

VERIZON WIRELESS

SITE CONSTRUCTION DRAWINGS

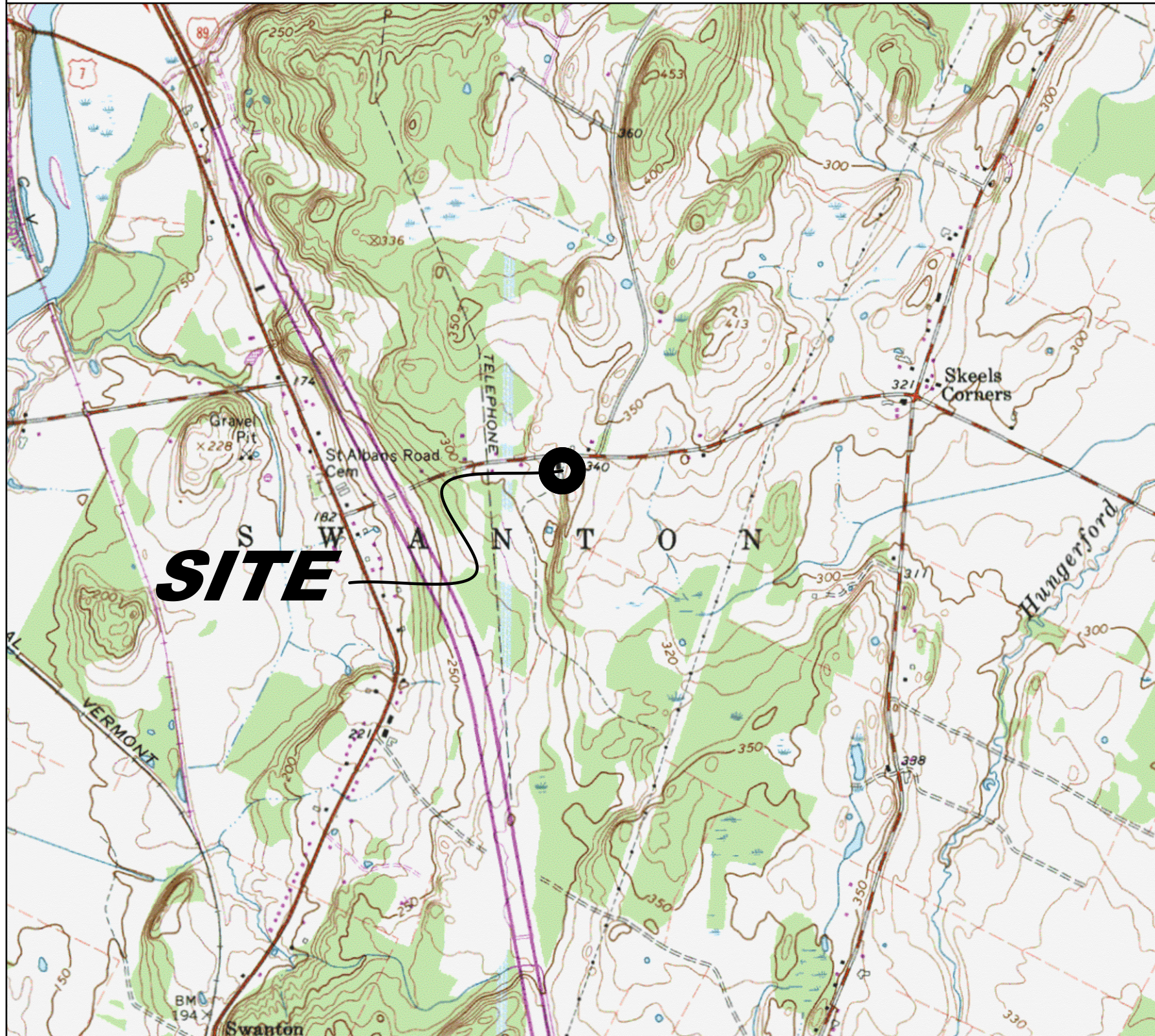
DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING
DIMENSIONS & CONDITIONS ON THE JOB SITE &
SHALL IMMEDIATELY NOTIFY THE PROJECT OWNER'S
REPRESENTATIVE IN WRITING OF DISCREPANCIES
BEFORE PROCEEDING WITH THE WORK OR BE
RESPONSIBLE FOR SAME.

