AT&T

SITE NAME:

MIKESVILLE

USID: 45057
FA NUMBER: 10091919
PACE NUMBER: MRTFL022727

3050 SE COUNTY RD 18
LAKE CITY, FL 32025

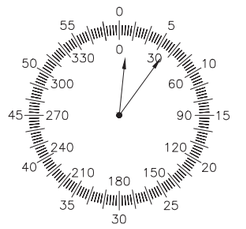
COLUMBIA COUNTY

EXISTING 262'-6" SELF-SUPPORT TOWER

AT&T PRIORITY

RF DATA SHEET	
RFDS ID	4906760
ISSUE REV	1.00
ISSUE DATE	4/4/22

NORTH DECLINATION
6° 6' W



PROJECT SUMMARY

TOWER OWNER:	AMERICAN TELEPHONE & TELEGRAPH
ADDRESS:	INTERSTATE PROPERTY TAX DEPT PO BOX 7207 BEDMINSTER, NJ 07921
SITE ADDRESS:	3050 SE COUNTY RD 18 LAKE CITY, FL 32025
CUSTOMER/APPLICANT:	AT&T MOBILITY 3210 LAKE EMMA RD. 1ST FLOOR LAKE MARY, FL 32746

NAD83

LATITUDE:	29.948333° N
LONGITUDE:	82.557778° W
PARCEL ID:	19-6S-18-10631-000
JURISDICTION:	COLUMBIA COUNTY
COUNTY:	COLUMBIA
GROUND ELEVATION:	158' AMSL
OCCUPANCY TYPE:	UNMANNED
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION

AREA MAP

NO SCALE

LOCATION MAP

NO SCALE

DRAWING INDEX

SHEET #	SHEET DESCRIPTION	REV. #
T-1	TITLE SHEET	0
GN-1	GENERAL NOTES	0
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C-2	ELEVATION	0
C-3	AZIMUTH PLAN	0
C-4	EQUIPMENT INFO	0
C-5	ANTENNA AND COAX SCHEDULE	0
RF-1	PLUMBING DIAGRAM	0
RF-2	PLUMBING DIAGRAM	0
ATTACHED	MOUNT SPECIFICATIONS	-

CONTACT INFORMATION

A&E FIRM:	B+T GROUP 1717 S. BOULDER, STE. 300 TULSA, OK 74119	ELECTRIC PROVIDER: PHONE:	N/A
CONTACT: PHONE:	ALICIA SAYED (918) 587-4630	TELCO PROVIDER: PHONE:	N/A

DRIVING DIRECTIONS

DEPART FROM 3210 LAKE EMMA RD, LAKE MARY FL, 32746:
TURN LEFT ONTO LAKE EMMA RD. USE THE MIDDLE 2 LANES TO TURN LEFT ONTO W LAKE MARY BLVD. USE THE RIGHT 2 LANES TO MERGE ONTO I-4 W VIA THE RAMP TO ORLANDO. MERGE ONTO I-4 W. KEEP RIGHT AT THE FORK TO STAY ON I-4 W. KEEP RIGHT AT THE FORK TO STAY ON I-4 W. KEEP LEFT AT THE FORK TO CONTINUE ON I-4 EXPRESS. KEEP RIGHT AT THE FORK TO STAY ON I-4 EXPRESS. KEEP RIGHT AT THE FORK AND MERGE ONTO FL-408 W. TAKE THE EXIT ONTO FLORIDA'S TURNPIKE TOWARD OCALA. MERGE ONTO I-75 N. KEEP LEFT TO STAY ON I-75 N. TAKE EXIT 404 TOWARD LAKE BUTLER. TURN LEFT ONTO NW COUNTY ROAD 236. TURN LEFT ONTO COUNTY RD 241. TURN LEFT ONTO COUNTY RD 18. DESTINATION WILL BE ON THE LEFT. ARRIVE AT MIKESVILLE.

A/E DOCUMENT REVIEW STATUS

TITLE	SIGNATURE	DATE
AT&T CONSTRUCTION MGR:		
SMARTLINK PM:		
RF ENGINEER:		
ZONING APPROVAL:		
SITE ACQUISITION:		
PROPERTY OWNER:		
STATUS CODE:		
1	ACCEPTED: WITH OR NO COMMENTS, CONSTRUCTION MAY PROCEED	
2	NOT ACCEPTED: RESOLVE COMMENTS AND RESUBMIT	

ACCEPTANCE DOES NOT CONSTITUTE APPROVAL OF DESIGN, CALCULATIONS, ANALYSIS, TEST METHODS OF MATERIALS DEVELOPED OR SELECTED BY THE SUBCONTRACTOR AND DOES NOT RELIEVE SUBCONTRACTOR FROM FULL COMPLIANCE WITH CONTRACTUAL OBLIGATIONS.

CODE COMPLIANCE

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

CODE TYPE	CODE
BUILDING/DWELLING	2020 FLORIDA BLDG CODE 7TH ED./2018 IBC
STRUCTURAL	2020 FLORIDA BLDG CODE 7TH ED./2018 IBC
MECHANICAL	2020 FLORIDA BLDG CODE 7TH ED./2018 IBC
ELECTRICAL	2020 FLORIDA BLDG CODE 7TH ED./2017 NEC

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES:
- REMOVE (3) EXISTING DC6 SQUIDS.
- INSTALL (1) NEW SECTOR FRAME ON DELTA SECTOR.
- INSTALL (2) NEW ANTENNAS AT 241'-0".
- INSTALL (5) NEW RRHs.
- INSTALL (3) NEW DC9 SQUIDS.
- INSTALL (3) NEW 6 AWG DC CABLES.

DO NOT SCALE DRAWINGS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 11x17.
CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SEE SHEET GN-1 FOR ADDITIONAL CONSTRUCTION NOTES

CALL FLORIDA ONE CALL
(800) 432-4770
CALL 3 WORKING DAYS
BEFORE YOU DIG!

811

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AT&T

smartlink

USID: 45057
FA: 10091919
MIKESVILLE

3050 SE COUNTY RD 18
LAKE CITY, FL 32025

EXISTING SELF-SUPPORT TOWER

PROJECT NO:	163146.001.01
CHECKED BY:	FWP

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
B	4/20/22	RMC	PRELIMINARY REVIEW
C	6/10/22	FWP	PRELIMINARY REVIEW
0	6/15/22	FWP	CONSTRUCTION

B&T ENGINEERING, INC.

CHAD TUTTLE, P.E.
B&T ENGINEERING, INC
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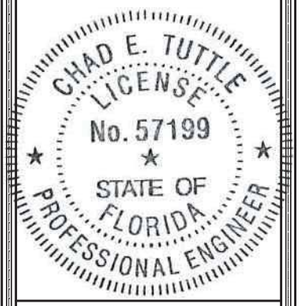

SHEET NUMBER:	REVISION:
T-1	0

PROJECT COMPLIANCE NOTES:

1. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE AND IS NOT FOR HUMAN HABITAT. (NO HANDICAP ACCESS IS REQUIRED).
2. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY AT&T TECHNICIANS.
3. NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS PROPOSAL, UNLESS DURING EMERGENCY.
4. OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROPOSED.
5. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST AT&T SYSTEM GROUNDING STANDARDS. "TECHNICAL SPECIFICATION FOR CONSTRUCTION OF LTE SITES AND WILL FOLLOW AT&T GROUNDING AND BONDING REQUIREMENTS FOR NETWORK FACILITIES AT&T DOC ID ATT-TP-76416 AND AT&T POLICY LETTER ATT-CEM-13002.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED DURING CONSTRUCTION OPERATION.
7. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
8. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM DRAWINGS PROVIDED BY THE APPLICANT REPRESENTATIVE. THE CONTRACTOR SHALL NOTIFY TURF VENDOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
9. NO ADDITIONAL PARKING IS PROPOSED. EXISTING ACCESS AND PARKING WILL BE USED.
10. NO ADDITIONAL LANDSCAPING IS PROPOSED AT THIS SITE.
11. ALL COAXIAL CABLE/FIBER AND DC CABLE INSTALLATION IS TO FOLLOW MANUFACTURER'S INSTRUCTION.

GREENFIELD GROUNDING NOTES:

ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC AND AT&T GROUNDING AND BONDING REQUIREMENTS FOR NETWORK FACILITIES ATT-TP-76416 AND AT&T POLICY LETTER ATT-CEM-13002.

THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.

THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.

METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH MINIMUM #2 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.

METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. TIN STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.

EACH CABINET AND FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #2 TIN STRANDED COPPER FOR INDOOR/ROOFTOP APPLICATIONS; #2 AWG SOLID TINNED COPPER FOR OUTDOOR GROUND CABINETS.

CONNECTIONS TO THE GROUND BAR SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BAR ARE PERMITTED.

ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE (2) CONDUCTORS OF #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.

USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.

EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.

ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS; A MINIMUM OF (2) CRIMPS AND WINDOWLESS LUGS FOR OUTDOOR APPLICATIONS AND WINDOWED LUGS FOR INDOOR APPLICATIONS.

ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE GROUNDING RING.

APPROVED ANTIOXIDANT COATINGS (I.E. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.

ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.

MISCELLANEOUS ELECTRICAL & NON-ELECTRICAL METAL BOXES, FRAMES & SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC AND AT&T GROUNDING & BONDING REQUIREMENTS FOR NETWORK FACILITIES ATT-TP-76416 & AT&T POLICY LETTER ATT-CEM-13002.

BOND ALL METALLIC OBJECTS WITHIN 6 FT. OF MAIN GROUND WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.

GROUNDS FOR INDOOR SITE EQUIPMENT SHALL BE LANDED ON THE APPROPRIATE SECTION OF THE CRGB OR HALO AS PER ATT-TP-76416 AND AT&T POLICY LETTER ATT-CEM-13002.

GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS, WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.

ELECTRICAL INSTALLATION NOTES:

ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.

CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

WIRING, RACEWAY & SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.

ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.

CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.

EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH PROPER LABELING ID, 145 TYPE FIBER TAG, WITH UV RATED P-TOUCH LABEL, MINIMUM WIDTH OF 1/2". THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.

ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH PLASTIC TAPE PER COLOR SCHEDULE. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (I.E. PANEL BOARD AND CIRCUIT ID'S).

