





<div>1. FOR THE PURPOSES OF THESE CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:</div> <div><div>OWNER</div><div>ENGINEER</div><div>CONTRACTOR</div></div> <div><div>–</div><div>–</div><div>–</div></div> <div><div>T–MOBILE SOUTH LLC</div><div>SMW ENGINEERING GROUP, INC.</div><div>GENERAL CONTRACTOR (CONSTRUCTION)</div></div>		<div>2. PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR SHALL VISIT THE JOB SITE IN ORDER TO (1) VERIFY ALL EXISTING CONDITIONS, (2) CONFIRM WHETHER ALL DIMENSIONS ARE AS SHOWN ON THE PLANS AND (3) CONFIRM WHETHER THE WORK MAY BE ACCOMPLISHED AS SHOWN. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER.</div> <div>3. A 20–FOOT HORIZONTAL CLEARANCE DISTANCE SHALL BE MAINTAINED FROM ALL EXISTING POWER LINES.</div> <div>4. THE CONTRACTOR’S USE OF A CONSTRUCTION STAGING AREA SHALL BE COORDINATED WITH THE OWNER WELL IN ADVANCE OF THE CONSTRUCTION START DATE.</div> <div>5. LABOR, MATERIAL, TOOLS, EQUIPMENT, TRANSPORTATION AND TEMPORARY POWER SERVICES NECESSARY FOR AND INCIDENTAL TO COMPLETION OF ALL WORK SHALL BE PROVIDED AS INDICATED ON THE DRAWINGS AND/OR AS SPECIFIED HEREIN. LABOR AND MATERIALS SHALL BE FURNISHED AS REQUIRED FOR COMPLETE SYSTEMS, INCLUDING ALL ELEMENTS OBVIOUSLY OR REASONABLY INCIDENTAL TO A COMPLETE INSTALLATION, WHETHER OR NOT SPECIFICALLY INDICATED ON THE PLANS.</div> <div>6. FOR TASKS REQUIRED TO BE PERFORMED BUT NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOT START WORK ON SUCH TASKS WITHOUT HAVING RECEIVED WRITTEN AUTHORIZATION FROM THE CONSTRUCTION MANAGER TO PROCEED.</div> <div>7. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT UNLESS OTHERWISE INDICATED BY DIMENSIONS OR DETAILS. EXACT EQUIPMENT LOCATIONS MAY BE MODIFIED AS REQUIRED BY ACTUAL FIELD CONDITIONS. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE ENGINEER AND THE CONSTRUCTION MANAGER.</div> <div>8. THE CONTRACTOR SHALL OBTAIN, PAY FOR AND DELIVER ALL REQUIRED PERMITS, CERTIFICATES OF INSPECTION, INCLUDING UTILITY CONNECTION FEES, ETC., REQUIRED BY THE AUTHORITIES HAVING JURISDICTION AND SHALL DELIVER SUCH DOCUMENTS TO THE OWNER PRIOR TO FINAL ACCEPTANCE OF THE WORK.</div> <div>9. THE CONTRACTOR’S OPERATIONS SHALL BE CONFINED TO AREAS OF NEW CONSTRUCTION.</div> <div>10. ALL NECESSARY PROVISIONS SHALL BE MADE TO PROTECT EXISTING IMPROVEMENTS, LANDSCAPING, PAVING, CURBS, GALVANIZED SURFACES, ETC, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO SAME RESULTING FROM THE CONSTRUCTION WORK. ALL DISTURBED AND DAMAGED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR BETTER UPON COMPLETION OF ALL WORK TO THE SATISFACTION OF THE CONSTRUCTION MANAGER.</div> <div>11. THE FOLLOWING CLEANUP TASKS SHALL BE PERFORMED AS FOLLOWS: (1) ON A DAILY BASIS, KEEP THE GENERAL AREA CLEAN AND HAZARD FREE, REMOVING ALL WASTE, DEBRIS AND TRASH FROM THE SITE AND DISPOSING OF SAME IN A LEGAL MANNER. (2) UPON COMPLETION, LEAVE THE PREMISES IN A CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.</div> <div>12. ALL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER’S RECOMMENDATIONS EXCEPT WHERE IT IS SPECIFICALLY INDICATED OTHERWISE IN THE CONTRACT DOCUMENTS OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.</div> <div>13. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY HAVING JURISDICTION OVER THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AS WELL AS LOCAL AND STATE CODES, ORDINANCES AND APPLICABLE REGULATIONS.</div> <div>14. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AT ALL TIMES, USING THE BEST SKILLS AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL OF THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK, INCLUDING CONTACT AND COORDINATION WITH THE CONSTRUCTION MANAGER AND WITH THE OWNER’S AUTHORIZED REPRESENTATIVE.</div> <div>15. WITHIN TEN (10) WORKING DAYS AFTER PROJECT COMPLETION, THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF AS–BUILT DRAWINGS, SWEEP TEST, CYLINDER TESTS, LIEN RELEASES, AND OTHER CLOSEOUT DOCUMENTATION AS REQUIRED BY THE OWNER. ALL SYSTEMS SHALL BE COMPLETELY ASSEMBLED, TESTED, ADJUSTED AND DEMONSTRATED TO BE READY FOR OPERATION PRIOR TO THE OWNER’S ACCEPTANCE.</div>		<div>1. THE APPROPRIATE UTILITY LOCATING SERVICES SHALL BE CONTACTED PRIOR TO THE START OF CONSTRUCTION IN ORDER TO VERIFY THE EXACT LOCATION OF ALL EXISTING UNDERGROUND UTILITIES.</div> <div>2. THE INSTALLATION OF NEW UTILITIES SHALL BE COORDINATED WITH LOCAL AUTHORITIES.</div> <div>3. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES. WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SUCH UTILITIES SHALL BE RELOCATED AS DIRECTED BY THE CONSTRUCTION MANAGER. EXTREME CAUTION SHALL BE USED WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES.</div> <div>4. RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.</div> <div>5. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES THAT INTERFERE WITH THE EXECUTION OF THE WORK SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS THAT WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF THE LANDLORD AND/OR LOCAL UTILITIES.</div> <div>6. DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION SHALL BE MINIMIZED.</div> <div>7. ANY AREAS OF THE CONSTRUCTION SITE DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE. SUCH GRADING SHALL CAUSE SURFACE WATER TO FLOW AWAY FROM ANY EQUIPMENT SHELTER AND TOWER AREAS AND THE SOIL SHALL BE STABILIZED TO PREVENT EROSION. EROSION CONTROL MEASURES,IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.</div> <div>8. THE SUB–GRADE SHALL BE COMPACTED AND BROUGHT TO A UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.</div> <div>9. BACKFILL SHALL CONSIST OF CLEAN SAND FILL APPROVED FOR USE BY THE ENGINEER. NO UNAPPROVED MATERIAL WILL BE ALLOWED. CLEAN SAND FILL SHALL BE FREE OF ALL ROOTS, BOULDERS, OR OTHER DELETERIOUS MATERIAL.</div> <div>10. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO EQUAL TO OR BETTER CONDITION THAN ORIGINAL.</div> <div>11. SITE SIGNAGE SHALL BE PROVIDED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS FOR SUCH SIGNAGE AS MAY BE CONTAINED IN THESE DRAWINGS.</div>	
GENERAL NOTES		1	STRUCTURAL STEEL NOTES	3	

