEDULE 40. HDPE COILABLE CONDUIT WITH TRADE SIZES GREATER THAN 2" SHALL USE A STANDARD DIMENSION RATIO (SDR) OF 13.5 OR LESS.
- HDPE STICK CONDUIT WITH TRADE SIZES GREATER THAN 4" SHALL USE A STANDARD DIMENSION RATIO (SDR) OF 13.5 OR LESS. (DOMINION ENERGY BLUE BOOK, 2017 EDITION, PAGE 17)
- 4. ALL ROAD CROSSING CONDUITS TO BE INSTALLED AT 36" BELOW GRADE, MEASURED FROM THE TOP OF THE CONDUIT. CONDUIT UNDER ROADWAYS TO BE SCHEDULE 80 PVC. 5. CONDUIT MUST BE INSTALLED WITH A PULL STRING (1000LB TEST NYLON). INDIVIDUAL PULL STRINGS MUST BE SECURELY TIED TOGETHER WHERE THEY MEET. ALL CONDUIT MUST BE CONNECTED (WITH ELBOWS IF APPROPRIATE) AND GLUED. WHEN CONDUIT
- AND A 36" RADIUS FOR A 4" OR 6" CONDUIT. CONDUIT ENDS NEED TO BE CAPPED AND CLEARLY MARKED ABOVE GROUND. CONDUIT END AT DOMINION TRANSFORMER MAY NOT EXCEED 3'-O" MAXIMUM FROM TRANSFORMER.
- CUSTOMER INSTALLED DOMINION ISSUED SPLICE BOXES ARE TO BE INSTALLED IN GREEN SPACE IF POSSIBLE AND ARE NOT TO BE INSTALLED IN ROADWAYS OR ANY AREA WITH VEHICLE TRAFFIC. THE SPLICE BOX IS TO BE INSTALLED AT A FLAT AREA OF TERRAIN AND THE TOP OF THE SPLICE BOX IS TO BE FLUSH WITH FINAL GRADE. CONDUITS ARE TO ENTER THE SPLICE BOX AT OPPOSITE ENDS TO ALLOW FOR PROPER SPACE FOR SPLICING.

Telegent Engineering In 2216 Commerce Road, Suite 1 Forest Hill, MD 21050 410-692-5816 www.tel-eng.com



