

Northeast Site Solutions Victoria Masse 420 Main Street #2, Sturbridge, MA 01566 860-306-2326 victoria@northeastsitesolutions.com

February 23, 2023

Members of the Siting Council Connecticut Siting Council Ten Franklin Square New Britain, CT 06051

RE: Notice of Exempt Modification

47 Turnpike Road, Willington CT 06279

Latitude: 41.92553767 Longitude: -72.25236900

T-Mobile Site#: CT11527B _L600

Dear Ms. Bachman:

T-Mobile currently has six (6) antennas at the 159-foot mount on the existing 170-foot monopole located at 47 Turnpike Road, Willington CT 06279. The property is owned by Kelley M Barber. The tower is owned by Cordless Data Transfer Inc. T-Mobile now intends to remove six (6) existing antenna and replace with three (3) new 600/700/1900/2100 MHz antenna. The new antennas would be installed at the 159-foot level of the monopole. This modification includes B2, B5 hardware that is both 4G (LTE), and 5G capable.

T-Mobile Planned Modifications:

Remove:

(3) EMS-RR90-17-02DP Antenna

Remove and Replace:

- $(3)\ LNX-6515DS-A1M\ Antenna\ (Remove)-(3)\ FS\ APXVAALL24_43-U-NA20\ 600/700/1900MHz\ Antenna\ (Replace)-(3)\ FS\ APXVAALL24_43-U-NA20\ 600/700/1900MHz\ APXVAAL24_43-U-NA20\ 600/700/1900MHz\ APXVAALL24_43-U-NA20\ 600/700/1900$
- (1) Platform (Remove) (1) SitePro 1 Platform (Replace)

Install New:

- (3) RRU 4480 B71+B85
- (1) Hybrid Line

Existing to Remain:

- (12) Coax Line
- (3) TMA



This facility was approved by the Connecticut Siting Council in Docket No. 267 on February 3, 2004. Please see attached.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 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.S.C.A. § 16-50j-73, a copy of this letter is being sent to The Honorable Erika G. Wiecenski, First Selectman for the Town of Willington, Michael D'Amato, Zoning Agent, Kelley M Barber the property owner and Cordless Data Transfer the tower owner.

- 1. The proposed modifications will not result in an increase in the height of the existing structure.
- 2. The proposed modifications will not require the 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 replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
- 5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
- 6. The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, T-Mobile 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).

Sincerely,

Victoria Masse

Mobile: 860-306-2326 Fax: 413-521-0558

Victoria Masse

Office: 420 Main Street, Unit 2, Sturbridge MA 01566

Email: victoria@northeastsitesolutions.com



Attachments:

cc: The Honorable Erika G. Wiecenski, First Selectman Town Office Building 40 Old Farms Road Willington, CT 06279

Michael D'Amato, Zoning Agent Town Office Building 40 Old Farms Road Willington, CT 06279

Kelley M Barber – property owner 29 Cassidy Hill Rd, Coventry, CT 06238

Cordless Data Transfer – tower owner 600 Old Hartford Rd Colchester, CT 064152417

Exhibit A

Original Facility Approval

Connecticut Siting Council (VCSC)

CT.gov Home (/) Connecticut Siting Council (/CSC) Docket 267 Decision and Order

Decisions (/CSC/Decisions/Decisions)	>
Meetings and Minutes (/CSC/Common-Elements/v4-template/Council-Activity)	>
Pending Matters (/CSC/1_Applications-and-Other-Pending-Matters/Pending-Matters)	>
About Us (/CSC/Common-Elements/Common-Elements/Connecticut-Siting-Council Description)	>
Contact Us (/CSC/Common-Elements/Common-Elements/Contact-Us)	>
Search Connecticut Siting Council	
	٥

DOCKET NO. 267 - Cordless Data Transfer, Inc. application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a wireless telecommunications facility at one of two sites at Turnpike Road, Map 45-Lot 4, Willington, Connecticut.

- } Connecticut
- } Siting
- } Council

February 3, 2004

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to Cordless Data Transfer, Inc. for the construction, maintenance and operation of a wireless telecommunications facility at the prime site on Turnpike Road, Map 45-Lot 4, Willington, Connecticut. The Council denies certification of the alternate site.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

- 1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of AT&T Wireless PCS LLC and other entities, both public and private, but such tower shall not exceed a total height of 170 feet above ground level.
- 2. The tower enclosure shall be moved approximately 25 feet to the southeast. Development of the site shall not disturb the intermittent watercourse (wetland drain) adjacent to the site.
- 3. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include:
- a) a detailed site development plan that depicts the location of the access road, compound, tower, utility line, erosion and sedimentation control features, extent of site clearing and grading, and landscaping. Erosion and sedimentation controls shall be consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended; and
- b) specifications for the tower, tower foundation, antennas, equipment building, and security fence.
- 4. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case

modeling of electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of electromagnetic radio frequency power density is submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

- 5. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
- 6. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing. The Certificate Holder shall provide reasonable space on the tower for no compensation for any municipal antennas, provided tower space is available and such antennas are compatible with the structural integrity of the tower.

- 7. If the facility does not initially provide wireless services within one year of completion of construction or ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.
- 8. Any antenna that becomes obsolete and ceases to function shall be removed within 60 days after such antennas become obsolete and cease to function.
- 9. Unless otherwise approved by the Council, this Decision and Order shall be void if the facility authorized herein is not operational within one year of the effective date of this Decision and Order or within one year after all appeals to this Decision and Order have been resolved.

Pursuant to General Statutes § 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in <u>The Hartford Courant</u> and <u>The Chronicle</u>.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The parties and intervenors to this proceeding are:

<u>Applicant</u>	<u>Its Representative</u>
Cordless Data Transfer, Inc.	Charles Andres, Esq.
	Tyler Cooper & Alcorn, LLP
	205 Church Street
	P.O. Box 1936
	New Haven, Connecticut 06509-1910
	Robert J. Francis, President
	Cordless Data Transfer, Inc.
	P.O. Box 363
	17 Ridgewood Drive
	Marlborough, Connecticut 06447

<u>Intervenor</u>	<u>Its Representative</u>
AT&T Wireless PCS, LLC	Christopher B. Fisher, Esq.
d/b/a AT&T Wireless	Cuddy & Feder LLP
	90 Maple Avenue
	White Plains, New York 10601

Exhibit B

Property Card

47 TURNPIKE RD

Location 47 TURNPIKE RD **Mblu** 45/ / 004-0A/ /

Acct# 00007401 Owner BARBER KELLEY M

Assessment \$39,010 Appraisal \$55,730

> PID 6225 **Building Count** 1

Current Value

Appraisal			
Valuation Year Improvements Land Total			
2018	\$0	\$55,730	\$55,730
Assessment			
Valuation Year Improvements Land Total			
2018	\$0	\$39,010	\$39,010

Owner of Record

Owner BARBER KELLEY M Sale Price \$0

Co-Owner MURRAY BRIAN P Certificate

Address 29 CASSIDY HILL RD Book & Page 225/967 COVENTRY, CT 06238

Sale Date 02/18/2021

Building Information

Building 1 : Section 1

Year Built:

Living Area: 0 Replacement Cost: \$0

Building Percent Good: Replacement Cost

\$0 Less Depreciation:

Building Attributes			
Field Description			
Style	Vacant Land		
Model			
Grade:			
Stories:			
Occupancy			

Exterior Wall 1	
Exterior Wall 2	
Roof Structure:	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Total Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Fireplaces	
Bsmt Garage	

Building Photo



(http://images.vgsi.com/photos/WillingtonCTPhotos//default.jpg)

Building Layout

(ParcelSketch.ashx?pid=6225&bid=20274)

Building Sub-Areas (sq ft)	<u>Legend</u>
No Data for Building Sub-Areas	

Extra Features

Extra Features	<u>Legend</u>
No Data for Extra Features	

Land

Land Use		Land Line Valua	Land Line Valuation	
Use Code	1300	Size (Acres)	11.61	
Description	Vacant Land	Frontage		
Zone		Depth		
Neighborhood	302	Assessed Value	\$39,010	
Alt Land Appr	No	Appraised Value	\$55,730	
Category				

Outbuildings

Outbuildings	<u>Legend</u>
No Data for Outbuildings	

Valuation History

Appraisal Appraisal			
Valuation Year	Improvements	Land	Total
2019	\$0	\$55,730	\$55,730

Assessment			
Valuation Year	Improvements	Land	Total
2019	\$0	\$1,950	\$1,950

(c) 2021 Vision Government Solutions, Inc. All rights reserved.