PANEL BOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH P-TOUCH LABELS ON 145 TYPE FIBER TAGS.

THERE SHALL BE NO USE OF NYLON TIE CABLE FOR INDOOR USE.

POWER, CONTROL AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET & DRY) OPERATION LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED UNLESS OTHERWISE SPECIFIED.

SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#2 TIN STRANDED OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET AND DRY) OPERATION LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED UNLESS OTHERWISE SPECIFIED.

POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET AND DRY) OPERATION WITH OUTER JACKET LISTED OR LABELED FOR THE LOCATION USED UNLESS OTHERWISE SPECIFIED.

ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75° C (90° C IF AVAILABLE).

RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

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.

ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT) OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.

RIGID NONMETALLIC CONDUIT (I.E. RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.

LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.

CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.

CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER).

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.

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.

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.

THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

INSTALL PLASTIC LABEL ON THE METER CENTER TO SHOW "AT&T WIRELESS".

PROJECT GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:

TURF VENDOR-	----------
CONTRACTOR-	GENERAL CONTRACTOR (CONSTRUCTION)
OWNER-	AT&T
OEM-	ORIGINAL EQUIPMENT MANUFACTURER

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO SCALE AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY TURF VENDOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE CONTRACTOR.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE TURF VENDOR.
9. CONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWINGS.
10. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
11. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
12. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
13. CONSTRUCTION SHALL COMPLY WITH AT&T AND MANUFACTURER SPECIFICATIONS.
14. ALL ITEMS REMOVED FROM SERVICE ON SITES THAT HAVE AN AT&T ASSET TAG MUST BE LOGGED BACK IN WITH AT&T.

ABBREVIATIONS AND SYMBOLS:

ABBREVIATIONS:

AGL	ABOVE GRADE LEVEL
BTS	BASE TRANSCEIVER STATION
(E)	EXISTING
MIN.	MINIMUM
N.T.S.	NOT TO SCALE
REF	REFERENCE
RF	RADIO FREQUENCY
T.B.D.	TO BE DETERMINED
T.B.R.	TO BE RESOLVED
TYP	TYPICAL
REQ	REQUIRED
EGR	EQUIPMENT GROUND RING
AWG	AMERICAN WIRE GAUGE
MGB	MASTER GROUND BAR
EG	EQUIPMENT GROUND
BCW	BARE COPPER WIRE
SIAD	SMART INTEGRATED ACCESS DEVICE
GEN	GENERATOR
IGR	INTERIOR GROUND RING (HALO)
RBS	RADIO BASE STATION

SYMBOLS:

S/G	SOLID GROUND BUS BAR
S/N	SOLID NEUTRAL BUS BAR
	SUPPLEMENTAL GROUND CONDUCTOR
	2-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
	SINGLE-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
	CHEMICAL GROUND ROD
	TEST WELL
	DISCONNECT SWITCH
M	METER

B+T GRP

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B&T ENGINEERING, INC.

CHAD TUTTLE, P.E.
B&T ENGINEERING, INC

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CHAD E. TUTTLE LICENSE No. 57199 STATE OF FLORIDA PROFESSIONAL ENGINEER

SHEET NUMBER:	REVISION:
GN-1	0

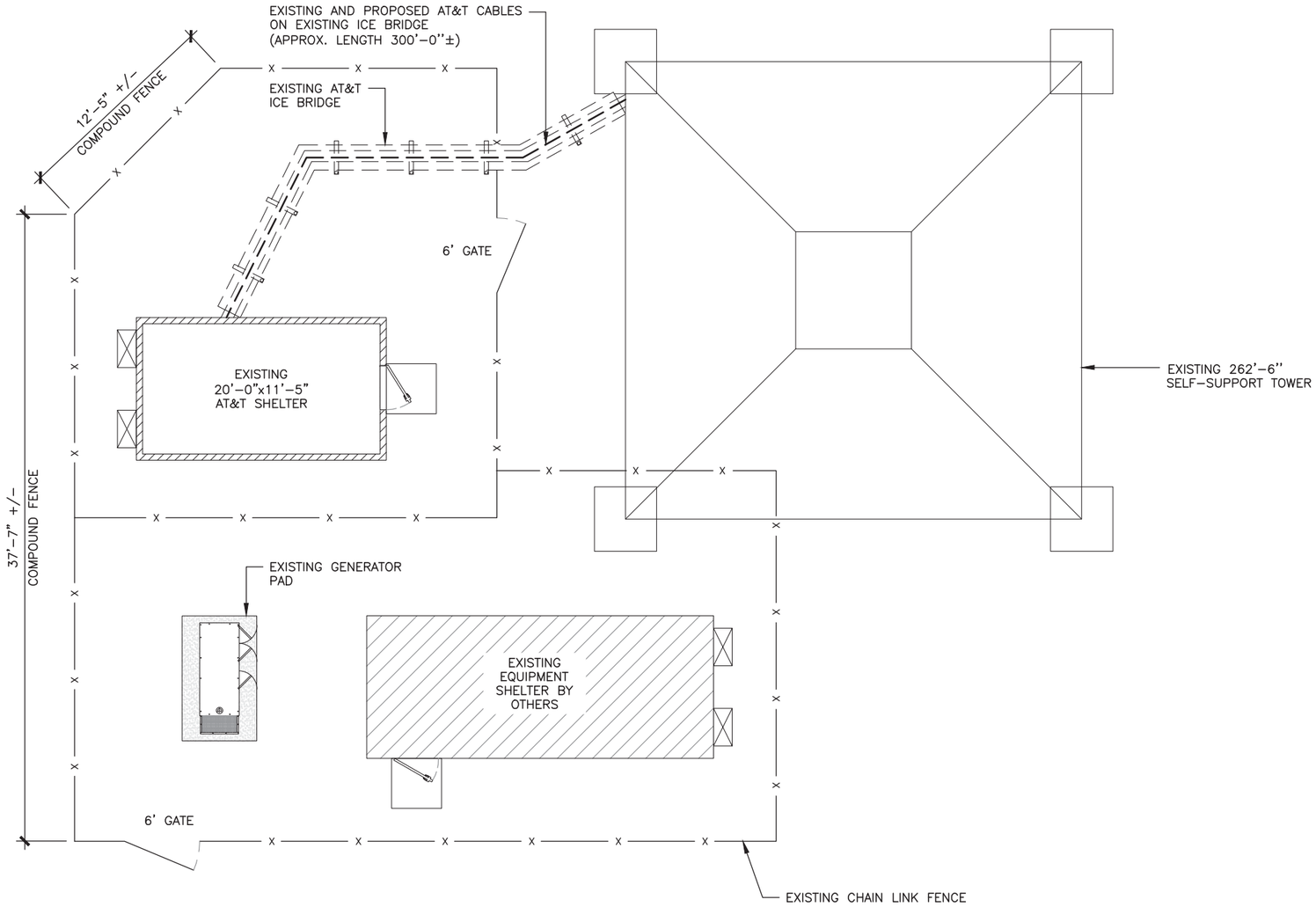
163146.001.01_MIKESVILLE.dwg — Sheet:GN-1 — User: fperkins — Jun 15, 2022 — 2:58pm

CONSTRUCTION NOTES:

1. CONTRACTOR TO FILL ANY EXISTING GRAVEL AREAS THAT ARE DISTURBED DURING THE COURSE OF CONSTRUCTION, GRAVEL TO MATCH EXISTING.
2. THE CONTRACTOR TO ENSURE THAT NO DAMAGE OR DEBRIS OCCURS ON THE ADJACENT PROPERTIES.
3. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITH LOW MAINTENANCE NATIVE GRASS AND COVER WITH APPROVED STRAW.
4. CONTRACTOR SHALL PROVIDE ALL REQUIRED EROSION CONTROL TECHNIQUES AND BEST MANAGEMENT PRACTICES PER LOCAL AND STATE REQUIREMENTS AS APPLICABLE.
5. NORTH ARROW SHOWN ON PLANS REFERS TO TRUE NORTH. CONTRACTOR SHALL VERIFY NORTH AND INFORM ARCHITECT/ENGINEER OF ANY DISCREPANCY BEFORE STARTING CONSTRUCTION.

CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE RAYCAP INSTALL ON THE TOWER TO ACCOMODATE THE QUANTITY OF RRHs.

CONTRACTOR MUST FIELD VERIFY ALL MEASUREMENTS AND FIELD CONDITIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.



1 ENLARGED SITE PLAN
SCALE: 0' 4' 8' 16' 32'

N

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smartlink

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LAKE CITY, FL 32025

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CHAD TUTTLE, P.E.
B&T ENGINEERING, INC
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CHAD E. TUTTLE LICENSE No. 57199 STATE OF FLORIDA PROFESSIONAL ENGINEER

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER:	REVISION:
C-1	0

NOTE:

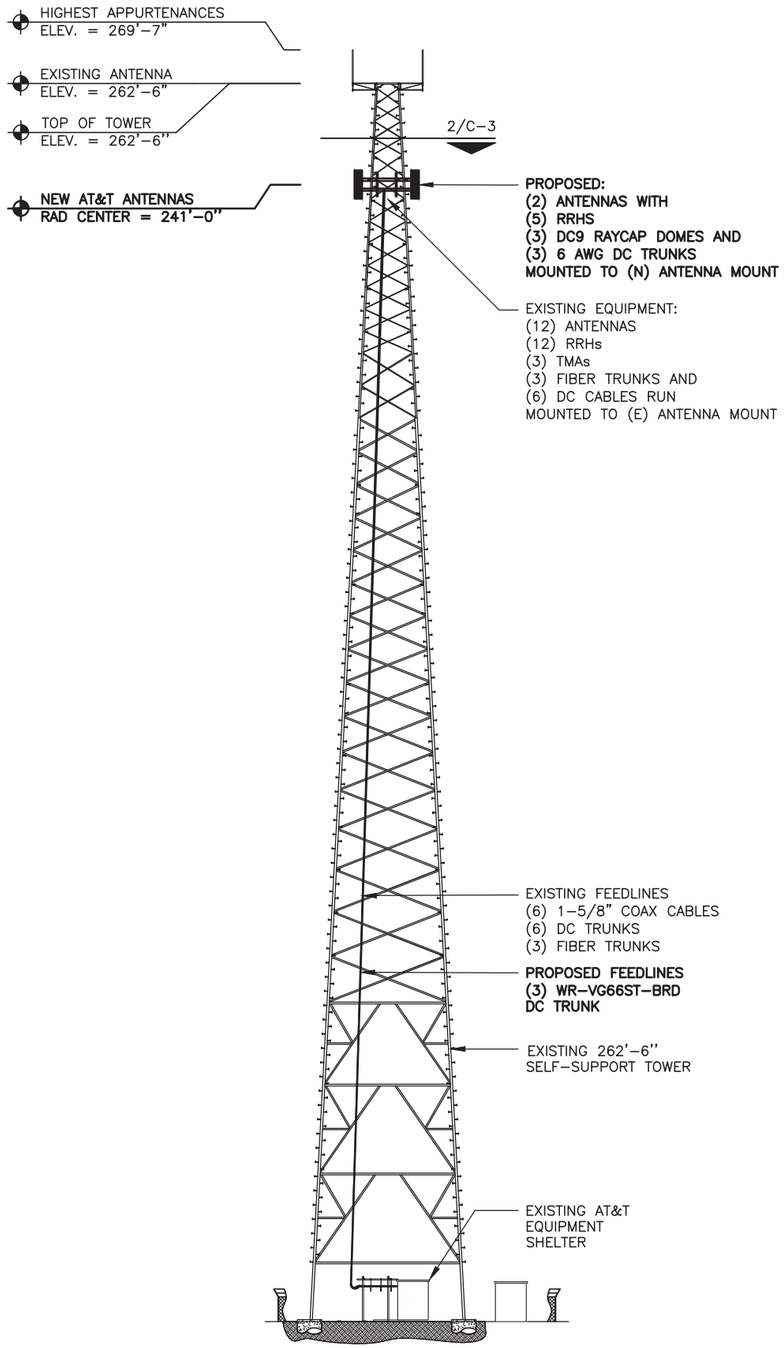
1. A STRUCTURAL ANALYSIS SHALL BE PERFORMED BY THE OWNER'S AGENT TO CERTIFY THAT THE EXISTING/PROPOSED COMMUNICATION STRUCTURE AND COMPONENTS ARE STRUCTURALLY ADEQUATE TO SUPPORT ALL EXISTING AND PROPOSED ANTENNAS, COAXIAL CABLES, AND OTHER APPURTENANCES. THE OWNER'S AGENT SHALL FURNISH A CERTIFICATION LETTER SEALED BY A REGISTERED PROFESSIONAL ENGINEER STATING THAT THIS STRUCTURAL ANALYSIS WAS PREPARED IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS.
2. IF ANY WORK IS PERFORMED AT THIS SITE THAT REQUIRES THE SITE TO BE OFF AIR OR TURNED DOWN, THE SWITCH IS TO BE NOTIFIED 48 HOURS PRIOR TO CONSTRUCTION VIA NCR/CTS.
3. INSTALLATION SHALL BE CONDUCTED BY FIELD CREWS EXPERIENCED IN THE ASSEMBLY AND ERECTION OF RADIO ANTENNAS, TRANSMISSION LINES, AND SUPPORT STRUCTURES. ANTENNA WORK TO BE INSTALLED PER THE REQUIREMENTS OF THE TOWER MANUFACTURER'S SPECIFICATION.
4. ANTENNA AND MOUNT DESIGN MUST COMPLY WITH TIA-EIA-222-H AND ALL LOCAL CODES.
5. CONTRACTOR TO PROVIDE THE PROPER COAX JUMPER SUPPORT ATTACHMENTS TO THE TOWER AND ANTENNA MOUNT.

CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE RAYCAP INSTALLED ON THE TOWER TO ACCOMMODATE THE QUANTITY OF RRU'S.

THE CONTRACTOR MUST FIELD VERIFY ALL MEASUREMENTS AND FIELD CONDITIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

NOTES:

1. REFER TO CURRENT RFDS FOR ADDITIONAL INFO.
2. ADJUST ANTENNA MOUNTS AS REQUIRED TO ACHIEVE THE AZIMUTH SPECIFIED AND LIMIT RF SHADOWING.
3. UNLESS NOTED OTHERWISE THE CONTRACTOR MUST PROVIDE ALL MATERIAL NECESSARY.
4. CONTRACTOR TO RETURN ALL EXISTING ANTENNAS BEING REMOVED TO AT&T.



1 TOWER ELEVATION
SCALE: N.T.S.

THIS SUBMISSION CONTAINS CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION THAT IS EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAWS.

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B+T GRP

AT&T

smartlink

USID: 45057
FA: 10091919
MIKESVILLE

3050 SE COUNTY RD 18
LAKE CITY, FL 32025

EXISTING SELF-SUPPORT TOWER

PROJECT NO:	**163146.001.01**
CHECKED BY:	**FWP**

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
B	4/20/22	RMC	PRELIMINARY REVIEW
C	6/10/22	FWP	PRELIMINARY REVIEW
0	6/15/22	FWP	CONSTRUCTION

B&T ENGINEERING, INC.

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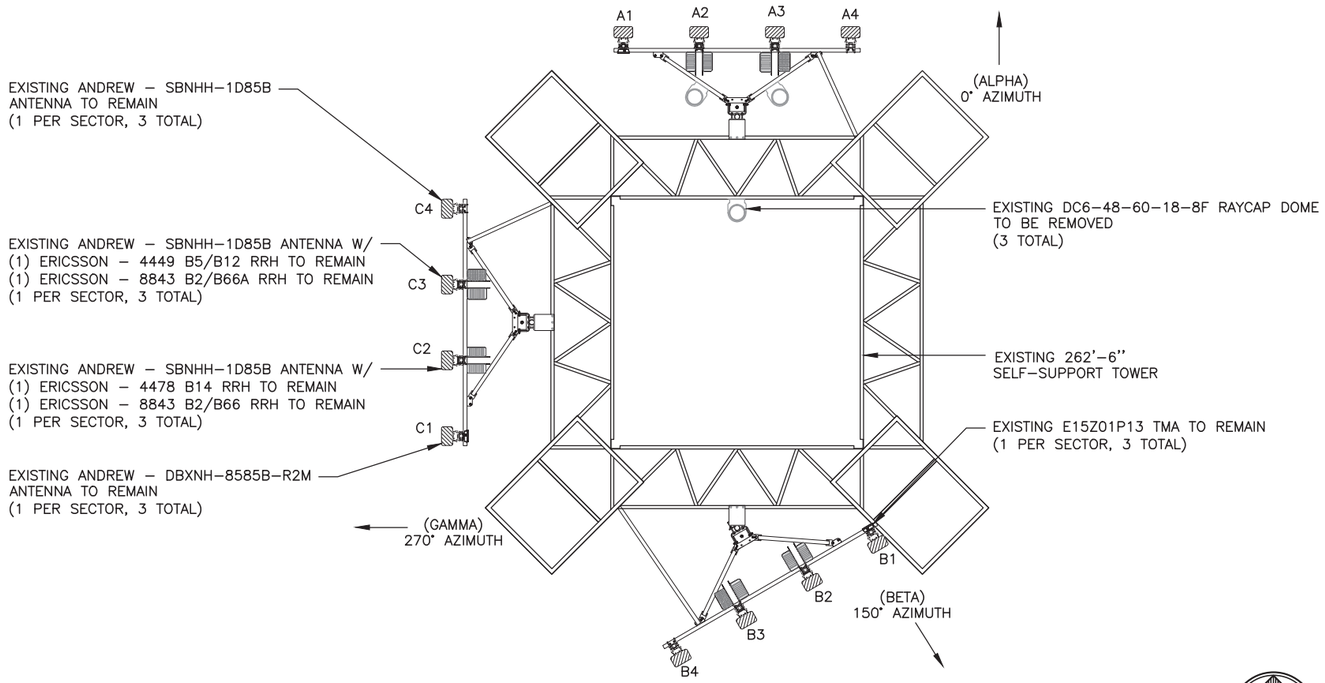
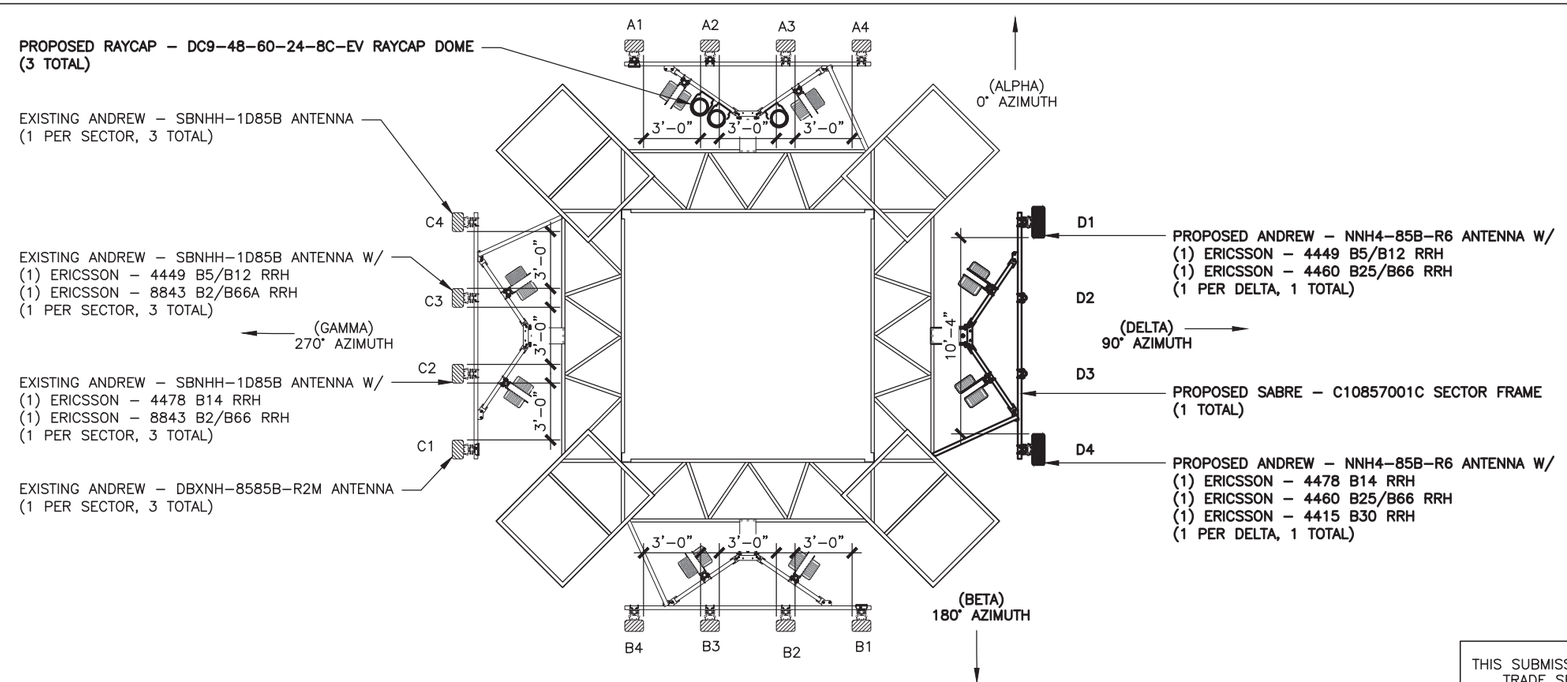
SHEET NUMBER:	REVISION:
C-2	0