REV	DATE	DESCRIPTION
A	08/19/24	PRELIM PLANS
0	08/26/24	FINAL PLANS
PROJECT NO.:		17–5641.1
DRAWN BY:		SAL
PROJECT MANAGER:		D. REVELS
CHECKED BY:		D. REVELS

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12979 N. TELECOM PARKWAY  
TEMPLE TERRACE, FLORIDA 33637  
(813) 615–1422

CERTIFICATE OF AUTHORIZATION 33693



7025 A.C. SKINNER PARKWAY  
JACKSONVILLE, FL 32256

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JEREMY D. SHARIT PE FL LIC 75137

WHITE SPRINGS

9JK0344B

12343 SOUTHWEST US HIGHWAY 27  
FORT WHITE, FLORIDA 32038  
(COLUMBIA COUNTY)

SHEET NAME

NOTES

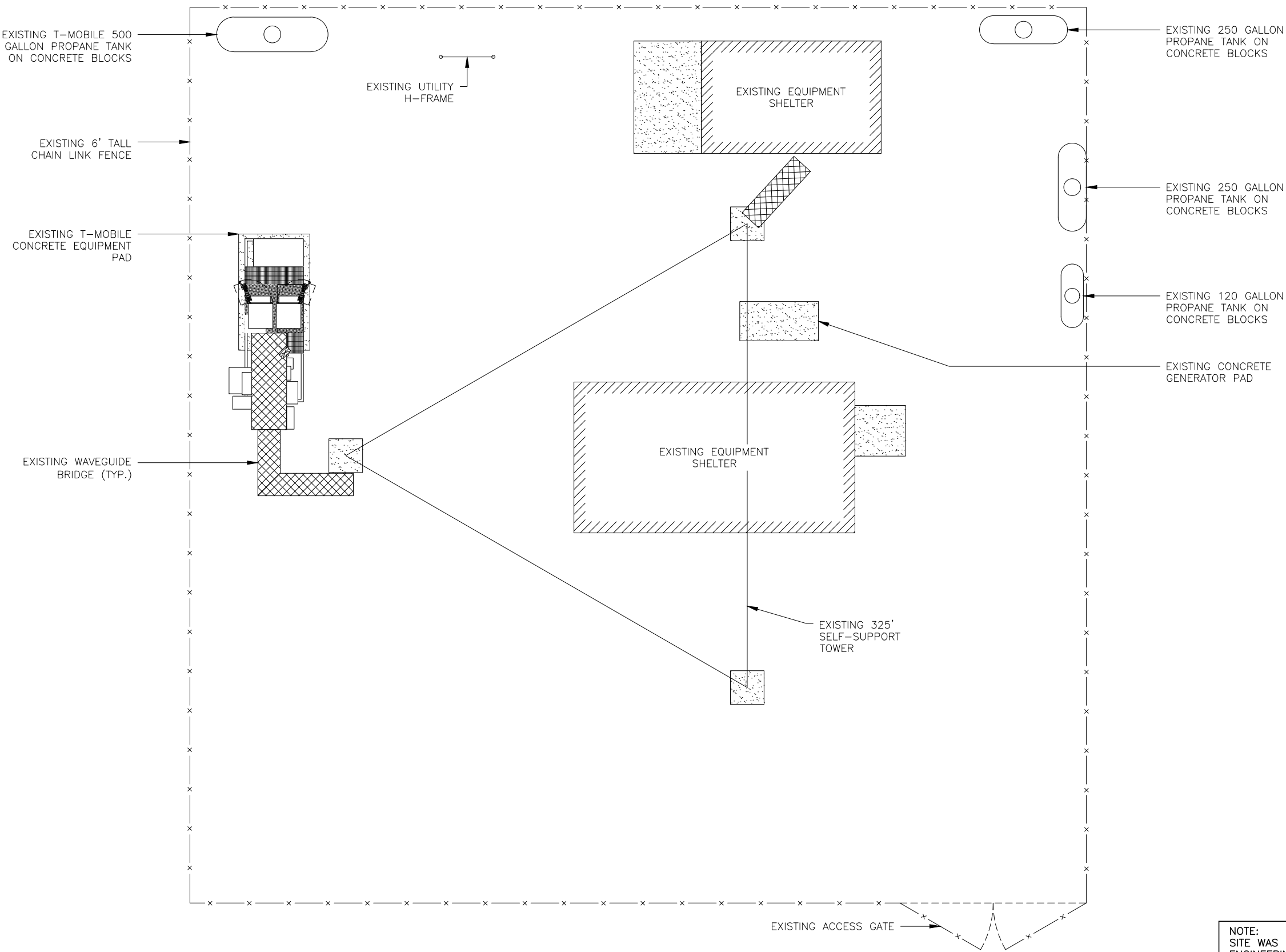
SHEET NUMBER

T2



10'0'5'10'

FOR 24"x36" DRAWINGS  
GRAPHIC SCALE: 1" = 5'  
FOR 11"x17" DRAWINGS  
GRAPHIC SCALE: 1" = 10'



NOTE:  
SITE WAS NOT WALKED BY SMW  
ENGINEERING GROUP, INC. ALL  
INFORMATION SHOWN ON COMPOUND  
DETAIL REFLECTS DATA PROVIDED TO  
SMW ENGINEERING GROUP, INC. BY  
T-MOBILE.

