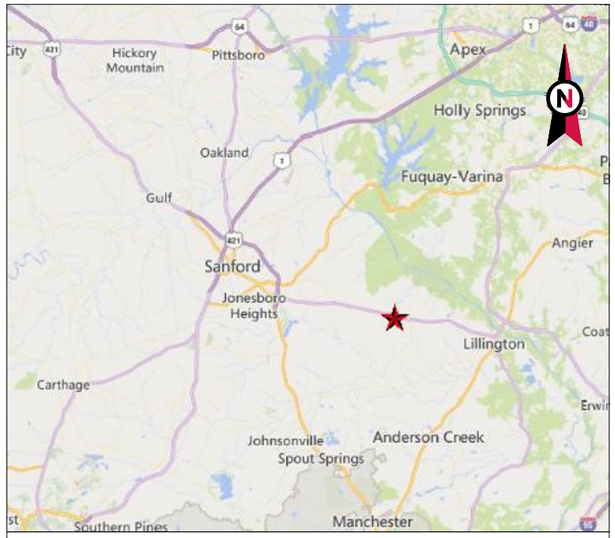


VICINITY MAP

AMERICAN TOWER®

ATC SITE NAME: MAMERS NC
ATC SITE NUMBER: 414969
T-MOBILE SITE NAME: ATC-414969
T-MOBILE SITE NUMBER: 5RA0962A
SITE ADDRESS: 177 DEAN RD.
LILLINGTON,NC 27546-7909
SITE CLASS: MONOPOLE

LOCATION MAP

T-MOBILE COVERAGE STRATEGY COLLOCATION PLAN
67E998E 6160 (LRP) CONFIGURATION

COMPLIANCE CODE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

2015 IBC
NATIONAL ELECTRICAL CODE (NFPA 70, NEC 2020 W/ AMND)
2018 NORTH CAROLINA MECHANICAL CODE (IMC 2015 W/ AMND)
2018 NORTH CAROLINA PLUMBING CODE (IPC 2015 W/ AMND)
2018 NORTH CAROLINA ENERGY CONSERVATION CODE (IECC 2015 W/ AMND)
2018 NORTH CAROLINA FIRE PREVENTION CODE (IFC 2015 W/ AMND)
2018 NORTH CAROLINA BUILDING CODE
2018 NORTH CAROLINA RESIDENTIAL CODE (IRC 2015 W/ AMND)
2018 NORTH CAROLINA FUEL GAS CODE (IFGC 2015 W/ AMND)

UTILITY COMPANIES

POWER COMPANY: SOUTH RIVER ELECTRIC CORP.
PHONE: 910-892-8071

TELEPHONE COMPANY: CENTURYLINK
PHONE: 888-723-8010

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

PROJECT SUMMARY

SITE ADDRESS:

177 DEAN RD.
LILLINGTON,NC 27546-7909
COUNTY: HARNETT

GEOGRAPHIC COORDINATES:

LATITUDE: 35.42135693
35° 25' 16.885" N
LONGITUDE: -78.95682606
78° 57' 24.574" W
GROUND ELEVATION: 366' AMSL

PROJECT TEAM

TOWER OWNER:

AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

APPLICANT:

T-MOBILE
2801 YORKMONT RD, STE 200
CHARLOTTE, NC 28217

ENGINEER:

A.T. ENGINEERING SERVICES, PLLC
1 FENTON MAIN, STE 300
CARY, NC 27511

PROPERTY OWNER:

DEBRA D WOMACK
177 DEAN RD.
LILLINGTON,NC 27546-7909

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.
Reviewed for Code Compliance
07/14/2025
Harnett COUNTY NORTH CAROLINA

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES INSTALLING EQUIPMENT CABINETS ON A PROPOSED CONCRETE PAD INSIDE A 10' X 15' GROUND SPACE WITHIN THE EXISTING COMPOUND, AND INSTALLING NEW EQUIPMENT AND MOUNTS ON THE EXISTING TOWER.

TOWER SCOPE:
INSTALL (1) PLATFORM, (3) ANTENNA(s), (6) RRU(s), AND (2) 2.00" HYBRID TRUNK 6/24 4AWG (70M) CABLE(s)

GROUND SCOPE:
INSTALL (1) CONCRETE PAD, (1) ICE BRIDGE, (1) GPS ANTENNA, (2) H-FRAME, (1) PPC, (1) FIBER MANAGEMENT BOX, (1) COMMERCIAL GRADE WORK LIGHT, (1) NEMA ENCLOSURE, (1) TELCO CABINET, (1) ENCLOSURE 6160 CABINET, AND (1) B160 BATTERY CABINET

PROJECT NOTES

1. THE FACILITY IS UNMANNED.
2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE.
3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE.
4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED.
5. HANDICAP ACCESS IS NOT REQUIRED.
6. THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. § 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL, AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR § 1.61000 (B)(7).

PROJECT LOCATION DIRECTIONS

TAKE EXIT 79 FROM INTERSTATE 95 ONTO N CAROLINA 50 NORTHKEEP LEFT ONTO NC-27 W AND US-421 N TURN LEFT ONTO DEAN RD.TURN LEFT ONTO THE GRAVEL ROAD AT 177.

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	0	02/27/25	KPF
G-002	GENERAL NOTES	0	02/27/25	KPF
	EXISTING SURVEY			
C-101	DETAILED SITE PLAN	0	02/27/25	KPF
C-102	DETAILED EQUIPMENT PLAN	0	02/27/25	KPF
C-201	TOWER ELEVATION	0	02/27/25	KPF
C-401	ANTENNA INFORMATION & SCHEDULE	0	02/27/25	KPF
C-501	MOUNT DETAILS	0	02/27/25	KPF
C-502	CONSTRUCTION DETAILS	0	02/27/25	KPF
C-503	CONSTRUCTION DETAILS	0	02/27/25	KPF
E-101	GROUNDING PLAN AND NOTES	0	02/27/25	KPF
E-501	GROUNDING DETAILS	0	02/27/25	KPF
E-601	PANEL SCHEDULE & ONE-LINE DIAGRAM	0	02/27/25	KPF
	SUPPLEMENTAL SHEETS (11 PAGES)			

AMERICAN TOWER®
A.T. ENGINEERING SERVICES, PLLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
P-1177

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	KPF	02/27/25

ATC SITE NUMBER:
414969
ATC SITE NAME:
MAMERS NC
T-MOBILE SITE NAME:
ATC-414969
SITE ADDRESS:
177 DEAN RD.
LILLINGTON,NC 27546-7909

SEAL:

Paul Northrup
Digitally signed by Paul Northrup
Date: 2025.02.27 16:29:27 -05'00'

T-Mobile

ATC PROJ. #:	15020848_D2
CUST. ID:	ATC-414969
CUST. #:	5RA0962A

TITLE SHEET

SHEET NUMBER:	REVISION:
G-001	0

GENERAL CONSTRUCTION NOTES:

1. OWNER FURNISHED MATERIALS, T-MOBILE "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
   - A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)
   - B. AC/TELCO INTERFACE BOX (PPC)
   - C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)
   - D. TOWERS, MONOPOLES
   - E. TOWER LIGHTING
   - F. GENERATORS & LIQUID PROPANE TANK
   - G. ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING
   - H. ANTENNAS (INSTALLED BY OTHERS)
   - I. TRANSMISSION LINE
   - J. TRANSMISSION LINE JUMPERS
   - K. TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS
   - L. TRANSMISSION LINE GROUND KITS
   - M. HANGERS
   - N. HOISTING GRIPS
   - O. BTS EQUIPMENT
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF T-MOBILE TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED PERMITS.
3. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE T-MOBILE REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE T-MOBILE REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE T-MOBILE REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE T-MOBILE CONSTRUCTION MANAGER.
15. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE T-MOBILE REP AND ENGINEER OF RECORD IMMEDIATELY.
17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20. CONTRACTOR SHALL FURNISH T-MOBILE AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH T-MOBILE REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.
22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH T-MOBILE REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY T-MOBILE MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH T-MOBILE SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO T-MOBILE FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO T-MOBILE SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
27. CONTRACTOR SHALL NOTIFY T-MOBILE REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
28. WHEN THE PROJECT SCOPE REQUIRES THE USE OF THE SAFETY CLIMB, THE GENERAL CONTRACTOR SHALL ENSURE THE SAFETY CLIMB IS FREE OF OBSTRUCTIONS, NOT RUBBING ON OR TRAPPED BY ANY INSTALLED CUSTOMER EQUIPMENT, IS VISUALLY TAUT, MEETS MANUFACTURER INSTALLATION SPECIFICATIONS, AND IS FIRMLY SECURED AT ALL CABLE GUIDE LOCATIONS UPON PROJECT COMPLETION.
29. COMPLETION OF PROJECT SHALL NOT OBSTRUCT, TRAP, LOOSEN, OR OTHERWISE CAUSE FAILURE TO MEET MANUFACTURER INSTALLATION REQUIREMENTS FOR THE SAFETY CLIMB.
30. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
31. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
32. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE T-MOBILE REP. ANY WORK FOUND BY THE T-MOBILE REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
33. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
34. T-MOBILE FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE T-MOBILE WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNCRATE, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.
35. T-MOBILE OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO T-MOBILE OR THEIR ARCHITECT/ENGINEER.

STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
2. STRUCTURAL STEEL ROLLED SHAPES, PLATES AND BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:
   - A. ASTM A-572, GRADE 50 - ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE
   - B. ASTM A-36 - ALL OTHER ROLLED SHAPES, PLATES AND BARS UNLESS NOTED OTHERWISE.
   - C. ASTM A-500, GRADE B - HSS SECTION (SQUARE, RECTANGULAR, AND ROUND)
   - D. ASTM A-325, TYPE SC OR N - ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS
   - E. ASTM F-1554 07 - ALL ANCHOR BOLTS, UNLESS NOTED OTHERWISE
3. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
4. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.
5. DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
6. CONNECTIONS:
   - A. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
   - B. ALL WELDS SHALL BE INSPECTED VISUALLY. 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY.
   - C. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
   - D. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE BURNING/WELDING PERMITS AS REQUIRED BY LOCAL GOVERNING AUTHORITY AND IF REQUIRED SHALL HAVE FIRE DEPARTMENT DETAIL FOR ANY WELDING ACTIVITY.
   - E. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
   - F. MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS, UNLESS NOTED OTHERWISE.
   - G. PRIOR TO FIELD WELDING GALVANIZING MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING ½" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.
   - H. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE REQUIRED DURING CONSTRUCTION UNTIL ALL CONNECTIONS ARE COMPLETE.
   - I. ANY FIELD CHANGES OR SUBSTITUTIONS SHALL HAVE PRIOR APPROVAL FROM THE ENGINEER, AND T-MOBILE PROJECT MANAGER IN WRITING

SPECIAL CONSTRUCTION ANTENNA INSTALLATION NOTES:

1. WORK INCLUDED:
   - A. ANTENNA AND COAXIAL CABLES ARE FURNISHED BY T-MOBILE UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL
   - B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND T-MOBILE SPECIFICATIONS.
   - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.
   - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE AND PROVIDE PRINTOUT OF THAT TEST.
   - E. CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF SWEEP TESTS USING ANRITZU-PACKARD 8713B RF SCALAR NETWORK ANALYZER. SUBMIT FREQUENCY DOMAIN REFLECTOMETER(FDR) TESTS RESULTS TO THE PROJECT MANAGER. SWEEP TESTS SHALL BE AS PER ATTACHED RFS "MINIMUM FIELD TESTING RECOMMENDED FOR ANTENNA AND HELIAX COAXIAL CABLE SYSTEMS" DATED 10/5/93. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE AND BE BOUND AND SUBMITTED WITHIN ONE WEEK OF WORK COMPLETION.
   - F. INSTALL COAXIAL CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
   - G. ANTENNA AND COAXIAL CABLE GROUNDING:
2. ALL EXTERIOR #6 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.
3. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS).

CONCRETE AND REINFORCING STEEL NOTES:

1. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF ALL APPLICABLE CODES INCLUDING: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", ACI 117 "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS", AND ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE."
2. MIX DESIGN SHALL BE APPROVED BY T-MOBILE REP PRIOR TO PLACING CONCRETE.
3. CONCRETE SHALL BE NORMAL WEIGHT, 6 % AIR ENTRAINED (+/- 1.5%) WITH A SLUMP RANGE OF 3-6" AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4500 PSI UNLESS OTHERWISE NOTED.
4. THE FOLLOWING MATERIALS SHALL BE USED:

PORTLAND CEMENT:	ASTM C150, TYPE 2
REINFORCEMENT:	ASTM A185, PLAIN STEEL WELDED WIRE FABRIC
REINFORCEMENT BARS:	ASTM A615, GRADE 60, DEFORMED
NORMAL WEIGHT AGGREGATE:	ASTM C33
WATER:	ASTM C 94/C 94M
WELDED WIRE FABRIC:	ASTM A185
ADMIXTURES:	
-WATER-REDUCING AGENT:	ASTM C 494/C 494M, TYPE A
-AIR-ENTERING AGENT:	ASTM C 260/C 260M
-SUPERPLASTICIZER:	ASTM C494, TYPE F OR TYPE G
-RETARDING:	ASTM C 494/C 494M, TYPE B

5. MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE NO LESS THAN 3".
6. A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE IN ACCORDANCE WITH ACI 301 SECTION 4.2.4, UNLESS NOTED OTHERWISE.
7. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL, OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR APPROVAL FROM AN ATC ENGINEER WHEN DRILLING HOLES IN CONCRETE.
8. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN "METHOD 1" OF ACI 301.
9. DO NOT WELD OR TACK WELD REINFORCING STEEL.
10. ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
11. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
12. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
13. FOR COLD-WEATHER (ACI 306) AND HOT-WEATHER (ACI 301M) CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS, MINIMUM.
14. ALL CONCRETE SHALL HAVE A "SMOOTH FORM FINISH."
15. SPLICING OF REINFORCEMENT IS PERMITTED ONLY AT LOCATIONS SHOWN IN THE CONTRACT DRAWINGS OR AS ACCEPTED BY THE ENGINEER. UNLESS OTHERWISE SHOWN OR NOTED REINFORCING STEEL SHALL BE SPLICED TO DEVELOP ITS FULL TENSILE CAPACITY (CLASS A) IN ACCORDANCE WITH ACI 318.
16. DETAILING OF REINFORCING STEEL SHALL CONFORM TO "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315).
17. ALL SLAB CONSTRUCTION SHALL BE CAST MONOLITHICALLY WITHOUT HORIZONTAL CONSTRUCTION JOINTS, UNLESS SHOWN IN THE CONTRACT DRAWINGS.
18. LOCATION OF ALL CONSTRUCTION JOINTS ARE SUBJECT TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, CONFORMANCE WITH ACI 318, AND ACCEPTANCE OF THE ENGINEER. DRAWINGS SHOWING LOCATION OF DETAILS OF THE PROPOSED CONSTRUCTION JOINTS SHALL BE SUBMITTED WITH REINFORCING STEEL PLACEMENT DRAWINGS.
19. SPLICES OF WWF, AT ALL SPLICED EDGES, SHALL BE SUCH THAT THE OVERLAP MEASURED BETWEEN OUTERMOST CROSS WIRES OF EACH FABRIC SHEET IS NOT LESS THAN THE SPACING OF THE CROSS WIRE PLUS 2 INCHES, NOR LESS THAN 6".
20. BAR SUPPORTS SHALL BE ALL-GALVANIZED METAL WITH PLASTIC TIPS.
21. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE TO PREVENT DISPLACEMENT BY CONSTRUCTION TRAFFIC OR CONCRETE. TIE WIRE SHALL BE OF SUFFICIENT STRENGTH FOR INTENDED PURPOSE, BUT NOT LESS THAN NO. 18 GAUGE.
22. SLAB ON GROUND: COMPACT STRUCTURAL FILL TO 95% DENSITY AND THEN PLACE 6" GRAVEL BENEATH SLAB.

ELECTRICAL NOTES:

1. ELECTRICAL WORK SHALL BE PERFORMED BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL ENSURE THAT ALL WORK COMPLIES WITH ALL APPLICABLE LOCAL AND STATE CODES AND NATIONAL ELECTRICAL CODE.
2. ALL SUGGESTED ELECTRICAL ELEMENTS (SUCH AS BREAKER SIZES, WIRE SIZES, CONDUITS SIZES) ARE FOR ZONING PURPOSES ONLY. IT IS THE RESPONSIBILITY TO OF THE ELECTRICAL CONTRACTOR TO CONFIRM COMPLIANCE WITH LOCAL ELECTRICAL CODES AND PASS ALL APPLICABLE AND NECESSARY INSPECTIONS. IN SOME EVENTS, IT MAY BE NECESSARY TO PERFORM AN ELECTRICAL LOAD STUDY TO VERIFY THE CAPACITY OF THE EXISTING SERVICE. THIS IS NOT THE RESPONSIBILITY OF ATC. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
3. CONTRACTOR SHALL FIELD LOCATE ALL BELOW GRADE GROUNDING CABLES AND UTILITY LINES PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR RELOCATION OF ALL UTILITIES AND GROUNDING LINES THAT MAY BECOME DISTURBED OR CONFLICTING IN THE COURSE OF CONSTRUCTION.

ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN. FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR APPROVAL FROM ATC ENGINEERING SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

AMERICAN TOWER®
A.T. ENGINEERING SERVICES, PLLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
P-1177

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	KPF	02/27/25

ATC SITE NUMBER:
414969
ATC SITE NAME:
MAMERS NC
T-MOBILE SITE NAME:
ATC-414969
SITE ADDRESS:
177 DEAN RD.
LILLINGTON,NC 27546-7909

SEAL:

Digitally Signed: 2025-02-27

T-Mobile

ATC PROJ. #:	15020848_D2
CUST. ID:	ATC-414969
CUST. #:	5RA0962A

GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0

PROJECT SUMMARY

FIELD SURVEY DATE: 09/11/2015

SITE ADDRESS: 177 DEAN RD, LILLINGTON, NC 27546

PARCEL INFORMATION
OWNER: DEBRA WOMACK
ADDRESS: 177 DEAN RD, LILLINGTON, NC 27546
APN: 0610-28-6363.000

TOTAL AREAS:
PARENT PARCEL: 7.7 ACRES ± (PER TAX ASSESSOR)
LEASE AREA: 0.517 ACRES ±

GEOGRAPHIC COORDINATES OF TOWER:
LATITUDE: 35°25'16.87" N
LONGITUDE: 78°57'24.56" W
VERTICAL DATUM: NAVD 1988
HORIZONTAL DATUM: NAD83
GROUND ELEVATION: 366.2
*BEARINGS ARE BASED ON GRID NORTH (NC ZONE)

FLOODPLAIN:
PER THE FEMA FLOODPLAIN MAPS, THE SITE IS LOCATED IN AN AREA DESIGNATED AS ZONE X, COMMUNITY PANEL NO. : 3720060003J DATED: 10/3/2006

*THIS SPECIFIC PURPOSE AS-BUILT SURVEY IS FOR THE LEASED PREMISES AND EASEMENTS ONLY AND WAS PREPARED FOR THE EXCLUSIVE USE OF AMERICAN TOWER CORPORATION AND EXCLUSIVELY FOR THE TRANSFERRAL OF THE PROPOSED LEASED PREMISES AND THE RIGHTS OF EASEMENT SHOWN HEREON AND SHALL NOT BE USED AS AN EXHIBIT OR EVIDENCE IN THE FEE SIMPLE TRANSFERRAL OF THE PARENT PARCEL NOR ANY PORTION OR PORTIONS THEREOF. BOUNDARY INFORMATION SHOWN HEREON HAS BEEN COMPILED FROM TAX MAPS AND DEED DESCRIPTIONS ONLY. NO BOUNDARY SURVEY OF THE PARENT PARCEL WAS PERFORMED.

ENCROACHMENT STATEMENT
THERE ARE NO VISIBLE ENCROACHMENTS.