O w REVISIONS: |NO.|DESCRIPTION| DATE PERMIT DWGS. OI/27/

LAST REV.: |PROJECT NO:191546 |DATE:JANUARY 27, 2020

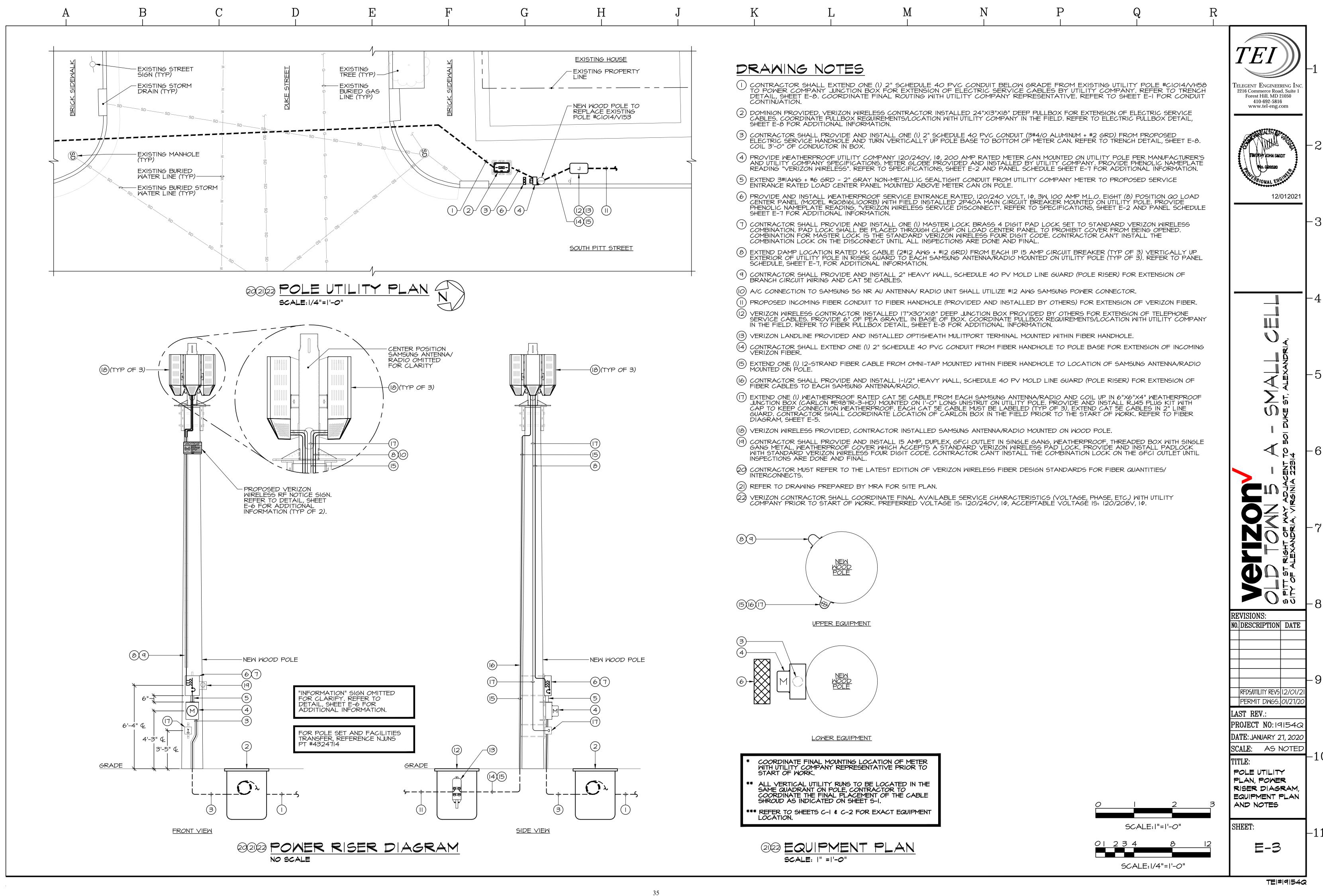
| SYMBOLS LIST, ELECTRICAL

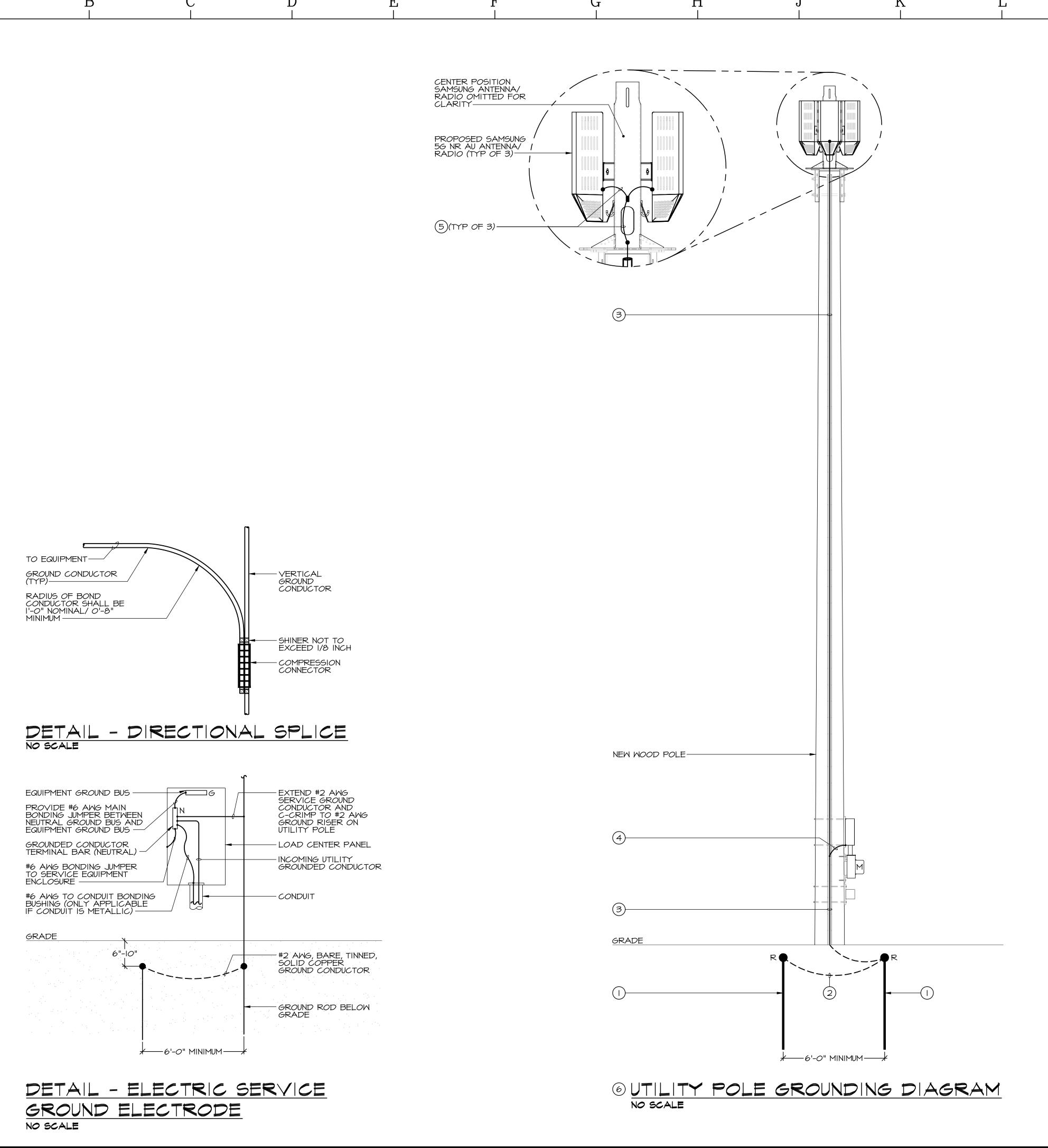
SPECIFICATIONS AND DOMINION

AS NOTE

SPECIFICATIONS SHEET:

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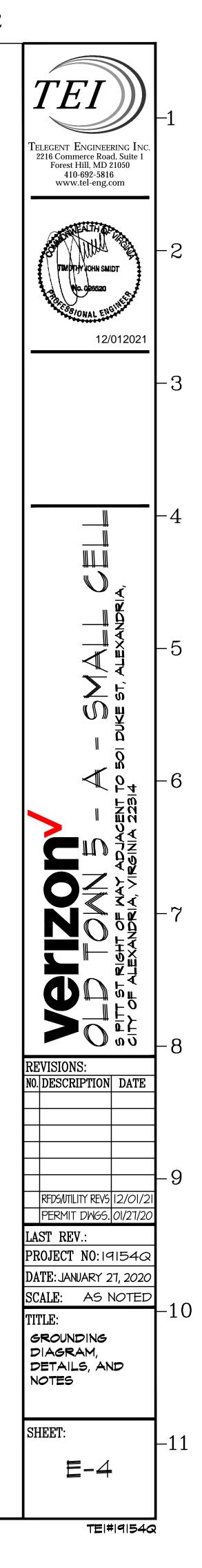
GROUNDING GENERAL NOTES

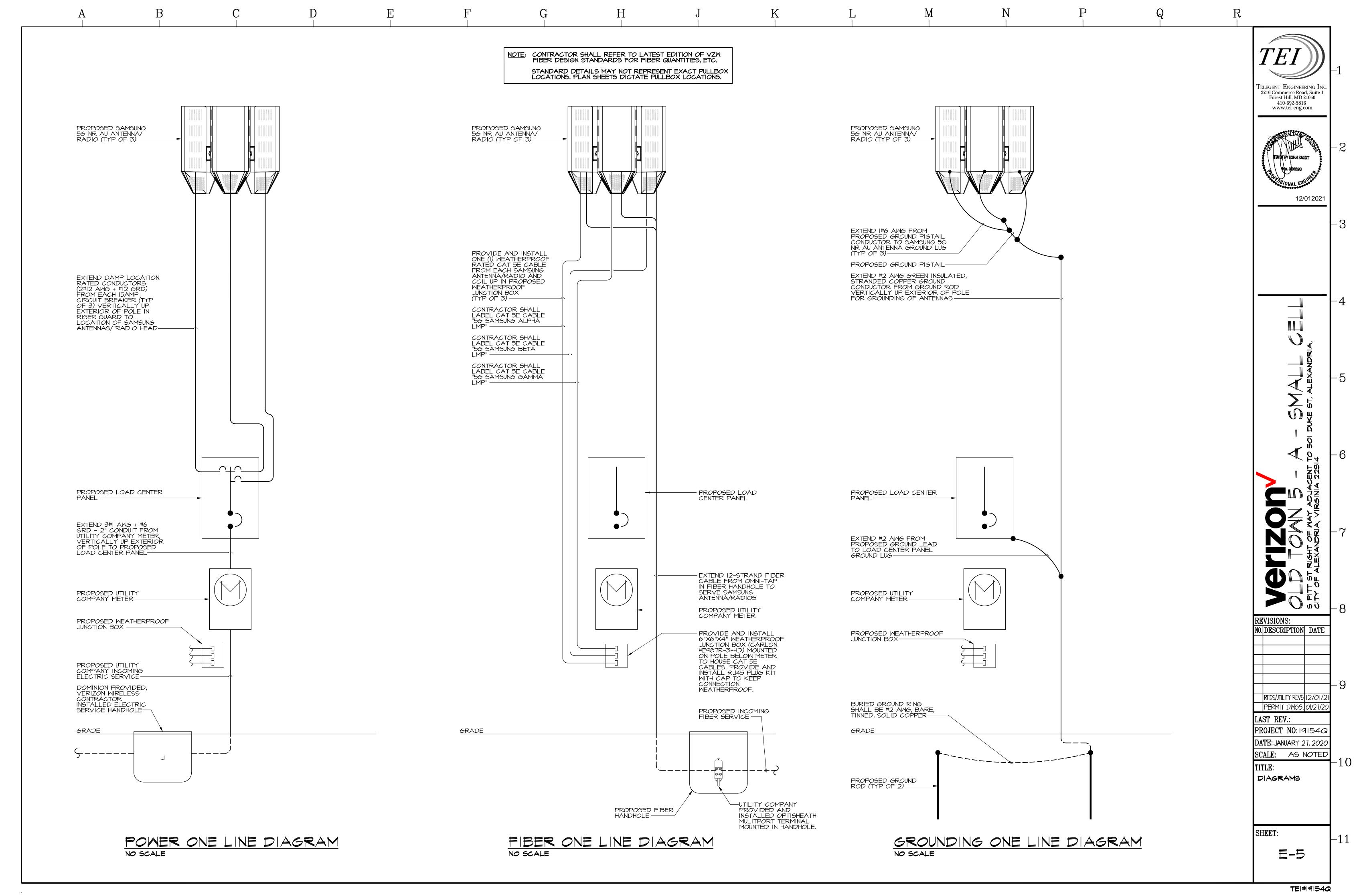
- I. ALL GROUND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC (CADWELD) TO NEAREST GROUND ROD USING ERICO CADWELD "ONE-SHOT" CONNECTIONS.
- 2. ALL EXTERIOR GROUND CONDUCTORS SHALL BE #2 AWG BARE, TINNED SOLID COPPER, UNLESS NOTED OTHERWISE.
- 3. ALL GROUND CONNECTIONS ABOVE GRADE SHALL BE TWO-HOLE COPPER COMPRESSION TYPE WITH STANDARD LENGTH BARREL (BURNDY # YA2CL- 2TC14EI). 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 CONNECTING SURFACES OF GROUND BAR PLATES. 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 CRIMP TYPE "C" TAP CONNECTORS.
- 7. ALL EXOTHERMIC WELD CONNECTIONS AND FIELD CUTS OF METALLIC OBJECTS EXPOSED TO WEATHER SHALL BE FIRST SPRAYED WITH COLD GALVANIZING (AFTER COOL DOWN) THEN BE TOPPED WITH BRUSH ON MARINE GRADE GALVANIZING.
- 8. ALL CONDUIT USED AS SLEEVES FOR GROUNDING OR BONDING CONDUCTORS SHALL BE PVC.
- 9. ALL GROUND RODS SHALL BE DRIVEN VERTICALLY USING A GROUND ROD SHIELD TO PREVENT THE ENDS FROM "MUSHROOMING".