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LOCATION MAP
NOT TO SCALE



SITE NAME:	SWANTON SOUTH SC1 VT		
PROPERTY OWNER:	MACHIA FAMILY HOLDINGS, LLC 1298 MACHIA ROAD SHELDON, VT 05483		
ADDRESS:	54 WOODS HILL ROAD SWANTON, VT 05488		
FAA 1A COORDINATES:	44° 53' 46.85"± N (44.896347°) 73° 04' 58.36"± W (73.082878°)		
FAA 1A ELEVATIONS:	GROUND ELEVATION:	324.0' A.M.S.L.	
	CL ANTENNA ELEVATION:	62.0' A.G.L. (386.0' A.M.S.L.)	
	TOP ANTENNA ELEVATION:	65.0' A.G.L. (389.0' A.M.S.L.)	
	TOP SILO ELEVATION:	70.0' A.G.L. (394.0' A.M.S.L.)	
APPLICANT:	BELL ATLANTIC MOBILE SYSTEMS OF ALLENTOWN, INC. AND CELLCO PARTNERSHIP C/O MSK P.O. BOX 4485, 275 COLLEGE STREET BURLINGTON, VT 05401-4485 802-861-7000		
SCOPE OF WORK:	PROPOSED ANTENNA & EQUIPMENT MODIFICATIONS TO EXISTING VERIZON WIRELESS 70' TALL SILO INSTALLATION, AT 62' A.G.L. CENTERLINE.		

NOTES

GENERAL NOTES

1. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
2. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
3. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
4. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
5. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
6. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER.
7. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
8. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
9. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
10. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 ($F_y = 36$ ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E ($F_y = 36$ ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
11. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. CONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

12. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY CONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
 13. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
 14. APPLICABLE BUILDING CODES:
 - SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF THE CONTRACT AWARD SHALL GOVERN THE DESIGN.
 - BUILDING CODE: VERMONT STATE BUILDING CODE & TIA-222, REVISION H
 - ELECTRICAL CODE: REFER TO ELECTRICAL DRAWINGS
 - LIGHTNING CODE: REFER TO ELECTRICAL DRAWINGS
- CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:
- AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;
 - AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
 - MANUAL OF STEEL CONSTRUCTION, ASD, FOURTEENTH EDITION;
 - TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-H, STRUCTURAL STANDARDS FOR STEEL
- FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ELECTRICAL & GROUNDING NOTES

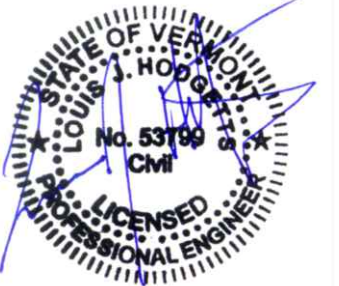
1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
3. THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.

4. GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
5. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
6. GROUNDING SHALL COMPLY WITH NEC ART. 250.
7. GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURER'S COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.
8. USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
9. ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
10. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 7 FEET OF PROPOSED EQUIPMENT OR CABINET TO MASTER GROUND BAR.
11. CONNECTIONS TO MGB SHALL BE ARRANGED IN THREE MAIN GROUPS: SURGE PRODUCERS (COAXIAL CABLE GROUND KITS, TELCO AND POWER PANEL GROUND); (GROUNDING ELECTRODE RING OR BUILDING STEEL); NON-SURGING OBJECTS (EGB GROUND IN BTS UNIT).
12. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
13. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
14. BOND ANTENNA MOUNTING BRACKETS, COAXIAL CABLE GROUND KITS, AND ALNA TO EGB PLACED NEAR THE ANTENNA LOCATION.
15. BOND ANTENNA EGB'S AND MGB TO WATER MAIN.
16. TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION.
17. BOND ANY METAL OBJECTS WITHIN 7 FEET OF PROPOSED EQUIPMENT OR CABINET TO MASTER GROUND BAR.



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PROFESSIONAL SEAL

[illegible]

PROJECT ID:
PROJECT TYPE:
LOCATION CODE:

**SWANTON
OUTH SC1 VT**

54 WOODS
HILL ROAD
WANTON, VT
05488

SHEET TITLE

TLE SHEET

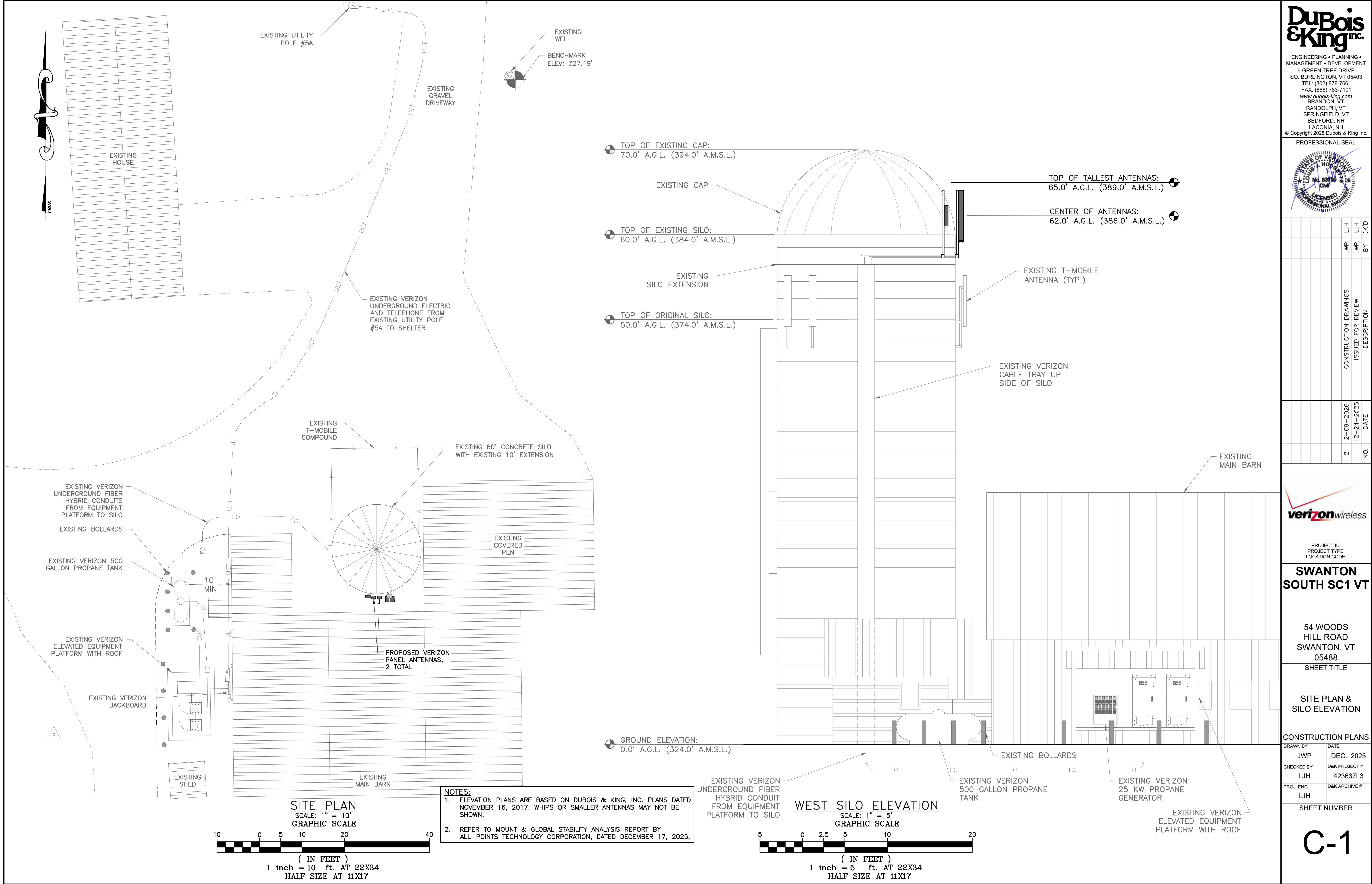
CONSTRUCTION PLANS

DRAWN BY JWP	DATE DEC. 2025
CHECKED BY LJH	D&K PROJECT # 423637L3
DESIGNED BY LJH	D&K ARCHIVE #

SHEET NUMBER

T-1

I:\A\410560X - Civil Proposals\Antenna Modifications\423637P-VZW Swanton South SC1_VT.dwg ANTMO.dwg