SURVEYOR'S NOTES

1. THERE IS ACCESS TO THE SUBJECT PROPERTY VIA DEAN ROAD, A PUBLIC RIGHT OF WAY.

2. THE LOCATIONS OF ALL UTILITIES SHOWN ON THE SURVEY ARE FROM VISIBLE SURFACE EVIDENCE ONLY.

3. AT THE TIME OF THIS SURVEY THERE WAS NO OBSERVABLE SURFACE EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WITHIN RECENT MONTHS.

4. AT THE TIME OF THIS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF THE SUBJECT PROPERTY BEING USED AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.

5. AT THE TIME OF THIS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF ANY RECENT CHANGES IN STREET RIGHT-OF-WAY LINES EITHER COMPLETED OR PROPOSED, AND AVAILABLE FROM THE CONTROLLING JURISDICTION.

6. AT THE TIME OF THIS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF ANY RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.

7. THE FIELD DATA UPON WHICH THIS AS-BUILT SURVEY IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 20,000+ FEET AND AN ANGULAR ERROR OF 5.0" PER ANGLE POINT AND WAS ADJUSTED USING LEAST SQUARES.

8. EQUIPMENT USED FOR ANGULAR & LINEAR MEASUREMENTS: LEICA TPS 1200 ROBOTIC,

9. NO WETLANDS AREAS HAVE BEEN INVESTIGATED BY THIS SURVEY.

ZONING INFORMATION

ZONE: RA – 30 (RESIDENTIAL/AGRICULTURAL)

*ALL SITE RESTRICTIONS SHOULD BE VERIFIED WITH THE PROPER ZONING OFFICIALS

LEGAL DESCRIPTION

PARENT PARCEL – AS PROVIDED BY LINCOLN FILE NO. 15100296NC:
TRACT #1:

THAT CERTAIN TRACT OF LAND CONTAINING 16.08 ACRES, MORE OR LESS, (INCLUSIVE OF EXCEPTION HEREINAFTER DESCRIBED) COMPOSED OF TWO CONTIGUOUS PARCELS LOCATED IN THE UPPER LITTLE RIVER TOWNSHIP, HARNETT COUNTY, NC, AND BOUNDED NOW OR FORMERLY BY NATURAL BOUNDS AND/OR LANDS OWNED BY/OR IN THE POSSESSION OF PERSONS AS FOLLOWS: ON THE NORTH BY DEBORAH DEAN WOMACK AND H. CLAYTON, ON THE EAST BY NEILL CAMERON AND MAGGIE TAYLOR WOOD, ON THE SOUTH BY MAGGIE TAYLOR WOOD AND H. S. CLAYTON, AND ON THE WEST BY H. S. CLAYTON AND MAGGIE TAYLOR WOOD; SAID TRACT LYING APPROXIMATELY 8.8 MILES WEST FROM THE TOWN OF LILLINGTON, NC AND BROADWAY AND BEING MORE SPECIFICALLY DESCRIBED AS FOLLOWS; BEGINNING AT AN EXISTING SPIKE IN THE CENTERLINE OF SR#1274 AT THE NORTH CORNER OF TRACTS 4 AND 5, ACCORDING TO SURVEY AND PLAT OF THOMAS LESTER STANCIL, R. S., DATED 10/22/75, AND RECORDED IN MAP BOOK 21, PAGE 2, HARNETT COUNTY REGISTRY, AND THE SOUTHEAST CORNER OF H. S. CLAYTON TRACT RECORDED IN DEED BOOK 376, PAGE 421, AND RUNS THENCE WITH THE CENTER LINE OF SR #1274, NORTH 46°16'00" EAST, 30.36 FEET TO A SPIKE, THE NEW CORNER WITH DEBRA DEAN WOMACK; THENCE, A NEW DIVIDING LINE WITH DEBRA DEAN WOMACK, SOUTH 34°53'08" EAST 159.17 FEET TO AN IRON STAKE; THENCE SOUTH 0°31'39" WEST, 163.67 FEET TO AN IRON STAKE; THENCE SOUTH 7°17'45" EAST, 203.84 FEET TO AN IRON STAKE; THE SOUTHWEST CORNER OF A ONE-ACRE LOT DEEDED TO W. RANDY WOMACK AND WIFE, DEBRA D. WOMACK, AND REPORTED IN DEED BOOK 662, PAGE 808; THENCE WITH THE SOUTHERN LINE OF SAID LOT, NORTH 59°17'21" EAST, 200 FEET TO AN IRON STAKE, THE SOUTHEAST CORNER OF SAID LOT; THENCE A NEW LINE WITH DEBRA DEAN WOMACK, SOUTH 83°17'15" EAST, 488.60 FEET TO A CONCRETE MONUMENT IN THE ORIGINAL LINE OF TRACT 3 RECORDED IN MAP BOOK 21, PAGE 2, HARNETT COUNTY REGISTRY; ALSO BEING THE SOUTHWEST CORNER OF THE SAM ASHWORTH HEIRS PROPERTY RECORDED IN DEED BOOK 290, PAGE 429, AND THE NORTHWEST CORNER OF THE NEILL CAMERON PROPERTY RECORDED IN DEED BOOK 287, PAGE 315, WHICH SAID POINT IS ALSO LOCATED SOUTH 38°15' EAST, 91.28 FEET AND SOUTH 3°15' EAST, 1052.7 FEET FROM N.C. GEODETIC SURVEY MONUMENT ELIJAH WHICH IS LOCATED JUST NORTH OF THE PAVEMENT OF U.S. HIGHWAY 421; THENCE WITH THE ORIGINAL EAST LINE OF SAID TRACT 2 AND THE WEST LINE OF NEILL CAMERON PROPERTY, SOUTH 3°15' EAST 325.9 FEET TO AN EXISTING IRON PIPE, THE NORTHEAST CORNER OF TRACT 5, AND THE SOUTHEAST CORNER OF TRACT 3 AS RECORDED IN MAP BOOK 21, PAGE 2; THENCE WITH THE DIVIDING LINE OF SAID TRACTS 3 AND 5, SOUTH 86°45' WEST 505.74 FEET TO AN EXISTING IRON PIPE; THENCE NORTH 47°04' WEST, 156.0 FEET TO AN EXISTING IRON PIPE; THENCE NORTH 80°16' WEST 133.20 FEET TO AN EXISTING IRON PIPE; THENCE SOUTH 80°33' WEST 421.90 FEET TO AN EXISTING IRON PIPE; THENCE NORTH 59°36' EAST, 198.78 FEET TO AN EXISTING IRON PIPE; THENCE NORTH 54°21' EAST, 154.55 FEET TO AN EXISTING IRON PIPE; THENCE NORTH 37°59' EAST 75.60 FEET TO AN EXISTING IRON PIPE; THENCE NORTH 0°35' EAST 144.20 FEET TO AN EXISTING IRON PIPE; THENCE NORTH 34°53' WEST 144.90 FEET TO AN EXISTING SPIKE IN THE CENTERLINE OF SR#1274, BEING THE POINT AND PLACE OF BEGINNING, AND BEING ALL OF TRACT B CONTAINING 7.702 ACRES (INCLUDING ROAD RIGHT OF WAY) ACCORDING TO A SURVEY AND PLAT OF THOMAS LESTER STANCIL, RLS, DATED 8/15/80 AND BEING THE SOUTHERN PORTION OF TRACT 3 AS HERETOFORE DESCRIBED BY REFERENCE TO MAP BOOK 21, PAGE 2, HARNETT COUNTY REGISTRY.

TRACT # 2:

THAT TRACT OR PARCEL OF LAND IN THE COUNTY OF HARNETT, AND STATE OF NORTH CAROLINA, IN UPPER LITTLE RIVER TOWNSHIP, AND BOUNDED AS FOLLOWS; BEGINNING AT AN IRON PIPE LOCATED WITHIN THE RIGHT-OF-WAY OF U.S. HIGHWAY 421, THE NORTHEAST CORNER OF TRACT NO. 3 ACCORDING TO SURVEY AND PLAT OF THOMAS LESTER STANCIL, R.S., DATED OCTOBER 22, 1975 ENTITLED, "DIVISION OF ANNIE GARNER LAND" RECORDED IN MAP BOOK 21, AT PAGE 2, HARNETT COUNTY REGISTRY, AND RUNS FROM SAID CORNER WITH SAM ASHWORTH HEIRS AND BEING LOCATED SOUTH 38 DEGREES 36 MINUTES EAST 91.28 FEET FROM NORTH CAROLINA GEODETIC SURVEY MONUMENT ELIJAH, AND RUNS THENCE AS A COMMON LINE WITH THE LINE OF THE SAM ASHWORTH HEIRS SOUTH 3 DEGREES 15 MINUTES EAST 1052.70 FEET TO A CONCRETE MONUMENT, BEING A CORNER WITH THE SAM ASHWORTH HEIRS AND NEILL CAMERON THE EASTERN LINE OF SAID TRACT 3; THENCE A NEW DIVISION LINE WITH HAROLD T. DEAN AND WIFE, BRENDA P. DEAN, NORTH 83 DEGREES 17 MINUTES 15 SECONDS WEST 488.60 FEET TO AN IRON STAKE, THE SOUTHEAST CORNER OF THAT ONE ACRE LOT DEED TO W. RANDY WOMACK AND WIFE, DEBRA DEAN WOMACK, BY DEED RECORDED IN DEED BOOK 662, AT PAGE 808, HARNETT COUNTY REGISTRY; THENCE WITH THE SOUTHERN LINE OF SAID ONE ACRE LOT SOUTH 59 DEGREES 17 MINUTES 21 SECONDS WEST 200.00 FEET TO AN IRON STAKE, THE SOUTHWEST CORNER OF SAID ONE ACRE LOT; THENCE NORTH 71 DEGREES 17 MINUTES 45 SECONDS WEST 203.84 FEET TO AN IRON STAKE; THENCE NORTH 0 DEGREES 31 MINUTES 39 SECONDS EAST 163.67 FEET TO AN IRON STAKE; THENCE NORTH 34 DEGREES 53 MINUTES 02 SECONDS WEST 159.17 FEET TO A SPIKE IN THE CENTER LINE OF SR 1274 SAID POINT BEING IN THE EASTERN LINE OF THE H.S. CLAYTON TRACT DESCRIBED IN DEED RECORDED IN BOOK 376, AT PAGE 421, HARNETT COUNTY REGISTRY, AND WHICH IS LOCATED NORTH 46 DEGREES 16 MINUTES 00 SECONDS EAST 30.36 FEET FROM THE NORTHERN CORNER, BEING THE COMMON CORNER OF TRACT 5 AND TRACT 4 OF THE ABOVE-REFERRED TO PLAT RECORDED IN MAP BOOK 21, AT PAGE 2, HARNETT COUNTY REGISTRY; THENCE A S A COMMON LINE WITH THE EASTERN LINE OF THE H.S. CLAYTON TRACT AND THE CENTER LINE OF SR 1274 THE COURSES AND DISTANCES AS FOLLOWS: NORTH 46 DEGREES 16 MINUTES 00 SECONDS EAST 269.94 FEET TO AN EXISTING SPIKE; THENCE NORTH 49 DEGREES 59 MINUTES EAST 300.00 FEET TO A SPIKE; THENCE NORTH 45 DEGREES 44 MINUTES EAST 100.00 FEET TO A SPIKE; THENCE NORTH 42 DEGREES 03 MINUTES EAST 100.00 FEET TO A SPIKE; THENCE NORTH 33 DEGREES 46 MINUTES EAST 100.00 FEET TO A SPIKE; THENCE NORTH 25 DEGREES 06 MINUTES EAST 145.07 FEET TO A SPIKE, A POINT IN THE LINE OF SAM ASHWORTH HEIRS AND A CORNER WITH H.S. CLAYTON AND SAID TRACT 3, THENCE ALONG THE A LINE OF SAM ASHWORTH HEIRS SOUTH 85 DEGREES 30 MINUTES EAST 214.91 FEET TO AN IRON PIPE BEING THE POINT AND PLACE OF BEGINNING AND BEING ALL OF TRACT A CONTAINING 14.974 ACRES (INCLUDING ROAD RIGHT-OF-WAY) ACCORDING TO SURVEY AND PLAT BY THOMAS LESTER STANCIL, R.S., DATED AUGUST 15, 1980.

EXCEPTED AND EXCLUDED HOWEVER FROM THIS CONVEYANCE IS THAT TRACT OR PARCEL OF LAND, SITUATED WITHIN SAID TRACT, DEEDED TO W. RANDY WOMACK AND WIFE, DEBRA DEAN WOMACK, BY DEED RECORDED IN DEED BOOK 662, AT PAGE 808, TO WHICH DEED REFERENCE IS HEREBY MADE FOR A GREATER CERTAINTY OF DESCRIPTION.

AND TRACT # 3:

LYING AND BEING ON THE SOUTH SIDE OF SR 1274 SAID CORNER BEING 180 FEET NORTHEAST LOT #5 BELONGING TO MAGGIE TAYLOR AND RUNS THENCE SOUTH 19 DEGREES EAST 232 FEET TO A CORNER THENCE SOUTH 65 DEGREES WEST 70 FEET TO A STAKE; THENCE SOUTH 24 DEGREES 30 MINUTES EAST 218 FEET TO AN IRON STAKE CORNER; THENCE NORTH 65 DEGREES 30 MINUTES EAST 280 FEET TO A CORNER; THENCE NORTH 24 DEGREES 30 MINUTES WEST 218 FEET TO A CORNER; THENCE SOUTH 65 DEGREES 30 MINUTES WEST 110 FEET TO A CORNER; THENCE NORTH 19 DEGREES 240 FEET TO AN IRON STAKE IN THE MARGIN OF SR 1274; THENCE IS THE MARGIN OF SAID SR 1274 SOUTH 46 DEGREES 16 MINUTES WEST 90 FEET TO THE POINT OF BEGINNING AND CONTAINING 1.0 ACRES MORE OR LESS. SEE PLAT HERETO ATTACHED. REFERENCE PLAT BOOK 21, AT PAGE 2.

NOTES CORRESPONDING TO SCHEDULE B

THIS SPECIFIC PURPOSE AS-BUILT SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY POINT TO POINT LAND SURVEYORS AND AS SUCH WE ARE NOT RESPONSIBLE FOR THE INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, UNRECORDED EASEMENTS, AUGMENTING EASEMENTS, IMPLIED OR PRESCRIPTIVE EASEMENTS, OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE. THIS SURVEY WAS COMPLETED WITH THE AID OF TITLE WORK PREPARED BY LINCOLN ABSTRACT & SETTLEMENT SERVICES, SEARCHED FROM SEPTEMBER 1, 1995 THROUGH SEPTEMBER 1, 2015, BEAND FILE NO. 15100296NC FOR THE SUBJECT PROPERTY, TO DETERMINE THE IMPACTS OF EXISTING TITLE EXCEPTIONS. THE COMMITMENT CONTAINS THE FOLLOWS SURVEY RELATED ITEMS.

1. MEMORANDUM OF LEASE BETWEEN CELLCO PARTNERSHIP A DELAWARE PARTNERSHIP D/B/A VERIZON WIRELESS AND NEW CINGULAR WIRELESS PCS, LLC DATED FEBRUARY 17, 2014 AND RECORDED MARCH 31, 2014 IN BOOK 3203 AT PAGE 254.

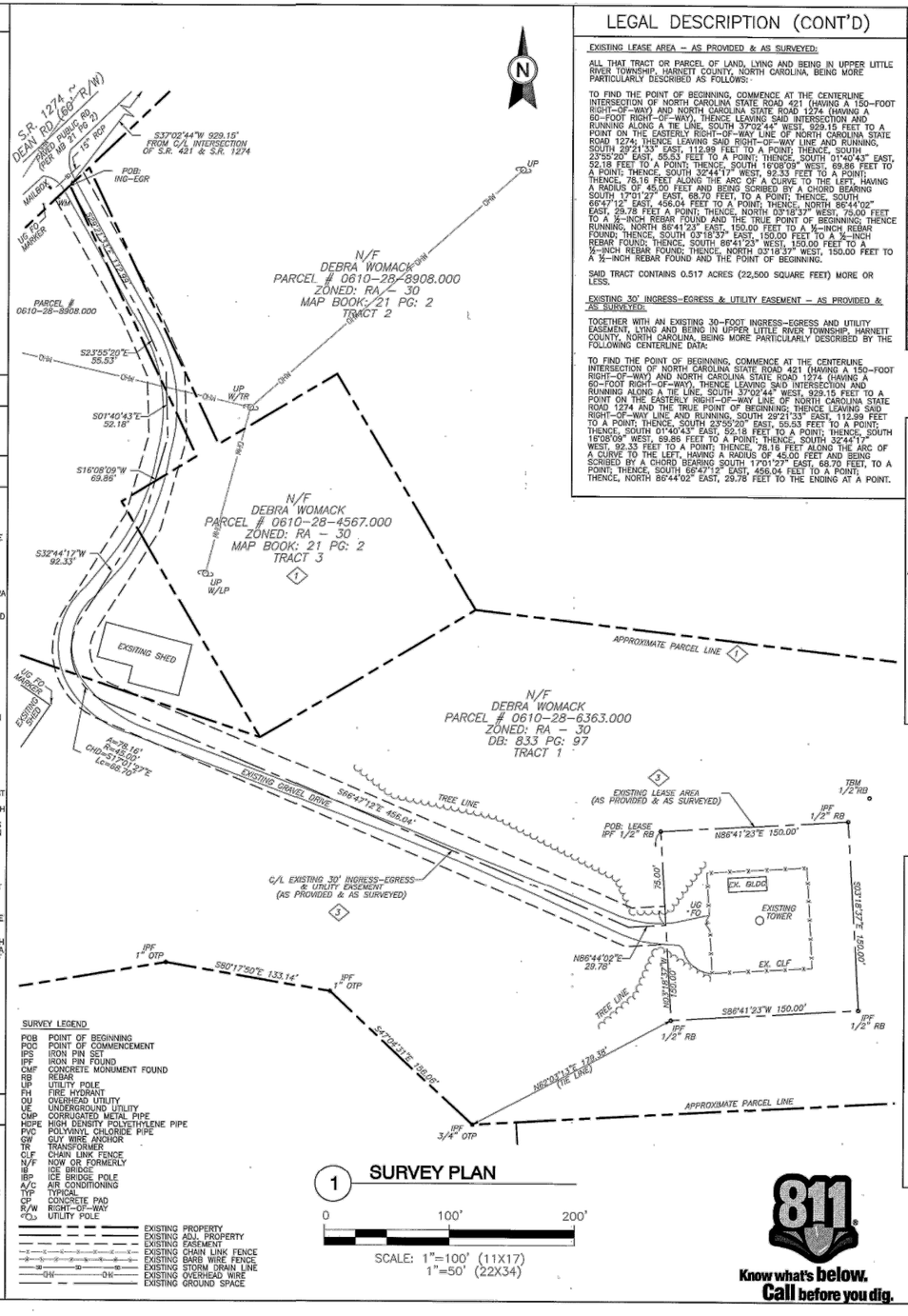
[THIS ITEM IS PLOTTED HEREON.]

2. SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT AGREEMENT BETWEEN CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS AND BRANCH BANKING AND TRUST COMPANY DATED JUNE 20, 2006 AND RECORDED NOVEMBER 16, 2006 IN BOOK 2308 AT PAGE 337.

[THIS ITEM CANNOT BE CERTIFIED AS BEING IN FULL AND FINAL AGREEMENT.]

3. MEMORANDUM OF LAND LEASE AGREEMENT BETWEEN WESLEY R. WOMACK AND WIFE, DEBRA D. WOMACK AND CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS DATED JUNE 20, 2006 AND RECORDED NOVEMBER 16, 2006 IN BOOK 2306 AT PAGE 324.

[THIS ITEM REFERS TO THE EXISTING LEASE AREA & INGRESS-EGRESS & UTILITY EASEMENT AND IS PLOTTED HEREON.]