10. ALL GROUNDED CONDUCTORS TO BE BONDED TOGETHER.

DRAWING NOTES

- (I) PROVIDE 8'-0" (MINIMUM) X 5/8" COPPER CLAD STEEL GROUND ROD.
- $\stackrel{ullet}{(2)}$ BURIED GROUND RING SHALL BE #2 AWG, BARE, TINNED, SOLID COPPER.
- (3) EXTEND I#2 AWG, GREEN INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM BURIED GROUND ROD VERTICALLY UP UTILITY POLE FOR GROUNDING OF EQUIPMENT/ANTENNAS. GROUND CONDUCTOR SHALL BE HOUSED WITHIN I/2" GROUND WIRE MOLDING THEN TRANSITION AT ELEVATION OF HEAVY WALL, SCHEDULE 40 PV MOLDING (POLE RISER) AT APPROXIMATELY 8'-0" ABOVE FINISHED GRADE. SECURE GROUND WIRE MOLDING TO UTILITY POLE VIA GALVANIZED 2"x5/8" STAPLES. SECURE POLE RISER TO UTILITY POLE VIA GALVANIZED LAG BOLTS, REFER TO STRUCTURAL FOR DETAILS.
- 4 EXTEND I#2 AWG, GREEN INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM ENCLOSURE OF PROPOSED LOAD CENTER AND BOND TO GROUND CONDUCTOR EXTENDING TO BURIED GROUND ROD. REFER TO SERVICE GROUNDING DETAIL, THIS SHEET.
- (5) EXTEND I#6 AMG, GREEN INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM EACH SAMSUNG ANTENNA/ RADIO AND BOND TO GROUND PIGTAIL CONDUCTOR. EXTEND GROUND PIGTAIL AND BOND TO GROUND CONDUCTOR EXTENDING DOWN POLE TO BURIED GROUND ROD. REFER TO DIRECTIONAL SPLICE DETAIL, THIS SHEET.
- 6) REFER TO DOMINION SPECIFICATIONS FOR ADDITIONAL GROUNDING REQUIREMENTS.







6INFORMATION
This is an ACCESS POINT to an area with transmitting antennas.
Obey all postings and boundaries beyond this point. Call Verizon at 1-800-264-6620 for more information. STATE: SWITCH:
SITE ID/PSLC:
verīzon ^v

- * REFER TO STRUCTURAL SHEETS FOR EXACT MOUNTING LOCATION AND DETAILS.
- ** VDOT SIGNAGE TO BE SUPPLIED BY GENERAL CONTRACTOR.
- *** INFORMATION SIGN TO BE MOUNTED AT 5'-O" AFG.