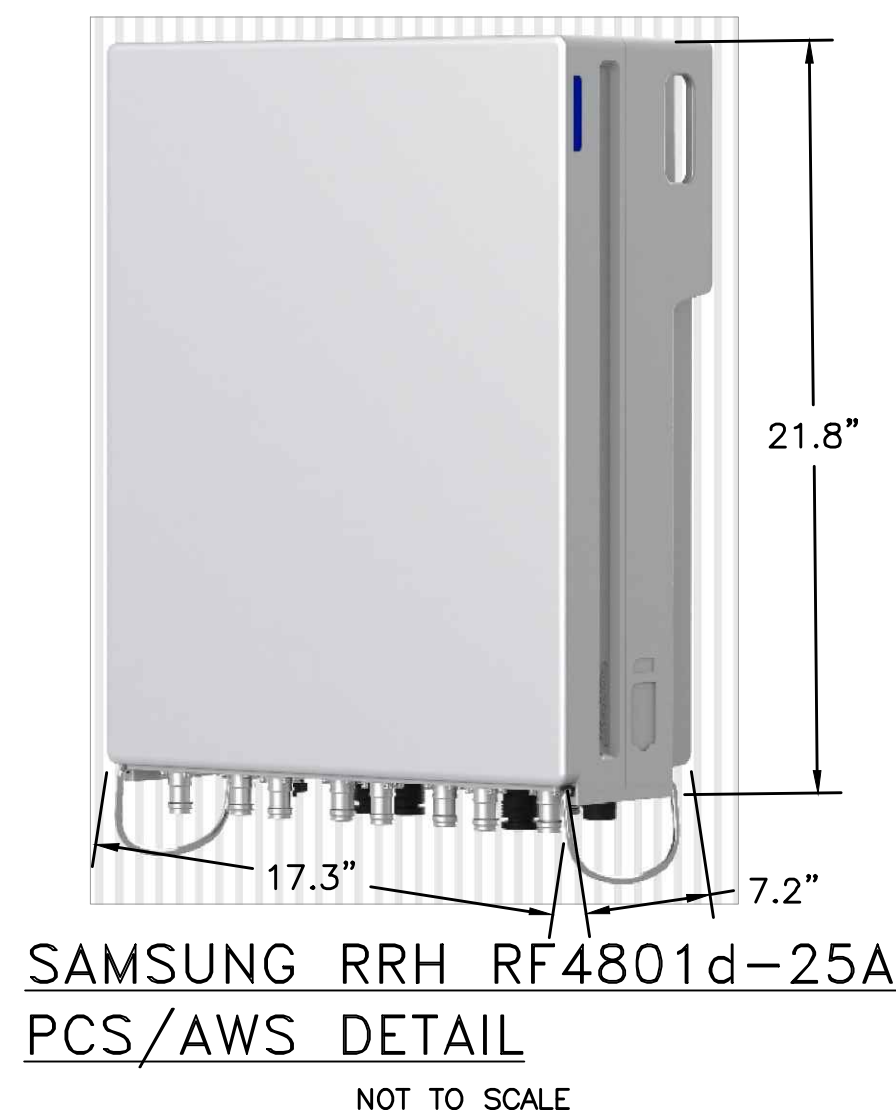