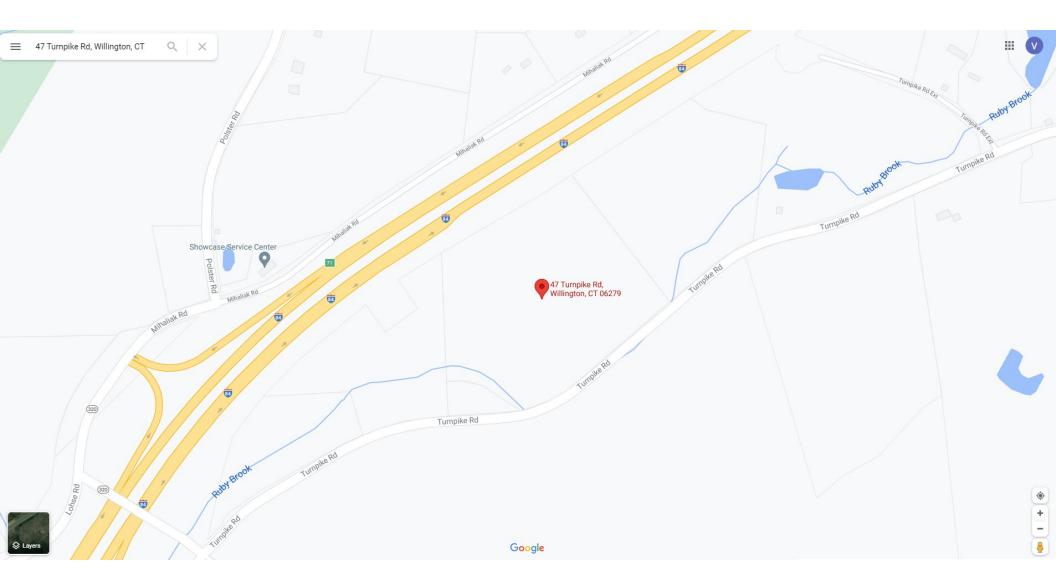


Exhibit C

Construction Drawings

MODIFICATION OF EXISTING WIRELESS FACILITY BY

T··Mobile·

T-MOBILE NORTHEAST LLC **PROJECT TITLE: L600**

SITE NUMBER: CT11527B

SITE NAME: CT527 / CORDLESS WILINGTON

SITE ADDRESS: 47 TURNPIKE ROAD WILLINGTON, CT 06279

PROJECT NOTES:

- . THIS IS AN UNMANNED TELECOMMUNICATION FACILITY AND NOT FOR HUMAN HABITATION HANDICAPPED ACCESS IS NOT REQUIRED. POTABLE WATER OR SANITARY SERVICE IS NOT REQUIRED.
- NO OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES REQUIRED.
- DEVELOPMENT AND USE OF THE SITE WILL CONFORM TO ALL APPLICABLE CODES, ORDINANCES AND SPECIFICATIONS.

CODE COMPLIANCE:

ALL WORK SHALL COMPLY WITH THE CURRENT NATIONAL AND CONNECTICUT STATE BUILDING AND LIFE SAFETY CODES, SUPPLEMENTS AND AMENDMENTS INCLUDING BUT NOT LIMITED TO THE LATEST EDITION OF:

2022 CONNECTICUT STATE BUILDING CODE (2018 IBC).

ANSI/TIA-222-H STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.

NATIONAL ELECTRICAL CODE (NEC) FOR POWER AND GROUNDING REQUIREMENTS.

OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA).

NFPA - NATIONAL FIRE PROTECTION ASSOCIATION



Connecticut - Call Before You Dig 811 or

Advance Notice

Minimum of 2 working days in advance, no more than 30 days in advance

CONTRACTOR'S NOTES:

1-800-922-4455

CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON THE JOB SITE. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK. FAILURE TO NOTIFY THE ARCHITECT/ENGINEER PLACES THE RESPONSIBILITY ON THE CONTRACTOR TO CORRECT THE DISCREPANCIES AT THE CONTRACTOR'S EXPENSE.

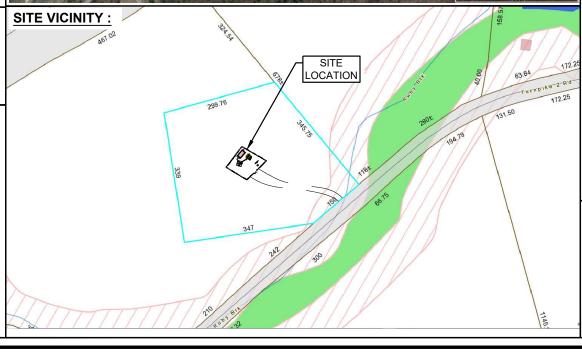
REFER TO MOUNT ANALYSIS REPORT - REPLACEMENT - REV.1, DATED 1/18/23 PREPARED BY

EFI GLOBAL INC.

APPROVALS:

FSA CM	DATE
RF ENGINEER	DATE
FOPS	DATE
T-MOBILE ENGINEERING AND DEVELOPMENT	DATE
	DATE
	DATE





PROJECT SCOPE:

PROJECT SCOPE CONSIST OF REPLACING EXISTING ANTENNAS AND EQUIPMENT AS FOLLOWS:

SECTOR MOUNT: REPLACE EXISTING ANTENNA SECTOR MOUNT WITH A NEW PLATFORM MOUNT.

ANTENNAS: REPLACE (6) EXISTING ANTENNAS WITH (3) NEW ANTENNAS, ADD (3) NEW RADIOS BEHIND NEW ANTENNAS.

CABINETS: UPGRADE THE EXISTING 6201 ODE CABINET INTERNALLY. CABLES: EXISTING (12) 1-5/8" COAX, ADD (1) 6/24 HYBRID CABLE.

