

**Verizon Wireless – Scruby Property - Tier III
Personal Wireless Service Facility**

Project Description / Request:

Cellco Partnership, operating as Verizon Wireless (“Verizon”), respectfully requests approval of a Special Use Permit and Special Exemption for a Personal Wireless Service Facility (PWSF), including a 140-foot tall monopole to be located immediately south of the nearest addressed parcel at 7418 Greenwood Station Road, and identified as Tax Map & Parcel Number 05500-00-00-01400 (the “Property”). The leased area is 40’x40’. Verizon’s proposed radio transmitter cabinet will be placed on a concrete pad, besides an approximately 10’ wide utility H-Frame stand and power communication components on a steel grated platform, and an emergency back-up power generator on another concrete pad. This facility will be installed within a 400 square-foot fenced compound and the ground equipment will be covered with an ice guard to prevent possible damage to the ground equipment due to falling tree branches and ice. The monopole, antennas, and base station equipment that might be visible above the screening fence will all be painted with Sherwin Williams Java Brown - #6090, which is a matte enamel color that has been previously approved as an appropriate color for many other “Treetop” Personal Wireless Service Facility sites throughout Albemarle County.

Network Objectives:

Verizon is licensed by the Federal Communications Commission (FCC) to provide state-of-the-art wireless telecommunications services within Albemarle County using a combination of four (4) separate bands on the frequency spectrum. These consists of the 850 MHz band for Cellular (CDMA), the 1900 MHz frequency band for Personal Communications Services (PCS), the 4G Long Term Evolution (LTE) on 700 MHz band, and Advance Wireless Services (AWS) on the 2100 MHz band. In addition, the site will be upgradable to 5G CBAND service with just a small equipment change at the time of the tower installation. The network offers data upload and download transmission speeds that much faster than the previous generations of wireless technologies. Verizon has also recently added high-definition calling capabilities to the data networks in the form of Voice Over LTE (VOLTE) service.

Whenever possible, it is Verizon’s goal to provide seamless in-building, in-car, and on-street coverage and the full range of voice and data services to existing and future customers. Verizon has determined that the area surrounding this proposed site needs expanded coverage to better service the nearby residences, businesses, and traffic along the I-64 Interstate. Therefore, this site is intended to provide infill coverage while also adding additional network capacity by offloading traffic from the company’s nearest existing sites in all directions. Although the proposed 140’ monopole tower would be too short to maximize coverage, it should allow the antennas to clear the highest treetops within the immediate area on this parcel allowing service from this facility to connect the with customers who are currently drawing on the marginal coverage levels that are currently being provided by the four (4) nearest neighboring sites: “I64 West” to the west (VZW PWSF off Newton Heights Road), “Yancey Mills” to the East (VZW PWSF off Patterson Mill Lane), “Parsons Green” to the southwest (VZW PWSF off of Route 151 – Critzers Shop Road), and “Railroad Avenue” to the Northeast (VZW Rooftop Mounted Antenna in Downtown Crozet).

Character of the Area:

The proposed PWSF will be contained within a 1600 square-foot lease area located on a 44.73 acre property used for agricultural & residential purposes. The site of the proposed facility has a

**Verizon Wireless – Scruby Property - Tier III
Personal Wireless Service Facility**

ground level elevation of 740.8 feet Above Mean Sea Level (AMSL). The subject parcel, which is in the White Hall Magisterial District, is located off of Greenwood Station Road, is zoned Rural Areas (RA), and is located within the Entrance Corridor (EC) Overlay District and the Greenwood-Afton Rural Historic District (DHR ID #0088-5075). All adjoining properties are zoned Rural Areas (RA) and have a mix of residential and agricultural uses. Access to the proposed PWSF will be provided from the east side of Greenwood Station Road, utilizing an existing gravel entrance to the property. The proposed monopole will be located approximately 754'2" feet east of the nearest boundary line with the right-of-way for Greenwood Station Road and 32'10" from the boundary line with the right-of-way for I-64. The nearest off-site dwelling is located approximately 1300' northwest of the monopole site across I-64 on property identified as Tax Map / Parcel Number 05400-00-00-07100.

Compliance with Section 5.1.40 of the Albemarle County Zoning Ordinance Section 5.1.40(b) – Development Requirements for Tier III Personal Wireless Service Facilities (Items 1-12):

1. General Design: The Facility shall be designed, installed, and maintained as follows:
 - (a) Guy Wires: *The proposed monopole will not require any installation of guy wires.*
 - (b) Outdoor Lighting: *One LED Floodlight will be placed on the utility H-Frame and test lights will only be used as needed during unexpected events that require nighttime visits by Verizon's technical operations staff. The proposed light must be adjustable to illuminate various parts of the compound for safety reasons. However, it will not be turned on nightly and will be located well below the treetops which will provide natural shielding from the light shining skyward during any relatively short periods of emergency maintenance.*
 - (c) Ground Equipment: *Proposed equipment consisting of the base station cabinets, H-Frame stand and generator will be placed in a location that is screened from offsite views by the surrounding trees, and a wooden fence will also be installed to help fortify the existing screening elements that are offered to this site. Any portions of equipment that are visible above the screening fence will be painted to match the tower and blend into the wooded area.*
 - (d) Whip Antenna: *No whip antennas are currently proposed with this application.*
 - (e) Grounding Rod: *The proposed grounding rod to be mounted at the top of this monopole will comply with the County's sizing requirements for a maximum of Two (2) feet in length and one (1) inch in diameter.*
2. Antennas and associated equipment:
 - (a) Number of arrays: *Verizon will use a mounting collar and mounting frames that will allow all six (6) of the necessary antennas to be installed in a single array within three (3) horizontally separated sectors at the same height. This antenna array will be centerline mounted at the 136 foot AGL level (876.8' AMSL), with the (2) antennas grouped in each sector to support the combination of the licensed Cellular, PCS, LTE, and AWS frequencies all at one mounting level on the monopole. Other supporting devices that consist of six (6) remote radio heads and two (2) fiber optic surge protection boxes will be placed below the antenna array on an additional array.*

**Verizon Wireless – Scruby Property - Tier III
Personal Wireless Service Facility**

- (b) Size: The antennas initially to be installed in Verizon's array are identified as Commscope Model Number: NHH-65C-R2B [96.0"(H) x 11.9"(W) x 7.1" (D), equaling 1,142.40 square inches]. Specific equipment will likely change over the life of the PWSF as technology advances.*
- (c) Projection: The antennas are proposed to be mounted with 18" between the face of the monopole and the backs of the antennas, and no need for physical down-tilting. Therefore, Verizon is also requesting approval of a Special Exception to modify Section 5.1.40.b(2)(c) of the Zoning Ordinance which allows maximum distances of 12" to 18" between the face of the monopole and the back of the antennas when down-tilting is employed.*
- (d) Color: All antennas will be painted the same Java Brown color as the proposed monopole.*

3. Tree Conservation Plan;Content:

Prior to the approval of a building permit, Verizon will also provide a tree conservation plan that has been prepared by a Certified Arborist. As standard practice, the designated arborist will not issue a written conservation plan letter until after they have had the chance to review Verizon's Final Construction Drawings / Site Plan and visit the site. The final issued letters often provide recommendations for any post-construction tree care techniques in addition to granting approval for app proposed land disturbance techniques, vegetation protection fencing locations, and other design elements that might affect the health of trees that surround this site. No tree removal is planned with this project.

4. Creation of slopes steeper than 2:1.

Upon the completion of this project, none of the remaining slopes will be greater than 2:1 as a result of construction and land disturbing activities for the proposed facility.

5. Ground equipment shelter;fencing.

Verizon is proposing the installation of a 10-foot (10') tall wood fence in order to prevent trespassing. The location and design details of the proposed screening fence are provided in the construction drawings/site plan being submitted with this application.

6. Screening and siting to minimize visibility.

The monopole will be located 754' 2" from the right-of-way line for Greenwood Station Road (Route 690) and 32' 10" from the I-64 Interstate right-of-way. There are numerous mature trees along the north property line that will screen views of the monopole from adjacent properties and the I-64 corridor. No tree removal is planned with this project.

7. Open space plan resources.

The PWSF is located along the I-64 interstate right-of-way but the numerous mature trees located along the right-of-way will screen the view of the monopole's location. In addition, the PWSF is also located within the Greenwood-Afton Rural Historic District (DHR ID #0088-5075) which covers an area of approximately 16,300 acres. The PWSF

**Verizon Wireless – Scruby Property - Tier III
Personal Wireless Service Facility**

location was chosen due to its location close to the I-64 interstate and the ability by VZW to locate the structure on an agricultural lot to minimize any impact to historical structures or uses.

8. Horizontal separation of multiple facilities.

This facility will be the first facility on the property and therefore this provision is inapplicable.

9. Diameter of monopole

As indicated in the attached construction drawings, Verizon's proposed monopole will be designed and constructed so that it is 30 inches at its base and tapers to 18 inches at its top.

10. Height of Monopole

140' foot tall (880.8 feet Above Mean Sea Level – AMSL).

11. Color of monopole, antennas, and equipment.

The monopole and all antennas will be painted Sherwin Williams Java Brown #6090, a color that has been applied to a number of treetop PWSF monopoles in Albemarle County. All of the base station equipment that is installed to support this facility will also be painted the same color and enclosed behind a ten foot (10') wooden security fence.

12. Placement of cables, wires, and similar attachments.

The proposed monopole will be designed and constructed to contain all of Verizon Wireless's coaxial and fiber optic cables that will run from the ground equipment to all antennas and their supporting devices.

Section 5.1.40(c) – Applicability of other regulations in this chapter (Items 1-6):

1. Building site exemption.

Verizon acknowledges this exemption from the standard building site requirements for PWSF.

2. Vehicular access.

Verizon will utilize Greenwood Station Road and the existing gravel access off of the public right-of-way to access the property.

3. Setbacks.

Verizon has selected a location for this proposed monopole facility will be located 754'2" feet from the right-of-way line for Greenwood Station Road (Route 690) and 32.10' from the I-64 Interstate right-of-way. The PWSF is located 185' from the adjacent property line shared with Parcel ID #05500-00-00-01500.

4. Area, bulk, and minimum yards.

Verizon acknowledges this exemption that allows relief to PWSF from the standard area, bulk, and minimum yard requirements.

**Verizon Wireless – Scruby Property - Tier III
Personal Wireless Service Facility**

5. Required yards.

Verizon acknowledges this exemption that allows relief to PWSF from the required yard standards.

6. Site plan.

Please refer to the attached construction drawings with site plan details and the specification sheets for proposed antennas and equipment that all demonstrate compliance with the Tier III PWSF criteria, set forth in Section 5.1.40(a)(4) – Plans and Supporting Documents. Any other supporting information that is deemed relevant to the requirements set forth in Section 32 of the zoning ordinance for site plans can be submitted upon request.

Compliance with Section 33.40 of the Albemarle County Zoning Ordinance
Section 33.40(B) – Factors to be Considered for Special Use Permits

In acting on a special use permit, the Board shall consider the following factors, provided that the Board is not required to make specific findings in support of its actions.

1. No substantial detriment:

This proposal meets all the design criteria for a Tier III PWSF currently required by Section 5.1.40 of the Albemarle County Zoning Ordinance. The property is screened by a buffer of mature trees that will help to screen the facility from adjacent properties and the I-64 interstate. The PWSF is unmanned (no water and sewer) and only requires monthly trips by a technician to maintain the facility, therefore impacts to public facilities and infrastructure will be minimal. The property does not contain steep slopes or floodplains nor will the proposed development create any steep slopes greater than 2:1. Lastly, the PWSF will not require any lighting on the structure or emit noise or odors which would affect any adjacent property owner's quiet enjoyment of their property.

2. Character of the nearby area is unchanged:

The area surrounding this facility is a mix of rural residential with large parcels being used for agricultural purposes. No trees are scheduled to be removed for the installation of the facility.

3. Harmony:

The RA (Rural Area) district was established to preserve agricultural and forestall land activities, water supply protection and conservation of natural, scenic, and historic resources. There are adjacent conservation easements located on Tax Map ("TMP") 55-15 & 71-2B (Seven Oaks Farm – ALB-00860), TMP 54-74E (Mirador Farm – ALB-00933), TMP 70-15E (PRF20140002), TMP 70-15D (PRF20140001), TMP 55-13A & TMP 55-12E & TMP 55-12 (ALB-02266), TMP 55-21 & TMP 55-81 & TMP 55-80 (ALB-0822), TMP 55-12B & TMP 55-20A & TMP 55-20 & TMP 55-16B (ALB-01370), and TMP 54-74F & TMP 54-20 & TMP 70-4 (ALB-00741). These easements seek to protect the open and scenic views, as well as visibility from neighboring properties also currently under conservation easements. A mature tree buffer on the associated property along

**Verizon Wireless – Scruby Property - Tier III
Personal Wireless Service Facility**

with those on neighboring properties will adequately screen the facility from adjacent properties and those traveling within the Historic District. The Applicant advised Justin Altice of the Virginia Outdoors Foundation (VOF) about the details of the project, and Mr. Altice provided the Applicant and the County staff with the six (6) VOF deeds for the easements in the area. Though the Applicant invited VOF to the balloon test, VOF responded that review is conducted by County staff, and VOF would not be reviewing the proposed facility. Two easements are held by the County in the ACE program.

4. Consistency with the Comprehensive Plan:

Per the adopted Albemarle County 2015 Comprehensive Plan calls for the preservation of the county's historic, archeological, and cultural resources within the Rural Areas. After multiple meetings with adjacent property owners, Verizon has moved the proposed location to limit the effect on the historic, archeological, and cultural resources in the area. There is a mature tree buffer along all the property lines which will screen the PWSF from adjacent properties. The proposed PWSF and ground based equipment will be painted brown which further will allow the facility to blend within the natural environment.

Objective 10 of the Community Facilities Chapter 12 of the Comprehensive Plan is to support the provision of private utilities, including wireless service when its provision is in keeping with other aspects of the Comprehensive Plan. This proposed site supports this objective and is consistent with Strategy 10e as the proposed facility has been sited and designed in accordance with the County's Personal Wireless Service Facilities Policy.

Conclusion

Approval of this PWSF application will contribute to the expansion of Verizon's coverage to the Rural Areas, existing and future residents and businesses as well as travelers on the I-64 interstate. This facility will also help to reinforce network capacity and relieve some of the high levels of traffic that has been experienced at the neighboring network locations. The monopole tower serving this PWSF will meet the County's design preferences for monopoles that extend just above the treetops with dark brown finishes and well-screened base station compounds. Therefore, Verizon is confident that the proposed PWSF will meet the design criteria necessary for approval of a Tier III Facility, and that it does not conflict with any of the goals and objectives set forth in the Albemarle County Comprehensive Plan.

Sincerely,



Nathan Holland
GDN Sites
Site Development Consultants to Verizon

**Verizon Wireless – Scruby Property - Tier III
Personal Wireless Service Facility**



SITE NAME: SCRUBY TIER III PERSONAL WIRELESS FACILITY

GREENWOOD STATION ROAD
GREENWOOD, VA 22943
ALBEMARLE COUNTY



Know what's below.
Call before you dig.



NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079



1831 RADY COURT
RICHMOND, VA 23222

SITE INFORMATION

PROJECT DESCRIPTION:	RAWLAND: PROPOSED INSTALLATION OF TELECOMMUNICATIONS TOWER AND RELATED EQUIPMENT WITHIN SECURED COMPOUND.
SITE ADDRESS:	GREENWOOD STATION ROAD GREENWOOD, VA 22943
LATITUDE (NAD 83): LONGITUDE (NAD 83):	38° 02' 41.1742" -78° 44' 55.9528"
GROUND ELEVATION:	740.8' AMSL
JURISDICTION:	ALBEMARLE COUNTY
ZONING:	RURAL AREAS
PARCEL ID:	05500-00-00-01400
PARCEL AREA:	44.73± ACRES
PARCEL OWNER:	SCRUBY, BRIAN GRAY PO BOX 83 GREENWOOD VA, 22943
TOWER OWNER:	VERIZON WIRELESS 1831 RADY COURT RICHMOND, VA 23222
STRUCTURE TYPE:	MONOPOLE
HEIGHT OF STRUCTURE:	140.0'± AGL (881.7' AMSL)
RAD CENTER:	137.0'± AGL (878.7' AMSL)
OVERALL HEIGHT OF STRUCTURE:	144.0'± AGL (885.7' AMSL)
TOTAL LEASE AREA:	1,600± SQ. FT.
TOTAL DISTURBED AREA:	5,400± SQ. FT.
POWER PROVIDER:	DOMINION POWER (866) 366-4357
TELCO PROVIDER:	N/A

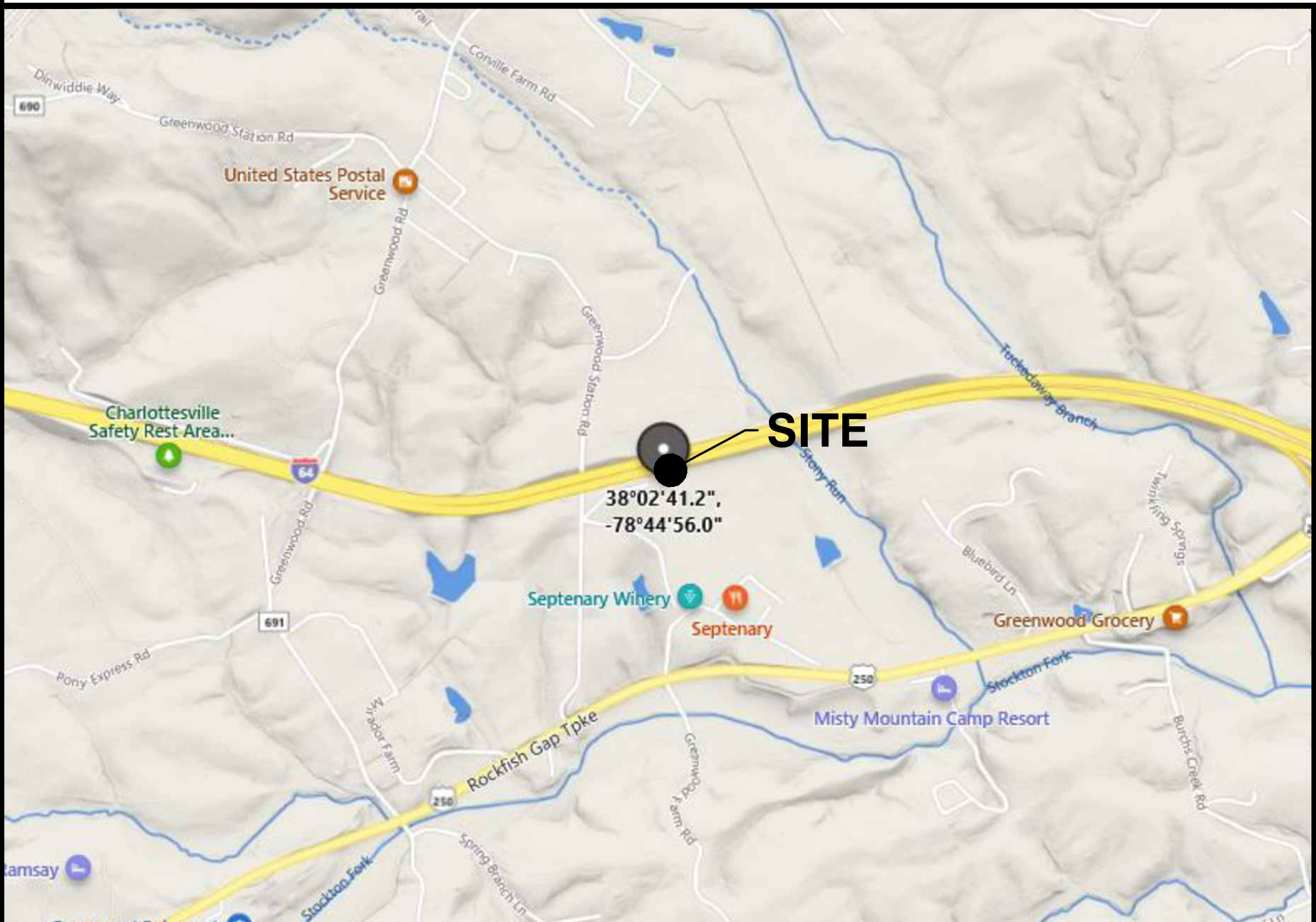
EMERGENCY INFORMATION:

ALBEMARLE COUNTY FIRE & RESCUE:	(434) 296-5833
ALBEMARLE COUNTY SHERIFF'S OFFICE:	(434) 972-4001

PROJECT TEAM

CONSTRUCTION MANAGER:	NETWORK BUILDING + CONSULTING JOHN KIRBY (540) 280-9630
PROJECT MANAGEMENT FIRM:	GDN SITES NATHAN HOLLAND (757) 305-8420
ENGINEERING FIRM:	NB+C ENGINEERING SERVICES, LLC. 120 EASTSHORE DRIVE SUITE 300 GLEN ALLEN, VA 23059 (804) 548-4079

VICINITY MAP



DIRECTIONS

HEAD NORTHEAST ON RADY ST TOWARD 5TH AVE. BEAR RIGHT ONTO DILL AVE. AT THE ROUNDABOUT, TAKE THE 4TH EXIT FOR 2ND AVE/ KEEP RIGHT TO GET ONTO 1ST AVE. AT THE ROUNDABOUT, TAKE THE 4TH EXIT FOR ROWEN AVE. ROAD NAME CHANGES TO N 5TH ST. TAKE THE RAMP ON THE LEFT AND FOLLOW SIGNS FOR I-95 NORTH / I-64 WEST. AT EXIT 79, HEAD RIGHT ON THE RAMP FOR I-64 WEST TOWARD STAPLES MILL RD. AT EXIT 107, HEAD RIGHT ON THE RAMP FOR US-250 TOWARD CROZET / MILLER SCHOOL. TURN RIGHT ONTO US-250 E / ROCKFISH GAP TPKE TOWARD CROZET / MILLER SCHOOL. TURN LEFT ONTO US-250 W / ROCKFISH GAP TPKE, THEN IMMEDIATELY TURN LEFT ONTO US-250 W / ROCKFISH GAP TPKE. TURN RIGHT ONTO GREENWOOD STATION RD / VA-690. ARRIVE WITH SITE LOCATED ON THE RIGHT

CODE COMPLIANCE

- ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES.
- 2015 INTERNATIONAL BUILDING CODE
 - 2014 NATIONAL ELECTRICAL CODE
 - 2015 NFPA 101, LIFE SAFETY CODE
 - 2015 IFC
 - AMERICAN CONCRETE INSTITUTE
 - AMERICAN INSTITUTE OF STEEL CONSTRUCTION
 - MANUAL OF STEEL CONSTRUCTION 13TH EDITION
 - ANSI/TIA-222-G
 - TIA 607
 - INSTITUTE FOR ELECTRICAL & ELECTRONICS ENGINEER 81
 - IEEE C2 NATIONAL ELECTRIC SAFETY CODE LATEST EDITION
 - TELECORDIA GR-1275
 - ANSI/T 311

DRAWING INDEX

T-1	TITLE SHEET
EE-1	EASEMENT EXHIBIT
EE-2	EASEMENT EXHIBIT
Z-1	SITE PLAN
Z-2	EXISTING TOPO & TREE SITE PLAN
Z-3	2,000' TOPO BOUNDARY
C-1	COMPOUND PLAN
C-2	TOWER ELEVATION & NOTES
A-1	EQUIPMENT DETAILS
A-2	EQUIPMENT MOUNT DETAILS
S-1	CONSTRUCTION DETAILS
S-2	GROUND EQUIPMENT MOUNTING DETAILS
ES-1	EROSION & SEDIMENT CONTROL & GRADING PLAN
ES-2	EROSION & SEDIMENT CONTROL NOTES
ES-3	EROSION & SEDIMENT CONTROL DETAILS

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 24"X36". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE DESIGNER / ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME. CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICE TO PREVENT STORM WATER POLLUTION DURING CONSTRUCTION.