1 EXISTING ANTENNA AZIMUTH PLAN

SCALE: 0' 1' 4' 8' 20'

N



2 PROPOSED ANTENNA AZIMUTH PLAN

SCALE: 0' 1' 4' 8' 20'

N

CONSTRUCTION NOTE: REFER TO MOUNT ANALYSIS FOR RRH LOCATION

CONSTRUCTION NOTE: REFER TO CURRENT RFDS FOR ADDITIONAL INFO.

CONSTRUCTION NOTE: DC9 LOCATIONS TO BE DETERMINED BY RFDS

CONSTRUCTION NOTE: CONTRACTOR TO ENSURE MINIMUM OF 36" EDGE TO EDGE SEPARATION BETWEEN EXISTING AND PROPOSED ANTENNAS PER SECTOR AND THE ANTENNA BACKPLANES OF SAME ON DIFFERENT FACE'S (ADJACENT SECTORS ON SAME RAD CENTER). REMAINDER OF ANTENNAS TO BE EQUALLY SPACED.

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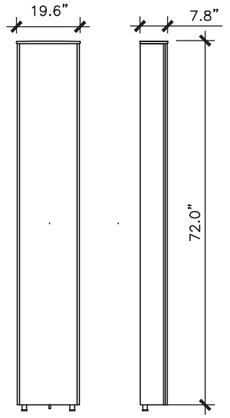
C-3	0



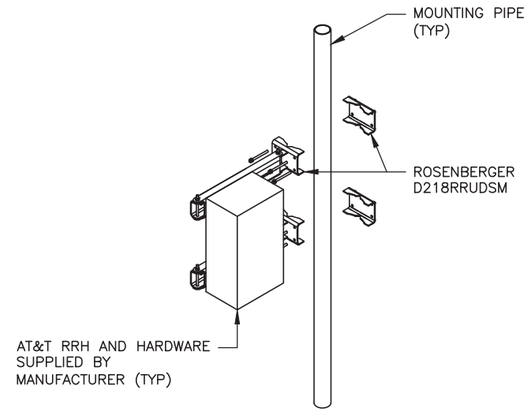
1 ANDREW - NNH4-85B-R6
SCALE: N.T.S.

2 NOT USED
SCALE: N.T.S.

3 NOT USED
SCALE: N.T.S.

NOTE:

COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRH'S RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING. DO NOT OPEN RRH PACKAGES IN THE RAIN.



4 RRH DUAL BRACKET MOUNT DETAIL
SCALE: N.T.S.

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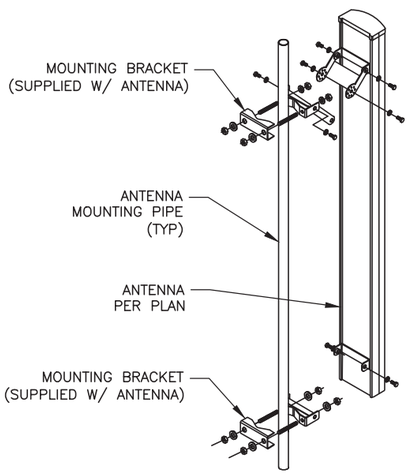


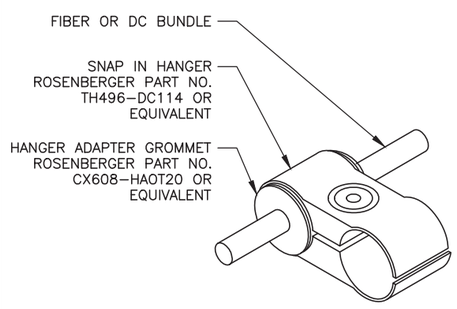
5 ANTENNA MOUNT DETAIL
SCALE: N.T.S.

MISCELLANEOUS MATERIALS SCHEDULE

DESCRIPTION	MODEL NUMBER	QUANTITY
SNAP–IN HANGER	TH496–DC114	230
HANGER ADAPTER GROMMET	CX608–HA0711	230
HOISTING GRIP	CX051–HG38PL	–
HOISTING GRIP	CX06–HC12PL	3
GROUNDING KIT	–	–

NOTES:

1. REFER TO JSA DOCUMENTS FOR EXACT CABLE NUMBER AND MANUFACTURER SPECIFICATIONS FOR PROPER GROMMETS AND HANGER TO SUPPORT THE FIBER AND DC CABLE BUNDLES.
2. REFER TO STRUCTURAL ANALYSIS FOR EXACT CABLE ROUTING AND MOUNTING CONFIGURATION.

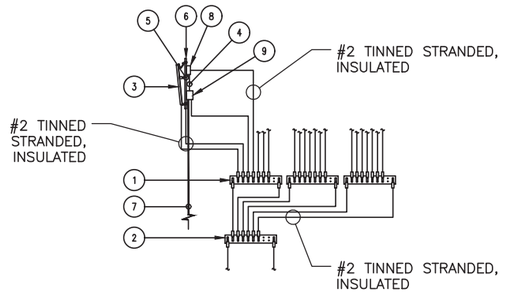


DOUBLE CLAMP

6 HANGER ADAPTER GROMMET DETAILS
SCALE: N.T.S.

KEYNOTE LEGEND:

1. SECTOR GROUND BAR (TYP)
2. COLLECTOR GROUND BAR
3. NEW ANTENNA
4. SINGLE PAIR FIBER & DC POWER
5. JUMPER CABLE, 1/2" TYP
6. PIPE MOUNT
7. DC POWER & FIBER TO RAYCAP UNIT
8. REMOTE RADIO HEAD (RRH) (IF APPLICABLE)
9. DC6/DC9 RAYCAP SURGE SUPPRESSOR (IF APPLICABLE)

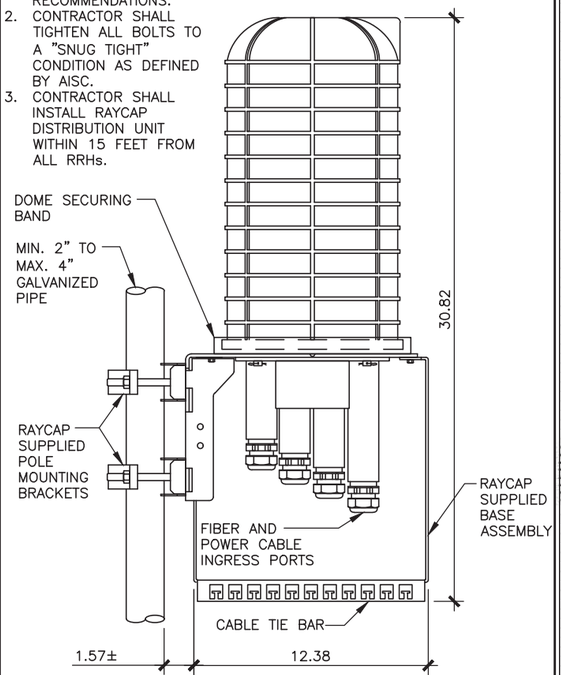


1. UTILIZE EXISTING AT&T GROUND BARS AND GROUNDING
2. ADD GROUND BARS IF THERE ARE INSUFFICIENT LUG POSITIONS
3. REFERENCE AT&T BONDING & GROUNDING PRACTICE TP76416

7 ANTENNA GROUNDING SCHEMATIC
SCALE: N.T.S.

NOTES:

1. UNIT SHALL BE MOUNTED AS PER MANUFACTURER'S RECOMMENDATIONS.
2. CONTRACTOR SHALL TIGHTEN ALL BOLTS TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC.
3. CONTRACTOR SHALL INSTALL RAYCAP DISTRIBUTION UNIT WITHIN 15 FEET FROM ALL RRHs.