PROJECT INFORMATION:

ADDRESS: 47 TURNPIKE ROAD WILLINGTON, CT 06279
PARCEL ID: 45/004-0A
ACCOUNT# 00007401
LAND USE: 6100-FOREST

LAND USE: 6100-FOREST ZONING DISTRICT: DI

LAND AREA: 11.61 AC COORDINATES: 41° 55' 32.11" N 72° 15' 08.43" W

GROUND ELEV: 685'± (AMSL)

PROJECT TEAM:

APPLICANT: T-MOBILE NORTHEAST, LLC. 35 GRIFFIN ROAD SOUTH

BLOOMFIELD, CT 06002 860-692-7100

PROPERTY OWNER: BARBER HAZEL M 88 SLATER RD TOLLAND CT 06084

PROJECT MANAGER: NORTHEAST SITE SOLUTIONS

420 MAIN STREET, BLDG 4 STURBRIDGE, MA 01566 MATT BANDLE

MATT@NORTHEASTSITESOLUTIONS.COM

MATT@NORT 201-776-8521

201-770-8521

462 WALNUT ST NEWTON, MA 02460 SAFED MOSSAVAT

SMOSSAVAT@FORESITELLC.COM

617-212-3123

FORESITE LLC

SHEET INDEX:

ENGINEERING CONSULTANTS:

T-1: TITLE SHEET
N-1: GENERAL NOTES
N-2: CONSTRUCTION NOTES

A-1: PLOT PLAN

A-2: SITE PLAN
A-3: ELEVATION AND ANTENNA PLANS

A-4: ANTENNA SPECIFICATIONS AND MOUNTING DETAILS

ELECTRICAL AND GROUNDING DETAILS

APPLICANT: - Mobile T-MOBILE NORTHEAST LLC

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100



STURBRIDGE, MA 01566 203-275-6669

ENGINEERING CONSULTANT:



462 WALNUT STREET, SUITE 1 NEWTON, MA 02460 617-212-3123



THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF FORESITE, LLC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT.
DUPLICATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED. DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

	REV	DESCRIPTION	DATE
l	Α	PRELIMINARY	07/14/22
l	0	FINAL ISSUED	07/19/22
l	1	REVISED PER NEW STATE CODES	01/23/23
l	2	REVISED PER COMMENTS	01/30/23
l			
l			
l			
1	l		J

SITE NUMBER: CT11527B SITE NAME: CT527 / CORDLESS

SITE ADDRESS: 47 TURNPIKE ROAD WILLINGTON, CT 06279

> SHEET TITLE: T-1: TITLE SHEET

GENERAL NOTES:

- 1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
- 2. THE ARCHITECT/ENGINEER HAS MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
- 3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE CLIENT'S REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK
- 5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
- 6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S / VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE
- 7. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS DURING CONSTRUCTION.
- 8. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT SECTIONS OF THE BASIC STATE BUILDING CODE, LATEST EDITION, AND ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJEC
- 9. THE CONTRACTOR SHALL NOTIFY THE CLIENT'S REPRESENTATIVE IN WRITING WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE CLIENT'S REPRESENTATIVE.
- 10. THE WORK SHALL CONFORM TO THE CODES AND STANDARDS OF THE FOLLOWING AGENCIES AS FURTHER CITED HEREIN:
- A. ASTM: AMERICAN SOCIETY FOR TESTING AND MATERIALS, AS PUBLISHED IN "COMPILATION OF ASTM STANDARDS BUILDING CODES" OR LATEST EDITION.
- B. AWS: AMERICAN WELDING SOCIETY INC. AS PUBLISHED IN "STANDARD D1.1-08, STRUCTURAL WELDING CODE" OR LATEST EDITION.
- C. AISC: AMERICAN INSTITUTE FOR STEEL CONSTRUCTION AS PUBLISHED IN "CODE FOR STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"; "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" (LATEST EDITION).
- 11. BOLTING:
- A. BOLTS SHALL BE CONFORMING TO ASTM A325 HIGH STRENGTH, HOT DIP GALVANIZED WITH ASTM A153 HEAVY HEX TYPE NUTS.
- B. BOLTS SHALL BE 3/4" MINIMUM (UNLESS OTHERWISE NOTED)
- C. ALL CONNECTIONS SHALL BE 2 BOLTS MINIMUM.
- 12. FABRICATION:
- A. FABRICATION OF STEEL SHALL CONFORM TO THE AISC AND AWS STANDARDS AND CODES (LATEST EDITION).
- B. ALL STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 (LATEST EDITION), UNLESS OTHERWISE NOTED.
- 13. ERECTION OF STEEL:
- A. PROVIDE ALL ERECTION EQUIPMENT, BRACING, PLANKING, FIELD BOLTS, NUTS, WASHERS, DRIFT PINS, AND SIMILAR MATERIALS WHICH DO NOT FORM A PART OF THE COMPLETED CONSTRUCTION BUT ARE NECESSARY FOR ITS PROPER ERECTION.
- B. ERECT AND ANCHOR ALL STRUCTURAL STEEL IN ACCORDANCE WITH AISC REFERENCE STANDARDS. ALL WORK SHALL BE ACCURATELY SET TO ESTABLISHED LINES AND ELEVATIONS AND RIGIDLY FASTENED IN PLACE WITH SUITABLE ATTACHMENTS TO THE CONSTRUCTION OF THE BUILDING.
- C. TEMPORARY BRACING, GUYING AND SUPPORT SHALL BE PROVIDED TO KEEP THE STRUCTURE SAFE AND ALIGNED AT ALL TIMES DURING CONSTRUCTION, AND TO PREVENT DANGER TO PERSONS AND PROPERTY. CHECK ALL TEMPORARY LOADS AND STAY WITHIN SAFE CAPACITY OF ALL BUILDING COMPONENTS.

- 14. RELATED WORK, FURNISH THE FOLLOWING WORK AS SPECIFIED UNDER CONSTRUCTION DOCUMENTS, BUT COORDINATE WITH OTHER TRADES PRIOR TO BID:
- A. FLASHING OF OPENING INTO OUTSIDE WALLS
- B. SEALING AND CAULKING ALL OPENINGS
- C. PAINTING
- D. CUTTING AND PATCHING
- 15. REQUIREMENTS OF REGULATORY AGENCIES:
- A. FURNISH U.L. LISTED EQUIPMENT WHERE SUCH LABEL IS AVAILABLE. INSTALL IN CONFORMANCE WITH U.L. STANDARDS WHERE APPLICABLE.
- B. INSTALL ANTENNA, ANTENNA CABLES, GROUNDING SYSTEM IN ACCORDANCE WITH DRAWINGS AND SPECIFICATION IN EFFECT AT PROJECT LOCATION AND RECOMMENDATIONS OF STATE AND LOCAL BUILDING CODES, AND SPECIAL CODES HAVING JURISDICTION OVER SPECIFIC PORTIONS OF WORK. THIS WORK INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:
- C. TIA-EIA 222 (LATEST EDITION). STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.
- D. FAA FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR AC 70/7460-IH, OBSTRUCTION MARKING AND LIGHTING.
- E. FCC FEDERAL COMMUNICATIONS COMMISSION RULES AND REGULATIONS FORM 715, OBSTRUCTION MARKING AND LIGHTING SPECIFICATION FOR ANTENNA STRUCTURES AND FORM 715A, HIGH INTENSITY OBSTRUCTION LIGHTING SPECIFICATIONS FOR ANTENNA STRUCTURES.
- F. AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 BOLTS (LATEST EDITION).
- G. NEC NATIONAL ELECTRICAL CODE ON TOWER LIGHTING KITS.
- H. UL UNDERWRITER'S LABORATORIES APPROVED ELECTRICAL PRODUCTS.
- I. IN ALL CASES, PART 77 OF THE FAA RULES AND PARTS 17 AND 22 OF THE FCC RULES ARE APPLICABLE AND IN THE EVENT OF CONFLICT, SUPERSEDE ANY OTHER STANDARDS OR SPECIFICATIONS.
- J. 2018 LIFE SAFETY CODE NFPA 101.

