CENTERLINE COMMUNICATIONS

38 Treeline Court
Fishkill, NY 12524
krevak@clinellc.com
845-242-6152

August 20, 2021

Melanie A. Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Notice of Exempt Modifications – AT&T Site CT4062
AT&T Telecommunications Facility @ 428 Platt Hill Road, Winsted, CT 06098

Dear Ms. Bachman,

New Cingular Wireless, PCS, LLC ("AT&T") is proposing a wireless telecommunications facility on an existing +/- 225 feet self support lattice tower at the above referenced address (Latitude = 41.89828611, Longitude = - 73.11601111) and within the existing fenced compound. Said self support lattice tower is owned and operated by American Tower Corporation.

AT&T desires to modify the existing telecommunications facility by: installing a WIC (Walk-In Cabinet) and a Generator on proposed concrete pads inside a 20' x 10' ground space within the existing compound and install (6) antennas, (9) RRUS Radios, (1) Squid and mounts/cabling on the existing tower at 170' as more particularly detailed and described on the enclosed Construction Drawings prepared by NB+C Engineering, LLC., dated June 22, 2021. The overall height of the existing tower is and will remain at 238 feet and no changes will be made to the compound dimensions.

Please accept this letter as notification pursuant to R.C.S.A §16-50j-73 for construction that constitutes an exempt modification pursuant to R.C.S.A §16-50j-72(b)(2). In accordance with R.C.S.A §16-50j-73, a copy of this letter is being sent to the following individuals: American Tower Corporation as Tower Operator/Owner and Property Owner; Joshua Kelly as Town Manager of the Town of Winchester and Pamela Colombie as ZEO for the Town of Winchester.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. §16-50j-72(b)(2). Specifically:

1. The proposed modifications will NOT result in an increase in the height of the existing structure.
2. The proposed modifications will NOT require an extension of the site boundary.

3. The proposed modifications will NOT increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the modified facility will NOT increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. *Please see the RF emissions calculation for AT&T's modified facility enclosed herewith*.
5. The proposed modifications will NOT cause an ineligible change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading. Please see the structural analysis dated May 22, 2021 prepared by American Tower Corporation enclosed herewith.

For the foregoing reasons, AT&T respectfully submits that the proposed modifications to the above referenced telecommunications facility constitute an exempt modification under R.C.S.A §16-50j-72(b)(2).

If you have any questions, please feel free to contact me.

Sincerely,

Kimberly Revak
Site Acquisition Consultant – Agent for AT&T
Centerline Communications, LLC
38 Treeline Court
Fishkill, NY 12524
Phone: (845) 242-6152
krevak@clinellc.com

Enclosures:
Exhibit 1 – Property Card and GIS
Exhibit 2 – Construction Drawings dated 06/22/21
Exhibit 3 – Structural Analysis Report
Exhibit 4 – Antenna Mount Analysis Report
Exhibit 5 – NIER Study Report
Exhibit 6 – Tower Approval
Exhibit 7 – (4) Notice Confirmations

Cc:
American Tower Corporation – Tower Operator/Owner
American Tower Corporation – Property Owner
Joshua Kelly – Town Manager of the Town of Winchester
Pamela Colombie – ZEO for the Town of Winchester

Exhibit 1

Property Card and GIS

428 PLATT HILL RD

Property Detail

Current Owner

Name: AMERICAN TOWERS INC

Mailing Address: P O BOX 723597
ATLANTA, GA 31139

Physical Address: 428 PLATT HILL RD

Property ID #: 037 154 026C

Total Acres: 3.5

Zoning: RR

Deed Book No: 290

Deed Book Page: 818

Valuation and Sales

Land	Building	Total Value
$49,000	$35,770	$85,960

Sale Price	Sale Date
$167,879	02/16/2000

Building

Year Built: 1965

House Style: Telephone Bldg

Residential Area: 1275

Story Height: 1

Number of Rooms: 0

Building Area: 1275

428 PLATT HILL RD

Location	428 PLATT HILL RD	**Mblu**	037/ 154/ 026C/ /
Acct#	000553	**Owner**	AMERICAN TOWERS INC
Assessment	$85,960	**Appraisal**	$122,800
PID	5318	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2018	$52,800	$70,000	$122,800

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2018	$36,960	$49,000	$85,960

Owner of Record

Owner	AMERICAN TOWERS INC	**Sale Price**	$167,879
Co-Owner		**Certificate**	
Address	C/O AMERICAN TOWER CORP PO BOX 723597 ATLANTA, GA 31139	**Book & Page**	00290/00818
		Sale Date	02/16/2000

Ownership History

Ownership History				
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Sale Date**
AMERICAN TOWERS INC	$167,879		00290/00818	02/16/2000

Building Information

Building 1 : Section 1

Year Built:	1965
Living Area:	1,275
Replacement Cost Less Depreciation:	$51,100

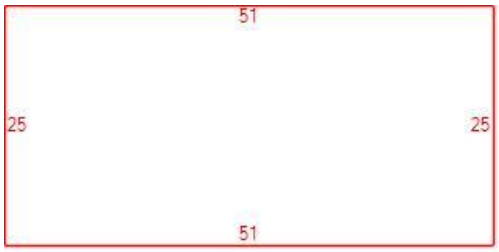
Building Attributes	
Field	**Description**

Style:	Telephone Bldg
Model	Ind/Comm
Grade	Low Quality
Stories:	1
Occupancy	1.00
Exterior Wall 1	Vinyl Siding
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	T&G/Rubber
Interior Wall 1	Drywall/Plaste
Interior Wall 2	
Interior Floor 1	Vinyl/Asphalt
Interior Floor 2	
Heating Fuel	Electric
Heating Type	Electr Basebrd
AC Type	None
Struct Class	
Bldg Use	Rad/TV TR
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	4310
Heat/AC	NONE
Frame Type	WOOD FRAME
Baths/Plumbing	NONE
Ceiling/Wall	NONE
Rooms/Prtns	AVERAGE
Wall Height	14.00
% Comn Wall	0.00

Building Photo

(http://images.vgsi.com/photos/WinchesterCTPhotos//\0005\IMG_1591_56

Building Layout



(ParcelSketch.ashx?pid=5318&bid=3902)

Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	1,275	1,275
		1,275	1,275

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code	4330
Description	Rad/TV TR
Zone	RR

Land Line Valuation

Size (Acres)	3.5
Depth	
Assessed Value	$49,000

Alt Land Appr Category No

Appraised Value $70,000

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
FN6	W/O Top RL-4'			300.00 L.F.	$1,700	1

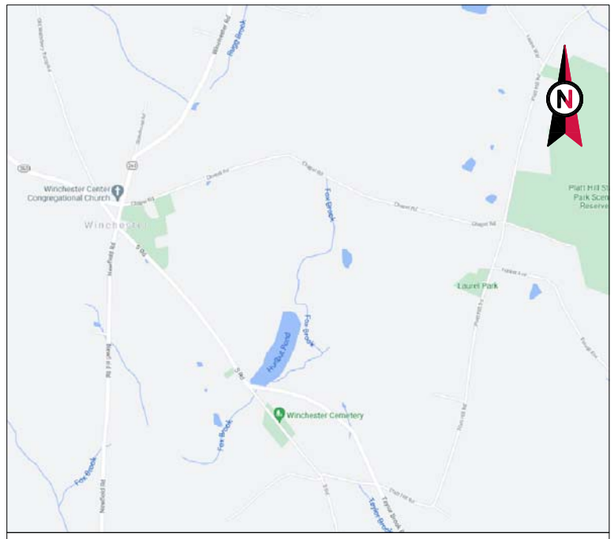
Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$52,800	$70,000	$122,800
2017	$52,800	$70,000	$122,800
2016	$50,900	$70,000	$120,900

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$36,960	$49,000	$85,960
2017	$36,960	$49,000	$85,960
2016	$35,630	$49,000	$84,630

Exhibit 2

Construction Drawings
(dated 06/22/21)



VICINITY MAP

AMERICAN TOWER®

ATC SITE NAME: WINSTEAD
ATC SITE NUMBER: 88019
AT&T PACE NUMBER: MRCTB050146
AT&T SITE ID: S4062
AT&T FA CODE:12676364
AT&T SITE NAME: WINCHESTER
SITE ADDRESS: 428 PLATT HILL RD
WINSTEAD, CT 06098-2522

AT&T MOBILITY
COLOCATION PLAN

LOCATION MAP

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.

1. INTERNATIONAL BUILDING CODE (IBC)
2. NATIONAL ELECTRIC CODE (NEC)
3. LOCAL BUILDING CODE
4. CITY/COUNTY ORDINANCES

UTILITY COMPANIES

POWER COMPANY: EVER SOURCE
PHONE: (877) 659-6326

TELEPHONE COMPANY: FRONTIER COMMUNICATIONS
PHONE: (800) 376-6843

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

PROJECT SUMMARY

SITE ADDRESS:

428 PLATT HILL RD

WINSTEAD, CT 06098-2522

COUNTY: LITCHFIELD

GEOGRAPHIC COORDINATES:

LATITUDE: 41.89828611°

LONGITUDE: -73.11601111°

GROUND ELEVATION: 1446' AMSL

PROJECT TEAM

TOWER OWNER:

AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

APPLICANT:

AT&T MOBILITY
550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

ENGINEER:

NB+C ENGINEERING SERVICES, LLC.
8601 SIX FORKS ROAD, SUITE 540
RALEIGH, NC 27615

PROPERTY OWNER:

AMERICAN TOWER
116 HUNTINGTON AVE
BOSTON, MA 02116

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES INSTALLING EQUIPMENT CABINETS AND A GENERATOR ON A PROPOSED CONCRETE PAD INSIDE A 10' X 20' GROUND SPACE WITHIN THE EXISTING COMPOUND, AND INSTALLING NEW EQUIPMENT AND MOUNTS ON THE EXISTING TOWER.

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.

PROJECT LOCATION DIRECTIONS

FROM CITY: FRAMINGHAN, MA

FROM 90 W (MASS) TAKE 8 S TO 44 W (WINSTED CT) THEN 263, 1.4 MILES ON LEFT IS PLATT HILL ROAD 1.6 MILES TO SITE ON ROUTE. FROM WATERBURY RT 8 NORTH TO EXIT 45 TAKE LEFT THEN RIGHT IN 2 MILES LEFT ON BURR MOUNTAIN RD THEN LEFT ON PLATT HILL RD TOWER ON LEFT.

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	0	06/22/21	CCC
G-002	GENERAL NOTES	0	06/22/21	CCC
C-001	OVERALL SITE PLAN	0	06/22/21	CCC
C-101	DETAILED SITE PLAN	0	06/22/21	CCC
C-102	DETAILED EQUIPMENT LAYOUT	0	06/22/21	CCC
C-201	TOWER ELEVATION	0	06/22/21	CCC
C-401	ANTENNA INFORMATION & SCHEDULE	0	06/22/21	CCC
C-501	CONSTRUCTION DETAILS	0	06/22/21	CCC
C-502	CONSTRUCTION DETAILS	0	06/22/21	CCC
C-503	CONSTRUCTION DETAILS	0	06/22/21	CCC
C-504	EQUIPMENT SPECIFICATIONS	0	06/22/21	CCC
E-101	GROUNDING DETAILS & ELECTRICAL SCHEMATIC	0	06/22/21	CCC
E-102	GROUNDING DETAIL	0	06/22/21	CCC
E-501	GROUNDING DETAILS	0	06/22/21	CCC
E-601	PANEL SCHEDULE	0	06/22/21	CCC
R-601	SUPPLEMENTAL			
R-602	SUPPLEMENTAL			
R-603	SUPPLEMENTAL			
R-604	SUPPLEMENTAL			
R-605	SUPPLEMENTAL			

AMERICAN TOWER®
A.T. ENGINEERING SERVICE, PLLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: 0012746

NB+C™
TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
8601 SIX FORKS ROAD, SUITE 540
RALEIGH, NC 27615
(919) 657-9131

REV.	DESCRIPTION	BY	DATE
A	PRELIM	CCC	06/02/21
B	PRELIM	CCC	06/14/21
0	FOR CONSTRUCTION	CCC	06/22/21

ATC SITE NUMBER:
88019

ATC SITE NAME:
WINSTEAD

AT&T MOBILITY SITE NAME:
WINCHESTER

SITE ADDRESS:
428 PLATT HILL RD
WINSTEAD, CT 06098-2522

SEAL:

AT&T

DATE DRAWN:	06/02/21
ATC JOB NO:	13626849
CUSTOMER ID:	S4062
CUSTOMER #:	12676364

TITLE SHEET

SHEET NUMBER:	REVISION:
G-001	0

GENERAL CONSTRUCTION NOTES:

1. OWNER FURNISHED MATERIALS, AT&T MOBILITY "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 AT&T MOBILITY 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 AT&T MOBILITY REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE AT&T MOBILITY REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE AT&T MOBILITY 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 AT&T MOBILITY 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 AT&T MOBILITY 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 AT&T MOBILITY 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 AT&T MOBILITY 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 AT&T MOBILITY REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MOBILITY MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH AT&T MOBILITY SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO AT&T MOBILITY FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO AT&T MOBILITY 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 AT&T MOBILITY 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. 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.
29. 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.
30. 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 AT&T MOBILITY REP. ANY WORK FOUND BY THE AT&T MOBILITY REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
31. 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.
32. AT&T MOBILITY FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE AT&T MOBILITY 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.
33. AT&T MOBILITY 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 AT&T MOBILITY 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 AT&T MOBILITY UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OD COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL AND
   - B. INSTALL ANTENNA AS INDICATE ON DRAWINGS AND AT&T MOBILITY 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 GREED 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 AT&T MOBILITY 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 4000 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 DESIGN SHALL BE PERFORMED BY ELECTRICAL CONTRACTOR. STRUCTURAL DESIGN SHALL BE PERFORMED BY GENERAL 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 CONCORDIA. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
3. CONTRACTOR SHALL FIELD LOCATE ALL BELOW GRADE GROUND LINES AND UTILITY LINES PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR RELOCATION OF ALL UTILITIES AND GROUND 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.

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NB+C ENGINEERING SERVICES, LLC.
8601 SIX FORKS ROAD, SUITE 540
RALEIGH, NC 27615
(919) 657-9131

REV.	DESCRIPTION	BY	DATE
A	PRELIM	CCC	06/02/21
B	PRELIM	CCC	06/14/21
0	FOR CONSTRUCTION	CCC	06/22/21

ATC SITE NUMBER:
88019

ATC SITE NAME:
WINSTEAD

AT&T MOBILITY SITE NAME:
WINCHESTER

SITE ADDRESS:
428 PLATT HILL RD
WINSTEAD, CT 06098-2522

SEAL:

AT&T

DATE DRAWN:	06/02/21
ATC JOB NO:	13626849
CUSTOMER ID:	S4062
CUSTOMER #:	12676364

GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0

NOTES:

1. BOUNDARY LINES OBTAINED FROM TOWN OF WINSTEAD ONLINE GIS.
2. ZONING INFORMATION OBTAINED FROM ZONING ORDINANCE.

1 OVERALL SITE PLAN

GRAPHIC SCALE

100 0 50 100

(IN FEET)
1 UNIT = 100 FEET

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OVERALL SITE PLAN

SHEET NUMBER:	REVISION:
C-001	0

SITE PLAN NOTES:

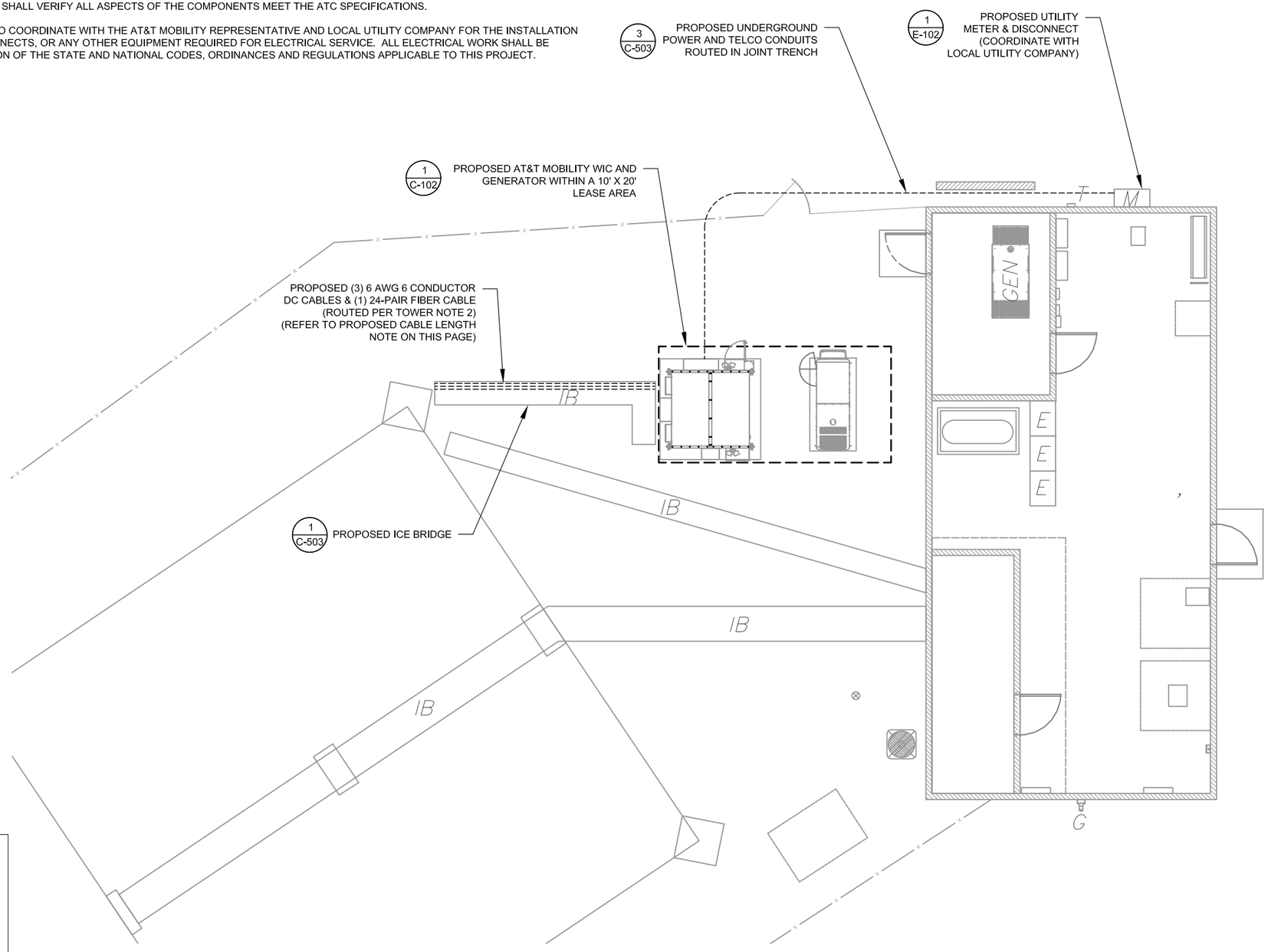
1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.

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 AT&T MOBILITY 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 RECEPTACAL
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
x x	CHAINLINK FENCE



1 DETAILED SITE PLAN

GRAPHIC SCALE

10 0 5 10

(IN FEET)
1 UNIT = 10 FEET

PROPOSED CABLE LENGTH:

1. ESTIMATED LENGTH OF PROPOSED CABLE IS **220'**. 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. WHERE POSSIBLE UTILIZE EXISTING CABLE SUPPORT STRUCTURES AS PROVIDED FOR CARRIER TO ADEQUATELY SECURE CABLES, USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER. OTHERWISE, ATTACH CABLES TO HORIZONTAL OR DIAGONAL TOWER MEMBERS USING PROPOSED STAINLESS STEEL ADAPTERS (DO NOT ATTACH TO TOWER LEG).

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SEAL:

AT&T

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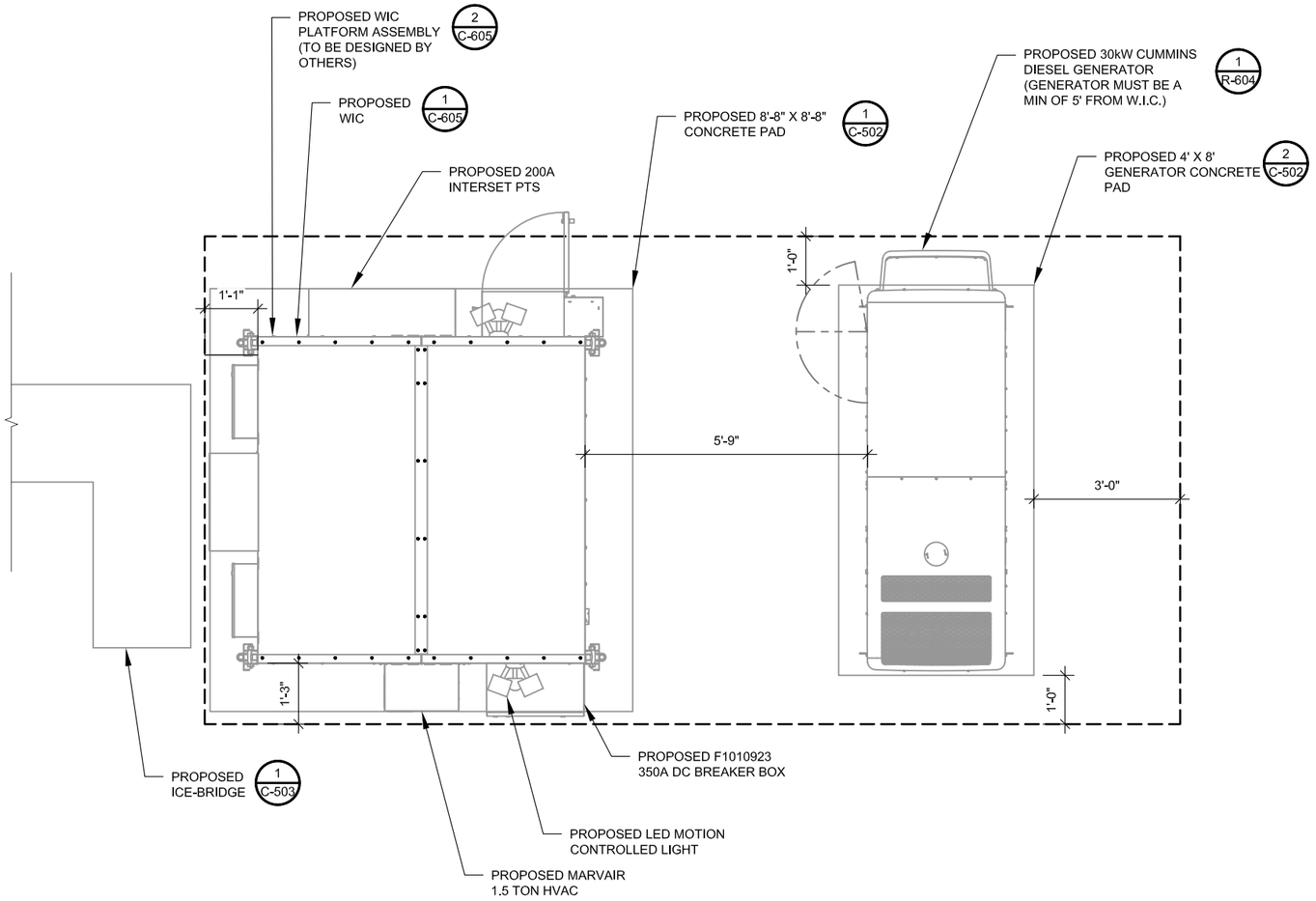
CUSTOMER ID:	S4062
CUSTOMER #:	12676364

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	0



1 DETAILED EQUIPMENT LAYOUT

SCALE: NOT TO SCALE

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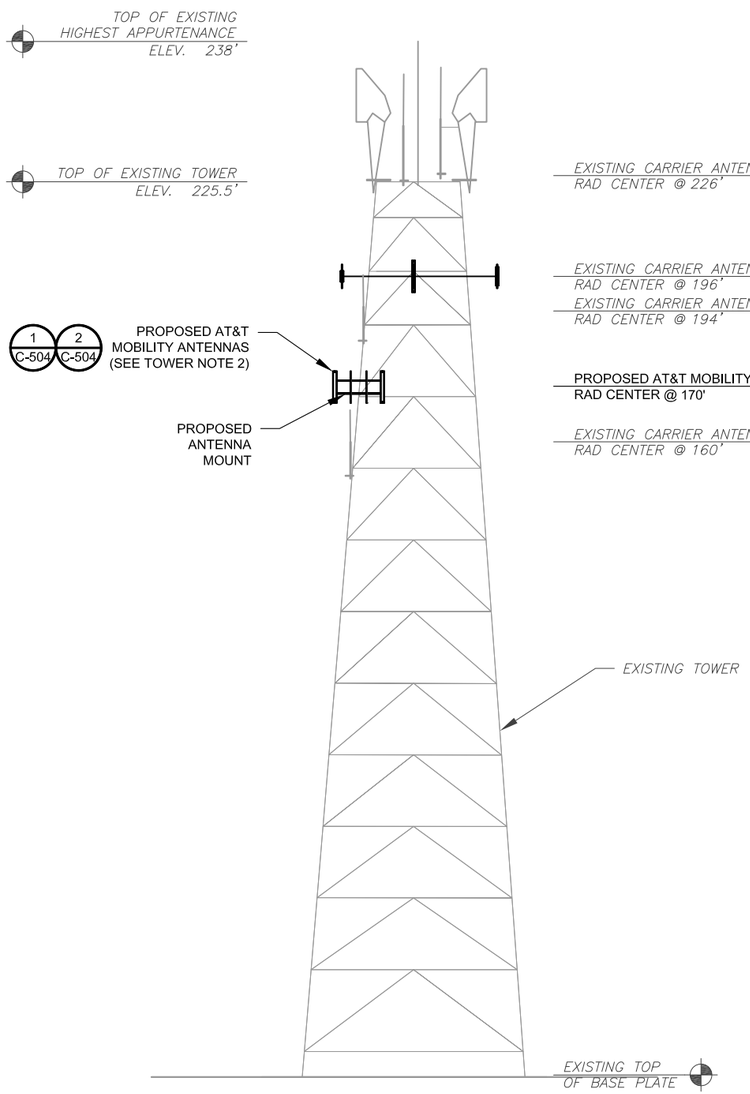
CUSTOMER #:	12676364

DETAILED EQUIPMENT LAYOUT

SHEET NUMBER:	REVISION:
C-102	0



1 TOWER ELEVATION
SCALE: N.T.S.

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. WHERE POSSIBLE UTILIZE EXISTING CABLE SUPPORT STRUCTURES AS PROVIDED FOR CARRIER TO ADEQUATELY SECURE CABLES, USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER. OTHERWISE, ATTACH CABLES TO HORIZONTAL OR DIAGONAL TOWER MEMBERS USING PROPOSED STAINLESS STEEL ADAPTERS (DO NOT ATTACH TO TOWER LEG).
4. TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)

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AT&T

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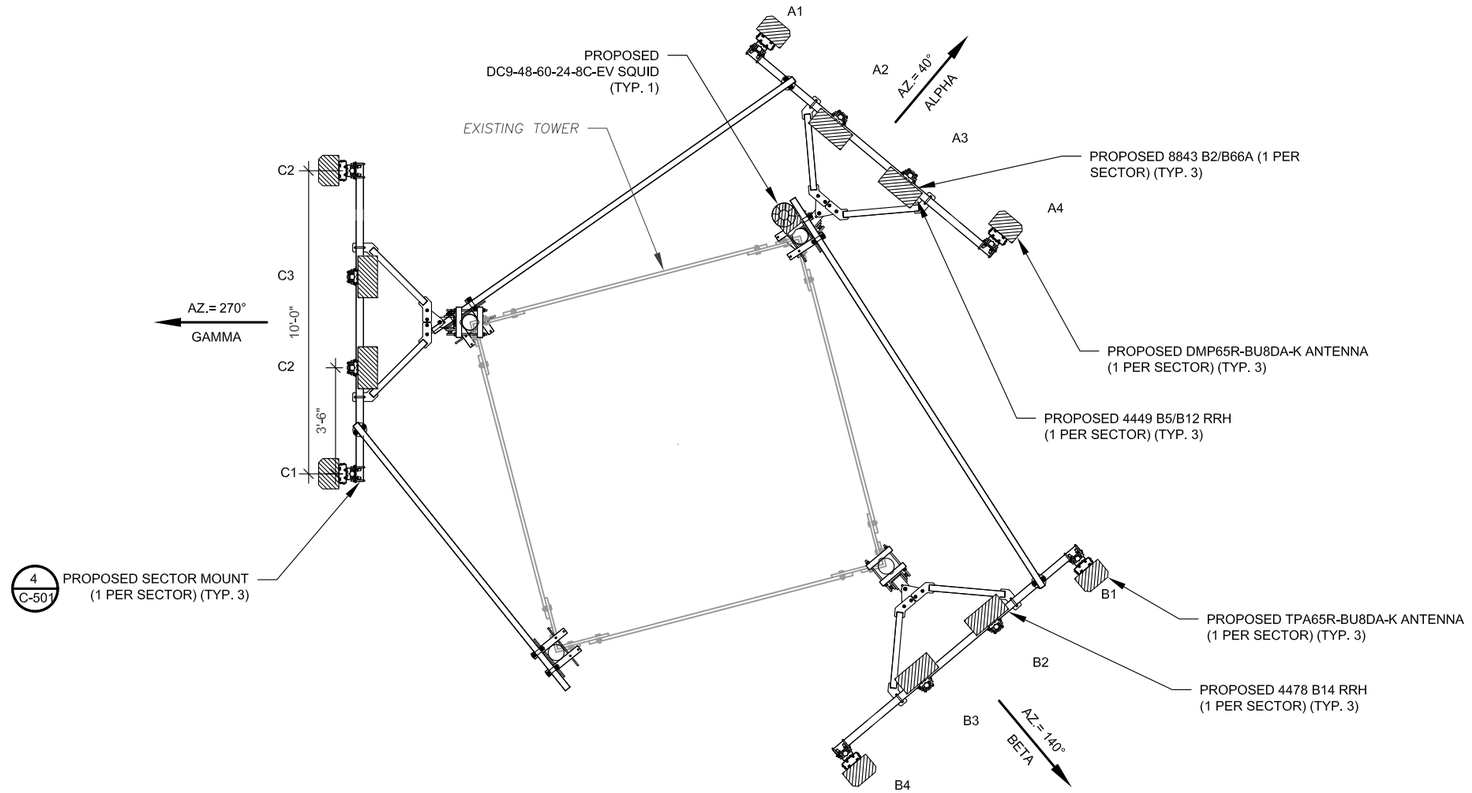
CUSTOMER #:	12676364

TOWER ELEVATION

SHEET NUMBER:	REVISION:
C-201	0



1 FINAL ANTENNA PLAN

SCALE: N.T.S.