8 DC9-48-60-24-8C-EV MOUNT DETAIL
SCALE: N.T.S.

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FA: 10091919
MIKESVILLE

3050 SE COUNTY RD 18
LAKE CITY, FL 32025

EXISTING SELF-SUPPORT TOWER

PROJECT NO:	163146.001.01
CHECKED BY:	FWP

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SHEET NUMBER:	REVISION:
C-4	0

DC/FIBER DEMARCATION BOX							
RAYCAP DC FIBER DEMARCATION BOX			CABLES				NOTES
MOUNTING HEIGHT	MODEL	QTY	MODEL	SIZE	QTY	LENGTH PER LINE	Follow AT&T antenna separation MOP to avoid PIM Please use SFP-7module for LTE 700/850 and LTE PCS/AWS
–	–	–	–	–	–	–	
241'-0"	**DC9-48-60-24-8C-EV**	**3**	ROSENBERGER (18) PAIR FIBER TRUNK	3/8"	3	254'-0"	
			(6) #8 AWG TINNED COPPER CONDUCTORS	3/4"	6	254'-0"	
			(6) #6 AWG TINNED COPPER CONDUCTORS	**0.957"**	**3**	**254'-0"**	

ANTENNA AND COAX SCHEDULE

SECTOR	AZ	ANTENNAS							CABLES					RRU		A2 MOD	DPLEXER/TRIPLEXER			TMA	
		RAD CENTER	ANTENNA		(QTY)	APPROXIMATE ANTENNA SPECS	DOWNTILT		MODEL	SIZE	(QTY)	LENGTH/ LINE	COLOR CODE	MODEL	(QTY)	(QTY)	MODEL	TWR (QTY)	GRND (QTY)	MODEL	(QTY)
			MAKE	MODEL			ELEC	MECH													
ALPHA (A1)	0°	241'-0"	ANDREW	DBXNH-8585B-R2M	1	H=73.2" x W=11.9" x D=7.1"	–	0°	LDF7-50A	1 5/8"	2	254'-0"	1 RED	–	–	–	CM1007-DBPXBC-002	–	2	E15Z01P13	1
ALPHA (A2)	0°	241'-0"	ANDREW	SBNHH-1D85B	1	H=72.9" x W=11.9" x D=7.1"	0°/0°	0°	ROSENBERGER FIBER JUMPER (DC9 TO RRH) ROSENBERGER SINGLE PAIR DC CABLE (DC9 TO RRH) 1/2" COAX JUMPER (RRH TO ANTENNA)	3/8" 7/16" 1/2"	4 2 6	15'-0" 15'-0" 10'-0"	2 RED	4478 B14 8843 B2/B66	1 1	–	–	–	–	–	–
ALPHA (A3)	0°	241'-0"	ANDREW	SBNHH-1D85B	1	H=72.9" x W=11.9" x D=7.1"	6°/3°	0°	ROSENBERGER FIBER JUMPER (DC9 TO RRH) ROSENBERGER SINGLE PAIR DC CABLE (DC9 TO RRH) 1/2" COAX JUMPER (RRH TO ANTENNA)	3/8" 7/16" 1/2"	4 4 6	15'-0" 15'-0" 10'-0"	3 RED	4449 B5/B12 RRUS-32 B66A	1 1	–	–	–	–	–	–
ALPHA (A4)	0°	241'-0"	ANDREW	SBNHH-1D85B	1	H=72.9" x W=11.9" x D=7.1"	0°/0°	0°	1/2" COAX JUMPER (RRH TO ANTENNA)	1/2"	6	10'-0"	4 RED	–	–	–	–	–	–	–	–
BETA (B1)	180°	**241'-0"**	ANDREW	DBXNH-8585B-R2M	1	H=73.2" x W=11.9" x D=7.1"	–	0°	LDF7-50A	1 5/8"	2	254'-0"	1 BLUE	–	–	–	CM1007-DBPXBC-002	–	2	E15Z01P13	1
BETA (B2)	180°	241'-0"	ANDREW	SBNHH-1D85B	1	H=72.9" x W=11.9" x D=7.1"	0°/0°	0°	ROSENBERGER FIBER JUMPER (DC9 TO RRH) ROSENBERGER SINGLE PAIR DC CABLE (DC9 TO RRH) 1/2" COAX JUMPER (RRH TO ANTENNA)	3/8" 7/16" 1/2"	4 2 6	15'-0" 15'-0" 10'-0"	2 BLUE	4478 B14 8843 B2/B66	1 1	–	–	–	–	–	–
BETA (B3)	180°	241'-0"	ANDREW	SBNHH-1D85B	1	H=72.9" x W=11.9" x D=7.1"	6°/3°	0°	ROSENBERGER FIBER JUMPER (DC9 TO RRH) ROSENBERGER SINGLE PAIR DC CABLE (DC9 TO RRH) 1/2" COAX JUMPER (RRH TO ANTENNA)	3/8" 7/16" 1/2"	4 4 6	15'-0" 15'-0" 10'-0"	3 BLUE	4449 B5/B12 RRUS-32 B66A	1 1	–	–	–	–	–	–
BETA (B4)	180°	241'-0"	ANDREW	SBNHH-1D85B	1	H=72.9" x W=11.9" x D=7.1"	0°/0°	0°	1/2" COAX JUMPER (RRH TO ANTENNA)	1/2"	6	10'-0"	4 BLUE	–	–	–	–	–	–	–	–
GAMMA (G1)	270°	**241'-0"**	ANDREW	DBXNH-8585B-R2M	1	H=73.2" x W=11.9" x D=7.1"	–	0°	LDF7-50A	1 5/8"	2	254'-0"	1 GREEN	–	–	–	CM1007-DBPXBC-002	–	2	E15Z01P13	1
GAMMA (G2)	270°	241'-0"	ANDREW	SBNHH-1D85B	1	H=72.9" x W=11.9" x D=7.1"	0°/0°	0°	ROSENBERGER FIBER JUMPER (DC9 TO RRH) ROSENBERGER SINGLE PAIR DC CABLE (DC9 TO RRH) 1/2" COAX JUMPER (RRH TO ANTENNA)	3/8" 7/16" 1/2"	4 2 6	15'-0" 15'-0" 10'-0"	2 GREEN	4478 B14 8843 B2/B66	1 1	–	–	–	–	–	–
GAMMA (G3)	270°	241'-0"	ANDREW	SBNHH-1D85B	1	H=72.9" x W=11.9" x D=7.1"	6°/3°	0°	ROSENBERGER FIBER JUMPER (DC9 TO RRH) ROSENBERGER SINGLE PAIR DC CABLE (DC9 TO RRH) 1/2" COAX JUMPER (RRH TO ANTENNA)	3/8" 7/16" 1/2"	4 4 6	15'-0" 15'-0" 10'-0"	3 GREEN	4449 B5/B12 RRUS-32 B66A	1 1	–	–	–	–	–	–
GAMMA (G4)	270°	241'-0"	ANDREW	SBNHH-1D85B	1	H=72.9" x W=11.9" x D=7.1"	0°/0°	0°	1/2" COAX JUMPER (RRH TO ANTENNA)	1/2"	6	10'-0"	4 GREEN	–	–	–	–	–	–	–	–
DELTA (D1)	**90°**	**241'-0"**	**ANDREW**	**NNH4-85B-R6**	**1**	**H=72" x W=19.6" x D=7.8"**	**2'/4'/2'**	**0°**	**ROSENBERGER FIBER JUMPER (DC9 TO RRH) ROSENBERGER SINGLE PAIR DC CABLE (DC9 TO RRH) 1/2" COAX JUMPER (RRH TO ANTENNA)**	**3/8" 7/16" 1/2"**	**1 3 8**	**15'-0" 15'-0" 10'-0"**	**1 ORANGE**	**4449 B5/B12 4460 B25/B66**	**1 1**	**–**	**–**	**–**	**–**	**–**	**–**
DELTA (D2)	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
DELTA (D3)	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
DELTA (D4)	**90°**	**241'-0"**	**ANDREW**	**NNH4-85B-R6**	**1**	**H=72" x W=19.6" x D=7.8"**	**2'/4'/2'**	**0°**	**1/2" COAX JUMPER (RRH TO ANTENNA)**	**1/2"**	**12**	**10'-0"**	**4 ORANGE**	**4478 B14 4460 B25/B66 4415 B30**	**1 1 1**	**–**	**–**	**–**	**–**	**–**	**–**
				TOTAL	**14**									**TOTAL**	**17**	**0**	**TOTAL**	**0**	**6**	**TOTAL**	**3**

TOTAL LDF7-50 1 5/8" COAX ACTIVE	**6**	**1,524'-0"**
TOTAL LDF7-50 1 5/8" COAX INACTIVE	**8**	**1,524'-0"**
TOTAL ROSENBERGER FIBER JUMPERS 3/8"	**25**	**375'-0"**
TOTAL ROSENBERGER SINGLE PAIR DC CABLE 7/16"	**21**	**315'-0"**
TOTAL 1/2" COAX JUMPERS	**74**	**740'-0"**
TOTAL 5/16" RET CABLES	**4**	**1,016'-0"**

NOTES:

1. ANTENNA AND COAX INFORMATION PROVIDED FROM THE RFDS VERSION **1.00** DATED **4/4/22**.
2. CONTRACTOR TO VERIFY RF INFO WITH CLIENT PRIOR TO CONSTRUCTION.
3. COAX LENGTHS ARE APPROXIMATE AND MUST BE VERIFIED PRIOR TO CONSTRUCTION.
4. ALL COAX SHALL BE COLOR CODED AT TOP AND BOTTOM JUMPER, AND AT TOP OF TOWER, BOTTOM OF TOWER, AND INSIDE SHELTER ON MAIN COAX.
5. EACH MAIN COAX SHALL HAVE CORROSION PROOF "ID TAGS" INSTALLED INSIDE THE SHELTER AT THE PORT AND AT THE ANTENNA.
6. **BOLD DENOTES NEW EQUIPMENT.**

1 ANTENNA AND COAX SCHEDULE
SCALE: N.T.S.

B+T GRP

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USID: 45057
FA: 10091919
MIKESVILLE

3050 SE COUNTY RD 18
LAKE CITY, FL 32025

EXISTING SELF-SUPPORT TOWER

PROJECT NO:	**163146.001.01**
CHECKED BY:	**FWP**

ISSUED FOR:

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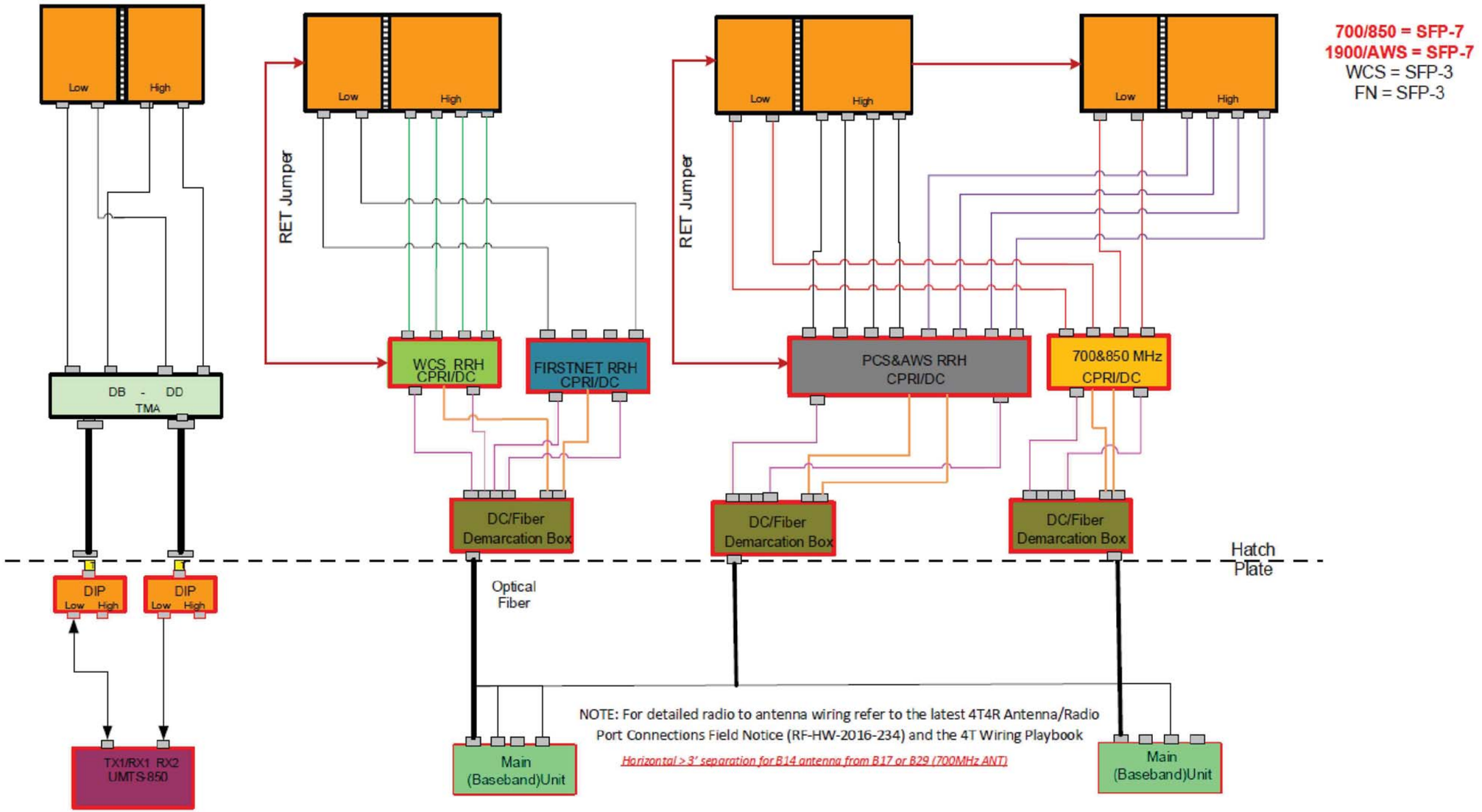
SHEET NUMBER:	REVISION:
C-5	0

Diagram - Sector	A	Diagram File Name - NFL_LTE 6C_U8_1TMA_2DIP_2DalBand RRH_FN2T2R_WCS2 No Filter.vsd					
Atoll Site Name -	159G0215	Location Name -	MIKESVILLE	Market -	JACKSONVILLE-PANHANDLE	Market Cluster -	NORTH FLORIDA
Comments: Sector D diagram is for DUS-MUX reference only							



1 PLUMBING DIAGRAM - ALPHA, BETA, & GAMMA SECTORS

SCALE: N.T.S.

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MIKESVILLE

3050 SE COUNTY RD 18
LAKE CITY, FL 32025

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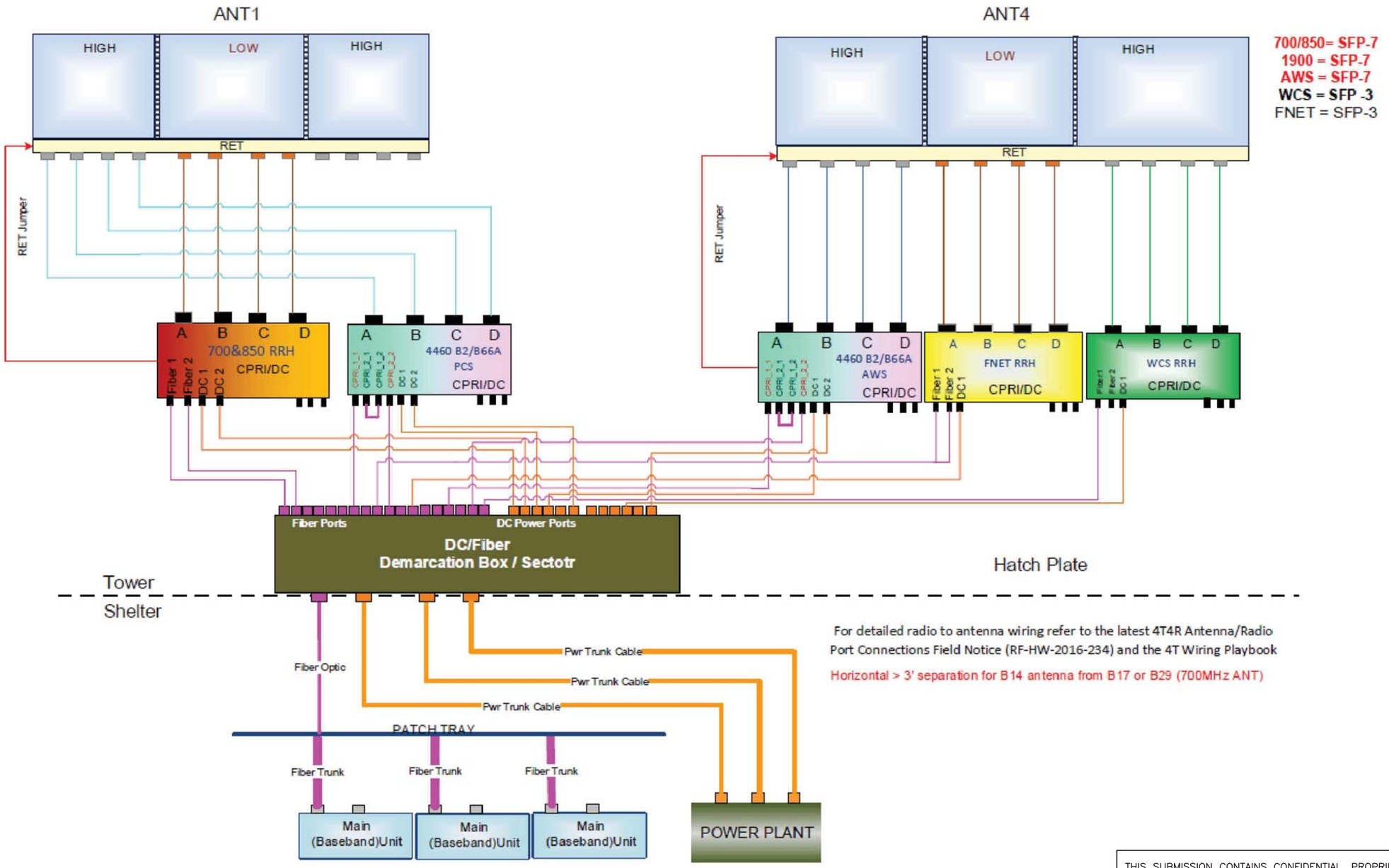
SHEET NUMBER:	REVISION:
RF-1	0

Diagram - Sector	D	Diagram File Name - NFL_LTE 6C_978_2FN3_12-12_2DB 5G RRU_NO Filter.vsd					
Atoll Site Name -	159G0215	Location Name -	MIKESVILLE	Market -	JACKSONVILLE-PANHANDLE	Market Cluster -	NORTH FLORIDA
Comments: Sector D diagram is for DUS-MUX reference only							



For detailed radio to antenna wiring refer to the latest 4T4R Antenna/Radio Port Connections Field Notice (RF-HW-2016-234) and the 4T Wiring Playbook

Horizontal > 3' separation for B14 antenna from B17 or B29 (700MHz ANT)

1 PLUMBING DIAGRAM - DELTA SECTOR

SCALE: N.T.S.

B+T GRP

AT&T

smartlink

USID: 45057
FA: 10091919
MIKESVILLE

3050 SE COUNTY RD 18
LAKE CITY, FL 32025

EXISTING SELF-SUPPORT TOWER

PROJECT NO:	163146.001.01
CHECKED BY:	FWP

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
B	4/20/22	RMC	PRELIMINARY REVIEW
C	6/10/22	FWP	PRELIMINARY REVIEW
0	6/15/22	FWP	CONSTRUCTION

B&T ENGINEERING, INC.

CHAD TUTTLE, P.E.
B&T ENGINEERING, INC

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY CHAD TUTTLE, P.E. USING A DIGITAL SIGNATURE.