DETAIL - RF SIGNAGE NO SCALE

Wood/Aluminum/Composite Pole Underground Service

Carrier: Carrier Address: Site address

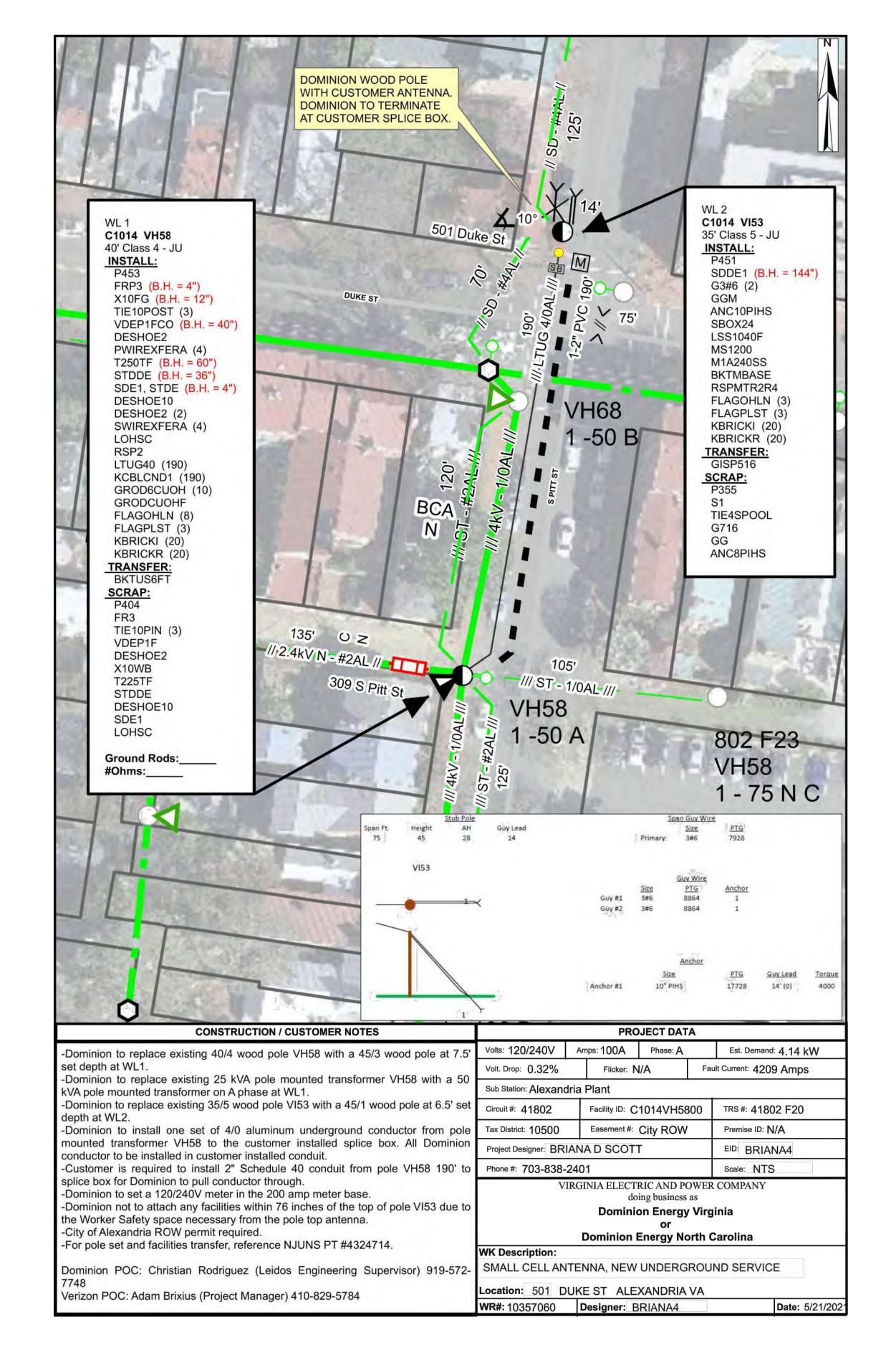
Work Request #: WR# Structure Owner: Structure