1 SURVEY PLAN

0 100' 200'

SCALE: 1"=100' (11X17)
1"=50' (22X34)

LEGAL DESCRIPTION (CONT'D)

EXISTING LEASE AREA – AS PROVIDED & AS SURVEYED:

ALL THAT TRACT OR PARCEL OF LAND, LYING AND BEING IN UPPER LITTLE RIVER TOWNSHIP, HARNETT COUNTY, NORTH CAROLINA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

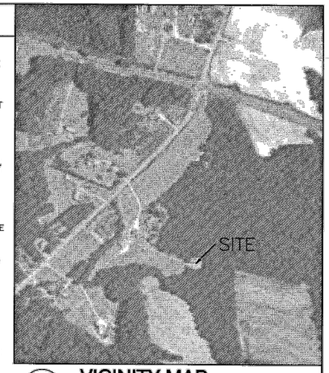
TO FIND THE POINT OF BEGINNING, COMMENCE AT THE CENTERLINE INTERSECTION OF NORTH CAROLINA STATE ROAD 421 (HAVING A 150-FOOT RIGHT-OF-WAY) AND NORTH CAROLINA STATE ROAD 1274 (HAVING A 60-FOOT RIGHT-OF-WAY), THENCE LEAVING SAID INTERSECTION AND RUNNING ALONG A TIE LINE, SOUTH 37°02'44" WEST, 929.15 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF NORTH CAROLINA STATE ROAD 1274; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, SOUTH 89°21'33" EAST, 12.99 FEET TO A POINT; THENCE, SOUTH 23°55'20" EAST, 55.53 FEET TO A POINT; THENCE, SOUTH 01°40'43" EAST, 52.18 FEET TO A POINT; THENCE, SOUTH 16°08'09" WEST, 69.86 FEET TO A POINT; THENCE, SOUTH 32°44'17" WEST, 92.33 FEET TO A POINT; THENCE, 78.16 FEET ALONG THE ARC OF A CURVE TO THE LEFT, HAVING A RADIUS OF 45.00 FEET AND BEING SCRIBED BY A CHORD BEARING SOUTH 17°01'27" EAST, 68.70 FEET, TO A POINT; THENCE, SOUTH 66°47'12" EAST, 456.04 FEET TO A POINT; THENCE, NORTH 86°44'02" EAST, 29.78 FEET TO THE ENDING AT A POINT.

SAID TRACT CONTAINS 0.517 ACRES (22,500 SQUARE FEET) MORE OR LESS.

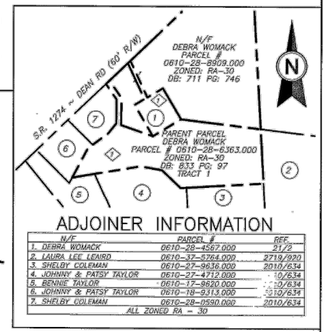
EXISTING 30' INGRESS-EGRESS & UTILITY EASEMENT – AS PROVIDED & AS SURVEYED:

TOGETHER WITH AN EXISTING 30-FOOT INGRESS-EGRESS AND UTILITY EASEMENT, LYING AND BEING IN UPPER LITTLE RIVER TOWNSHIP, HARNETT COUNTY, NORTH CAROLINA, BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT THE CENTERLINE INTERSECTION OF NORTH CAROLINA STATE ROAD 421 (HAVING A 150-FOOT RIGHT-OF-WAY) AND NORTH CAROLINA STATE ROAD 1274 (HAVING A 60-FOOT RIGHT-OF-WAY), THENCE LEAVING SAID INTERSECTION AND RUNNING ALONG A TIE LINE, SOUTH 37°02'44" WEST, 929.15 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF NORTH CAROLINA STATE ROAD 1274 AND THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, SOUTH 29°21'33" EAST, 112.99 FEET TO A POINT; THENCE, SOUTH 23°55'20" EAST, 55.53 FEET TO A POINT; THENCE, SOUTH 01°40'43" EAST, 52.18 FEET TO A POINT; THENCE, SOUTH 16°08'09" WEST, 69.86 FEET TO A POINT; THENCE, SOUTH 32°44'17" WEST, 92.33 FEET TO A POINT; THENCE, 78.16 FEET ALONG THE ARC OF A CURVE TO THE LEFT, HAVING A RADIUS OF 45.00 FEET AND BEING SCRIBED BY A CHORD BEARING SOUTH 17°01'27" EAST, 68.70 FEET, TO A POINT; THENCE, SOUTH 66°47'12" EAST, 456.04 FEET TO A POINT; THENCE, NORTH 86°44'02" EAST, 29.78' FEET TO THE ENDING AT A POINT.



2 VICINITY MAP



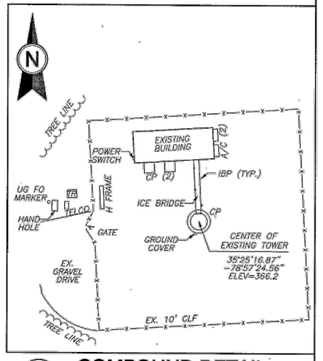
ADJOINER INFORMATION

N/F	PARCEL #	REF.
1. DEBRA WOMACK	0610-28-4567.000	21/3
2. LAURA LEE LEARD	0610-37-5764.000	2719/920
3. SHELBY COLEMAN	0610-27-9636.000	2010/634
4. JOHNNY & PATSY TAYLOR	0610-27-4712.000	10/634
5. BENNIE TAYLOR	0610-17-8620.000	10/634
6. JOHNNY & PATSY TAYLOR	0610-18-9315.000	310/634
7. SHELBY COLEMAN	0610-28-0590.000	2010/634
	ALL ZONED RA – 30	

3 PARENT PARCEL

0 900' 1800'

SCALE: 1"=900' (11X17)
1"=450' (22X34)



4 COMPOUND DETAIL

0 50' 100'

SCALE: 1"=50' (11X17)
1"=25' (22X34)

Know what's below. Call before you dig.

AMERICAN TOWER ®
ATC TOWER SERVICES, INC.
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
FAX: (919) 468-5415

REV.	DESCRIPTION	BY	DATE
0	INITIAL RELEASE	EAL	9/21/15

ATC SITE NUMBER:
414969

ATC SITE NAME:
MAMERS, NC

SITE ADDRESS:
179 DEAN RD,
LILLINGTON, NC 27546

NORTH CAROLINA PROFESSIONAL LAND SURVEYOR L-5021 CHRISTOPHER A. MIELKE

I HEREBY CERTIFY THAT THIS MAP IS CORRECT AND WAS DRAWN UNDER MY DIRECT SUPERVISION. ANY VISIBLE ENCROACHMENTS ARE SHOWN HEREON.

CHRISTOPHER MIELKE,
NORTH CAROLINA REGISTERED LAND SURVEYOR #L-5021
POINT TO POINT LAND SURVEYORS, INC.
FIRM LICENSE NUMBER: C-4145
531 KEISLER DRIVE, SUITE 104
CARY, NC 27518
(DIRECT) 984-242-0864 (MAIN) 866-706-9114

SURVEY BY:
POINT TO POINT
LAND SURVEYORS
531 KEISLER DRIVE, SUITE 104
CARY, NC 27518
(p) (984) 242-0864
(F) (984) 242-0866
(w) pointtopointsurvey.com
P2P DRAWING NO: 15-D-203
P2P JOB NO: N150055

DRAWN BY:	EAL
APPROVED BY:	JKL
DATE DRAWN:	09/21/2015
ATC JOB NO:	414969

*AS-BUILT SURVEY

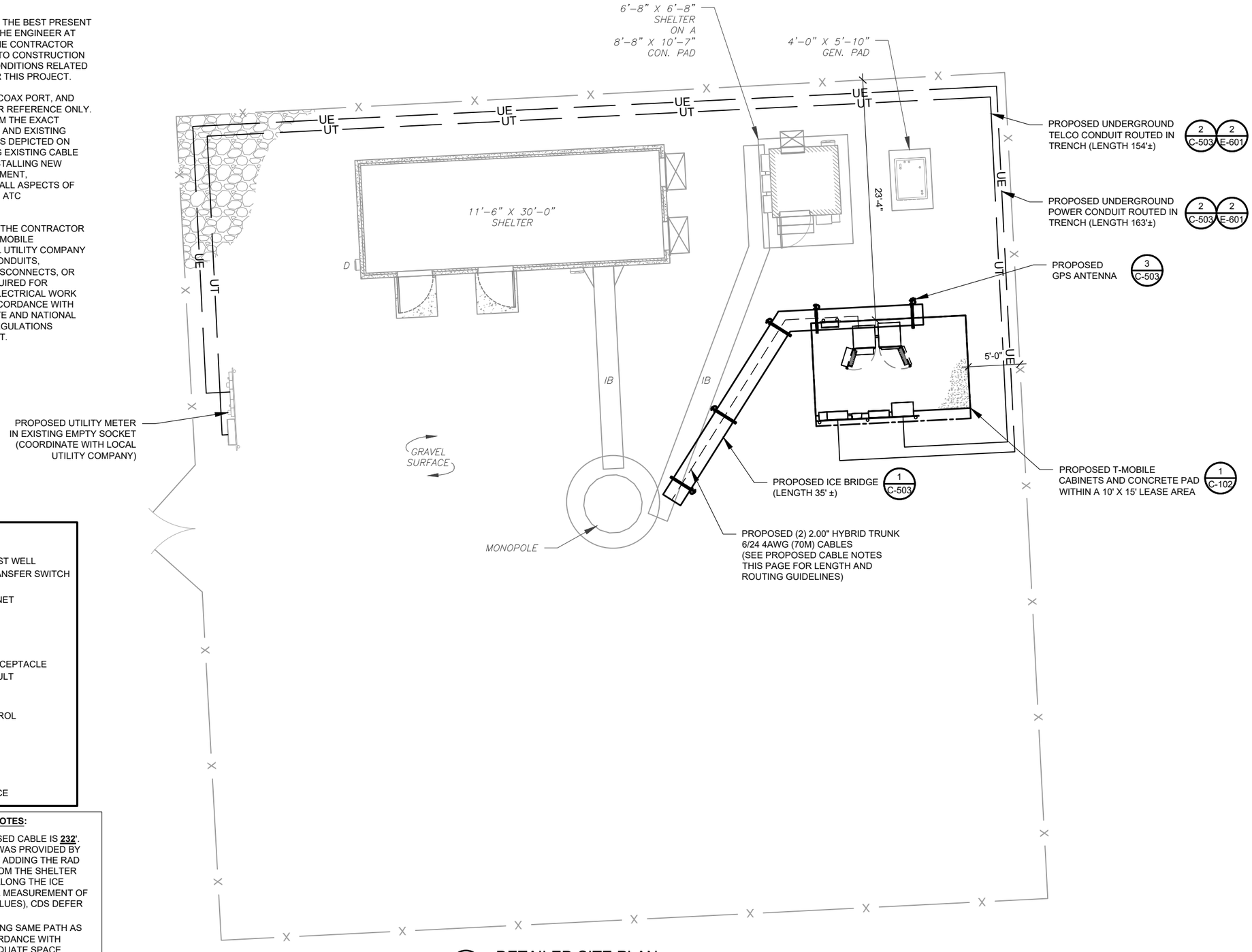
SHEET NUMBER:	REVISION:
V-101	0

SITE PLAN NOTES:

1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.

2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.

3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE T-MOBILE REPRESENTATIVE AND LOCAL UTILITY COMPANY FOR THE INSTALLATION OF CONDUITS, CONDUCTORS, BREAKERS, DISCONNECTS, OR ANY OTHER EQUIPMENT REQUIRED FOR ELECTRICAL SERVICE. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE STATE AND NATIONAL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS PROJECT.



LEGEND

⊗	GROUNDING TEST WELL
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACLE
HH, V	HAND HOLE, VAULT
IB	ICE BRIDGE
K	KENTROX BOX
LC	LIGHTING CONTROL
M	METER
PB	PULL BOX
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
———	CHAINLINK FENCE

PROPOSED CABLE NOTES:

1. ESTIMATED LENGTH OF PROPOSED CABLE IS **232'**. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES), CDS DEFER TO GREATEST CABLE LENGTH.
2. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.

1 DETAILED SITE PLAN

GRAPHIC SCALE

10 0 5 10

(IN FEET)
1 UNIT = 10 FEET

N

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1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	KPF	02/27/25

ATC SITE NUMBER:
414969

ATC SITE NAME:
MAMERS NC

T-MOBILE SITE NAME:
ATC-414969

SITE ADDRESS:
177 DEAN RD.
LILLINGTON,NC 27546-7909

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 057710 ENGINEER PAUL J. NORTHRUP

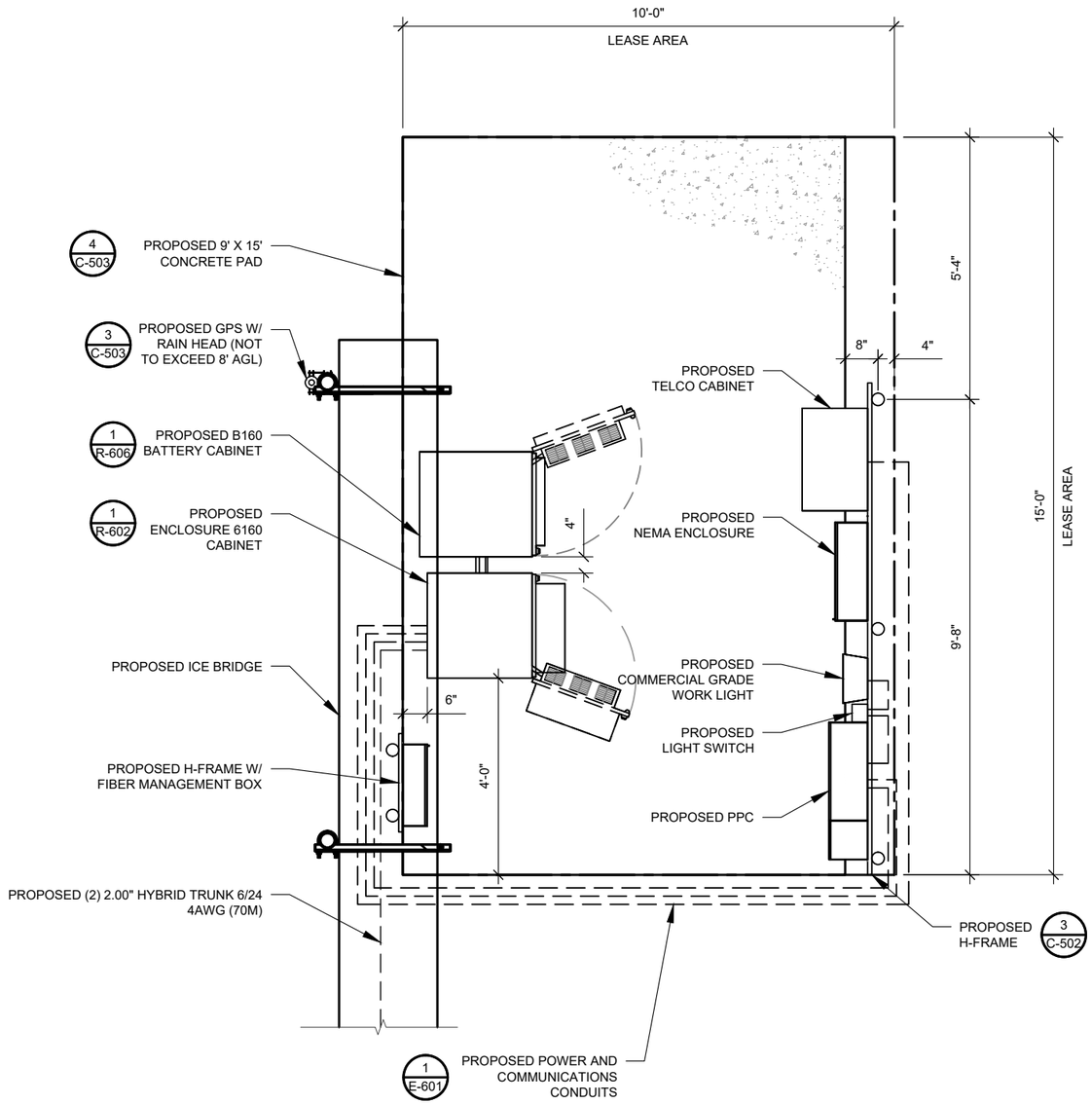
Digitally Signed: 2025-02-27

T-Mobile

ATC PROJ. #:	15020848_D2
CUST. ID:	ATC-414969
CUST. #:	5RA0962A

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	0



1 PROPOSED GROUND EQUIPMENT LAYOUT

GRAPHIC SCALE

3 0 1.5' 3

(IN FEET)
1 UNIT = 3 FEET

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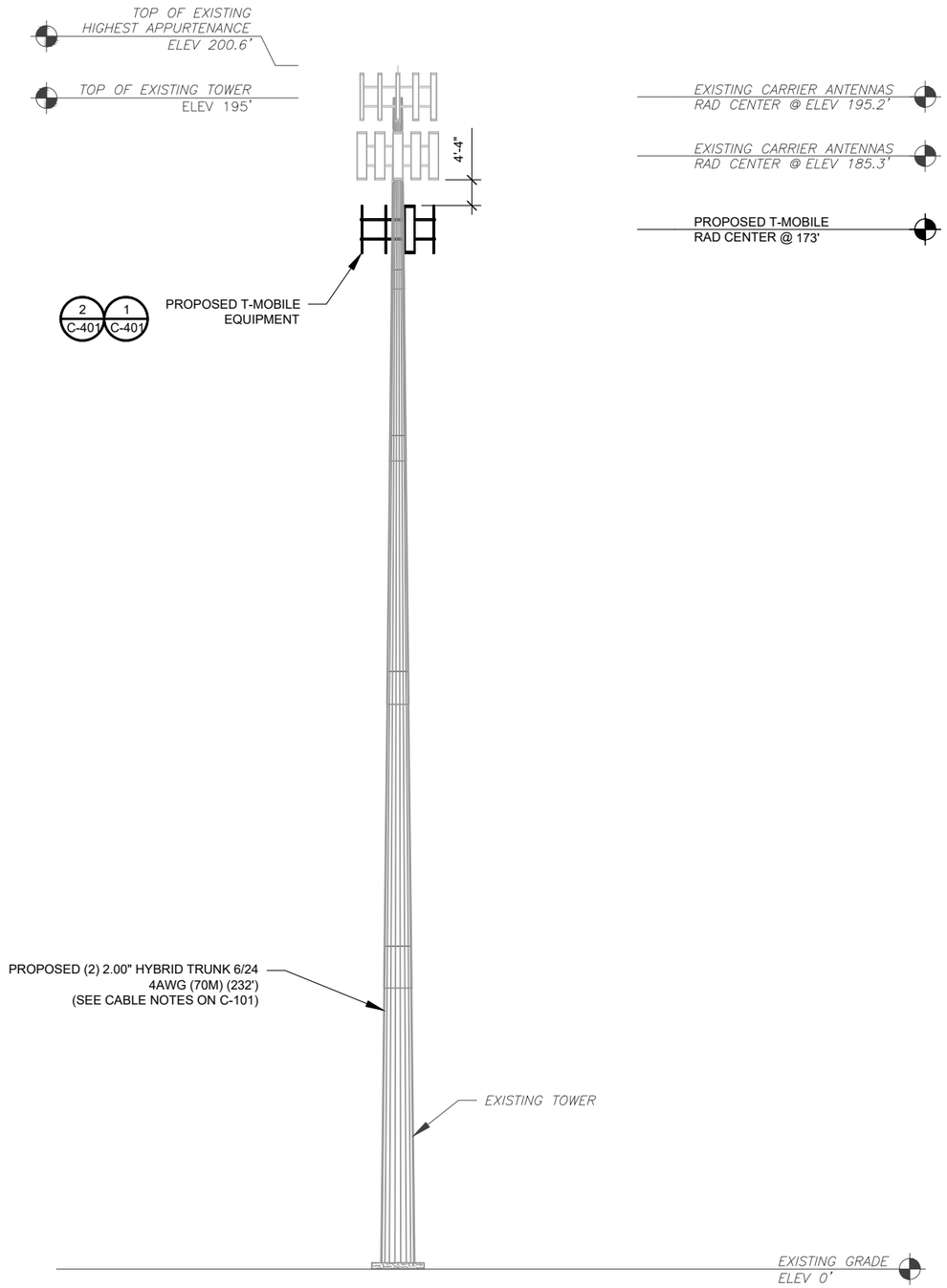
DETAILED EQUIPMENT PLAN

SHEET NUMBER:	REVISION:
C-102	0



1 TOWER ELEVATION
SCALE: N.T.S.

ALL ELEVATIONS REFLECT ABOVE GROUND LEVEL (A.G.L.)