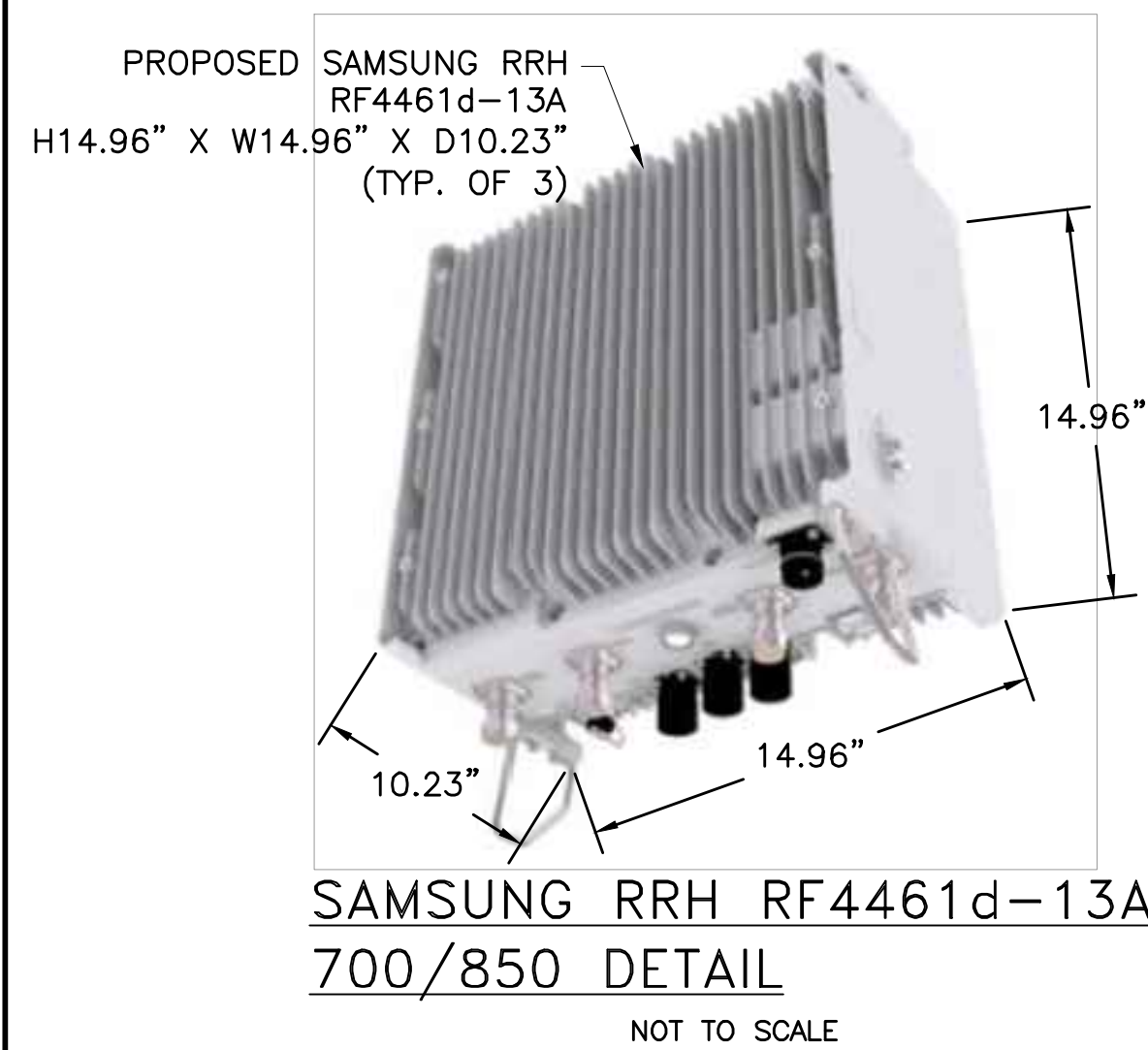