APPROVAL BLOCK

ENGINEER

APPLICANT

SITE INFORMATION

DESIGN RECORD

PROFESSIONAL STAMP

ENGINEER

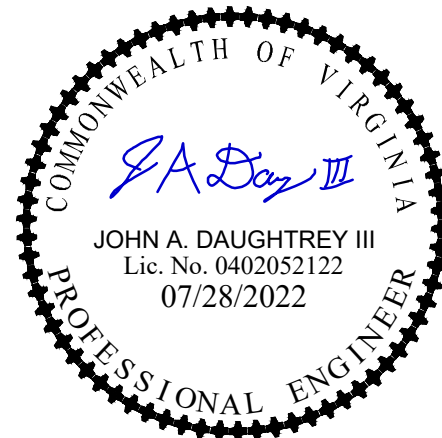
SHEET TITLE

SHEET NUMBER

SCRUBY TIER III PERSONAL WIRELESS FACILITY
VERIZON RAW LAND
GREENWOOD STATION ROAD
GREENWOOD, VA 22943
ALBEMARLE COUNTY

REVISIONS

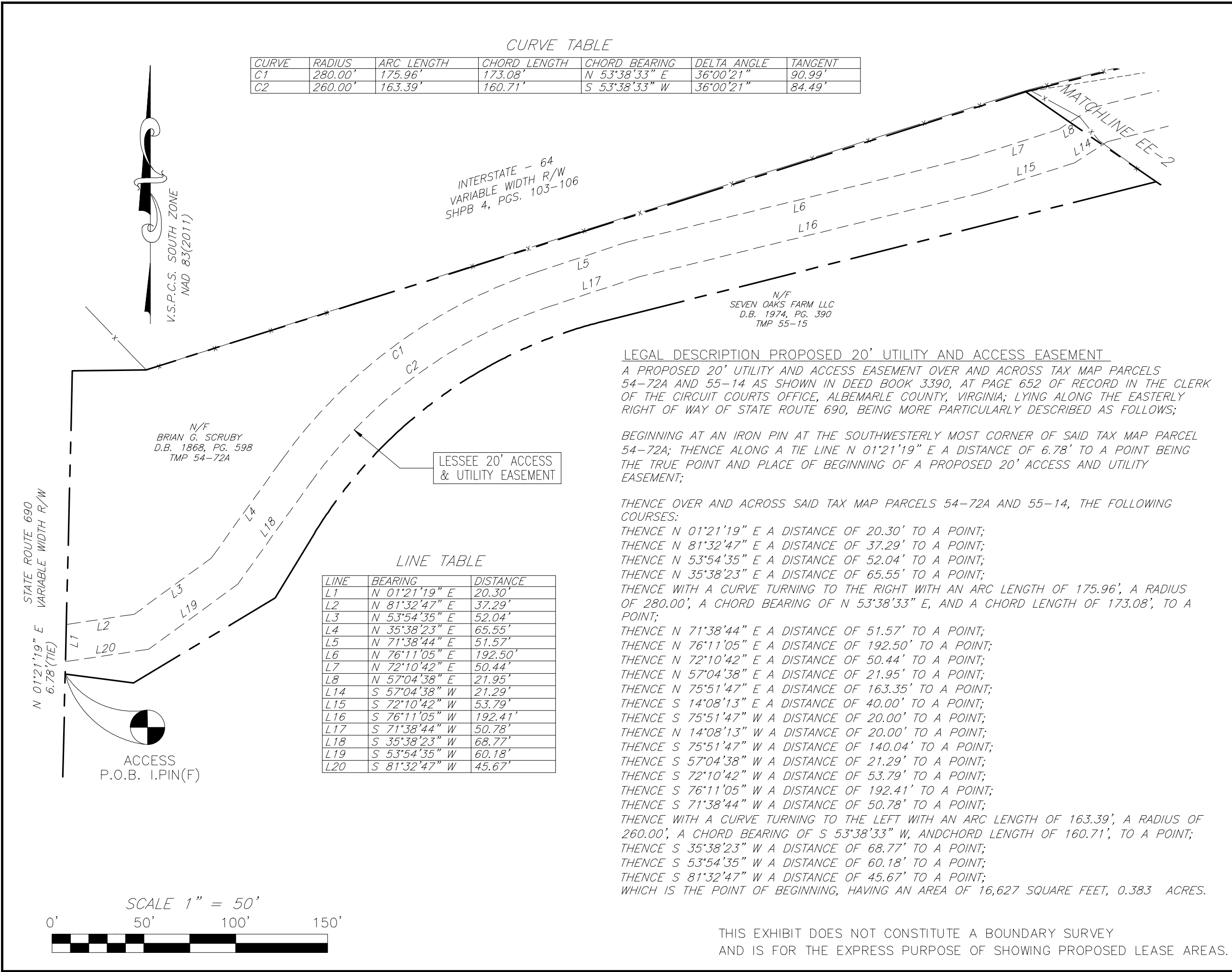
REV	DATE	DESCRIPTION	BY
2	07/28/22	REVISED EQUIPMENT	KLB
1	05/05/22	FINAL ZDs	KLB
0	03/17/22	PRELIMINARY ZDs	KLB







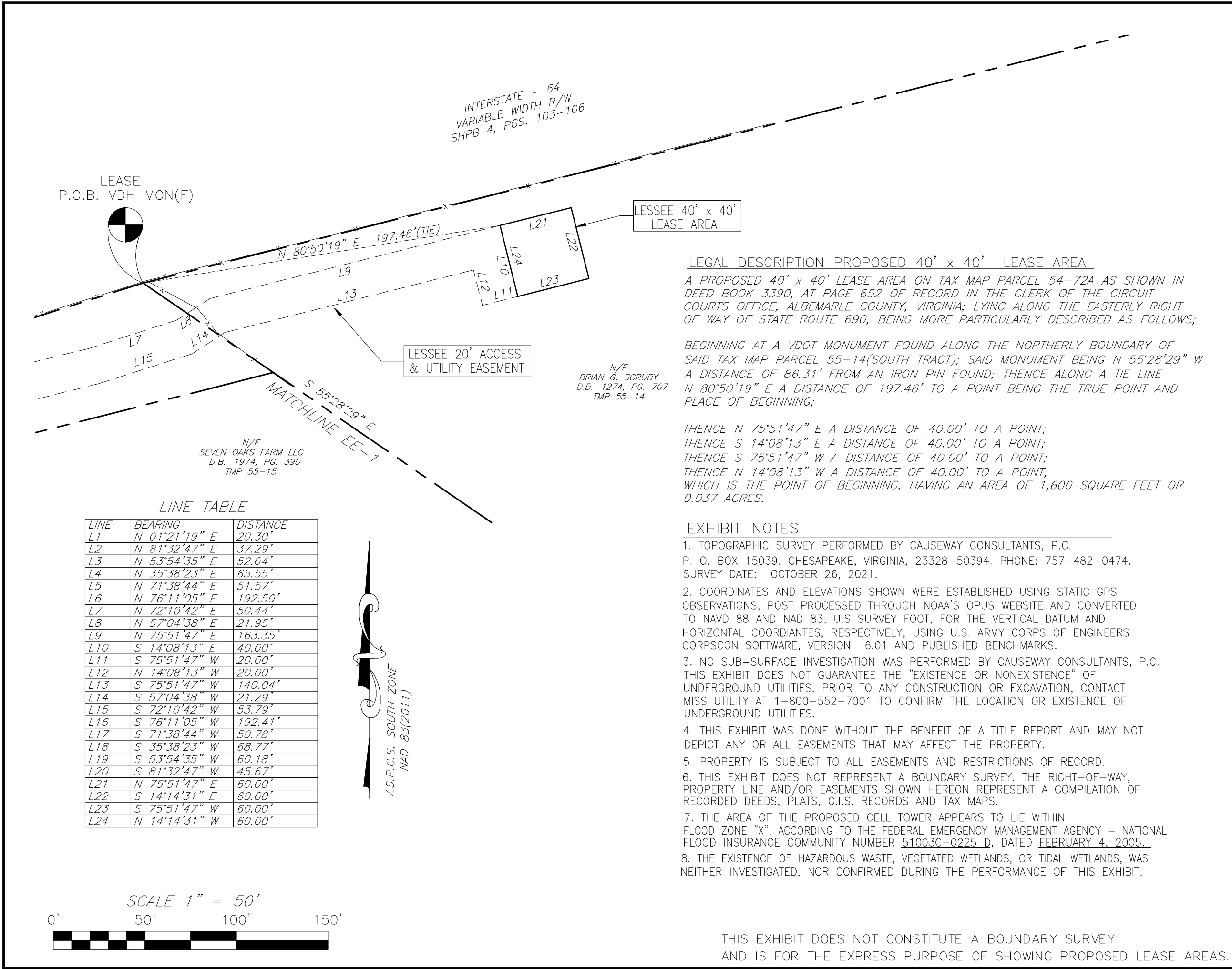
JOHN A. DAUGHTREY III, P.E.
VA PROFESSIONAL ENGINEER LIC. #052122

TITLE SHEET

T-1



ENGINEER	 TOTALLY COMMITTED. NB+C ENGINEERING SERVICES, LLC. 4435 WATERFRONT DRIVE, SUITE 100 GLENN ALLEN, VA 22060 804.548.4079																																
APPLICANT	 1831 RADY COURT RICHMOND, VA 23222																																
SITE INFORMATION	NB&C #02671 EASEMENT EXHIBIT SITE NAME: SCRUBY TIER III PERSONAL WIRELESS FACILITY 7416 GREENWOOD STATION RD GREENWOOD, VA 22943 ALBEMARLE COUNTY, VA																																
DESIGN RECORD	<table><thead><tr><th colspan="4">REVISIONS</th></tr><tr><th>REV</th><th>DATE</th><th>DESCRIPTION</th><th>BY</th></tr></thead><tbody><tr><td>2</td><td>11/16/21</td><td>REDUCE LEASE AREA</td><td>RW</td></tr><tr><td>4</td><td>10/29/21</td><td>NEW SITE LOCATION</td><td>RW</td></tr><tr><td>3</td><td>10/21/20</td><td>REV TOWER HEIGHT</td><td>RW</td></tr><tr><td>2</td><td>9/11/20</td><td>REVISE TARGET TREE</td><td>RW</td></tr><tr><td>1</td><td>6/9/20</td><td>ADD ADJOINING R/W</td><td>RW</td></tr><tr><td>0</td><td>11/1/17</td><td>EASEMENT EXHIBIT</td><td>RW</td></tr></tbody></table>	REVISIONS				REV	DATE	DESCRIPTION	BY	2	11/16/21	REDUCE LEASE AREA	RW	4	10/29/21	NEW SITE LOCATION	RW	3	10/21/20	REV TOWER HEIGHT	RW	2	9/11/20	REVISE TARGET TREE	RW	1	6/9/20	ADD ADJOINING R/W	RW	0	11/1/17	EASEMENT EXHIBIT	RW
REVISIONS																																	
REV	DATE	DESCRIPTION	BY																														
2	11/16/21	REDUCE LEASE AREA	RW																														
4	10/29/21	NEW SITE LOCATION	RW																														
3	10/21/20	REV TOWER HEIGHT	RW																														
2	9/11/20	REVISE TARGET TREE	RW																														
1	6/9/20	ADD ADJOINING R/W	RW																														
0	11/1/17	EASEMENT EXHIBIT	RW																														
SURVEYOR	  Causeway Consultants, P.C. Land Surveyors VA&NC P.O. BOX 15039 CHESAPEAKE, VA. 23328 PHONE: 757-482-0474 ©CAUSEWAY CONSULTANTS, P.C. 2021																																
SHEET TITLE	EASEMENT EXHIBIT																																
SHEET NUMBER	EE-1																																



ENGINEER

NB+C
TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
4435 WATERFRONT DRIVE, SUITE 100
GLEN ALLEN, VA 22060
804.548.4079

APPLICANT

verizon
1831 RADY COURT
RICHMOND, VA 23222

SITE INFORMATION

NB&C #02671
EASEMENT EXHIBIT
SITE NAME: SCRUBY TIER III
PERSONAL WIRELESS FACILITY
7416 GREENWOOD STATION RD
GREENWOOD, VA 22943
ALBEMARLE COUNTY, VA

DESIGN RECORD

REVISIONS			
REV	DATE	DESCRIPTION	BY
2	11/16/21	REDUCE LEASE AREA	RW
1	10/29/21	NEW SITE LOCATION	RW
0	11/1/17	EASEMENT EXHIBIT	RW

SURVEYOR

ROBERT T. WILLIAMS, JR.
LIC. No. 002551
11-16-2021
LAND SURVEYOR

Causeway Consultants, P.C.
Land Surveyors VA&NC
P.O. BOX 15039
CHESAPEAKE, VA. 23328
PHONE: 757-482-0474
©CAUSEWAY CONSULTANTS, P.C. 2021

SHEET TITLE

EASEMENT
EXHIBIT

SHEET NUMBER

EE-2



1
SCRUBY, BRIAN G
PO BOX 83
GREENWOOD VA, 22943
PARCEL ID: 05400-00-00-072T0
ZONING: RA
AREA: N/A

2
SCRUBY, BRIAN GRAY
PO BOX 83
GREENWOOD VA, 22943
PARCEL ID: 05500-00-00-01400
ZONING: RA
AREA: 1.04± ACRES

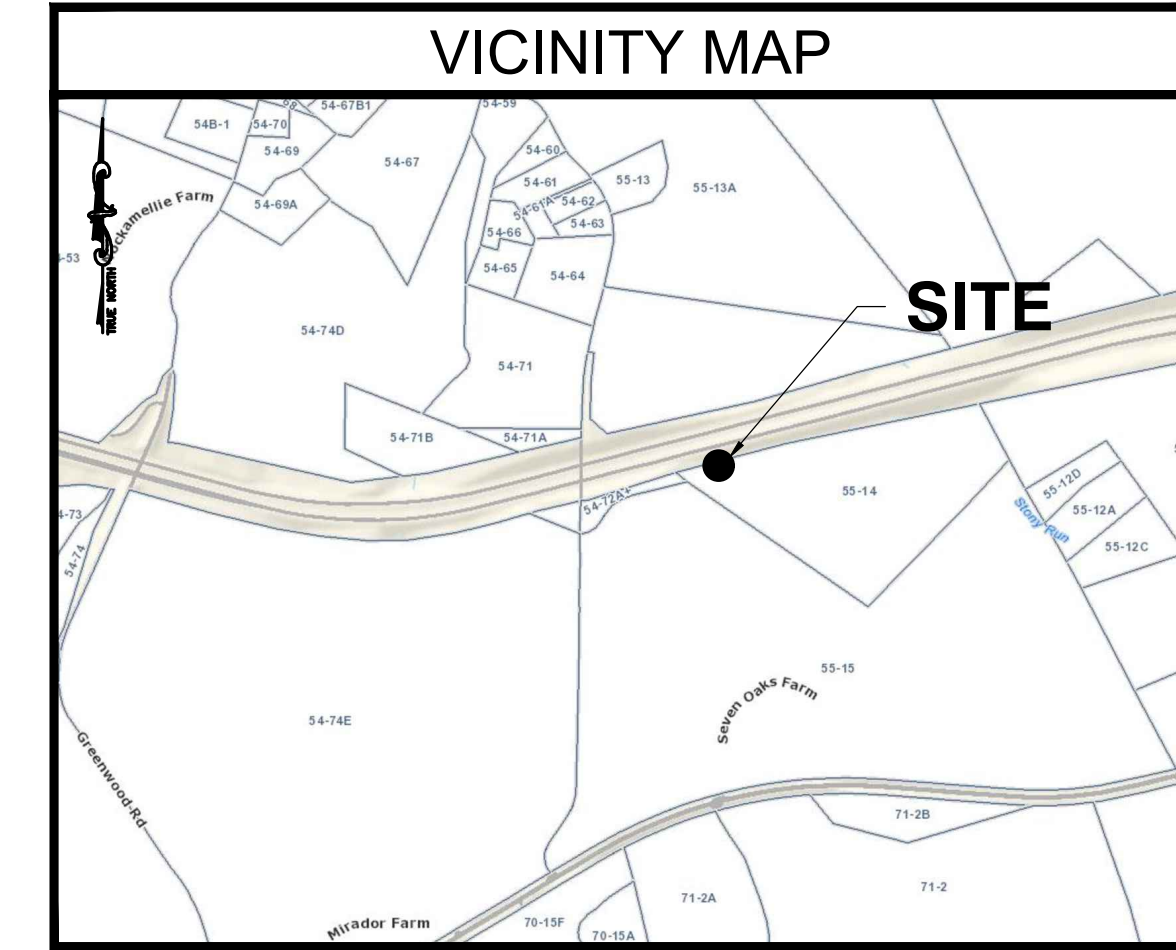
3
TAF INVESTMENTS LLC
PO BOX 7886
CHARLOTTESVILLE VA, 22906
PARCEL ID: 05500-00-00-012B0
ZONING: RA
AREA: 34.78± ACRES

4
GOLDEN MAGNOLIA LLC
200 SEVEN OAKS FARM
GREENWOOD VA, 22943
PARCEL ID: 05500-00-00-01500
ZONING: RA
AREA: 98.54± ACRES

5
BURGHARDT, HOPE HADLEY TRUSTEE
OF THE HOPE HADLEY
BURGHARDT LIVING TRUST
PO BOX 8
GREENWOOD VA, 22943
PARCEL ID: 05400-00-00-074E0
ZONING: RA
AREA: 141.15± ACRES

6
HOPE/HADLEY 1999 TRUST: GUARANTY
TRUST ETAL ATTN: ENTERPRISE TRUST
PO BOX 8
GREENWOOD VA, 22943
PARCEL ID: 05400-00-00-071A0
ZONING: RA
AREA: 0.57± ACRES

7
SCRUBY, TIMOTHY MARK & SCRUBY,
ALICE ROWE
8153 DICK WOODS RD
AFTON VA, 22920
PARCEL ID: 05400-00-00-07100
ZONING: RA
AREA: 11.55± ACRES



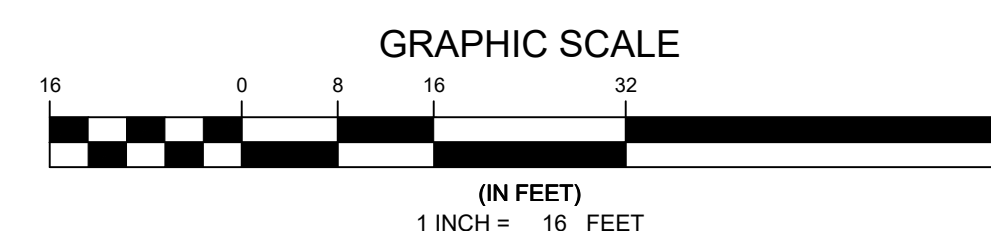
GENERAL NOTES

1. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
2. NO SIGNIFICANT NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS FACILITY.
3. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION. THERE IS NO HANDICAP ACCESS REQUIRED.
4. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
5. NO CRITICAL SLOPES ARE TO BE DISTURBED.

LEGEND	
	PROPERTY LINE - SUBJECT PARCEL
	PROPERTY LINE - ADJUTERS
	EXISTING ROAD
	EXISTING FENCE
	PROPOSED EASEMENT
	PROPOSED LEASE AREA
	EXISTING EASEMENT
	PROPOSED FENCE
	EXISTING BUILDING

ZONING INFORMATION	
JURISDICTION: ALBEMARLE COUNTY	
ZONING: RURAL AREAS	
DIMENSION	PROPOSED ±
FRONT YARD SETBACK:	194'-2"±
SIDE YARD SETBACK:	23'-8"±
REAR YARD SETBACK:	1510'-9"±
LOT AREA: 44.73± ACRES	
(ALL MEASUREMENTS ARE IN FEET ± UNLESS OTHERWISE NOTED)	

1 SITE PLAN
Z-1 SCALE: 1"=16'



ENGINEER

APPLICANT

SITE INFORMATION

DESIGN RECORD

PROFESSIONAL STAMP

ENGINEER

SHEET TITLE

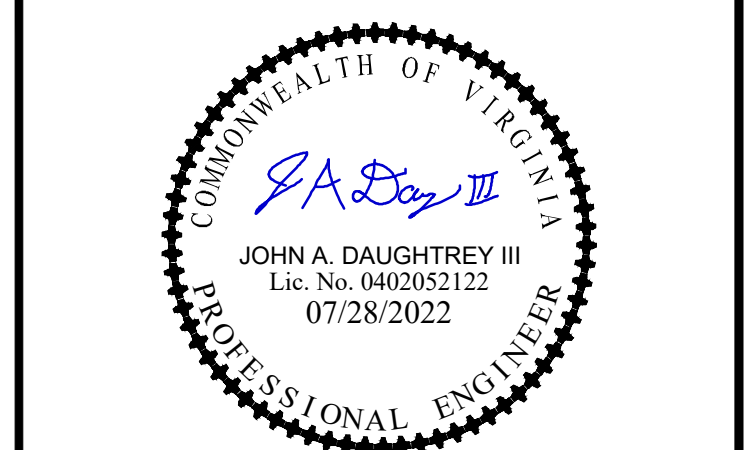
SHEET NUMBER

NB+C
TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
804-546-4079

verizon
1831 RADY COURT
RICHMOND, VA 23222

SCRUBY TIER III PERSONAL
WIRELESS FACILITY
VERIZON RAW LAND
GREENWOOD STATION ROAD
GREENWOOD, VA 22943
ALBEMARLE COUNTY

REVISIONS			
2	07/28/22	REVISED EQUIPMENT	KLB
1	05/05/22	FINAL ZDs	KLB
0	03/17/22	PRELIMINARY ZDs	KLB
REV	DATE	DESCRIPTION	BY



JOHN A. DAUGHTREY III, P.E.
VA PROFESSIONAL ENGINEER LIC. #052122

SITE PLAN

Z-1



LEGEND

PROPERTY LINE - SUBJECT PARCEL

PROPERTY LINE - ABUTTERS

EXISTING ROAD

EXISTING FENCE

PROPOSED EASEMENT

PROPOSED LEASE AREA

EXISTING EASEMENT

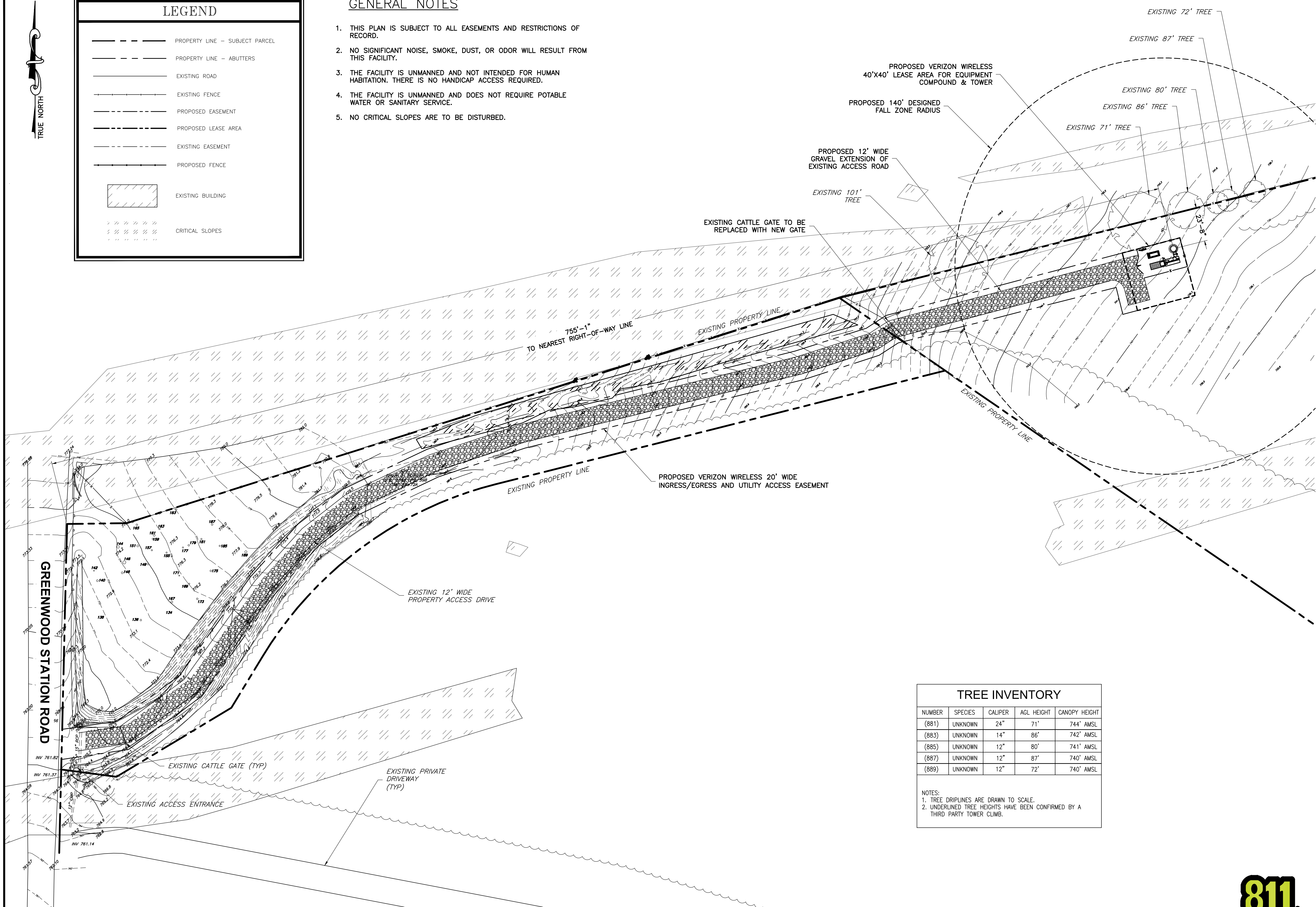
PROPOSED FENCE

EXISTING BUILDING

CRITICAL SLOPES

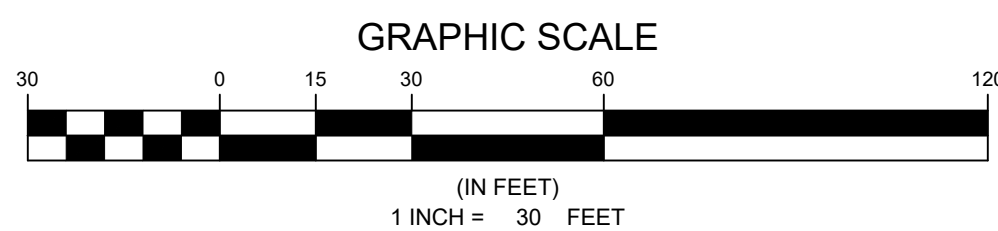
GENERAL NOTES

1. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
2. NO SIGNIFICANT NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS FACILITY.
3. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION. THERE IS NO HANDICAP ACCESS REQUIRED.
4. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
5. NO CRITICAL SLOPES ARE TO BE DISTURBED.