FINAL ANTENNA SCHEDULE									
LOCATION			ANTENNA SUMMARY					NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	170'	40°	A1	TPA65R-BU8DA-K	700	0 / 2	ADD	RRUS 4478 B14	ADD
			A2	-	-	-	-	-	-
			A3	-	-	-	-	-	-
			A4	DMP65R-BU8D	700/1900	0 / 2	ADD	RRUS 4449 B5 B12, RRUS 8843B2 B66A	ADD
BETA	170'	140°	B1	TPA65R-BU8DA-K	700	0 / 2	ADD	RRUS 4478 B14	ADD
			B2	-	-	-	-	-	-
			B3	-	-	-	-	-	-
			B4	DMP65R-BU8D	700/1900	0 / 2	ADD	RRUS 4449 B5 B12, RRUS 8843B2 B66A	ADD
GAMMA	170'	270°	C1	TPA65R-BU8DA-K	700	0 / 2	ADD	RRUS 4478 B14	ADD
			C2	-	-	-	-	-	-
			C3	-	-	-	-	-	-
			C4	DMP65R-BU8D	700/1900	0 / 2	ADD	RRUS 4449 B5 B12, RRUS 8843B2 B66A	ADD

1. CONFIRM WITH AT&T MOBILITY REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG).
GC TO CAP ALL UNUSED PORTS.
2. CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.

2 ANTENNA SCHEDULE

CABLE LENGTHS FOR JUMPERS
FIBER DISTRIBUTION/OVP TO RRU: 30'
RRU TO ANTENNA: 20'

PROPOSED FIBER DISTRIBUTION/OVP BOX		PROPOSED CABLING SUMMARY			
MODEL NUMBER	STATUS	COAX	DC	FIBER	STATUS
DC9-48-60-24-8C-EV	ADD	-	(3) #6 AWG, 6 CONDUTOR	(1) 24 - PAIR	ADD
-	-	-		-	-

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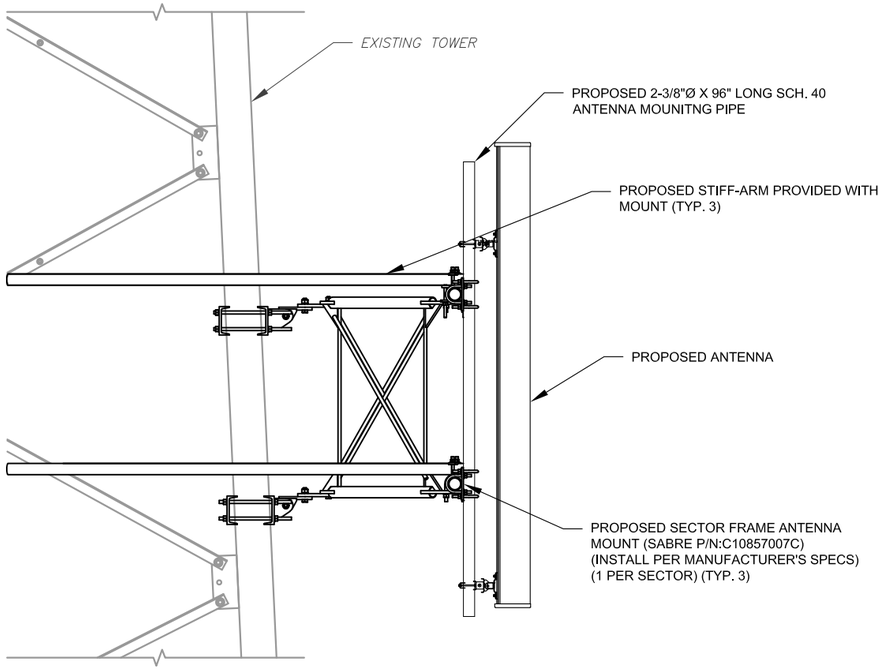
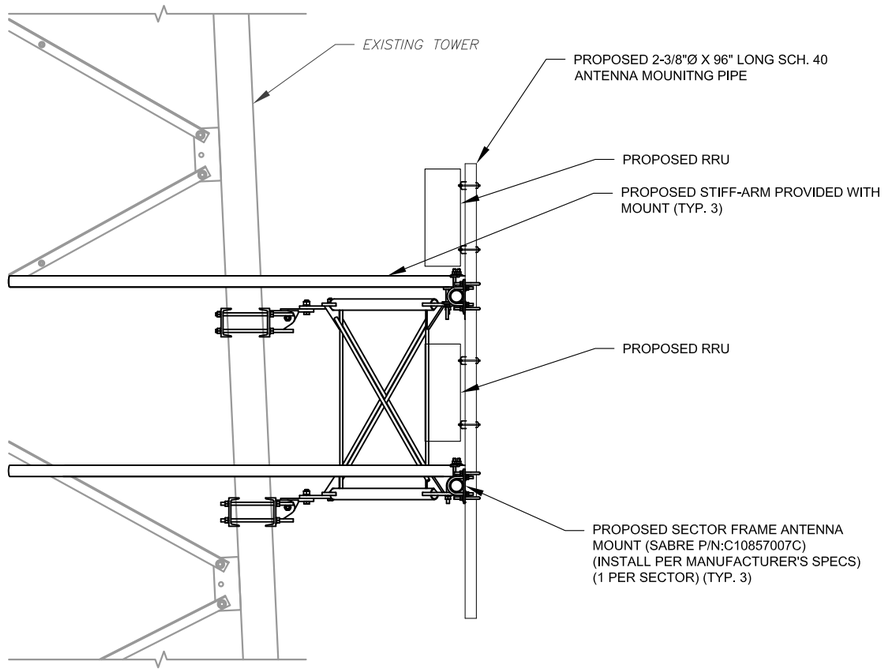
ANTENNA INFORMATION & SCHEDULE

SHEET NUMBER:	REVISION:
C-401	0



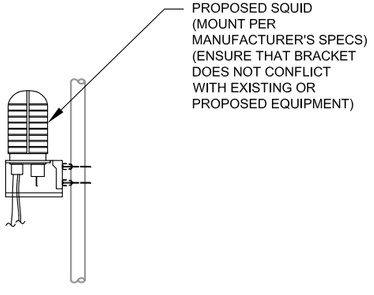
1 PROPOSED ANTENNA MOUNTING DETAIL (ELEVATION)

SCALE: NOT TO SCALE



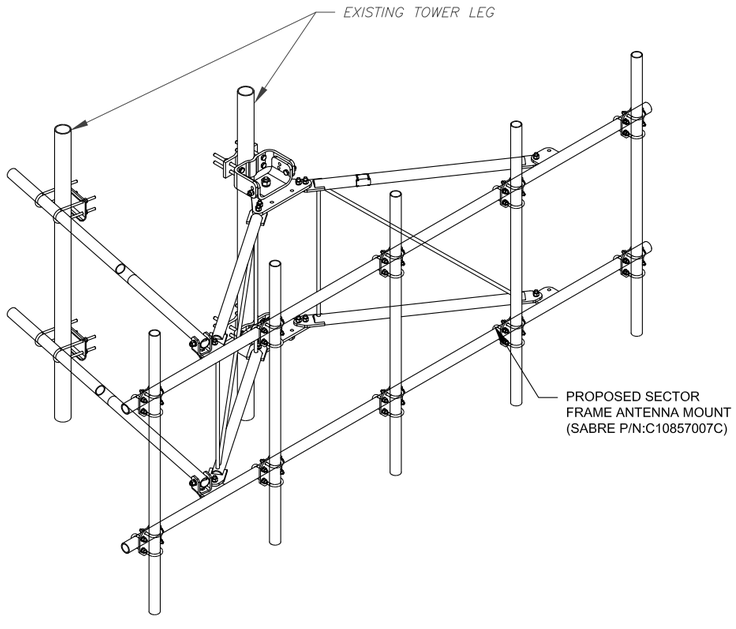
2 PROPOSED ANTENNA MOUNTING DETAIL (ELEVATION)

SCALE: NOT TO SCALE



3 PROPOSED SQUID MOUNTING

SCALE: N.T.S.



4 ISOMETRIC SECTOR FRAME DETAIL

SCALE: N.T.S.

RF REQUIREMENTS FOR 700 B14 FIRSTNET, 700 B12, 700D B29 ANTENNA SEPARATION

- ❑ Horizontal separation (side to side of antenna): >= 3'
- ❑ Vertical separation (between the tips of the antennas): > 3'
- ❑ Inter-sector separation: > 3' between the center of the antenna backplanes.

- ❑ Please note additional horizontal separation may be required if B14 antennas azimuth are different from others or antennas are severely angled with respect to the mount.
- ❑ Typical 3' horizontal separation can tolerate skew angle up to 6°.

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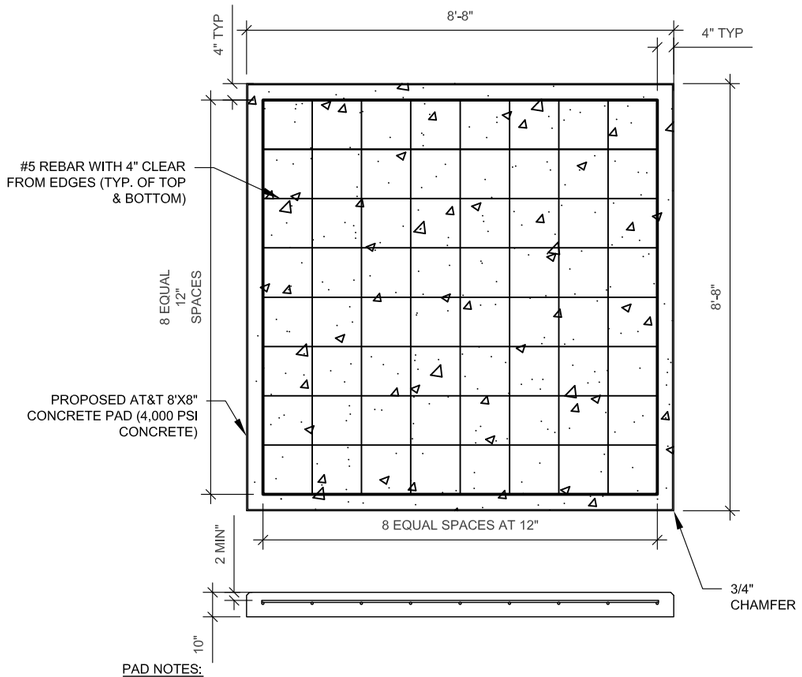
CUSTOMER ID:	S4062
CUSTOMER #:	12676364

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-501	0

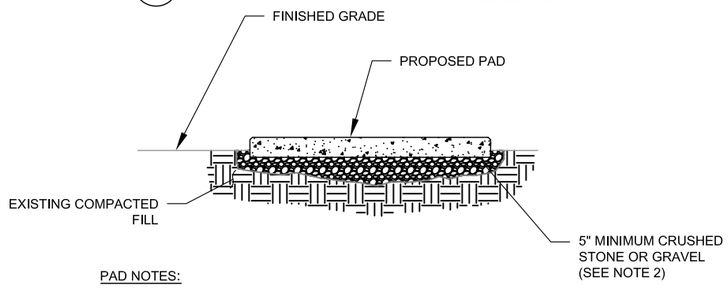


PAD NOTES:

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.
3. WALK-IN CABINET (WIC) TO BE INSTALLED ACCORDING TO MANUFACTURER RECOMMENDATIONS & SPECIFICATIONS.
4. CONTRACTOR TO CONFIRM PARTS & HARDWARE PRIOR TO CONSTRUCTION & COORDINATE WITH AT&T CM.
5. FOUNDATION TO BE FLUSH WITH EXISTING GRADE, CONTRACTOR SHALL MAINTAIN A MAXIMUM 18" CLEARANCE FROM GRADE TO BOTTOM OF WIC TO ACCOMMODATE STAIRS. VERIFY IN FIELD PRIOR TO POST INSTALLATION.
6. COORDINATE POWER & TELCO CONDUIT STUBUP PLACEMENT WITH ELECTRICAL TRADES.
7. PROVIDE WORKING HVAC AND ELECTRICAL WORKING SPACE CLEARANCES PER MANUFACTURER RECOMMENDATIONS AND CODE REQUIREMENTS.

1 CONCRETE EQUIPMENT PAD DESIGN

SCALE: N.T.S.

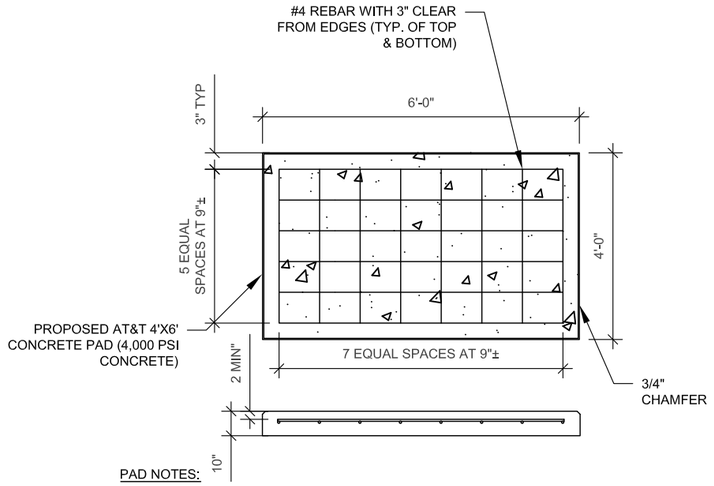


PAD NOTES:

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.

3 GRAVEL PREPARATION

SCALE: N.T.S.

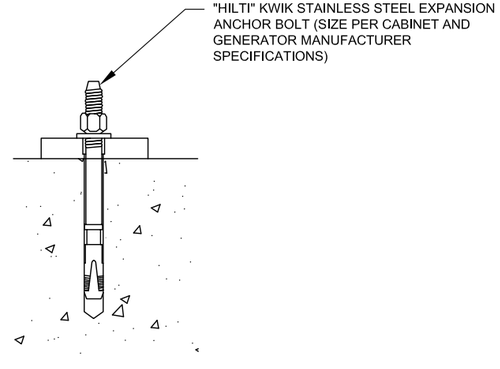


PAD NOTES:

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.
3. GENERATOR TO BE INSTALLED ACCORDING TO MANUFACTURER RECOMMENDATIONS & SPECIFICATIONS.
4. CONTRACTOR TO CONFIRM PARTS & HARDWARE PRIOR TO CONSTRUCTION & COORDINATE WITH AT&T CM.
5. FOUNDATION TO BE FLUSH WITH EXISTING GRADE, CONTRACTOR SHALL MAINTAIN A MAXIMUM 18" CLEARANCE FROM GRADE TO BOTTOM OF WIC TO ACCOMMODATE STAIRS. VERIFY IN FIELD PRIOR TO POST INSTALLATION.
6. COORDINATE POWER & TELCO CONDUIT STUBUP PLACEMENT WITH ELECTRICAL TRADES.
7. PROVIDE WORKING ELECTRICAL WORKING SPACE CLEARANCES PER MANUFACTURER RECOMMENDATIONS AND CODE REQUIREMENTS.

2 CONCRETE GENERATOR PAD DESIGN

SCALE: N.T.S.



4 EXPANSION ANCHOR DETAIL

SCALE: N.T.S.

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3500 REGENCY PARKWAY
SUITE 100
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PHONE: (919) 468-0112
COA: 0012746

NB+C TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
8601 SIX FORKS ROAD, SUITE 540
RALEIGH, NC 27615
(919) 657-9131

REV.	DESCRIPTION	BY	DATE
A	PRELIM	CCC	06/02/21
B	PRELIM	CCC	06/14/21
0	FOR CONSTRUCTION	CCC	06/22/21

ATC SITE NUMBER:
88019

ATC SITE NAME:
WINSTEAD

AT&T MOBILITY SITE NAME:
WINCHESTER

SITE ADDRESS:
428 PLATT HILL RD
WINSTEAD, CT 06098-2522

SEAL:

AT&T

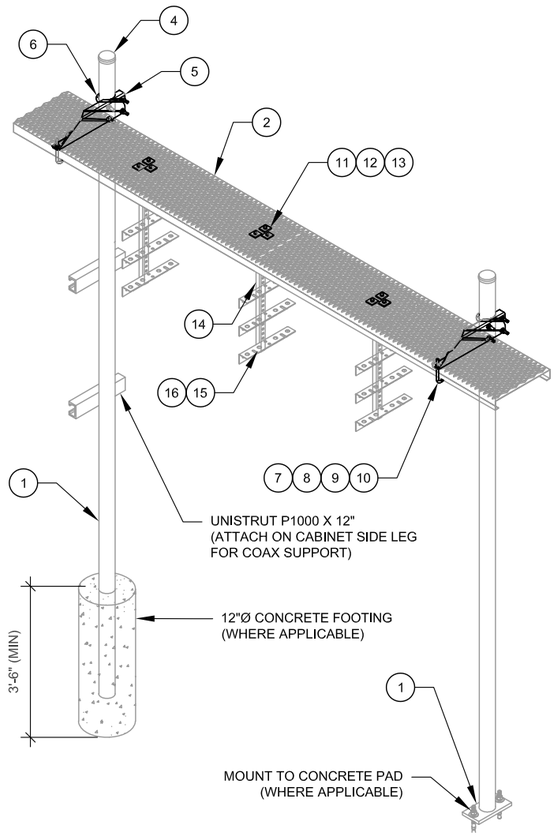
DATE DRAWN:	06/02/21
ATC JOB NO:	13626849
CUSTOMER ID:	S4062
CUSTOMER #:	12676364

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-502	0

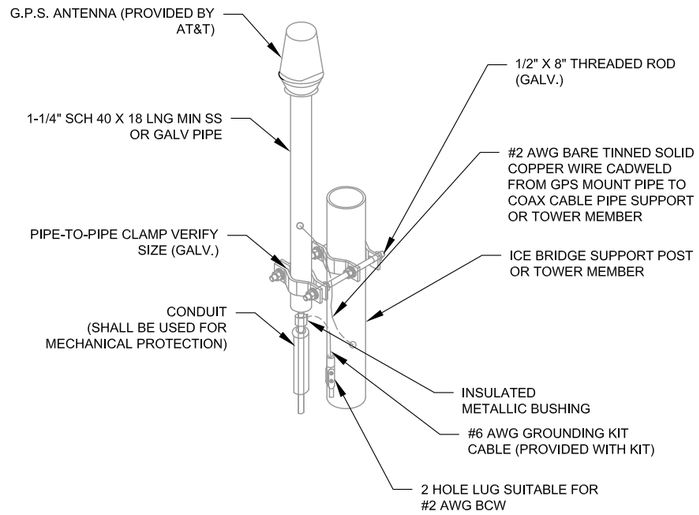
CONSTRUCTION NOTE:

1. INSTALL ICE BRIDGE TO ALLOW 7 FEET CLEARANCE ABOVE GRADE TO LOWEST APPURTENANCE.



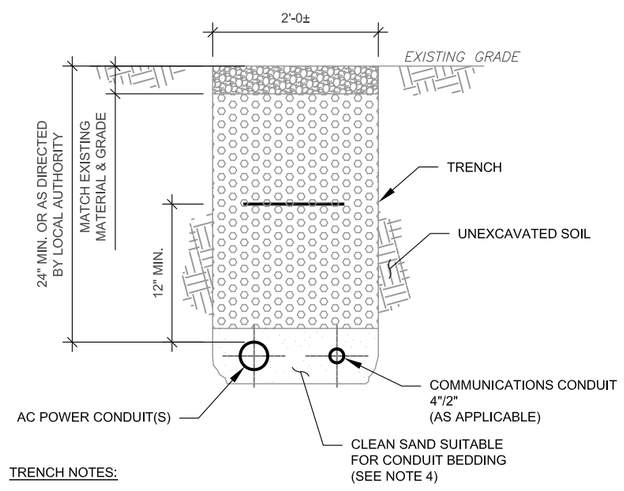
WB-K210-B WAVEGUIDE BRIDGE KIT - BILL OF MATERIALS (INCLUDED WITH KIT UNLESS NOTED OTHERWISE)					
ITEM	PART NUMBER	DESCRIPTION	ITEM	PART NUMBER	DESCRIPTION
1	MF126.01 MF-130	10'-4" COLUMN & BASE SHOE* 13'-4" PIPE COLUMN	9	GWL-04	1/2" GALV LOCK WASHER
2	WB-CY210	SAFETY GRATING 24" X 10'	10	GN-04	1/2" GALV HEX NUT
3	WBK110BHK	HARDWARE KIT (ITEMS 4-16)	11	GB-03205	3/8" X 2" GALV BOLT KIT
4	PC-034	PIPE CAP 3-1/2"	12	MT-387	SQUARE WASHER, 1-1/2" X 1-1/2" W/ 7/16" HOLE
5	WBLB243.08	24" WAVEGUIDE BRIDGE SUPPORT BRACKET	13	GWF-03	3/8" GALV FLAT WASHER
6	GUB-4356	1/2" X 3-5/8" X 6" GALV U-BOLT	14	WBT243.01	VERTICAL TRAPEZE SECTION
7	WB-JB-6	1/2" J-BOLT	15	GB-03105	3/8" X 1" GALV BOLT KIT
8	GWF-04	1/2" GALV FLAT WASHER	16	WBT243.02	HORIZONTAL TRAPEZE SECTION
CONTRACTOR SHALL USE PARTS MANUFACTURED BY COMMSCOPE OR APPROVED EQUIVALENT. *BASE SHOE NOT INCLUDED IN WB-K210-B KIT, ORDER COLUMN SEPARATELY OR KIT WB-K210-S.					

1 WAVEGUIDE BRIDGE KIT
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.

2 GPS ANTENNA ATTACHMENT DETAIL
SCALE: N.T.S.



TRENCH NOTES:

1. IF FREE OF ORGANIC OR OTHER DELETERIOUS MATERIAL, EXCAVATED MATERIAL MAY BE USED FOR BACKFILL. IF NOT, PROVIDE CLEAN, COMPACTIBLE MATERIAL.
2. 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. USE COMMUNICATIONS ONLY TRENCH FOR COMMUNICATIONS CONDUIT UNLESS TRAVELING UNDER PATH OF VEHICLE TRAVEL, THEN CONDUIT MUST BE 24" MIN. BELOW GRADE.
5. CONFIRM SPACING AND DEPTH WITH NEC OR LOCAL CODE REQUIREMENTS

3 POWER/TELCO CONDUIT TRENCH DETAILS
SCALE: N.T.S.

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WINSTEAD, CT 06098-2522

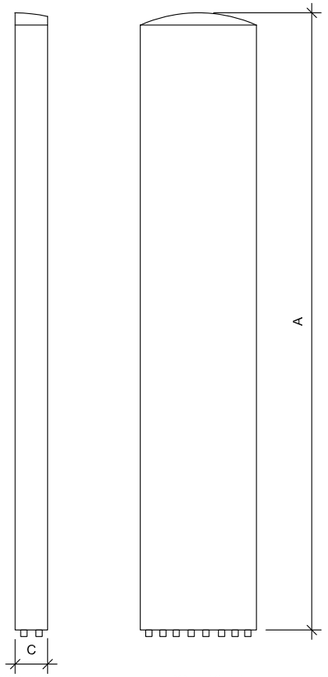
SEAL:

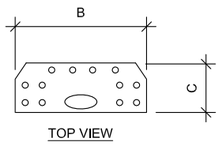
AT&T

DATE DRAWN:	06/02/21
ATC JOB NO:	13626849
CUSTOMER ID:	S4062
CUSTOMER #:	12676364

CONSTRUCTION DETAILS

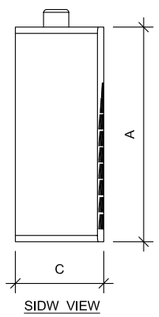
SHEET NUMBER:	REVISION:
C-503	0

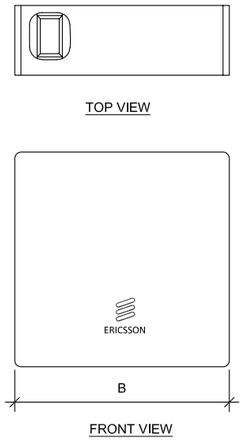




ANTENNA SPECIFICATIONS				
ANTENNA MODEL	A	B	C	WEIGHT (LBS)
TPA65R-BU8D	96.0"	21.0"	7.8"	82.5
DMP65R-BU8D	96.0"	20.7"	7.7"	95.7

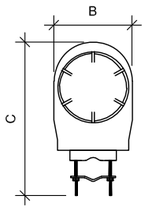
1 ANTENNA SPECIFICATIONS
SCALE: N.T.S.