Site Name: Carrier Site Name Antenna Pole #: N/A or Pole #

NJUNS #: N/A or NJUNS Source Pole replacement: N/Y

- Site Name and/or address clearly indicated on front of meter base.
- 2. Standard Meter Base used in all non-coastal or non-contaminated areas (200 AMP Meter Base 11"x17"). Aluminum Meter Base used in all coastal or contaminated areas (200 AMP Meter Base 11"x15" without top knockout see blue book page 126). Raycap Combo Meter Base allowed on wood poles.
- 3. Meter base properly located on pole, facing away from vehicular traffic and not hanging over sidewalk (includes glass meter). Any meter glass over sidewalk must allow for 36" of sidewalk clearance per ADA requirements. Meter Reader's back should never be against traffic.
- 4. Meter base properly meeting height requirement from ground-level to center of meter glass. Height minimum 4' to maximum 6'. (5' height from ground-level to center of meter glass preferred).
- 5. Any foreign object around Dominion meter base including sides, top, and bottom must maintain a 6" clear space. There must be a clear 3' clear workability area in front of meter glass.
- 6. On wood poles, proper Dominion mounting bracket for meter base using four-point attachment. (Each Dominion supplied bracket has 2 holes, mount with two 2 screws in the top and 2 screws in the bottom). All 3/4" carriage bolts tightly fastened in place with washer and nut locked down inside meter base with 2-4 threads showing just above nut. No bolts missing. On Steel Poles, four point attachment attaches meter base to pole with banded bracket. Bands should not cover any cable ports on the pole.
- 7. Properly wired meter base for service indicated on design sketch, based on Blue Book for Underground page 91 and proper use of knockouts for line and load conductors entering inside meter base. Proper load and line conductor tails if customer does not land cables into lay-in terminals. On Private Owned Steel Poles in East, the load side conductors may enter from the pole into the back of the meter base.
- 8. Proper 2-Inch PVC Sch 40 riser with a 4-Inch offset for lateral from splice box. Two straps used to mount conduit at pole, one just below last bend closest to pole and one about 6 Inches above ground level. On Private Owned Steel Poles, the conduit may enter bottom of Meter Base from inside the pole. Offset still required and conduit must be flush with meter base.
- 9. Contractor must meet all proper clearances with their 5G equipment between our conductors and equipment. 9"x11" Blue RF FCC regulated signage in place on antenna pole when located close to adjacent poles with Dominion facilities.
- 10. Proper splice box used is SBOX36D (38-1/2" L x 26-1/2" W x 18" H) for Dominion owned Aluminum/Composite Poles with lighting circuits. Chamber 'A' is labeled "PVT Electric" for the use by customer conductors. Chamber 'B' is labeled "Dominion" for the use of company conductors. Top cover is screwed shut before site is left. Refer to design sketch provided by Dominion.
- 11. Proper splice box used is standard box SBOX24 (24" L x 13" W x 18" H) for Aluminum/Composite Poles without lighting. The word "Dominion" is stamped in the top. Refer to design sketch provided by Dominion.
- 12. Proper placement of splice box with 3' minimum from pole to edge of splice box and 5' minimum from pole to middle of splice box. Splice boxes should not be in streets or driveways, etc., as they are not rated for vehicles.
- 13. Proper installation of splice box with all Dominion provided (penta-head) bolts fastened tightly in place and none missing. No gravel present in splice box and splice box is not grounded. Properly leveled grade around the box, including dirt, concrete, pavement, etc. Erosion control measures in place. Site should be restored to original state or better.
- 14. Proper tamping of conduit for riser at base of pole and proper seeding straw or sod along service lateral run. Properly repaired sidewalks, including blacktop patching. Proper erosion and sediment control in place to prevent EPA violations (including but not limited to erosion control meshing). Dominion will not take ownership of a site with erosion issues. Proper grading and tamping around poles with JU facilities, if replaced. Site should be restored to original state or better.
- 15. Proper installation of conduits with pull strings. For pad mounted transformers, end of conduit is within 5' of pad mount on the right (secondary) side, properly marked above ground, and capped with pull string. For pole, end of conduit is to be turned tightly up against pole and capped with pull string. Refer to the Certificate of Proper Conduit Installation provided by Dominion.
- 16. Source Pole Replacement matches pole class, height, and set depth indicated on design sketch. If UG coming off pole must be properly graded & tamped. Site must be restored to original state or better.
- 17. Any and all additional requirements specified on design sketch completed, including but not limited to additional RF signage on adjacent poles, additional signage related to horizontal clearances, yellow caution signage when RF exceeds occupational limits etc.





DOMINION DESIGN PRINT No scale

TE|#|9|54Q

REVISIONS:

LAST REV.:

DOMINION

DOMINION

SHEET:

CHECKLIST,

Design Print,

AND DETAIL

NO. DESCRIPTION DATE

|RFDS/UTILITY REVS|12/01/2

PERMIT DWGS. 01/27/2

PROJECT NO:19154Q

DATE: JANUARY 27, 2020

SCALE: AS NOTEI

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

12/012021

A	В	C	D	E	F	G	Н	J	K	L	\mathbf{M}	N	P	Q R

	EQUIPMENT	T SCHEDULE			
MANUFACTURER	PART #	COMPONENT TYPE	QUANTITY	DIMENSIONS (H×M×D)	MEIGHT
SAMSUNG	ATIKO4	ANTENNA/ REMOTE RADIO HEAD	3	16.8"×9.6"×6.9"	32.0 LBS.
SQUARE-D	Q0816L100RB	LOAD CENTER PANEL	I	12.64"×8.90"×4.27"	9.68 LBS.
CARLON	E987R-3-HD	CAT 5E CABLE JUNCTION BOX	I	6.0"x6.0"x4.0"	3.00 LBS.
DOMINION STANDARD	65.737000	ELECTRIC METER	I	17.0"×11.0"×5.0"	5.25 LBS.
		CONDUIT CABLING	3±	VARIES	20.0 LBS.
_				TOTAL MEIGHT:	133.93 LBS.
					$\overline{}$