TREE INVENTORY				
NUMBER	SPECIES	CALIPER	AGL HEIGHT	CANOPY HEIGHT
(881)	UNKNOWN	24"	71'	744' AMSL
(883)	UNKNOWN	14"	86'	742' AMSL
(885)	UNKNOWN	12"	80'	741' AMSL
(887)	UNKNOWN	12"	87'	740' AMSL
(889)	UNKNOWN	12"	72'	740' AMSL
NOTES: 1. TREE DRIPLINES ARE DRAWN TO SCALE. 2. UNDERLINED TREE HEIGHTS HAVE BEEN CONFIRMED BY A THIRD PARTY TOWER CLIMB.				

1 EXISTING TOPO SITE PLAN
Z-2 SCALE: 1"=30'



ENGINEER
APPLICANT
SITE INFORMATION
DESIGN RECORD
PROFESSIONAL STAMP
ENGINEER
SHEET TITLE
SHEET NUMBER

NB+C
TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4073

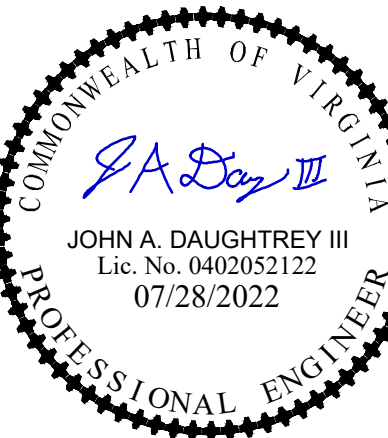
verizon

1831 RADY COURT
RICHMOND, VA 23222

SCRUBY TIER III PERSONAL
WIRELESS FACILITY
VERIZON RAW LAND
GREENWOOD STATION ROAD
GREENWOOD, VA 22943
ALBEMARLE COUNTY

REVISIONS

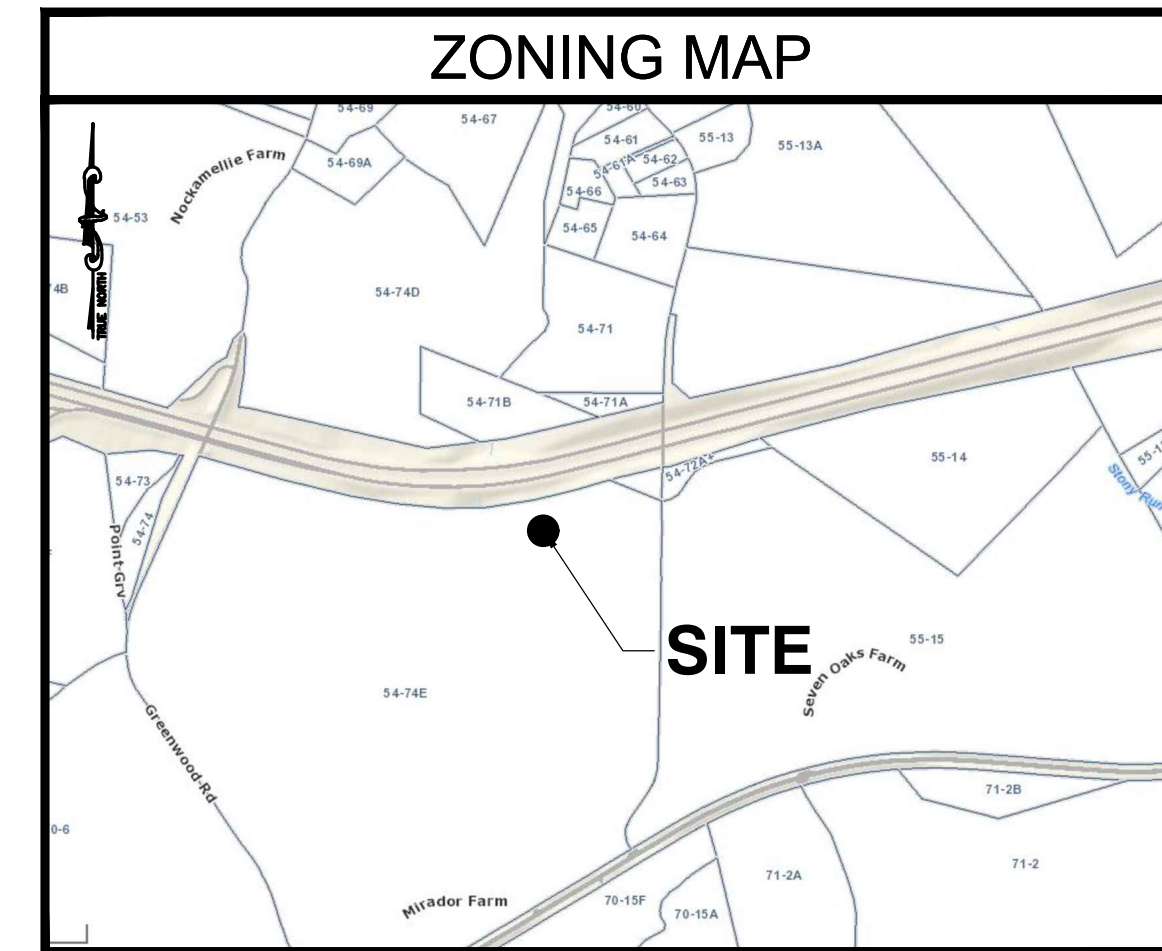
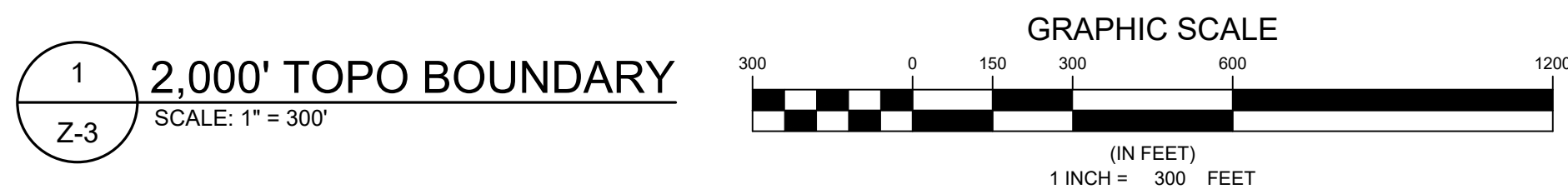
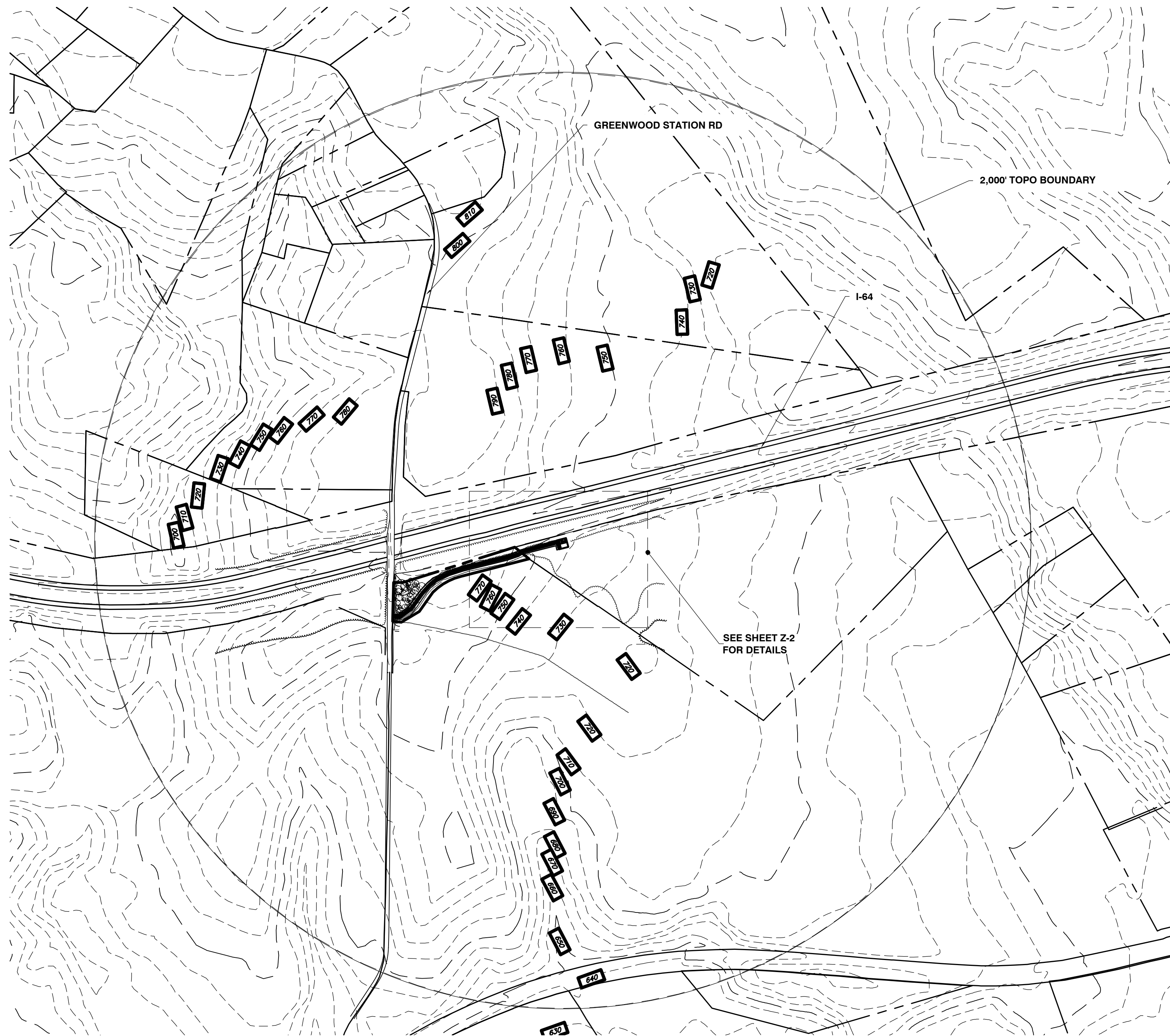
REV	DATE	DESCRIPTION	BY
2	07/28/22	REVISED EQUIPMENT	KLB
1	05/05/22	FINAL ZDs	KLB
0	03/17/22	PRELIMINARY ZDs	KLB



JOHN A. DAUGHTREY III, P.E.
VA PROFESSIONAL ENGINEER LIC. #052122

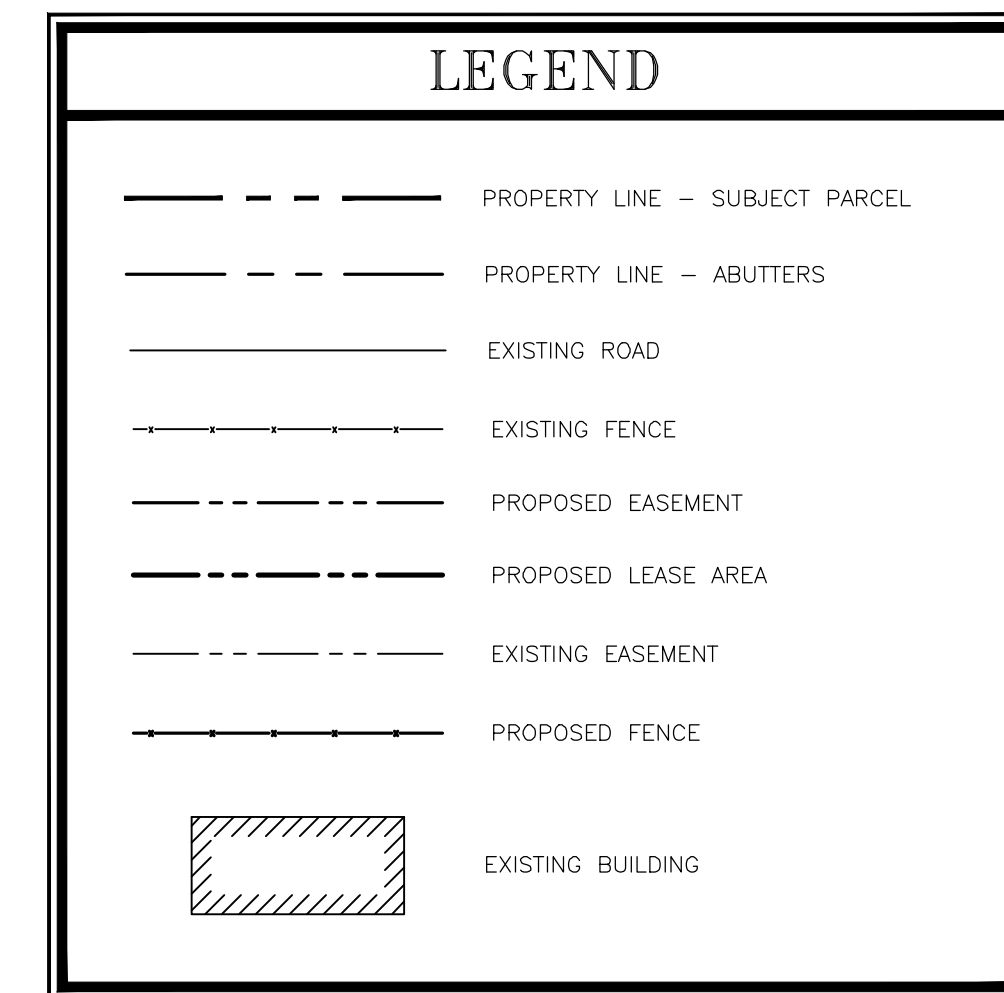
EXISTING TOPO
& TREE
SITE PLAN

Z-2



GENERAL NOTES

1. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
2. NO SIGNIFICANT NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS FACILITY.
3. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION. THERE IS NO HANDICAP ACCESS REQUIRED.
4. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
5. ALBEMARLE COUNTY GIS IS THE SOURCE FOR TOPO LINES SHOWN.



ENGINEER

APPLICANT

SITE INFORMATION

DESIGN RECORD

PROFESSIONAL STAMP

ENGINEER

SHEET TITLE

SHEET NUMBER

NB+C
TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 546-6070

verizon
1831 RADY COURT
RICHMOND, VA 23222

SCRUBY TIER III PERSONAL
WIRELESS FACILITY
VERIZON RAW LAND
GREENWOOD STATION ROAD
GREENWOOD, VA 22943
ALBEMARLE COUNTY

REVISIONS

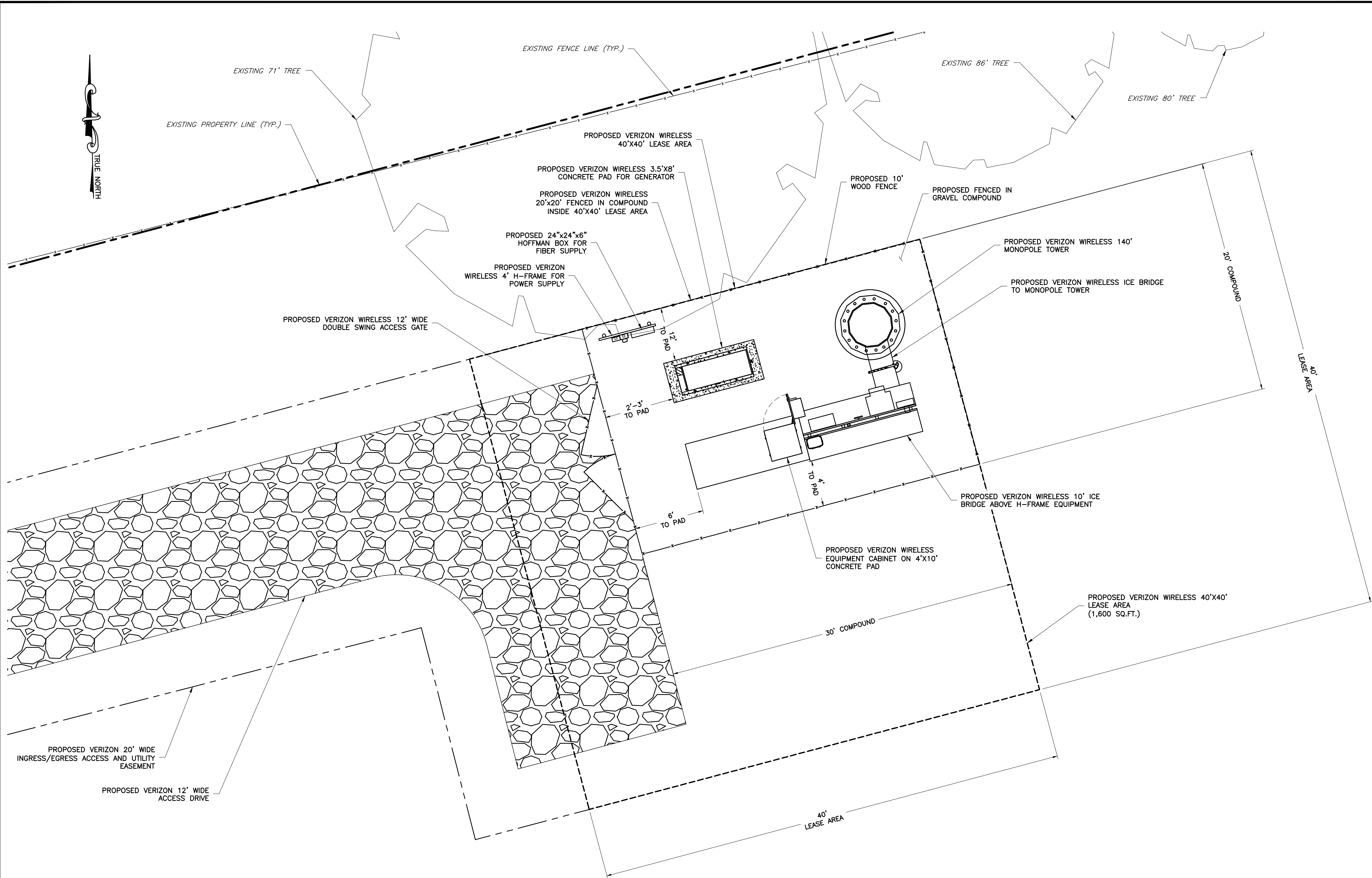
REV	DATE	DESCRIPTION	BY
2	07/28/22	REVISED EQUIPMENT	KLB
1	05/05/22	FINAL ZDs	KLB
0	03/17/22	PRELIMINARY ZDs	KLB



JOHN A. DAUGHTREY III, P.E.
VA PROFESSIONAL ENGINEER LIC. #052122

**2,000' TOPO
BOUNDARY**

Z-3



ENGINEER

APPLICANT

SITE INFORMATION


DESIGN RECORD

PROFESSIONAL STAMP

ENGINEER


SHEET TITLE

SHEET NUMBER



NB+C
TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 461-4073

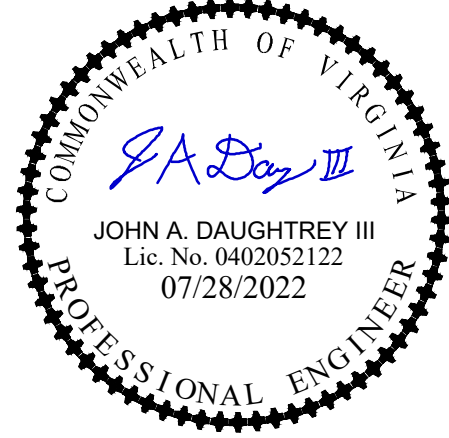


verizon

1831 RADY COURT
RICHMOND, VA 23222

SCRUBY TIER III PERSONAL
WIRELESS FACILITY
VERIZON RAW LAND
GREENWOOD STATION ROAD
GREENWOOD, VA 22943
ALBEMARLE COUNTY

REVISIONS				
REV	DATE	DESCRIPTION	BY	
2	07/28/22	REVISED EQUIPMENT	KLB	
1	05/05/22	FINAL ZDs	KLB	
0	03/17/22	PRELIMINARY ZDs	KLB	