TOWER NOTE:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
2. WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
3. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.
4. TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.

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SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 057710 ENGINEER PAUL J. NORTHRUP

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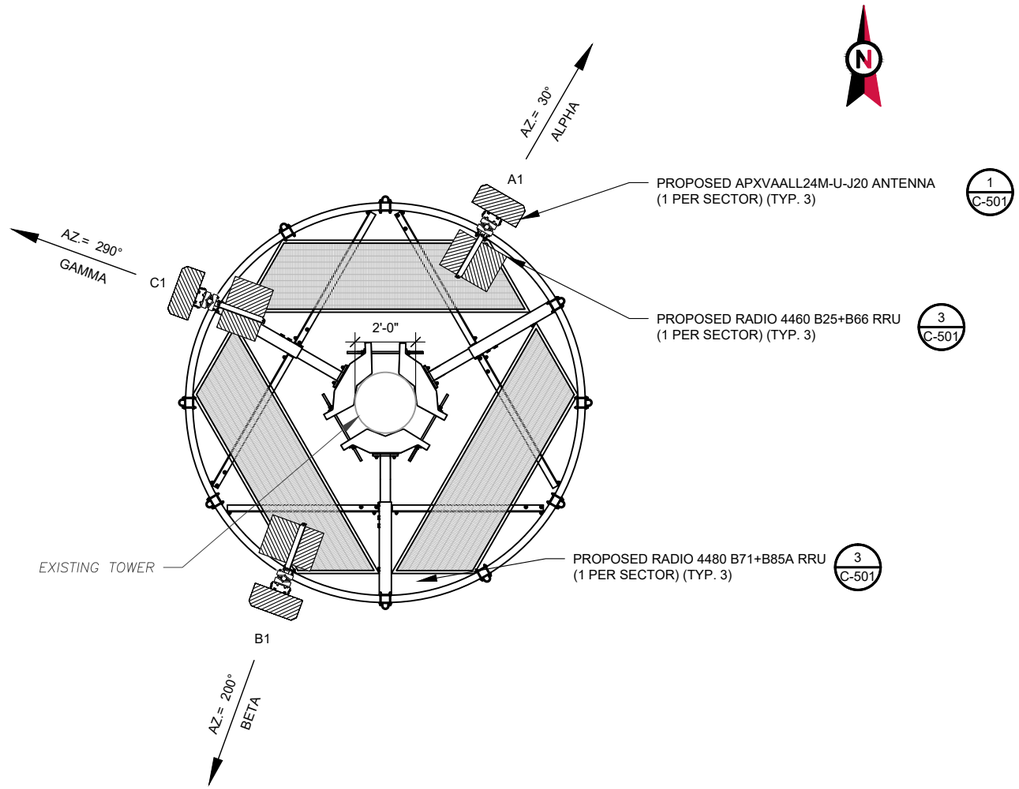
TOWER ELEVATION

SHEET NUMBER:	REVISION:
C-201	0



1 FINAL ANTENNA PLAN

SCALE: N.T.S.

FINAL ANTENNA/ COAX SCHEDULE						
SECTOR	ANT.	MODEL #	RAD CENTER	AZIMUTH	ADDITIONAL TOWER MOUNTED EQUIPMENT	CABLE DESCRIPTION
ALPHA	A1	APXVAALL24M-U-J20	173'	30°	RADIO 4480 B71+B85 RADIO 4460 B25+B66	(2) 2.00" HYBRID TRUNK 6/24 4AWG (70M) (232')
BETA	B1	APXVAALL24M-U-J20		200°	RADIO 4480 B71+B85 RADIO 4460 B25+B66	
GAMMA	C1	APXVAALL24M-U-J20		290°	RADIO 4480 B71+B85 RADIO 4460 B25+B66	
1. GC TO VERIFY THE FINAL RFDS MATCHES THE FINAL CONSTRUCTION DRAWINGS. GC TO NOTIFY ATC PM OF ANY DISCREPANCY PRIOR TO INSTALLING THE EQUIPMENT. 2. GC TO CAP ALL UNUSED PORTS. 3. GC TO CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.						

2 ANTENNA SCHEDULE

RF JUMPER LENGTH
MONOPOLE = 15'± GUYED / SELF SUPPORT = FACE WIDTH + 15'
REFER TO FINAL RFDS FOR TYPE AND QUANTITY

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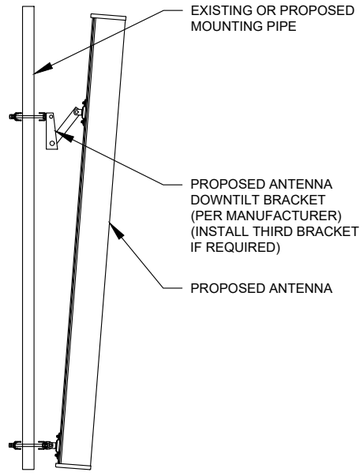
CUST. #:	5RA0962A

ANTENNA INFORMATION & SCHEDULE

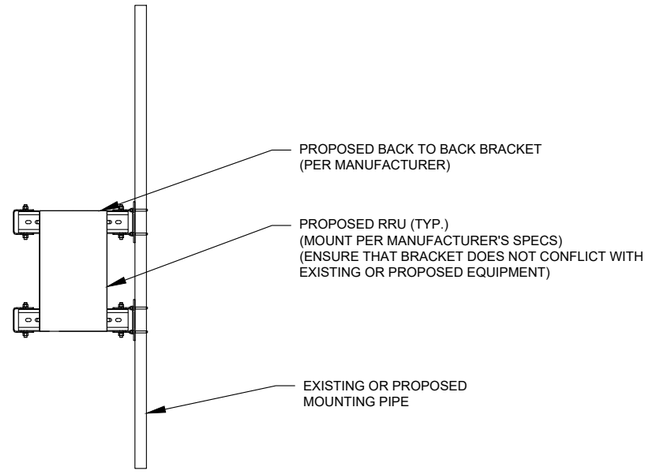
SHEET NUMBER:	REVISION:
C-401	0

EXISTING/PROPOSED MOUNTS AND/OR MOUNT MODIFICATIONS NOT SHOWN FOR CLARITY. REFER TO ANTENNA PLANS, MOUNT ANALYSES AND/OR MOUNT MODIFICATION DOCUMENTS FOR ADDITIONAL DETAIL.



1 PROPOSED ANTENNA MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.



2 PROPOSED RRU MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.

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MAMERS NC

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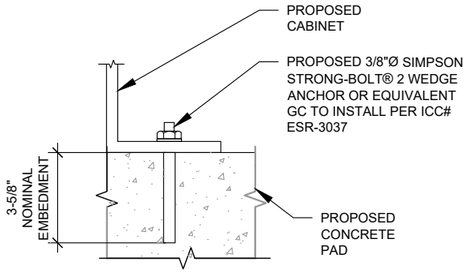
CUST. #:	5RA0962A

MOUNT DETAILS

SHEET NUMBER:	REVISION:
C-501	0

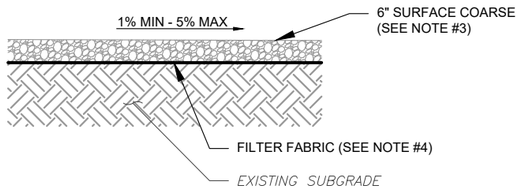


NOTE:

INSTALL SIMPSON STRONG-TIE® STRONG-BOLT® 2 WEDGE ANCHOR(S) STRICTLY PER INSTALLATION INSTRUCTIONS INCLUDED WITH PRODUCT OR FOUND ONLINE AT WWW.STRONGTIE.COM. PROPER INSTALLATION IS CRITICAL FOR FULL PERFORMANCE.

1 CABINET ATTACHMENT DETAIL

SCALE: N.T.S.

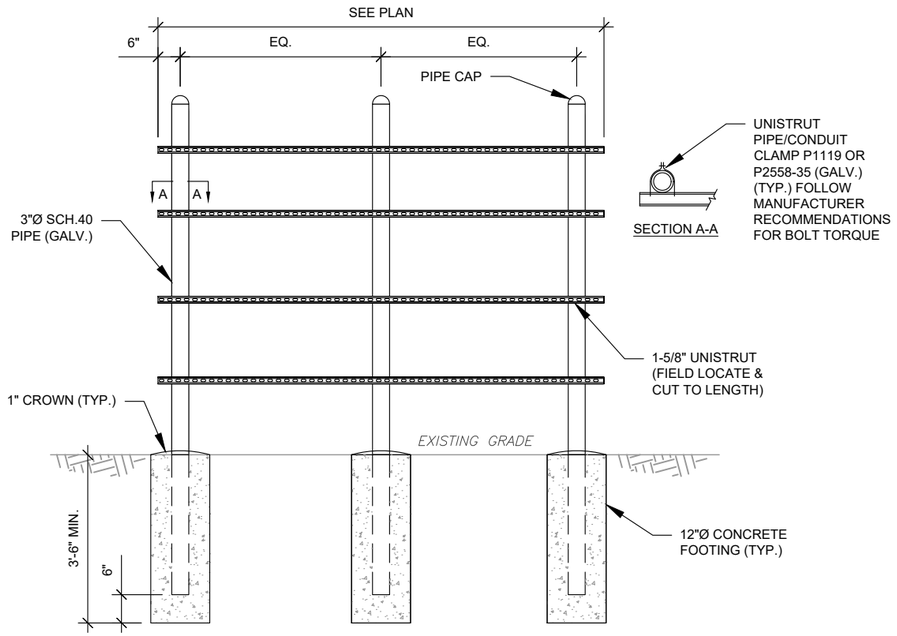


NOTES:

1. CONTRACTOR TO CONTACT ALL UTILITIES FOR LOCATION OF UNDERGROUND SERVICES. SERVICE LOCATIONS TO BE CONFIRMED PRIOR TO CONSTRUCTION.
2. REMOVE ALL UNSUITABLE OR DELETERIOUS MATERIAL AS REQUIRED. COMPACT UNDERLYING SOIL TO 90% OF MAXIMUM DENSITY. REPLACE REMOVED SOIL WITH 8" LIFTS OF GRANULAR "B" MATERIAL TO A DEPTH OF 4" BELOW PROPOSED GRADE. COMPACT TO MINIMUM 95% OF MAXIMUM DRY DENSITY ALL COMPACTION SHALL BE IN ACCORDANCE WITH THE MOST RECENT IBC. REVIEW WITH PROJECT MANAGER AND GEOTECT PRIOR TO CONSTRUCTION.
3. SURFACE COARSE OF GRANULAR "A" MATERIAL SHALL CONSIST OF EVENLY GRADED MIXTURE OF CRUSHED STONE OR GRAVEL, WITH 100% PASSING THROUGH 3/4" SIEVE AND NOT MORE THAN 5% PASSING THROUGH #4 SIEVE.
4. PROVIDE GEOTEXTILE FABRIC UNDER WASHED CHIPPED STONE COMPOUND UNLESS NOTED OTHERWISE. WOVEN GEOTEXTILE:US FABRICS: US 230 OR APPROVED EQUIVALENT. CONTRACTOR MAY SUBMIT DESIGN ALTERNATIVE AS OUTLINED IN THE AMERICAN TOWER MASTER SPECIFICATIONS.

2 COMPOUND CROSS SECTION

SCALE: N.T.S.



H-FRAME NOTES:

1. IF IT IS NECESSARY TO EXTEND THE H-FRAME, AN ADDITIONAL POST WILL ALWAYS BE REQUIRED.
2. PROPOSED UNISTRUTS TO BE FIELD CUT AND SHOULD NOT EXTEND MORE THAN 6 INCHES BEYOND THE LAST POST.
3. SPRAY ENDS OF UNISTRUT WITH COLD GALVANIZING SPRAY PAINT, ALLOW TO DRY, THEN COVER WITH RUBBER PROTECTIVE CAPS FOR SAFETY.
4. UNISTRUT TO BE CUT FLUSH WITH NO SHARP OR JAGGED EDGES.
5. ALL PROPOSED HARDWARE TO BE MOUNTED PER MANUFACTURERS SPECS.

3 TYPICAL H-FRAME DETAIL

SCALE: N.T.S.

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LILLINGTON,NC 27546-7909

SEAL:

Digitally Signed: 2025-02-27

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ATC PROJ. #:	15020848_D2
CUST. ID:	ATC-414969
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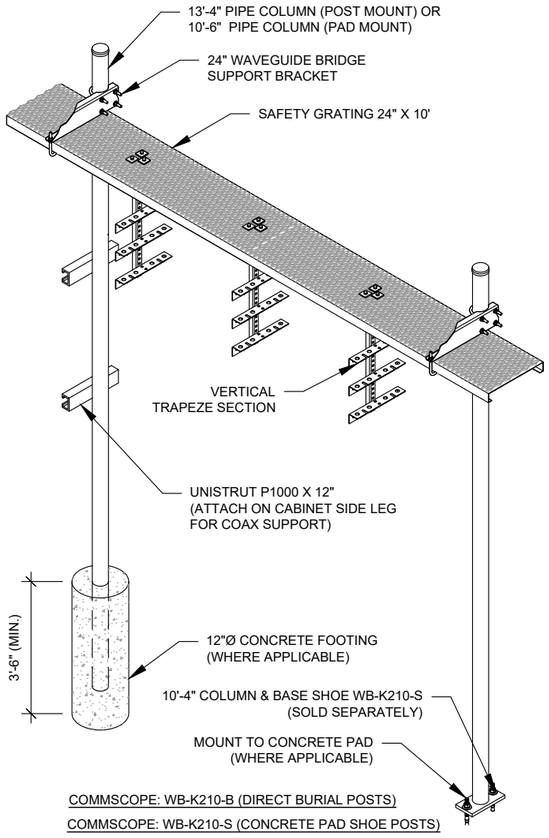
CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-502	0



COMMSCOPE: WB-K210-B (DIRECT BURIAL POSTS)

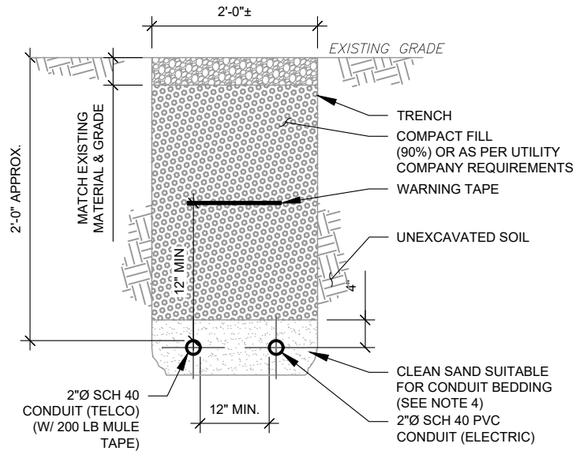
COMMSCOPE: WB-K210-S (CONCRETE PAD SHOE POSTS)

CONSTRUCTION NOTE:

1. INSTALL ICE BRIDGE TO ALLOW 7 FEET CLEARANCE ABOVE GRADE TO LOWEST APPURTENANCE.
2. INSTALL PER MANUFACTURES SPECIFICATION.

1 WAVEGUIDE BRIDGE KIT

SCALE: N.T.S.

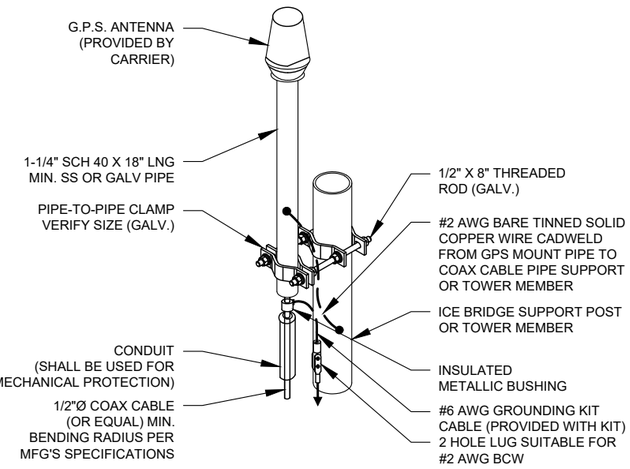


TRENCH NOTES:

1. IF FREE OF ORGANIC OR OTHER DELETERIOUS MATERIAL, EXCAVATED MATERIAL MAY BE USED FOR BACKFILL.
2. IF NOT, PROVIDE CLEAN, COMPACTIBLE MATERIAL. COMPACT IN 8" LIFTS. REMOVE ANY LARGE ROCKS PRIOR TO BACKFILLING. CONTRACTOR TO VERIFY LOCATION OF EXISTING U/G UTILITIES PRIOR TO DIGGING.
3. IF CURRENT AS-BUILT DRAWINGS ARE NOT AVAILABLE CONTRACTOR SHALL HAND DIG U/G TRENCHING.
4. CONCRETE ENCASE CONDUIT WHEN TRENCHING UNDER SITE ACCESS ROAD.

2 TELCO AND POWER CONDUIT JOINT TRENCH

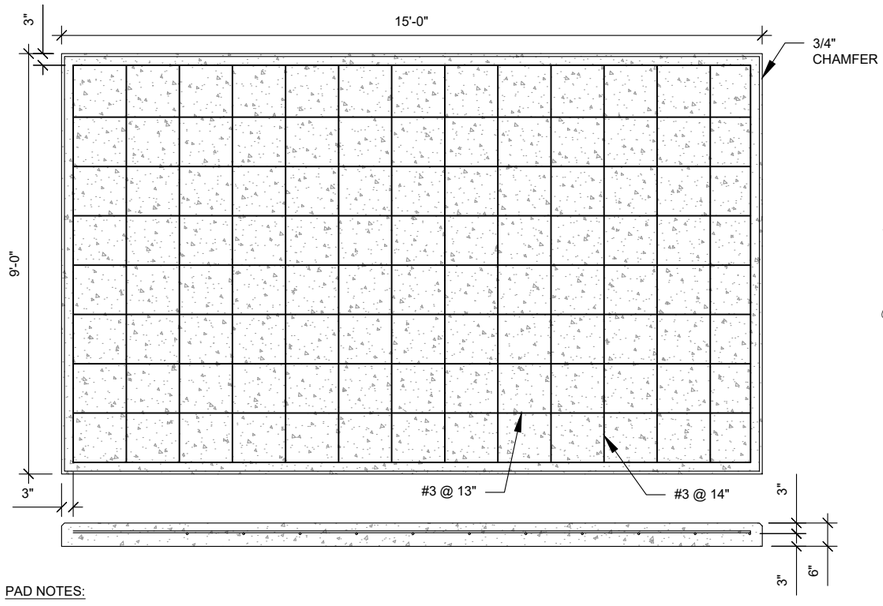
SCALE: N.T.S.



NOTE:
1. GPS SHALL BE PLACED WITH CLEAR SIGHT LINE TO THE SOUTHERN SKY.
2. CONTRACTOR TO SUPPLY COAX FOR GPS UNIT.

3 GPS ANTENNA ATTACHMENT DETAIL

SCALE: N.T.S.

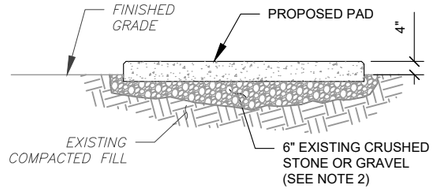


PAD NOTES:

1. PADS SHALL BE PRE-CAST MATCHING THIS DESIGN WHERE ALLOWED BY LOCAL JURISDICTION.
2. REFER TO CONCRETE & REINFORCED STEEL NOTES ON SHEET G-002 & ATC SPEC 033000 FOR CAST-IN-PLACE PADS.