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SHEET NAME

COMPOUND DETAIL

SHEET NUMBER

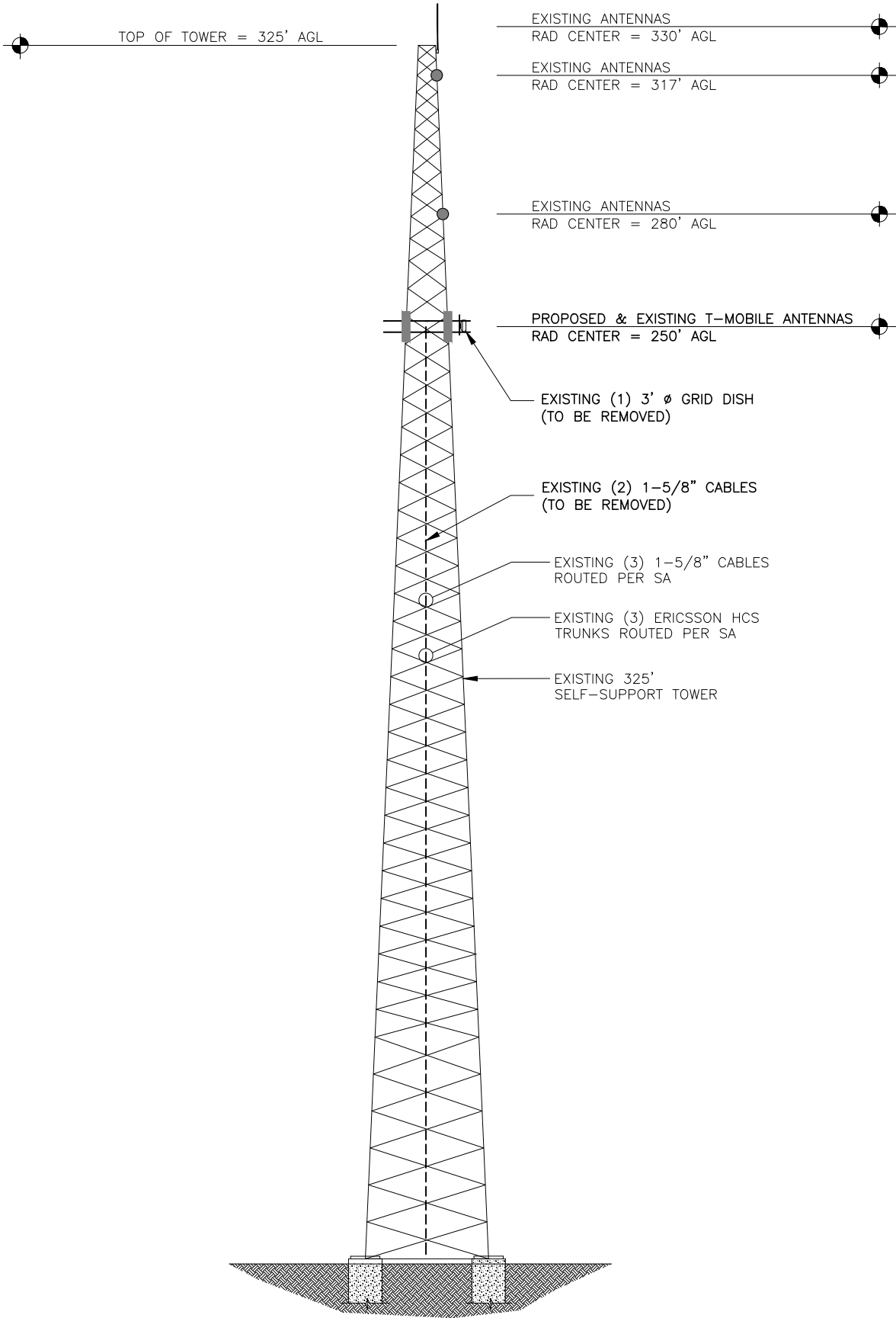
C1





30'0'15'30'

FOR 24"x36" DRAWINGS  
GRAPHIC SCALE: 1" = 15'  
FOR 11"x17" DRAWINGS  
GRAPHIC SCALE: 1" = 30'



- NOTES:
1. FOR ANTENNA MOUNTING AND COAX ROUTING INFORMATION, SEE STRUCTURAL ANALYSIS BY OTHERS.

2. INFORMATION FOR TOWER ELEVATION PROVIDED BY T-MOBILE.

3. ANTENNA HEIGHTS/INFORMATION TAKEN FROM STRUCTURAL ANALYSIS PERFORMED BY TOWER ENGINEERING PROFESSIONALS, DATED 08-02-2024.