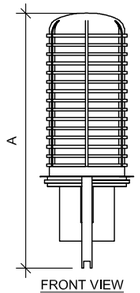


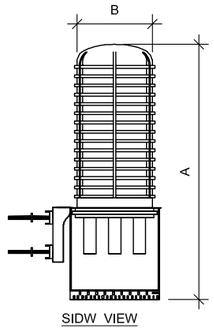


RRU SPECIFICATIONS				
RRU MODEL	A	B	C	WEIGHT (LBS)
RRUS 4478 B14	16.5"	13.4"	7.7"	59.9
RRUS 4449 B5, B12	17.9"	13.2"	9.4"	71.0
RRUS 8843 B2 B66A	14.9"	13.2"	10.9"	72.0

2 RRU SPECIFICATIONS
SCALE: N.T.S.







RAYCAP SPECIFICATIONS				
RAYCAP MODEL	A	B	C	WEIGHT (LBS)
DC9-48-60-24-8C-EV	31.4"	18.3"	10.2"	16

3 RAYCAP EQUIPMENT SPECIFICATIONS
SCALE: N.T.S.

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0	FOR CONSTRUCTION	CCC	06/22/21

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AT&T MOBILITY SITE NAME:
WINCHESTER

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WINSTEAD, CT 06098-2522

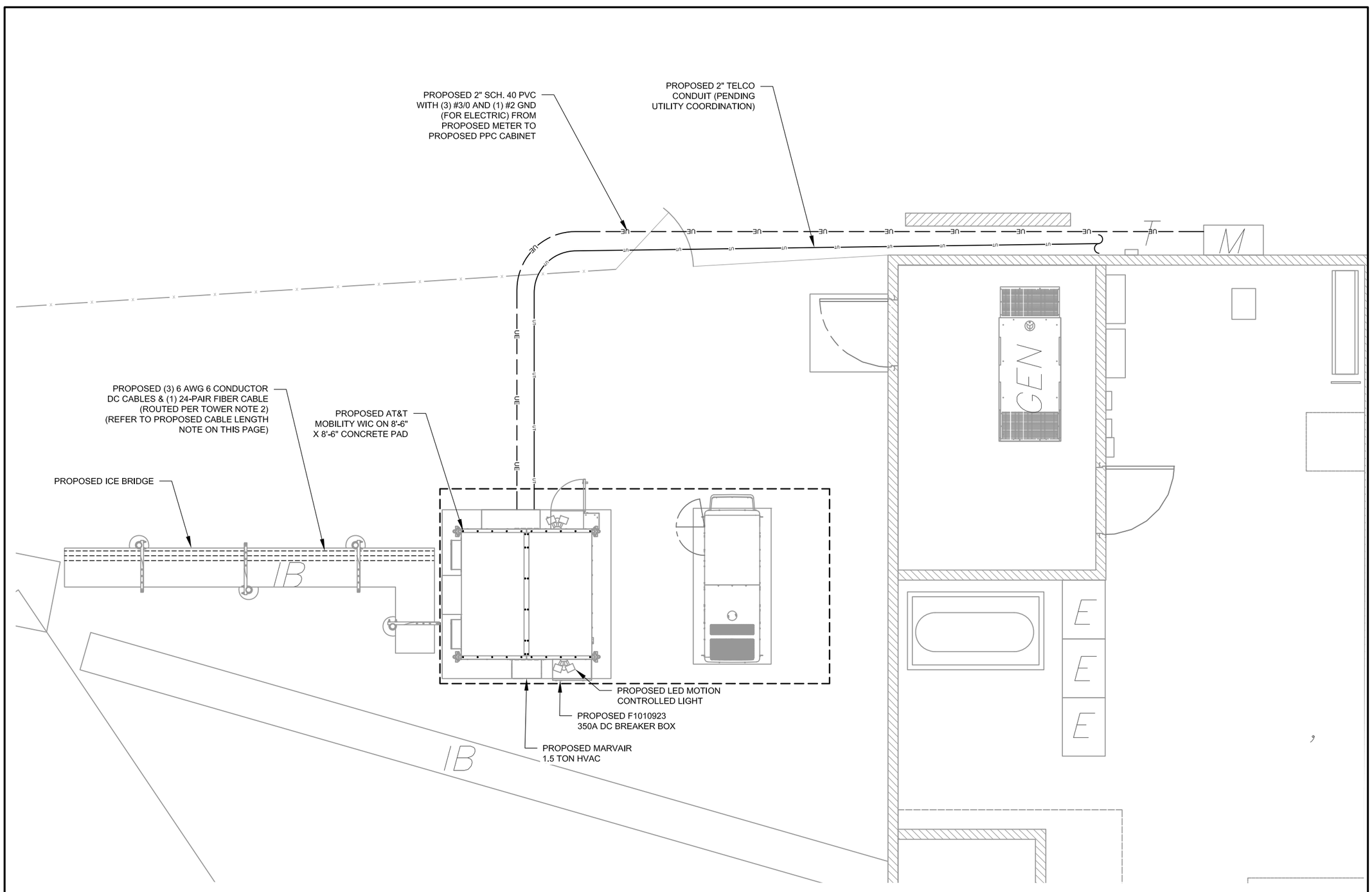
SEAL:

AT&T

DATE DRAWN:	06/02/21
ATC JOB NO:	13626849
CUSTOMER ID:	S4062
CUSTOMER #:	12676364

EQUIPMENT SPECIFICATIONS

SHEET NUMBER:	REVISION:
C-504	0



1 ELECTRICAL PLAN

GRAPHIC SCALE

5 0 2.5 5

(IN FEET)
1 UNIT = 5 FEET

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SEAL:

AT&T

DATE DRAWN:	06/02/21
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CUSTOMER ID:	S4062
CUSTOMER #:	12676364

ELECTRICAL PLAN

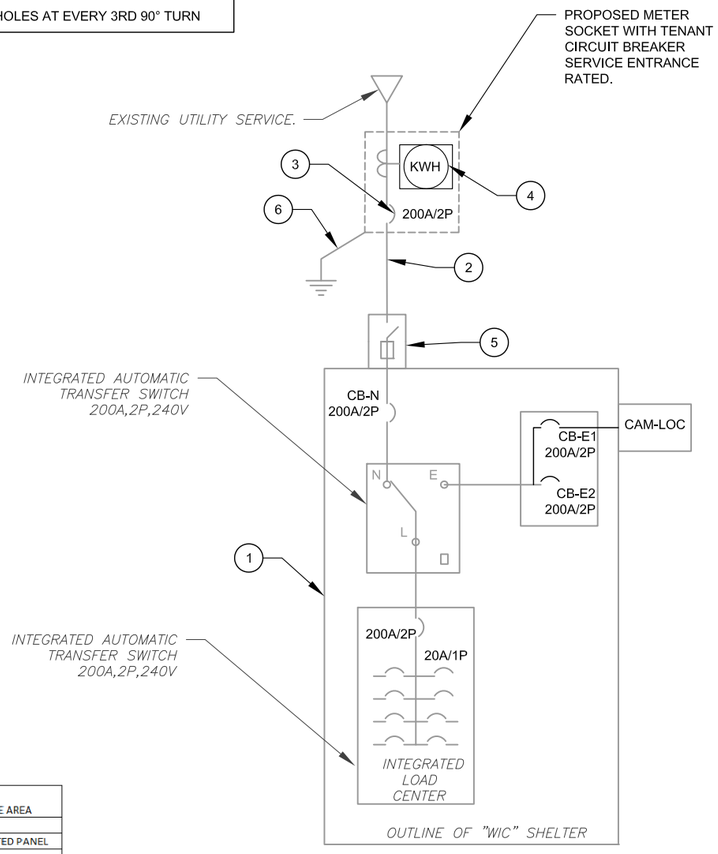
SHEET NUMBER:	REVISION:
E-101	0

ELECTRICAL NOTES:

1. POWER TRANSFER LOAD CENTER (PTLC) INCLUDES A CAM-LOC GENERATOR CONNECTION PANEL, AND ATS, A MECHANICALLY INTERLOCKED TRANSFER SWITCH, A 200A 42 CIRCUIT PANEL AND SURGE SUPPRESSION.
2. CONTRACTOR SHALL FURNISH AND INSTALL POWER CONDUCTORS (3#3/0, #6 G IN 2"C) FROM METER CENTER TO SHELTER. METER WILL BE FURNISHED AND INSTALLED BY LOCAL UTILITY COMPANY.
3. CONTRACTOR SHALL PROVIDE AND INSTALL CIRCUIT BREAKER IN METER CENTER TO FEED AT&T SHELTER. CIRCUIT BREAKER SHALL BE 200A, 240V, 1PH, 3W TYP AND AIC RATING SHALL MATCH EXISTING.
4. CONTRACTOR SHALL PROVIDE AND INSTALL NAMEPLATE ON METER TO INDICATE "AT&T". NAMEPLATES SHALL BE PHENOLIC, WHITE LETTERS ON BLACK BACKGROUND.
5. SHELTER DISCONNECT IS FURNISHED WITH SHELTER. ON SITES WHERE SERVICE IS OBTAINED FROM AN EXISTING SOURCE (METER CENTER), OR SERVICE DISCONNECT IS LOCATED ON EQUIPMENT RACK, SHELTER DISCONNECT MAY BE OMITTED.
6. ALL EQUIPMENT SHALL BE GROUNDED PER NEC (MIN #2 SBTC) AND AT&T STANDARDS.

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



1 ELECTRICAL ONE LINE DIAGRAM
SCALE: N.T.S.

PANEL DESIGNATION: AT&T
TYPE: LIGHTING & APPLIANCE
MOUNTING: SURFACE
ENCLOSURE:
SYSTEM: 120/240V, 3W, 42 CKT
MAIN BREAKER (MB): 200A
MAIN BUS RATING: 200A
MIN. A.I.C. RATING: 65K
LOCATION: AT&T LEASE AREA
PANEL NOTES: WIC INTEGRATED PANEL

CONNECTED LOAD (KVa) A	CONNECTED LOAD (KVa) B	BRIEF DESCRIPTION	FEEDER OR BRANCH CIRCUIT BREAKER AMPS	BREAKER POLES	POLE NO.	CIRC. NOTES
2.00		RECTIFIER #1	30	2	1	
	2.00				3	
2.00		RECTIFIER #3	30	2	5	
	2.00				7	
2.00		RECTIFIER #5	30	2	9	
	2.00				11	
0.00		SPACE			13	
	0.00	SPACE			15	
0.00		SPACE			17	
	0.00	SPACE			19	
0.00		SPACE			21	
	0.00	SPACE			23	
3.50		1.5 TON AC UNIT	20	2	25	
	3.50				27	
0.48		FIBER BOX OUTLET	20	1	29	
	0.00	SPACE			31	
0.00		SPACE			33	
	0.00	SPACE			35	
0.00		SPACE			37	
	0.00	SPACE			39	
0.00		SPACE			41	
10.0	9.5					

CIRC. NOTES	POLE NO.	BREAKER POLES	BREAKER AMPS	BRIEF DESCRIPTION	CONNECTED LOAD (KVa) A	CONNECTED LOAD (KVa) B
	2	1	20	EXT. GFCI OUTLETS	0.18	
	4	2	30	RECTIFIER #2		2.00
	6				2.00	
	8	2	30	RECTIFIER #4		2.00
	10				2.00	
	12	2	30	RECTIFIER #6		2.00
	14				2.00	
	16			SPACE		0.00
	18			SPACE	0.00	
	20			SPACE		0.00
	22			SPACE	0.00	
	24			SPACE		0.00
	26			SPACE	0.00	
	28	1	20	GFI RECEPT / LIGHT		0.70
	30	1	20	GEN BLOCK HEATER	1.92	
	32	1	20	BATTERY CHARGER		1.92
	34			SPACE	0.00	
	36			SPACE		0.00
	38			SPACE	0.00	
	40			SPACE		0.00
	42			SPACE	0.00	
					8.1	8.6

A	B	TOTAL	
18.1	18.1	36.2	CONNECTED LOAD (kVA)
18.1	18.1	36.2	DEMAND LOAD (kVA)

DERATING FACTOR (80%)
DEMAND LOAD SIZING: 189 AMPS

NOTES:
1. ALL CONDUCTORS ARE TYPE THWN (75°C) COPPER.
2. MAXIMUM LENGTH OF RUN FOR RECTIFIER CIRCUITS IS 50 FT.

2 PANEL SCHEDULE
SCALE: N.T.S.

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SEAL:

AT&T

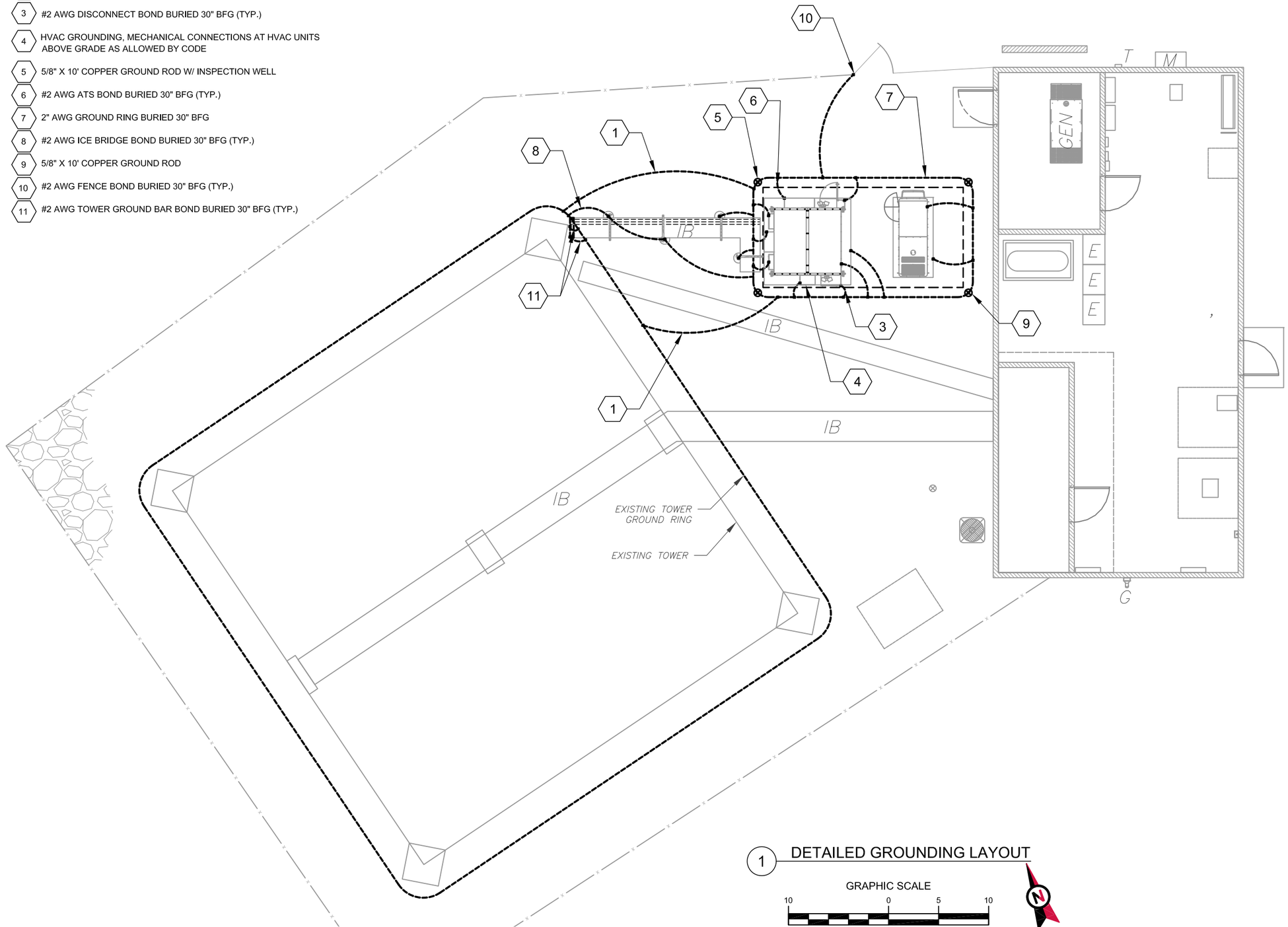
DATE DRAWN:	06/02/21
ATC JOB NO:	13626849
CUSTOMER ID:	S4062
CUSTOMER #:	12676364

ELECTRICAL ONE-LINE & PANEL SCHEDULE

SHEET NUMBER:	REVISION:
E-102	0

GROUNDING KEYED NOTES:

1. BOND TO TOWER GROUND RING
2. #2 AWG RAYCAP BOND BURIED 30" BFG (TYP.)
3. #2 AWG DISCONNECT BOND BURIED 30" BFG (TYP.)
4. HVAC GROUNDING, MECHANICAL CONNECTIONS AT HVAC UNITS ABOVE GRADE AS ALLOWED BY CODE
5. 5/8" X 10' COPPER GROUND ROD W/ INSPECTION WELL
6. #2 AWG ATS BOND BURIED 30" BFG (TYP.)
7. 2" AWG GROUND RING BURIED 30" BFG
8. #2 AWG ICE BRIDGE BOND BURIED 30" BFG (TYP.)
9. 5/8" X 10' COPPER GROUND ROD
10. #2 AWG FENCE BOND BURIED 30" BFG (TYP.)
11. #2 AWG TOWER GROUND BAR BOND BURIED 30" BFG (TYP.)



1 DETAILED GROUNDING LAYOUT

GRAPHIC SCALE

10 0 5 10

(IN FEET)
1 UNIT = 10 FEET

N

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DATE DRAWN:	06/02/21
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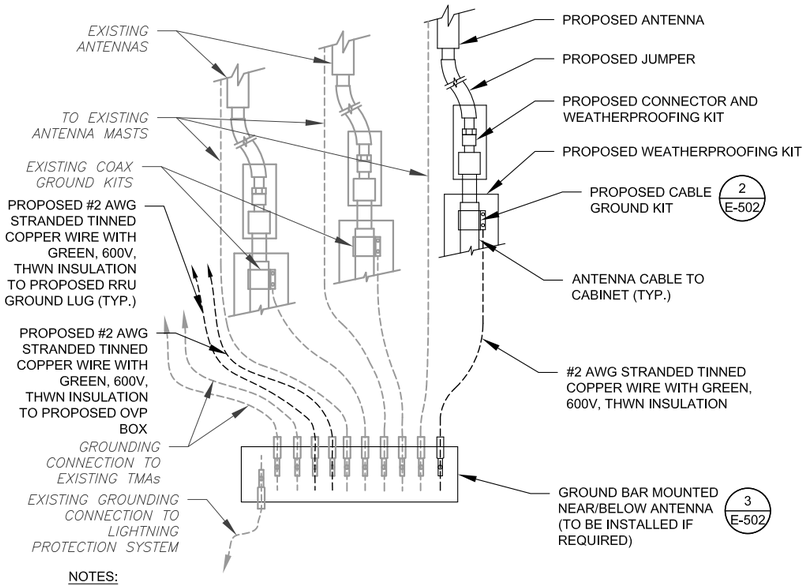
CUSTOMER ID:	S4062
CUSTOMER #:	12676364

GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-501	0

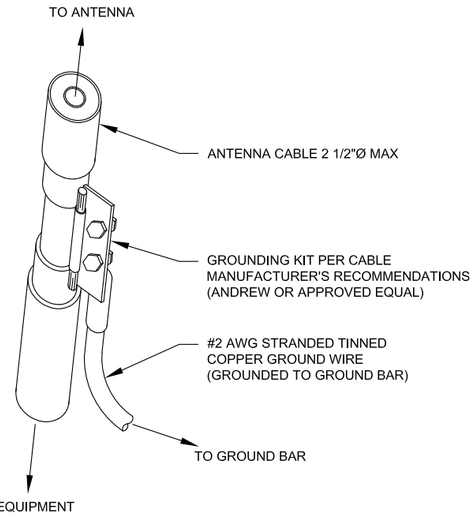


NOTES:

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 AT&T MOBILITY GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH AT&T MOBILITY 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.

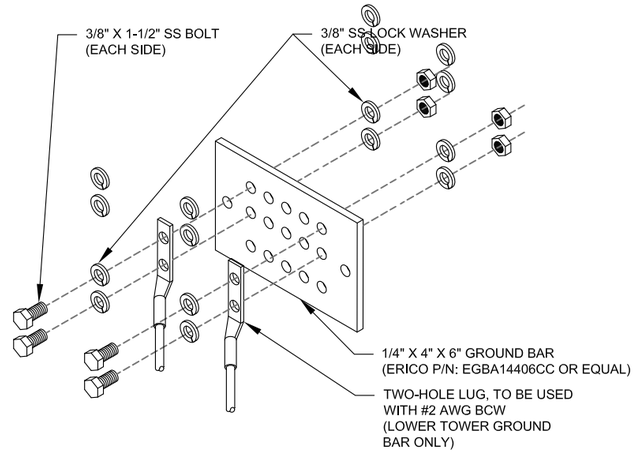


GROUND KIT NOTES:

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.

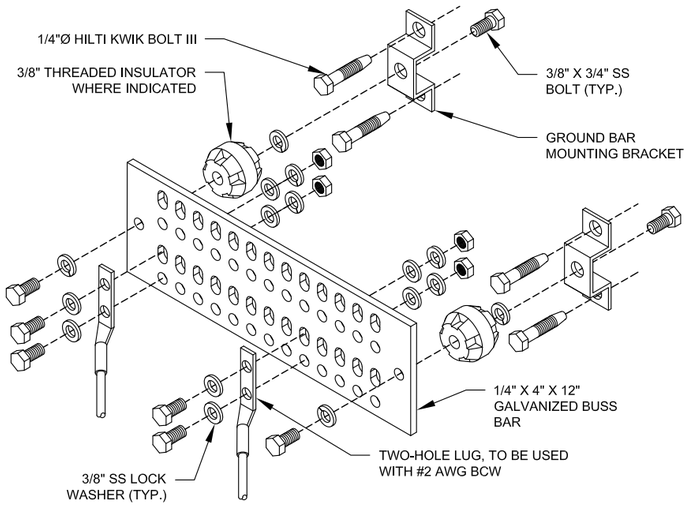


GROUND BAR NOTES:

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.

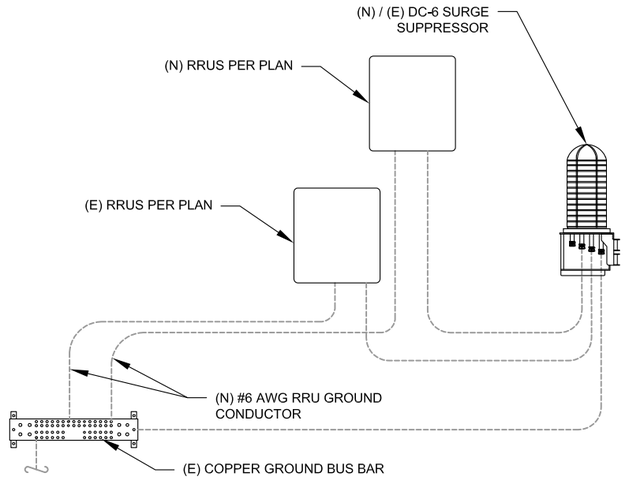


GROUND BAR NOTES

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.

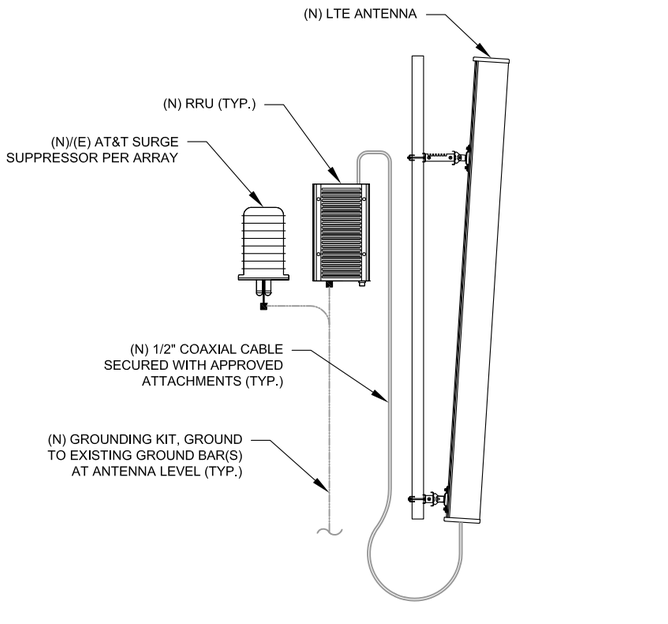
4 MAIN GROUND BAR DETAIL

SCALE: N.T.S.



5 RRU GROUNDING

SCALE: N.T.S.



6 ANTENNA/RRU GROUNDING

SCALE: N.T.S.

AMERICAN TOWER®
A.T. ENGINEERING SERVICE, PLLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: 0012746

NB+C™
TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
8601 SIX FORKS ROAD, SUITE 540
RALEIGH, NC 27615
(919) 657-9131

REV.	DESCRIPTION	BY	DATE
A	PRELIM	CCC	06/02/21
B	PRELIM	CCC	06/14/21
0	FOR CONSTRUCTION	CCC	06/22/21

ATC SITE NUMBER:
88019

ATC SITE NAME:
WINSTEAD

AT&T MOBILITY SITE NAME:
WINCHESTER

SITE ADDRESS:
428 PLATT HILL RD
WINSTEAD, CT 06098-2522

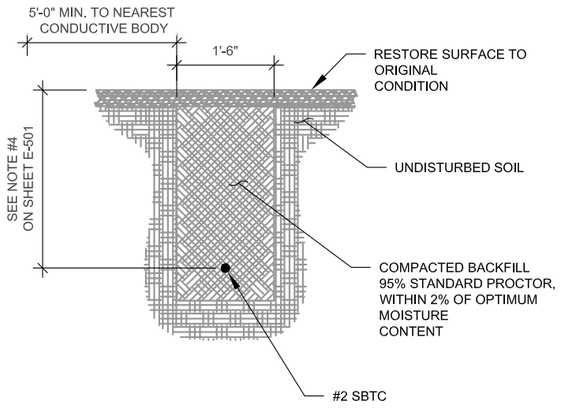
SEAL:

AT&T

DATE DRAWN:	06/02/21
ATC JOB NO:	13626849
CUSTOMER ID:	S4062
CUSTOMER #:	12676364

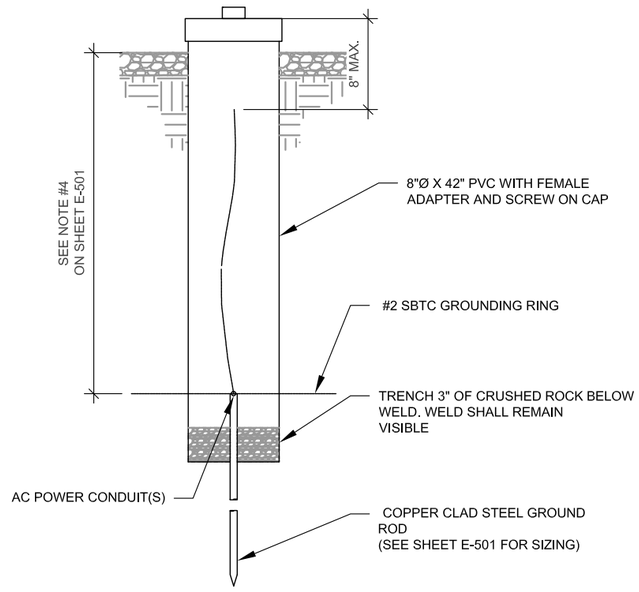
GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-502	0



1 GROUND CONNECTION TRENCH DETAIL

SCALE: N.T.S.



2 TEST WELL DETAIL

SCALE: N.T.S.

AMERICAN TOWER®
A.T. ENGINEERING SERVICE, PLLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: 0012746

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NB+C ENGINEERING SERVICES, LLC.
8601 SIX FORKS ROAD, SUITE 540
RALEIGH, NC 27615
(919) 657-9131

REV.	DESCRIPTION	BY	DATE
A	PRELIM	CCC	06/02/21
B	PRELIM	CCC	06/14/21
0	FOR CONSTRUCTION	CCC	06/22/21

ATC SITE NUMBER:
88019

ATC SITE NAME:
WINSTEAD

AT&T MOBILITY SITE NAME:
WINCHESTER

SITE ADDRESS:
428 PLATT HILL RD
WINSTEAD, CT 06098-2522

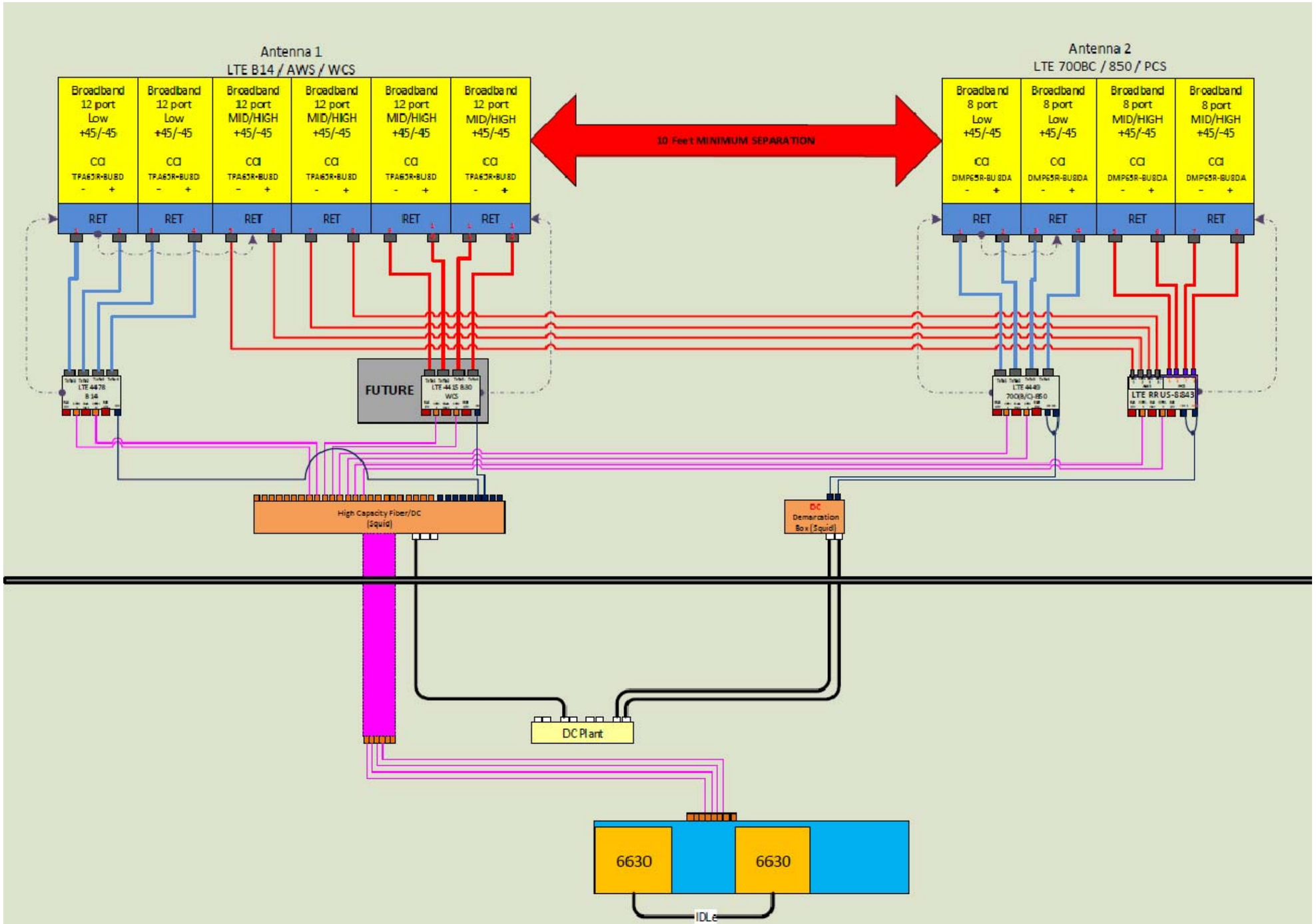
SEAL:

AT&T

DATE DRAWN:	06/02/21
ATC JOB NO:	13626849
CUSTOMER ID:	S4062
CUSTOMER #:	12676364

GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-503	0



1 PLUMBING DIAGRAM
SCALE: N.T.S.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-601	0

AMERICAN TOWER®
CORPORATION

Antenna Mount Analysis Report

ATC Site Name	:	WINSTEAD, CT
ATC Site Number	:	88019
Engineering Number	:	13626849_C8_01
Mount Elevation	:	170 ft
Carrier	:	AT&T Mobility
Carrier Site Name	:	Winchester
Carrier Site Number	:	54062
Site Location	:	428 Platt Hill Road Winsted, CT 06098-2522 41.89828611 , -73.11601111
County	:	Litchfield
Date	:	May 6, 2021
Max Usage	:	51%
Result	:	Pass

STATE OF CONNECTICUT · ESHA KAUSHAL MODI · 32593 · LICENSED · PROFESSIONAL ENGINEER

Prepared By:
Alan Samboy
Structural Engineer
Alan Samboy

Reviewed By:

Authorised by "EOR"
06 May 2021 11:13:18 cosign

COA: PEC.0001553

AMERICAN TOWER CORPORATION

Introduction

The purpose of this report is to summarize results of the antenna mount analysis performed for AT&T Mobility at 170 ft.