4 REINFORCED PAD LAYOUT

SCALE: N.T.S.



PAD NOTES:

1. SUBGRADE AND FILL SHALL CONSIST OF CLEAN SOIL. DELETRIOUS MATERIAL AND ORGANICS SHALL BE REMOVED.
2. MECHANICALLY COMPACT FOOTPRINT OF PAD PLUS 2' PERIMETER.
3. USE GALVANIZED HILTI EXPANSION ANCHORS OR, APPROVED EQUAL, FOR EQUIPMENT ANCHORAGE.
4. FOR SIZE AND LOCATION OF ANCHORS AND OTHER REQUIREMENT, SEE EQUIPMENT VENDOR DRAWINGS.

5 GRAVEL PREPARATION

SCALE: N.T.S.

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CUST. ID:	ATC-414969
CUST. #:	5RA0962A

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-503	0

GROUNDING NOTES:

1. ALL EQUIPMENT ENCLOSURES, DEVICES AND CONDUITS SHALL BE GROUNDED TO CONFORM WITH THE LATEST REQUIREMENTS OF THE NEC BY THE INSTALLATION OF A SEPARATE, GREEN, INSULATED GROUND CONDUCTOR FOR ALL FEEDER AND BRANCH CIRCUITS. GROUND CONDUCTORS SHALL BE OF THE SIZE INDICATED ON THE DRAWINGS. GROUND CONDUCTORS SHALL BE CONTINUOUS IN LENGTH AND SHALL BE BONDED TO EACH ENCLOSURE THEY PASS THROUGH. CONDUIT SHALL NOT BE USED AS A GROUNDING CONDUCTOR.

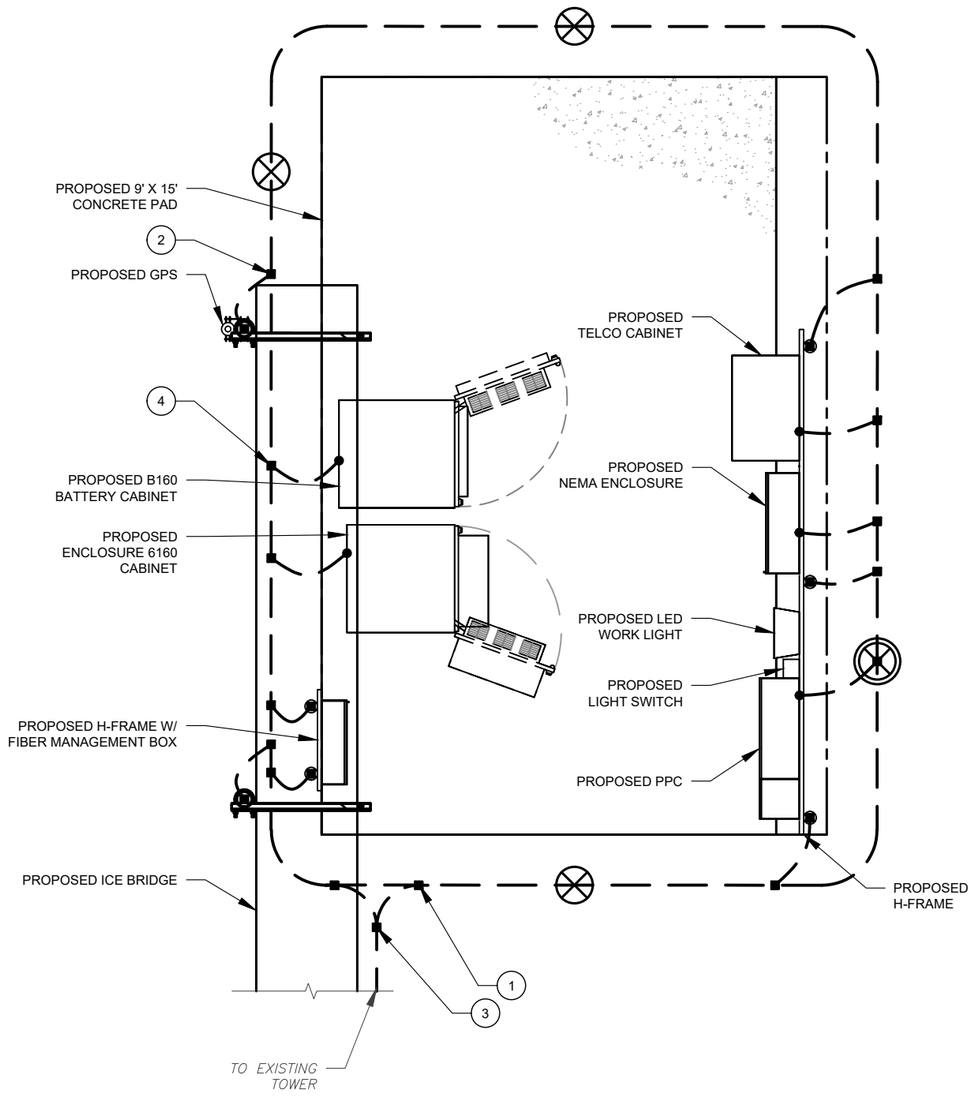
2. GROUNDING CONDUCTORS SHALL:
   - A. BE #2 AWG SOLID BARE TINNED COPPER (SBTC) FOR ALL GROUNDING SYSTEM WIRE UNLESS OTHERWISE NOTED, OR OTHERWISE REQUIRED BY CODE.
   - B. BE MINIMUM 12" BEND RADIUS. KEEP NUMBER OF BENDS TO A MINIMUM.
   - C. AVOID LONG BONDING CONNECTION RUNS. MAKE DIRECT AS POSSIBLE.
   - D. NOT HAVE ANY U-SHAPED RUNS.
   - E. BE IN NON-METALLIC CONDUIT ONLY, IF IN CONDUIT.
   - F. BE PLACED THROUGH NON-METALLIC SLEEVES IN FLOORS, WALLS, CEILINGS, ETC.
   - G. PROTECTED IN NON-METALLIC CONDUIT WHERE EXPOSED ABOVE GRADE.

2. INSTALL ALL GROUNDING RINGS AND RADIALS WITH CONDUCTIVE CEMENT, SANKOSHA AS DISTRIBUTED BY ELECTRIC MOTION COMPANY, INC., WINSTED, CT 06098, OR AS SPECIFICALLY INDICATED. INSTALL PER MANUFACTURER'S SPECIFICATIONS.

3. GROUND RINGS SHALL BE:
   - A. MINIMUM 30" BELOW GRADE, OR BELOW FROST LINE WHICHEVER IS DEEPER.
   - B. MINIMUM 2' FROM FOUNDATIONS, FOOTINGS, OTHER GROUNDING SYSTEMS AND ALL CONDUCTIVE OBJECTS.
   - C. WITH MINIMUM 12" BEND RADII.
   - D. WITH ALL CONNECTIONS IN CONTACT WITH EARTH, BONDED BY EXOTHERMIC WELDING.
   - E. BONDED TO A SINGLE POINT GROUND (SPG) WITH A SINGLE WIRE AS INDICATED ON DRAWINGS.

4. GROUND RODS SHALL BE:
   - A. MINIMUM 5/8" DIAMETER.
   - B. MINIMUM 10' LONG.
   - C. COPPER-CLAD GALVANIZED STEEL OR STAINLESS STEEL.
   - D. PLACED IN UNDISTURBED SOIL AND BELOW THE FROST LINE.
   - E. INSTALLED WITH MINIMUM SEPARATION DISTANCE OF TWICE THE DEPTH OF THE ROD(S), OR AS INDICATED ON DRAWINGS.
   - F. MINIMUM TWO (2) RODS ON THE TOWER RING OR ONE (1) PER LEG WHICHEVER IS LARGER, MINIMUM FOUR (4) RODS ON EVERY EQUIPMENT BUILDING RING WITH ONE AT EACH CORNER OR AS INDICATED, MINIMUM ONE (1) ROD FOR POWER SERVICE GROUNDING ELECTRODE, AND MINIMUM ONE (1) ROD AT END OF EACH RADIAL.

5. CONDUCTIVE OBJECTS, SUCH AS FENCES, SHALL BE BONDED TO THE GROUNDING SYSTEM IF WITHIN 20' OF THE TOWER GROUNDING SYSTEM, OR 5' OF ANY OTHER GROUNDED COMPONENT.



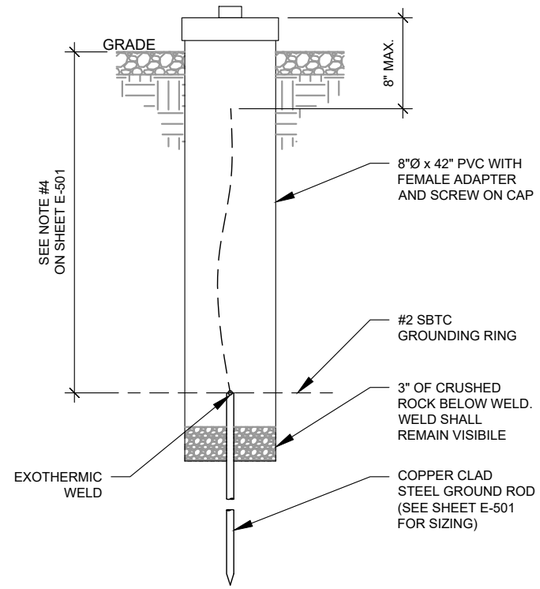
1 DETAILED GROUNDING PLAN
SCALE: N.T.S.

GROUNDING PLAN LEGEND:

- EXISTING GROUND WIRE
- GROUND WIRE
- EXOTHERMIC WELD
- MECHANICAL WELD
- 5/8"Ø X 10' COPPER GROUND ROD
- TEST WELL

GROUNDING KEYED NOTES:

1. BOND TO TOWER GROUND RING
2. #2 AWG BOND FROM VERTICAL H-FRAME AND ICE BRIDGE POST TO EXTERNAL GROUND RING (TYP. EVERY POST).
3. #2 AWG SBTC BOND FROM TOWER GROUND RING TO EQUIPMENT.
4. EQUIPMENT BOND TO GROUND RING (TYP.)



2 TEST WELL DETAIL
SCALE: N.T.S.

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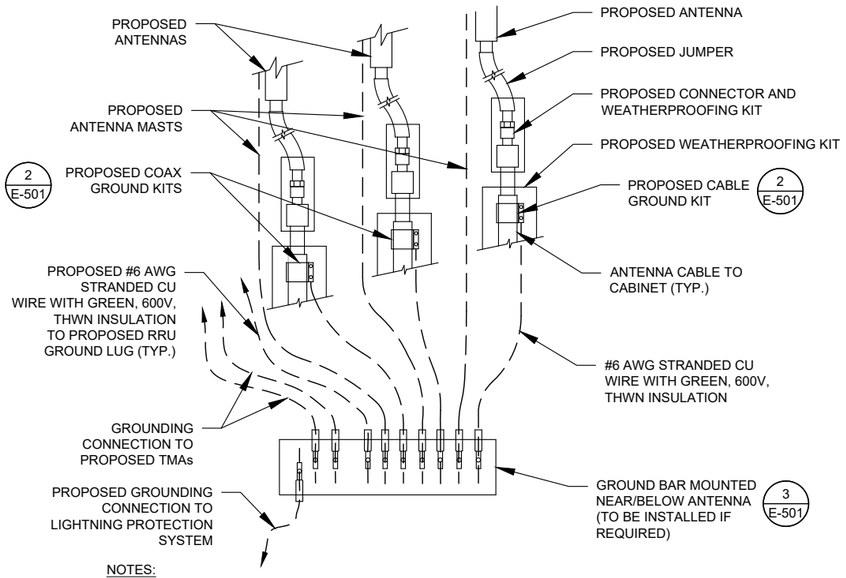
GROUNDING PLAN AND NOTES

SHEET NUMBER:	REVISION:
E-101	0

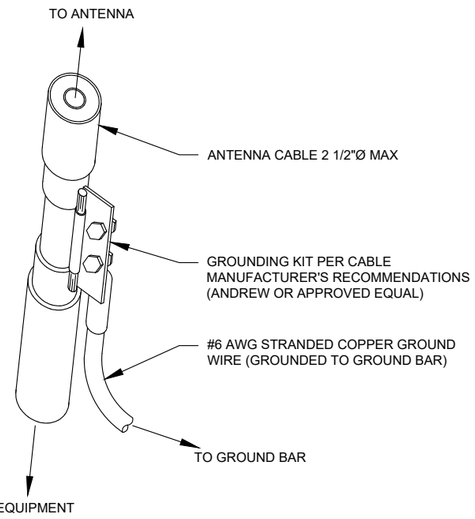


NOTES:

1. THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
2. SITE GROUNDING SHALL COMPLY WITH T-MOBILE GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH T-MOBILE GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

1 TYPICAL ANTENNA GROUNDING DIAGRAM

SCALE: N.T.S.

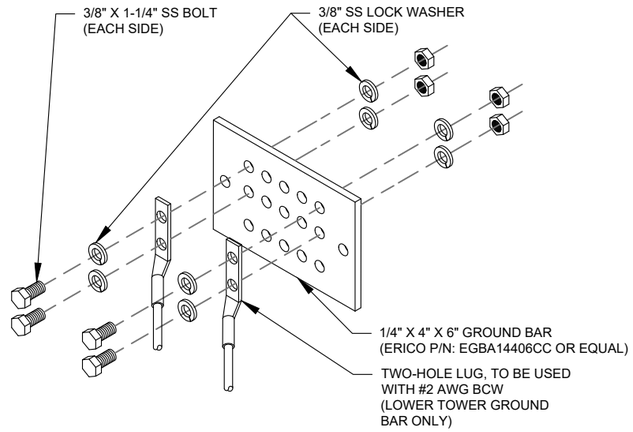


GROUND KIT NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. CONTRACTOR SHALL PROVIDE WEATHERPROOFING KIT (ANDREW PART NUMBER 221213) AND INSTALL/TAPE PER MANUFACTURER'S SPECIFICATIONS.

2 CABLE GROUND KIT CONNECTION DETAIL

SCALE: N.T.S.

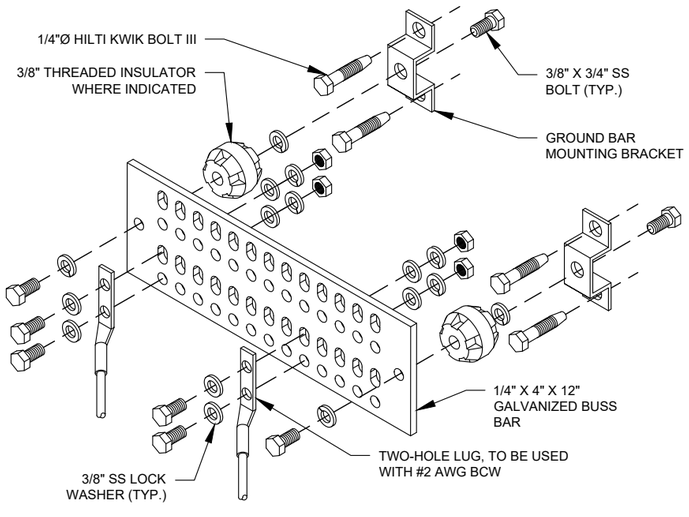


GROUND BAR NOTES:

1. GROUND BAR KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
2. GROUND BAR TO BE BONDED DIRECTLY TO TOWER.

3 TOWER GROUND BAR DETAIL

SCALE: N.T.S.

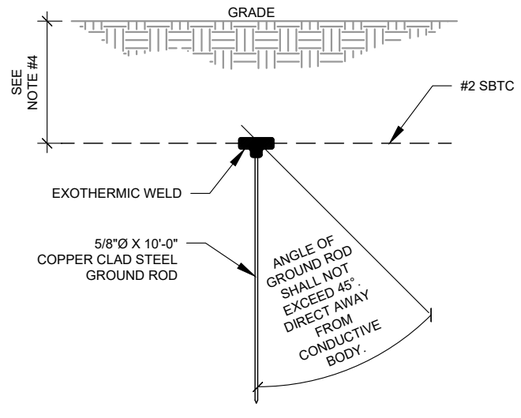


GROUND BAR NOTES

1. GROUND KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
2. GROUND BAR SHALL BE BOLTED TO STRUCTURAL MEMBER OR ANCHORED TO CONCRETE SLAB W/ HILTI KWIK BOLT III.

4 MAIN GROUND BAR DETAIL

SCALE: N.T.S.

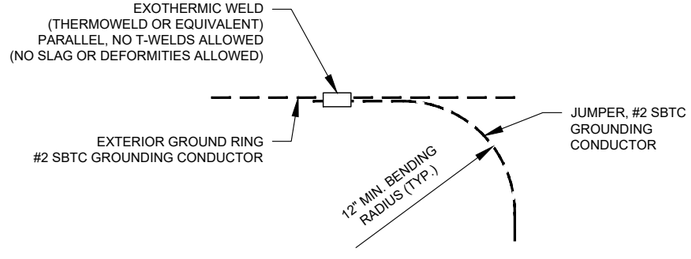


NOTES:

1. SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS.
2. COORDINATE UTILITY, LOCATE BEFORE DIGGING.
3. CONDUIT TRENCHING DEPTHS AT 36" OR 6" BELOW FROST LINE, WHICHEVER IS GREATER.
4. ALL RING AND RADIAL DEPTHS AT 30" OR 6" BELOW FROST LINE, WHICHEVER IS GREATER.

5 GROUND ROD DETAIL

SCALE: N.T.S.



6 TIE CONNECTION DETAIL

SCALE: N.T.S.