BETA SECTOR

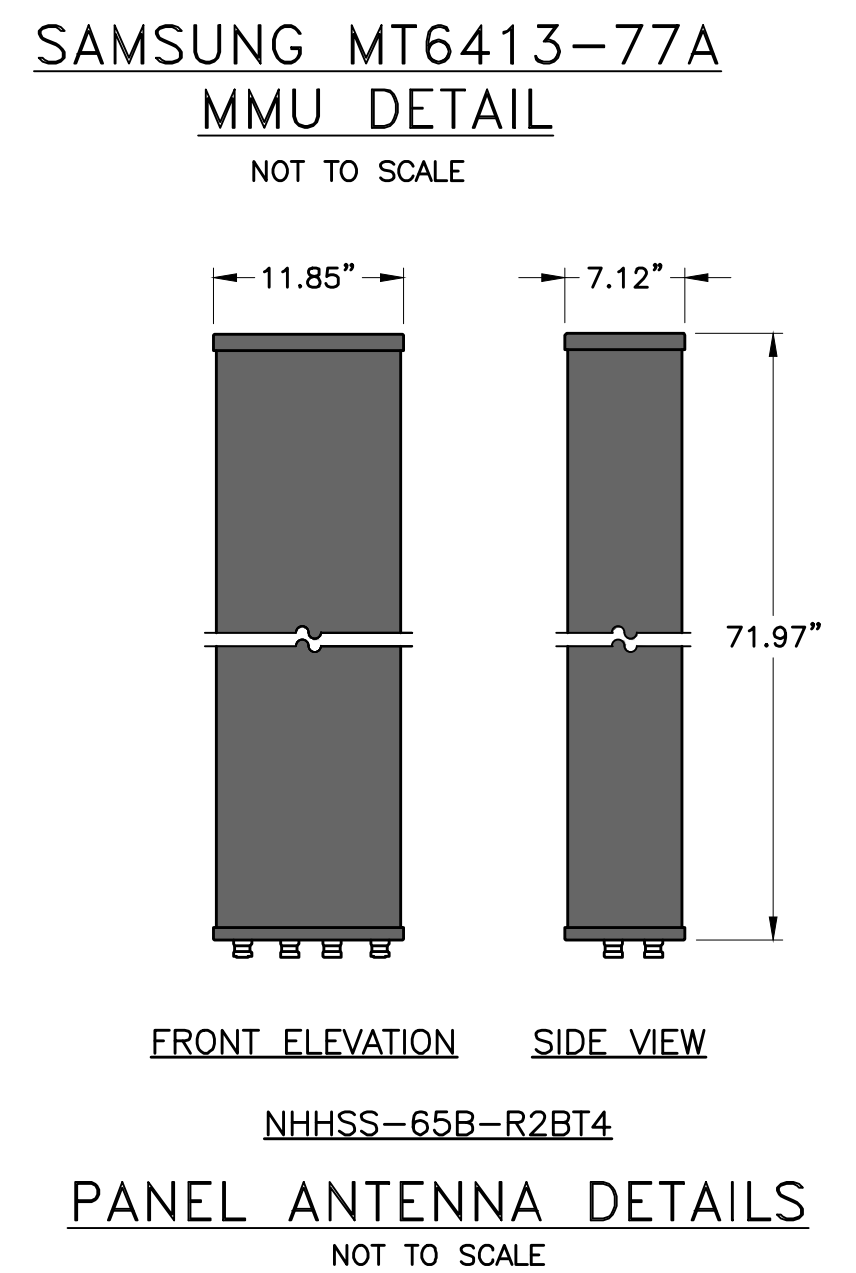
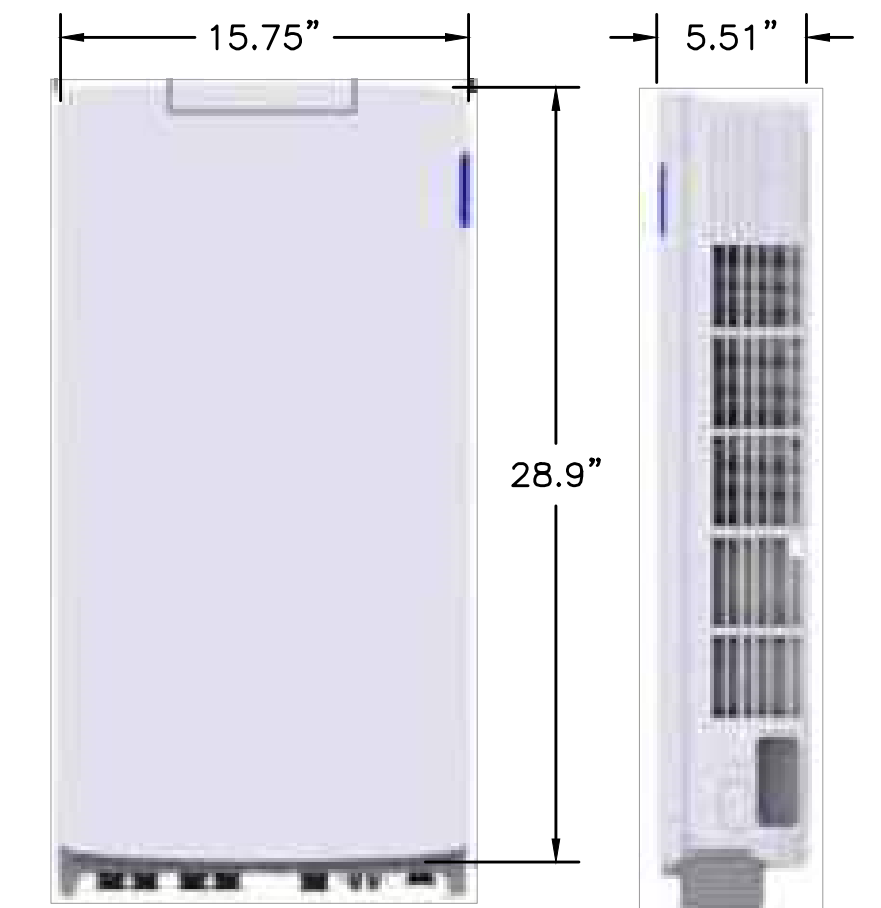
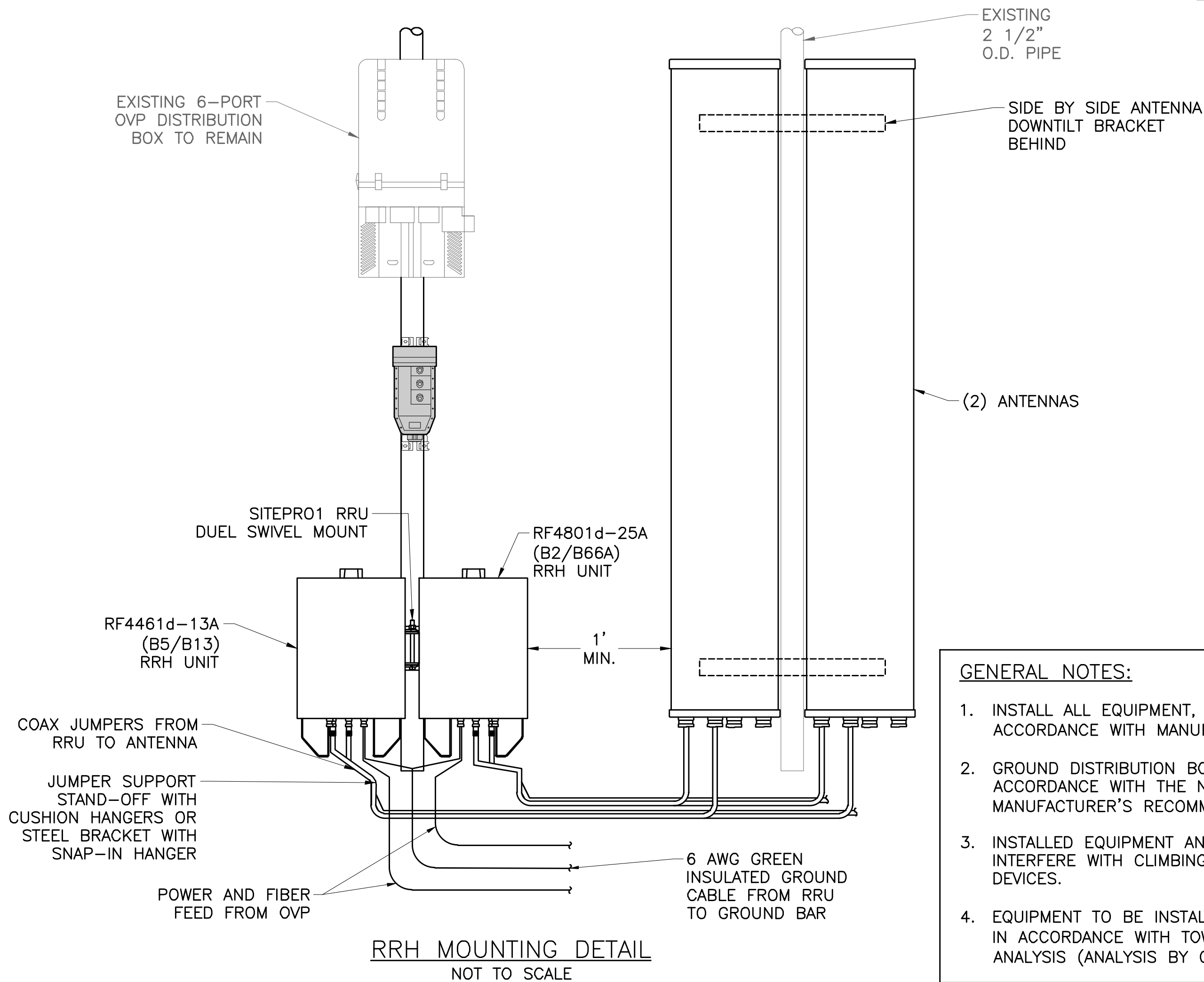
- REMOVE (2) SBNHH-1D65B PANEL ANTENNAS, AND (2) RET CONTROL CABLES.
- REMOVE (1) UHBA (B13) 4x30 RRH UNIT, AND (8) 1/2" COAX CABLES.
- INSTALL (2) NHSS-65B-R2BT4 PANEL ANTENNAS, AS SHOWN ON PLANS.
- INSTALL (1) SAMSUNG MT6413-77A MMU, AS SHOWN ON PLANS.
- INSTALL (1) POWER CABLE AND (1) FIBER CABLE FROM EXISTING 6-PORT OVP TO MMU.
- INSTALL (1) SAMSUNG RF4461d-13A RRH UNIT, AS SHOWN ON PLANS.
- INSTALL (1) POWER CABLE AND (1) FIBER CABLE FROM EXISTING 6-PORT OVP TO 700/850 RRH UNIT.
- INSTALL (1) SAMSUNG RF4801d-25A, AS SHOWN ON PLANS.
- INSTALL (1) 3x6 NGOVP HYBRID CABLE.
- INSTALL (1) 3x6 NGOVP BOX.