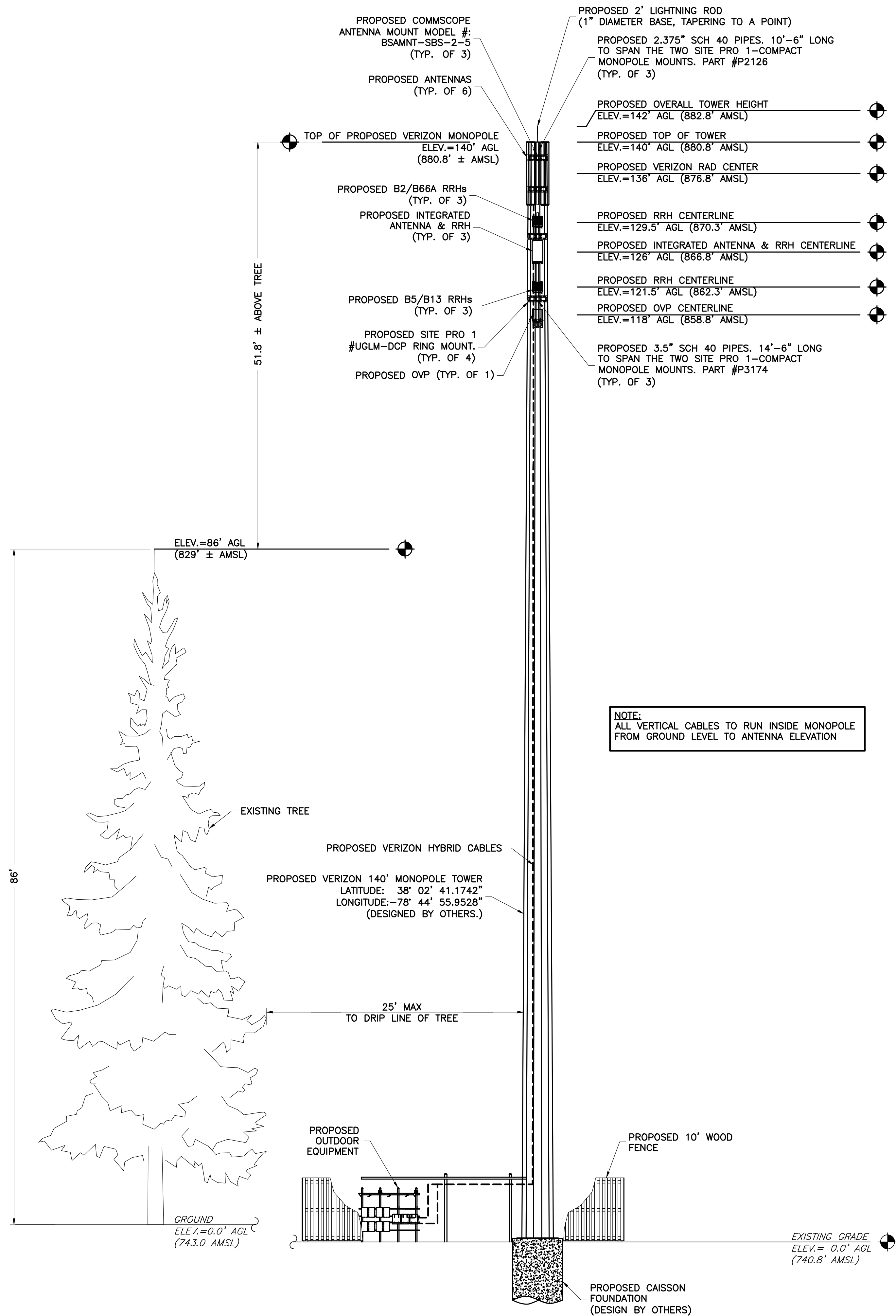


JOHN A. DAUGHTREY III
Lic. No. 0402052122
07/28/2022
PROFESSIONAL ENGINEER

JOHN A. DAUGHTREY III, P.E.
VA PROFESSIONAL ENGINEER LIC. #052122

COMPOUND PLAN

C-1

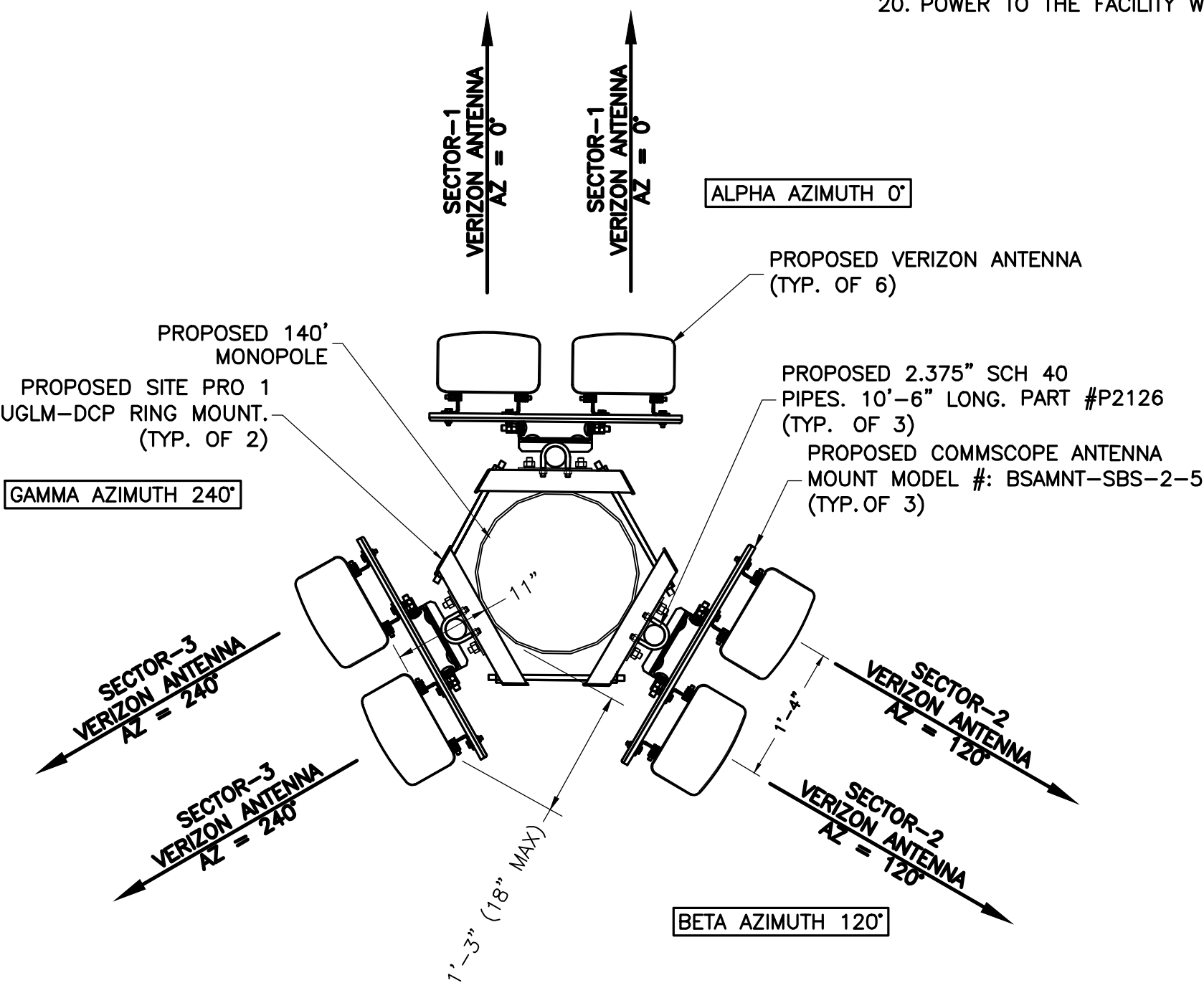


NOTE:
ALL VERTICAL CABLES TO RUN INSIDE MONOPOLE FROM GROUND LEVEL TO ANTENNA ELEVATION

NOTE:
1. THE PROPOSED TOWER, TOWER MOUNTS, ANTENNAS & RRHs WILL BE PAINTED THE COUNTY APPROVED COLOR SHERWIN WILLIAMS JAVA BROWN #6090.
2. ANTENNAS WILL BE INSTALLED USING A MODIFIED FLUSH DESIGN WITH LOW PROFILE MOUNTING BRACKETS. NO POINT ON THE BACK OF ANTENNAS SHALL BE MORE THAN 18" FROM FACE OF MONOPOLE.
3. PROPOSED ANTENNA MODEL: COMMSCOPE NHH-65C-R2B: 96.0"x11.9"x7.1" - 51.6 LBS -1142.4 SQ.IN.
4. THE MAXIMUM BASE DIAMETER OF THE MONOPOLE SHALL NOT EXCEED 30" AND THE MAXIMUM DIAMETER AT THE TOP SHALL NOT EXCEED 18".

GENERAL NOTES

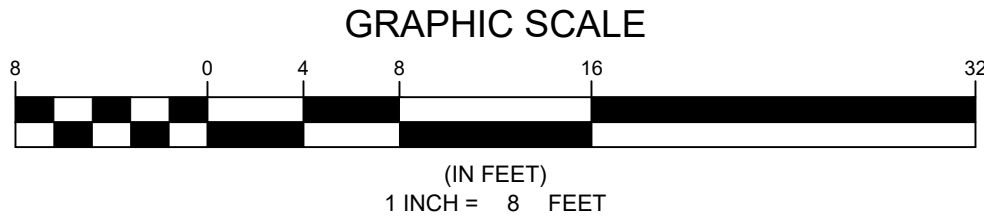
1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITIES COMPANY OR OTHER PUBLIC AUTHORITIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
3. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK. MINOR OMISSIONS OR ERRORS IN THE BID DOCUMENTS SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR THE OVERALL INTENT OF THESE DRAWINGS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED AS A RESULT OF CONSTRUCTION OF THIS FACILITY.
5. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
6. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING A BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
7. CONTRACTOR SHALL VERIFY ANTENNA ELEVATION AND AZIMUTH WITH RF ENGINEERING PRIOR TO INSTALLATION.
8. TRANSMITTER EQUIPMENT AND ANTENNAS ARE DESIGNED TO MEET ANSI/TIA 222-G REQUIREMENTS.
9. ALL STRUCTURAL ELEMENTS SHALL BE HOT DIPPED GALVANIZED STEEL.
10. CONTRACTOR SHALL MAKE A UTILITY "ONE CALL" TO LOCATE ALL UTILITIES PRIOR TO EXCAVATING.
11. IF ANY UNDERGROUND UTILITIES OR STRUCTURES EXIST BENEATH THE PROJECT AREA, CONTRACTOR MUST LOCATE IT AND CONTACT THE APPLICANT & THE OWNER'S REPRESENTATIVE.
12. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION BY TECHNICIANS APPROXIMATELY 2 TIMES PER MONTH.
13. PRIOR TO THE INSTALLATION OF THE PROPOSED EQUIPMENT OR MODIFICATION OF THE EXISTING STRUCTURE, A STRUCTURAL ANALYSIS SHALL BE PERFORMED BY THE OWNER'S AGENT TO CERTIFY THAT THE EXISTING/PROPOSED COMMUNICATION STRUCTURE AND COMPONENTS ARE STRUCTURALLY ADEQUATE TO SUPPORT ALL EXISTING AND PROPOSED ANTENNAS, COAXIAL CABLES AND OTHER APPURTENANCES.
14. PROPERTY LINE INFORMATION WAS PREPARED USING DEEDS, TAX MAPS, AND PLANS OF RECORD AND SHOULD NOT BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY.
15. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
16. THE PROPOSED FACILITY WILL CAUSE ONLY A "DE MINIMIS" INCREASE IN STORMWATER RUNOFF. THEREFORE, NO DRAINAGE STRUCTURES ARE PROPOSED.
17. NO SIGNIFICANT NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS FACILITY.
18. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION (NO HANDICAP ACCESS REQUIRED).
19. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
20. POWER TO THE FACILITY WILL BE MONITORED BY A SEPARATE METER.



2 ANTENNA ORIENTATION PLAN AT 136'
C-2 NTS



1 ELEVATION
C-2 SCALE: 1/8" = 1'



ENGINEER

APPLICANT

SITE INFORMATION

DESIGN RECORD

PROFESSIONAL STAMP

ENGINEER

SHEET TITLE

SHEET NUMBER

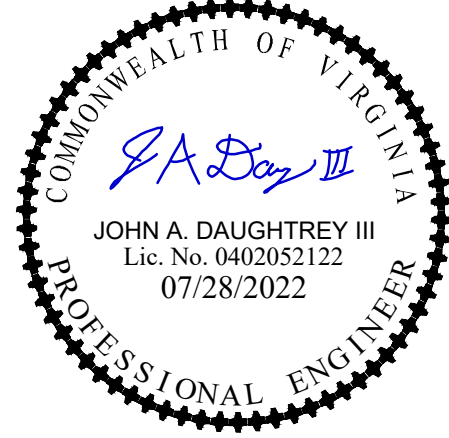
NB+C
TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 468-6070

verizon
1831 RADY COURT
RICHMOND, VA 23222

SCRUBY TIER III PERSONAL WIRELESS FACILITY
VERIZON RAW LAND
GREENWOOD STATION ROAD
GREENWOOD, VA 22943
ALBEMARLE COUNTY

REVISIONS

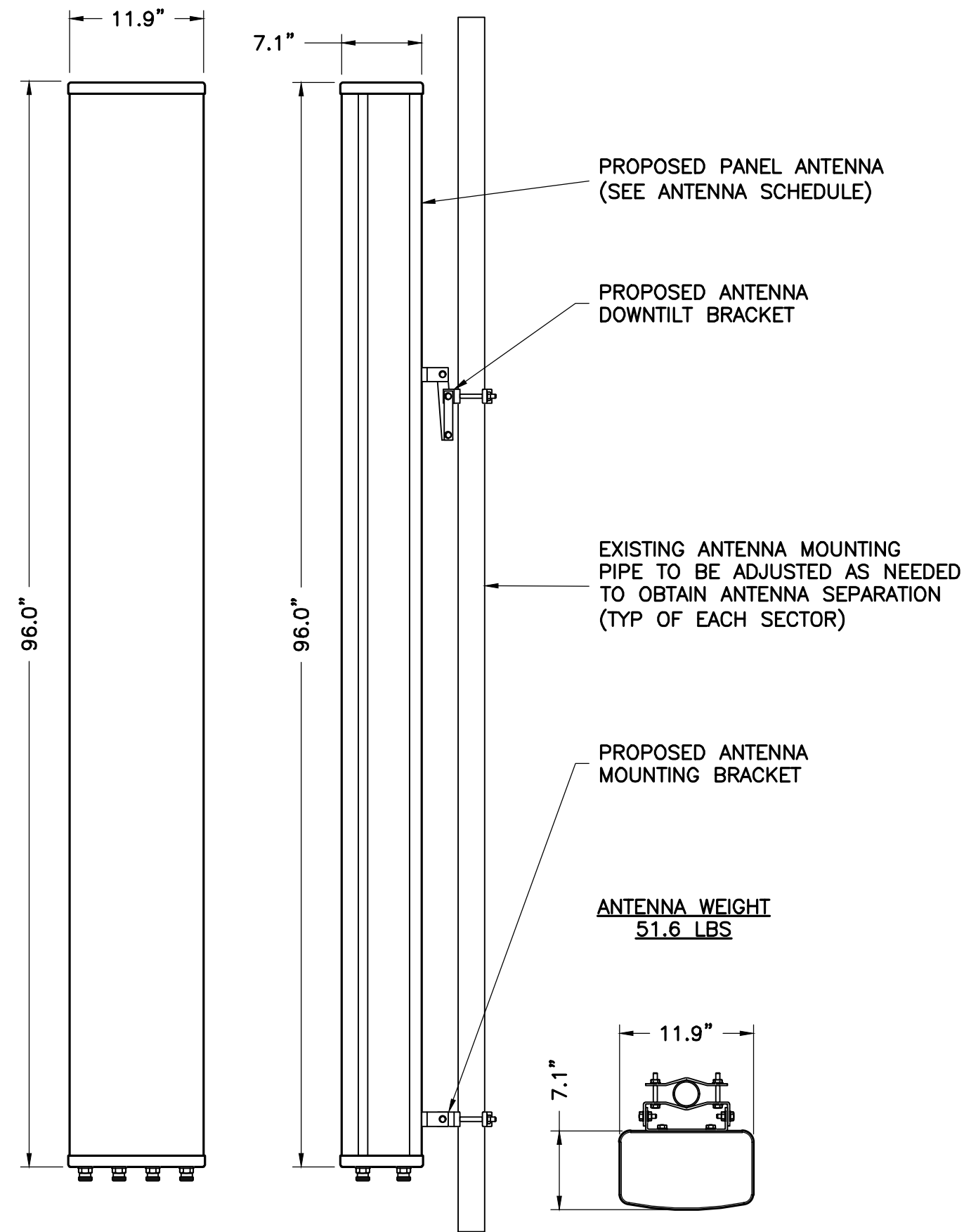
REV	DATE	DESCRIPTION	BY
2	07/28/22	REVISED EQUIPMENT	KLB
1	05/05/22	FINAL ZDs	KLB
0	03/17/22	PRELIMINARY ZDs	KLB



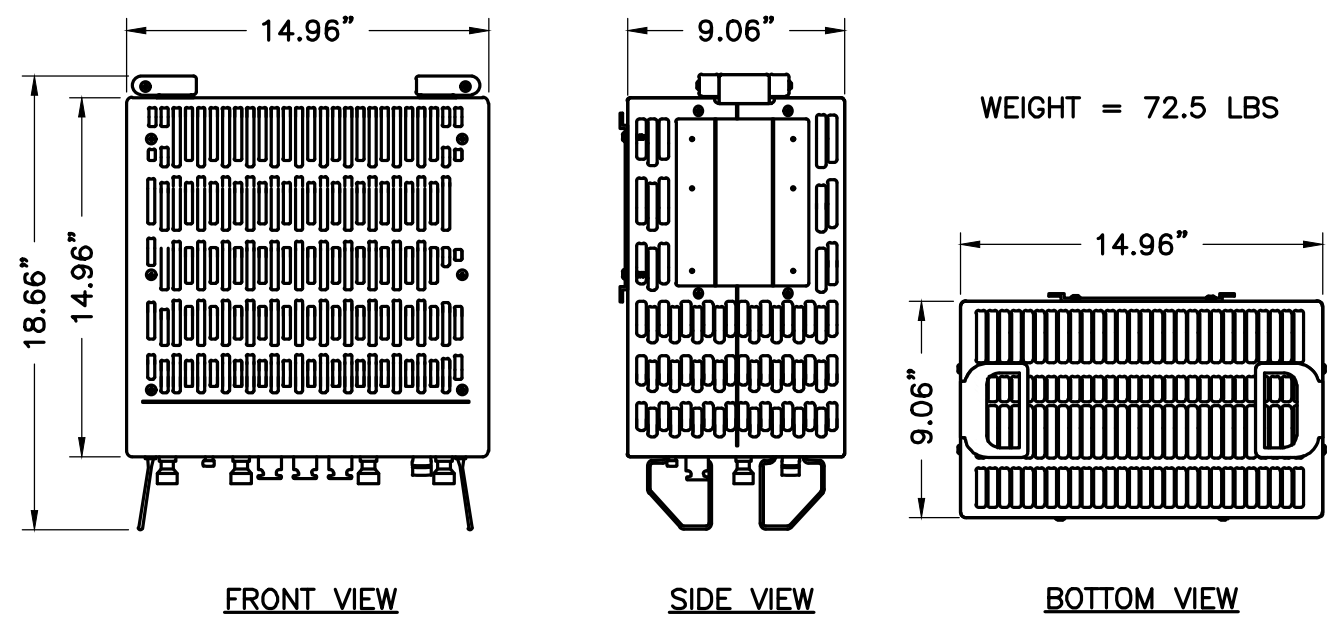
JOHN A. DAUGHTREY III, P.E.
VA PROFESSIONAL ENGINEER LIC. #052122

TOWER ELEVATION & NOTES

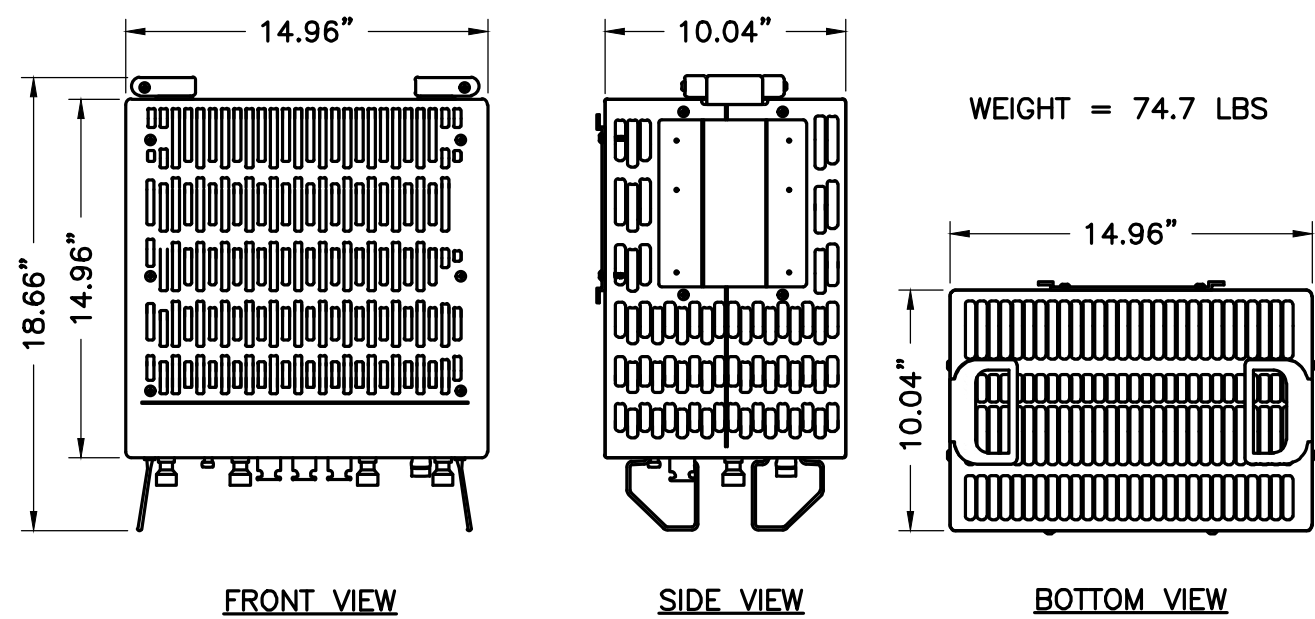
C-2



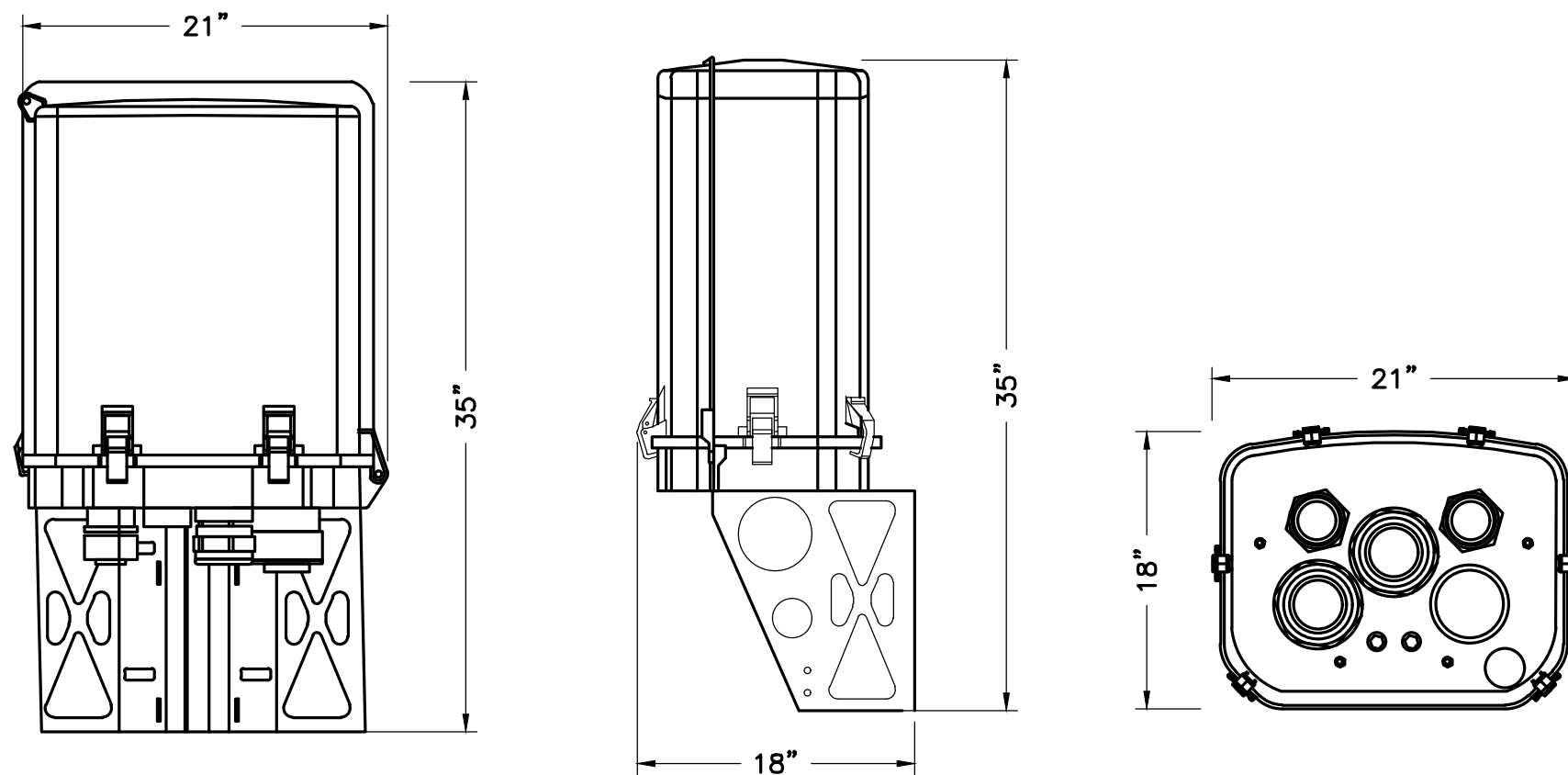
1 COMMSCOPE NHH-65C-R2B
A-1 NTS



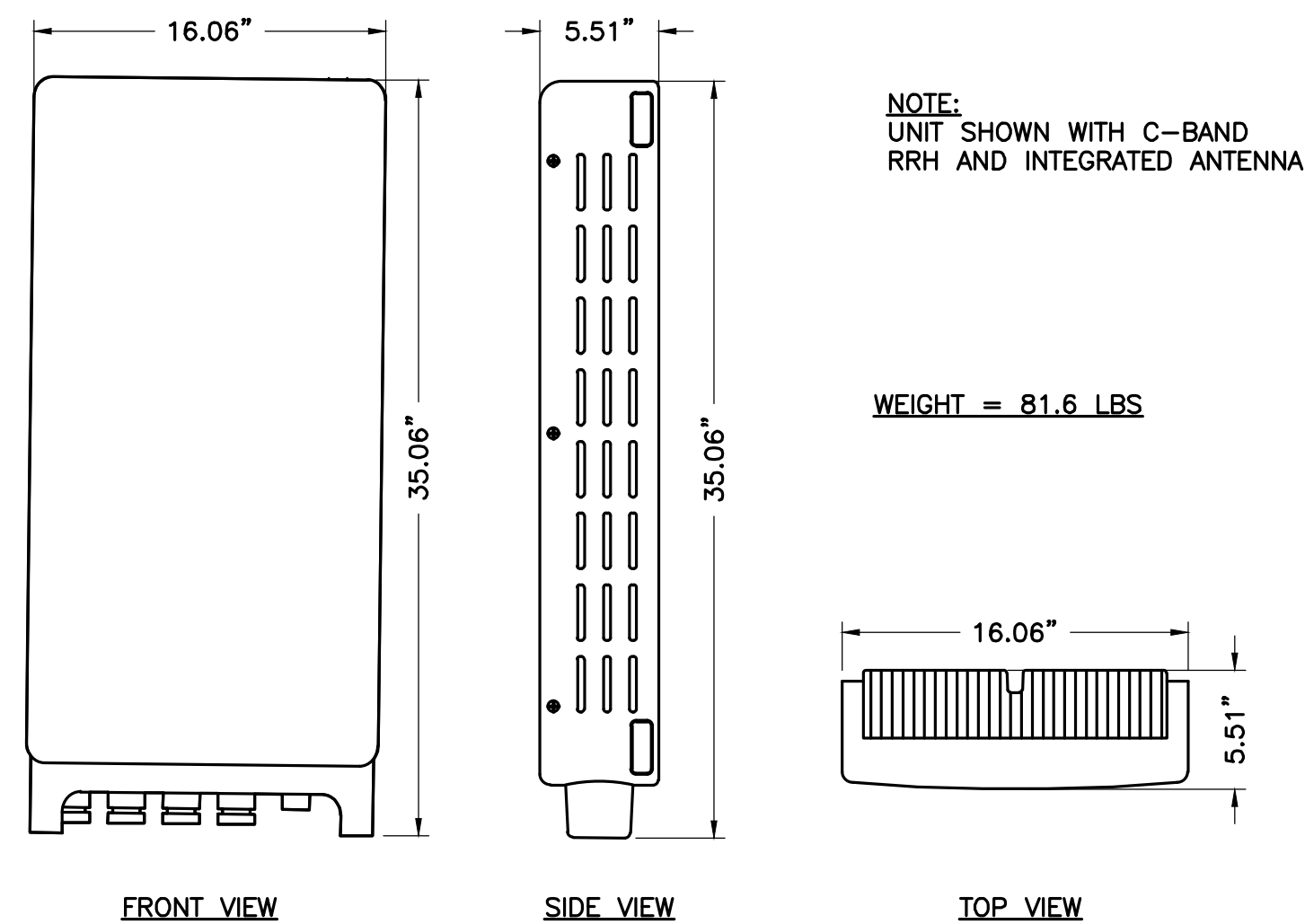
2 SAMSUNG B5/B13 RRH ORAN RF4440d-13A
A-1 NTS