AMERICAN TOWER®
A.T. ENGINEERING SERVICES, PLLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
P-1177

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	KPF	02/27/25

ATC SITE NUMBER:
414969
ATC SITE NAME:
MAMERS NC
T-MOBILE SITE NAME:
ATC-414969
SITE ADDRESS:
177 DEAN RD.
LILLINGTON,NC 27546-7909

SEAL:

Digitally Signed: 2025-02-27

T-Mobile

ATC PROJ. #:	15020848_D2
CUST. ID:	ATC-414969
CUST. #:	5RA0962A

GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-501	0

PANEL DESIGNATION:	TMO	TYPE:	LIGHTING & APPLIANCE	SYSTEM:	120/240V, 1Ø, 3W, 24 CKT	LOCATION:	TMO LEASE EQUIPMENT AREA
		MOUNTING:	SURFACE	MAIN BREAKER (MB):	200A		
		ENCLOSURE:	NEMA 3R	MAIN BUS RATING:	225A	PANEL NOTES:	PROPOSED
				MIN. A.I.C. RATING:	N/A		

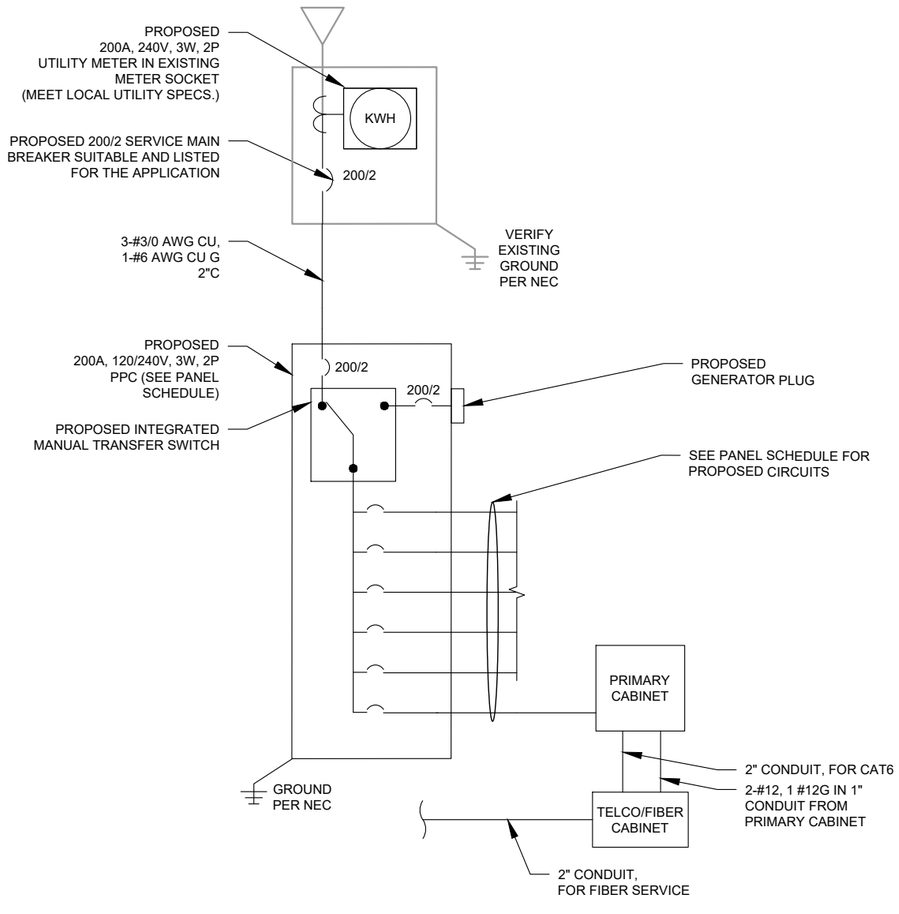
CONNECTED LOAD (kVA)		BRIEF DESCRIPTION	FEEDER OR BRANCH CIRCUIT						CIRC. NOTES		CIRC. NOTES	POLE NO.	FEEDER OR BRANCH CIRCUIT						BRIEF DESCRIPTION	CONNECTED LOAD (kVA)	
			BREAKER		CIRCUIT			POLE NO.					CIRCUIT			BREAKER					
A	B		AMPS	POLES	WIRE	GND	COND.						COND.	GND	WIRE	POLES	AMPS			A	B
0.01		SURGE	60	2	3-#6	#10	1"	1				2	1/2"	#12	2-#12	1	20	GFI		0.18	
	0.01							3				4	1/2"	#12	2-#12	1	20	LIGHT			0.50
7.50		ENCLOSURE 6160	150	2	2-#3/0	#6	2"	5				6	1/2"	#12	2-#12	1	20	AAV GFI		0.15	
	7.50							7				8									0.00
0.00								9				10								0.00	
	0.00							11				12									0.00
0.00								13				14								0.00	
	0.00							15				16									0.00
0.00								17				18								0.00	
	0.00							19				20									0.00
0.00								21				22								0.00	
	0.00							23				24									0.00
7.5	7.5								A	B	TOTAL									0.3	0.5
									7.8	8.0	15.9	CONNECTED LOAD (kVA)									
									7.8	8.0	15.9	DEMAND LOAD (kVA)									

DERATING FACTOR (80%)

DEMANDLOAD SIZING: 83 AMPS

1 PANEL SCHEDULE

NOTE:
1. ALL EQUIPMENTS' SHORT-CIRCUIT CURRENT RATING SHALL EXCEED AVAILABLE FAULT CURRENT PER UTILITY
2. CONTRACTOR TO INSTALL HANDHOLES AT EVERY 3RD 90° TURN



2 ONE-LINE DIAGRAM

STANDARD CONDUIT USE TABLE			
CONDUIT TYPE	USE CASE	LOCATION	USE CASE EXAMPLE
RMC (METALLIC)	AC, DC COMM	ABOVE GROUND	ABOVE GROUND PPC TO SSC
PVC	AC POWER	UNDERGROUND	UNDERGROUND PPC TO SSC OR BACKHAUL TRANSPORT HUB TO SSC
LFMC	AC, DC, COMM	MAX 6' PER CONDUIT RUN, ABOVE GROUND ONLY	TIGHT LOCATIONS BETWEEN HUB AND CONDUIT BUT NOT TO BE USED WHERE IT CAN BE STEPPED ON
EMT	INDOOR AC, DC COMM	INDOOR NOT EXPOSED TO THE OUTDOOR ENVIRONMENT (MUST BE DRY)	CIRCUIT PANEL TO JUNCTION BOX
LFNC	GROUND WIRE	CONCEALING AND PROTECTING BTCW RISERS ONLY	GROUND RING TO MGB OR SSC

EXCEPTION CONDUIT USE TABLE			
CONDUIT TYPE	USE CASE	LOCATION	USE CASE EXAMPLE
EMT (NOT PREFERRED)	OUTDOOR DC, COMM	OUTDOOR WHEN USED WITH WATERTIGHT HUBS ONLY	BETWEEN EQUIPMENT AND BATTERY CABINET OR EQUIPMENT TO EQUIPMENT CABINETS FOR INTER CABINET CONNECTION
RMC NONMETALLIC (ALUMINUM)	OUTDOOR/INDOOR PER NEC GUIDLINES	ABOVE GROUND	MAT BE USED AS A LOWER COST ALTERNATIVE TO METALLIC RMC, MUST MEET OR EXCEED FEDERAL SPEC: WW-C-540C, UL-6A, ANSI C80.5, NEC 344.10 (A) ALLOWS THE USE OF EITHER ALUMINUM OR GALVANIZED FITTINGS

3 CONDUIT USE TABLES

AMERICAN TOWER®
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SUITE 300
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PHONE: (919) 468-0112
P-1177

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	KPF	02/27/25

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SEAL:

Digitally Signed: 2025-02-27

T-Mobile

ATC PROJ. #:	15020848_D2
CUST. ID:	ATC-414969
CUST. #:	5RA0962A

PANEL SCHEDULE & ONE-LINE DIAGRAM

SHEET NUMBER:	REVISION:
E-601	0

Proposed RAN Equipment		
Template: 67E998E 6160 (LRP)		
Enclosure	**1**	**2**
Enclosure Type	B160	Enclosure 6160_v2 AC
Transport System		CSR IXRe V2 (Gen2)
Hybrid Cable System		Hybrid Trunk 6/24 4AWG 70m (x2)
Baseband		RP 6672 N600 N1900 N2100 L600 L1900 L2100

RAN Scope of Work:

Install: (2) HCS 6/24 4AWG 70m, (1) RP6672, (1) E6160, (1) B160, (1) IXR-e

1 CABINET CONFIGURATION

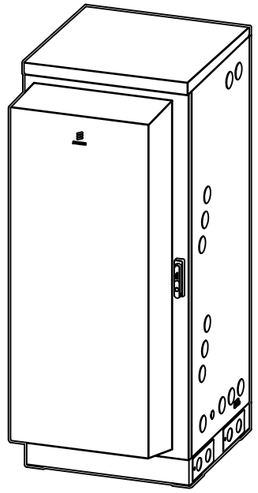
NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

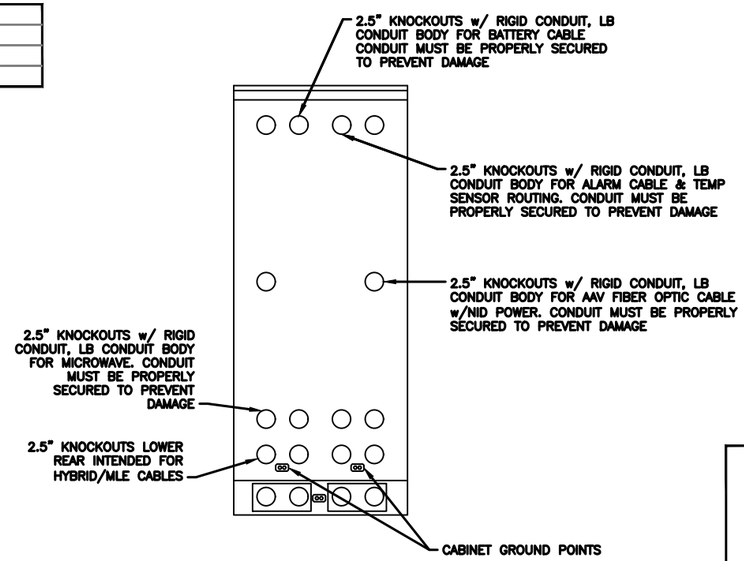
SUPPLEMENTAL

SHEET NUMBER: R-601

REVISION: 0

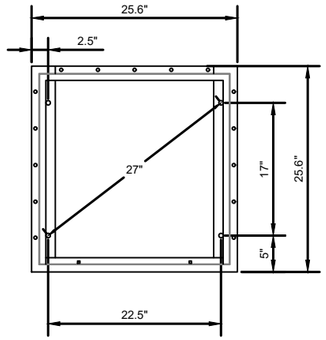
MANUFACTURER:	ERICSSON
MODEL:	6160 SITE SUPPORT CABINET
DIMENSIONS:	63" x 25.6" x 33.6" (H x W x D)
WEIGHT:	373 LBS





REAR VIEW

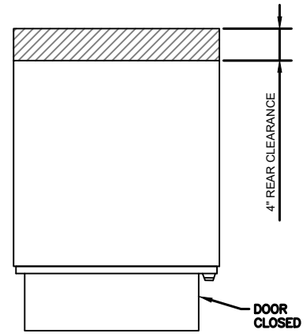
NOTE:
- CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL THROUGH KNOCKOUTS
- CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND OR CABLING

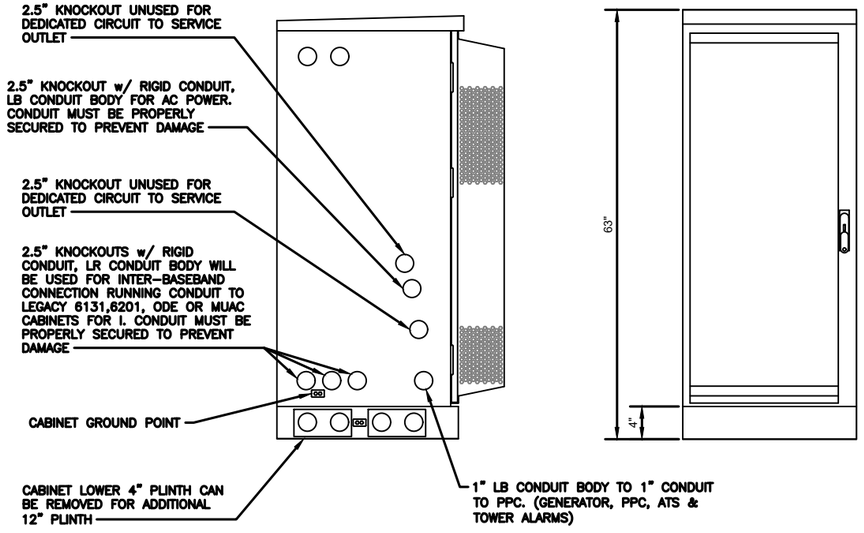


BOLT DOWN PATTERN

GROUNDING NOTE:

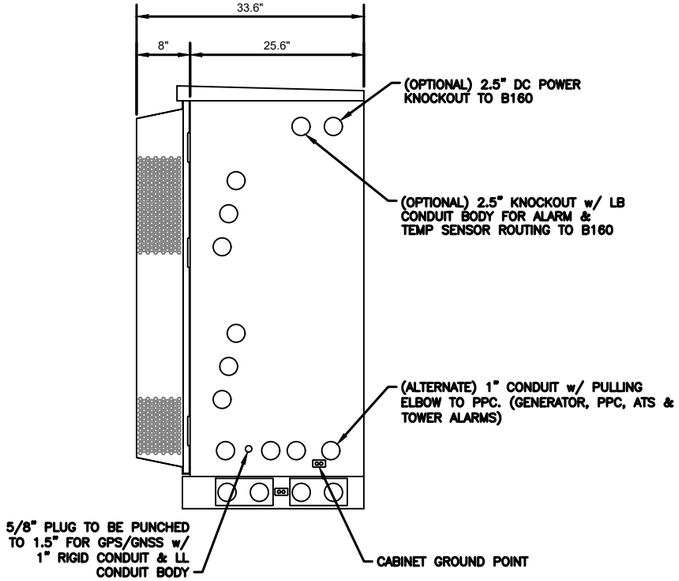
"CABINET GROUNDING TO USE A SINGLE, #2 BTCW CONDUCTOR, W/ 2-HOLE, 1" C-C, LONG BARREL, WINDOW LUG, IN 3/4" LFNC TO GROUND RING. PLINTH GROUNDING IS NOT REQUIRED."



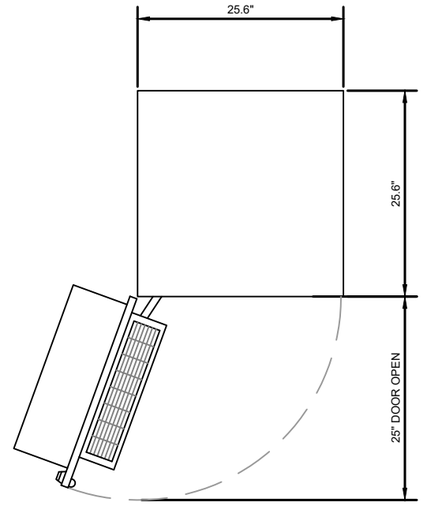


LEFT VIEW

FRONT VIEW



RIGHT VIEW



PLAN VIEW

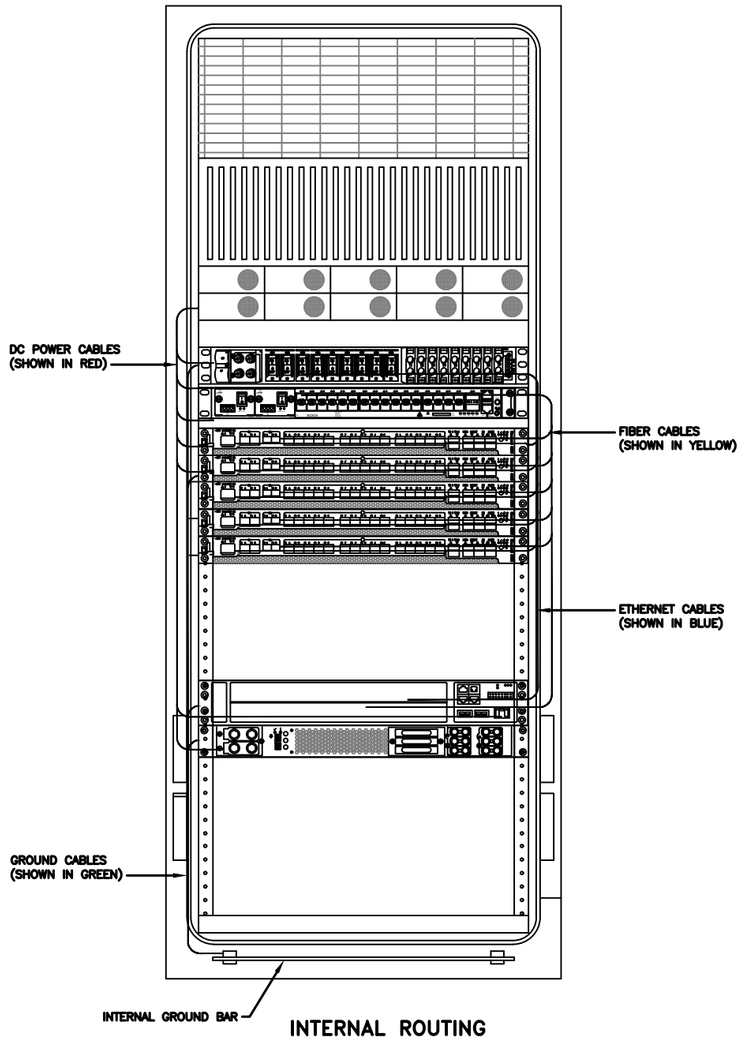
1 ERICSSON 6160 SITE SUPPORT CABINET SPECIFICATIONS

SCALE: N.T.S.

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

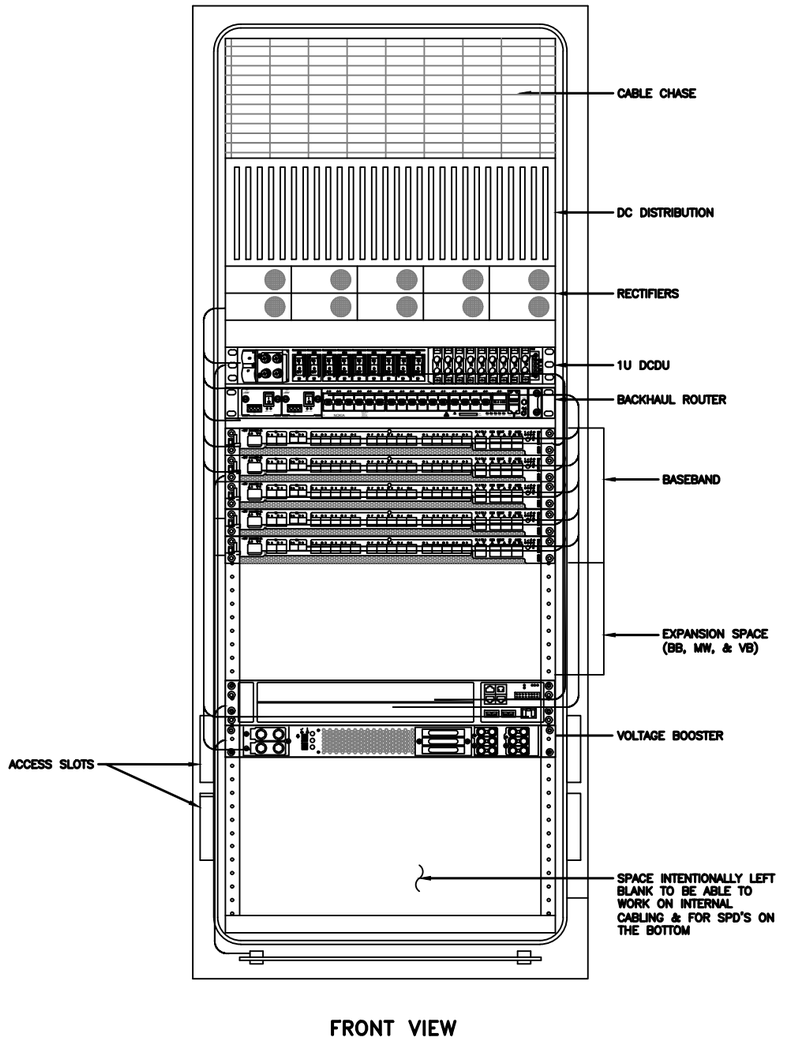
SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-602	0



INTERNAL ROUTING
(DOOR OPEN)

RACK ASSIGNMENTS	
RU SLOTS	DESCRIPTION
1	DC DISTRIBUTION
2	
3	
4	
5	RECTIFIER SHELF
6	
7	FIBER BOX
8	DCDU
9	BACKHAUL ROUTER
10	
11	1ST BASEBAND
12	2ND BASEBAND
13	3RD BASEBAND
14	4TH BASEBAND
15	5TH BASEBAND
16	EXPANSION
17	
18	
19	
20	EXPANSION / LEGACY BASEBAND / VOLTAGE BOOSTER
21	
22	VOLTAGE BOOSTER
23	OPEN SPACE FOR SPD ACCESS
24	
25	



FRONT VIEW
(DOOR OPEN)

1 ERICSSON 6160 CABINET DETAILS

SCALE: N.T.S.