APPLICANT:

T - Mobile - T-Mobile - T-Mobile NORTHEAST LLC

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100

PROJECT MANAGER



420 MAIN STREET, BLDG 4 STURBRIDGE, MA 01566 203-275-6669

ENGINEERING CONSULTANT:



462 WALNUT STREET, SUITE 1 NEWTON, MA 02460 617-212-3123



THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF FORESITE, LLC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT. DUPLICATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED. DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

	REV	DESCRIPTION	DATE
	Α	PRELIMINARY	07/14/22
l	0	FINAL ISSUED	07/19/22
l	1	REVISED PER NEW STATE CODES	01/23/23
l	2	REVISED PER COMMENTS	01/30/23
l			
l			
l			
١	(J

SITE NUMBER: CT11527B SITE NAME: CT527 / CORDLESS

SITE ADDRESS: 47 TURNPIKE ROAD WILLINGTON, CT 06279

SHEET TITLE: N-1: GENERAL NOTES

- . ALL FINAL GRADED SLOPES SHALL BE A MAXIMUM OF 3 HORIZONTAL TO 1 VERTICAL.
- 2. ALL EXCAVATIONS PREPARED FOR PLACEMENT OF CONCRETE SHALL BE OF UNDISTURBED SOILS, SUBSTANTIALLY HORIZONTAL AND FREE FROM ANY LOOSE, UNSUITABLE MATERIAL OR FROZEN SOILS, AND WITHOUT THE PRESENCE OF POUNDING WATER. DEWATERING FOR EXCESS GROUND WATER SHALL BE PROVIDED WHEN REQUIRED. COMPACTION OF SOILS UNDER CONCRETE PAD FOUNDATIONS SHALL NOT BE LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR THE SOIL IN ACCORDANCE WITH ASTM D1557.
- 3. CONCRETE FOUNDATIONS SHALL NOT BE PLACED ON ORGANIC OR UNSUITABLE MATERIAL. IF INADEQUATE BEARING CAPACITY IS REACHED AT THE DESIGNED EXCAVATION DEPTH, THE UNSATISFACTORY SOIL SHALL BE EXCAVATED TO ITS FULL DEPTH AND EITHER BE REPLACED WITH MECHANICALLY COMPACTED GRANULAR MATERIAL OR THE EXCAVATION SHALL BE FILLED WITH CONCRETE OF THE SAME TYPE SPECIFIED FOR THE FOUNDATION. CRUSHED STONE MAY BE USED TO STABILIZE THE BOTTOM OF THE EXCAVATION. ANY STONE SUB BASE MATERIAL, IF USED, SHALL NOT SUBSTITUTE FOR REQUIRED THICKNESS OF CONCRETE.
- 4. ALL EXCAVATIONS SHALL BE CLEAN OF UNSUITABLE MATERIAL SUCH AS VEGETATION, TRASH, DEBRIS, AND SO FORTH PRIOR TO BACK FILLING. BACK FILL SHALL CONSIST OF APPROVED MATERIALS SUCH AS EARTH, LOAM SANDY CLAY, SAND AND GRAVEL, OR SOFT SHALE, FREE FROM CLODS OR LARGE STONES OVER 2 1/2" MAX DIMENSIONS. ALL BACK FILL SHALL BE PLACED IN COMPACTED LAYERS.
- 5. ALL FILL MATERIALS AND FOUNDATION BACK FILL SHALL BE PLACED MAXIMUM 6" THICK LIFTS BEFORE COMPACTION. EACH LIFT SHALL BE WETTED IF REQUIRED AND COMPACTED TO NOT LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR SOIL IN ACCORDANCE WITH ASTM D1557.
- . NEWLY PLACED CONCRETE FOUNDATIONS SHALL CURE A MINIMUM OF 72 HRS PRIOR TO BACK FILLING.

SPECIFIED, I.E. FDOT TYPE NO. 57 FOR FENCED COMPOUND: FDOT TYPE NO. 67 FOR ACCESS DRIVE AREA

- 7. FINISHED GRADING SHALL BE SLOPED TO PROVIDE POSITIVE DRAINAGE AND PREVENT STANDING WATER. THE FINAL (FINISH) ELEVATION OF SLAB FOUNDATIONS SHALL SLOPE AWAY IN ALL DIRECTIONS FROM THE CENTER. FINISH GRADE OF CONCRETE PADS SHALL BE A MAXIMUM OF 4 INCHES ABOVE FINAL FINISH GRADE ELEVATIONS. PROVIDE SURFACE FILL GRAVEL TO ESTABLISH SPECIFIED ELEVATIONS WHERE REQUIRED.
- 8. NEWLY GRADED SURFACE AREAS TO RECEIVE GRAVEL SHALL BE COVERED WITH GEOTEXTILE FABRIC TYPE: YPAR-3401 AS MANUFACTURED BY "CONSTRUCTION MATERIAL 1-800-239-3841" OR AN APPROVED EQUIVALENT, SHOWN ON PLANS. THE GEOTEXTILE FABRIC SHALL BE BLACK IN COLOR TO CONTROL THE RECURRENCE OF VEGETATIVE GROWTH AND EXTEND TO WITHIN 1 FOOT OUTSIDE THE SITE FENCING OR ELECTRICAL GROUNDING SYSTEM PERIMETER WHICH EVER IS GREATER. ALL FABRIC SHALL BE COVERED WITH A MINIMUM OF 4" DEEP COMPACTED STONE OR GRAVEL AS
- 9. IN ALL AREAS TO RECEIVE FILL, REMOVE ALL VEGETATION, TOPSOIL, DEBRIS, WET AND UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE. PLOW STRIP OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL SUCH THAT FILL MATERIAL WILL BIND WITH EXISTING/PREPARED SOIL SURFACE.
- 10. WHEN SUB GRADE OR PREPARED GROUND SURFACE HAS A DENSITY LESS THAN THAT REQUIRED FOR THE FILL MATERIAL, SCARIFY THE GROUND SURFACE TO DEPTH REQUIRED, PULVERIZE, MOISTURE-CONDITION AND/OR AERATE THE SOILS AND RE-COMPACT TO THE REQUIRED DENSITY PRIOR TO PLACEMENT OF FILLS.
- 11. IN AREAS WHICH EXISTING GRAVEL SURFACING IS REMOVED OR DISTURBED DURING CONSTRUCTION OPERATIONS, REPLACE GRAVEL SURFACING TO MATCH ADJACENT GRAVEL SURFACING AND RESTORED TO THE SAME THICKNESS AND COMPACTION AS SPECIFIED. ALL RESTORED GRAVEL SURFACING SHALL BE FREE FROM CORRUGATIONS AND WAVES.
- 12. EXISTING GRAVEL SURFACING MAY BE EXCAVATED SEPARATELY AND REUSED WITH THE CONDITION THAT ANY UNFAVORABLE AMOUNTS OF ORGANIC MATTER, OR OTHER DELETERIOUS MATERIALS ARE REMOVED PRIOR TO REUSE. FURNISH ANY ADDITIONAL GRAVEL RESURFACING MATERIAL AS NEEDED TO PROVIDE A FULL DEPTH COMPACTED SURFACE THROUGHOUT SITE.
- 13. GRAVEL SUB SURFACE SHALL BE PREPARED TO REQUIRED COMPACTION AND SUB GRADE ELEVATIONS BEFORE GRAVEL SURFACING IS PLACED AND/OR RESTORED. ANY LOOSE OR DISTURBED MATERIALS SHALL BE THOROUGHLY COMPACTED AND ANY DEPRESSIONS IN THE SUB GRADE SHALL BE FILLED AND COMPACTED WITH APPROVED SELECTED MATERIAL. GRAVEL SURFACING MATERIAL SHALL NOT BE USED FOR FILLING DEPRESSIONS IN THE SUB GRADE.
- 14. PROTECT EXISTING GRAVEL SURFACING AND SUB GRADE IN AREAS WHERE EQUIPMENT LOADS WILL OPERATE.
- 15. DAMAGE TO EXISTING STRUCTURES AND/OR UTILITIES RESULTING FROM CONTRACTORS NEGLIGENCE SHALL BE REPAIRED AND/OR REPLACED TO THE OWNERS SATISFACTION AT NO ADDITIONAL COST TO THE CONTRACT.
- 16. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES AT NO ADDITIONAL COST TO THE CONTRACT.