3 SAMSUNG B2/B66A RRH ORAN RF4439d-25A
A-1 NTS



4 COMMSCOPE RCMD-6627-PF-48
A-1 NTS



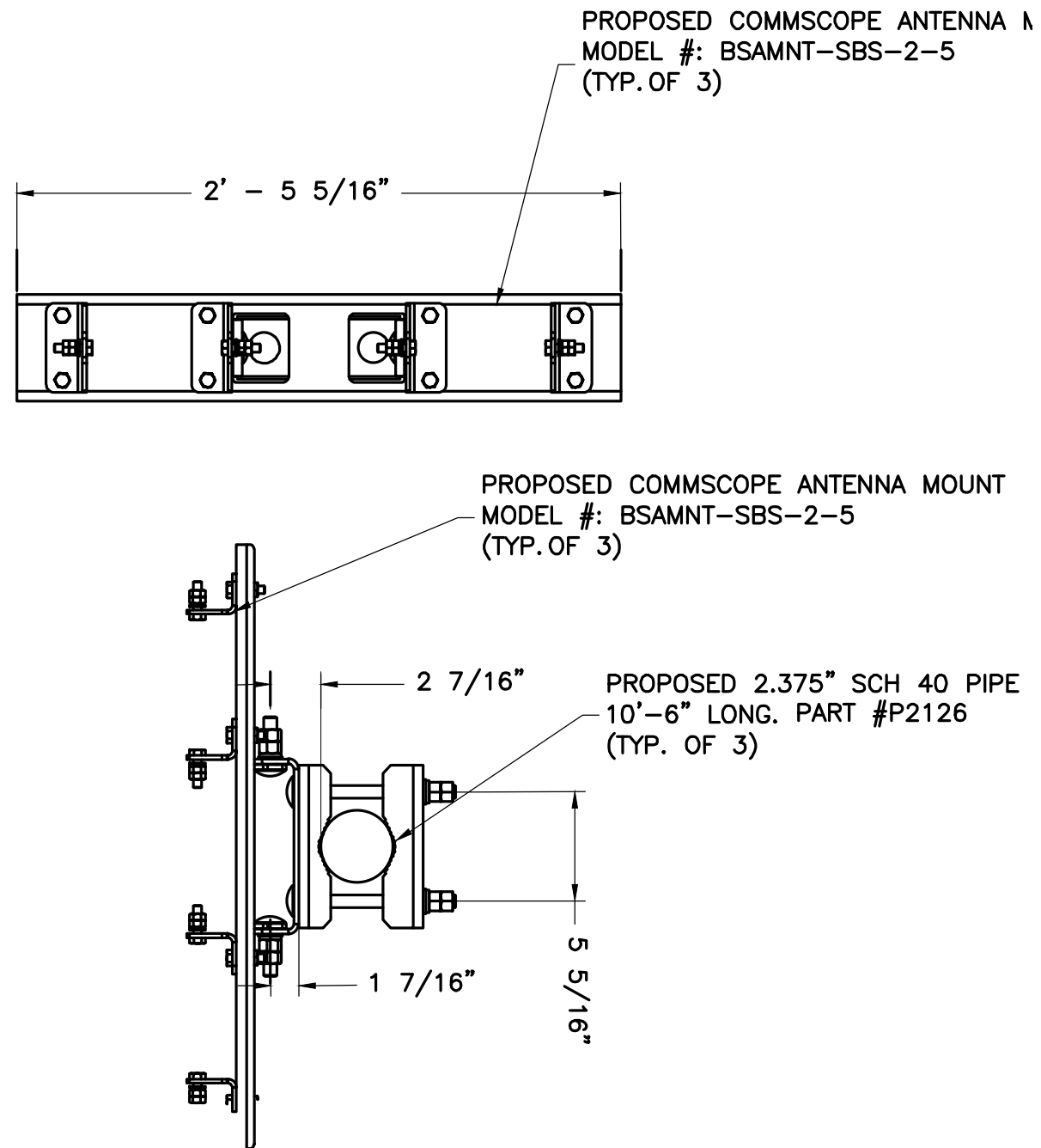
5 SAMSUNG MT6407-77A RRH & ANTENNA
A-1 NTS

REVISIONS

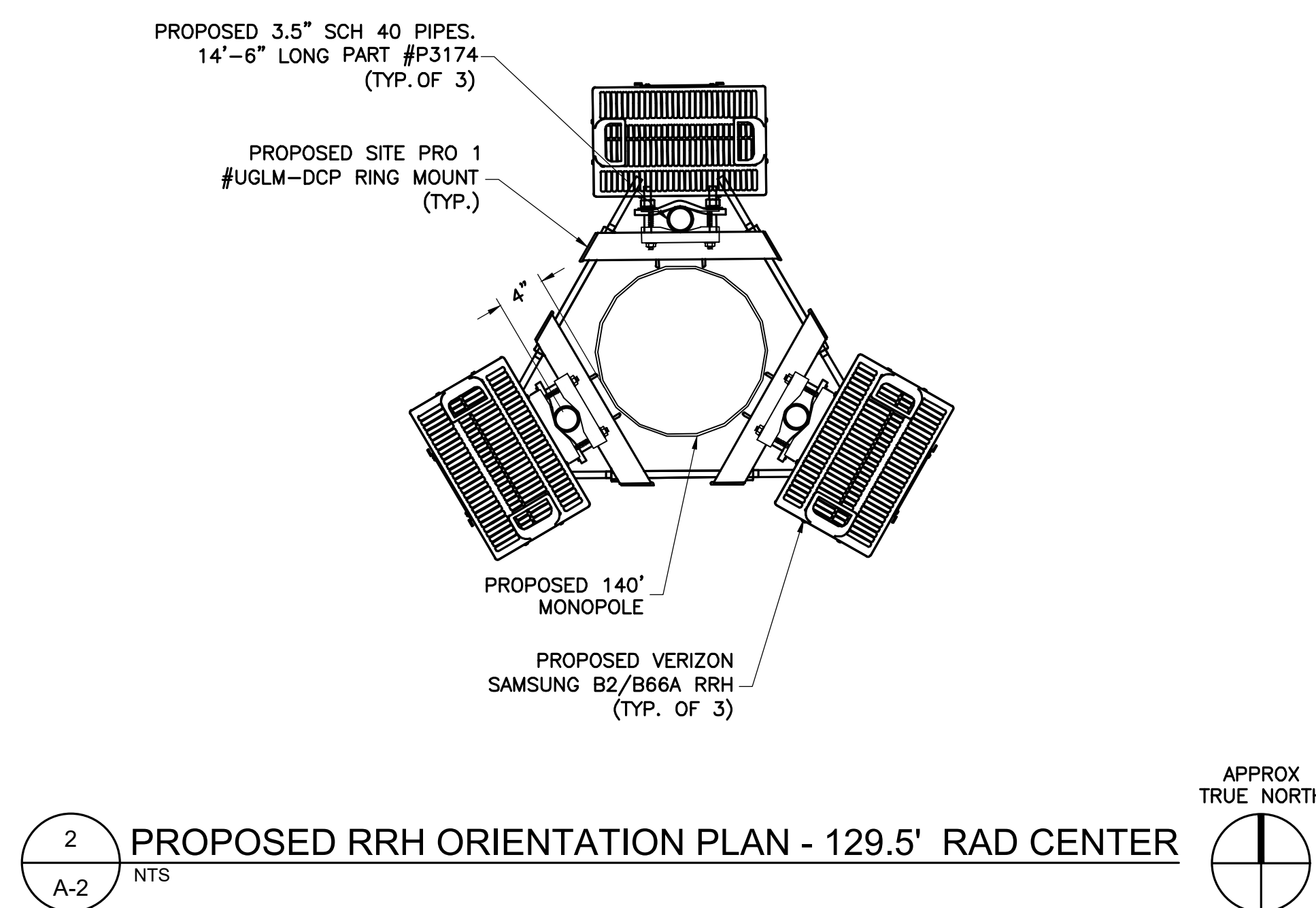
REV	DATE	DESCRIPTION	BY
2	07/28/22	REVISED EQUIPMENT	KLB
1	05/05/22	FINAL ZDs	KLB
0	03/17/22	PRELIMINARY ZDs	KLB



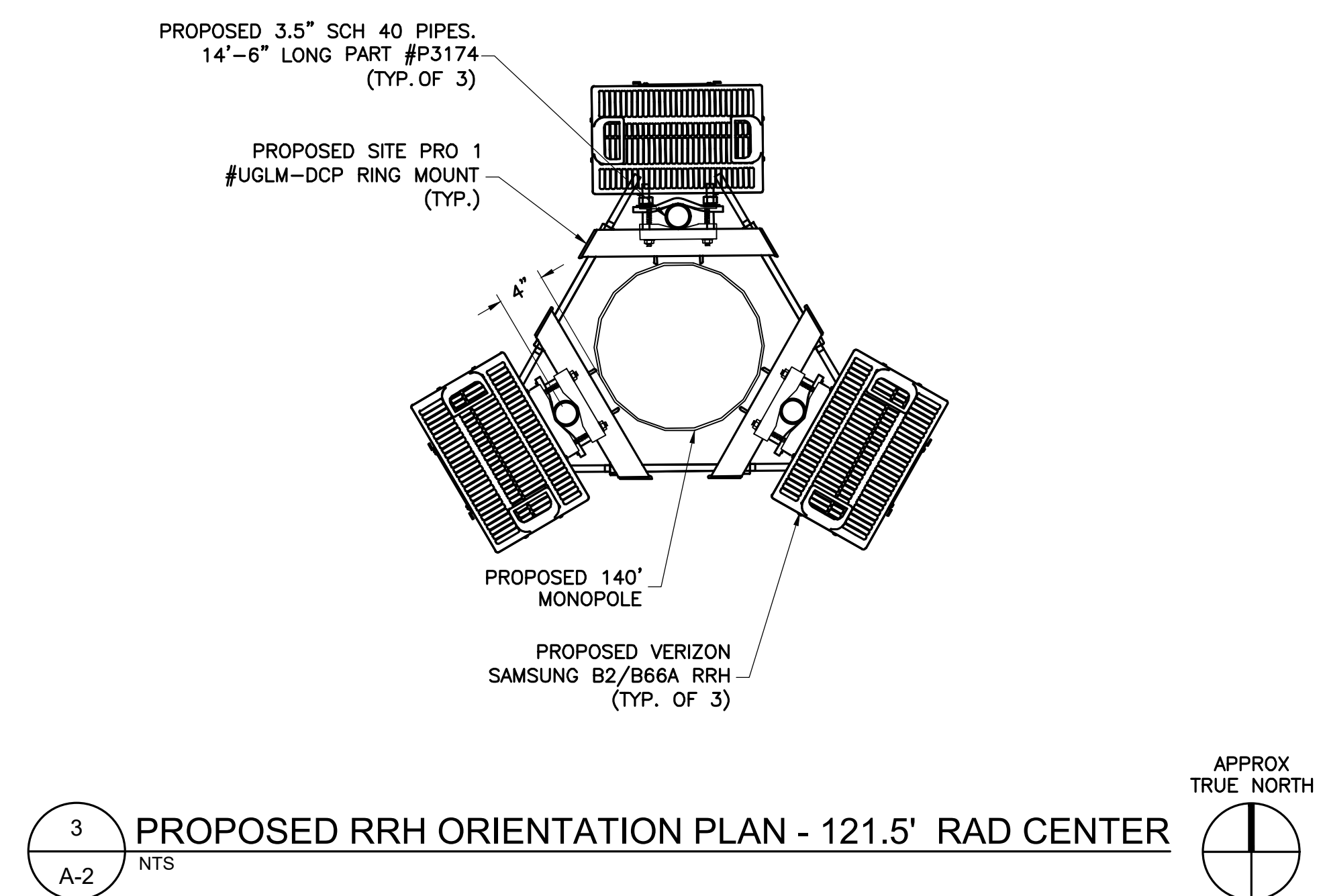
EQUIPMENT
DETAILS



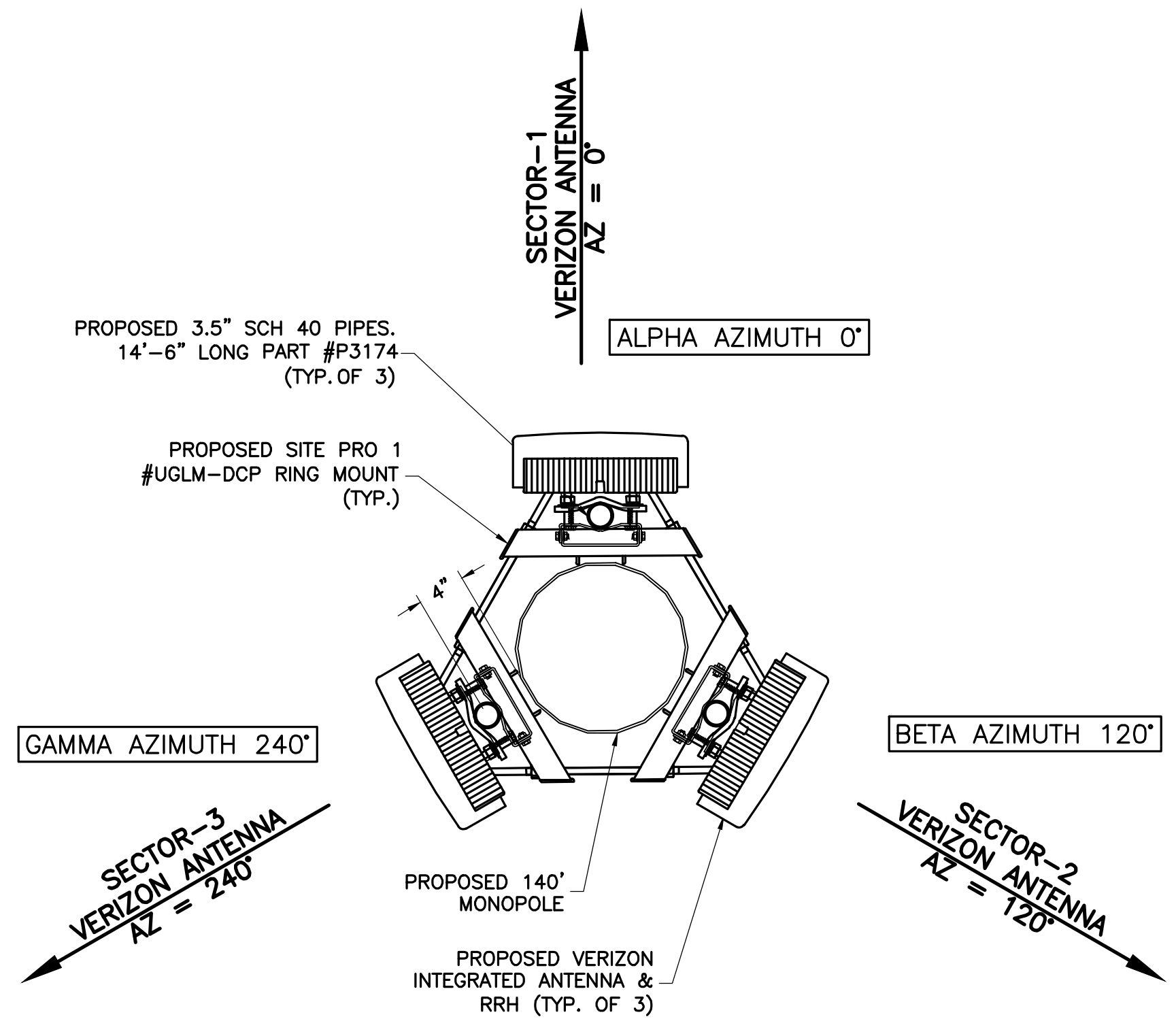
1 ANTENNA MOUNT DETAIL
SCALE: NTS



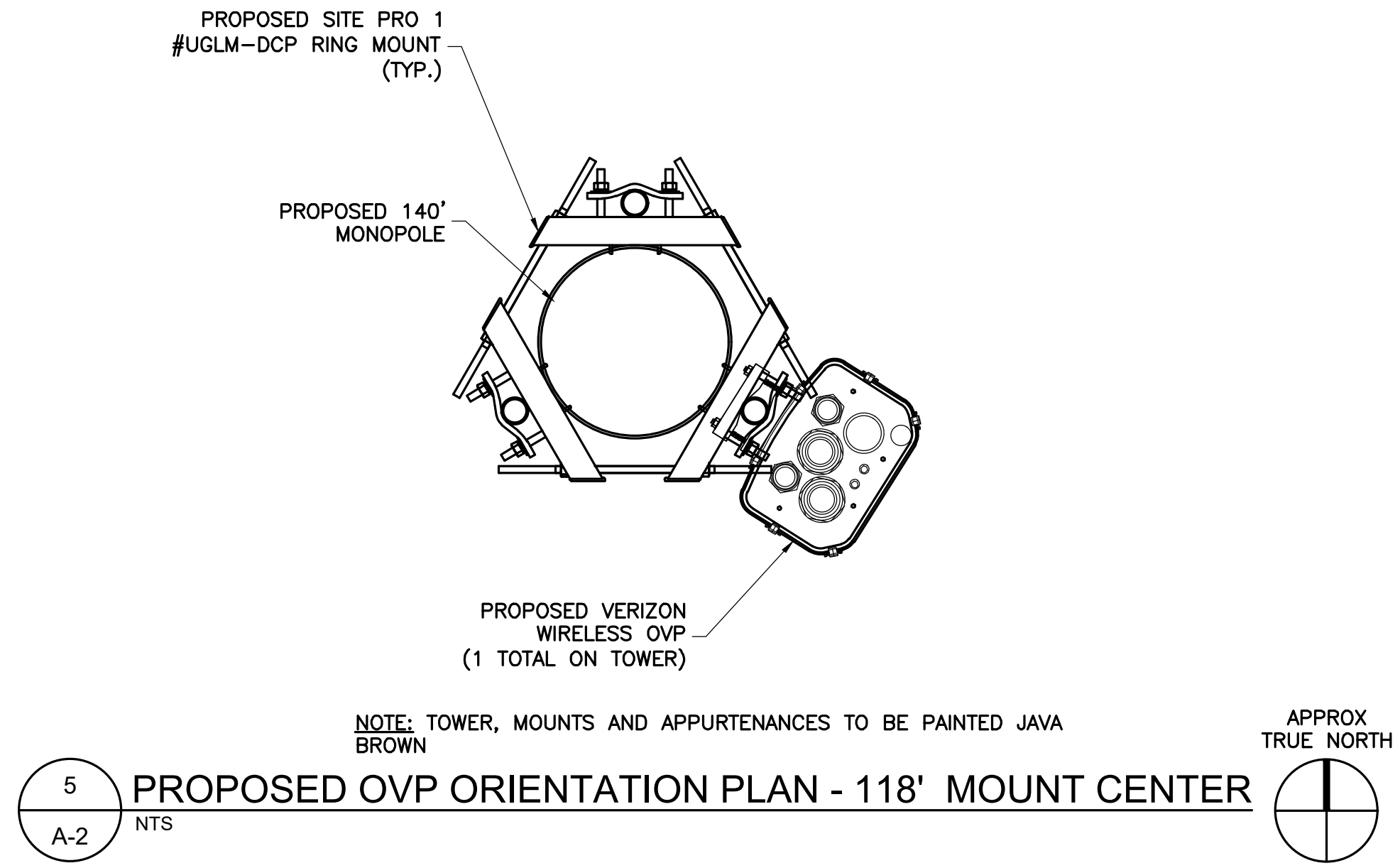
2 PROPOSED RRH ORIENTATION PLAN - 129.5' RAD CENTER
NTS



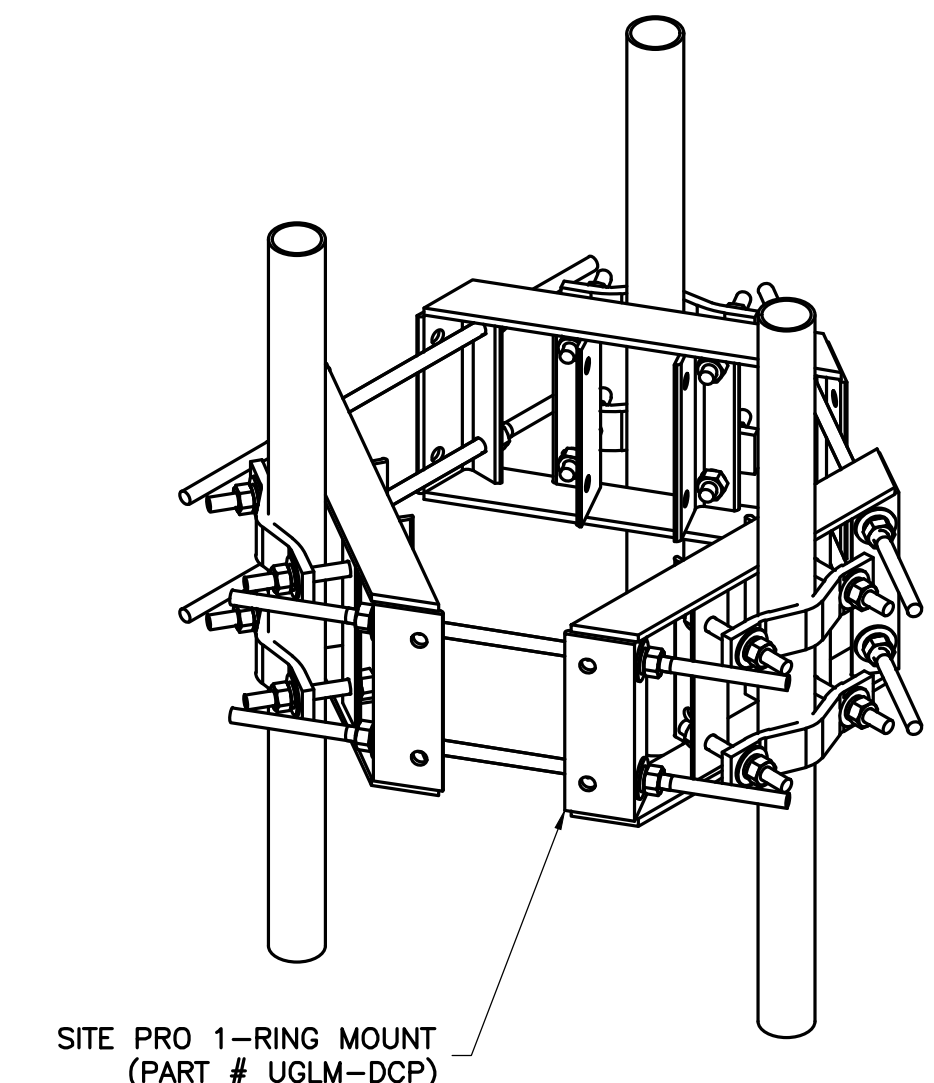
3 PROPOSED RRH ORIENTATION PLAN - 121.5' RAD CENTER
NTS



4 PROPOSED INTEGRATED RRH & ANTENNA ORIENTATION PLAN - 126' RAD CENTER
NTS



5 PROPOSED OVP ORIENTATION PLAN - 118' MOUNT CENTER
NTS



NOTE: CONTRACTOR TO PROVIDE SITE PRO 1-RING MOUNT
(PART # UGLM-DCP) OR APPROVED EQUIVALENT

6 MOUNT DETAIL
SCALE: NTS

ENGINEER

NB+C
TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 466-4079

APPLICANT

verizon

1831 RADY COURT
RICHMOND, VA 23222

SITE INFORMATION

SCRUBY TIER III PERSONAL
WIRELESS FACILITY
VERIZON RAW LAND
GREENWOOD STATION ROAD
GREENWOOD, VA 22943
ALBEMARLE COUNTY

DESIGN RECORD

REVISIONS				
REV	DATE	DESCRIPTION	BY	
2	07/28/22	REVISED EQUIPMENT	KLB	
1	05/05/22	FINAL ZDs	KLB	
0	03/17/22	PRELIMINARY ZDs	KLB	