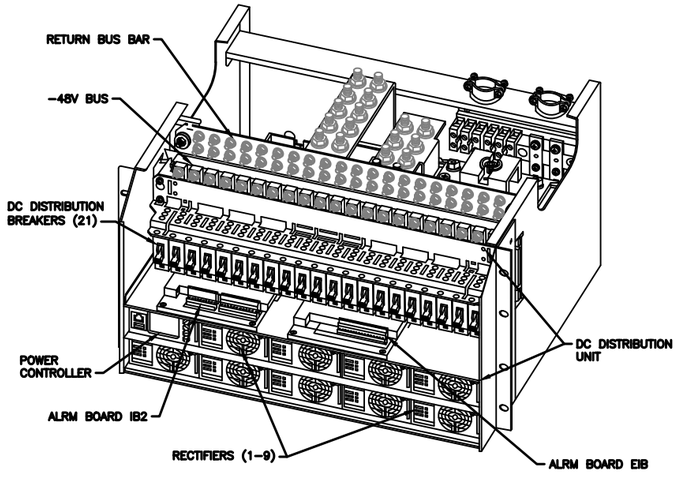
NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

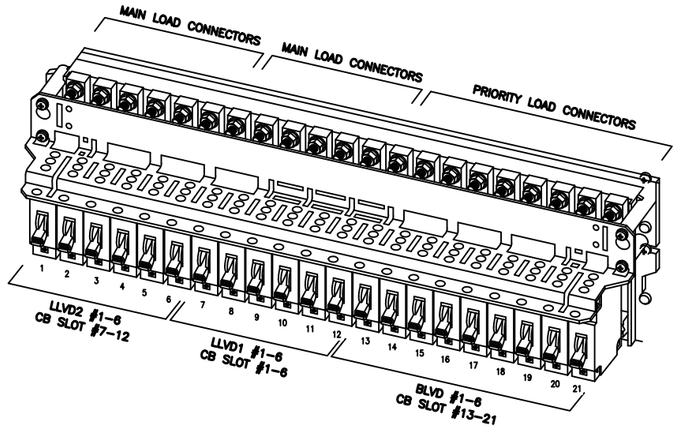
SHEET NUMBER:	REVISION:
R-603	0

NOTE:
THIS IS FOR REFERENCE ONLY, CHECK FOR SPECIFIC DETAIL IN T–MOBILE CABINET SPECIFIC INSTALLATION GUIDES

Breaker Allocation for E6160					
CB SLOT	Ckt #		w/ DCDU Prior to availability of the 4460 and 4480	w/ DCDU Later Design Post-4460 and Post-4480	w/ DCDU 4 and 6 Sector designs
1	LVD1 47.0V	1	Router PS-2*/Future		Radio 4460 B25/66 ζ-1
2		2	Future		Radio 4460 B25/66 ζ-2
3		3	PSU 4813 feeding B25/66 α, β and γ (AIR 1641s)		PSU 4813 feeding B41-δ & B71/12-δ (Air 6449s and Radio 4480s)
4		4			
5		5	PSU 4813 feeding B41 α, β and γ (Air 6449s)		
6		6			
7	LVD2 45.1V	1	PSU 4813 feeding B71/12 α, β and γ (Radio 4449s)	PSU 4813 feeding B71/12 α, β and γ (Radio 4480s)	
8		2			
9		3	Future		Radio 4460 B25/66 δ-1
10		4	Future		Radio 4460 B25/66 δ-2
11		5	Future		Radio 4460 B25/66 ε-1
12		6	Future		Radio 4460 B25/66 ε-2
13	BLVD 43.2V	1	Router PS-1		
14		2	Radio 4415 B25/66 α	Radio 4460 B25/66 α-1	
15		3	Radio 4415 B25/66 β	Radio 4460 B25/66 α-2	
16		4	Radio 4415 B25/66 γ	Radio 4460 B25/66 β-1	
17		5	PSU 4813 feeding B2/25 α, β and γ (Radio 4424s)	Radio 4460 B25/66 β-2	
18		6		Radio 4460 B25/66 γ-1	
19		7	Future	Radio 4460 B25/66 γ-2	
20		8	DCDU		
21		9	AAV		
Sector Identification α = Alpha, β = Beta, γ = Gamma, δ = Delta, ε = Epsilon, ζ = Zeta					



POWER SUBRACK



DC DISTRIBUTION

1 ERICSSON 6160 ELECTRICAL DETAILS

SCALE: N.T.S.

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

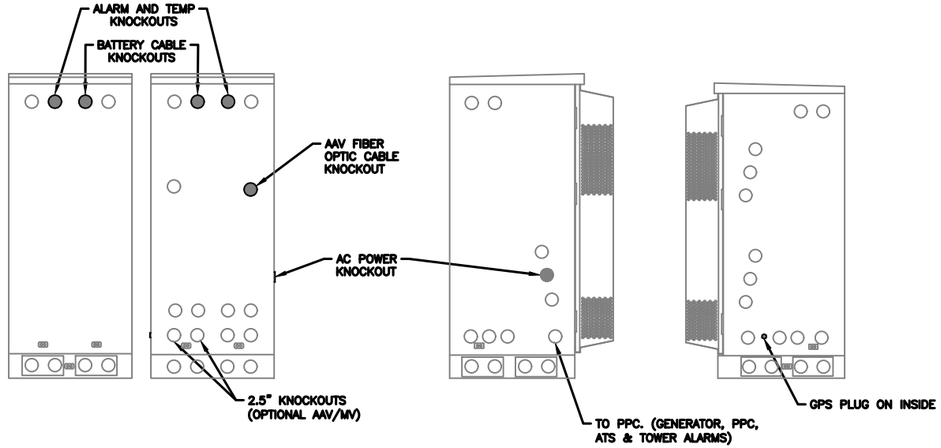
SUPPLEMENTAL

SHEET NUMBER: R-604

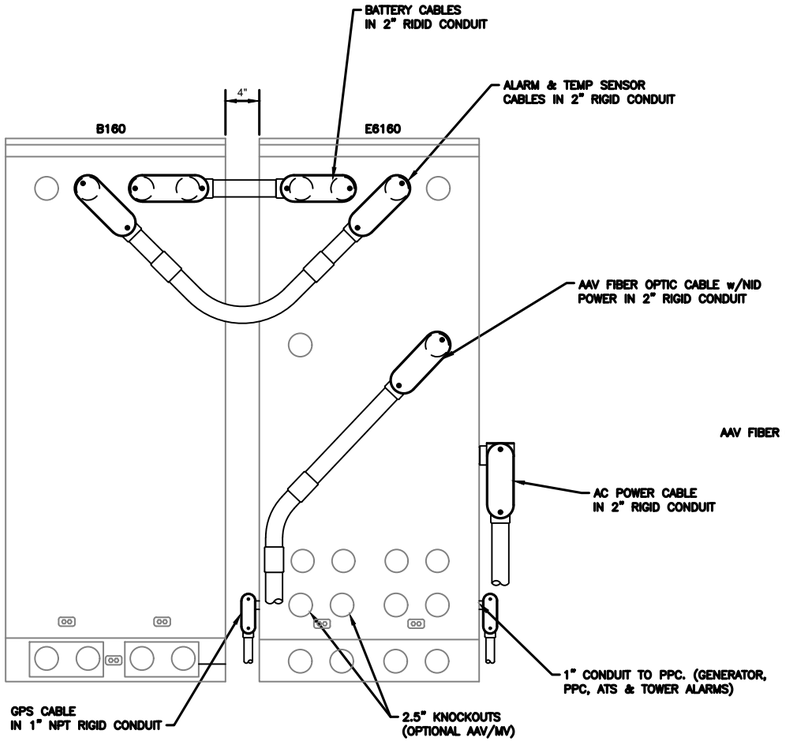
REVISION: 0

NOTE:

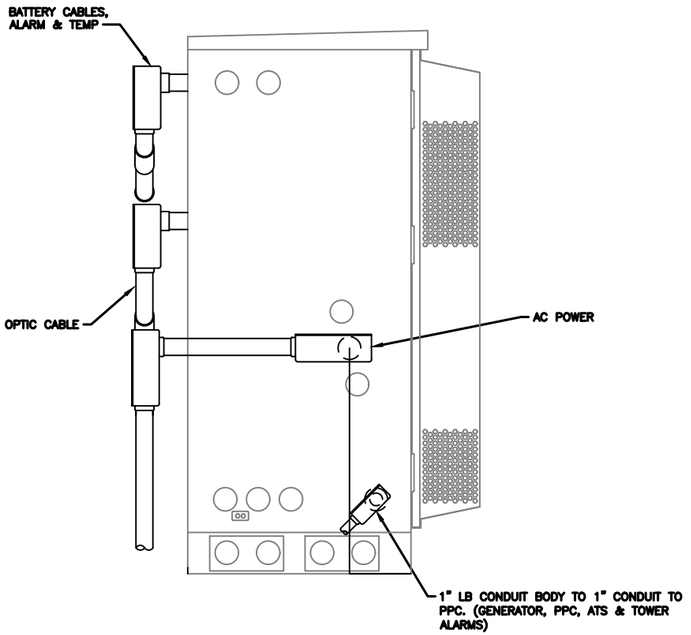
1. ALL CONDUIT AND FITTING ENTRANCES INTO CABINETS AND ENCLOSURES MUST UTILIZE MYERS OR EQUIVALENT HUBS OR SEALING WASHERS TO PREVENT WATER ENTRY/SEEPAGE INTO CABINETS AND ENCLOSURES.
2. (LIQUIDFLEX) FLEXIBLE METALLIC CONDUIT (LFMC) & ASSOCIATED FITTINGS CAN BE USED AS NEEDED BUT ONLY FOR TIGHT CONDUIT BENDS AND RUNS SUBJECT TO UL AND NEC LIMITATIONS. 6' MAX PER CONDUIT RUN.
3. POWER CONDUIT BODY ATTACHED WITH SHORT NIPPLE AND SEALING WASHER INSIDE & OUT. (FOR DOOR HOOD CLEARANCE)
4. PULLING ELBOWS MAY BE USED IN LIEU OF A CONDUIT BODIES WHEN CLEARANCE IS LIMITED.
5. ALL EXTERNAL ALARM CONDUITS ARE TOO TERMINATE AT THE PPC WITH A SINGLE 1" ALARM CONDUIT TO THE 6160.
6. (DO NOT USE CHASE NIPPLES) CONDUIT SHOULD HAVE SEALING WASHERS INSIDE AND OUT w/ LOCK NUT AND CAP.



CONDUIT LOCATIONS



REAR VIEW



SIDE VIEW

1 ERICSSON 6160/B160 CONDUIT ROUTING DETAILS

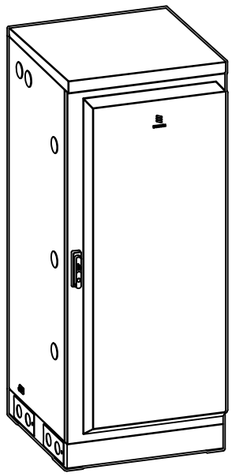
SCALE: N.T.S.

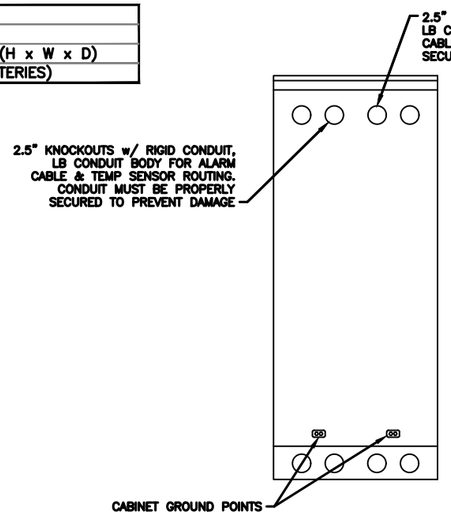
NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

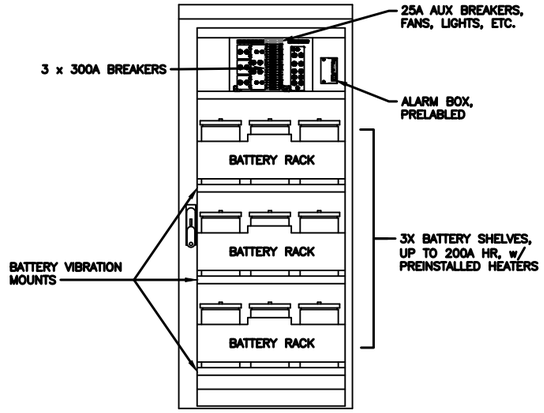
SHEET NUMBER:	REVISION:
R-605	0

MANUFACTURER:	ERICSSON
MODEL:	B160 BATTERY CABINET
DIMENSIONS:	63" x 25.6" x 29.5" (H x W x D)
WEIGHT:	295 LBS (WITHOUT BATTERIES)



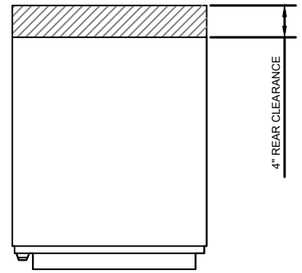


REAR VIEW



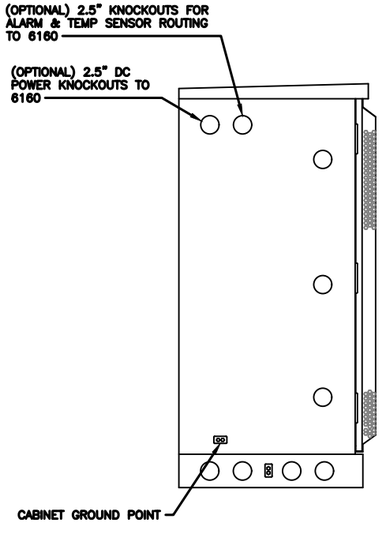
FRONT VIEW
(DOOR OPEN)

NOTE:
- CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL THROUGH KNOCKOUTS
- CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND OR CABLING

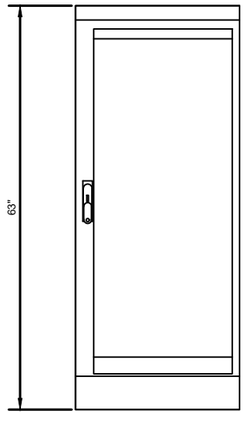


GROUNDING NOTE:

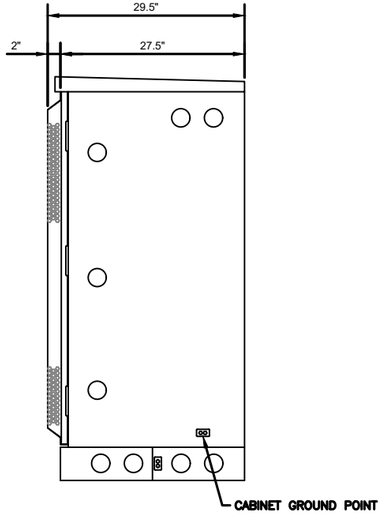
"CABINET GROUNDING TO USE A SINGLE, #2 BTCW CONDUCTOR, W/ 2-HOLE, 1" C-C, LONG BARREL, WINDOW LUG, IN 3/4" LFNC TO GROUND RING. PLINTH GROUNDING IS NOT REQUIRED."



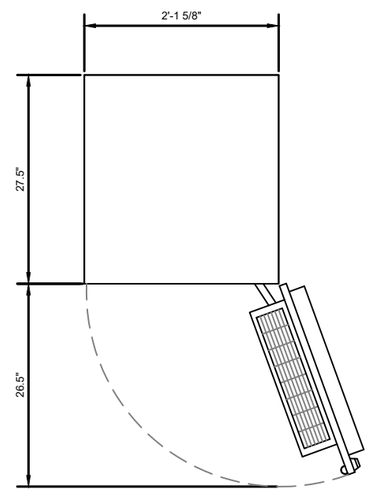
LEFT VIEW



FRONT VIEW



RIGHT VIEW



PLAN VIEW

B160 ERICSSON SITE SUPPORT BATTERY CABINET

1 ERICSSON B160 BATTERY CABINET SPECIFICATIONS

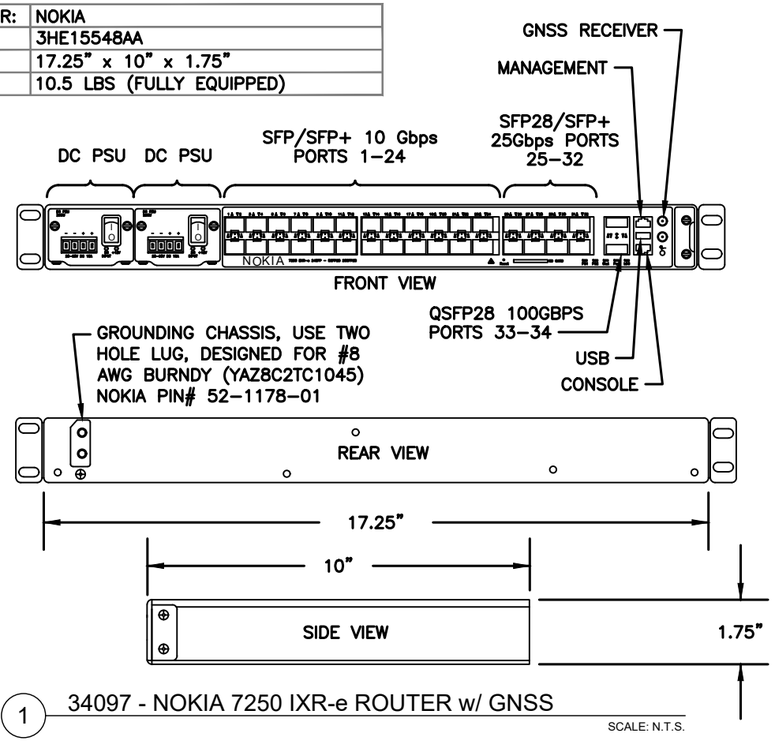
SCALE: N.T.S.

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-606	0

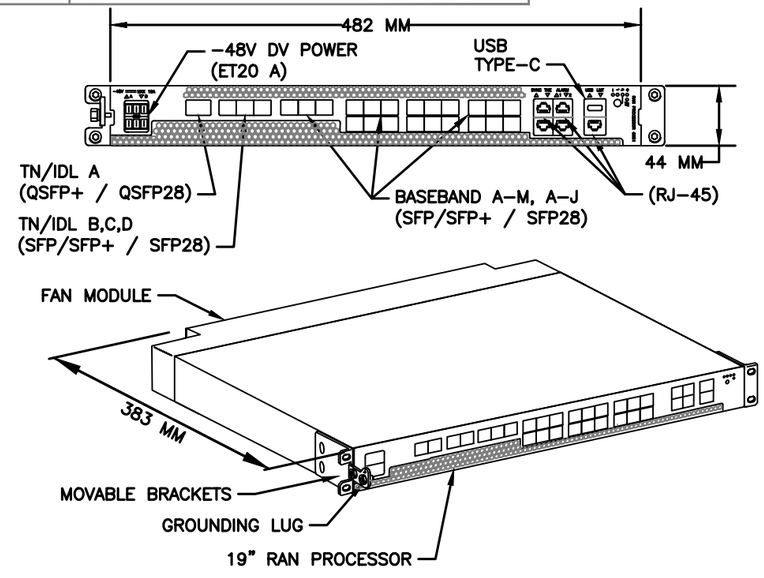
MANUFACTURER:	NOKIA
MODEL:	3HE15548AA
DIMENSIONS:	17.25" x 10" x 1.75"
WEIGHT:	10.5 LBS (FULLY EQUIPPED)



1 34097 - NOKIA 7250 IXR-e ROUTER w/ GNSS

SCALE: N.T.S.

MANUFACTURER:	ERICSSON
MODEL:	6672 RAN PROCESSOR (KDU1370114/11)
DIMENSIONS:	44 MM X 482 MM X 383 MM (H" X W" X D")
WEIGHT:	8 KG



2 34916 - ERICSSON 6672 RAN PROCESSOR

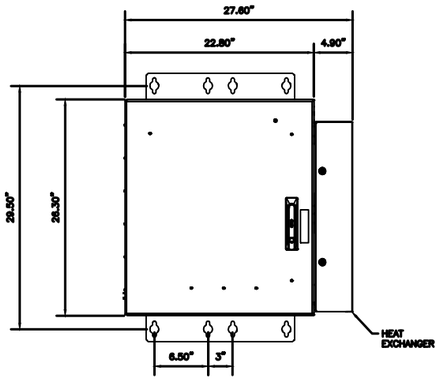
SCALE: N.T.S.