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(COLUMBIA COUNTY)

SHEET NAME

TOWER ELEVATION

SHEET NUMBER

C2



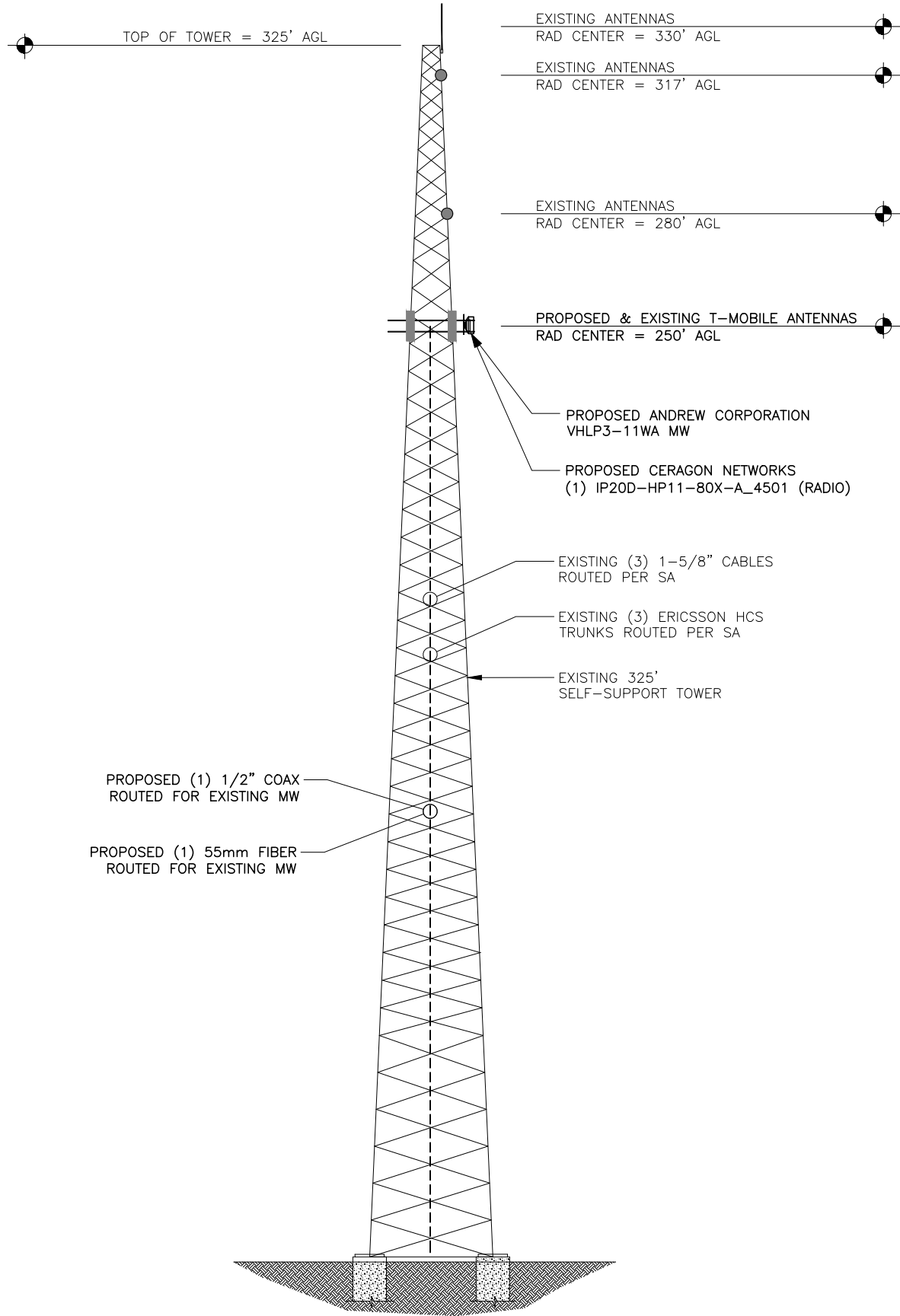
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SNW

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T-Mobile

stick together

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WHITE SPRINGS

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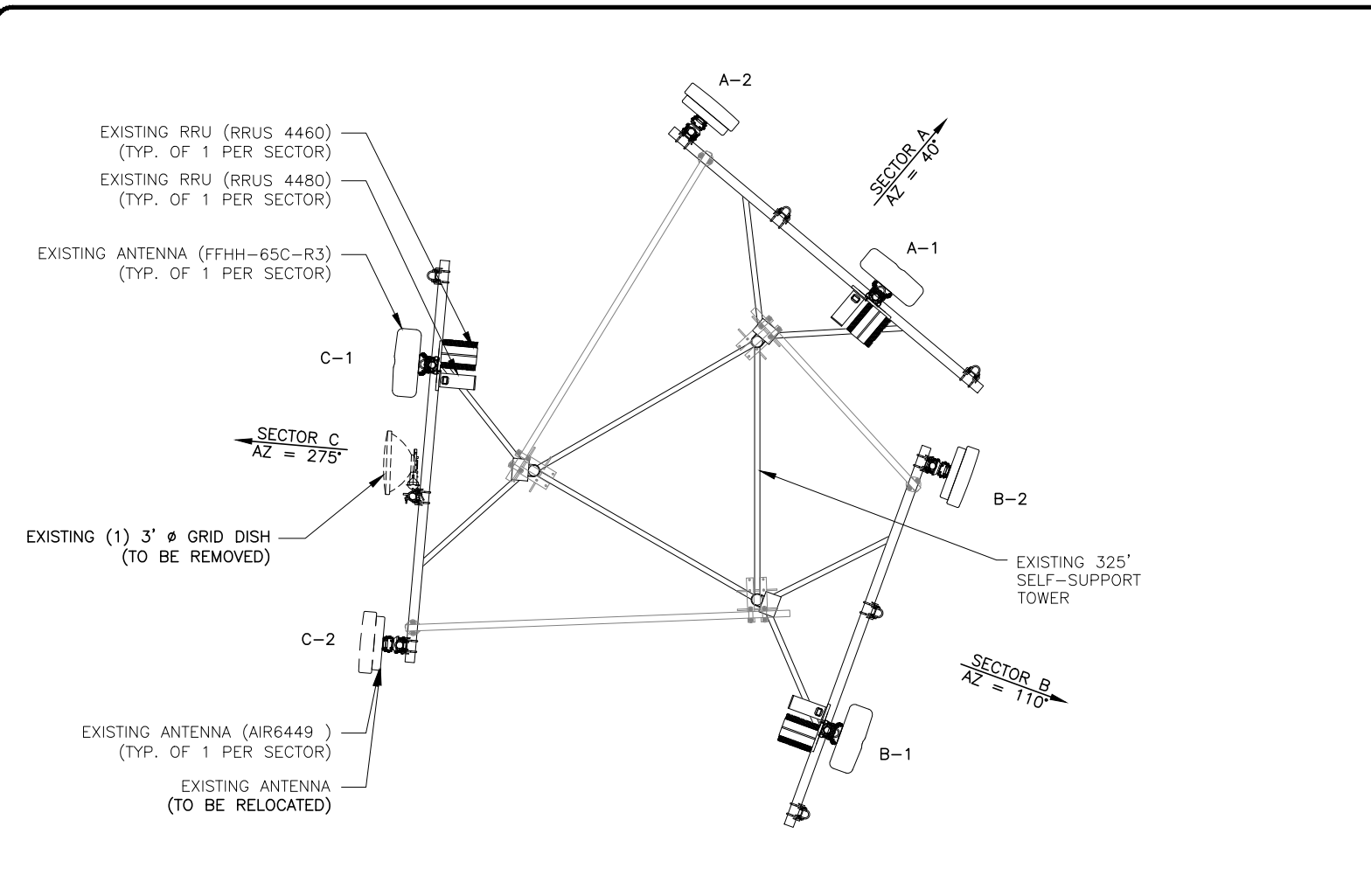
SHEET NAME