STRUCTURAL STEEL NOTES

- 1. ALL STEEL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION. STEEL SECTIONS SHALL BE IN ACCORDANCE WITH ASTM AS INDICATED BELOW:
- ANGLES, BARS, CHANNELS, PLATES: ASTM A36, 36 KSI

HSS SECTIONS: ASTM 500, 46 KSI

PIPE SECTIONS: ASTM A53-E, 35 KSI

- 2. ALL EXTERIOR EXPOSED STEEL AND HARDWARE SHALL BE HOT DIPPED GALVANIZED
- 3. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION". PAINTED SURFACES SHALL BE TOUCHED UP. ALL WELDING SHALL BE PERFORMED IN AN APPROVED SHOP.
- 4. ALL BOLTS FOR STEEL TO STEEL CONNECTIONS TO BE PER ASTM A325. HOLES TO BE 1/16" DIA. LARGER THAN BOLT, U.N.O. 5. FIELD MODIFICATIONS ARE TO BE COATED WITH ZINC ENRICHED PAINT.

SITE WORK NOTES

- 1. DO NOT EXCAVATE OR DISTURB BEYOND THE PROPERTY LINES OR LEASE LINES, UNLESS OTHERWISE NOTED.
- 2. DO NOT SCALE BUILDING DIMENSIONS FROM DRAWING
- 3. SIZE, LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS SHALL BE ACCURATELY NOTED AND PLACED ON AS-BUILT DRAWINGS BY GENERAL CONTRACTOR AND ISSUED TO ARCHITECT/ENGINEER AT COMPLETION OF PROJECT.
- 4. ALL EXISTING UTILITIES, FACILITIES, CONDITIONS AND THEIR DIMENSIONS SHOWN ON PLANS HAVE BEEN PLOTTED FROM AVAILABLE RECORDS. THE ENGINEER AND OWNER ASSUME NOT RESPONSIBILITY WHATSOEVER AS TO THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN ON THE PLANS OR THE MANNER OF THEIR REMOVAL OR ADJUSTMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL EXISTING UTILITIES AND FACILITIES PRIOR TO START OF

CONSTRUCTION. CONTRACTOR SHALL ALSO OBTAIN FROM EACH UTILITY COMPANY DETAILED INFORMATION RELATIVE TO WORKING SCHEDULES AND METHODS OF REMOVING OR ADJUSTING EXISTING UTILITIES.

- 5. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES BOTH HORIZONTALLY AND VERTICALLY PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES OR DOUBTS AS TO THE INTERPRETATION OF PLANS SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT/ENGINEER FOR RESOLUTION AND INSTRUCTION, AND NO FURTHER WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS CHECKED AND CORRECTED BY THE ARCHITECT/ENGINEER. FAILURE TO SECURE SUCH INSTRUCTION MEANS CONTRACTOR WILL HAVE WORKED AT HIS/HER OWN RISK AND EXPENSE.
- 6. CONTRACTOR SHALL CALL LOCAL DIGGER HOT LINE FOR UTILITY LOCATIONS 48 HOURS PRIOR TO START OF CONSTRUCTION.
 7. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH ELEVATIONS PRIOR TO FINAL INSPECTION OF WORK.
- 8. GRADING OF THE SITE WORK AREA IS TO BE SMOOTH AND CONTINUOUS IN SLOPE AND IS TO FEATHER INTO EXISTING GRADES AT THE GRADING LIMITS.
- 9. ALL TEMPORARY EXCAVATIONS FOR THE INSTALLATION OF FOUNDATIONS, UTILITIES, ETC., SHALL BE PROPERL

STRUCTURAL CONCRETE NOTES

- 1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 318-08 AND THE SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
- 2. ALL CONCRETE FOR SLABS ON GRADE, SHELTER FOUNDATION, AND PIER FOUNDATIONS FOR FENCES, ICE BRIDGE, AND H-FRAME SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH FC'=4,000 PSI AT 28 DAYS UNLESS NOTED OTHERWISE. SPECIAL INSPECTION REQUIRED AS NOTED.
- 3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES CLASS "B" AND ALL HOOKS SHALL BE STANDARD UNLESS NOTED OTHERWISE.

CONCRETE EXPOSED TO EARTH OR WEATHER: #6 AND LARGER......2 IN.

#5 AND SMALLER & WWF......

CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:

SLAB AND WALL......3/4 IN.

BEAMS AND COLUMNS......1 1/2 II

- 5. A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE U.N.O. IN ACCORDANCE WITH ACI 301, LATEST EDITION, SECTION 4.
- 6. HOLES TO RECEIVE EXPANSION/WEDGE ANCHORS SHALL BE 1/8" LARGER IN DIAMETER THAN THE ANCHOR BOLT, DOWEL OR ROD AND SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. LOCATE AND AVOID CUTTING EXISTING REBAR WHEN DRILLING HOLES IN ELEVATED CONCRETE SLABS.
- 7. USE AND INSTALLATION OF CONCRETE ADHESIVE AND EXPANSION/WEDGE ANCHORS SHALL BE PER ICC & MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURES.
- 8. FOUNDATION DESIGN IS BASED ON PRESUMPTIVE SOIL PARAMETERS. IT IS STRONGLY RECOMMENDED THAT INDEPENDENT SOILS TESTING BE PERFORMED BY A LICENSED GEOTECHNICAL ENGINEER TO VERIFY SOIL BEARING CAPACITY, SLOPE STABILITY, AND ALL OTHER RELATED SOIL PARAMETERS.

POST-INSTALLED ANCHORS

- 1. USE, INSTALLATION, EMBEDMENT DEPTH, AND DIAMETER OF ADHESIVE ANCHORS IN HARDENED CONCRETE SHALL CONFORM TO ICC REPORT & MANUFACTURER'S RECOMMENDATIONS.
- 2. MAINTAIN CRITICAL EDGE DISTANCE SPECIFIED IN ICC REPORT AS A MINIMUM, U.N.O. IN THESE DRAWINGS.
- 3. LOCATE AND AVOID CUTTING EXISTING REBAR OR TENDONS WHEN DRILLING HOLES IN ELEVATED CONCRETE SLABS.

SPECIAL INSPECTION NOTES

- 1. CONTRACTOR SHALL PROVIDE REQUIRED SPECIAL INSPECTIONS PERFORMED BY AN INDEPENDENT INSPECTOR, APPROVED BY CARRIER AND THE LOCAL JURISDICTION, AS REQUIRED BY IBC SECTION 1704 AND 1705 FOR THE FOLLOWING:

 A. STRUCTURAL STEEL:
- I. ALL HIGH STRENGTH BOLT INSTALLATIONS; BOLTING INSPECTION TASKS SHALL BE IN ACCORDANCE WITH TABLES N5.6-1, N5.6-2, AND N5.6-3 PER AISC 360-10.
- II. FIELD WELDING (IF UTILIZED).
- B. BOLTS, REBAR, AND ANCHORS IN CONCRETE:
- I. RETROFIT ANCHORS IN CONCRETE (ASHESIVE/EPOXY, EXPANSION, WEDGE, OR SCREW TYPE ANCHORS): INSPECT SIZE, LENGTH, CLEANLINESS, AND INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS.
- SPECIAL INSPECTION NOTES
- C. CONCRETE CONSTRUCTION
- I. VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH IBC SECTION 1705, TABLE 1705.3.
- 2. PROVIDE SPECIAL INSPECTIONS FOR OTHER ITEMS NOTED ON DRAWINGS TO CONFIRM COMPLIANCE WITH CONTRACT DOCUMENTS.
- 3. THE SPECIAL INSPECTOR SHALL PROVIDE A COPY OF THE REPORT TO THE OWNER, ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR, AND BUILDING OFFICIAL

APPLICANT:

T - Mobile - T-Mobile NORTHEAST LLC

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100

PROJECT MANAGER

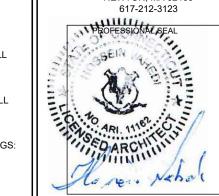


420 MAIN STREET, BLDG 4 STURBRIDGE, MA 01566 203-275-6669

ENGINEERING CONSULTANT:



462 WALNUT STREET, SUITE 1 NEWTON, MA 02460 617-212-3123



THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF FORESITE, LLC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT.

DUPLICATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED. DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

l	REV	DESCRIPTION	DATE
l	Α	PRELIMINARY	07/14/22
	0	FINAL ISSUED	07/19/22
	1	REVISED PER NEW STATE CODES	01/23/23
	2	REVISED PER COMMENTS	01/30/23
I			
Į.			ر ا

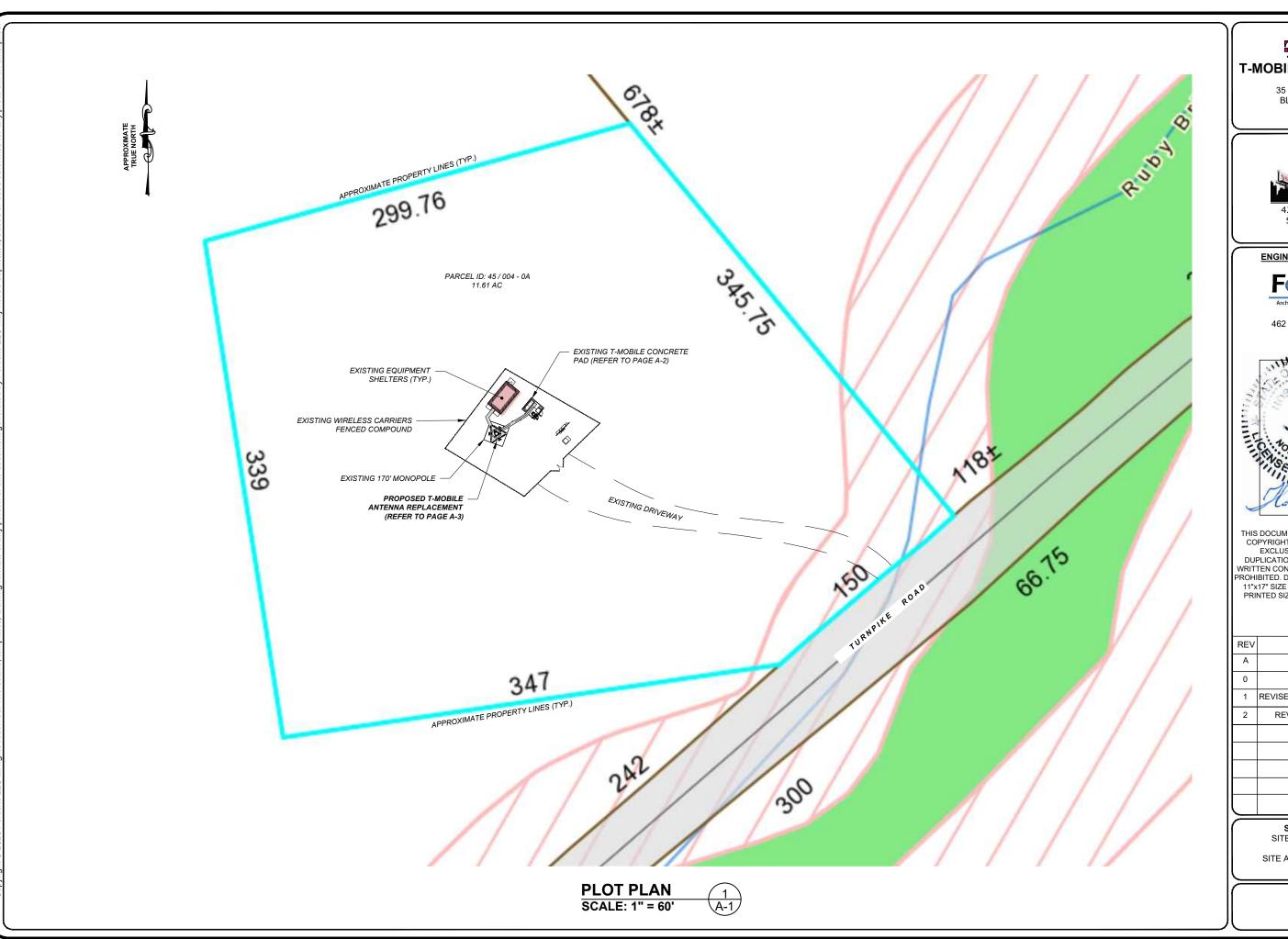
SITE NUMBER: CT11527B

SITE NAME: CT527 / CORDLESS

SITE ADDRESS: 47 TURNPIKE ROAD WILLINGTON, CT 06279

SHEET TITLE:

N-1: GENERAL NOTES



APPLICANT:

T··Mobile· T-MOBILE NORTHEAST LLC

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100

PROJECT MANAGER

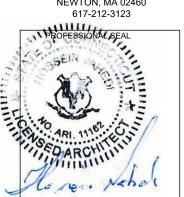


420 MAIN STREET, BLDG 4 STURBRIDGE, MA 01566 203-275-6669

ENGINEERING CONSULTANT:



462 WALNUT STREET, SUITE 1 NEWTON, MA 02460



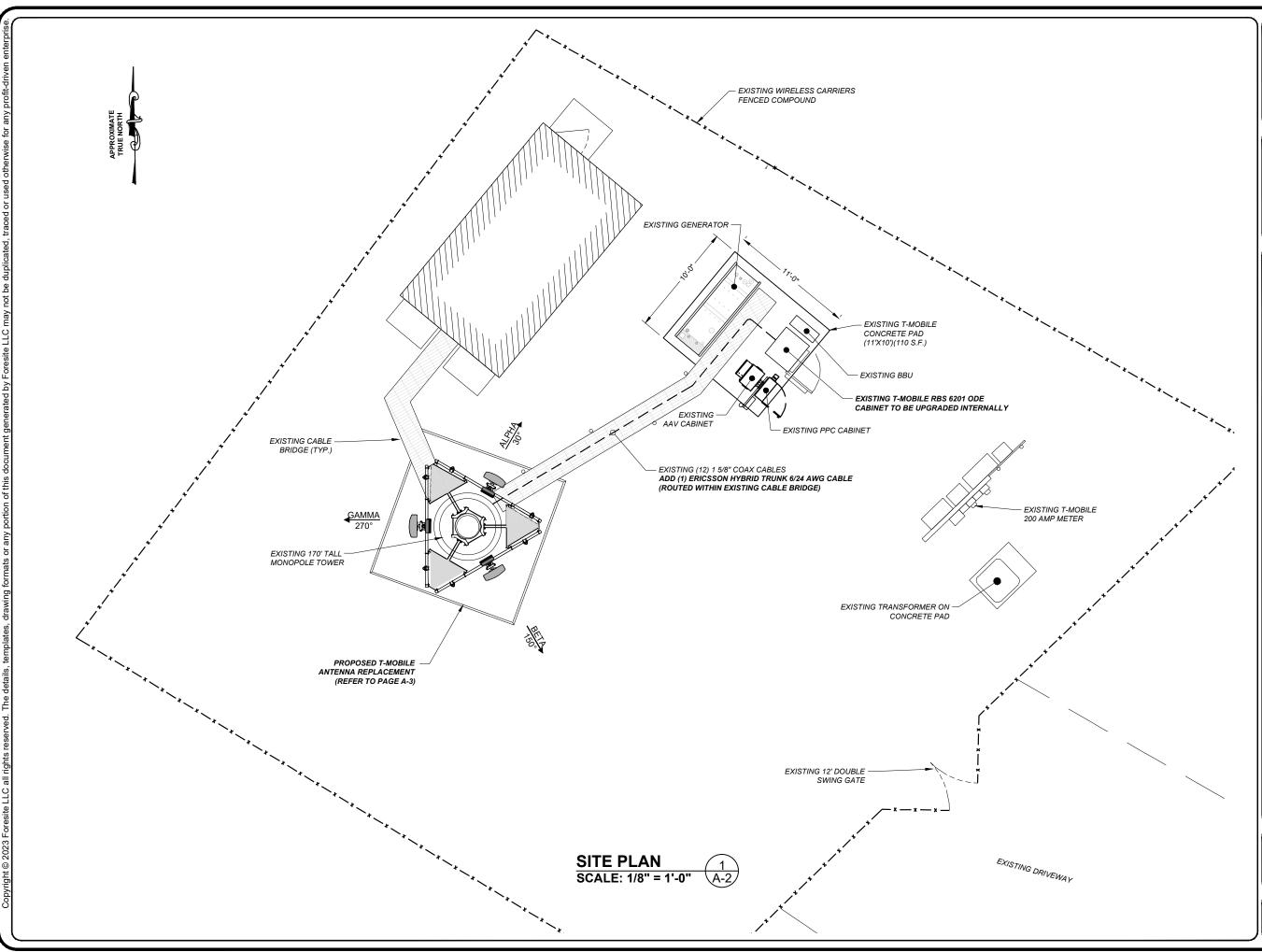
THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF FORESITE, LLC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT. DUPLICATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED. DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