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

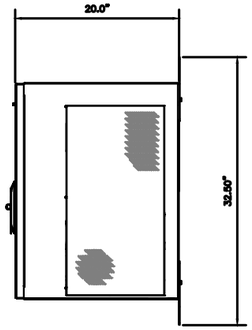
SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-607	0

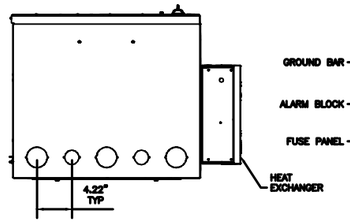
MANUFACTURER:	CHARLES
MODEL:	LT-RL1003AB-A
DIMENSIONS:	26.30" x 27.60" x 20.0" (H x W x D)
WEIGHT:	90 LBS
KITS & REPLACEMENT PARTS:	H- FRAME MOUNTING KIT: 97-001971-0 POLE MOUNTING KIT: 97-CABPMTKIT PAD MOUNTING KIT w/ PLINTH: 97-002127-A OPTIONAL FUSE PANEL: 96-FSPNL4824V



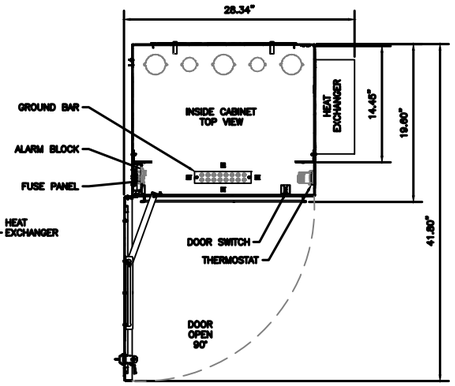
FRONT VIEW

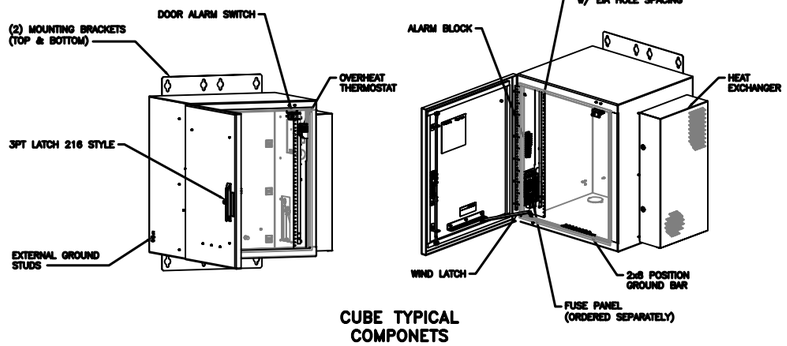


RIGHT SIDE



BOTTOM VIEW



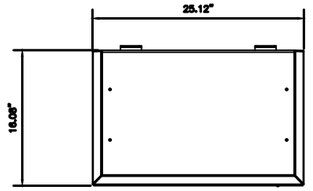


CUBE TYPICAL COMPONETS

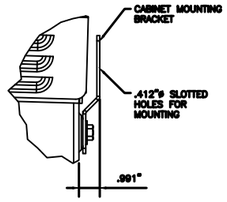
1 34576 - CHARLES RL1003AB-A ENCLOSURE

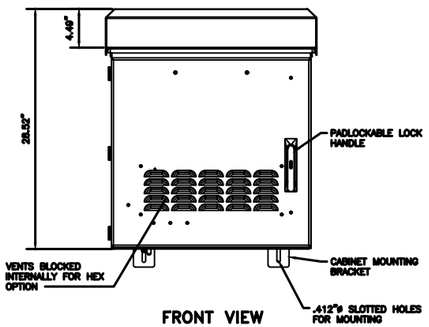
SCALE: N.T.S.

MANUFACTURER:	RAYCAP
MODEL#: PARTS:	RANE-227116-T (1) SURGE PROTECTION DEVICE (STRIKESORB) (3) 30A, 4MM DIN RAIL TERMINAL BLOCK GND BUS BAR TERMINAL BLOCK END COVER (4) DIN RAIL END STOP
DIMENSIONS:	28.52" x 25.12" x 16.08" (H x W x D)
WEIGHT:	46.24 LBS (WITHOUT EQUIPMENT)
MOUNTS:	STANDARD H-FRAME MOUNT (COMES WITH)

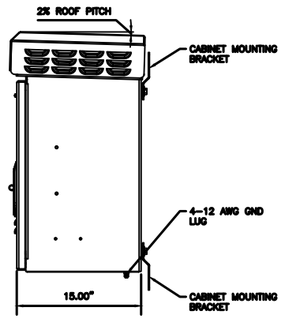


TOP VIEW

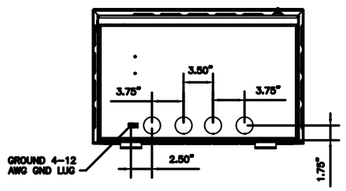




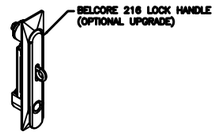
FRONT VIEW

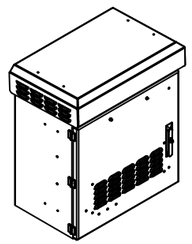


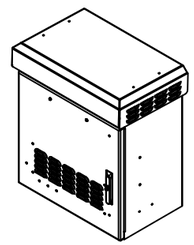
LEFT VIEW



BOTTOM VIEW







2 34603 - RAYCAP RANE-227116-T AAV ENCLOSURE

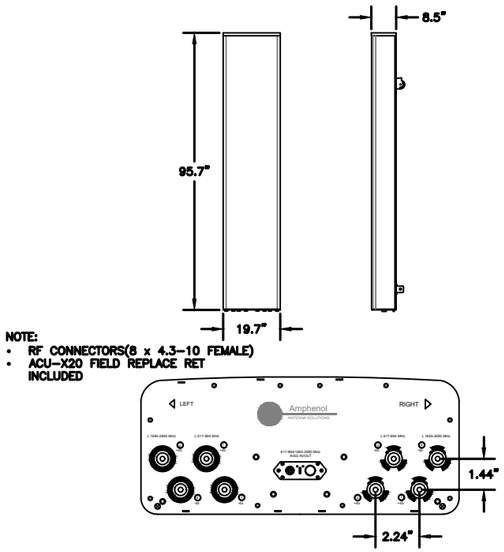
SCALE: N.T.S.

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-608	0

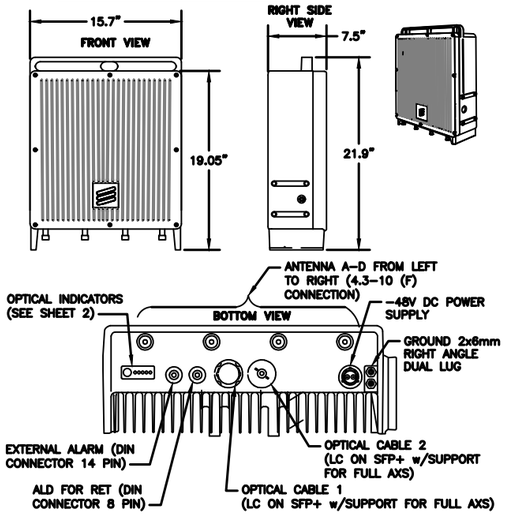
MANUFACTURER:	AMPHENOL
MODEL:	APXVAALL24M-U-J20
DIMENSIONS:	95.7" x 19.7" x 8.5" (H x W x D)
WEIGHT:	86 LB
BAND:	MID BAND (5-8 PORT)
MOUNTING KIT:	APM40-5E BEAM TILT KIT & APM40-E10T (19.4 LBS) INCLUDED



1 34877 - RFS APXVAALL24M-U-J20

SCALE: N.T.S.

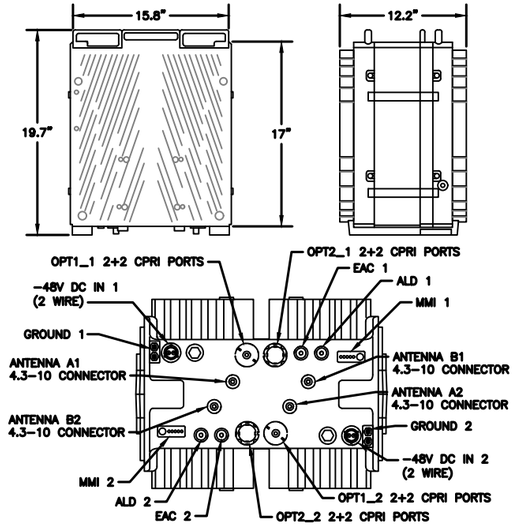
MANUFACTURER:	ERICSSON
MODEL:	4480 RADIO (KRC 161 922/1)
DIMENSIONS:	21.9" x 15.7" x 7.5" (H x W x D)
MODEL BAND:	B71, B85 FOR NR AND LTE
WEIGHT:	81 LBS
BRACKET WEIGHT:	3.75 LBS (MULTI ERS #109 1973/2)



2 34372 - ERICSSON 4480 RADIO

SCALE: N.T.S.

MANUFACTURER:	ERICSSON
MODEL:	4460 RADIO B2/25 B66 (KRC 161 912/3)
DIMENSIONS:	19.7" x 15.8" x 12.2" (H" x W" x D")
WEIGHT:	109 LBS
BRACKET WEIGHT:	4.8 LBS (ERS HEAVY #SXK1255993/1)



3 34373 - ERICSSON 4460 RADIO B2/25 B66

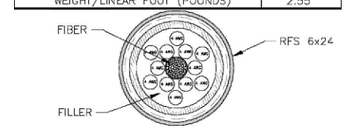
SCALE: N.T.S.

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

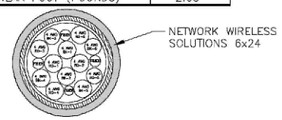
SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-609	0

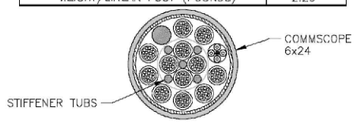
PARAMETER	VALUE
NOMINAL DIAMETER (INCHES)	2
CROSS-SECTION AREA (SQUARE INCHES)	3.13
JACKET COLOR	BLACK
WEIGHT/LINEAR FOOT (POUNDS)	2.55



PARAMETER	VALUE
NOMINAL DIAMETER (INCHES)	1.79
CROSS-SECTION AREA (SQUARE INCHES)	2.52
JACKET COLOR	BLACK
WEIGHT/LINEAR FOOT (POUNDS)	2.65

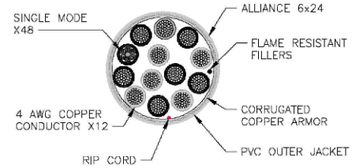


PARAMETER	VALUE
NOMINAL DIAMETER (INCHES)	1.76
CROSS-SECTION AREA (SQUARE INCHES)	2.43
JACKET COLOR	BLACK
WEIGHT/LINEAR FOOT (POUNDS)	2.29

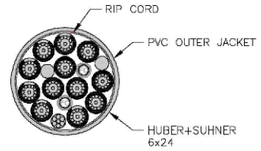


(6x24) HYBRID TRUNK CROSS SECTION 1
8.5" x 11" SCALE N.T.S. | 11" x 17" SCALE N.T.S.

PARAMETER	VALUE
NOMINAL DIAMETER (INCHES)	1.8
CROSS-SECTION AREA (SQUARE INCHES)	2.54
JACKET COLOR	BLACK
WEIGHT/LINEAR FOOT (POUNDS)	2.48



PARAMETER	VALUE
NOMINAL DIAMETER (INCHES)	1.62
CROSS-SECTION AREA (SQUARE INCHES)	2.04
JACKET COLOR	BLACK
WEIGHT/LINEAR FOOT (POUNDS)	2.39



(6x24) HYBRID TRUNK CROSS SECTION 2
8.5" x 11" SCALE N.T.S. | 11" x 17" SCALE N.T.S.

Cable Vendor	Cable Type	Nominal OD (in.)	C.S. Area (sq. in.)	Weight (lbs./ft)	enTop Breakout	MAX ENTITLEMENT	
HCS 2.0	6 AWG 25' to 225' cable lengths				HCS Pendant (Breakout) Dimension (in.)		
Alliance	6x24 6AWG	1.46	1.67	1.61	16.36 x 9.30 x 5.79 (sq./in 152.15)	Nominal OD (in.)	1.55
CommScope	6x24 6AWG	1.55	1.89	1.71	19.37 x 10.83 x 5.12 (sq./in 235.07)	C.S. Area (sq./in.)	1.89
NWS	6x24 6AWG	1.48	1.72	1.61	15.95 x 10.20 x 3.21 (sq./in 162.69)	Weight (lbs./ft)	1.71
Amphenol	6x24 6AWG	1.46	1.67	1.65	19.37 x 10.83 x 5.12 (sq./in 209.78)	Pendant (sq/in)	235.07
	4 AWG 250' to 450' cable lengths						
Alliance	6x24 4AWG	1.8	2.54	2.48	16.36 x 9.30 x 5.79 (sq./in 152.15)	Nominal OD (in.)	1.8
CommScope	6x24 4AWG	1.76	2.43	2.4	19.37 x 10.83 x 5.12 (sq./in 235.07)	C.S. Area (sq./in.)	2.54
NWS	6x24 4AWG	1.79	2.52	2.65	15.95 x 10.20 x 3.21 (sq./in 162.69)	Weight (lbs./ft)	2.65
Amphenol	6x24 4AWG	1.71	2.3	2.55	19.37 x 10.83 x 5.12 (sq./in 209.78)	Pendant (sq/in)	235.07
6x24					6x24 Canister Breakout - OD x Length (in.)		
Alliance	6x24 4AWG	1.8	2.54	2.48	3.11 x 9.45 (c.s. Area 7.60)	Nominal OD (in.)	2
CommScope	6x24 4AWG	1.76	2.43	2.29	2.68 x 9.81 (c.s. Area 5.64)	C.S. Area (sq./in.)	3.13
H&S	6x24 4AWG	1.62	2.04	2.39	3.82 x 9.26 (c.s. Area 11.46)	Weight (lbs./ft)	2.65
NWS	6x24 4AWG	1.79	2.52	2.65	2.99 x 8.82 (c.s. Area 7.02)	Canister (sq/in)	11.46
RFS	6x24 4AWG	2	3.13	2.55	2.88 x 9.72 (c.s. Area 6.51)		

(6x24) HYBRID TRUNK ENTITLEMENT INFORMATION 3
8.5" x 11" SCALE N.T.S. | 11" x 17" SCALE N.T.S.

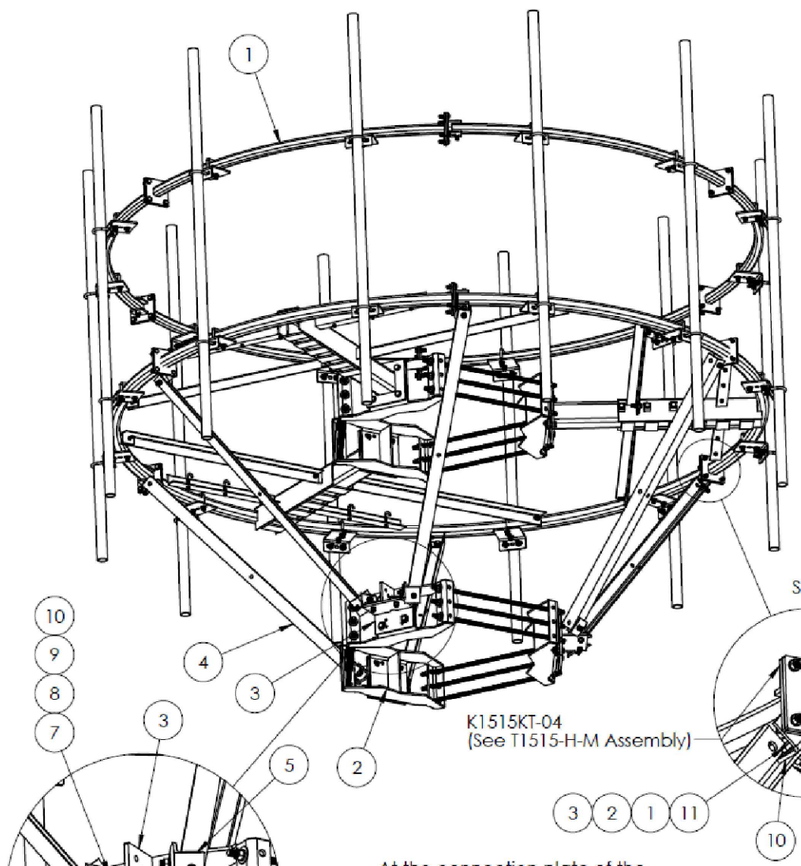
1 HYBRID TRUNK INFORMATION (6X24)
SCALE: N.T.S.

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

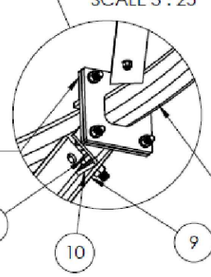
SUPPLEMENTAL

SHEET NUMBER: R-610

REVISION: 0



DETAIL D
SCALE 2 : 25



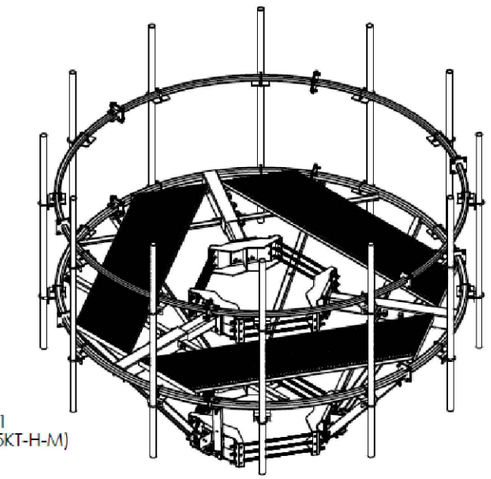
DETAIL C
SCALE 3 : 25

K1515KT-04
(See T1515-H-M Assembly)

K1515KT-01
(See T1515KT-H-M)

At the connection plate of the T1515KT-H-M Use existing bolt to connect reinforcement Kit. See T1515KT-H-M Assembly.

ITEM NO.	PART NUMBER	DESCRIPTION	Monopole Version/QTY.
1	T1515KT-H-M	Circular Platform with Handrail, for up to 48" diameter poles	1
2	T1503KT48TA	Universal ring mount 10"-48" Kit	1
3	Z2026KT-01	Mounting Weldment, T-arm Stabilizer	3
4	Z2026KT-07	Support Angle for Stabilizer Kits, 72"	6
5	Z2031KT-B	Angle, T-arm Stabilizer	12
6	K9970KT-95	Corner, Clip; 3 x 3 x 3/16; 2" long	6
7	H1029KT2GA3	Bolt, 5/8"x2", hex, A325, HDG	24
8	H3012KT58GSA3	Flat washer, 5/8", SAE (A325), HDG	24
9	H3002KT58G	Lock washer, 5/8", HDG	24
10	H2002KT58GA3	Nut, hex heavy 5/8" HDG A325	24
11	K1029KT214-4	5/8" x 2-1/4" A325 bolt kit (4 bolts)	3



KENWOOD TELECOM
3431 Navis Pointe Acworth, Ga 30101
(770) 975-0600 office (770) 974-5100 fax

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL: ± 1/32
ANGULAR: ± 2°
ONE PLACE DECIMAL: ± .06
TWO PLACE DECIMAL: ± .03
THREE PLACE DECIMAL: ± .010
INTERPRET GEOMETRIC TOLERANCING PER:
MATERIAL
FINISH
DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	KAR	5/22/19
CHECKED		
ENG APPR.		
MFG APPR.		

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KENWOOD TELECOM

TITLE:
Reinforcement Kit
Circle Platform, Monopole

SIZE	DWG. NO.	REV
B	T1515KTR-H-M	

SCALE: 1:20 | FINISHED WEIGHT: 2550 lbs | SHEET 2 OF 2

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-611	0