TOWER ELEVATION

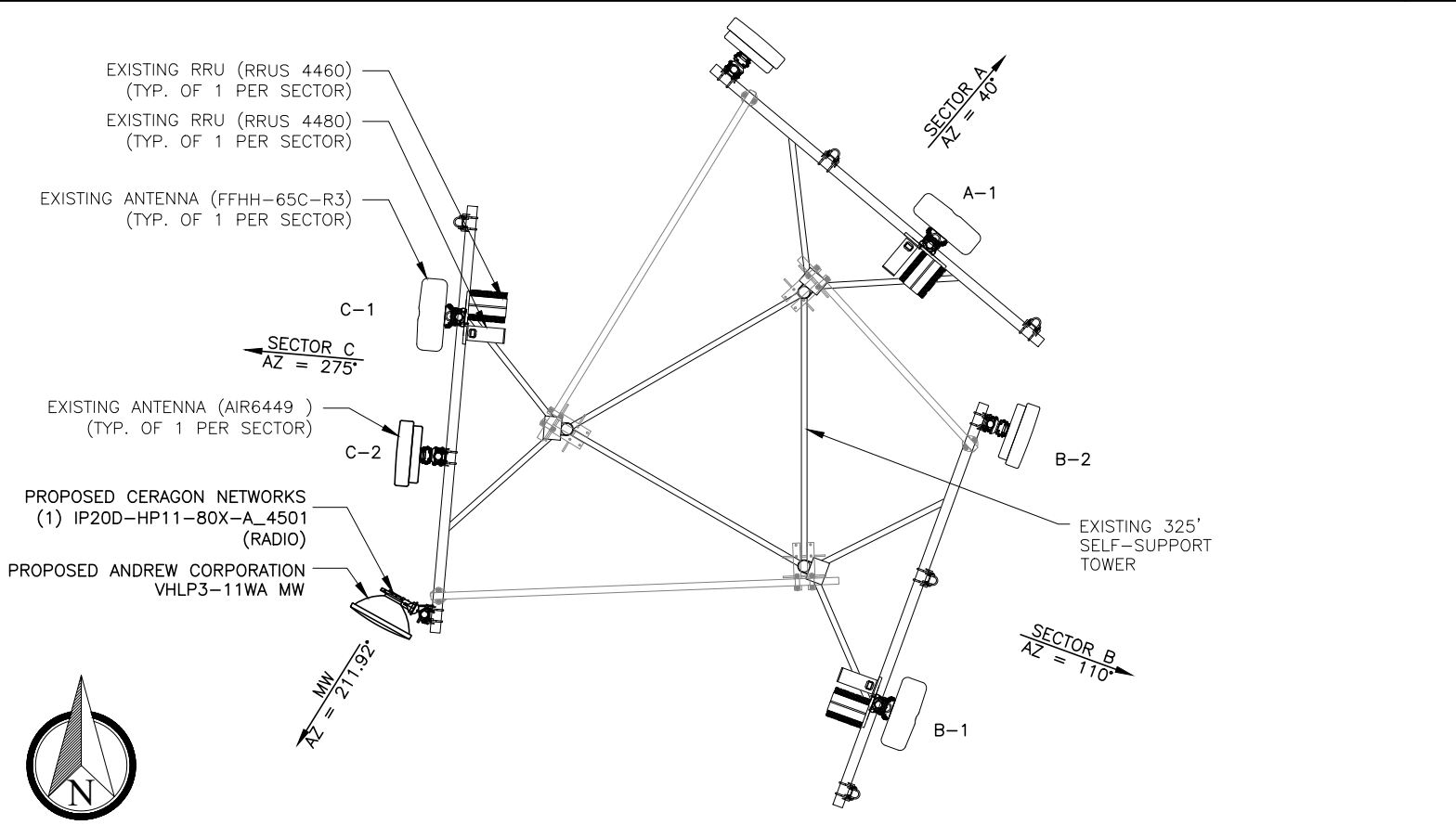
SHEET NUMBER

C2.1





EXISTING MW LAYOUT (RAD 250') NOT TO SCALE 1



PROPOSED MW LAYOUT (RAD 250') NOT TO SCALE 2

EXISTING T-MOBILE TOWER INVENTORY AT 250'	
# OF EXISTING ANTENNAS:	(3) FFHH-65C-R3 (NO CHANGES) (3) Ericsson AIR6449 (NO CHANGES)
# OF EXISTING RRUS:	(3) 4480 RRUS (NO CHANGES) (3) 4460 RRUS (NO CHANGES)
# OF EXISTING CABLES:	(3) 1.996" HYBRID CABLE (NO CHANGES) (1) 1-5/8"CABLE (NO CHANGES)

EXISTING T-MOBILE TOWER INVENTORY AT 250' (TO BE REMOVED)	
# OF EXISTING ANTENNAS:	3' Ø GRID DISH (TO BE REMOVED)
# OF EXISTING RRUS:	
# OF EXISTING CABLES:	(2) COAX CABLE (TO BE REMOVED)