Supporting Documents

Specifications Sheet	Sabre C10857007C, dated February 5, 2016
Radio Frequency Data Sheet	RFDS ID #54062, dated March 5, 2021.

Analysis

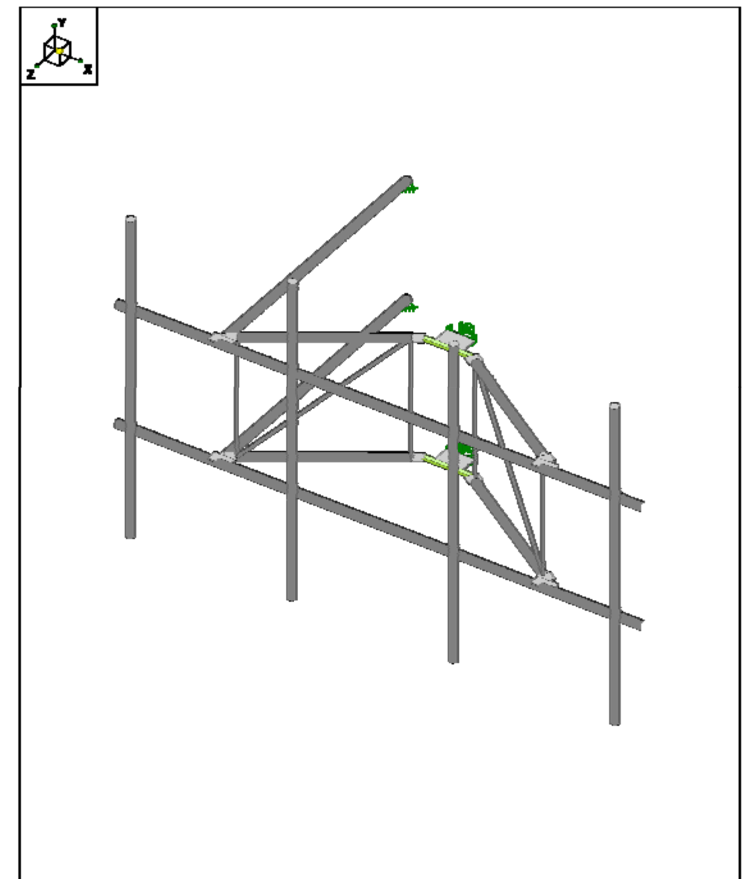
This antenna mount was analyzed using American Tower Corporation's Mount Analysis Program and RISA-3D

Basic Wind Speed:	114 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Codes:	ANSI/TIA-222-H
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 2
Feature:	Flat
Crest Height (H):	0 ft
Crest Length (L):	0 ft
Spectral Response:	Ss = 0.169, S1 = 0.054
Site Class:	D - Stiff Soil
Live Loads:	Lm = 500 lbs, Lv = 250 lbs

Conclusion

Based on the analysis results, the antenna mount meets the requirements per the applicable codes listed above. The mount can support the equipment as described in this report. Analysis based on new Sabre C10857007C sector frames or approved equivalent.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.



American Tower Corp.		SK - 1
Alan Samboy	88019, WINSTEAD	May 6, 2021 at 11:34 AM
13626849_C8_01	3D Rendering	R3D. ATT MOBILITY @ 88019, W...

1 MOUNT ANALYSIS
SCALE: N.T.S.

SUPPLEMENTAL

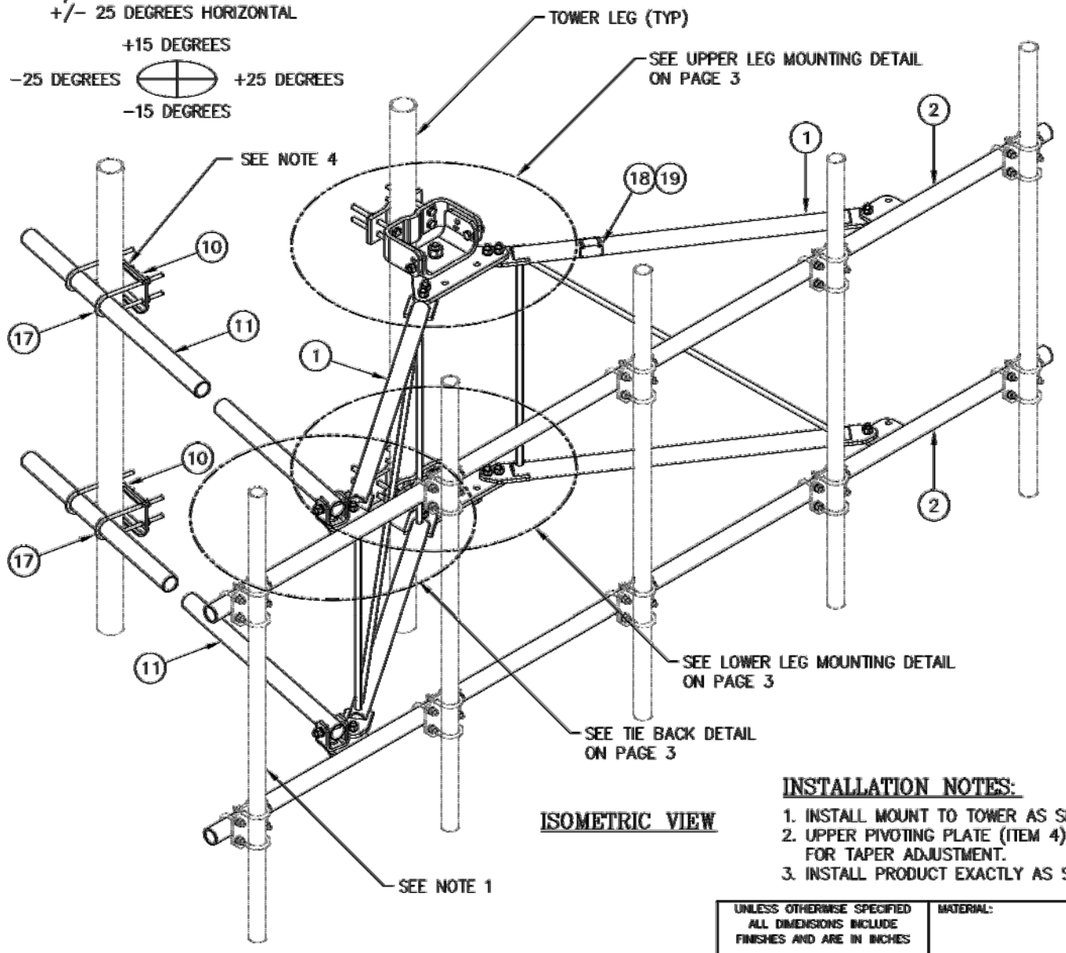
SHEET NUMBER: R-602

REVISION: 0

TIEBACK ANGLE RANGE DETAIL

+/- 15 DEGREES VERTICAL
+/- 25 DEGREES HORIZONTAL

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



ISOMETRIC VIEW

C10857007C 12' EHD V-BOOM ASSEMBLY W/TIEBACKS

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.	2	CS00098	PLATE, TIE BACK SWIVEL	5
10.	2	CS03285	PLATE, TIE BACK CLAMP	9
11.	2	CS03333	PIPE, TIE BACK	76
12.	2	C40026073	BOLT ASSEMBLY, 1 ø X 3 A325	4
13.	8	C40140004	BOLT ASSEMBLY, 5/8 ø X 8 A307	13
14.	2	C40026033	BOLT ASSEMBLY, 5/8 ø X 4 1/2 A325	2
15.	12	C40026025	BOLT ASSEMBLY, 5/8 ø X 2 1/2 A325	6
16.	6	C40026024	BOLT ASSEMBLY, 5/8 ø X 2 1/4 A325	3
17.	4	C40034183	U-BOLT ASSEMBLY, 1/2 ø X 2 9/16 C-C	6
18.	1	Z30992017	MOUNT CLASSIFICATION TAG C10857007C	1
19.	2	C40062103	STAINLESS STEEL SELF-LOCKING CABLE TIE	1
			TOTAL WEIGHT	511

PACKAGING NOTE

CK00386 INCLUDES ITEMS 1, 3, 4, 5, 6, 7, 12 & 15 (8 QTY)
CK00392 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. TIEBACKS 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
1	10/19/16	KLE	DEL	ADDED INSTALLATION NOTES

Sabre Industries
Towers and Poles

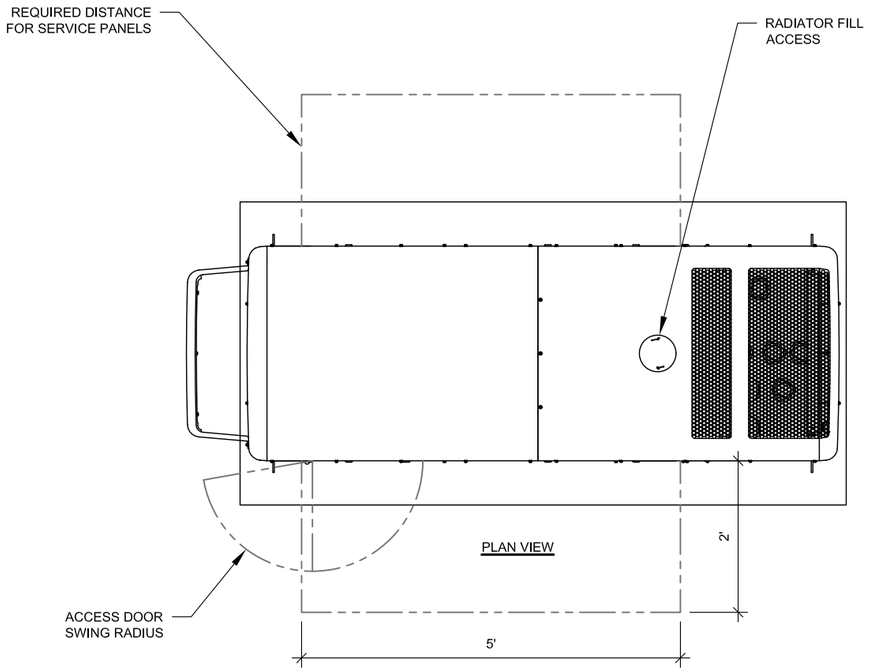
12' EHD V-BOOM ASSEMBLY W/TIEBACKS
(3' STANDOFF)
W/NO ANTENNA MOUNTING PIPES

		SIZE	DRAWING NO.	REV
DATE	02/29/16	B	C10857007C	1
DRAWN BY	WRF			
CHECKED BY	KLE		SCALE None	PAGE 1 OF 3

1 SABRE C10857007C SECTOR FRAME DETAIL
SCALE: N.T.S.

SUPPLEMENTAL

SHEET NUMBER: R-603
REVISION: 0

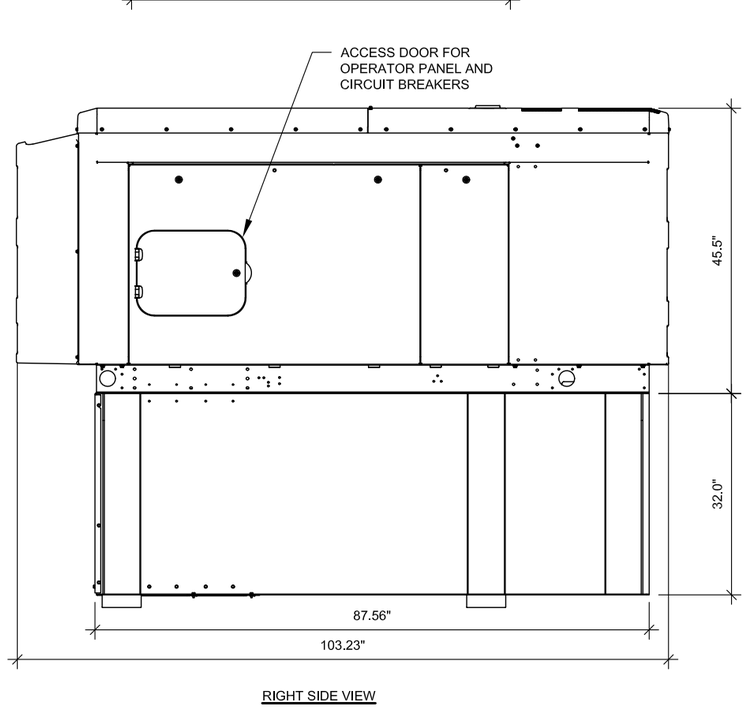


PLAN VIEW

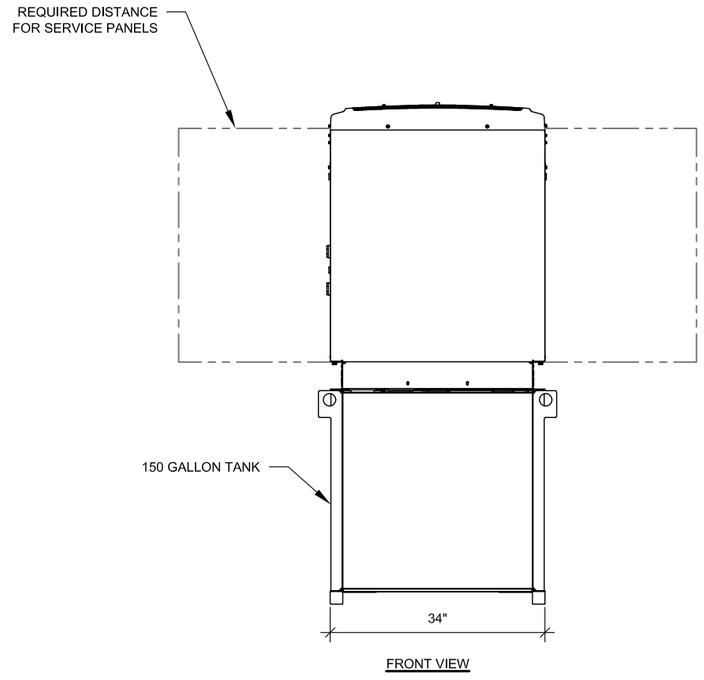
TANK WEIGHT
796LBS (361kg)

GENERATOR WEIGHT
1328LBS (600kg)

ELECTRICAL
SINGLE PHASE 120/240



RIGHT SIDE VIEW



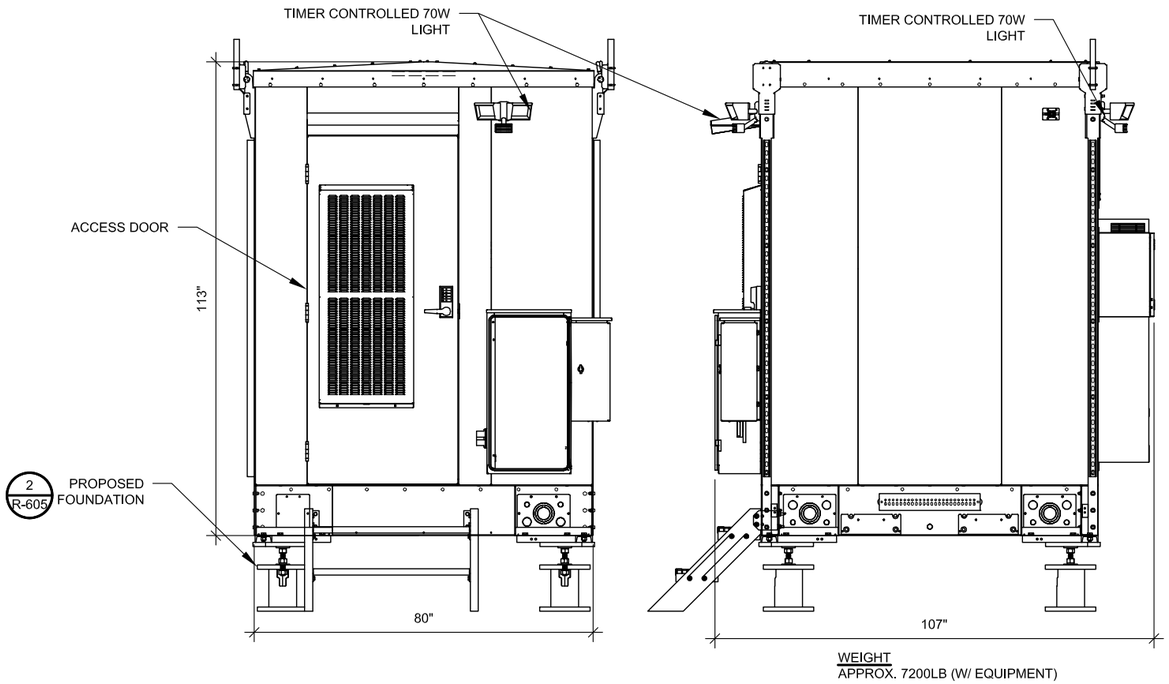
FRONT VIEW

1 CUMMINS 30KW DIESEL GENERATOR DETAIL

SCALE: NOT TO SCALE

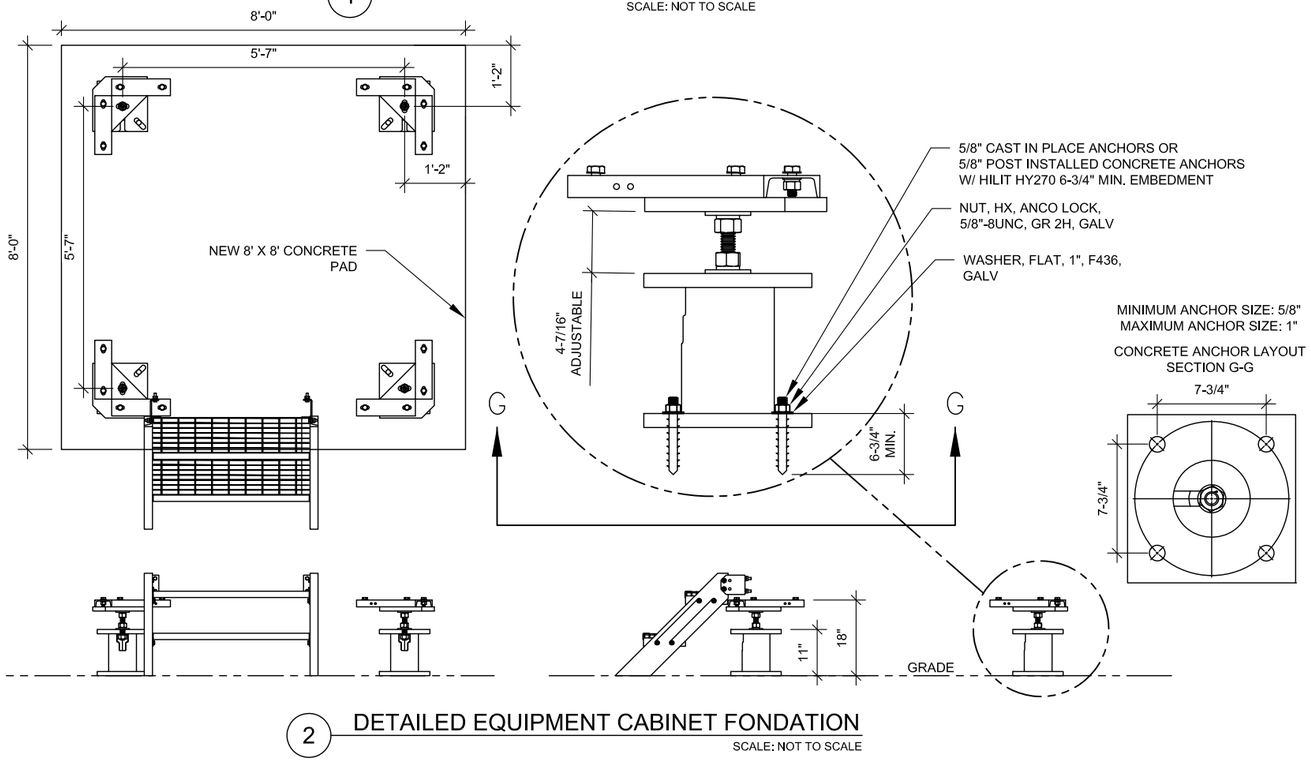
SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-604	0



1 DETAILED EQUIPMENT CABINET

SCALE: NOT TO SCALE



2 DETAILED EQUIPMENT CABINET FONDATION

SCALE: NOT TO SCALE

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-605	0

Exhibit 3

Structural Analysis Report

AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure	:	**225.5 ft Self Supported Tower**
ATC Site Name	:	**Winstead, CT**
ATC Asset Number	:	**88019**
Engineering Number	:	**13626849_C3_04**
Proposed Carrier	:	**AT&T MOBILITY**
Carrier Site Name	:	**Winchester**
Carrier Site Number	:	**S4062**
Site Location	:	**428 Platt Hill Road** **Winsted, CT 06098-2522** **41.898300, -73.116000**
County	:	**Litchfield**
Date	:	**May 22, 2021**
Max Usage	:	**81%**
Result	:	**Pass**

Prepared By:
Isaac P. Dodson
Structural Engineer III

Reviewed By:

COA: PEC.0001553

AMERICAN TOWER®
CORPORATION

Table of Contents

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 225.5 ft self supported tower to reflect the change in loading by AT&T MOBILITY.

Supporting Documents

Tower Drawings	TEP Mapping: Job #070513, dated April 5, 2007
Foundation Drawing	TEP Mapping: Job #070513, dated April 5, 2007
Geotechnical Report	TEP Project #070513.02, dated April 4, 2007

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	114 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Code:	ANSI/TIA-222-H / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

Existing and Reserved Equipment

Elev.[1] (ft)	Qty	Equipment	Mount Type	Lines	Carrier
196.0	3	Ericsson Radio 4449 B71 B85A	Sector Frame	(1) 1 1/4" Hybriflex Cable (3) 1 5/8" Hybriflex	SPRINT NEXTEL
	3	Ericsson 4424 B25			
	3	Ericsson Air6449 B41			
	3	RFS APXVAALL24 43-U-NA20			
	3	Ericsson RRUS 4415 B66			
	3	RFS APX16DWV-16DWVS-E-A20			
194.0	1	Andrew DB616E-BC	Leg	(1) 1 1/4" Coax	US DEPT OF HOMELAND SECURITY
185.0	1	Comprod 872F-70SM	Side Arm	(1) 7/8" Coax	ALL-STAR TRANSPORTATION, LLC

Equipment to be Removed

Elev.[1] (ft)	Qty	Equipment	Mount Type	Lines	Carrier
No loading was considered as removed as part of this analysis.					

Proposed Equipment

Elev.[1] (ft)	Qty	Equipment	Mount Type	Lines	Carrier
170.0	3	Ericsson RRUS 8843 B2, B66A	Sector Frame	(1) 0.39" (9.8mm) Cable (3) 0.92" (23.4mm) Cable	AT&T MOBILITY
	3	Ericsson RRUS 4478 B14			
	3	Ericsson RRUS 4449 B5, B12			
	2	Raycap DC9-48-60-24-8C-EV			
	3	CCI DMP65R-BU8D			
	3	CCI TPA65R-BU8D			

[1] Contracted elevations are shown for appurtenances within contracted installation tolerances. Appurtenances outside of contract limits are shown at installed elevations.

Install proposed coax on the tower face with the least amount of existing coax.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Legs	42%	Pass
Diagonals	81%	Pass
Truss Diagonals	64%	Pass
Horizontals	37%	Pass
Truss Horizontals	32%	Pass
Anchor Bolts	31%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Uplift (Kips)	155.75	29%
Axial (Kips)	245.82	6%

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.

Standard Conditions

All engineering services performed by A.T. Engineering Service, PLLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and A.T. Engineering Service, PLLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.

Project Name : 88019 - Winstead, CT
Project Notes: 225' Type 'A' AT&T Tag Tower
Project File : X:\W-Z\Winstead, CT (88019)\Structural Info\88019.tow
Date run : 5:11:46 PM Friday, May 21, 2021
by : Tower Version 16.01
Licensed to : American Tower Corp.

Successfully performed nonlinear analysis

Member check option: ANSI/TIA 222-H-1
Connection rupture check: Not Checked
Crossing diagonal check: Fixed
Included angle check: None
Climbing load check: None
Redundant members checked with: Actual Force
Loads from file: X:\W-Z\Winstead, CT (88019)\Structural Info\88019.eia

*** Analysis Results:

Maximum element usage is 81.05% for Angle "D 4X" in load case "W -90"

Foundation Design Forces For All Load Cases:

Note: loads are factored.