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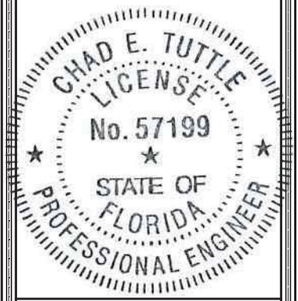
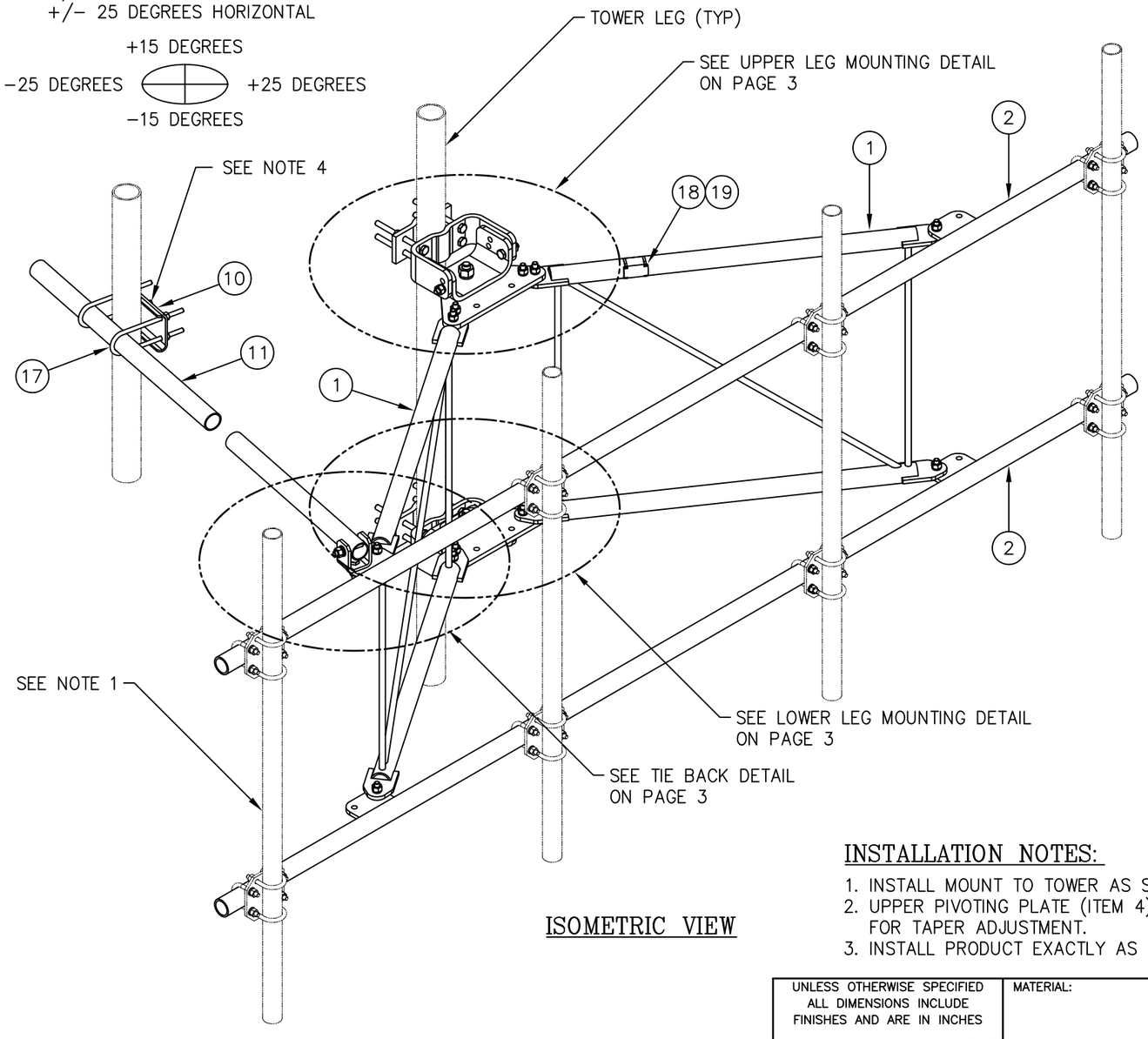


SHEET NUMBER:	REVISION:
RF-2	0

TIEBACK ANGLE RANGE DETAIL

+/− 15 DEGREES VERTICAL
+/− 25 DEGREES HORIZONTAL

+15 DEGREES
−25 DEGREES +25 DEGREES
−15 DEGREES



ISOMETRIC VIEW

C10857001C 12' HD V-BOOM ASSEMBLY W/TIEBACK

ITEM	QTY.	PART NO.	DESCRIPTION	WEIGHT
1.	2	CW01222	WELDMENT, STANDOFF ARM	126
2.	2	CW01223	WELDMENT, FACE PIPE	147
3.	2	CS03109	PLATE, ROTATING	34
4.	1	CS03110	PLATE, PIVOTING (UPPER)	16
5.	1	CS03111	PLATE, LEG CLAMP (UPPER)	17
6.	1	CS03112	PLATE, PIVOTING (LOWER)	14
7.	1	CS03113	PLATE, LEG CLAMP (LOWER)	17
8.	2	CS03114	PLATE, LEG CLAMP (BACK)	14
9.	1	CS00098	PLATE, TIE BACK SWIVEL	3
10.	1	CS03285	PLATE, TIE BACK CLAMP	4
11.	1	CS03333	PIPE, TIE BACK	38
12.	2	C40026073	BOLT ASSEMBLY, 1 ø X 3 A325	4
13.	8	C40140004	BOLT ASSEMBLY, 5/8 ø X 8 A307	13
14.	1	C40026033	BOLT ASSEMBLY, 5/8 ø X 4 1/2 A325	1
15.	12	C40026025	BOLT ASSEMBLY, 5/8 ø X 2 1/2 A325	6
16.	5	C40026024	BOLT ASSEMBLY, 5/8 ø X 2 1/4 A325	3
17.	2	C40034183	U-BOLT ASSEMBLY, 1/2 ø X 2 9/16 C-C	3
18.	1	Z30992001	MOUNT CLASSIFICATION TAG C10857001C	1
19.	2	C40062103	STAINLESS STEEL SELF-LOCKING CABLE TIE	1
			TOTAL WEIGHT	462

PACKAGING NOTE

CK00386 INCLUDES ITEMS 1, 3, 4, 5, 6, 7, 12 & 15 (8 QTY)
CK00387 INCLUDES ITEMS 2, 8, 9, 10, 11, 13, 14, 15 (4 QTY), 16, 17, 18 & 19

INSTALLATION NOTES:

1. INSTALL MOUNT TO TOWER AS SHOWN, SO THAT WELDED STANDOFF DIAGONAL IS SLOPING DOWNWARD FROM TOWER END TO FACE PIPE END.
2. UPPER PIVOTING PLATE (ITEM 4) HAS THREE HOLES ON EACH SIDE AND UPPER LEG CLAMP PLATE (ITEM 5) HAS TWO HOLES ON EACH SIDE FOR TAPER ADJUSTMENT.
3. INSTALL PRODUCT EXACTLY AS SHOWN IN DRAWING, WITH ALL BOLTS FACING UPWARDS.

NOTES:

1. MOUNTING PIPES & CROSSOVER PLATE KITS MUST BE PURCHASED SEPARATELY.
2. QUANTITIES SHOWN IN LISTS OF MATERIAL ARE FOR ONE (1) V-BOOM ONLY.
3. THIS V-BOOM WILL MOUNT TO THE FOLLOWING: 1 1/2"ø TO 5 9/16"ø ROUND LEG.
4. TIEBACK MUST BE CONNECTED TO A RIGID MEMBER THAT PROVIDES ADEQUATE SUPPORT WITHIN THE LIMITS NOTED ABOVE IN THE TIEBACK ANGLE RANGE DETAIL UNLESS APPROVED BY THE ENGINEER OF RECORD.

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES
TOLERANCES: FRACTIONS ± 1/16" ANGLES ± 1/2 DEG. DECIMALS ± .010"

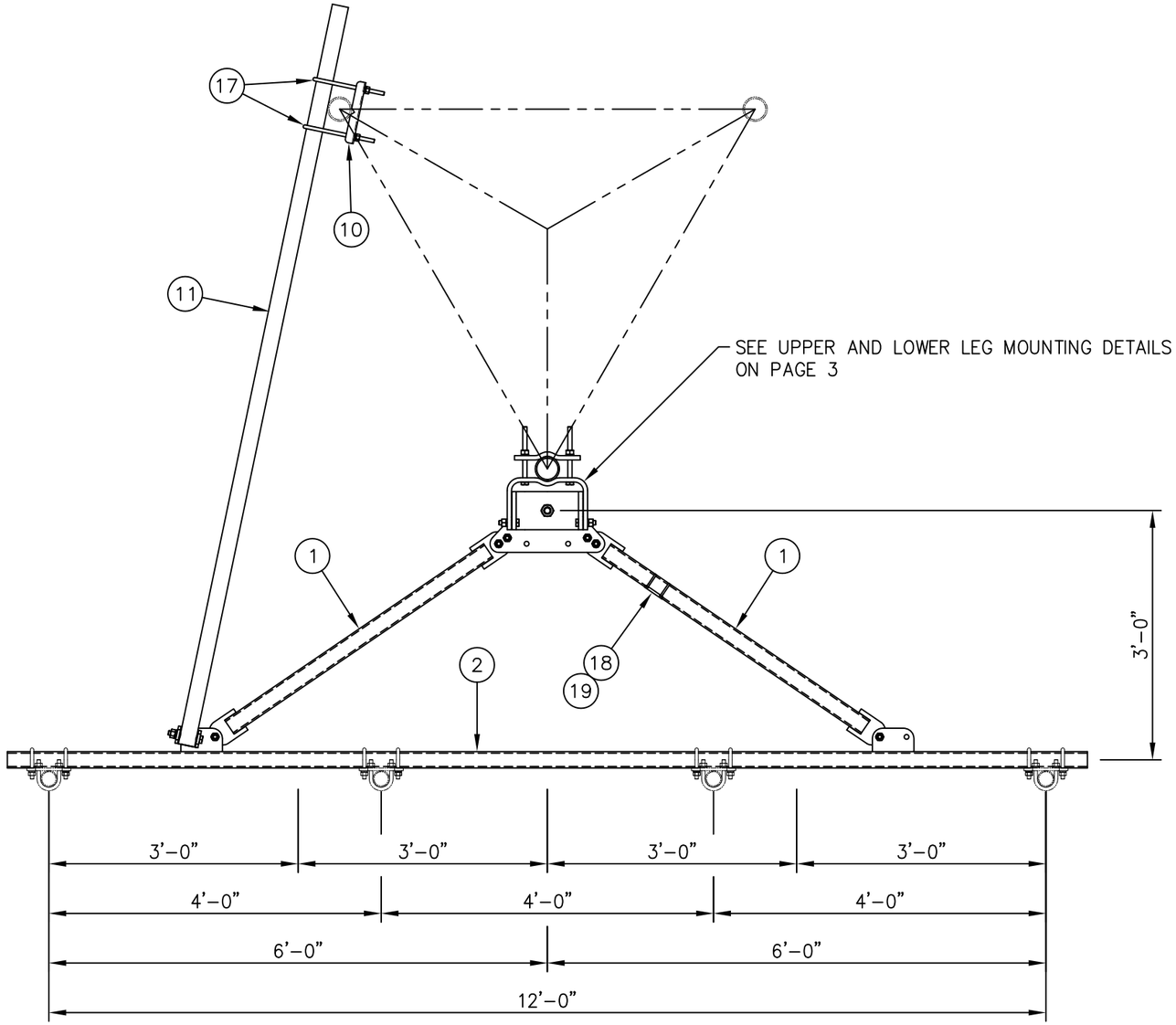
MATERIAL:
TOLERANCES DO NOT APPLY TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION
3	10/19/16	KLE	DEL	ADDED INSTALLATION NOTES
2	02/05/16	DLW	DEL	ADDED PACKAGING NOTE
1	01/21/16	KLE	EK	REVISED NOTES & ADDED TIEBACK ANGLE RANGE DETAIL