PROPOSED T-MOBILE TOWER INVENTORY AT 250'	
# OF ANTENNAS:	(1) ANDREW CORPORATION VHLP3-11WA MW
# OF RRUS:	(1) CERAGON IP20 RADIO
# OF CABLES:	(1) ½" COAX CABLE (1) 55MM FIBER CABLE

ANTENNA INFORMATION 3

REV	DATE	DESCRIPTION
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0	08/26/24	FINAL PLANS

PROJECT NO.: 17-5641.1	
DRAWN BY: SAL	
PROJECT MANAGER: D. REVELS	
CHECKED BY: D. REVELS	

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9JK0344B

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FORT WHITE, FLORIDA 32038  
(COLUMBIA COUNTY)

SHEET NAME

ANTENNA LAYOUT  
& ANTENNA  
INFORMATION

SHEET NUMBER

C3



Transmission details		
SITE ID:	9JK2455S	9JK0344B
[CLUSTER_ID_LABEL]:	[CLUSTER_ID_A]	[CLUSTER_ID_B]
[CALL_SIGN_LABEL]:	[CALL_SIGN_A]	[CALL_SIGN_B]
ASR #:		
AAV_CONTRACT_ID:	WST150	WST185-
AAV_CONTRACT_STATUS:	Selected	Selected
Ethernet Installed:	Ethernet	Ethernet
Latitude:	29-51-26.7 N	29-57- 8.6 N
Longitude:	82-50-49.6 W	82-46-45.3 W
Azimuth (deg):	31.89 Deg	211.92 Deg
Vertical angle (deg):	0.08 Down	0.01 Down
Elevation:	65.62 ft	39.37 ft
Antenna model:	VHLP3-11WA	VHLP3-11WA
Antenna manufacturer:	ANDREW CORPORATION	ANDREW CORPORATION
Antenna Id:	220	220
Antenna gain (dBi):	38.50 dBi	38.50 dBi
Antenna diameter:	2.95 ft	2.95 ft
Antenna CL:	248.00 ft AGL	250.00 ft AGL
Diversity Antenna model:		
Diversity Antenna manufacturer:		
Diversity Antenna Id:		
Diversity Antenna gain (dBi):		
Diversity Antenna diameter:		
Diversity Antenna CL:		
Branch Loss Tx/Rx (dB):	1.00/1.00	1.00/1.00
Attenuator Common/Tx/Rx (dB):		
Waveguide #1 Model, Len, Loss(dB):		
Waveguide #2 Model, Len, Loss(dB):		
Waveguide #3 Model, Len, Loss(dB):		

Total Waveguide Loss (dB):		
Other Losses (dB):	0.00	0.00
Frequency (GHz):	11.00 GHz	
Path length:	7.71 mi	
Free space loss (dB):	135.15 dB	
Atmospheric absorption loss (dB):	0.18 dB	
Obstruction Loss (dB):	0.00 dB (oLOS)	
Field margin (dB):	1.00 dB	
Net path loss (dB):	60.33 dB	60.33 dB
Configuration:	2+0/DP/DM/OMT	2+0/DP/DM/OMT
Radio model:	IP20D-HP11-80X-A_4501	IP20D-HP11-80X-A_4501
Radio manufacturer:	Ceragon Networks	Ceragon Networks
Radio Id:	754	754
Frequency Plan: Frequency (MHz):	High: N/A	Low: N/A
Polarization:	N/A	N/A
Emission designator:	80M0D7W	80M0D7W
Climatic factor:	1.00	
Terrain roughness factor:	4.00	
Average annual temperature:	68.26 degF	
Design Path Polarity:	Vertical	
Rain region:	Jacksonville, Florida	
0.01% Rain Rate:	72.9 mm/hr	
Passive Repeaters		
Antenna model:		
Antenna manufacturer:		
Antenna height:		

Modulation / Throughput	Tx Power A/B (dBm)		EIRP A/B (dBm)		Recelve Signal A/B (dBm)		Composite Fade Margin A/B (dB)		Radio Threshold/ ACM Drop Level A/B (dBm)	
BPSK 67.00 Mbps	36.00	36.00	73.50	73.50	-24.33	-24.33	60.97	60.97	-86.30	-86.30

4QAM 136.00 Mbps	36.00	36.00	73.50	73.50	-24.33	-24.33	55.17	55.17	-80.50	-80.50
8QAM 195.00 Mbps	36.00	36.00	73.50	73.50	-24.33	-24.33	51.47	51.47	-76.80	-76.80
16QAM 279.00 Mbps	35.00	35.00	72.50	72.50	-25.33	-25.33	47.47	47.47	-73.80	-73.80
32QAM 368.00 Mbps	35.00	35.00	72.50	72.50	-25.33	-25.33	44.07	44.07	-70.40	-70.40
64QAM 451.00 Mbps	34.00	34.00	71.50	71.50	-26.33	-26.33	40.17	40.17	-67.50	-67.50
128QAM 533.00 Mbps	33.00	33.00	70.50	70.50	-27.33	-27.33	36.17	36.17	-64.50	-64.50
256QAM 614.00 Mbps	32.00	32.00	69.50	69.50	-28.33	-28.33	32.47	32.47	-61.80	-61.80
512QAM 675.00 Mbps	32.00	32.00	69.50	69.50	-28.33	-28.33	29.77	29.77	-59.10	-59.10
1KLQAM 735.00 Mbps	31.00	31.00	68.50	68.50	-29.33	-29.33	25.57	25.57	-55.90	-55.90
1KHQAM 780.00 Mbps	31.00	31.00	68.50	68.50	-29.33	-29.33	25.17	25.17	-55.50	-55.50
2KQAM 826.00 Mbps	31.00	31.00	68.50	68.50	-29.33	-29.33	22.27	22.27	-52.60	-52.60