DESIGN SHOWN HEREIN IS BASED ON RFDS PROVIDED BY VERIZON WIRELESS DATED 9-26-2025.

Existing/Proposed Antenna Array Configuration					
Sector	Position	Status	Equipment Model	Elevation	Azimuth
Beta (B)	1	(P) – NEW	2.5" Pipe Mount	59.0–65.0	–
Beta (B)	1	(P) – NEW	Samsung MMU (MT6413–77A)	62.0 (Center)	175°
Beta (B)	2	(E) – To Remain	2.5" Pipe Mount	59.0–65.0	–
Beta (B)	3	(E) – To Remain	2.5" Pipe to Pipe Standoff	59.0–65.0	–
Beta (B)	2	(R) – To Be Removed	Commscope Panel (SBNHH–1D65B)	62.0 (Center)	180°
Beta (B)	2	(R) – To Be Removed	Commscope Panel (SBNHH–1D65B)	62.0 (Center)	180°
Beta (B)	2	(P) – NEW	CommScope Panel (NHHS–65B–R2BT4)	62.0 (Center)	180°
Beta (B)	2	(P) – NEW	CommScope Panel (NHHS–65B–R2BT4)	62.0 (Center)	180°
Beta (B)	2	(E) – To Remain	Side by Side Mount	–	–
Beta (B)	3	(E) – To Remain	2.5" Pipe Mount	59.0–65.0	–
Beta (B)	3	(E) – To Remain	6 Port OVP (RVZDC–3315–PF–48)	64.0 (Center)	–
Beta (B)	3	(R) – To Be Removed	ALU B13 RRH 4x30	61.0 (Center)	–
Beta (B)	3	(P) – NEW	NGOVP3	62.5 (Center)	–
Beta (B)	3	(P) – NEW	SitePro1 RRU Swivel Mount	61.0 (Center)	–
Beta (B)	3	(P) – NEW	Samsung AWS/PCS RRH (RF4801d–25A)	61.0 (Center)	–
Beta (B)	3	(P) – NEW	Samsung 700/850 RRH (RF4461d–13A)	61.0 (Center)	–
	Silo Face	(P) – NEW	3x6 Hybrid		–
	Silo Face	(E) – To Remain	6x12 Hybrid		–
	Silo Face	(E) – To Remain	12" Cable Tray		–



ANTENNA & EQUIPMENT SUMMARY								
EXISTING								
DESCRIPTION	HEIGHT (in)	WIDTH (in)	SURFACE AREA (sq. ft.)	WEIGHT OF UNIT (lbs)	NUMBER OF UNITS	TOTAL SURFACE AREA (sq. ft.)	EXPOSED SURFACE AREA (sq. ft.)	TOTAL WEIGHT (lbs)
ANTENNA: SBNHH-1D65B	72.90	11.90	6.02	54.50	2	12.04	12.04	109.00
RRH: UHBA (B13) 4x30	21.60	12.00	1.80	67.20	1	1.80	1.80	67.20
6-PORT OVP DISTRIBUTION BOX	19.18	15.73	2.10	26.90	1	2.10	2.10	26.90
BSAMNT-SBS-1-2 SIDE-BY-SIDE ANTENNA MOUNT	N/A	N/A	N/A	25.40	1	N/A	N/A	25.40
(8) ½" FOAM COAX JUMPERS, (1) 6x12 HYBRID CABLE, (2) RET CONTROL CABLES						TOTAL =	15.94	228.50
PROPOSED								
ANTENNA: NHHSS-65B-R2BT4	71.97	11.85	5.92	64.16	2	11.84	11.84	128.32
MMU: SAMSUNG MT6413-77A	28.90	15.75	3.16	66.82	1	3.16	3.16	66.82
RRH: SAMSUNG RF4461d-13A (B5/B13) 700/850	14.96	14.96	1.55	79.10	1	1.55	1.55	79.10
RRH: SAMSUNG RF4801d-25A (B2/B66A) PCS/AWS	21.80	17.30	2.62	98.34	1	2.62	2.62	98.34
3x6 NGOVP	12.43	9.65	0.83	15.87	1	0.83	0.83	15.87
6-PORT OVP DISTRIBUTION BOX	19.18	15.73	2.10	26.90	1	2.10	2.10	26.90
BSAMNT-SBS-1-2 SIDE-BY-SIDE ANTENNA MOUNT	N/A	N/A	N/A	25.40	1	N/A	N/A	25.40
(12) ½" FOAM COAX JUMPERS, (1) 6x12 HYBRID CABLE, (3) 1x4 FIBER JUMPERS, (1) 3x6 NGOVP HYBRID CABLE						TOTAL =	22.10	440.75



1. INSTALL ALL EQUIPMENT, MOUNTING BRACKETS, AND HARDWARE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. GROUND DISTRIBUTION BOXES, MOUNTING PIPES, AND RRH'S IN ACCORDANCE WITH THE NEC ARTICLE 250 & THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
3. INSTALLED EQUIPMENT AND MOUNTING BRACKETS SHALL NOT INTERFERE WITH CLIMBING ACCESS NOR ANY INSTALLED SAFETY DEVICES.
4. EQUIPMENT TO BE INSTALLED AT VERIZON WIRELESS' RAD CENTER IN ACCORDANCE WITH TOWER ANALYSIS/ROOFTOP STRUCTURAL ANALYSIS (ANALYSIS BY OTHERS).