AVA	AVAILABLE FAULT CURRENT = 4,209 AMPS									1PS
(PROF	(PROPOSED) (NEMA 3F									4 3R)
P /	PANEL "VERIZON WIRELESS"									
120/2	40 V	OLTS	· ΙΦ 3	MI	RE	: IC	00	AMP	MAIN	L.O.
υ⊻⊢	_	2	3	_	4	Ę	5	6	7	8
ሠጜጙዪ	4	0	15	15	5	15	15	ı	-	-
DESCRIPTION	<u> </u>		GFCI RECEPTACLE	SAMSUNG ANTENNA - ALPHA	SAMSUNG ANTENNA - BETA	SAMSUNG ANTENNA - GAMMA	SPARE	SPACE	SPACE	SPACE
POWE	R LO	AD:	1.43	3 K	\\ 	4 х @		25% = = 1 0/240	1.79 1.46 A DV, 14	MPS

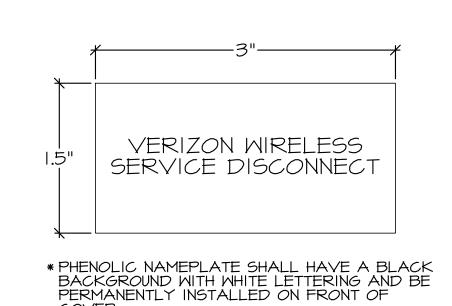
- * PANEL SHALL BE LOCKABLE WITH PADLOCK.

 ** PANEL SHALL BE SERVICE ENTRANCE RATED.
- *** LOAD CENTER PANEL SHALL BE EQUIPPED WITH A TYPEWRITTEN DIRECTORY, INDICATING PLAINLY WHAT EACH CIRCUIT OF THE PANEL CONTROLS. THIS SCHEDULE SHALL BE PLACED ON FRONT COVER OF PANEL.
- **** CONTRACTOR SHALL PROVIDE AND INSTALL IS AMP TANDEM BREAKERS IN SPACES PROVIDED.



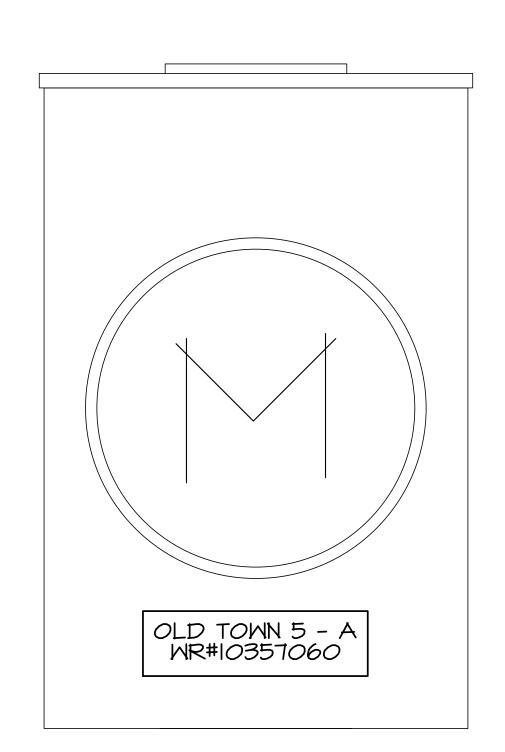
DETAIL - SQUARE-D QOSIGLIOORB NOT TO SCALE (OR APPROVED EQUAL)

Underground Dominion Feed – ALL AREAS



DETAIL - MAIN OVERCURRENT DEVICE PLACARD

NOT TO SCALE (DISCONNECTING MEANS)