Modulation/Throughput	Worst Month Multipath		Worst Month Rain		Annual Multipath		Annual Rain		Total Annual		Total Active in Mode	
	(100-%)	(s)	(100-%)	(s)	(100-%)	(s)	(100-%)	(s)	(100-%)	(s)	(100-%)	(s)
BPSK 67.00 Mbps	99.999992	0.21	99.998163	48.27	99.999997	0.87	99.999786	67.55	99.999783	68.41	0.000129	40.79
4QAM 136.00 Mbps	99.999969	0.80	99.997284	71.38	99.999990	3.29	99.999664	105.91	99.999654	109.21	0.000133	42.10
8QAM 195.00 Mbps	99.999928	1.89	99.996461	93.00	99.999976	7.72	99.999545	143.59	99.999520	151.31	0.000224	70.54
16QAM 279.00 Mbps	99.999820	4.73	99.995229	125.38	99.999939	19.39	99.999358	202.46	99.999297	221.85	0.000303	95.51
32QAM 368.00 Mbps	99.999606	10.36	99.993774	163.61	99.999865	42.43	99.999128	274.94	99.998994	317.36	0.000577	182.03
64QAM 451.00 Mbps	99.999032	25.43	99.991464	224.33	99.999670	104.14	99.998747	395.25	99.998416	499.40	0.001088	343.04
128QAM 533.00 Mbps	99.997570	63.67	99.988070	313.52	99.999170	261.59	99.998158	580.84	99.997329	842.44	0.001935	610.30
256QAM 614.00 Mbps	99.994303	149.73	99.983566	431.88	99.998055	613.23	99.997338	839.50	99.995393	1452.73	0.002534	799.14
512QAM 675.00 Mbps	99.989391	278.81	99.979049	550.60	99.996379	1141.89	99.996480	1109.99	99.992859	2251.88	0.007907	2493.67
1KLQAM 735.00 Mbps	99.972095	733.34	99.968995	814.80	99.990476	3003.47	99.994476	1742.09	99.984952	4745.55	0.001168	368.30
1KHQAM 780.00 Mbps	99.960403	804.09	99.967783	846.65	99.989557	3293.24	99.994227	1820.62	99.983784	5113.86	0.012171	3838.17
2KQAM 826.00 Mbps	99.940340	1567.85	99.957101	1127.39	99.979638	6421.31	99.991975	2530.72	99.971613	8952.03	99.971613	31527047.97

Multipath fading method - VIGANTS  
Rain fading method - Crane City/Jacksonville, Florida

REV	DATE	DESCRIPTION
A	08/19/24	PRELIM PLANS
0	08/26/24	FINAL PLANS

PROJECT NO.: 17-5641.1	
DRAWN BY:	SAL
PROJECT MANAGER:	D. REVELS
CHECKED BY:	D. REVELS

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12979 N. TELECOM PARKWAY  
TEMPLE TERRACE, FLORIDA 33637  
(813) 615-1422

CERTIFICATE OF AUTHORIZATION 33693



7025 A.C. SKINNER PARKWAY  
JACKSONVILLE, FL 32256

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JEREMY D. SHARIT PE FL LIC 75137

WHITE SPRINGS

9JK0344B

12343 SOUTHWEST US HIGHWAY 27  
FORT WHITE, FLORIDA 32038  
(COLUMBIA COUNTY)

SHEET NAME

ANTENNA  
INFORMATION

SHEET NUMBER

C4



iQ.link — Link Budget Report

Date Printed: 03-APR-2024

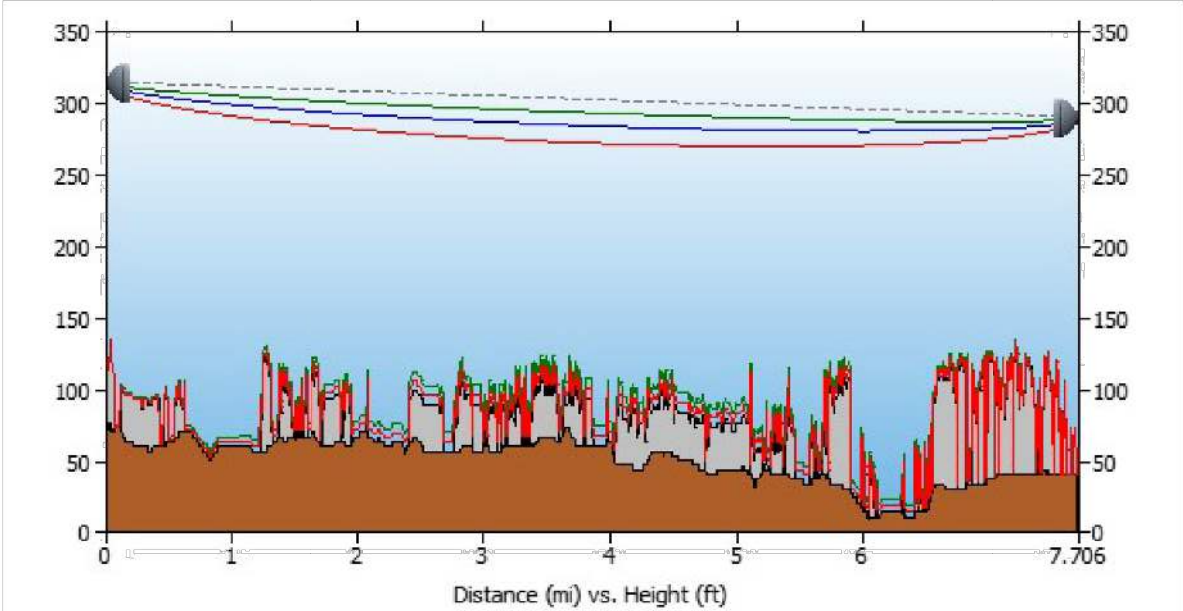
Create Date: 02-APR-2024

Link ID: 3011858

Link Name: 9JK2455S\_9JK0344B

Region: South

Created By: CVance5



Path length (7.71 mi)

9JK2455S	
Latitude:	29-51-26.7 N
Longitude:	82-50-49.6 W
Azimuth:	31.89 Deg
Elevation:	65.62 ft

Frequency (GHz) = 11.00 GHz	
K1:	1.33
%F1:	0.60
K2:	0.67
%F2:	0.30

9JK0344B	
Latitude:	29-57- 8.6 N
Longitude:	82-46-45.3 W
Azimuth:	211.92 Deg
Elevation:	39.37 ft

Antenna CL:	248.00 ft AGL
-------------	---------------

K3:	1.33
%F3:	1.00

Antenna CL:	250.00 ft AGL
-------------	---------------

REV	DATE	DESCRIPTION
A	08/19/24	PRELIM PLANS
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PROJECT MANAGER:		D. REVELS
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ENGINEERING GROUP, INC.