Load Case	Foundation Description	Axial Force (kips)	Shear Force (kips)	Bending Moment (ft-k)	Foundation Usage %
W 0	0P	180.75	30.34	2.18	0.00
W 0	0X	175.21	29.48	2.02	0.00
W 0	0XY	-91.44	18.14	2.53	0.00
W 0	0Y	-92.44	18.71	2.67	0.00
W 180	0P	-89.65	18.50	2.73	0.00
W 180	0X	-89.63	18.15	2.60	0.00
W 180	0XY	173.39	29.46	2.08	0.00
W 180	0Y	177.95	30.13	2.22	0.00
W 45	0P	245.82	40.90	2.26	0.00
W 45	0X	40.92	10.70	2.35	0.00
W 45	0XY	-155.56	28.49	2.90	0.00
W 45	0Y	40.89	10.68	2.35	0.00
W -45	0P	45.65	11.50	2.52	0.00
W -45	0X	241.09	40.33	2.27	0.00
W -45	0XY	41.07	10.60	2.27	0.00
W -45	0Y	-155.75	28.78	2.98	0.00
W 90	0P	180.81	30.35	2.18	0.00
W 90	0X	-92.47	18.72	2.67	0.00
W 90	0XY	-91.39	18.13	2.53	0.00
W 90	0Y	175.12	29.47	2.01	0.00
W -90	0P	-89.70	18.51	2.73	0.00
W -90	0X	178.04	30.14	2.23	0.00
W -90	0XY	173.34	29.45	2.08	0.00
W -90	0Y	-89.61	18.14	2.60	0.00
W 0 Ice	0P	96.45	12.73	1.45	0.00
W 0 Ice	0X	92.29	12.25	1.39	0.00
W 0 Ice	0XY	23.27	1.55	2.19	0.00
W 0 Ice	0Y	24.81	1.49	2.25	0.00
W 180 Ice	0P	28.30	1.80	2.31	0.00
W 180 Ice	0X	25.55	1.75	2.26	0.00
W 180 Ice	0XY	90.01	12.20	1.34	0.00
W 180 Ice	0Y	92.97	12.43	1.42	0.00
W 45 Ice	0P	113.63	15.62	1.16	0.00
W 45 Ice	0X	58.42	6.66	1.87	0.00
W 45 Ice	0XY	6.39	2.44	2.38	0.00
W 45 Ice	0Y	58.39	6.65	1.87	0.00
W -45 Ice	0P	62.38	7.15	1.93	0.00
W -45 Ice	0X	109.67	15.22	1.13	0.00
W -45 Ice	0XY	56.64	6.70	1.81	0.00
W -45 Ice	0Y	8.14	2.47	2.45	0.00
W 90 Ice	0P	96.47	12.73	1.45	0.00
W 90 Ice	0X	24.83	1.50	2.25	0.00
W 90 Ice	0XY	23.28	1.55	2.19	0.00
W 90 Ice	0Y	92.24	12.24	1.39	0.00
W -90 Ice	0P	28.28	1.80	2.31	0.00
W -90 Ice	0X	93.01	12.44	1.43	0.00
W -90 Ice	0XY	90.00	12.20	1.34	0.00
W -90 Ice	0Y	25.53	1.75	2.26	0.00
1.2D+E 0	0P	120.93	17.12	0.30	0.00
1.2D+E 0	0X	115.20	16.33	0.11	0.00
1.2D+E 0	0XY	-31.44	4.44	0.58	0.00
1.2D+E 0	0Y	-32.62	4.99	0.69	0.00
1.2D+E 45	0P	152.05	21.52	0.03	0.00
1.2D+E 45	0X	40.79	5.81	0.44	0.00
1.2D+E 45	0XY	-61.53	8.71	0.68	0.00
1.2D+E 45	0Y	40.76	5.81	0.44	0.00
1.2D+E 90	0P	120.98	17.13	0.30	0.00
1.2D+E 90	0X	-32.64	4.99	0.69	0.00
1.2D+E 90	0XY	-31.38	4.43	0.58	0.00
1.2D+E 90	0Y	115.11	16.32	0.11	0.00
0.9D+E 0	0P	109.16	15.39	0.30	0.00
0.9D+E 0	0X	104.20	14.67	0.12	0.00
0.9D+E 0	0XY	-41.69	6.05	0.59	0.00
0.9D+E 0	0Y	-43.33	6.59	0.70	0.00
0.9D+E 45	0P	140.22	19.77	0.04	0.00
0.9D+E 45	0X	29.94	4.23	0.45	0.00
0.9D+E 45	0XY	-71.72	10.32	0.70	0.00
0.9D+E 45	0Y	29.91	4.23	0.44	0.00
0.9D+E 90	0P	109.22	15.40	0.30	0.00
0.9D+E 90	0X	-43.36	6.60	0.70	0.00
0.9D+E 90	0XY	-41.63	6.04	0.59	0.00
0.9D+E 90	0Y	104.12	14.66	0.12	0.00

Summary of Joint Support Reactions For All Load Cases:

Load Case	Joint Label	Long. Force (kips)	Tran. Force (kips)	Vert. Force (kips)	Shear Force (kips)	Tran. Moment (ft-k)	Long. Moment (ft-k)	Bending Moment (ft-k)	Vert. Moment (ft-k)	Found. Usage %
W 0	0P	-25.49	-16.46	-180.75	30.34	-0.20	-2.17	2.18	-0.79	0.00
W 0	0X	-24.44	16.49	-175.21	29.48	0.05	-2.01	2.02	0.79	0.00
W 0	0XY	-16.31	-7.95	91.44	18.14	0.39	-2.50	2.53	0.79	0.00
W 0	0Y	-16.95	7.92	92.44	18.71	-0.36	-2.65	2.67	-0.78	0.00
W 180	0P	16.85	7.62	89.65	18.50	-0.35	2.71	2.73	0.79	0.00
W 180	0X	16.39	-7.80	89.63	18.15	0.39	2.57	2.60	-0.80	0.00
W 180	0XY	24.52	16.34	-173.39	29.46	0.05	2.08	2.08	-0.80	0.00
W 180	0Y	25.43	-16.16	-177.95	30.13	-0.21	2.21	2.22	0.80	0.00
W 45	0P	-28.92	-28.93	-245.82	40.90	1.60	-1.60	2.26	-0.00	0.00
W 45	0X	-10.43	-2.36	-40.92	10.70	1.91	-1.38	2.35	1.17	0.00
W 45	0XY	-20.15	-20.14	155.56	28.49	2.05	-2.06	2.90	-0.00	0.00
W 45	0Y	-2.35	-10.42	-40.89	10.68	1.38	-1.90	2.35	-1.17	0.00
W -45	0P	-11.26	2.35	-45.65	11.50	-2.03	-1.49	2.52	-1.18	0.00
W -45	0X	-28.09	28.94	-241.09	40.33	-1.72	-1.49	2.27	-0.00	0.00
W -45	0XY	-1.94	10.42	-41.07	10.60	-1.38	-1.80	2.27	1.18	0.00
W -45	0Y	-20.56	20.14	155.75	28.78	-2.05	-2.16	2.98	0.01	0.00
W 90	0P	-16.46	-25.50	-180.81	30.35	2.17	0.21	2.18	0.79	0.00
W 90	0X	7.92	-16.96	92.47	18.72	2.65	0.36	2.67	0.78	0.00
W 90	0XY	-7.95	-16.30	91.39	18.13	2.50	-0.39	2.53	-0.79	0.00
W 90	0Y	16.49	-24.43	-175.12	29.47	2.01	-0.05	2.01	-0.79	0.00
W -90	0P	7.62	16.87	89.70	18.51	-2.71	0.35	2.73	-0.79	0.00
W -90	0X	-16.16	25.44	-178.04	30.14	-2.22	0.21	2.23	-0.80	0.00
W -90	0XY	16.35	24.50	-173.34	29.45	-2.08	-0.05	2.08	0.80	0.00
W -90	0Y	-7.81	16.38	89.61	18.14	-2.57	-0.39	2.60	0.80	0.00
W 0 Ice	0P	-10.06	-7.80	-96.45	12.73	-1.27	0.69	1.45	-0.19	0.00
W 0 Ice	0X	-9.50	7.73	-92.29	12.25	1.18	0.73	1.39	0.19	0.00
W 0 Ice	0XY	-0.66	1.40	-23.27	1.55	1.26	-1.79	2.19	0.20	0.00
W 0 Ice	0Y	-0.68	-1.33	-24.81	1.49	-1.32	-1.83	2.25	-0.19	0.00
W 180 Ice	0P	0.58	-1.70	-28.30	1.80	-1.31	1.90	2.31	0.19	0.00
W 180 Ice	0X	0.75	1.58	-25.55	1.75	1.27	1.87	2.26	-0.20	0.00
W 180 Ice	0XY	9.59	7.54	-90.01	12.20	1.18	-0.65	1.34	-0.20	0.00
W 180 Ice	0Y	9.97	-7.42	-92.97	12.43	-1.28	-0.62	1.42	0.20	0.00
W 45 Ice	0P	-11.05	-11.05	-113.63	15.62	-0.82	0.82	1.16	0.00	0.00
W 45 Ice	0X	-5.97	2.95	-58.42	6.66	1.65	0.88	1.87	0.29	0.00
W 45 Ice	0XY	-1.73	-1.73	-6.39	2.44	1.68	-1.68	2.38	-0.00	0.00
W 45 Ice	0Y	2.95	-5.97	-58.39	6.65	-0.88	-1.65	1.87	-0.29	0.00
W -45 Ice	0P	-6.48	-3.02	-62.38	7.15	-1.74	0.85	1.93	-0.30	0.00
W -45 Ice	0X	-10.54	10.98	-109.67	15.22	0.73	0.85	1.13	-0.01	0.00
W -45 Ice	0XY	2.91	6.04	-56.64	6.70	0.82	-1.62	1.81	0.30	0.00
W -45 Ice	0Y	-1.69	1.80	-8.14	2.47	-1.75	-1.71	2.45	0.01	0.00
W 90 Ice	0P	-7.79	-10.07	-96.47	12.73	-0.69	1.28	1.45	0.19	0.00
W 90 Ice	0X	-1.33	-0.68	-24.83	1.50	1.83	1.32	2.25	0.19	0.00
W 90 Ice	0XY	1.40	-0.66	-23.28	1.55	1.79	-1.26	2.19	-0.20	0.00
W 90 Ice	0Y	7.73	-9.49	-92.24	12.24	-0.73	-1.18	1.39	-0.19	0.00
W -90 Ice	0P	-1.70	0.58	-28.28	1.80	-1.90	1.31	2.31	-0.19	0.00
W -90 Ice	0X	-7.42	9.98	-93.01	12.44	0.62	1.28	1.43	-0.20	0.00
W -90 Ice	0XY	7.54	9.59	-90.00	12.20	0.65	-1.18	1.34	0.20	0.00
W -90 Ice	0Y	1.58	0.75	-25.53	1.75	-1.87	-1.27	2.26	0.21	0.00
1.2D+E 0	0P	-12.99	-11.16	-120.93	17.12	-0.26	-0.14	0.30	-0.04	0.00
1.2D+E 0	0X	-11.90	11.19	-115.20	16.33	0.11	0.02	0.11	0.04	0.00
1.2D+E 0	0XY	-3.57	-2.64	31.44	4.44	0.32	-0.48	0.58	0.05	0.00
1.2D+E 0	0Y	-4.25	2.60	32.62	4.99	-0.29	-0.63	0.69	-0.03	0.00
1.2D+E 45	0P	-15.21	-15.22	-152.05	21.52	0.02	-0.02	0.03	-0.00	0.00
1.2D+E 45	0X	-4.90	3.13	-40.79	5.81	0.43	0.09	0.44	0.05	0.00

1.2D+E 45	0XY	-6.16	-6.15	61.53	8.71	0.48	-0.48	0.68	-0.00	0.00
1.2D+E 45	0Y	3.14	-4.88	-40.76	5.81	-0.10	-0.43	0.44	-0.05	0.00
1.2D+E 90	0P	-11.15	-13.00	-120.98	17.13	0.15	0.27	0.30	0.04	0.00
1.2D+E 90	0X	2.60	-4.26	32.64	4.99	0.63	0.29	0.69	0.03	0.00
1.2D+E 90	0XY	-2.64	-3.56	31.38	4.43	0.48	-0.32	0.58	-0.05	0.00
1.2D+E 90	0Y	11.19	-11.88	-115.11	16.32	-0.02	-0.11	0.11	-0.04	0.00
0.9D+E 0	0P	-11.76	-9.93	-109.16	15.39	-0.26	-0.15	0.30	-0.04	0.00
0.9D+E 0	0X	-10.75	9.98	-104.20	14.67	0.12	0.01	0.12	0.04	0.00
0.9D+E 0	0XY	-4.72	-3.78	41.69	6.05	0.33	-0.49	0.59	0.05	0.00
0.9D+E 0	0Y	-5.43	3.72	43.33	6.59	-0.28	-0.64	0.70	-0.03	0.00
0.9D+E 45	0P	-13.98	-13.99	-140.22	19.77	0.03	-0.03	0.04	-0.00	0.00
0.9D+E 45	0X	-3.76	1.93	-29.94	4.23	0.44	0.09	0.45	0.06	0.00
0.9D+E 45	0XY	-7.30	-7.29	71.72	10.32	0.49	-0.49	0.70	-0.00	0.00
0.9D+E 45	0Y	1.94	-3.75	-29.91	4.23	-0.09	-0.44	0.44	-0.06	0.00
0.9D+E 90	0P	-9.93	-11.77	-109.22	15.40	0.15	0.26	0.30	0.04	0.00
0.9D+E 90	0X	3.72	-5.45	43.36	6.60	0.64	0.28	0.70	0.03	0.00
0.9D+E 90	0XY	-3.78	-4.71	41.63	6.04	0.49	-0.34	0.59	-0.05	0.00
0.9D+E 90	0Y	9.98	-10.74	-104.12	14.66	-0.01	-0.12	0.12	-0.04	0.00

Summary of Joint Support Reactions For All Load Cases in Direction of Leg:

Load Case	Support Joint	Origin Joint	Leg Member	Force In Leg Dir. (kips)	Residual Shear Perpendicular To Leg (kips)	Residual Shear Horizontal To Leg - Res. (kips)	Residual Shear Horizontal To Leg - Long. (kips)	Residual Shear Horizontal To Leg - Tran. (kips)	Total Long. Force (kips)	Total Tran. Force (kips)	Total Vert. Force (kips)
W 0	0P	1P	L 1P	182.828	12.840	12.890	12.431	3.408	-25.49	-16.46	-180.75
W 0	0X	1X	L 1X	177.240	12.345	12.396	11.787	-3.836	-24.44	16.49	-175.21
W 0	0XY	1XY	L 1XY	-92.713	9.764	9.796	9.704	1.344	-16.31	-7.95	91.44
W 0	0Y	1Y	L 1Y	-93.750	10.316	10.349	10.274	-1.244	-16.95	7.92	92.44
W 180	0P	1P	L 1P	-90.942	10.410	10.443	-10.380	-1.147	16.85	7.62	89.65
W 180	0X	1X	L 1X	-90.904	9.969	10.002	-9.913	1.329	16.39	-7.80	89.63
W 180	0XY	1XY	L 1XY	175.431	12.536	12.587	-11.993	-3.821	24.52	16.34	-173.39
W 180	0Y	1Y	L 1Y	180.022	12.954	13.005	-12.576	3.310	25.43	-16.16	-177.95
W 45	0P	1P	L 1P	248.705	15.713	15.795	11.163	11.175	-28.92	-28.93	-245.82
W 45	0X	1X	L 1X	41.288	9.176	9.177	7.479	5.319	-10.43	-2.36	-40.92
W 45	0XY	1XY	L 1XY	-157.650	12.534	12.599	8.914	8.905	-20.15	-20.14	155.56
W 45	0Y	1Y	L 1Y	41.256	9.162	9.163	5.308	7.469	-2.35	-10.42	-40.89
W -45	0P	1P	L 1P	46.054	9.760	9.761	7.964	-5.644	-11.26	2.35	-45.65
W -45	0X	1X	L 1X	243.944	15.631	15.712	10.677	-11.527	-28.09	28.94	-241.09
W -45	0XY	1XY	L 1XY	41.468	8.927	8.929	4.910	-7.458	-1.94	10.42	-41.07
W -45	0Y	1Y	L 1Y	-157.863	12.811	12.877	9.312	-8.895	-20.56	20.14	155.75
W 90	0P	1P	L 1P	182.885	12.847	12.897	3.400	12.441	-16.46	-25.50	-180.81
W 90	0X	1X	L 1X	-93.775	10.325	10.358	-1.238	10.283	7.92	-16.96	92.47
W 90	0XY	1XY	L 1XY	-92.656	9.758	9.790	1.348	9.697	-7.95	-16.30	91.39
W 90	0Y	1Y	L 1Y	177.150	12.340	12.391	-3.843	11.780	16.49	-24.43	-175.12
W -90	0P	1P	L 1P	-90.999	10.416	10.449	-1.142	-10.387	7.62	16.87	89.70
W -90	0X	1X	L 1X	180.112	12.960	13.010	3.303	-12.584	-16.16	25.44	-178.04
W -90	0XY	1XY	L 1XY	175.373	12.529	12.580	-3.829	-11.983	16.35	24.50	-173.34
W -90	0Y	1Y	L 1Y	-90.879	9.961	9.993	1.335	-9.904	-7.81	16.38	89.61
W 0 Ice	0P	1P	L 1P	97.238	3.192	3.204	3.095	0.830	-10.06	-7.80	-96.45
W 0 Ice	0X	1X	L 1X	93.053	3.013	3.026	2.833	-1.063	-9.50	7.73	-92.29
W 0 Ice	0XY	1XY	L 1XY	23.199	2.350	2.357	2.340	0.282	-0.66	1.40	-23.27
W 0 Ice	0Y	1Y	L 1Y	24.730	2.502	2.510	2.468	-0.461	-0.68	-1.33	-24.81
W 180 Ice	0P	1P	L 1P	28.234	2.634	2.643	-2.621	-0.340	0.58	-1.70	-28.30
W 180 Ice	0X	1X	L 1X	25.477	2.604	2.612	-2.599	0.261	0.75	1.58	-25.55
W 180 Ice	0XY	1XY	L 1XY	90.776	3.248	3.261	-3.090	-1.041	9.59	7.54	-90.01
W 180 Ice	0Y	1Y	L 1Y	93.734	3.322	3.335	-3.258	0.708	9.97	-7.42	-92.97
W 45 Ice	0P	1P	L 1P	114.628	3.998	4.019	2.840	2.844	-11.05	-11.05	-113.63
W 45 Ice	0X	1X	L 1X	58.759	2.165	2.165	1.751	1.273	-5.97	2.95	-58.42
W 45 Ice	0XY	1XY	L 1XY	6.107	3.081	3.097	2.191	2.189	-1.73	-1.73	-6.39
W 45 Ice	0Y	1Y	L 1Y	58.726	2.161	2.161	1.269	1.749	2.95	-5.97	-58.39
W -45 Ice	0P	1P	L 1P	62.735	2.465	2.466	1.972	-1.480	-6.48	-3.02	-62.38
W -45 Ice	0X	1X	L 1X	110.652	4.006	4.027	2.619	-3.059	-10.54	10.98	-109.67
W -45 Ice	0XY	1XY	L 1XY	56.986	2.281	2.282	1.185	-1.950	2.91	6.04	-56.64
W -45 Ice	0Y	1Y	L 1Y	7.846	3.283	3.300	2.275	-2.391	-1.69	1.80	-8.14
W 90 Ice	0P	1P	L 1P	97.253	3.194	3.207	0.826	3.099	-7.79	-10.07	-96.47
W 90 Ice	0X	1X	L 1X	24.747	2.504	2.513	-0.460	2.471	-1.33	-0.68	-24.83
W 90 Ice	0XY	1XY	L 1XY	23.215	2.349	2.357	0.283	2.340	1.40	-0.66	-23.28
W 90 Ice	0Y	1Y	L 1Y	93.005	3.012	3.025	-1.066	2.831	7.73	-9.49	-92.24
W -90 Ice	0P	1P	L 1P	28.219	2.635	2.644	-0.340	-2.622	-1.70	0.58	-28.28
W -90 Ice	0X	1X	L 1X	93.782	3.323	3.335	0.706	-3.260	-7.42	9.98	-93.01
W -90 Ice	0XY	1XY	L 1XY	90.760	3.245	3.259	-1.045	-3.087	7.54	9.59	-90.00
W -90 Ice	0Y	1Y	L 1Y	25.459	2.601	2.609	0.262	-2.596	1.58	0.75	-25.53
1.2D+E 0	0P	1P	L 1P	122.034	4.873	4.896	4.254	2.425	-12.99	-11.16	-120.93
1.2D+E 0	0X	1X	L 1X	116.267	4.562	4.585	3.575	-2.871	-11.90	11.19	-115.20
1.2D+E 0	0XY	1XY	L 1XY	-31.726	1.347	1.352	1.302	0.365	-3.57	-2.64	31.44
1.2D+E 0	0Y	1Y	L 1Y	-32.942	1.907	1.913	1.897	-0.247	-4.25	2.60	32.62
1.2D+E 45	0P	1P	L 1P	153.449	5.956	5.987	4.227	4.239	-15.21	-15.22	-152.05
1.2D+E 45	0X	1X	L 1X	41.159	1.953	1.959	1.950	-0.184	-4.90	3.13	-40.79
1.2D+E 45	0XY	1XY	L 1XY	-62.101	2.413	2.425	1.720	1.710	-6.16	-6.15	61.53
1.2D+E 45	0Y	1Y	L 1Y	41.126	1.944	1.950	-0.196	1.940	3.14	-4.88	-40.76
1.2D+E 90	0P	1P	L 1P	122.094	4.877	4.901	2.416	4.264	-11.15	-13.00	-120.98
1.2D+E 90	0X	1X	L 1X	-32.969	1.916	1.922	-0.241	1.907	2.60	-4.26	32.64
1.2D+E 90	0XY	1XY	L 1XY	-31.666	1.341	1.347	0.370	1.295	-2.64	-3.56	31.38
1.2D+E 90	0Y	1Y	L 1Y	116.175	4.561	4.584	-2.879	3.567	11.19	-11.88	-115.11
0.9D+E 0	0P	1P	L 1P	110.154	4.361	4.382	3.875	2.046	-11.76	-9.93	-109.16
0.9D+E 0	0X	1X	L 1X	105.154	4.034	4.055	3.225	-2.458	-10.75	9.98	-104.20
0.9D+E 0	0XY	1XY	L 1XY	-42.081	1.865	1.873	1.709	0.768	-4.72	-3.78	41.69
0.9D+E 0	0Y	1Y	L 1Y	-43.761	2.372	2.381	2.306	-0.595	-5.43	3.72	43.33
0.9D+E 45	0P	1P	L 1P	141.508	5.422	5.450	3.848	3.860	-13.98	-13.99	-140.22
0.9D+E 45	0X	1X	L 1X	30.190	1.614	1.617	1.601	0.227	-3.76	1.93	-29.94
0.9D+E 45	0XY	1XY	L 1XY	-72.399	2.981	2.997	2.124	2.114	-7.30	-7.29	71.72
0.9D+E 45	0Y	1Y	L 1Y	30.167	1.602	1.605	0.216	1.591	1.94	-3.75	-29.91
0.9D+E 90	0P	1P	L 1P	110.213	4.366	4.387	2.038	3.885	-9.93	-11.77	-109.22
0.9D+E 90	0X	1X	L 1X	-43.798	2.380	2.389	-0.589	2.315	3.72	-5.45	43.36
0.9D+E 90	0XY	1XY	L 1XY	-42.022	1.860	1.869	0.774	1.701	-3.78	-4.71	41.63
0.9D+E 90	0Y	1Y	L 1Y	105.072	4.032	4.053	-2.465	3.217	9.98	-10.74	-104.12

Overturning Moment Summary For All Load Cases:

Load Case	Transverse Moment (ft-k)	Longitudinal Moment (ft-k)	Torsional Moment (ft-k)	Resultant Moment (ft-k)	Transverse Force (kips)	Longitudinal Force (kips)	Vertical Force (kips)
W 0	102.271	-12146.417	39.203	12146.848	-0.000	83.185	172.069
W 180	102.271	11939.052	-39.201	11939.490	-0.000	-83.185	172.069
W 45	9030.354	-9031.823	-0.940	12771.888	61.854	61.854	172.069
W -45	-8825.869	-9031.885	56.389	12628.179	-61.854	61.854	172.069
W 90	12144.952	-103.741	-40.533	12145.395	83.185	-0.000	172.069
W -90	-11940.521	-103.741	40.531	11940.972	-83.185	-0.000	172.069
W 0 Ice	128.374	-3165.058	10.003	3167.660	-0.000	20.895	236.825
W 180 Ice	128.374	2905.360	-10.003	2908.195	-0.000	-20.895	236.825
W 45 Ice	2412.160	-2413.638	-0.249	3412.354	15.798	15.798	236.825
W -45 Ice	-2155.415	-2413.642	14.399	3235.966	-15.798	15.798	236.825
W 90 Ice	3163.580	-129.853	-10.355	3166.244	20.895	-0.000	236.825
W -90 Ice	-2906.839	-129.853	10.355	2909.738	-20.895	-0.000	236.825
1.2D+E 0	102.270	-6754.278	41.379	6755.052	-0.000	32.708	172.069
1.2D+E 45	4804.908	-4806.377	-0.970	6796.204	23.128	23.128	172.069
1.2D+E 90	6752.811	-103.740	-42.752	6753.608	32.708	-0.000	172.069
0.9D+E 0	74.610	-6713.480	41.230	6713.894	-0.000	32.664	128.350
0.9D+E 45	4768.279	-4769.294	-0.967	6744.083	23.097	23.097	128.350
0.9D+E 90	6712.467	-75.627	-42.599	6712.893	32.664	-0.000	128.350

EIA Sections Information:

Section Label	Top Z (ft)	Bottom Z (ft)	Joint Count	Member Count	Top Width (ft)	Bottom Width (ft)	Gross Area (ft^2)	Face Af Adjust Factor	Face Ar Adjust Factor	Dead Load Factor
212.5-225.0	225.000	212.500	8	20	12.50	14.31	167.53	1.1060	1.1060	1.127
200.0-212.5	212.500	200.000	8	16	14.31	16.11	190.10	1.1350	1.1350	1.162
187.5-200.0	200.000	187.500	8	16	16.11	17.92	212.67	1.1390	1.1390	1.167
175.0-187.5	187.500	175.000	12	24	17.92	19.72	235.24	1.1470	1.1470	1.176
162.5-175.0	175.000	162.500	16	24	19.72	21.53	257.81	1.2240	1.2240	1.268
150.0-162.5	162.500	150.000	16	24	21.53	23.33	280.38	1.2300	1.2300	1.276
137.5-150.0	150.000	137.500	16	24	23.33	25.14	302.95	1.2370	1.2370	1.284
125.0-137.5	137.500	125.000	16	24	25.14	26.94	325.52	1.2430	1.2430	1.292
100.0-125.0	125.000	100.000	16	24	26.94	30.56	718.75	1.2740	1.2740	1.329
75.00-100.0	100.000	75.000	16	24	30.56	34.17	809.03	1.2910	1.2910	1.349
50.00-75.00	75.000	50.000	20	32	34.17	37.78	899.31	1.3330	1.3330	1.400
25.00-50.00	50.000	25.000	36	76	37.78	41.39	989.58	1.2110	1.2110	1.253
0.000-25.00	25.000	0.000	28	56	41.39	45.00	1079.86	1.2140	1.2140	1.257

Printed capacities do not include the strength factor entered for each load case.
The Group Summary reports on the member and load case that resulted in maximum usage which may not necessarily be the same as that which produces maximum force.

Group Summary (Compression Portion):

Group Label	Group Desc.	Angle Type	Angle Size	Steel Strength (ksi)	Max Usage %	Max Use In Comp. %	Comp. Control Member	Comp. Force (kips)	Comp. Control Case	L/r Capacity (kips)	Comp. Connect. Shear Capacity (kips)	Comp. Connect. Bearing Capacity (kips)	RLX	RLY	RLZ	L/r	KL/r	Length Comp. Member (ft)	Curve No.	No. Of Bolts Comp.
Leg S1	L 8" x 8" x 1.125"	SAE	8X8X1.13	33.0	42.32	Comp 42.32	L 1P	-205.911	W 45	486.568	0.000	0.000	0.333	0.333	0.333	64.43	64.43	25.130	1	0
Leg S2	L 8" x 8" x 1.125"	SAE	8X8X1.13	33.0	36.67	Comp 36.67	L 2P	-178.438	W 45	486.568	0.000	0.000	0.333	0.333	0.333	64.43	64.43	25.130	1	0
Leg S3	L 8" x 8" x 1"	SAE	8X8X1	33.0	39.68	Comp 39.68	L 3P	-173.151	W 45	436.407	0.000	0.000	0.333	0.333	0.333	64.43	64.43	25.130	1	0
Leg S4	L 8" x 8" x 0.875"	SAE	8X8X0.88	33.0	38.34	Comp 38.34	L 4P	-147.745	W 45	385.350	0.000	0.000	0.333	0.333	0.333	64.02	64.02	25.130	1	0