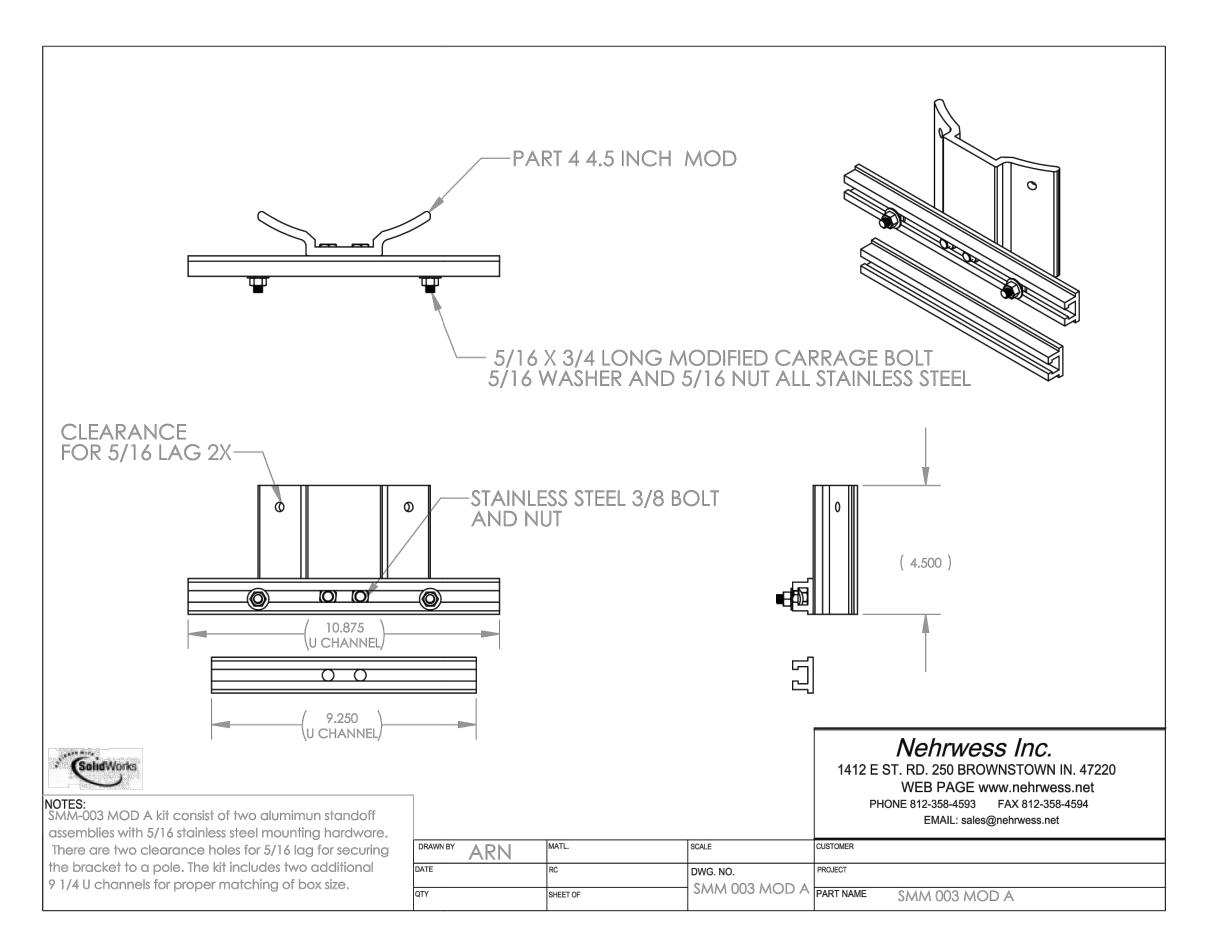


DETAIL - METER LABEL NO SCALE

5th TERMINAL FOR 120/208V SERVICE SEE 240.3 -LINE KNOCKOUTS BOTTOM LEFT 1-250 1-250 BOTTOM RIGHT LOAD KNOCKOUTS 1-250 BOTTOM LEFT BOTTOM CENTER 1-250 BOTTOM RIGHT 1-250 1-250 1-250 LEFT SIDE RIGHT SIDE 1-250

DETAIL - DOMINION METER CONNECTIONS NO SCALE

LOAD

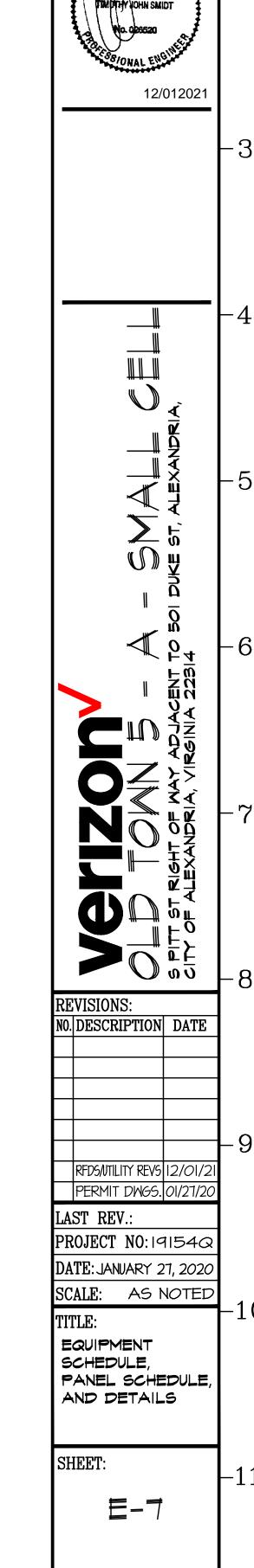


NO SCALE

(MOOD POLES)

CONTRACTOR SHALL USE THE FIRST ISO OLD KITS FOR FOR METER MOUNTING. CONTRACTOR SHALL USE NEW KITS ONCE THE OLD ONES ARE NO LONGER AVAILABLE FOR THE SELF CONTAINED 200 AMP METERBASE. BRACKET SHALL BE MOUNTED TO WOOD POLE WITH 5/16"x2-1/2" GALVANIZED LAG BOLTS.

DETAIL - METER BRACKET



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TOTAL VOLUME: 2.84 CU.FT.

LINE

SIDE