TOGETHER PLANNING A BETTER TOMORROW

12979 N. TELECOM PARKWAY  
TEMPLE TERRACE, FLORIDA 33637  
(813) 615-1422

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stick together

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JEREMY D. SHARIT PE FL LIC 75137

WHITE SPRINGS

9JK0344B

12343 SOUTHWEST US HIGHWAY 27  
FORT WHITE, FLORIDA 32038  
(COLUMBIA COUNTY)

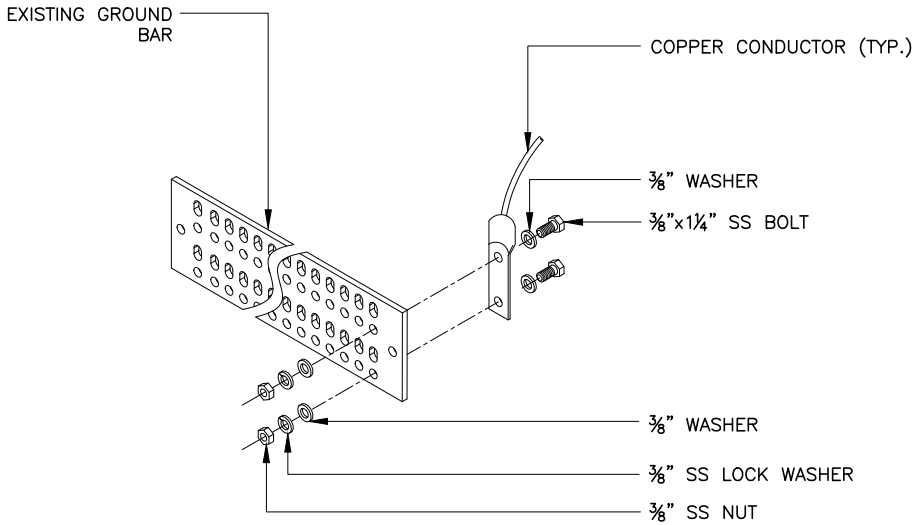
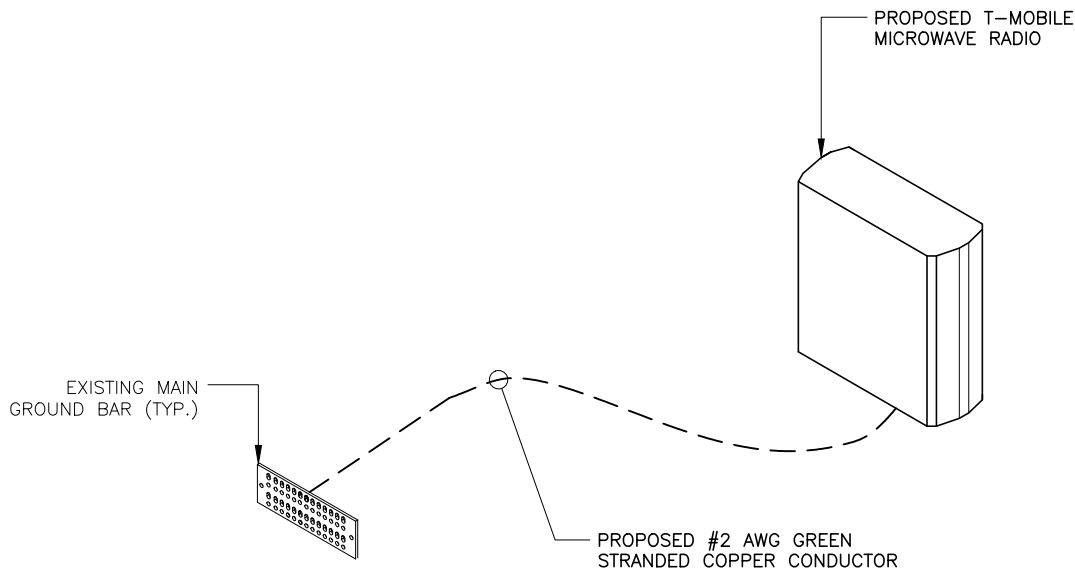
SHEET NAME

PATH  
PROFILE

SHEET NUMBER

C5





TYPICAL GROUND BAR CONNECTION DETAIL

NTS

2

1. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT DOCUMENTS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT.
2. GUARANTEE/WARRANTY: GUARANTEE INSTALLATION TO BE FREE OF DEFECTS, SHORTS, GROUNDS, ETC., FOR A PERIOD OF ONE YEAR. FURNISH WARRANTY SO THE DEFECTIVE MATERIAL AND/OR WORKMANSHIP WILL BE REPAIRED/REPLACED IMMEDIATELY UPON NOTIFICATION AT NO COST TO THE OWNER FOR PERIOD OF WARRANTY.
3. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
4. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
5. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
6. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
7. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
8. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
9. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

GROUNDING DIAGRAM (TYP.)

NTS

1

GROUNDING NOTES

3

REV	DATE	DESCRIPTION
A	08/19/24	PRELIM PLANS
0	08/26/24	FINAL PLANS
PROJECT NO.:		17-5641.1
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PROJECT MANAGER:		D. REVELS
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WHITE SPRINGS

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12343 SOUTHWEST US HIGHWAY 27  
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SHEET NAME

GROUNDING DETAILS  
AND NOTES

SHEET NUMBER

E1