PROFESSIONAL STAMP



ENGINEER

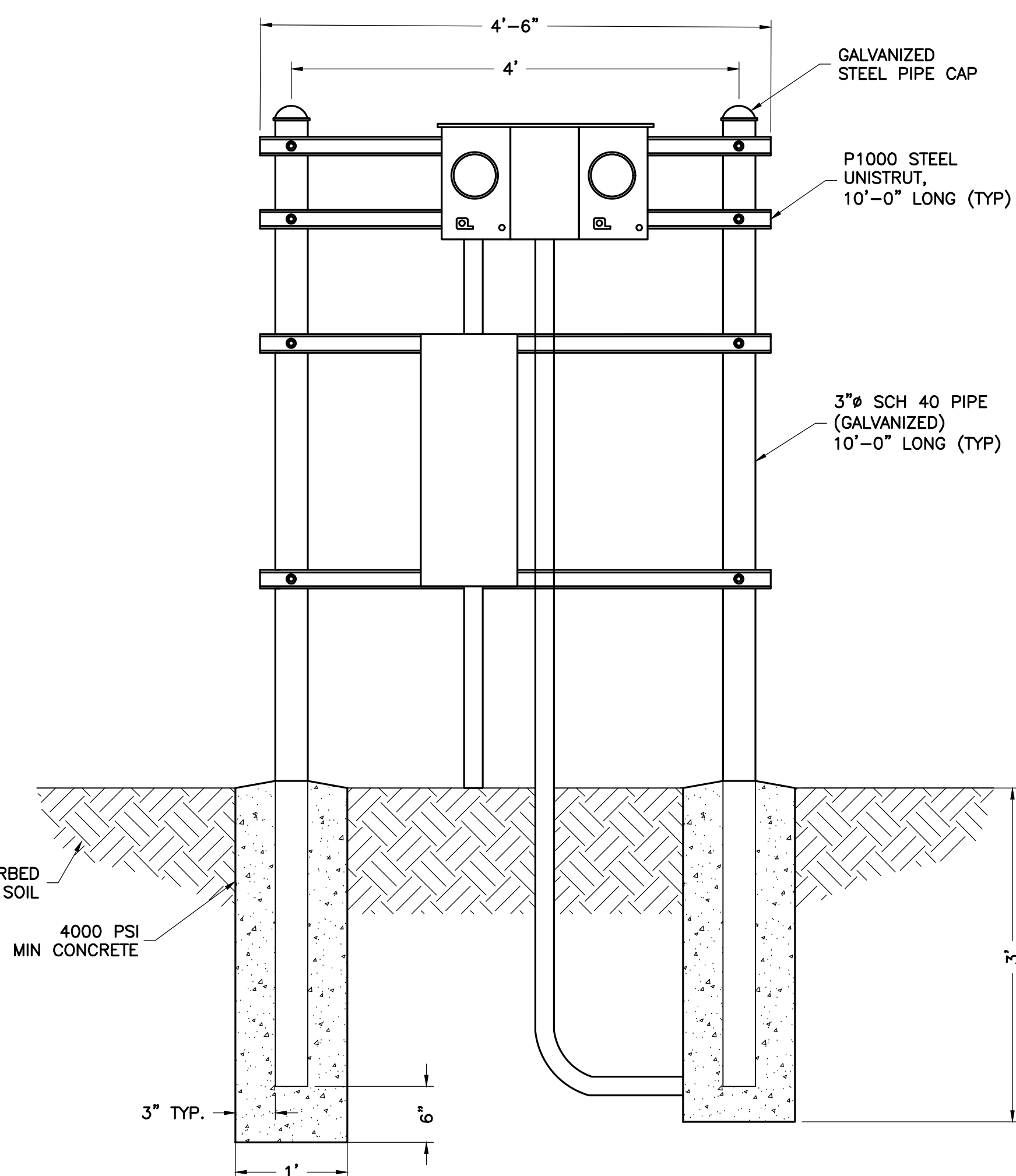
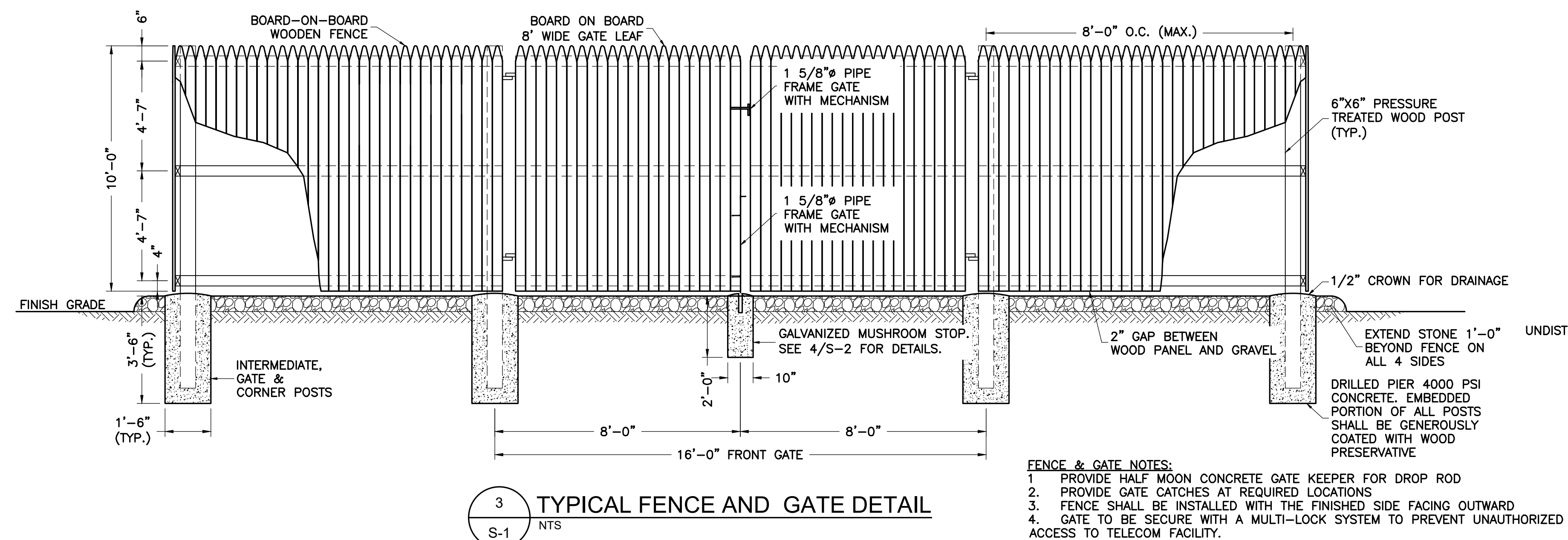
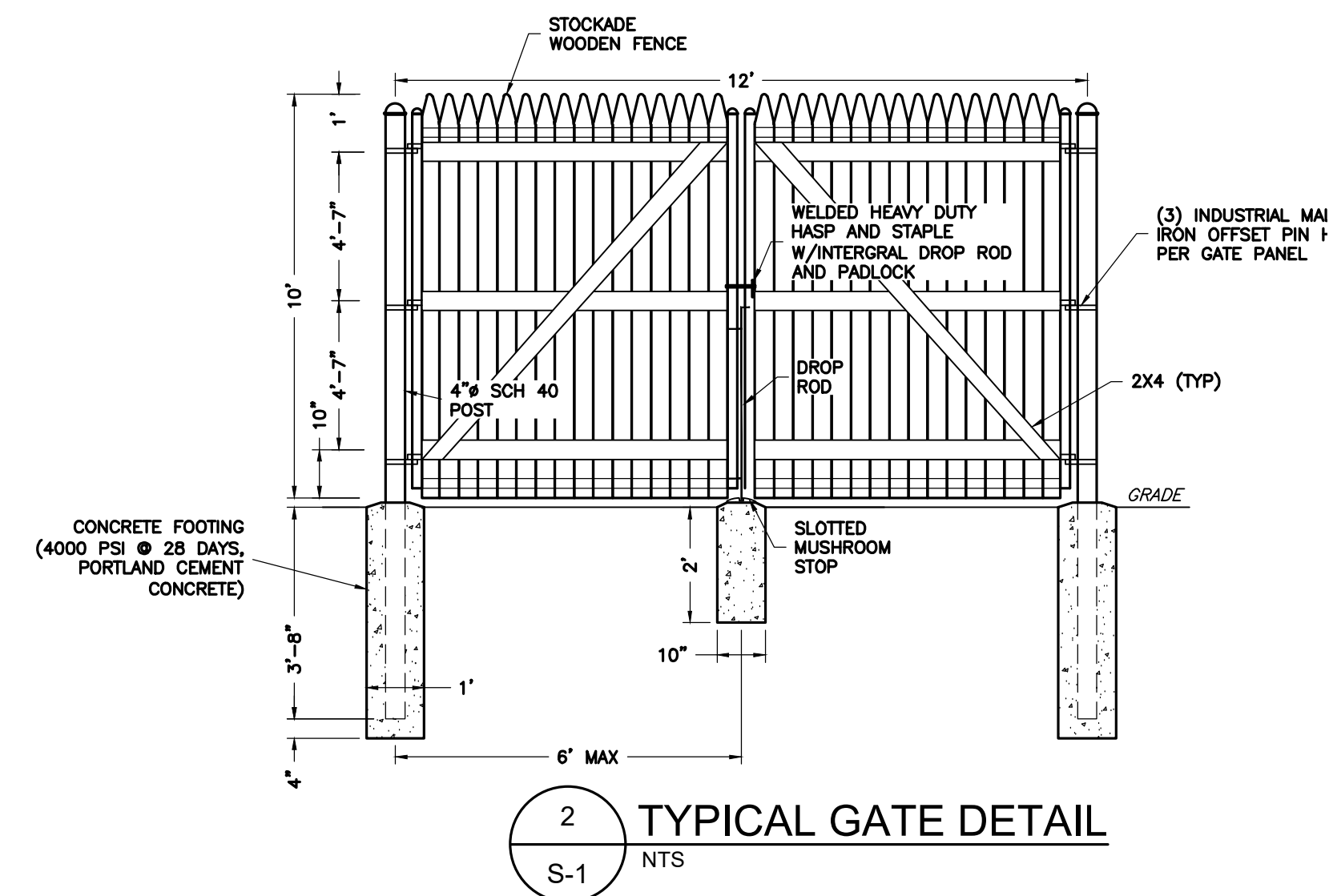
JOHN A. DAUGHTREY III, P.E.
VA PROFESSIONAL ENGINEER LIC. #052122

SHEET TITLE

EQUIPMENT
MOUNT DETAILS

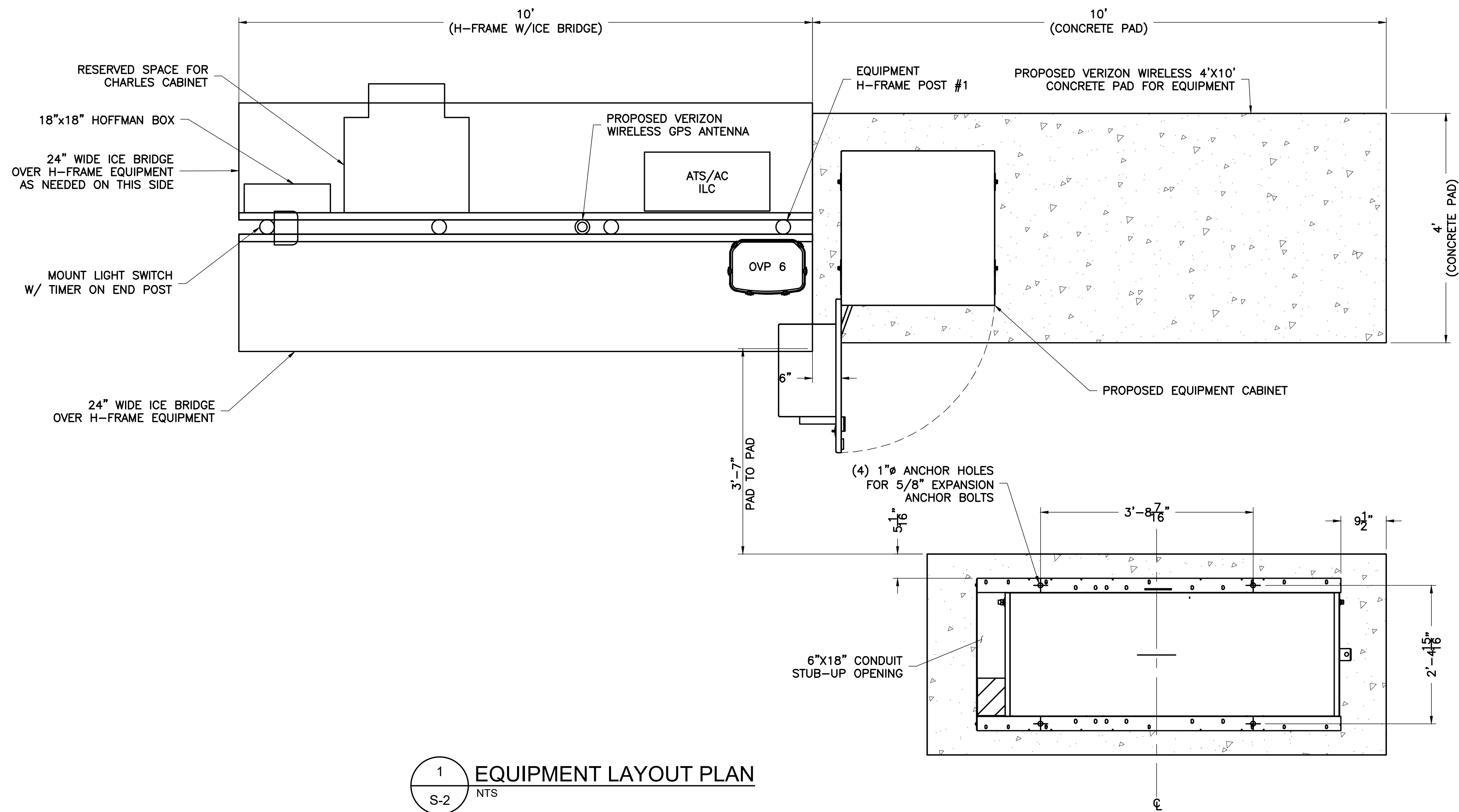
SHEET NUMBER

A-2



SHEET NUMBER





1 EQUIPMENT LAYOUT PLAN
S-2 NTS

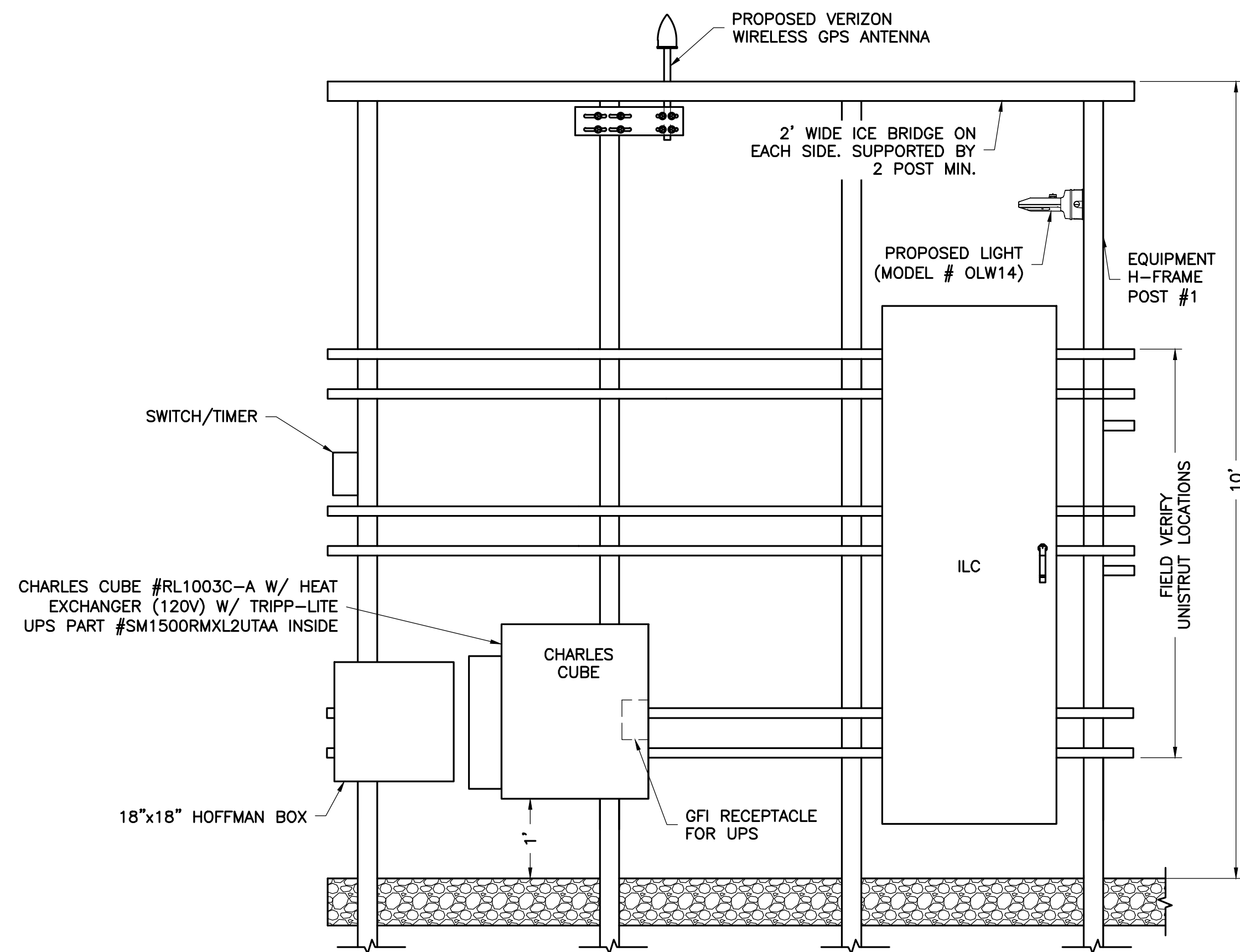
VERIZON WIRELESS EQUIPMENT:

- CHARLES INDUSTRIES CUBE-SS4B231PX2 EQUIPMENT CABINET WITH BATTERY CABINET INCLUDED

CONTRACTOR PROVIDED EQUIPMENT:

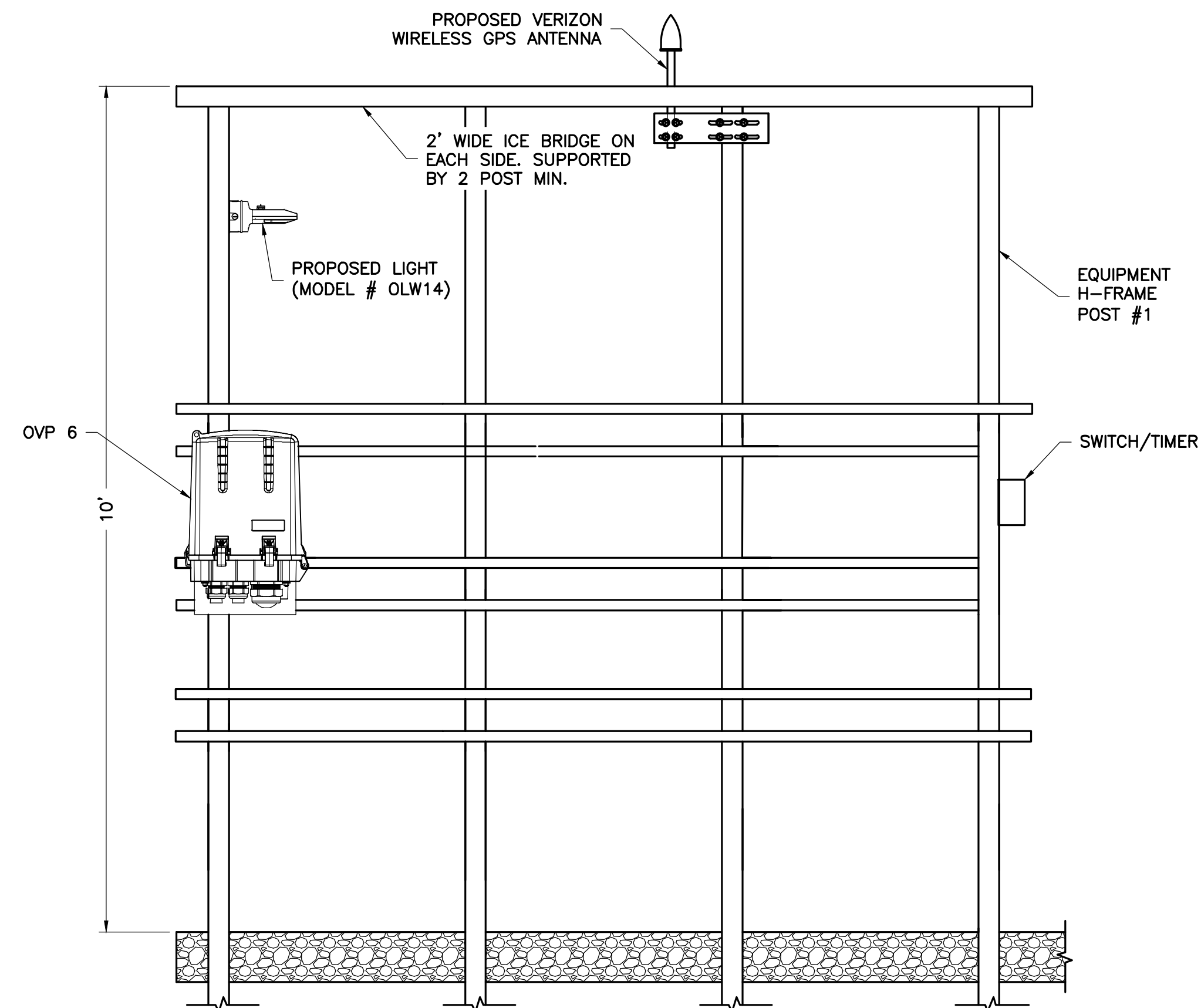
- * THIS IS NOT A COMPREHENSIVE LIST. IT SHOULD BE ASSUMED BY THE CONTRACTOR THAT ALL OTHER ITEMS DETAILED IN THIS SET OF DRAWINGS SHALL BE PROVIDED BY THE CONTRACTOR.
- 26.2" WIDE X 78" TALL X 12.3" DEEP, ASCO D300L SERIES POWER TRANSFER LOAD CENTER MODEL AA300G-1PH-N-3R - INTEGRATED LOAD CENTER "ILC" WITH COMBINATION PADLOCK.
- 22" WIDE X 26" TALL X 20" DEEP, CHARLES INDUSTRIES CUBE-RL1003C-A W/ HEAT EXCHANGER (120V) W/ TRIPP-LITE UPS PART #SM1500RMXL2UTAA INSIDE (ONLY REQUIRED WHEN V&T PROVIDES LIT FIBER. UTILITY COORDINATOR MUST VERIFY IF THIS IS NEEDED)
- RAYCAP OVP-6 (RCMDC-3315-PF-48)
- COORDINATE ADDITIONAL ENTRY GATE LOCK(S) WITH CONSTRUCTION MANAGER.

- NOTES:
1. SEE SHEET E-1, E-2 & E-3 FOR CABLE/CONDUIT ROUTINGS.
 2. BOTTOM OF OVPS SHALL NOT EXCEED 36" ABOVE FINISHED GRADE.