Leg S5	L 8" x 8" x 0.75"	SAE	8X8X0.75	33.0	36.67	Comp	36.67	L 5P	-122.258	W 45	333.360	0.000	0.000	0.333	0.333	0.333	63.61	63.61	25.130	1	0
Leg S6	L 6" x 6" x 0.875"	SAE	6X6X0.88	33.0	37.33	Comp	37.33	L 6P	-105.646	W 45	282.986	0.000	0.000	0.500	0.500	0.500	64.44	64.44	12.565	1	0
Leg S7	L 6" x 6" x 0.875"	SAE	6X6X0.88	33.0	32.70	Comp	32.70	L 7P	-92.548	W 45	282.986	0.000	0.000	0.500	0.500	0.500	64.44	64.44	12.565	1	0
Leg S8	L 6" x 6" x 0.875"	SAE	6X6X0.88	33.0	27.85	Comp	27.85	L 8P	-78.816	W 45	282.986	0.000	0.000	0.500	0.500	0.500	64.44	64.44	12.565	1	0
Leg S9	L 6" x 6" x 0.875"	SAE	6X6X0.88	33.0	22.69	Comp	22.69	L 9P	-64.199	W 45	282.986	0.000	0.000	0.500	0.500	0.500	64.44	64.44	12.565	1	0
Leg S10	L 6" x 6" x 0.625"	SAE	6X6X0.63	33.0	25.96	Comp	25.96	L 10P	-53.753	W 45	207.070	0.000	0.000	0.500	0.500	0.500	63.89	63.89	12.565	1	0
Leg S11	L 6" x 6" x 0.625"	SAE	6X6X0.63	33.0	19.65	Comp	19.65	L 11X	-40.684	W -45	207.070	0.000	0.000	0.500	0.500	0.500	63.89	63.89	12.565	1	0
Leg S12	L 6" x 6" x 0.5"	SAE	6X6X0.5	33.0	15.26	Comp	15.26	L 12X	-25.588	W -45	167.717	0.000	0.000	0.500	0.500	0.500	63.89	63.89	12.565	1	0
Leg S13	L 6" x 6" x 0.5"	SAE	6X6X0.5	33.0	6.62	Comp	6.62	L 13P	-11.095	1.2D+E 4	167.717	0.000	0.000	0.500	0.500	0.500	63.89	63.89	12.565	1	0
Diag S1	B/B L3"x3"x0.25"	DAE	3X3X0.25	33.0	80.96	Comp	80.96	D 2X	-26.675	W -90	32.947	0.000	0.000	0.333	1.000	0.333	169.93	158.08	19.683	5	0
Diag S2	B/B L3"x3"x0.25"	DAE	3X3X0.25	33.0	81.05	Comp	81.05	D 4X	-27.646	W -90	34.110	0.000	0.000	0.333	1.000	0.333	166.37	155.37	19.271	5	0
Diag S3	B/B L2.5"x3"x0.3125"	DAS	3X2.5X0.31	33.0	51.34	Comp	51.34	D 5X	-18.760	W -90	36.541	0.000	0.000	0.333	0.667	0.333	171.98	159.65	31.386	5	0
Diag S4	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	33.0	60.96	Comp	60.96	D 7X	-18.825	W -90	30.882	0.000	0.000	0.333	0.667	0.333	167.36	156.13	30.333	5	0
Diag S5	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	33.0	58.33	Comp	58.33	D 9X	-19.007	W -90	32.583	0.000	0.000	0.333	0.667	0.333	161.96	152.02	29.354	5	0
Diag S6	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	50.24	Comp	50.24	D 11X	-11.803	W -90	23.494	0.000	0.000	0.500	1.000	0.500	185.55	169.99	18.400	5	0
Diag S7	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	47.45	Comp	47.45	D 13X	-11.835	W -90	24.942	0.000	0.000	0.500	1.000	0.500	178.99	164.99	17.750	5	0
Diag S8	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	45.46	Comp	45.46	D 15X	-12.035	W -90	26.471	0.000	0.000	0.500	1.000	0.500	172.66	160.17	17.122	5	0
Diag S9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	44.21	Comp	44.21	D 17X	-12.411	W -90	28.073	0.000	0.000	0.500	1.000	0.500	166.59	155.54	16.520	5	0
Diag S10	L 4" x 3" x 0.25"	SAU	4X3X0.25	33.0	61.80	Comp	61.80	D 19Y	-7.968	W 180	12.894	0.000	0.000	0.520	0.520	0.520	216.73	193.75	22.611	5	0
Diag S11	L 4" x 3" x 0.25"	SAU	4X3X0.25	33.0	55.53	Comp	55.53	D 21P	-8.032	W 0	14.464	0.000	0.000	0.520	0.520	0.520	202.55	182.94	21.131	5	0
Diag S12	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	33.0	41.09	Comp	41.09	D 24XY	-7.419	W -90	18.057	0.000	0.000	0.520	0.520	0.520	177.19	163.62	19.707	5	0
Diag S13	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	33.0	34.00	Comp	34.00	D 26Y	-6.903	1.2D+E 9	20.304	0.000	0.000	0.520	0.520	0.520	164.99	154.32	18.349	5	0
Horiz 1	B/B L3.5"x3"x0.3125"	DAL	3.5X3X0.31	33.0	32.28	Comp	32.28	H 2Y	-17.346	W -45	53.736	0.000	0.000	1.000	1.000	1.000	150.51	143.28	13.796	5	0
Horiz 2	B/B L3"x3"x0.3125"	DAE	3X3X0.31	33.0	37.36	Comp	37.36	H 3P	-16.124	W -90	43.163	0.000	0.000	1.000	1.000	1.000	163.89	153.49	12.593	5	0
Horiz 3	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	33.0	35.47	Comp	35.47	H 5P	-9.841	W -90	27.744	0.000	0.000	1.000	1.000	1.000	188.07	171.91	17.083	5	0
Horiz 4	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	33.0	37.90	Comp	37.90	H 7P	-9.155	W -90	24.155	0.000	0.000	1.000	1.000	1.000	194.00	176.43	15.278	5	0
Horiz 5	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	33.0	30.16	Comp	30.16	H 9P	-8.973	W -90	29.755	0.000	0.000	1.000	1.000	1.000	171.08	158.96	13.472	5	0
Horiz 6	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	35.50	Comp	35.50	H 11P	-7.620	W -90	21.463	0.000	0.000	1.000	1.000	1.000	196.14	178.06	12.569	5	0
Horiz 7	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	30.68	Comp	30.68	H 13P	-7.456	W -90	24.305	0.000	0.000	1.000	1.000	1.000	182.05	167.33	11.667	5	0
Horiz 8	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	26.51	Comp	26.51	H 15P	-7.358	W -90	27.751	0.000	0.000	1.000	1.000	1.000	167.97	156.59	10.764	5	0
Horiz 9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	22.88	Comp	22.88	H 17P	-7.318	W -90	31.986	0.000	0.000	1.000	1.000	1.000	153.88	145.86	9.861	5	0
Horiz 10	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	33.0	6.42	Comp	6.42	H 19Y	-1.184	0.9D+E 0	18.433	0.000	0.000	1.000	1.000	1.000	227.51	201.97	17.917	5	0
Horiz 11	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	33.0	3.83	Comp	3.83	H 21Y	-0.847	0.9D+E 0	22.089	0.000	0.000	1.000	1.000	1.000	204.59	184.49	16.111	5	0
Horiz 12	B/B L3.5"x3"x0.3125"	DAL	3.5X3X0.31	33.0	1.65	Tens	0.91	H 24X	-0.463	0.9D+E 9	50.695	0.000	0.000	1.000	1.000	1.000	156.06	147.52	14.306	5	0
Horiz 13	C8x11.5	CHN	C8x11.5	33.0	1.56	Comp	1.56	H 25Y	-0.266	0.9D+E 0	17.073	0.000	0.000	1.000	1.000	1.000	240.00	211.48	12.500	5	0
LD 1	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	33.0	58.23	Comp	58.23	LD 1X	-12.520	W -45	21.502	0.000	0.000	1.000	1.000	1.000	183.48	168.41	11.987	5	0
LD 2	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	54.09	Comp	54.09	LD 3X	-17.411	W -90	32.188	0.000	0.000	1.000	1.000	1.000	153.57	145.62	9.841	5	0
LD 3	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	61.29	Comp	61.29	LD 5P	-16.870	W -90	27.526	0.000	0.000	1.000	1.000	1.000	169.07	157.43	10.834	5	0
LD 4	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	33.0	54.89	Comp	54.89	LD 7X	-12.780	W -45	23.282	0.000	0.000	1.000	1.000	1.000	174.88	161.86	11.425	5	0
LD 5	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	33.0	57.79	Comp	57.79	LD 9X	-17.750	W -90	30.715	0.000	0.000	1.000	1.000	1.000	147.47	140.98	9.635	5	0
LD 6	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	33.0	62.49	Comp	62.49	LD 11P	-16.808	W -90	26.898	0.000	0.000	1.000	1.000	1.000	160.13	150.62	10.462	5	0
LH 1	B/B L3.5"x3.5"x0.3125"	DAE	3.5X3.5X0.31	33.0	33.73	Comp	33.73	LH 1X	-14.484	W -45	42.941	0.000	0.000	1.000	2.000	1.000	181.48	166.89	12.099	5	0
LH 2	B/B L3.5"x3.5"x0.3125"	DAE	3.5X3.5X0.31	33.0	28.45	Comp	28.45	LH 3X	-14.083	W -45	49.511	0.000	0.000	1.000	2.000	1.000	166.43	155.42	11.095	5	0
DUM 1	Dummy Bracing Member	DUM	0.1X0.1X1	36.0	0.00		0.00	BR 7XY	-0.665	W 45	0.324	0.000	0.000	1.000	1.000	1.000	2.59	2.59	21.606	1	0

Group Summary (Tension Portion):

Group Label	Group Desc.	Angle Type	Angle Size	Steel Strength (ksi)	Max Usage %	Usage Cont-rol	Max Use In Tens. %	Tension Control Member	Tension Force (kips)	Tension Control Load Case	Net Section Capacity (kips)	Tension Connect. Shear Capacity (kips)	Tension Connect. Bearing Capacity (kips)	Tension Connect. Rupture Capacity (kips)	Length Tens. Member (ft)	No. Of Bolts Tens.	No. Of Holes	Hole Diameter (in)
Leg S1	L 8" x 8" x 1.125"	SAE	8X8X1.13	33.0	42.32	Comp	25.37	L 1XY	126.055	W 45	496.880	0.000	0.000	0.000	25.130	0	0.000	0
Leg S2	L 8" x 8" x 1.125"	SAE	8X8X1.13	33.0	36.67	Comp	22.75	L 2XY	113.025	W 45	496.880	0.000	0.000	0.000	25.130	0	0.000	0
Leg S3	L 8" x 8" x 1"	SAE	8X8X1	33.0	39.68	Comp	25.01	L 3XY	111.400	W 45	445.499	0.000	0.000	0.000	25.130	0	0.000	0
Leg S4	L 8" x 8" x 0.875"	SAE	8X8X0.88	33.0	38.34	Comp	23.92	L 4XY	93.993	W 45	392.930	0.000	0.000	0.000	25.130	0	0.000	0
Leg S5	L 8" x 8" x 0.75"	SAE	8X8X0.75	33.0	36.67	Comp	22.12	L 5XY	75.172	W 45	339.767	0.000	0.000	0.000	25.130	0	0.000	0
Leg S6	L 6" x 6" x 0.875"	SAE	6X6X0.88	33.0	37.33	Comp	22.88	L 6XY	66.119	W 45	288.981	0.000	0.000	0.000	12.565	0	0.000	0
Leg S7	L 6" x 6" x 0.875"	SAE	6X6X0.88	33.0	32.70	Comp	19.50	L 7XY	56.363	W 45	288.981	0.000	0.000	0.000	12.565	0	0.000	0
Leg S8	L 6" x 6" x 0.875"	SAE	6X6X0.88	33.0	27.85	Comp	15.98	L 8XY	46.182	W 45	288.981	0.000	0.000	0.000	12.565	0	0.000	0
Leg S9	L 6" x 6" x 0.875"	SAE	6X6X0.88	33.0	22.69	Comp	12.30	L 9XY	35.548	W 45	288.981	0.000	0.000	0.000	12.565	0	0.000	0
Leg S10	L 6" x 6" x 0.625"	SAE	6X6X0.63	33.0	25.96	Comp	14.21	L 10XY	30.014	W 45	211.167	0.000	0.000	0.000	12.565	0	0.000	0
Leg S11	L 6" x 6" x 0.625"	SAE	6X6X0.63	33.0	19.65	Comp	9.53	L 11XY	20.122	0.9D+E 4	211.167	0.000	0.000	0.000	12.565	0	0.000	0
Leg S12	L 6" x 6" x 0.5"	SAE	6X6X0.5	33.0	15.26	Comp	6.07	L 12XY	10.369	0.9D+E 4	170.775	0.000	0.000	0.000	12.565	0	0.000	0
Leg S13	L 6" x 6" x 0.5"	SAE	6X6X0.5	33.0	6.62	Comp	0.99	L 13XY	1.683	0.9D+E 4	170.775	0.000	0.000	0.000	12.565	0	0.000	0
Diag S1	B/B L3"x3"x0.25"	DAE	3X3X0.25	33.0	80.96	Comp	24.82	D 2P	21.233	W -90	85.536	0.000	0.000	0.000	19.683	0	0.000	0
Diag S2	B/B L3"x3"x0.25"	DAE	3X3X0.25	33.0	81.05	Comp	24.20	D 4P	20.703	W -90	85.536	0.000	0.000	0.000	19.271	0	0.000	0
Diag S3	B/B L2.5"x3"x0.3125"	DAS	3X2.5X0.31	33.0	51.34	Comp	17.27	D 5P	16.621	W -90	96.228	0.000	0.000	0.000	31.386	0	0.000	0
Diag S4	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	33.0	60.96	Comp	21.62	D 7P	16.887	W -90	78.111	0.000	0.000	0.000	30.333	0	0.000	0
Diag S5	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	33.0	58.33	Comp	22.62	D 9P	17.669	W -90	78.111	0.000	0.000	0.000	29.354	0	0.000	0
Diag S6	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	50.24	Comp	15.11	D 11P	10.682	W -90	70.686	0.000	0.000	0.000	18.400	0	0.000	0
Diag S7	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	47.45	Comp	15.28	D 13P	10.800	W -90	70.686	0.000	0.000	0.000	17.750	0	0.000	0
Diag S8	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	45.46	Comp	15.66	D 15P	11.070	W -90	70.686	0.000	0.000	0.000	17.122	0	0.000	0
Diag S9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	44.21	Comp	16.23	D 17P	11.474	W -90	70.686	0.000	0.000	0.000	16.520	0	0.000	0
Diag S10	L 4" x 3" x 0.25"	SAU	4X3X0.25	33.0	61.80	Comp	13.45	D 19Y	6.749	W 0	50.193	0.000	0.000	0.000	22.611	0	0.000	0
Diag S11	L 4" x 3" x 0.25"	SAU	4X3X0.25	33.0	55.53	Comp	13.69	D 21Y	6.871	W 0	50.193	0.000	0.000	0.000	21.131	0	0.000	0
Diag S12	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	33.0	41.09	Comp	11.67	D 24XY	5.857	W 90	50.193	0.000	0.000	0.000	19.707	0	0.000	0
Diag S13	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	33.0	34.00	Comp	11.49	D 26XY	5.767	0.9D+E 9	50.193	0.000	0.000	0.000	18.349	0	0.000	0
Horiz 1	B/B L3.5"x3"x0.3125"	DAL	3.5X3X0.31	33.0	32.28	Comp	18.10	H 1X	20.809	W -45	114.939	0.000	0.000	0.000	13.796	0	0.000	0
Horiz 2	B/B L3"x3"x0.3125"	DAE	3X3X0.31	33.0	37.36	Comp	17.74	H 3X	18.700	W -90	105.435	0.000	0.000	0.000	12.593	0	0.000	0
Horiz 3	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	33.0	35.47	Comp	12.12	H 5P	10.368	W 90	85.536	0.000	0.000	0.000	17.083	0	0.000	0
Horiz 4	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	33.0	37.90	Comp	12.13	H 7X	9.474	W -90	78.111	0.000	0.000	0.000	15.278	0	0.000	0
Horiz 5	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	33.0	30.16	Comp	11.56	H 9X	9.029	W -90	78.111	0.000	0.000	0.000	13.472	0	0.000	0
Horiz 6	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	35.50	Comp	11.54	H 11X	8.161	W -90	70.686	0.000	0.000	0.000	12.569	0	0.000	0
Horiz 7	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	30.68	Comp	11.22	H 13X	7.933	W -90	70.686	0.000	0.000	0.000	11.667	0	0.000	0
Horiz 8	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	26.51	Comp	11.02	H 15X	7.789	W -90	70.686	0.000	0.000	0.000	10.764	0	0.000	0
Horiz 9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	22.88	Comp	11.21	H 17P	7.921	W 90	70.686	0.000	0.000	0.000	9.861	0	0.000	0
Horiz 10	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	33.0	6.42	Comp	3.68	H 19P	2.873	W 0	78.111	0.000	0.000	0.000	17.917	0	0.000	0
Horiz 11	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	33.0	3.83	Comp	3.10	H 21Y	2.422	W 180	78.111	0.000	0.000	0.000	16.111	0	0.000	0
Horiz 12	B/B L3.5"x3"x0.3125"	DAL	3.5X3X0.31	33.0	1.65	Tens	1.65	H 23P	1.898	1.2D+E 0	114.939	0.000	0.000	0.000	14.306	0	0.000	0
Horiz 13	C8x11.5	CHN	C8x11.5	33.0	1.56	Comp	0.35	H 26P	0.353	1.2D+E 9	100.386	0.000	0.000	0.000	12.500	0	0.000	0
LD 1	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	33.0	58.23	Comp	18.53	LD 2Y	11.725	W -45	63.261	0.000	0.000	0.000	11.987	0	0.000	0
LD 2	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	54.09	Comp	19.80	LD 3P	13.994	W -90	70.686	0.000	0.000	0.000	9.841	0	0.000	0
LD 3	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	33.0	61.29	Comp	24.97	LD 5X	17.651	W -90	70.686	0.000	0.000	0.000	10.834	0	0.000	0
LD 4	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	33.0	54.89	Comp	16.61	LD 8Y	10.505	W -45	63.261	0.000	0.000	0.000	11.425	0	0.000	0
LD 5	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	33.0	57.79	Comp	21.96	LD 9P	13.895	W -90	63.261	0.000	0.000	0.000	9.635	0	0.000	0
LD 6	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	33.0	62.49	Comp	27.64	LD 11X	17.488	W -90	63.261	0.000	0.000	0.000	10.462	0	0.000	0
LH 1	B/B L3.5"x3.5"x0.3125"	DAE	3.5X3.5X0.31	33.0	33.73	Comp	10.32	LH 2Y	12.811	W -45	124.146	0.000	0.000	0.000	12.099	0	0.000	0
LH 2	B/B L3.5"x3.5"x0.3125"	DAE	3.5X3.5X0.31	33.0	28.45	Comp	8.82	LH 4Y	10.946	W -45	124.146	0.000	0.000	0.000	11.095	0	0.000	0
DUM 1	Dummy Bracing Member	DUM	0.1X0.1X1	36.0	0.00		0.00	BR 7X	0.512	W -45	0.324	0.000	0.000	0.000	21.606	0	0.000	0

*** Maximum Stress Summary for Each Load Case

Summary of Maximum Usages by Load Case:

Load Case	Maximum Usage %	Element Label	Element Type
W 0	80.34	D 3P	Angle
W 180	81.00	D 3Y	Angle
W 45	72.38	D 2P	Angle
W -45	74.66	D 2X	Angle
W 90	80.42	D 4P	Angle
W -90	81.05	D 4X	Angle
W 0 Ice	31.82	D 3P	Angle
W 180 Ice	32.58	D 3Y	Angle
W 45 Ice	30.07	D 4P	Angle
W -45 Ice	31.20	D 4X	Angle
W 90 Ice	31.85	D 4P	Angle
W -90 Ice	32.59	D 4X	Angle
1.2D+E 0	48.10	D 21P	Angle
1.2D+E 45	41.89	D 20P	Angle
1.2D+E 90	48.07	D 22P	Angle
0.9D+E 0	46.89	D 21P	Angle
0.9D+E 45	40.51	D 20P	Angle
0.9D+E 90	46.86	D 22P	Angle

*** Weight of structure (lbs):
Weight of Angles*Section DLF: 94901.3
Total: 94901.3

*** End of Report

Site #:	88019
Name:	Winstead, CT

Engineer:	Isaac.dodson
Date:	05/21/21

Windspeed:	No Ice:	114 mph	Ice:	50 mph	
Carrier					

Taper:	-0.144444		
FW @ Base:	45.00	ft	

Taper Change:	225	ft
FW @ Top:	12.5	ft

Spreadsheet Version Last Updated: 11/12/2014

Joint Label	Symmetry Code	X Coord. (ft)	Y Coord. (ft)	Z Coord. (ft)	X Disp. Rest.	Y Disp. Rest.	Z Disp. Rest.	X Rot. Rest.	Y Rot. Rest.	Z Rot. Rest.	Drop Sub-Brace (Y or Blank)	# Vert	Drop (ft)	Height (ft)	Type	Count	Z-Elev. (ft)	FW (ft)	# Sub-Brace
0	XY-Symmetry	22.5	22.5	0	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed			8.333	25	2	1	0	45	3
1	XY-Symmetry	20.69444444	20.69444444	25	Free	Free	Free	Free	Free	Free			8.333	25	2	2	25	41.38888889	3
2	XY-Symmetry	18.88888889	18.88888889	50	Free	Free	Free	Free	Free	Free				25	A	3	50	37.77777778	2
3	XY-Symmetry	17.08333333	17.08333333	75	Free	Free	Free	Free	Free	Free				25	A	4	75	34.16666667	2
4	XY-Symmetry	15.27777778	15.27777778	100	Free	Free	Free	Free	Free	Free				25	A	5	100	30.55555556	2
5	XY-Symmetry	13.47222222	13.47222222	125	Free	Free	Free	Free	Free	Free				12.5	A	6	125	26.94444444	1
6	XY-Symmetry	12.56944444	12.56944444	137.5	Free	Free	Free	Free	Free	Free				12.5	A	7	137.5	25.13888889	1
7	XY-Symmetry	11.66666667	11.66666667	150	Free	Free	Free	Free	Free	Free				12.5	A	8	150	23.33333333	1
8	XY-Symmetry	10.76388889	10.76388889	162.5	Free	Free	Free	Free	Free	Free				12.5	A	9	162.5	21.52777778	1
9	XY-Symmetry	9.861111111	9.861111111	175	Free	Free	Free	Free	Free	Free		1		12.5	X	10	175	19.72222222	1
10	XY-Symmetry	8.958333333	8.958333333	187.5	Free	Free	Free	Free	Free	Free		1		12.5	X	11	187.5	17.91666667	1
11	XY-Symmetry	8.055555556	8.055555556	200	Free	Free	Free	Free	Free	Free		1		12.5	X	12	200	16.11111111	1
12	XY-Symmetry	7.152777778	7.152777778	212.5	Free	Free	Free	Free	Free	Free				12.5	X	13	212.5	14.30555556	1
13	XY-Symmetry	6.25	6.25	225	Free	Free	Free	Free	Free	Free						14	225	12.5	

NOTES	
Types:	
1:	Built up Horizs. w/ A
2:	Built up Horizs. w/ M
A:	Typical A brace
X:	Typical X brace
Drop:	Use only for types 1 & 2
# Sections:	13

A1	XY-Symmetry	20.69444444	6.898148148	25	Free	Free	Free	Free	Free	Free
A2	XY-Symmetry	6.898148148	20.69444444	25	Free	Free	Free	Free	Free	Free
A3	XY-Symmetry	18.88888889	6.296296296	50	Free	Free	Free	Free	Free	Free
A4	XY-Symmetry	6.296296296	18.88888889	50	Free	Free	Free	Free	Free	Free
A5	Y-Symmetry	17.08333333	0	75	Free	Free	Free	Free	Free	Free
A6	X-Symmetry	0	17.08333333	75	Free	Free	Free	Free	Free	Free
A7	Y-Symmetry	15.27777778	0	100	Free	Free	Free	Free	Free	Free
A8	X-Symmetry	0	15.27777778	100	Free	Free	Free	Free	Free	Free
A9	Y-Symmetry	13.47222222	0	125	Free	Free	Free	Free	Free	Free
A10	X-Symmetry	0	13.47222222	125	Free	Free	Free	Free	Free	Free
A11	Y-Symmetry	12.56944444	0	137.5	Free	Free	Free	Free	Free	Free
A12	X-Symmetry	0	12.56944444	137.5	Free	Free	Free	Free	Free	Free
A13	Y-Symmetry	11.66666667	0	150	Free	Free	Free	Free	Free	Free
A14	X-Symmetry	0	11.66666667	150	Free	Free	Free	Free	Free	Free
A15	Y-Symmetry	10.76388889	0	162.5	Free	Free	Free	Free	Free	Free
A16	X-Symmetry	0	10.76388889	162.5	Free	Free	Free	Free	Free	Free
A17	Y-Symmetry	9.861111111	0	175	Free	Free	Free	Free	Free	Free
A18	X-Symmetry	0	9.861111111	175	Free	Free	Free	Free	Free	Free

H1	XY-Symmetry	21.29627222	12.09855741	16.667	Free	Free	Free	Free	Free	Free
H2	XY-Symmetry	12.09855741	21.29627222	16.667	Free	Free	Free	Free	Free	Free
H3	Y-Symmetry	21.29627222	0	16.667	Free	Free	Free	Free	Free	Free
H4	X-Symmetry	0	21.29627222	16.667	Free	Free	Free	Free	Free	Free
H5	XY-Symmetry	19.49071667	11.09548704	41.667	Free	Free	Free	Free	Free	Free
H6	XY-Symmetry	11.09548704	19.49071667	41.667	Free	Free	Free	Free	Free	Free
H7	Y-Symmetry	19.49071667	0	41.667	Free	Free	Free	Free	Free	Free
H8	X-Symmetry	0	19.49071667	41.667	Free	Free	Free	Free	Free	Free

Legs

Site No.:	88019
Engineer:	isaac.dodson
Date:	05/21/2021
Carrier:	0

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations *(ft)*	Type of Shape [1]	Diameter or Length *(in)*	Thickness [2] *(in)*	F_Y *(ksi)*
1	0.000-25.00	L	8	1.125	33
2	25.00-50.00	L	8	1.125	33
3	50.00-75.00	L	8	1	33
4	75.00-100.0	L	8	0.875	33
5	100.0-125.0	L	8	0.75	33
6	125.0-137.5	L	6	0.875	33
7	137.5-150.0	L	6	0.875	33
8	150.0-162.5	L	6	0.875	33
9	162.5-175.0	L	6	0.875	33
10	175.0-187.5	L	6	0.625	33
11	187.5-200.0	L	6	0.625	33
12	200.0-212.5	L	6	0.5	33
13	212.5-225.0	L	6	0.5	33

Notes:

[1] Type of Leg Shape: **R** = Round or **P** = Bent Plate or **S** = Schifflerized Angle. **L** = Even Leg

[2] For Solid Round Leg Shapes Thickness Equals Zero.

[3] Adjust for Bent Plate Leg Shapes.

Diagonals

Site No.:	88019
Engineer:	isaac.dodson
Date:	05/21/2021
Carrier:	0

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations *(ft)*	Type of Shape [1]	Diameter [2] *(in)*	Web Length [3] *(in)*	Flange Length [3] *(in)*	Thickness *(in)*	F_y *(ksi)*	Is Diag. Tension Only? *(Y/N)*
1	0.000-25.00	2L		3	3	0.25	33	
2	25.00-50.00	2L		3	3	0.25	33	
3	50.00-75.00	2L		2.5	3	0.3125	33	
4	75.00-100.0	2L		2.5	3	0.25	33	
5	100.0-125.0	2L		2.5	3	0.25	33	
6	125.0-137.5	2L		2.5	2.5	0.25	33	
7	137.5-150.0	2L		2.5	2.5	0.25	33	
8	150.0-162.5	2L		2.5	2.5	0.25	33	
9	162.5-175.0	2L		2.5	2.5	0.25	33	
10	175.0-187.5	L		4	3	0.25	33	
11	187.5-200.0	L		4	3	0.25	33	
12	200.0-212.5	L		3.5	3.5	0.25	33	
13	212.5-225.0	L		3.5	3.5	0.25	33	

Notes:

[1] Type of Diagonal Shape: **R** = Round, **L** = Single-Angle or **2L** = Double-Angle.

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

Horizontals

Site No.:	88019
Engineer:	isaac.dodson
Date:	05/21/2021
Carrier:	0

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations *(ft)*	Type of Shape [1]	Diameter [2] *(in)*	Web Length [3] *(in)*	Flange Length [3] *(in)*	Thickness *(in)*	F_y *(ksi)*	B/B Spacing (in.)
1	0.000-25.00	2L		3.5	3	0.3125	33	
2	25.00-50.00	2L		3	3	0.3125	33	
3	50.00-75.00	2L		3.5	2.5	0.25	33	
4	75.00-100.0	2L		3	2.5	0.25	33	
5	100.0-125.0	2L		3	2.5	0.25	33	
6	125.0-137.5	2L		2.5	2.5	0.25	33	
7	137.5-150.0	2L		2.5	2.5	0.25	33	
8	150.0-162.5	2L		2.5	2.5	0.25	33	
9	162.5-175.0	2L		2.5	2.5	0.25	33	
10	175.0-187.5	2L		3	2.5	0.25	33	
11	187.5-200.0	2L		3	2.5	0.25	33	
12	200.0-212.5	2L		3.5	3	0.3125	33	
13	212.5-225.0	C		8	11.5		33	

Notes:

[1] Type of Horizontal Shape: **R** = Round, **L** = Single-Angle, **2L** = Double-Angle, **C** = Channel, **W** = W Shape

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

Built-up Diagonals

Site No.:	88019
Engineer:	isaac.dodson
Date:	05/21/2021
Carrier:	0

When inputting thickness values, include all decimal places.
Input diags. from left to center & from base section upward.

Tower Built-up Diag. #	Section Elevations *(ft)*	Type of Shape [1]	Diameter [2] *(in)*	Web Length [3] *(in)*	Flange Length [3] *(in)*	Thickness *(in)*	F_y *(ksi)*
1	0.000-25.00	2L		2.5	2	0.25	33
2	0.000-25.00	2L		2.5	2.5	0.25	33
3	0.000-25.00	2L		2.5	2.5	0.25	33
4	25.00-50.00	2L		2.5	2	0.25	33
5	25.00-50.00	2L		2.5	2	0.25	33
6	25.00-50.00	2L		2.5	2	0.25	33

Notes:

[1] Type of Diagonal Shape: **R** = Round, **L** = Single-Angle or **2L** = Double-Angle.

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

Built-up Horizontals

Site No.:	88019
Engineer:	isaac.dodson
Date:	05/21/2021
Carrier:	0

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations *(ft)*	Type of Shape [1]	Diameter [2] *(in)*	Web Length [3] *(in)*	Flange Length [3] *(in)*	Thickness *(in)*	F_y *(ksi)*	Is Horiz. Tension Only? *(Y/N)*
1	0.000-25.00	2L		3.5	3.5	0.3125	33	
2	25.00-50.00	2L		3.5	3.5	0.3125	33	

Notes:

[1] Type of Horizontal Shape: **R** = Round, **L** = Single-Angle or **2L** = Double-Angle.