REV	DESCRIPTION	DATE
Α	PRELIMINARY	07/14/22
0	FINAL ISSUED	07/19/22
1	REVISED PER NEW STATE CODES	01/23/23
2	REVISED PER COMMENTS	01/30/23
		,

SITE NUMBER: CT11527B SITE NAME: CT527 / CORDLESS

SITE ADDRESS: 47 TURNPIKE ROAD WILLINGTON, CT 06279

SHEET TITLE: A-1: PLOT PLAN



APPLICANT: T - Mobile-

T-MOBILE NORTHEAST LLC

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100

PROJECT MANAGER

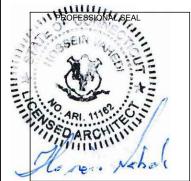


420 MAIN STERESTINBLDG 4 STURBRIDGE KMA 497566 203-275-6669

ENGINEERING CONSULTANT:



462 WALNUT STREET, SUITE 1 NEWTON, MA 02460 617-212-3123



THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF FORESITE, LLC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT. DUPLICATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED. DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

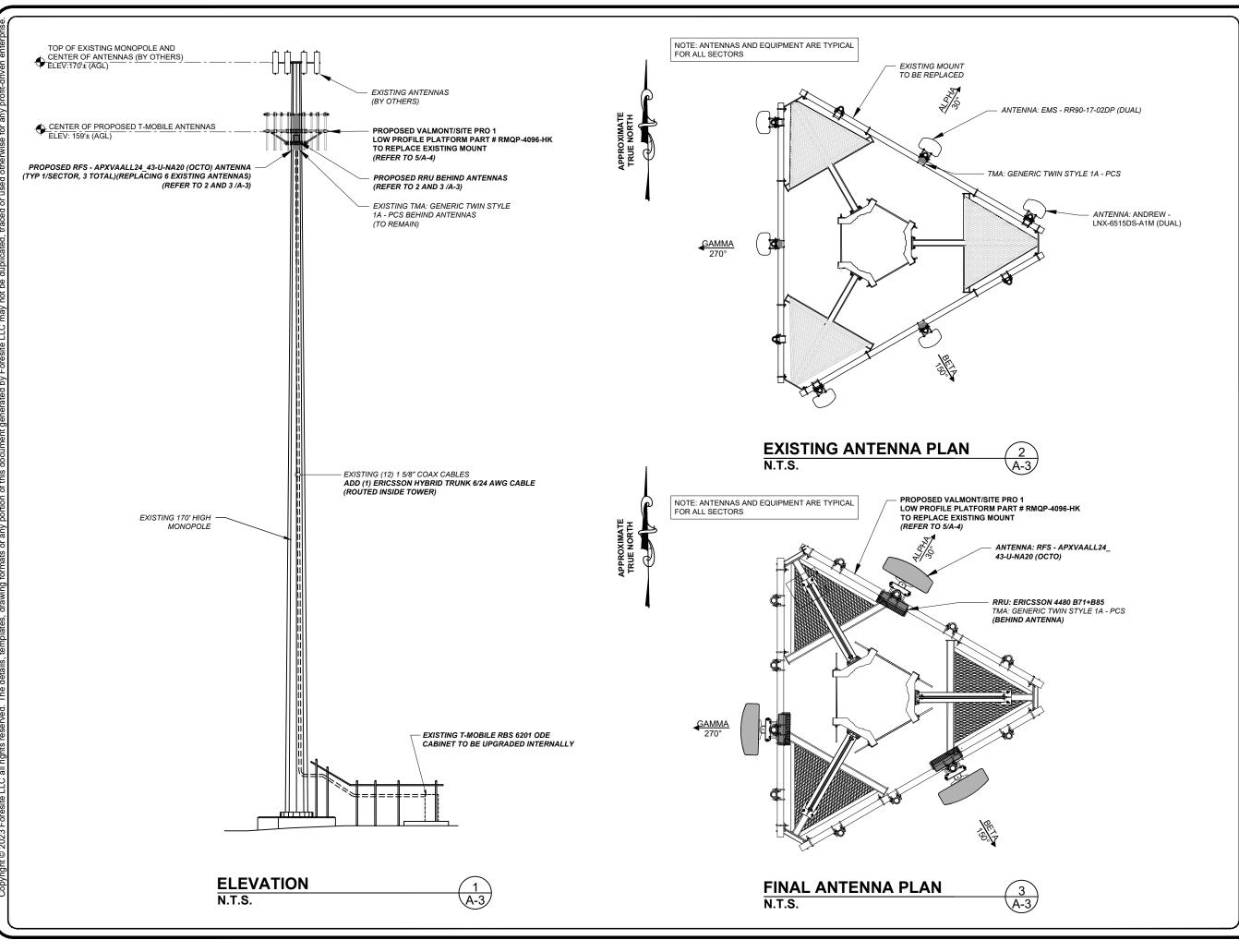
REV	DESCRIPTION	DATE
Α	PRELIMINARY	07/14/22
0	FINAL ISSUED	07/19/22
1	REVISED PER NEW STATE CODES	01/23/23
2	REVISED PER COMMENTS	01/30/23
		,

SITE NUMBER: CT11527B

SITE NAME: CT527 / CORDLESS

SITE ADDRESS: 47 TURNPIKE ROAD WILLINGTON, CT 06279

> SHEET TITLE: A-2: SITE PLAN



APPLICANT: T • • Mobile • T-MOBILE NORTHEAST LLC

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100

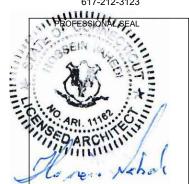


420 MAIN STREET, BLDG 4 STURBRIDGE, MA 01566 203-275-6669

ENGINEERING CONSULTANT:



462 WALNUT STREET, SUITE 1 NEWTON, MA 02460 617-212-3123



THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF FORESITE, LLC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT.