Sabre Industries™ Towers and Poles

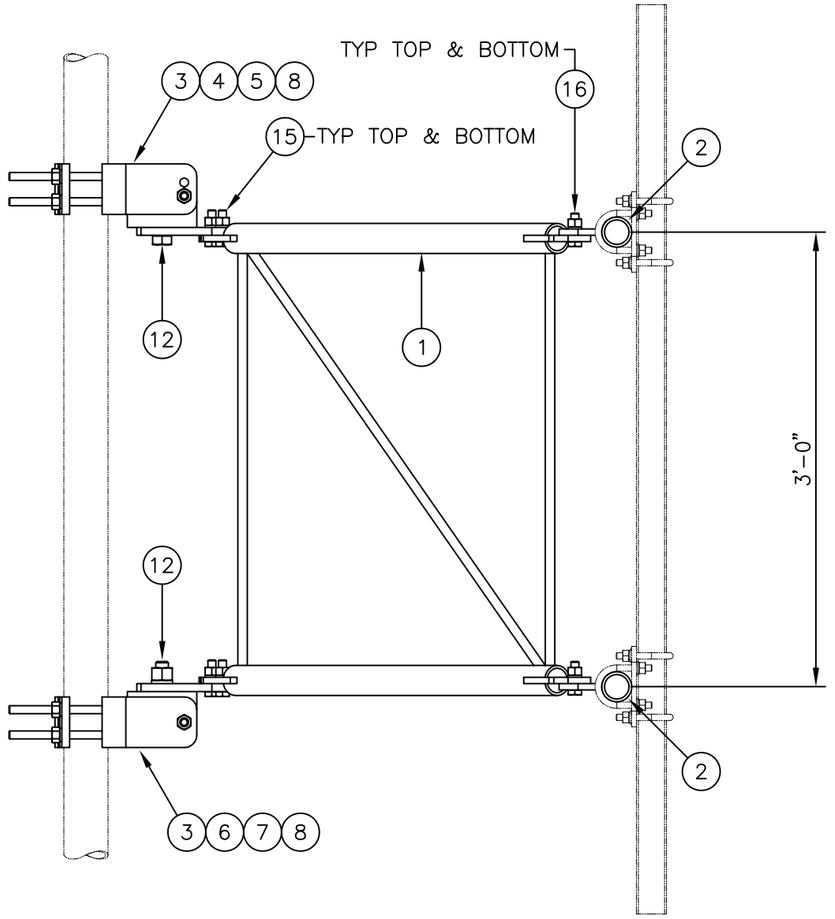
12' HD V-BOOM ASSEMBLY W/TIEBACK (3' STANDOFF) W/NO ANTENNA MOUNTING PIPES

		SIZE	DRAWING NO.	REV
DATE	12/22/15	B	C10857001C	3
DRAWN BY	WRF			
CHECKED BY	EK	SCALE None	PAGE 1 OF 3	



MOUNTING OPTIONS

SHOWING MOUNTING PIPE PLACEMENTS



SIDE VIEW

UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION
3	10/19/16	KLE	DEL	ADDED INSTALLATION NOTES
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1	01/21/16	KLE	EK	REVISED NOTES & ADDED TIEBACK ANGLE RANGE DETAIL

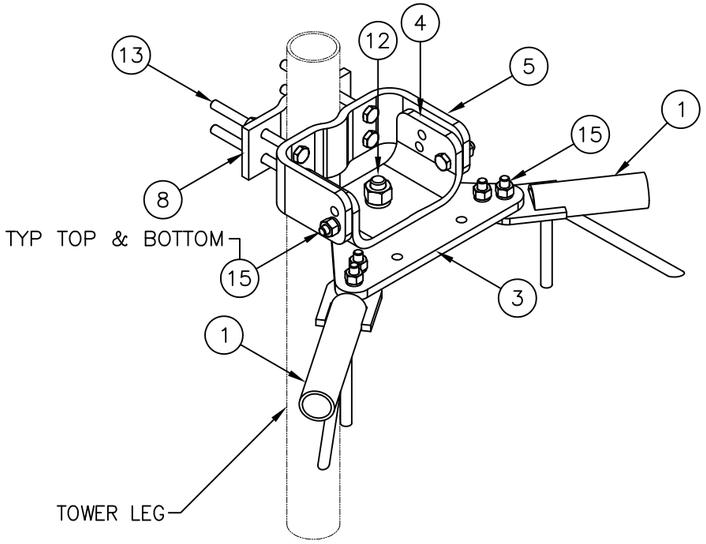
Sabre Industries™
Towers and Poles

12' HD V-BOOM ASSEMBLY W/TIEBACK (3' STANDOFF) W/NO ANTENNA MOUNTING PIPES

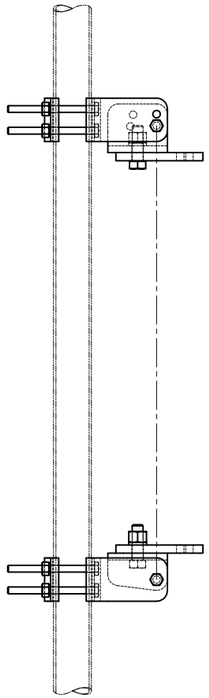
DATE	12/22/15
DRAWN BY	WRF
CHECKED BY	EK

SIZE	DRAWING NO.	REV
B	C10857001C	3

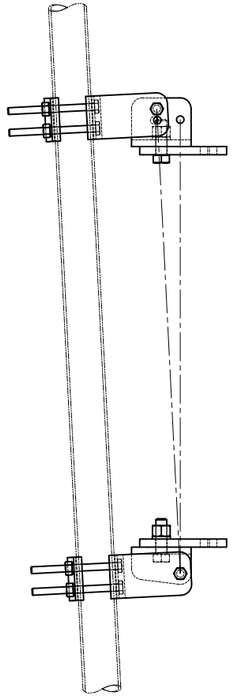
SCALE	PAGE
None	2 OF 3



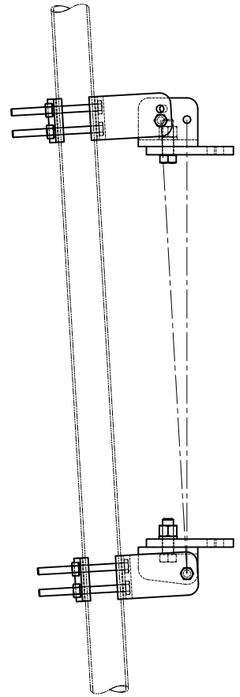
UPPER LEG MOUNTING DETAIL



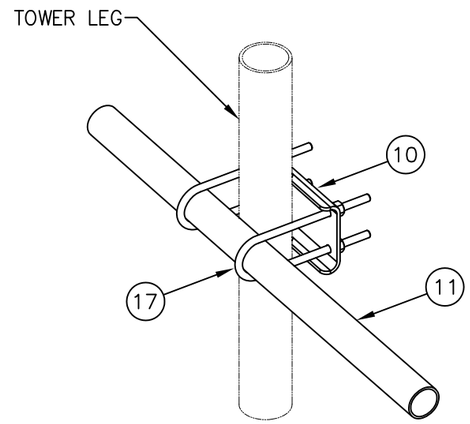
STRAIGHT
TOWER SECTION



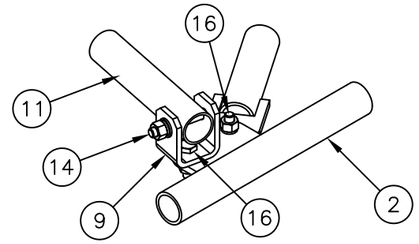
TAPERED
1'–9 IN 20' SLOPE



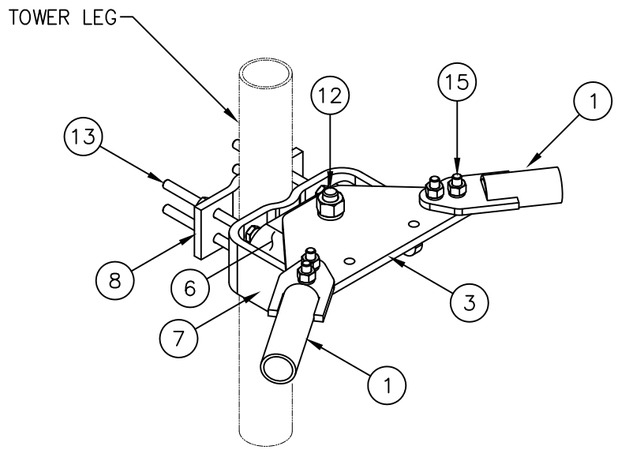
TAPERED
2' IN 20' SLOPE



TIE BACK DETAIL
AT TOWER LEG



TIE BACK DETAIL
AT ANTENNA MOUNTING FRAME



LOWER LEG MOUNTING DETAIL

-------PIVOTING OPTIONS-------

UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS INCLUDE
FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY
TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION
3	10/19/16	KLE	DEL	ADDED INSTALLATION NOTES
2	02/05/16	DLW	DEL	ADDED PACKAGING NOTE
1	01/21/16	KLE	EK	REVISED NOTES & ADDED TIEBACK ANGLE RANGE DETAIL

Sabre Industries™
Towers and Poles

12' HD V-BOOM ASSEMBLY W/TIEBACK (3' STANDOFF) W/NO ANTENNA MOUNTING PIPES

DATE	12/22/15
DRAWN BY	WRF
CHECKED BY	EK

SIZE	DRAWING NO.	REV
B	C10857001C	3

SCALE	PAGE
None	3 OF 3