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

Coax (p. 1 of 2)

Orig by MED, Improved by ABL. Last update 6/25/13 MED

Site No.:	88019
Engineer:	isaac.dodson
Date:	05/21/21
Carrier:	0

Description	From (ft)	To (ft)	Quantity	Shape	Width or Diameter** (in)	Perimeter (in)	Unit Weight (lb/ft)	In Face Zone? (Yes/No)	Include in Wind Load (Yes/No)
1 Ladder	0	225	1	Flat	2.000	8.0	6	No	Yes
2 1-1/4" Hybriflex Cable	0	198	1	Round	1.540	4.8	1	Yes	Yes
3 1 5/8" Hybriflex	0	196	3	Round	1.980	6.2	0.82	Yes	Yes
4 1 1/4" Coax	0	194	1	Round	1.550	4.9	0.63	Yes	Yes
5 7/8" Coax	0	185	1	Round	1.090	3.4	0.33	Yes	Yes
6 Wave Guide	0	225	1	Flat	2.000	8.0	6	Yes	Yes
7 0.39" (9.8mm) Cable	0	170	1	Round	2.000	1.2	0.07	Yes	Yes
8 0.92" (23.4mm) Cable	0	170	3	Round	2.000	2.9	0.89	Yes	Yes

**Note: *Actual block width multiplied by 0.75 (1.5 block drag factor actual divided by 2.0 flat*

Coax (p. 2 of 2)

Site No.:	880
Engineer:	isaac.d
Date:	05/2
Carrier:	

Exposure	B	Ke	0.949036
		α	7
Tia Code: TIA-222-H	**Topo Cat:** 1	z_g	1200
f		K_c	0.9

$k_{z\ max}$ 2.01

$k_{z\ min}$ 0.7

K_t

Description	From (ft)	To (ft)	Quantity	Face # (1-4, A-D)	Coax Width (in)	Coax Shape (Block / Flat / Ind)	% Exposed	Spacing (in)	Shape (Round/Flat)	Block Width (# coax)	Block Depth (# coax)	Perimeter (in)	Unit Weight (lb/ft)	In Face Zone (Yes/No)	Include in Wind Load (Yes/No)
Ladder	0	225	1	A	2.00	**Flat**	100	1	**Flat**	**1**	**1**	**8.0**	**6**	No	Yes
1-1/4" Hybriflex Cable	0	198	1	1	1.54	**Ind**	100	1	**Round**	**1**	**1**	**4.8**	**1**	Yes	Yes
1 5/8" Hybriflex	0	196	3	1	1.98	**Ind**	100	1	**Round**	**3**	**1**	**6.2**	**0.82**	Yes	Yes
1 1/4" Coax	0	194	1	1	1.55	**Ind**	100	1	**Round**	**1**	**1**	**4.9**	**0.63**	Yes	Yes
7/8" Coax	0	185	1	1	1.09	**Ind**	100	1	**Round**	**1**	**1**	**3.4**	**0.33**	Yes	Yes
Wave Guide	0	225	1	1	2.00	**Flat**	100	1	**Flat**	**1**	**1**	**8.0**	**6**	Yes	Yes
0.39" (9.8mm) Cable	0	170	1	1	0.39	**Ind**	100	1	**Round**	**1**	**1**	**1.2**	**0.07**	Yes	Yes
0.92" (23.4mm) Cable	0	170	3	1	0.92	**Ind**	100	1	**Round**	**3**	**1**	**2.9**	**0.89**	Yes	Yes
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
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								1						No	No
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								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No
								1						No	No

Task:	Determine Point Loads	
Tower Height:	150	ft
Gh:	0.85	
Wind Speed:	114	mph,Vult
Ice Wind Speed:	50	
Ice Density:	56	
Tower Type:	S	

Ice Thick:	1	in
Topographic Category (1-4):	1	
Exposure Category (B-D):	B	
Risk Category (1-4):	2	
Height of Crest (H) if Topo Cat. >1:	0	ft
Load Factor; Wind:	1	
Load Factor; Dead:	1.2	

Rooftop Speed Up Factor (Ks)	1	
Ground Elevation (AMSL)	1445	ft
Topographic Factor Procedure	Method 1	

Site No.:	
Engineer:	
Date:	
Carrier:	

No.	Carrier	Elevation (ft)	Quantity	# of Azimuths	Proposed?	Manufacturer	Model	Height (in)	Width (in)	Depth (in)	Weight (lbs/ea)	Flat/Round (F/R)	Reduction	C_AA_C (ft^2)	Weight (k)	Ka
1	-	225	1	4		-	-	0.001	0.001	0.001	0.001	R	0.001			0.001
	-	225	1	4		-	Platform w/ HR						1.000	80.00	9.00	1
2	-	206.25	1	4		-	-	0.001	0.001	0.001	0.001	R	0.001			0.001
	-	206.25	1	4		-	Catwalk						1.000	70.00	8.00	1
3	-	175	1	1		-	-	0.001	0.001	0.001	0.001	R	0.001			0.001
	-	175	1	1		-	Rest Platform						1.000	15.00	0.50	1
4	-	125	1	3		-	-	0.001	0.001	0.001	0.001	R	0.001			0.001
	-	125	1	3		-	Platform w/ HR						1.000	80.00	9.00	1
5	-	75	1	1		-	-	0.001	0.001	0.001	0.001	R	0.001			0.001
	-	75	1	1		-	Rest Platform						1.000	15.00	0.50	1
6	-	25	1	1		-	-	0.001	0.001	0.001	0.001	R	0.001			0.001
	-	25	1	1		-	Rest Platform						1.000	15.00	0.50	1
7	-	225	4	4		-	-	0.001	0.001	0.001	0.001	R	0.001			0.001
	-	225	4	4		-	KS15676						1.000	128.00	2.50	1
8	-	225	1	1		-	-	0.001	0.001	0.001	0.001	R	0.001			0.001
	-	225	1	1		-	-						0.001	0.00	0.00	0.001
9	SPRINT NEXTEL	196	3	3	Proposed		-	0.001	0.001	0.001	0.001	R	0.001			0.001
	SPRINT NEXTEL	196	3	3			Flat Sector Frames						0.750	17.90	0.40	0.75
10	SPRINT NEXTEL	196	3	3	Proposed	Ericsson	RRUS 4415 B66	15	13.2	5.4	46	F	0.500			0.8
	SPRINT NEXTEL	196	3	3			-						0.001	0.00	0.00	0.001
11	SPRINT NEXTEL	196	3	3	Proposed	Ericsson	Radio 4449 B71 B85A	15	13.2	10.5	75	F	0.500			0.8
	SPRINT NEXTEL	196	3	3			-						0.001	0.00	0.00	0.001
12	SPRINT NEXTEL	196	3	3	Proposed	Ericsson	4424 B25	17.1	14.4	11.3	86	F	0.500			0.8
	SPRINT NEXTEL	196	3	3			-						0.001	0.00	0.00	0.001
13	SPRINT NEXTEL	196	3	3	Proposed	Ericsson	Air6449 B41	33.1	20.6	8.6	104	F	0.744			0.8
	SPRINT NEXTEL	196	3	3			-						0.001	0.00	0.00	0.001
14	SPRINT NEXTEL	196	3	3	Proposed	RFS	APX16DWV-16DWVS-E-A20	55.9	13.3	3.1	40.7	F	0.661			0.8
	SPRINT NEXTEL	196	3	3			-						0.001	0.00	0.00	0.001
15	SPRINT NEXTEL	196	3	3	Proposed	RFS	APXVAALL24 43-U-NA20	95.9	24	8.5	122.8	F	0.716			0.8
	SPRINT NEXTEL	196	3	3			-						0.001	0.00	0.00	0.001
16	US DEPT OF HOMELAND SECURITY	194	1	1		-	-	0.001	0.001	0.001	0.001	R	0.001			0.001
	US DEPT OF HOMELAND SECURITY	194	1	1		Andrew	DB616E-BC						1.000	6.73	0.05	1
17	ALL-STAR TRANSPORTATION, LLC	174	1	1		-	-	0.001	0.001	0.001	0.001	R	0.001			0.001
	ALL-STAR TRANSPORTATION, LLC	174	1	1		Comprod	872F-70SM						1.000	2.56	0.02	1
18	AT&T MOBILITY	170	3	3	Proposed	Ericsson	RRUS 8843 B2, B66A	14.9	13.2	10.9	72	F	0.500			0.8
	AT&T MOBILITY	170	3	3			-						0.001	0.00	0.00	0.001
19	AT&T MOBILITY	170	3	3	Proposed	Ericsson	RRUS 4478 B14	16.5	13.4	7.7	59.9	F	0.500			0.8
	AT&T MOBILITY	170	3	3			-						0.001	0.00	0.00	0.001
20	AT&T MOBILITY	170	3	3	Proposed	Ericsson	RRUS 4449 B5, B12	17.9	13.2	9.4	71	F	0.500			0.8
	AT&T MOBILITY	170	3	3			-						0.001	0.00	0.00	0.001
21	AT&T MOBILITY	170	2	2	Proposed	Raycap	DC9-48-60-24-8C-EV	31.4	18.3	10.2	16	F	0.670			0.8
	AT&T MOBILITY	170	2	2			-						0.001	0.00	0.00	0.001
22	AT&T MOBILITY	170	3	3	Proposed	CCI	DMP65R-BU8D	96	20.7	7.7	95.7	F	0.727			0.8
	AT&T MOBILITY	170	3	3			-						0.001	0.00	0.00	0.001
23	AT&T MOBILITY	170	3	3	Proposed	CCI	TPA65R-BU8D	96	21	7.8	82.5	F	0.727			0.8
	AT&T MOBILITY	170	3	3			-						0.001	0.00	0.00	0.001
24	AT&T MOBILITY	170	3	3	Proposed		-	0.001	0.001	0.001	0.001	R	0.001			0.001
	AT&T MOBILITY	170	3	3			Flat Sector Frames						0.750	17.90	0.40	0.75
25																1
26																1
27																1
28																1
29																1
30																1
31																1
32																1
33																1
34																1
35																1
36																1
37																1
38																1
39																1
40																1
41																1
42																1
43																1
44																1
45																1
46																1
47																1
48																1
49																1
50																1

No.	Elevation	C_AA_C	C_AA_C (Ice)	Force	Force (Ice)	Weight	Weight (Ice)	60 Azi	Force	F (Ice)	Height	Sum of Forces (No I	
	(ft)	*(ft^2)*	*(ft^2)*	*(lb)*	*(lb)*	*(lb)*	*(lb)*	Mult.	mean	mean	Flag	60 Azi.	180 Azi.
1	225	0.00	0.00	0.000	0.000	0	0	**1.00**	**0.00**	**0.00**			
	225	80.00	108.00	2273.747	590.481	10800	14040	**1.00**	**1250.56**	**324.76**	1.5044444	2273.74696	
2	206.25	0.00	0.00	0.000	0.000	0	0	**1.00**	**0.00**	**0.00**	1.5044454		
	206.25	70.00	94.50	1940.678	503.985	9600	12480	**1.00**	**1067.37**	**277.19**	1.5048485	1940.677867	
3	175	0.00	0.00	0.000	0.000	0	0	**1.00**	**0.00**	**0.00**	1.5048495		
	175	15.00	20.25	396.789	103.044	600	780	**1.00**	**218.23**	**56.67**	1.5057143	396.7886762	
4	125	0.00	0.00	0.000	0.000	0	0	**1.00**	**0.00**	**0.00**	1.5057153		
	125	80.00	108.00	1922.238	499.196	10800	14040	**1.00**	**1057.23**	**274.56**	1.5080000	1922.237874	
5	75	0.00	0.00	0.000	0.000	0	0	**1.00**	**0.00**	**0.00**	1.5080010		
	75	15.00	20.25	311.475	80.889	600	780	**1.00**	**171.31**	**44.49**	1.5133333	311.4748928	
6	25	0.00	0.00	0.000	0.000	0	0	**1.00**	**0.00**	**0.00**	1.5133343		
	25	15.00	20.25	239.530	62.205	600	780	**1.00**	**131.74**	**34.21**	1.5400000	239.5296657	
7	225	0.00	0.00	0.000	0.000	0	0	**1.00**	**0.00**	**0.00**	1.5400010		
	225	512.00	691.20	14551.981	3779.081	12000	15600	**1.00**	**8003.59**	**2078.49**	1.5400010	14551.98055	
8	225	0.00	0.00	0.000	0.000	0	0	**1.00**	**0.00**	**0.00**	1.5400020		
	225	0.00	0.00	0.000	0.000	1	2	**1.00**	**0.00**	**0.00**	1.5044444	14551.98055	
9	196	0.00	0.00	0.000	0.000	0	0	**1.00**	**0.00**	**0.00**	1.5044454		
	196	30.21	40.78	618.997	160.751	1440	1872	**1.00**	**340.45**	**88.41**	1.5044454	618.9967638	
10	196	1.98	3.01	54.100	15.845	166	233	**1.00**	**29.75**	**8.71**	1.5044464		
	196	0.00	0.00	0.000	0.000	4	5	**1.00**	**0.00**	**0.00**	1.5044464	673.096543	
11	196	1.98	3.01	54.100	15.845	270	364	**1.00**	**29.75**	**8.71**	1.5044474		
	196	0.00	0.00	0.000	0.000	4	5	**1.00**	**0.00**	**0.00**	1.5044474	727.1963222	
12	196	2.46	3.65	67.280	19.208	310	420	**1.00**	**37.00**	**10.56**	1.5044484		
	196	0.00	0.00	0.000	0.000	4	5	**1.00**	**0.00**	**0.00**	1.5044484	794.4767749	
13	196	10.14	13.76	277.046	72.335	374	563	**1.00**	**152.38**	**39.78**	1.5044494		
	196	0.00	0.00	0.000	0.000	4	5	**1.00**	**0.00**	**0.00**	1.5044494	1071.523202	
14	196	10.46	13.67	285.702	71.868	147	297	**1.00**	**157.14**	**39.53**	1.5044504		
	196	0.00	0.00	0.000	0.000	4	5	**1.00**	**0.00**	**0.00**	1.5051020	1357.224834	
15	196	34.77	42.51	950.048	223.425	442	904	**1.00**	**522.53**	**122.88**	1.5051030		
	196	0.00	0.00	0.000	0.000	4	5	**1.00**	**0.00**	**0.00**	1.5051020	2307.273071	
16	194	0.00	0.00	0.000	0.000	0	0	**1.00**	**0.00**	**0.00**	1.5051030		
	194	6.73	9.09	183.347	47.614	61	80	**1.00**	**100.84**	**26.19**	1.5051546	183.3465312	
17	174	0.00	0.00	0.000	0.000	0	0	**1.00**	**0.00**	**0.00**	1.5051556		
	174	2.56	3.46	67.608	17.557	25	33	**1.00**	**37.18**	**9.66**	1.5057471	67.60781338	
18	170	1.97	3.00	51.598	15.124	259	350	**1.00**	**28.38**	**8.32**	1.5057481		
	170	0.00	0.00	0.000	0.000	4	5	**1.00**	**0.00**	**0.00**	1.5058824	51.59781565	
19	170	2.21	3.32	58.004	16.774	216	298	**1.00**	**31.90**	**9.23**	1.5058834		
	170	0.00	0.00	0.000	0.000	4	5	**1.00**	**0.00**	**0.00**	1.5058824	109.6020715	
20	170	2.36	3.53	61.987	17.809	256	352	**1.00**	**34.09**	**9.80**	1.5058834		
	170	0.00	0.00	0.000	0.000	4	5	**1.00**	**0.00**	**0.00**	1.5058824	171.5887091	
21	170	5.13	7.07	134.668	35.662	38	146	**1.00**	**74.07**	**19.61**	1.5058834		
	170	0.00	0.00	0.000	0.000	2	3	**1.00**	**0.00**	**0.00**	1.5058824	306.2570141	
22	170	31.19	37.75	818.303	190.507	345	735	**1.00**	**450.07**	**104.78**	1.5058834		
	170	0.00	0.00	0.000	0.000	4	5	**1.00**	**0.00**	**0.00**	1.5058824	1124.560383	
23	170	31.55	38.22	827.608	192.869	297	682	**1.00**	**455.18**	**106.08**	1.5058834		
	170	0.00	0.00	0.000	0.000	4	5	**1.00**	**0.00**	**0.00**	1.5058824	1952.168218	
24	170	0.00	0.00	0.000	0.000	0	0	**1.00**	**0.00**	**0.00**	1.5058834		
	170	30.21	40.78	594.332	154.345	1440	1872	**1.00**	**326.88**	**84.89**	1.5058824	2546.500326	
25					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	1.5058834		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
26					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
27					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
28					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
29					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
30					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
31					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
32					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
33					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
34					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
35					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
36					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
37					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
38					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
39					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
40					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
41					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
42					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
43					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
44					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
45					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
46					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
47					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
48					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
49					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	
50					#VALUE!			**1.00**	**#VALUE!**	**#VALUE!**	#DIV/0!		
								1.00	**#VALUE!**	**#VALUE!**	#DIV/0!	#VALUE!	

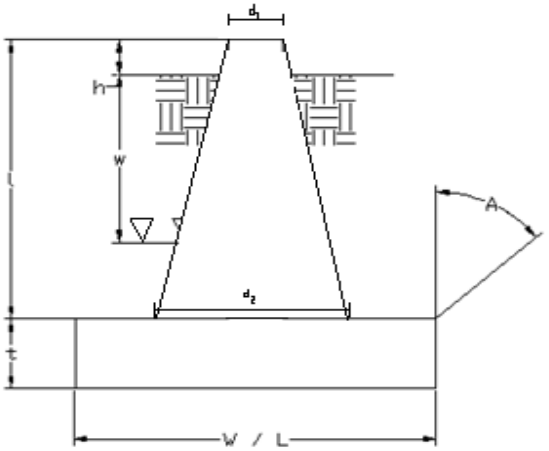
Foundation

Site No.:	88019
Engineer:	isaac.dodson
Date:	05/21/21
Carrier:	0

Design Loads (Factored)

Compression/Leg:	245.82	k
Uplift/Leg:	155.75	k
Shear/Leg	40.90	k

Face Width @ Top of Pier (d_1):	3.50	ft
Face Width @ Bottom of Pier (d_2):	8.50	ft
Total Length of Pier (l):	9.50	ft
Height of Pedestal Above Ground (h):	0.50	ft
Width of Pad (W):	20.50	ft
Length of Pad (L):	20.50	ft
Thickness of Pad (t):	2.00	ft
Water Table Depth (w):	30.00	ft
Unit Weight of Concrete:	150.0	pcf
Unit Weight of Soil (Above Water Table):	115.0	pcf
Unit Weight of Soil (Below Water Table):	52.6	pcf
Friction Angle of Uplift (A):	20	°
Ultimate Compressive Bearing Pressure:	12000	psf
Ultimate Skin Friction:	0	psf



Volume Pier (Total):	361.79	ft³
Volume Pad (Total):	840.50	ft³
Volume Soil (Total):	4736.93	ft³
Volume Pier (Buoyant):	0.00	ft³
Volume Pad (Buoyant):	0.00	ft³
Volume Soil (Buoyant):	0.00	ft³
Weight Pier:	54.27	k
Weight Pad:	126.08	k
Weight Soil:	544.75	k
Uplift Skin Friction:	0.00	k

Uplift Check

ϕs Uplift Resistance (k)	Ratio	Result
543.82	0.29	**OK**

Axial Check

ϕs Axial Resistance (k)	Ratio	Result
3782.25	0.06	**OK**

Anchor Bolt Check

Bolt Diameter (in)	2.5
# of Bolts	4
Steel Grade	A36
Steel Fy	36
Steel Fu	58
Detail Type	C

Usage Ratio	Result
0.31	**OK**

Exhibit 4

Antenna Mount Analysis Report

AMERICAN TOWER®
CORPORATION

Antenna Mount Analysis Report

ATC Site Name	:	**WINSTEAD, CT**
ATC Site Number	:	**88019**
Engineering Number	:	**13626849_C8_01**
Mount Elevation	:	**170 ft**
Carrier	:	**AT&T Mobility**
Carrier Site Name	:	**Winchester**
Carrier Site Number	:	**S4062**
Site Location	:	**428 Platt Hill Road** **Winsted, CT 06098-2522** **41.89828611 , -73.11601111**
County	:	**Litchfield**
Date	:	**May 6, 2021**
Max Usage	:	**51%**
Result	:	**Pass**

Prepared By:
Alan Samboy
Structural Engineer

Alan Samboy

Reviewed By:

COA: PEC.0001553

AMERICAN TOWER®
CORPORATION

Table of Contents

Introduction

The purpose of this report is to summarize results of the antenna mount analysis performed for AT&T Mobility at 170 ft.

Supporting Documents

Specifications Sheet	Sabre C10857007C, dated February 5, 2016
Radio Frequency Data Sheet	RFDS ID #S4062, dated March 5, 2021

Analysis

This antenna mount was analyzed using American Tower Corporation's Mount Analysis Program and RISA-3D

Basic Wind Speed:	114 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1'' radial ice concurrent
Codes:	ANSI/TIA-222-H
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 2
Feature:	Flat
Crest Height (H):	0 ft
Crest Length (L):	0 ft
Spectral Response:	Ss = 0.169, S1 = 0.054
Site Class:	D - Stiff Soil
Live Loads:	Lm = 500 lbs, Lv = 250 lbs

Conclusion

Based on the analysis results, the antenna mount meets the requirements per the applicable codes listed above. The mount can support the equipment as described in this report. Analysis based on new Sabre C10857007C sector frames or approved equivalent.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

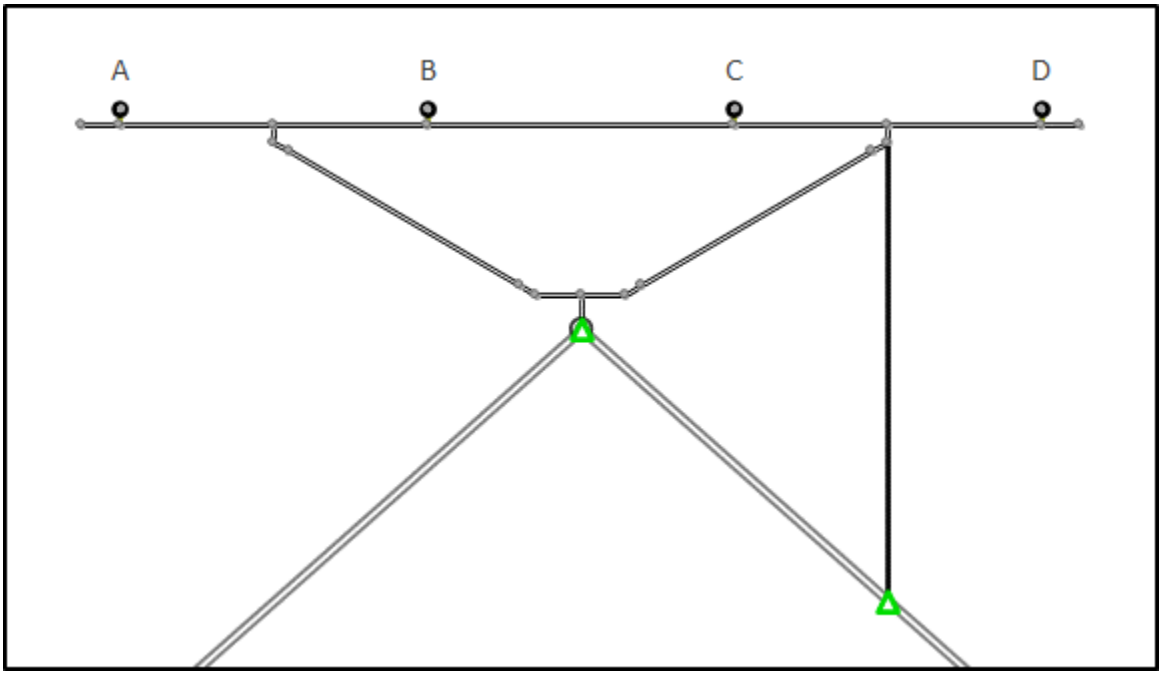
Application Loading

Mount Centerline (ft)	Antenna Centerline (ft)	Qty	Antenna Model
170.0	170.0	3	CCI TPA65R-BU8D
		3	CCI DMP65R-BU8D
		2	Raycap DC9-48-60-24-8C-EV
		3	Ericsson RRUS 4478 B14
		3	Ericsson RRUS 4449 B5, B12
		3	Ericsson RRUS 8843 B2, B66A

Structure Usages

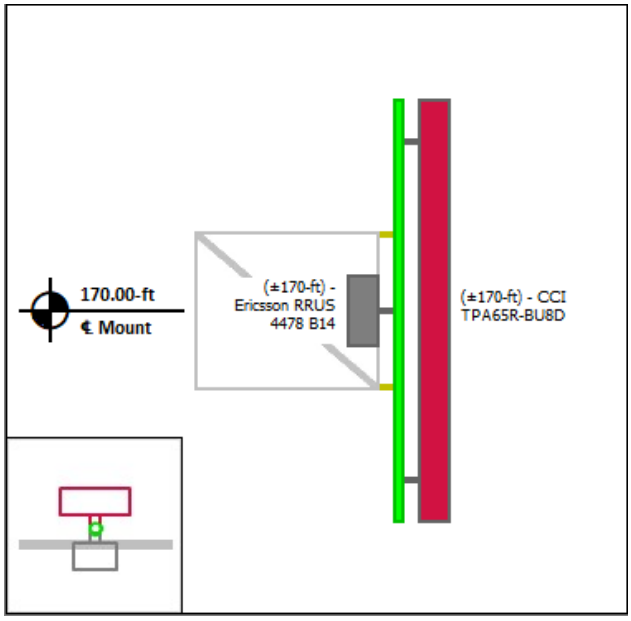
Structural Component	Controlling Usage	Pass/Fail
Horizontals	23%	Pass
Verticals	12%	Pass
Diagonals	9%	Pass
Tie-Backs	4%	Pass
Mount Pipes	51%	Pass

Mount Layout

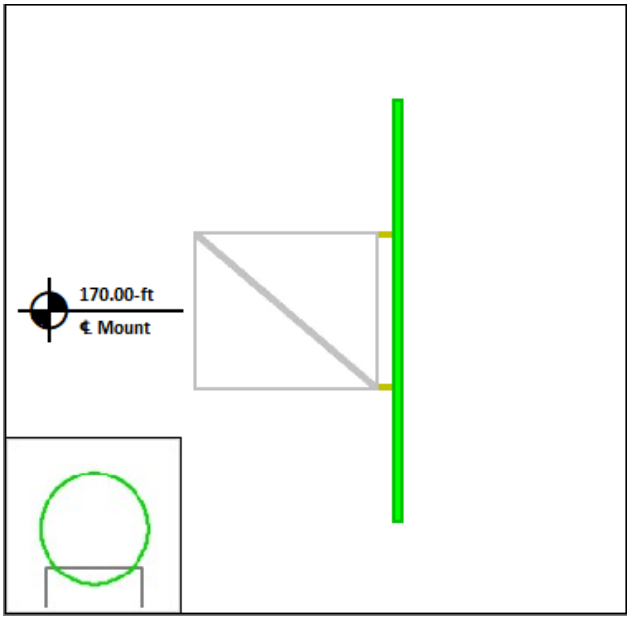


Equipment Layout

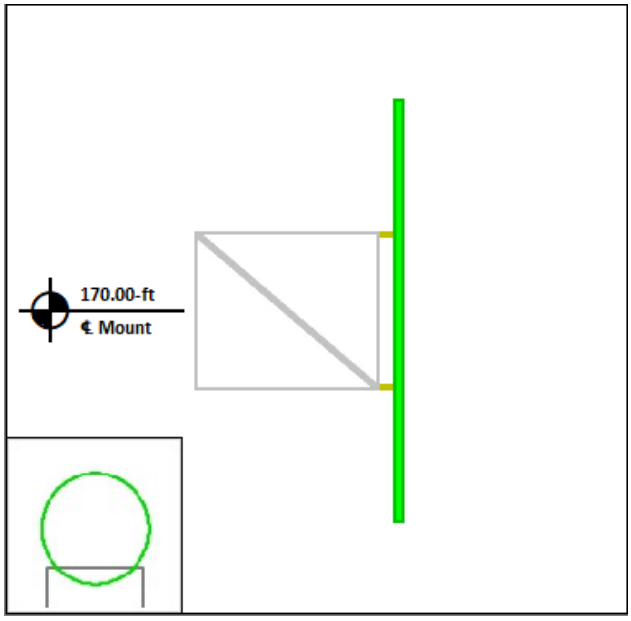
Mount Pipe A



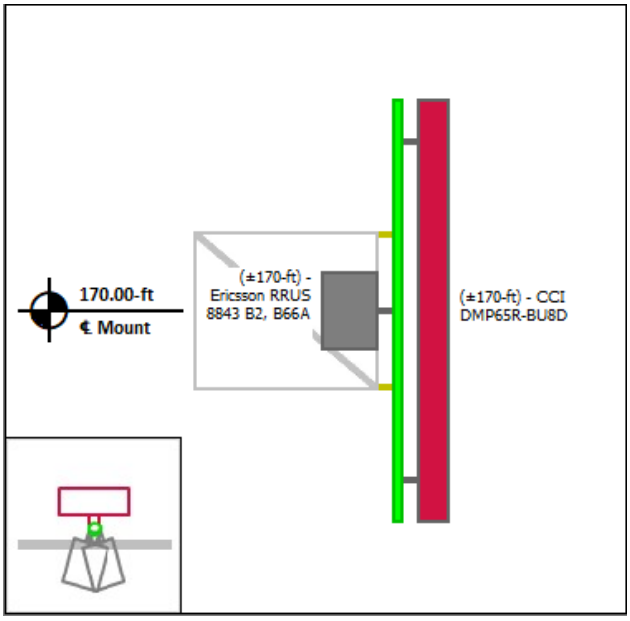
Mount Pipe B



Mount Pipe C



Mount Pipe D



Standard Conditions

All engineering services performed by A.T. Engineering Service, PLLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

All connections are to be verified for condition and tightness by the installation contractor preceding any changes to the appurtenance mounting system and/or equipment attached to it.

Unless explicitly agreed by both the client and A.T. Engineering Service, PLLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.