REAR

2 H-FRAME RISER DETAILS
S-2 NTS



FRONT

ENGINEER

APPLICANT

SITE INFORMATION

DESIGN RECORD

PROFESSIONAL STAMP

ENGINEER

SHEET TITLE

SHEET NUMBER



SCRUBY TIER III PERSONAL WIRELESS FACILITY
VERIZON RAW LAND
GREENWOOD STATION ROAD
GREENWOOD, VA 22943
ALBEMARLE COUNTY

REVISIONS

REV	DATE	DESCRIPTION	BY
2	07/28/22	REVISED EQUIPMENT	KLB
1	05/05/22	FINAL ZDs	KLB
0	03/17/22	PRELIMINARY ZDs	KLB



JOHN A. DAUGHTREY III, P.E.
VA PROFESSIONAL ENGINEER LIC. #052122

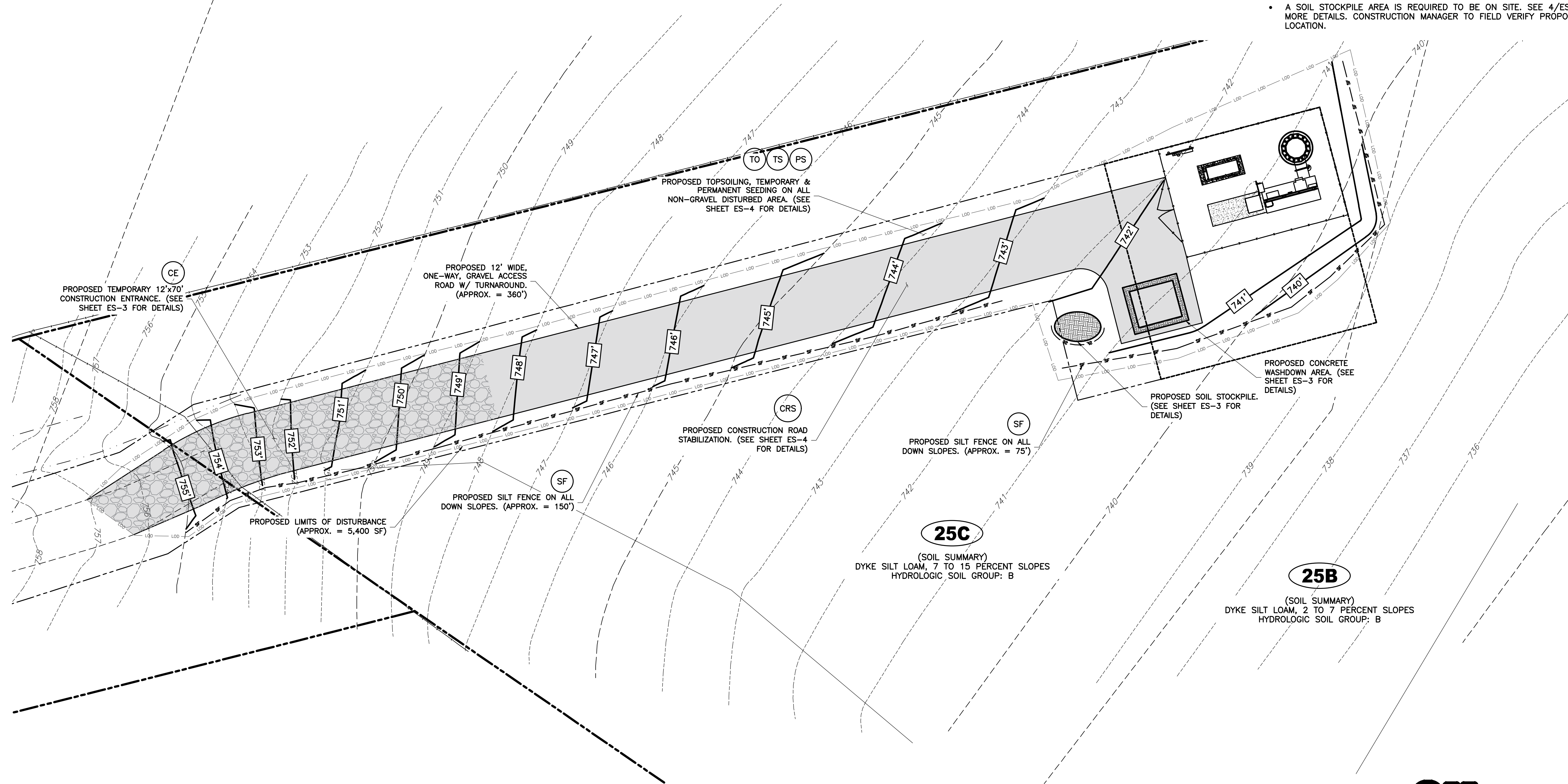
GROUND EQUIPMENT MOUNTING DETAILS

S-2



25B

(SOIL SUMMARY)
DYKE SILT LOAM, 2 TO 7 PERCENT SLOPES
HYDROLOGIC SOIL GROUP: B



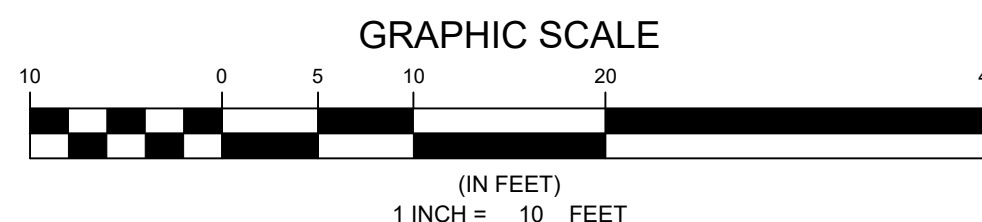
LEGEND

- EXISTING SOIL BOUNDARY
- PROPERTY LINE - SUBJECT PARCEL
- EXISTING CONTOUR LINE
- PROPOSED CONTOUR LINE
- PROPOSED FENCE
- PROPOSED LEASE AREA
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED SILT FENCE

- PROPOSED TREE PROTECTION
- PROPOSED CONSTRUCTION ENTRANCE
- PROPOSED CONSTRUCTION ROAD STABILIZATION
- PROPOSED PERMANENT SEEDING
- PROPOSED TEMPORARY SEEDING

- NOTE:
- A PROPOSED HAY BALE W/ PLASTIC LINING CONCRETE WASHOUT IS REQUIRED TO BE ON SITE. SEE "HAY BALE AND PLASTIC WASHOUT PIT" NOTES ON SHEET ES-2 FOR MORE INFORMATION. CONSTRUCTION MANAGER TO FIELD VERIFY PROPOSED LOCATION.
 - A SOIL STOCKPILE AREA IS REQUIRED TO BE ON SITE. SEE 4/ES-3 FOR MORE DETAILS. CONSTRUCTION MANAGER TO FIELD VERIFY PROPOSED LOCATION.

1 EROSION & SEDIMENT CONTROL PLAN
ES-1 SCALE: 1" = 10'-0"



ENGINEER

APPLICANT

SITE INFORMATION

DESIGN RECORD

PROFESSIONAL STAMP

ENGINEER

SHEET TITLE

SHEET NUMBER

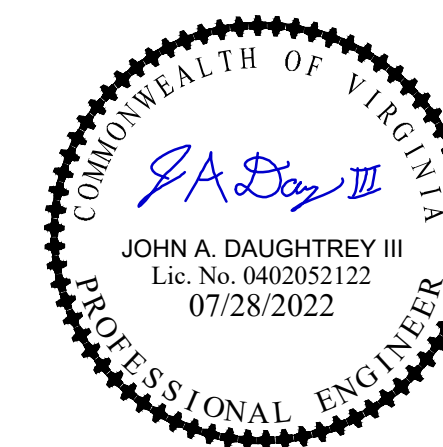
NB+C
TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 448-4073

verizon
1831 RADY COURT
RICHMOND, VA 23222

SCRUBY TIER III PERSONAL
WIRELESS FACILITY
VERIZON RAW LAND
GREENWOOD STATION ROAD
GREENWOOD, VA 22943
ALBEMARLE COUNTY

REVISIONS

REV	DATE	DESCRIPTION	BY
2	07/28/22	REVISED EQUIPMENT	KLB
1	05/05/22	FINAL ZDs	KLB
0	03/17/22	PRELIMINARY ZDs	KLB



JOHN A. DAUGHTREY III, P.E.
VA PROFESSIONAL ENGINEER LIC. #052122

EROSION &
SEDIMENT
CONTROL &
GRADING PLAN

ES-1

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION
THE PURPOSE OF THIS PROJECT IS THE CONSTRUCTION OF MONOPOLE TOWER, 190’ GRAVEL ACCESS DRIVE, AND FENCED COMPOUND, ALONG WITH ASSOCIATED UTILITIES. THE LEASE AREA OF THE TOWER IS 1,600 SQ.FT.; THE COMPOUND AREA IS 600 SQ.FT.; THE TOTAL DISTURBED AREA IS 5,400 SF.

EXISTING SITE CONDITIONS
THE EXISTING SITE CONDITIONS CONSIST OF OPEN PASTURE AND SPARSE WOODLANDS IN GOOD CONDITION. THE GRADE SLOPES TO THE SOUTH EAST. OUR ACCESS ROAD EXTENDS AN EXISTING GRAVEL ACCESS ROAD THAT CONNECTS TO GREEN WOOD DRIVE.

ADJACENT AREAS
THE ADJACENT AREAS ARE UNDEVELOPED WOODLANDS AND SINGLE FAMILY RESIDENTIAL HOMES. WITH OPEN PASTURE TO THE NORTH EAST AND SOUTH WEST. THE SITE IS BOARDED BY INTERSTATE 64 TO THE NORTH WEST AND GREENWOOD STATION ROAD TO THE WEST.

OFF-SITE AREAS
THERE ARE NO PROPOSED OFF-SITE AREAS ASSOCIATED WITH THIS PROJECT.

SOILS
(25B) DYKE SILT LOAM – 2 TO 7 PERCENT SLOPES
(25C) DYKE SILT LOAM – 7 TO 15 PERCENT SLOPES

CRITICAL AREAS
THERE ARE NO CRITICAL AREAS ASSOCIATED WITH THIS PROJECT.

ESC MEASURES – STRUCTURAL PRACTICES
STRUCTURAL MEASURES TO BE USED ON THE SITE INCLUDE SILT FENCE (VE&SCH SPEC. 3.05), CONSTRUCTION ENTRANCE (VE&SCH SPEC. 3.02), TREE PROTECTION FENCE (VE&SCH SPEC. 3.38), TEMPORARY STOCK PILE (VE&SCH SPEC. 3.30), AND CONCRETE WASHOUT. ALL MEASURES SELECTED ARE STANDARD ESC ITEMS FOR THIS APPLICATION. ANY DISTURBED AREA DENUDED FOR SEVEN DAYS THAT IS NOT IN ACTIVE WORK AREA TO BE TEMPORARILY SEEDED.

ESC MEASURES – VEGETATIVE PRACTICES
VEGETATION PRACTICES INCLUDE TEMPORARY AND PERMANENT SEEDING (VE&SCH SPEC. 3.31 & 3.32).

PERMANENT STABILIZATION
1. UNTIL AN ADEQUATE ROOT SYSTEM IS ESTABLISHED AND IN THE ABSENCE OF ADEQUATE RAINFALL, SODDING (OR WHATEVER VEGETATION IS USED) SHALL BE IRRIGATED AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. IN GENERAL, WATERING SHALL BE PERFORMED IN ACCORDANCE WITH THE VESCH.
2. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINISHED GRADING. SEEDING SHALL BE DONE WITH KENTUCKY 31 TALL FESCUE ACCORDING TO STD. AND SPEC. 3.32. PERMANENT SEEDING, OF THE HANDBOOK, EROSION CONTROL BLANKETS WILL BE INSTALLED OVER FILL SLOPES WHICH HAVE BEEN BROUGHT TO FINAL GRADE AND HAVE BEEN SEEDED TO PROTECT THE SLOPES PROPERLY. MULCH (STRAW OR FIBER) WILL BE USED ON RELATIVELY FLAT AREAS. IN ALL SEEDING OPERATIONS, SEED FERTILIZER AND LIME WILL BE APPLIED PRIOR TO MULCHING. IN ACCORDANCE WITH MINIMUM STANDARD #3, PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
3. THE LOCAL VESCP AUTHORITY REPRESENTATIVE SHALL MAKE THE DETERMINATION AS TO WEATHER OR NOT PERMANENT VEGETATION HAS BEEN ESTABLISHED IN ACCORDANCE WITH MINIMUM STANDARD #3.

UNDERGROUND UTILITY LINE INSTALLATION:
UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:

1. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
2. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
3. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
4. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
5. DESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
6. COMPLY WITH APPLICABLE SAFETY REGULATIONS.

CONSTRUCTION SEQUENCE

AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OWNER/OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND THE CONSERVATION DISTRICT TO AN ON-SITE MEETING. ALSO, AT LEAST 3 WORKING DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL VIRGINIA CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE VIRGINIA ONE CALL SYSTEM "MISS UTILITY" INCORPORATED AT 811 FOR BURIED UTILITIES LOCATIONS.

EROSION AND SEDIMENT BMPS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPS.

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.

1. INSTALL ROCK CONSTRUCTION ENTRANCE AND ALL PERIMETER BMP’S AS SHOWN ON THE PLANS.
2. CLEAR TREES AND LIMBS FOR FULL WIDTH OF EASEMENT AND LEASE AREA, GROUND TO SKY.
3. STRIP TOPSOIL FOR THE ACCESS DRIVE AND STORE AT DESIGNATED LOCATIONS AS SHOWN ON THE PLANS OR LOCATION AS AGREED UPON WITH THE CONSTRUCTION MANAGER.
4. ALL DIVERSIONS, SEDIMENT TRAPS, AND STOCKPILES MUST BE SEEDED AND MULCHED IMMEDIATELY UPON CONSTRUCTION.
5. BEGIN GRADING AND INSTALL GRAVEL, ROADSIDE DITCHES, AND CULVERTS WITH OUTLET PROTECTION.
6. STRIP TOPSOIL ACROSS COMPOUND AND STORE AT DESIGNATED LOCATIONS AS SHOWN ON THE PLANS OR LOCATION AS AGREED UPON WITH THE CONSTRUCTION MANAGER.
7. GRADE COMPOUND SITE AND INSTALL GRAVEL. IMMEDIATELY STABILIZE FILL AND CUT SLOPES WITH EROSION CONTROL MATTING OR ROCK.
8. ONCE CONSTRUCTION OF COMPOUND AND ACCESS DRIVE IS COMPLETE, BEGIN CONSTRUCTION OF TOWER AND ASSOCIATED FACILITIES AND UTILITIES AS SHOWN ON THE DRAWINGS.
9. IF CONSTRUCTION IS TERMINATED OR SUSPENDED PRIOR TO CONSTRUCTION COMPLETION, ALL EXPOSED SOIL AREAS SHALL BE SEEDED WITH TEMPORARY SEEDING AND MULCHED IMMEDIATELY.
10. IT SHALL BE THE CONTRACTOR’S RESPONSIBILITY TO MAINTAIN ALL SEDIMENT AND EROSION CONTROL FACILITIES IN EFFECTIVE WORKING ORDER DURING CONSTRUCTION AND UNTIL ALL EXPOSED SOIL AREAS HAVE BEEN STABILIZED.
11. NO EROSION AND SEDIMENT CONTROL MEASURES CAN BE REMOVED WITHOUT APPROVAL OF THE ENVIRONMENTAL INSPECTOR FOR THE PROJECT.

IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE O/RP SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.

AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPS MUST BE STABILIZED IMMEDIATELY.

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

1. THE OWNER/DEVELOPER MUST NOTIFY THE ALBEMARLE COUNTY AT LEAST 24 HOURS PRIOR TO THE START OF THE CONSTRUCTION IN ACCORDANCE WITH APPLICABLE ALBEMARLE COUNTY ORDINANCES AND POLICIES.
2. THE OWNER/DEVELOPER GRANTS THE RIGHT-OF-ENTRY ON TO THIS PROPERTY TO THE DESIGNATED ALBEMARLE COUNTY PERSONNEL FOR THE PURPOSE OF INSPECTING AND MONITORING FOR COMPLIANCE WITH TITLE 10.01, CHAPTER 5, ARTICLE 4 OF THE CODE OF VIRGINIA, EROSION AND SEDIMENT CONTROL LAW AND THE DESIGN AND CONSTRUCTION STANDARDS MANUAL 750.04.
3. ALL EROSION CONTROL MEASURES SHOWN ON THE APPROVED PLAN MUST BE IN PLACE AND INSPECTED AND APPROVED BY THE DEPARTMENT PF PUBLIC WORKS PRIOR TO CLEARING, STRIPPING OF TOPSOIL OR GRADING.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE KEPT ON THE SITE AT ALL TIMES.
5. THE DEVELOPER/DEVELOPERS’S REPRESENTATIVE IS RESPONSIBLE FOR THE INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE ALBEMARLE COUNTY.
6. ALL DISTRIBUTED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL COMPLETE AND ADEQUATE STABILIZATION IS ACHIEVED.
7. WATER MUST BE PUMPED INTO AN APPROVED FILTERING DEVICE DURING DEWATERING OPERATIONS.
8. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND THE VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS AND TO AMHERST COUNTY DESIGN AND CONSTRUCTION STANDARDS MANUAL. THE DEVELOPER/DEVELOPER’S REPRESENTATIVE WILL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES AT ALL TIMES.
9. THE DEVELOPERS/ DEVELOPER’S REPRESENTATIVE SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES DAILY AND AFTER EACH SIGNIFICANT RAINFALL THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:
 - a. SILT FENCE BARRIERS WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES HALF WAY TO THE TOP OF THE BARRIER.
 - b. SEEDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RE-SEEDED AS NEEDED.
10. SEDIMENT TRAPPING MEASURES WILL BE INSTALLED AS A FIRST STEP IN GRADING AND WILL BE SEEDED AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION.
11. PERMANENT SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZED SHALL BE APPLIED WITH IN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN FOURTEEN (14) DAYS. SEEDING AND SELECTION OF THE SEED MIXTURE SHALL BE IN ACCORDANCE WITH VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK STANDARD AND SPECIFICATION 3.32. ROADS AND PARKING AREAS SHALL BE STABILIZED WITH SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED.
12. ELECTRIC POWER, TELEPHONE, CABLE T.V. AND GAS SUPPLY TRENCHES SHALL BE COMPACTED, SEEDED AND MULCHED WITHIN FIVE DAYS AFTER BACKFILL.
13. ALL TEMPORARY EARTH BERM, DIVERSIONS AND SILT DAMS SHALL BE MULCHED WITHIN FIVE DAYS AFTER GRADING, STRAW OR HAY MULCH IS REQUIRED.
14. DURING CONSTRUCTION, ALL STORM SEWER INLETS SHALL BE PROTECTED BY INLET PROTECTION MAINTAINED AN MODIFIED DURING CONSTRUCTION AS REQUIRED.
15. AT THE COMPLETION OF ANY PROJECT CONSTRUCTION AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROL MEASURES SHALL BE REMOVED.
16. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES WILL BE REMOVED WITHIN 30 DAYS AFTER ADEQUATE SITE STABILIZATION AND AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, AS AUTHORIZED BY THE ALBEMARLE COUNTY INSPECTORS. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES WILL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
17. WHEN SEDIMENT IS TRANSPORTED ONTO A PAVED ROAD SURFACE, THE ROAD WILL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT WILL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING WILL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
18. AREAS WHICH ARE NOT TO BE DISTURBED WILL BE CLEARLY MARKED BY FLAGS, SIGNS, ETC.
19. RPA AND FLOOD PLAIN LIMITS SHALL BE CLEARLY MARKED IN THE FIELD BY FLAGS, SIGNS, ETC.
20. TREE SAVE AREAS SHALL BE CLEARLY MARKED IN THE FIELD BY ORANGE SAFETY FENCE. APPROPRIATE TREE PRESERVATION SIGNS (WATERPROOF) TO IDENTIFY TREE PRESERVATION AREA SHALL BE LOCATED ON TREE PROTECTION FENCING (INCLUDES SUPER SILT FENCING) AND SHOULD BE LOCATED ALTERNATE BETWEEN ENGLISH AND SPANISH EVERY 30 FEET.
21. ORANGE SAFETY FENCE MUST BE INSTALLED AROUND ALL SILT TRAPS AND SEDIMENT BASINS.

MAINTENANCE

1. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT, ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY. THE FOLLOWING ITEMS WILL BE CHECKED, IN PARTICULAR:
 2. THE SILT FENCE BARRIER WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES HALF WAY TO THE TOP OF THE BARRIER.
 3. THE SEEDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RE-SEEDED AS NEEDED.
4. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ECS CONTROLS DURING CONSTRUCTION.
5. INSPECTION TO BE CONDUCTED SHALL BE PER ALBEMARLE COUNTY STANDARDS AND REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING ALL INSPECTIONS.
6. SILT FENCE SHALL BE CHECKED AFTER EACH MAJOR STORM EVENT OR ONCE EVERY FIVE DAYS. SEDIMENT SHALL BE REMOVED AFTER IT BECOMES 1/3 HEIGHT OF SILT FENCE.
7. ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL WILL BE CONSTRUCTED ACCORDING TO THE STANDARDS AND SPECIFICATIONS OF THE VIRGINIA SEDIMENT AND EROSION CONTROL HANDBOOK, 3RD ED, 1992.

SEEDING/ STABILIZATION SPECIFICATIONS

1. **TOPSOIL STOCKPILE PROTECTION**
 - A. APPLY GROUND LIMESTONE AT A RATE OF 90LBS. PER 1000 SQ.FT.
 - B. APPLY FERTILIZER (10-20-10) AT A RATE 11LBS. PER 1000 SQ.FT.
 - C. APPLY PERENNIAL RYEGRASS SEED AT 170 LB. PER 1 ACRE. AND ANNUAL RYEGRASS AT 170 LB. PER 1 ACRE.
 - D. MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 138 LBS. PER 1000 SQ.FT.
 - E. PROPERLY ENTRENCH A SILT FENCE AT THE BOTTOM OF THE STOCKPILE.
18. **TEMPORARY STABILIZATION SPECIFICATIONS**
 - A. APPLY GROUND LIMESTONE AT A RATE OF 184 LBS. PER 1000 SQ.FT.
 - B. APPLY FERTILIZER (10-20-10) AT A RATE 11 LBS. PER 1000 SQ.FT.
 - C. APPLY PERENNIAL RYEGRASS SEED AT 170 LB. PER 1 ACRE. AND ANNUAL RYEGRASS AT 170 LB. PER 1 ACRE.
 - D. MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 138 LBS. PER 1000 SQ.FT.
 - E. APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.
19. **PERMANENT STABILIZATION SPECIFICATIONS**
 - A. APPLY TOPSOIL TO A DEPTH OF 5 INCHES (UNSETTLED)
 - B. APPLY GROUND LIMESTONE AT A RATE OF 184 LBS. PER 1000 SQ.FT. AND WORK FOUR INCHES INTO SOIL.
 - C. APPLY FERTILIZER (10-20-10) AT A RATE 11 LBS. PER 1000 SQ.FT.
 - D. APPLY HARD FESCUE SEED AT 20 LBS. PER 1 ACRE. AND CREEPING RED FESCUE SEED AT 20 LBS. PER 1 ACRE. AND TALL FESCUE SEED AT 20 LBS. PER 1 ACRE.
 - E. MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 138 LBS. PER 1000 SQ.FT.
 - F. APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.

HAY BALE AND PLASTIC WASHOUT PIT

HAY BALE AND PLASTIC WASHOUT PIT TO BE BUILT ABOVE GRADE. THE PLASTIC LINING SHOULD BE MINIMUM 10 MIL THICKNESS, FREE OF TEARS OR HOLES THAT WOULD ALLOW THE WASHWATER TO ESCAPE. AFTER THE PIT IS USED TO WASH DOWN THE CHUTES OF MULTIPLE READY MIXED TRUCKS AND THE WASHWATER HAS EVAPORATED OR HAS BEEN VACUUMED OFF, THE REMAINING HARDENED SOLIDS CAN BE BROKEN UP AND REMOVED FROM THE PIT. THIS PROCESS MAY DAMAGE THE HAY BALES AND PLASTIC LINING. IF DAMAGE OCCURS, THE PIT WILL NEED TO BE REPAIRED AND RELINED WITH NEW PLASTIC. WHEN THE HARDENED SOLIDS ARE REMOVED FROM THE PIT, THE WASTE MATERIAL MUST BE RECYCLED OR DISPOSED OF AT AN APPROVE WASTE FACILITY.