Exhibit 5

NIER Study Report

NIER Study Report

SITE NAME:

88029 Winstead

LOCATION:

Winstead, Connecticut

COMPANY:

American Tower
Woburn, Massachusetts

June 5th, 2021

Contents

Disclaimer Notice

This work is based upon our best interpretation of available information. However, these data and their interpretation are constantly changing. Therefore, we do not warrant that any undertaking based on this report will be successful, or that others will not require further research or actions in support of this proposal or future undertaking. In the event of errors, our liability is strictly limited to replacement of this document with a corrected one. Liability for consequential damages is specifically disclaimed. Any use of this document constitutes an agreement to hold Tower Engineering Professionals and its employees harmless and indemnify it for all liability, claims, demands, and litigation expenses and attorney's fees arising out of such use.

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NIER STUDY REPORT

88019 Winstead

Winstead, CT

INTRODUCTION

Tower Engineering Professionals (TEP) has been retained by American Tower (ATC) of Woburn, Massachusetts to evaluate the RF emissions of an existing tower at this location.

SITE AND FACILITY CONSIDERATIONS

Site Winstead is located at 428 Platt Hill Rd in Winstead, CT at coordinates 41.898286, -73.11601. The support structure is a 226' self-support tower. The installation consists of 12 antenna levels ranging from 100' to 276' above ground level. All antennae will have a radiation center as described above. All data used in this study was provided by one or more of the following sources:

1. ATC furnished data
2. Compiled from carrier and manufacturer standard configurations
3. Empirical data collected by TEP

A topographic map of the study area is located in Appendix 1. A satellite view of the study area is located in Appendix 2.

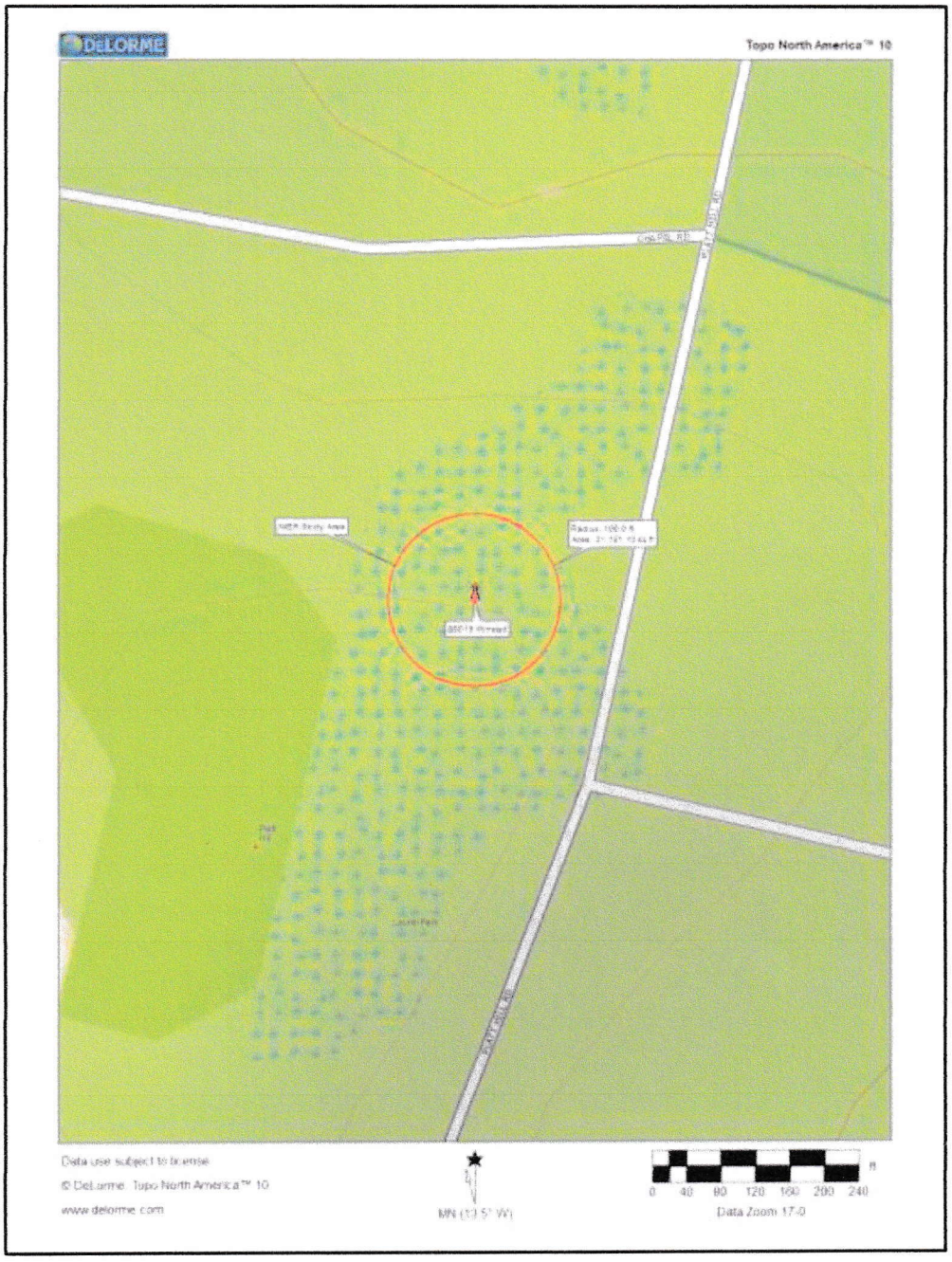
POWER DENSITY CALCULATIONS

Graphs of the power density at different distances from the transmitter, compared to FCC MPE general population and occupational limits, may be seen in Appendix 3. These limits are based upon the Information Relating to MPE Standards found in Appendix 6. Study methodology may be seen in Appendix 7, which describes the Non-Ionizing Radiation Prediction Models. Approximate radiation patterns may be found in Appendix 4. A list of antenna systems located at this site along with their associated Effective Radiated Power (ERP) may be found in Appendix 5. As ERP varies depending on traffic through the carrier's facility, the ERP listed is the ***maximum*** possible based upon advertised manufacturer specifications and will typically be less. This site ***IS*** in compliance with FCC OET-65 MPE limits.

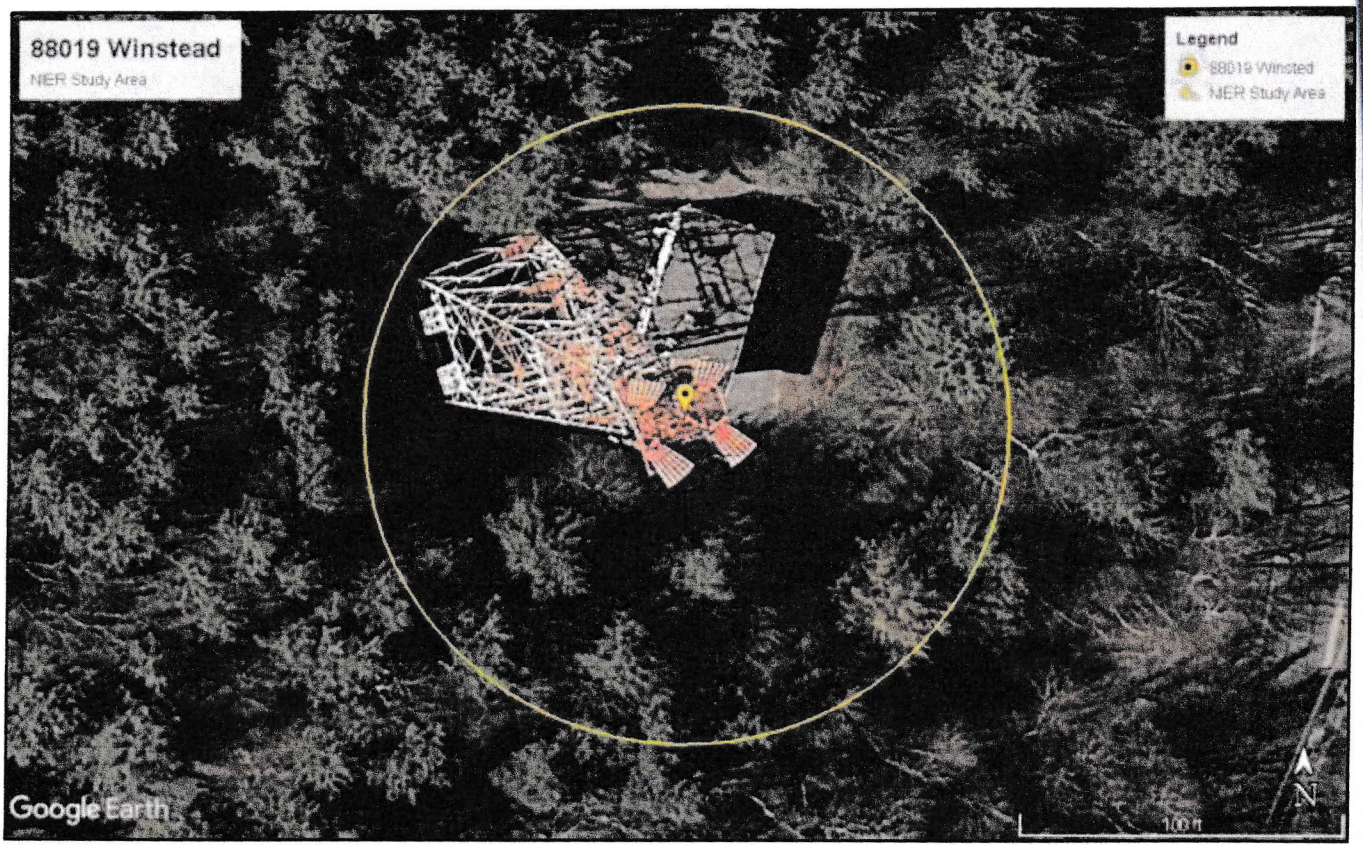
June 5th, 2021

Michael W. Hayden NCE CPBE CBNT AMD CPI
Director, RF Design & Services
Tower Engineering Professionals

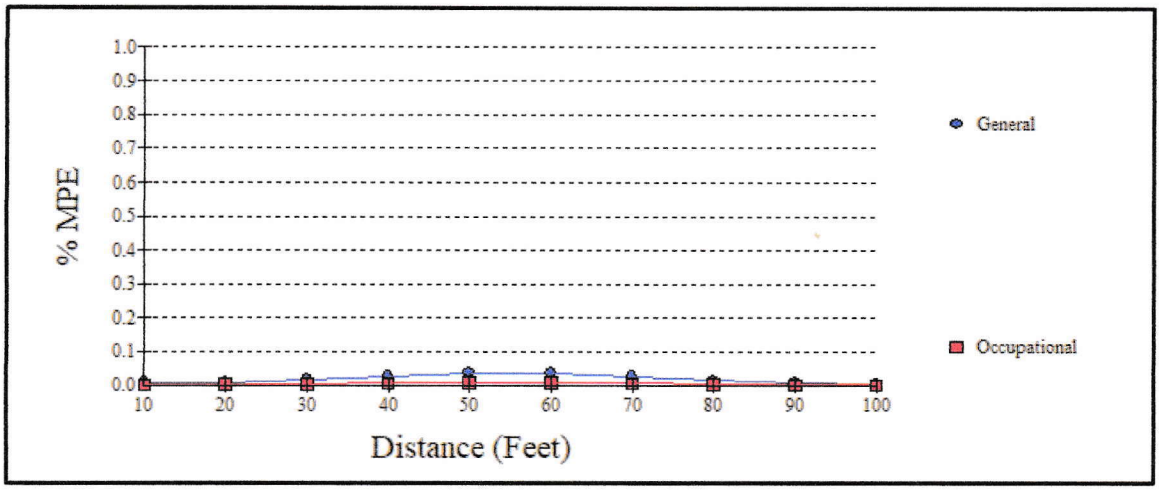
APPENDIX 1 Topographic Map



APPENDIX 2 Satellite Photo

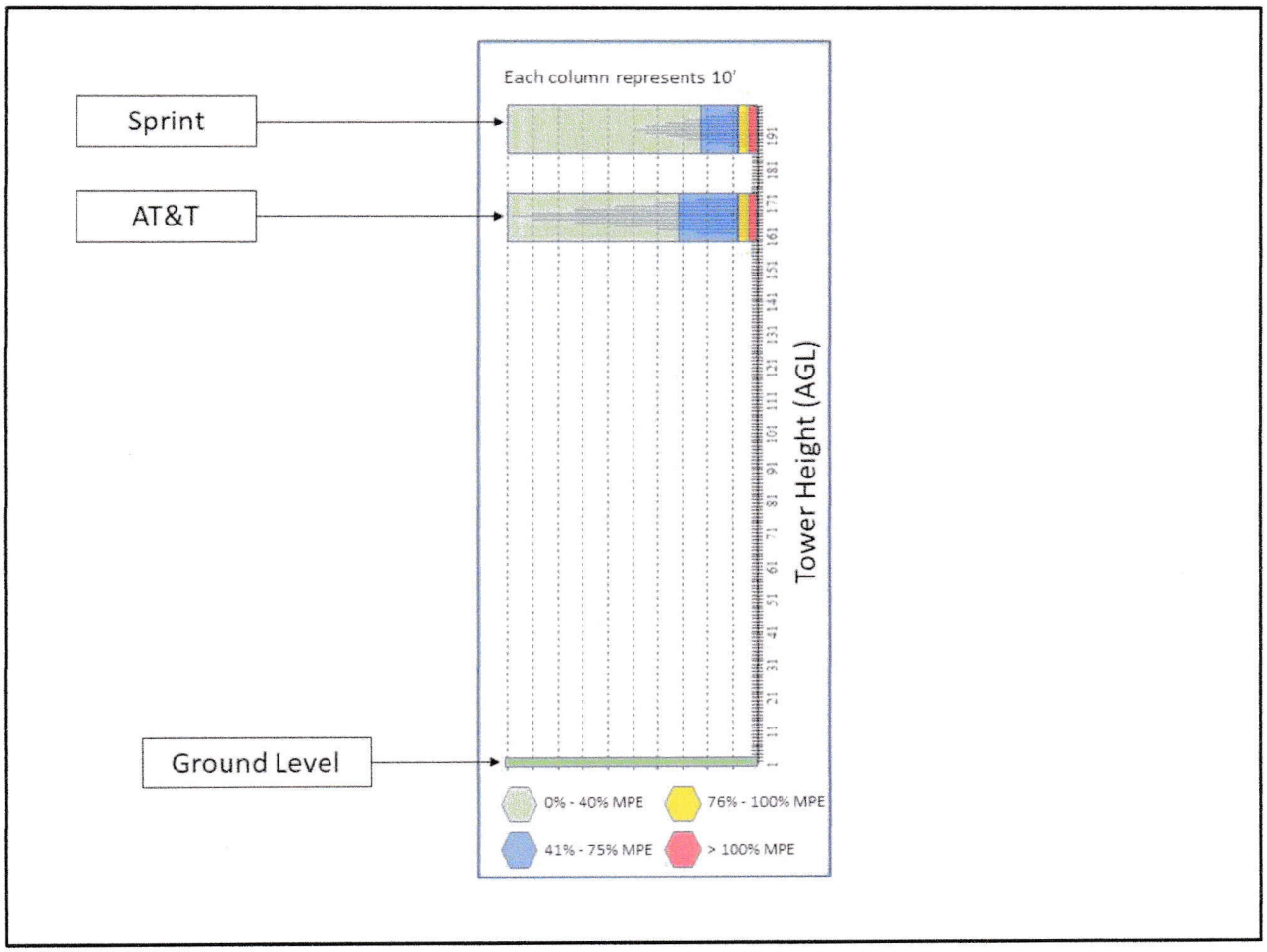


APPENDIX 3 FCC OET-65 MPE Limit Study



Maximum Power Density (@50'):	0.0004 mW/cm²
General Population MPE (@50'):	0.0374%
Occupational MPE (@50'):	0.0075%

APPENDIX 4 Tower Radiation Patterns



APPENDIX 5 Antenna List

ATC Site 88019 Winstead Antenna List								
Antenna Owner	Antenna Model	Quantity/Sector	Number of Sectors	Sector Azimuth (°T)	Frequency Bands (UL) (MHz)	Frequency Bands (DL) (MHz)	Max. ERP (watts)	Radiation Center (feet)
AT&T	Andrew KS15676	1	4	Unknown	Not Used	Not Used	N/A	226
DHS	Andrew DB616E	1	1	Omni	160-164	160-164	1754	215
Sprint	RFS APXVSPPP1-8-6-120	1	3	70/230/310	2496-2690	2496-2690	2877	196
Sprint	RFS APXVTM14-C-120	1	3	70/230/310	835-849, 1850-1855	880-894, 1930-193	2978	196
Sprint	RFS APXVTM14-C-120	1	3	70/230/310	2496-2690	2496-2690	2877	196
Sprint	RFS APXVAAll2443	1	3	70/230/310	668-688, 728-734, 1850-1910	622-642, 698-704, 1950-1990	1875	196
Sprint	Ericsson 6449 B41	1	3	70/230/310	2300-2700	2300-2700	7800	196
Sprint	RFS AXX16DWV-160	1	3	70/230/310	1710-1755	2110-2155	2877	196
DHS	Andrew DB616E	1	1	Omni	160-164	160-164	1754	194
All Star Transport	Comprod 872F-70SM	1	1	Omni	160	183	868	185
AT&T	CCI TPA65R BU8D	1	3	40/140/270	698-896, 1695-2400	698-896, 1695-2400	12000	170
AT&T	CCI DMP65RBU8E	1	3	40/140/270	698-896, 1695-2400	698-896, 1695-2400	9641	170

APPENDIX 6 Information Pertaining to MPE Studies

In 1985, the FCC first adopted guidelines to be used for evaluating human exposure to RF emissions. The FCC revised and updated these guidelines on August 1, 1996, as a result of a rule-making proceeding initiated in 1993. The new guidelines incorporate limits for Maximum Permissible Exposure (MPE) in terms of electric and magnetic field strength and power density for transmitters operating at frequencies between 300 kHz and 100 GHz.

The FCC's MPE limits are based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits were developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC's limits, and the NCRP and ANSI/IEEE limits on which they are based, are derived from exposure criteria quantified in terms of specific absorption rate (SAR). The basis for these limits is a whole-body averaged SAR threshold level of 4 watts per kilogram (4 W/kg), as averaged over the entire mass of the body, above which expert organizations have determined that potentially hazardous exposures may occur. The MPE limits are derived by incorporating safety factors that lead, in some cases, to limits that are more conservative than the limits originally adopted by the FCC in 1985. Where more conservative limits exist, they do not arise from a fundamental change in the RF safety criteria for whole-body averaged SAR, but from a precautionary desire to protect subgroups of the general population who, potentially, may be more at risk.

The FCC exposure limits are also based on data showing that the human body absorbs RF energy at some frequencies more efficiently than at others. The most restrictive limits occur in the frequency range of 30-300 MHz where whole-body absorption of RF energy by human beings is most efficient. At other frequencies, whole-body absorption is less efficient, and consequently, the MPE limits are less restrictive.

MPE limits are defined in terms of power density (units of milliwatts per centimeter squared: mW/cm^2), electric field strength (units of volts per meter: V/m) and magnetic field strength (units of amperes per meter: A/m). The far-field of a transmitting antenna is where the electric field vector (E), the magnetic field vector (H), and the direction of propagation can be considered to be all mutually orthogonal ("plane-wave" conditions).

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area. Additional details can be found in FCC OET 65.

APPENDIX 7 MPE Standards Methodology

This study predicts RF field strength and power density levels that emanate from communications system antennae. It considers all transmitter power levels (less filter and line losses) delivered to each active transmitting antenna at the communications site. Calculations are performed to determine power density and MPE levels for each antenna as well as composite levels from all antennas. The calculated levels are based on where a human (Observer) would be standing at various locations at the site. The point of interest where the MPE level is predicted is based on the height of the Observer.

Compliance with the FCC limits on RF emissions are determined by spatially averaging a person's exposure over the projected area of an adult human body, that is approximately six-feet or two-meters, as defined in the ANSI/IEEE C95.1 standard. The MPE limits are specified as time-averaged exposure limits. This means that exposure is averaged over an identifiable time interval. It is 30 minutes for the general population/uncontrolled RF environment and 6 minutes for the occupational/controlled RF environment. However, in the case of the general public, time averaging should not be applied because the general public is typically not aware of RF exposure and they do not have control of their exposure time. Therefore, it should be assumed that any RF exposure to the general public will be continuous.

The FCC's limits for exposure at different frequencies are shown in the following Tables.

Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	**Electric Field Strength (E) (V/m)**	**Magnetic Field Strength (H) (A/m)**	**Power Density (S) (mW/cm^2)**	**Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)**
0.3 - 3.0	614	1.63	100*	6
3.0 - 30	1842/f	4.89/f	$900/F^2$	6
30 - 300	61.4	0.163	1.0	6
300 - 1500	--	--	f/300	6
1500 - 100,000	--	--	5	6

f = frequency

* = Plane-wave equivalent power density

Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (E) (V/m)**	**Magnetic Field Strength (H) (A/m)**	**Power Density (S) (mW/cm^2)**	**Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)**
0.3 - 1.34	614	1.63	100*	30
1.34 - 30	824/f	2.19/f	$180/F^2$	30
30 -300	27.5	0.073	0.2	30
300 -1500	--	--	f/1500	30
1500 -100,000	--	--	1.0	30

f = frequency
* = Plane-wave equivalent power density

General population/uncontrolled exposures apply in situations in which the general public may be exposed or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

It is important to understand that these limits apply cumulatively to all sources of RF emissions affecting a given area. For example, if several different communications system antennas occupy a shared facility such as a tower or rooftop, then the total exposure from all systems at the facility must be within compliance of the FCC guidelines.

The field strength emanating from an antenna can be estimated based on the characteristics of an antenna radiating in free space. There are basically two field areas associated with a radiating antenna. When close to the antenna, the region is known as the Near Field. Within this region, the characteristics of the RF fields are very complex and the wave front is extremely curved. As you move further from the antenna, the wave front has less curvature and becomes planar. The wave front still has a curvature but it appears to occupy a flat plane in space (plane-wave radiation). This region is known as the Far Field.

Two models are utilized to predict Near and Far field power densities. They are based on the formulae in FCC OET 65. As this study is concerned only with Near Field calculations, we will only describe the model used for this study. For additional details, refer to FCC OET Bulletin 65.

Cylindrical Model (Near Field Predictions)

Spatially averaged plane-wave equivalent power densities parallel to the antenna may be estimated by dividing the antenna input power by the surface area of an imaginary cylinder surrounding the length of the radiating antenna. While the actual power density will vary along the height of the antenna, the average value along its length will closely follow the relation given by the following equation:

$$S = P \div 2\pi RL$$

Where:
S = Power Density
P = Total Power into antenna
R = Distance from the antenna
L = Antenna aperture length

For directional-type antennas, power densities can be estimated by dividing the input power by that portion of a cylindrical surface area corresponding to the angular beam width of the antenna. For example, for the case of a 120-degree azimuthal beam width, the surface area should correspond to 1/3 that of a full cylinder. This would increase the power density near the antenna by a factor of three over that for a purely omni-directional antenna. Mathematically, this can be represented by the following formula:

$$S = (180 / \theta_{BW}) P \div \pi RL$$

Where:
S = Power Density
θ_{BW} = Beam width of antenna in degrees (3 dB half-power point)
P = Total Power into antenna
R = Distance from the antenna
L = Antenna aperture length

If the antenna is a 360-degree omni-directional antenna, this formula would be equivalent to the previous formula.

Spherical Model (Far Field Predictions)

Spatially averaged plane-wave power densities in the Far Field of an antenna may be estimated by considering the additional factors of antenna gain and reflective waves that would contribute to exposure.

The radiation pattern of an antenna has developed in the Far Field region and the power gain needs to be considered in exposure predictions. Also, if the vertical radiation pattern of the antenna is considered, the exposure predictions would most likely be reduced significantly at ground level, resulting in a more realistic estimate of the actual exposure levels.

Additionally, to model a truly "worst case" prediction of exposure levels at or near a surface, such as at ground-level or on a rooftop, reflection off the surface of antenna radiation power can be assumed, resulting in a potential four-fold increase in power density.

These additional factors are considered and the Far Field prediction model is determined by the following equation:

$$S = EIRP \times Rc \div 4\pi R^2$$

Where:
S = Power Density
EIRP = Effective Radiated Power from antenna
Rc = Reflection Coefficient (2.56)
R = Distance from the antenna

The EIRP includes the antenna gain. If the antenna pattern is considered, the antenna gain is relative based on the horizontal and vertical pattern gain values at that particular location in space, on a rooftop or on the ground. However, it is recommended that the antenna radiation pattern characteristics not be considered to provide a conservative "worst case" prediction. This is the equation is utilized for the Far Field exposure predictions herein.

Exhibit 6

Original Facility Approval

Kimberly Revak

To: Kimberly Revak
Subject: FW: Town Permit for Tower at 428 Platt Hill Road

Email from Town of Winchester Zoning Enforcement Officer below about documents for the original approval of the Telecommunications Tower located at 428 Platt Hill Road:

Kimberly Revak | Site Acquisition Consultant
38 Treeline Court, Fishkill, New York, 12524
Phone: 845.242.6152 | krevak@clinellc.com
www.centerlinecommunications.com

From: Marc Melanson <mmelanson@townofwinchester.org>
Sent: Thursday, September 9, 2021 12:43 PM
To: Kimberly Revak <krevak@clinellc.com>
Subject: RE:

Kimberly,
I cannot locate the original permit for the cell tower. I only can locate permits for modifications to it.

Marc Melanson
Building Official
Zoning Enforcement Officer
Town of Winchester
City of Winsted
338 Main St.
Winsted, CT 06098
860-379-3818

Exhibit 7

(4) Notice Confirmations

Kimberly Revak

From: UPS <pkginfo@ups.com>
Sent: Thursday, September 9, 2021 10:23 PM
To: Kimberly Revak
Subject: *UPS Schedule Delivery Update, Tracking Number 1Z9Y45030318740252*

Your scheduled delivery date has changed.

Scheduled Delivery Date: Monday, 09/13/2021

Important Delivery Information

From:	CENTERLINE SITE ACQUISITION
Tracking Number:	1Z9Y45030318740252

Shipment Details

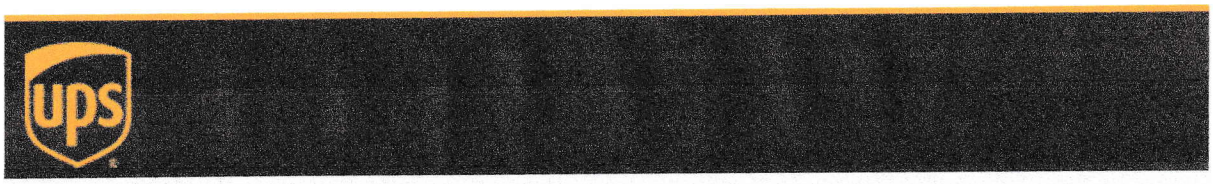
Ship To:	Gary Waitt - Site Development American Tower Corporation 10 Presidential Way WOBURN, MA 018011053 US
Number of Packages:	1
Weight:	1.0 LBS
Reference Number 1:	ATC - Winstead

It's the thought that counts — Create a Return

Download the UPS mobile app

Kimberly Revak

From: UPS <pkginfo@ups.com>
Sent: Thursday, September 9, 2021 10:23 PM
To: Kimberly Revak
Subject: *UPS Schedule Delivery Update, Tracking Number 1Z9Y45030306793263*



Your scheduled delivery date has changed.
Scheduled Delivery Date: Monday, 09/13/2021

Important Delivery Information

From:	CENTERLINE SITE ACQUISITION
Tracking Number:	1Z9Y45030306793263

Shipment Details

Ship To:	Gary Waitt - Site Development American Tower Corporation 10 Presidential Way WOBURN, MA 018011053 US
Number of Packages:	1
Weight:	1.0 LBS
Reference Number 1:	Winstead - LL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Kimberly Revak

From: UPS <pkginfo@ups.com>
Sent: Thursday, September 9, 2021 10:24 PM
To: Kimberly Revak
Subject: *UPS Schedule Delivery Update, Tracking Number 1Z9Y45030305625188*

Your scheduled delivery date has changed.
Scheduled Delivery Date: Friday, 09/10/2021

Important Delivery Information

From:	CENTERLINE SITE ACQUISITION
Tracking Number:	1Z9Y45030305625188

Shipment Details

Ship To:	Attn: Joshua Kelly - Town Manager Town of Winchester Town Hall 338 Main Street WINSTED, CT 060981697 US
Number of Packages:	1
Weight:	1.0 LBS
Reference Number 1:	Winstead - Town

It's the thought that counts Create a Return

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Kimberly Revak

From: UPS <pkginfo@ups.com>
Sent: Thursday, September 9, 2021 10:23 PM
To: Kimberly Revak
Subject: *UPS Schedule Delivery Update, Tracking Number 1Z9Y45030307988177*

Your scheduled delivery date has changed.
Scheduled Delivery Date: Friday, 09/10/2021

Important Delivery Information

From:	CENTERLINE SITE ACQUISITION
Tracking Number:	1Z9Y45030307988177

Shipment Details

Ship To:	Pamela Colombie / Planning Dept Town of Winchester Town Hall 338 Main Street WINSTED, CT 060981697 US
Number of Packages:	1
Weight:	1.0 LBS
Reference Number 1:	Winstead - Zoning


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