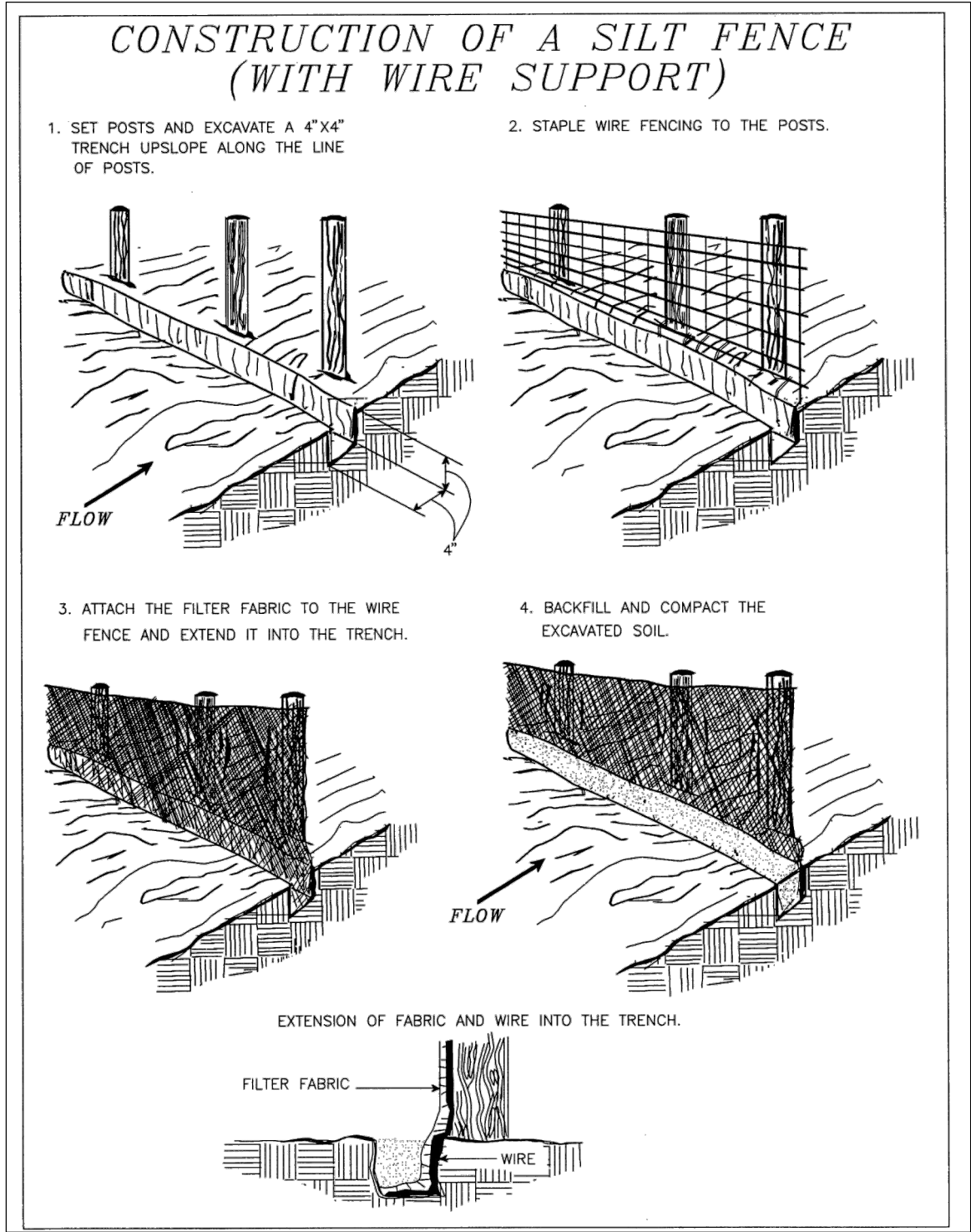
GRADING NOTES

1. SOILS USED FOR ROADWAY SUBGRADE MUST BE COMPACTED SO THAT THE MINIMUM DRY DENSITY ACHIEVED EXCEEDS 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE CONTRACTOR MAY ONLY USE CUT MATERIAL AS FILL IF IT CAN BE COMPACTED TO 95% OF ITS STANDARD PROCTOR MAXIMUM DRY DENSITY. PROCTOR READING MUST BE INSPECTED AND APPROVED BY A THIRD PARTY DURING ROADWAY CONSTRUCTION.
2. NATIVE TOPSOIL SHALL BE SAVED, STOCKPILED, MULCHED, AND REUSED AS MUCH AS POSSIBLE ON THE SITE. SILTATION FENCE SHALL BE INSTALLED AT THE BASE OF STOCKPILES AT THE DOWNHILL LIMIT TO PROTECT AGAINST EROSION. STOCKPILES WILL BE STABILIZED BY SEEDING AND MULCHING UPON FORMATION OF THE PILES. UPHILL OF THE STOCKPILES, STABILIZED DITCHES AND/OR BERMS WILL BE CONSTRUCTED TO DIVERT STORMWATER RUNOFF AWAY FROM THE PILES. EXCESS CUT SOIL NOT REUSED AS FILL SHALL BE HAULED OFF SITE TO AN APPROVED AND PERMITTED SOIL DISPOSAL SITE AS SOON AS FINAL GRADE HAS BEEN ESTABLISHED.
3. FOR AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY TO BE CONSIDERED PERMANENTLY STABILIZED, THE DISTURBED AREAS SHALL BE COVERED BY A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
4. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS.
5. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR ORGANIC MATERIAL THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS. ANY ROCK GREATER THAN 12" IN ANY DIRECTION SHOULD BE DISPOSED OF AND NOT USED AS FILL. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
6. PLOW, SCARIFY, BENCH, OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL SO FILL MATERIAL WILL BOND WITH EXISTING MATERIAL. IF FILL EXCEEDS 4' IN HEIGHT FROM TOE TO CREST, FILL MUST BE BENCHMARKED AND KEYED IN. SEE DETAIL 4/ES-7 FOR DETAILS.
7. PLACE SOIL FILL ON SUB-GRADES FREE OF ORGANIC MATERIAL, MUD, FROST, SNOW, OR ICE
8. PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES THICK IN LOOSE DEPTH COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND OPERATED TAMPERS.
9. UNDER ACCESS ROADS WITH MARGINAL TO EXCESSIVE SLOPES AND MARGINAL SUBGRADE, CLEAR, GRUB AND SCARIFY ROAD AREA. INSTALL ONE LAYER OF GEO-TEXTILE FABRIC (US 160 NW OR EQUIVALENT) AND PIN TO SUBGRADE. INSTALL BASE LAYER, AND TRACK IN WITH A BULLDOZER OR SHEEPSFOOT ROLLER, INSTALL SURFACE LAYER, DRESS ROAD AS REQUIRED AFTER CONSTRUCTION WITH MOTOR GRADER AND COMPACT WITH A VIBRATORY ROAD ROLLER.

TOPSOIL SPECIFICATIONS

1. **TOPSOIL SPECIFICATIONS**
 - A. THE CONTRACTOR SHALL FURNISH ALL LABOR, SUPERVISION, MATERIAL (EXCEPT AS HEREIN PROVIDED), TOOLS EQUIPMENT, SUPPLIES, AND SERVICES; AND, SHALL PERFORM ALL WORK NECESSARY FOR PROVIDING (TYPE B AS NECESSARY) AND APPLYING TOPSOIL IN ACCORDANCE WITH THE REQUIREMENTS OF THESE SPECIFICATIONS AND IN CONFORMITY TO THE DEPTHS AND LIMITS SHOWN ON THE DRAWINGS OR AS ESTABLISHED BY THE OWNER.
 - B. PRIOR TO USE OR PLACEMENT, THE CONTRACTOR SHALL SUBMIT CERTIFICATIONS OF SOIL TESTS FOR APPROVAL. SOIL TESTS SHALL BE PROVIDED AT THE RATE OF ONE TEST PER 10,000 SQUARE FEET OF DISTURBED AREA.
 - C. UNLESS OTHERWISE DIRECTED BY THE OWNER, AREAS DESIGNATED TO RECEIVE TOPSOIL SHALL BE GRADED, SHAPED, AND THEN SCARIFIED OR TILLED BY DISKING, HARROWING, OR OTHER APPROVED METHODS TO A DEPTH OF APPROXIMATELY 2". TOPSOIL SHALL BE APPLIED ONLY WHEN THE SUBSOIL IS IN A LOOSE, FRIABLE CONDITION.
 - D. THE CONTRACTOR SHALL PROTECT BENCHMARKS, UTILITIES, AND EXISTING TREES, SHRUBS, AND OTHER LANDSCAPE FEATURES DESIGNATED FOR PRESERVATION WITH TEMPORARY FENCING OR BARRICADES SATISFACTORY TO THE OWNER.
 - E. SUBSOIL ON SLOPES THAT HAVE BEEN HORIZONTALLY GROOVED IN ACCORDANCE WITH THE DRAWINGS SHALL NOT BE LOOSENEED.
 - F. THE LOOSE DEPTH OF THE CLASS OF TOPSOIL SHALL BE NO LESS THAN 4" (NOT LESS THAN 6" IN MEDIANS; AND SHALL BE SUFFICIENT TO ALLOW THE AREA TO CONFORM TO THE ELEVATIONS SHOWN ON THE DRAWINGS AFTER TOPSOIL SETTLES. IN NO CASE SHALL THE CONSOLIDATED FINISH ELEVATION OF TOPSOIL EXCEED THE ELEVATION OF ADJACENT STRUCTURES. CONSOLIDATED ELEVATION SHALL BE FLUSH WITH THE ADJACENT STRUCTURES.
 - G. AFTER TOPSOIL HAS BEEN APPLIED, LARGE CLODS, HARD LUMPS, AND STONES MORE THAN 1" IN THE GREATEST DIMENSION, BRUSH, ROOTS, STUMPS, LITTER, AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE AREA. WHEN THE OPERATION IS COMPLETE, THE AREA SHALL BE IN A CONDITION TO RECEIVE SEED, SOD, OR PLANTS WITHOUT FURTHER SOIL PREPARATION; AREAS SHALL BE STABILIZED WITHIN 15 DAYS AFTER TOPSOIL IS APPLIED.
 - H. THE CONTRACTOR SHALL BE REQUIRED TO BACKFILL ALONG EDGES OF CURBS, SIDEWALKS AND ENTRANCES WHERE SETTLEMENT HAS OCCURRED AND RESHAPE AND RESLOPE, WHERE DIRECTED, PRIOR TO PLACEMENT OF TOPSOIL AS WELL AS TO ADD ADDITIONAL TOPSOIL AS REQUIRED DUE TO SETTLEMENT OR EROSION AT NO ADDITIONAL COST TO THE OWNER.

ENGINEER	<div><div><div>NB+CTM</div><div>TOTALLY COMMITTED.</div><div>NB+C ENGINEERING SERVICES, LLC.</div><div>120 EASTSHORE DRIVE, SUITE 300 GLEN ALLEN, VA 23059 804-548-6070</div></div></div>																																
APPLICANT	<div><div><div>verizon[✓]</div><div>1831 RADY COURT RICHMOND, VA 23222</div></div></div>																																
SITE INFORMATION	<div>SCRUBY TIER III PERSONAL WIRELESS FACILITY VERIZON RAW LAND GREENWOOD STATION ROAD GREENWOOD, VA 22943 ALBEMARLE COUNTY</div>																																
DESIGN RECORD	<div><div>REVISIONS</div><table><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>07/28/22</td><td>REVISED EQUIPMENT</td><td>KLB</td></tr><tr><td>1</td><td>05/05/22</td><td>FINAL ZDs</td><td>KLB</td></tr><tr><td>0</td><td>03/17/22</td><td>PRELIMINARY ZDs</td><td>KLB</td></tr><tr><td>REV</td><td>DATE</td><td>DESCRIPTION</td><td>BY</td></tr></table></div>																	2	07/28/22	REVISED EQUIPMENT	KLB	1	05/05/22	FINAL ZDs	KLB	0	03/17/22	PRELIMINARY ZDs	KLB	REV	DATE	DESCRIPTION	BY
2	07/28/22	REVISED EQUIPMENT	KLB																														
1	05/05/22	FINAL ZDs	KLB																														
0	03/17/22	PRELIMINARY ZDs	KLB																														
REV	DATE	DESCRIPTION	BY																														
PROFESSIONAL STAMP	<div><div><div>COMMONWEALTH OF VIRGINIA</div><div><i>John A. Daughtrey III</i></div><div>JOHN A. DAUGHTREY III Lic. No. 0402052122 07/28/2022</div><div>PROFESSIONAL ENGINEER</div></div></div>																																
ENGINEER	<div>JOHN A. DAUGHTREY III, P.E. VA PROFESSIONAL ENGINEER LIC. #052122</div>																																
SHEET TITLE	<div>EROSION & SEDIMENT CONTROL NOTES</div>																																
SHEET NUMBER	<div>ES-2</div>																																



NOTE: ALL SILT FENCES ARE TO USE 36 INCH FABRIC AND STAKED WITH 2"x2" HARDWOOD STAKES ON 6" CENTERS

VESCH 3.05 SILT FENCE

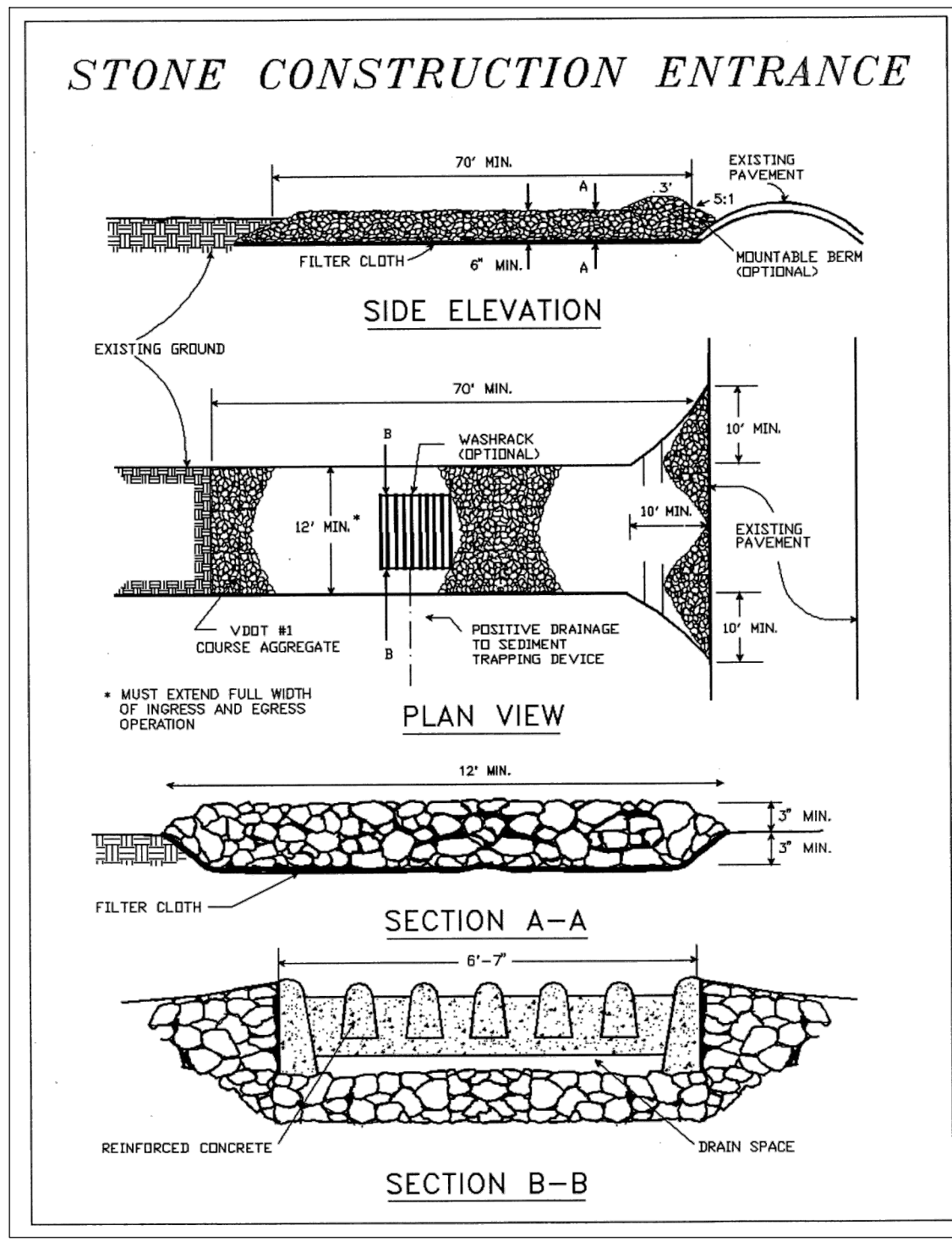
1

STANDARD FILTER FABRIC FENCE

ES-3

NTS

SF



VESCH 3.02 TEMPORARY CONSTRUCTION ENTRANCE

2

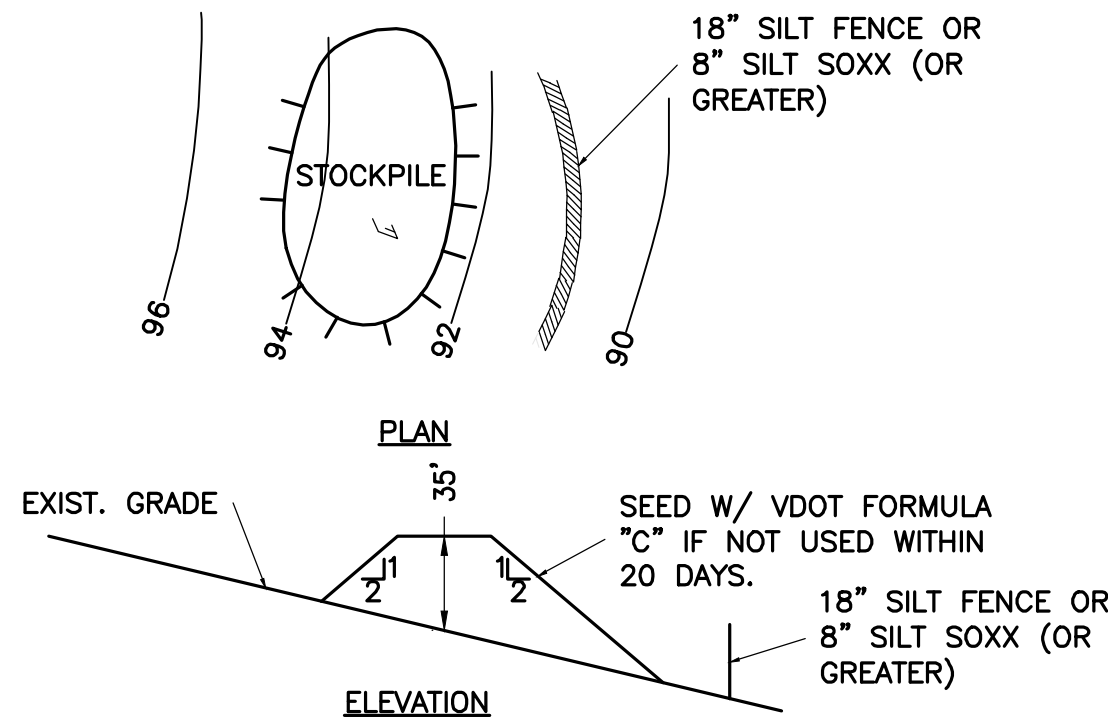
ROCK CONSTRUCTION ENTRANCE

ES-3

NTS

CE

TABLE 3.32-C SITE SPECIFIC SEEDING MIXTURES FOR APPALACHIAN/MOUNTAIN AREA	
Minimum Care Lawn	Total Lbs. Per Acre
- Commercial or Residential	200-250 lbs.
- Kentucky 31 or Turf-Type Tall Fescue	90-100%
- Improved Perennial Ryegrass *	0-10%
- Kentucky Bluegrass	0-10%
High-Maintenance Lawn	
Minimum of three (3) up to five (5) varieties of bluegrass from approved list for use in Virginia.	125 lbs.
General Slope (3:1 or less)	
- Kentucky 31 Fescue	128 lbs.
- Red Top Grass	2 lbs.
- Seasonal Nurse Crop **	20 lbs.
150 lbs.	
Low-Maintenance Slope (Steeper than 3:1)	
- Kentucky 31 Fescue	108 lbs.
- Red Top Grass	2 lbs.
- Seasonal Nurse Crop **	20 lbs.
- Crownvetch ***	150 lbs.
* Perennial Ryegrass will germinate faster and at lower soil temperatures than fescue, thereby providing cover and erosion resistance for seedbed.	
** Use seasonal nurse crop in accordance with seeding dates as stated below: March, April through May 15th Annual Rye May 16th through August 15th Foxtail Millet August 16th through September, October Annual Rye November through February Winter Rye	
*** If Flatpea is used, increase to 30 lbs./acre. All legume seed must be properly inoculated. Weeping Lovegrass may also be included in any slope or low- maintenance mixture during warmer seeding periods; add 10-20 lbs/acre in mixes.	



NOTES:

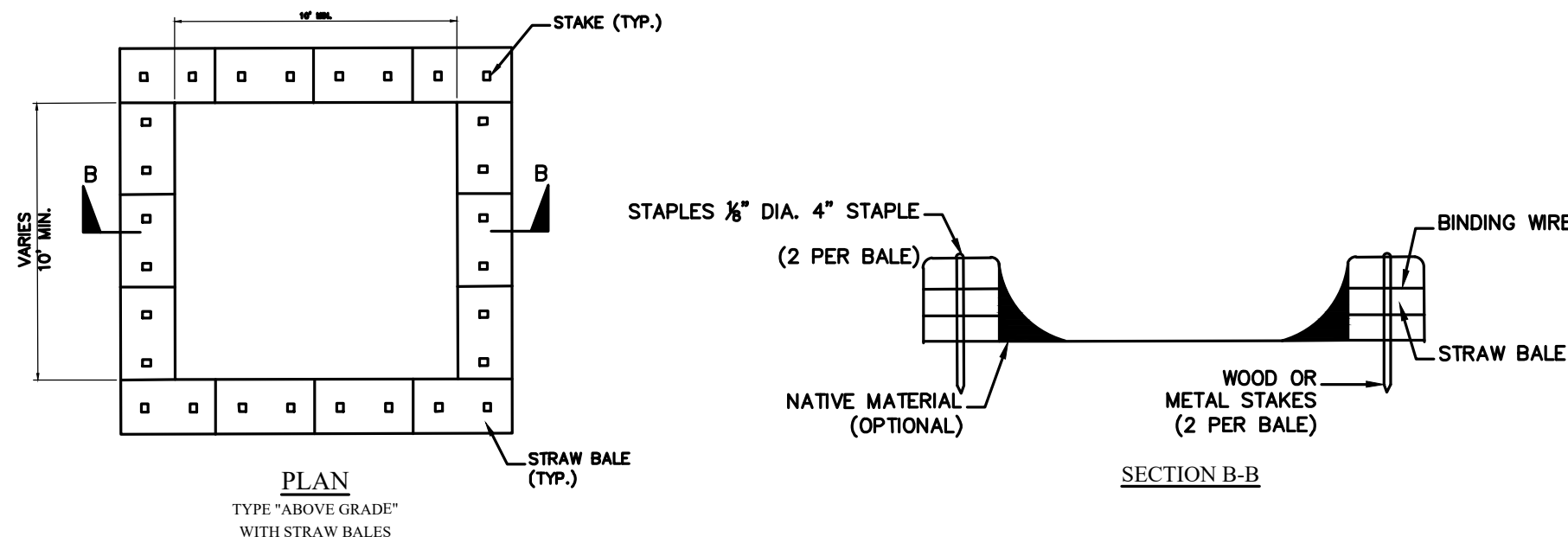
1. INSTALL SILT FENCE DOWNSLOPE OF AREA OF STOCKPILE.
2. PLACE STOCKPILE IN AREAS SHOWN ON EROSION CONTROL PLAN WITHOUT BLOCKING NATURAL DRAINAGE PATTERNS.
3. FOLLOW DIMENSIONS SHOWN ABOVE. HEIGHT SHOULD NOT EXCEED 35 FT. SIDE SLOPES SHOULD NOT BE STEEPER THAN 2(H):1(V).
4. SEED IMMEDIATELY IF MATERIAL IS NOT TO BE USED WITHIN 20 DAYS. FOLLOW "SEEDING, FERTILIZATION SCHEDULE & SPECIFICATIONS."
5. LOCATION(S) AND SIZE(S) OF SOIL STOCKPILES ARE APPROXIMATE AND SHALL BE ADJUSTED PER FIELD AND CONSTRUCTION SEQUENCE CONDITIONS. CONTRACTOR SHALL VERIFY REQUIRED SIZE(S). REQUIREMENTS FROM THE STANDARDS DETAIL MUST BE FOLLOWED FOR STOCKPILES.

4

TOPSOIL STOCKPILE AND MAINTENANCE

ES-3

NTS



NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. INSTALL CONCRETE WASHOUT SIGN (24"x24", MINIMUM) WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM A STORM DRAIN, CREEK BANK OR PERIMETER CONTROL.
4. CLEAN OUT CONCRETE WASHOUT AREA WHEN 50% FULL.
5. THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.
6. SILT FENCE SHALL BE INSTALLED AROUND PERIMETER OF CONCRETE WASHOUT AREA EXCEPT FOR THE SIDE UTILIZED FOR ACCESSING THE WASHOUT.
7. A ROCK CONSTRUCTION ENTRANCE MAY BE NECESSARY ALONG ONE SIDE OF THE WASHOUT TO PROVIDE VEHICLE ACCESS.

5

CONCRETE WASHOUT

ES-3

NTS

VESCH 3.32 PERMANENT SEEDING

3

PERMANENT SEEDING

ES-3

NTS

PS

TABLE 3.31-B ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS "QUICK REFERENCE FOR ALL REGIONS"		
Planting Dates	Species	Rate (lbs./acre)
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (<i>Lolium multi-florum</i>) & Cereal (Winter) Rye (<i>Secale cereale</i>)	50 - 100
Feb. 16 - Apr. 30	Annual Ryegrass (<i>Lolium multi-florum</i>)	60 - 100
May 1 - Aug 31	German Millet (<i>Setaria italica</i>)	50

VESCH 3.31 TEMPORARY SEEDING

6

TEMPORARY SEEDING

ES-3

NTS

TS

REVISIONS

REV	DATE	DESCRIPTION	BY
2	07/28/22	REVISED EQUIPMENT	KLB
1	05/05/22	FINAL ZDs	KLB
0	03/17/22	PRELIMINARY ZDs	KLB