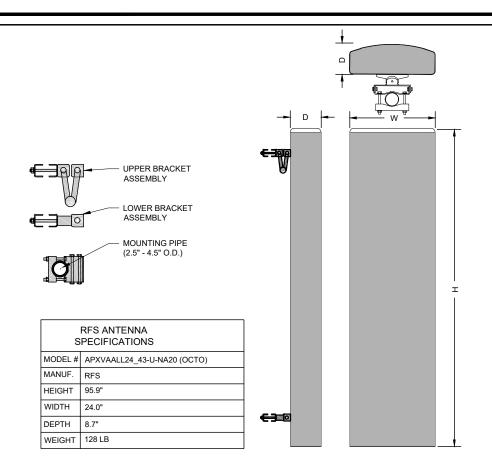
DUPLICATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED. DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

	REV	DESCRIPTION	DATE
	Α	PRELIMINARY	07/14/22
	0	FINAL ISSUED	07/19/22
	1	REVISED PER NEW STATE CODES	01/23/23
l	2	REVISED PER COMMENTS	01/30/23
l			
l			
l			

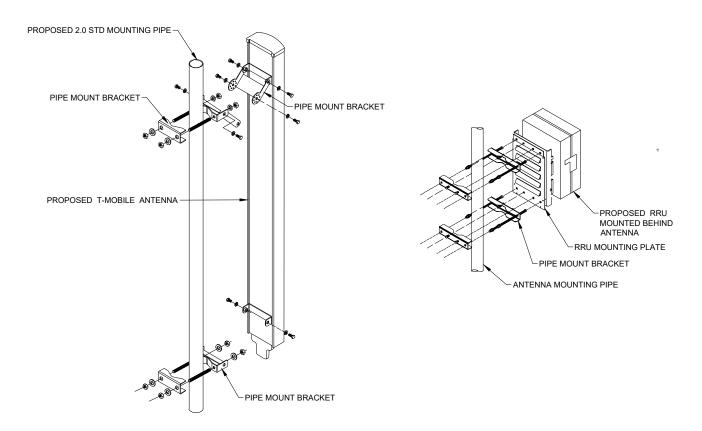
SITE NUMBER: CT11527B SITE NAME: CT527 / CORDLESS

SITE ADDRESS: 47 TURNPIKE ROAD WILLINGTON, CT 06279

> SHEET TITLE: A-3: ELEVATION AND ANTENNA PLANS





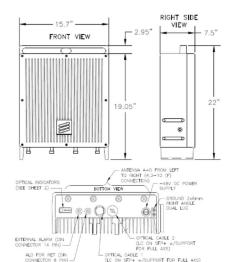


RRU MOUNT DETAIL

N.T.S

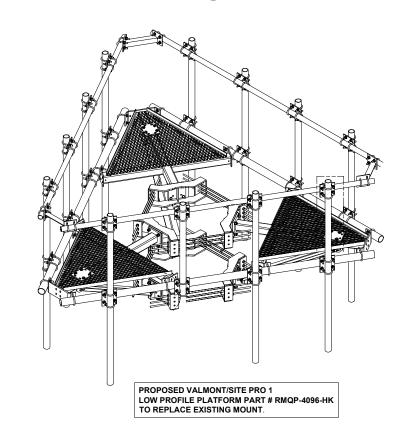
ANTENNA MOUNT DETAIL

N.T.S



RRU SPECIFICATIONS				
MODEL#	4480 B71+85			
MANUF.	ERICSSON			
LENGTH	22.0"			
WIDTH	15.7"			
DEPTH	7.5"			
WEIGHT	93.0 LB			

REMOTE RADIO UNIT 2 N.T.S A-4



NEW MOUNT DETAIL
N.T.S



APPLICANT:

T - Mobile - T-MOBILE NORTHEAST LLC

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100

PROJECT MANAGER

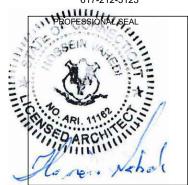


420 MAIN STREET, BLDG 4 STURBRIDGE, MA 01566 203-275-6669

ENGINEERING CONSULTANT:



462 WALNUT STREET, SUITE 1 NEWTON, MA 02460 617-212-3123



THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF FORESITE, LLC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT.

DUPLICATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED. DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

REV	DESCRIPTION	DATE
Α	PRELIMINARY	07/14/22
0	FINAL ISSUED	07/19/22
1	REVISED PER NEW STATE CODES	01/23/23
2	REVISED PER COMMENTS	01/30/23
		,

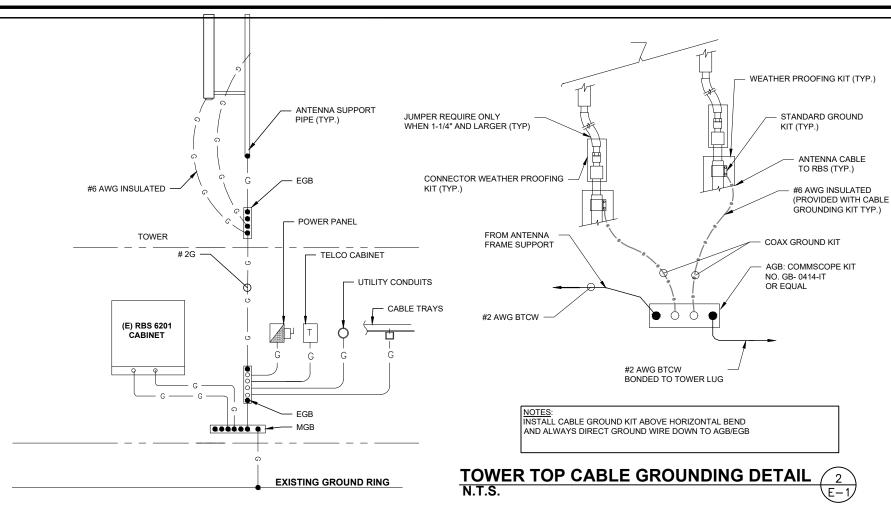
SITE NUMBER: CT11527B SITE NAME: CT527 / CORDLESS

SITE ADDRESS: 47 TURNPIKE ROAD WILLINGTON, CT 06279

SHEET TITLE:

A-4: ANTENNA AND EQUIPMENT SPECIFICATIONS

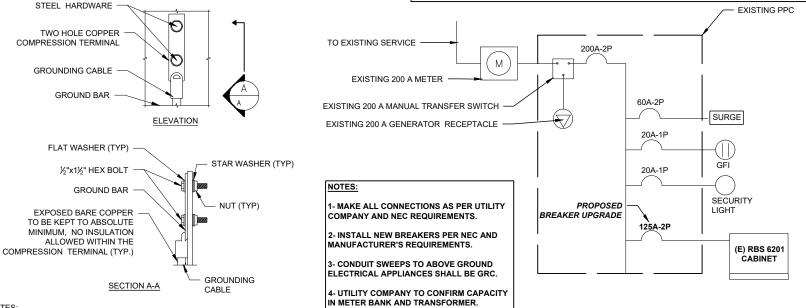
- 2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PRODUCED PER SPECIFICATION REQUIREMENTS.
- 3. THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
- 4. GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
- 5. ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) ND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.
- 6. RIGID STEEL CONDUITS SHALL BE GROUNDED AT BOTH ENDS.
- 7. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR THIN INSULATION.
- 8. RUN ELECTRICAL CONDUIT OR CABLING BETWEEN ELECTRICAL ROOM AND PROPOSED CELL SITE ARE PEDESTAL AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE INSTALLATION WITH UTILITY COMPANY.
- 9. RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND PROPOSED CELL SITE TELECOM CABINET AND RBS CABINET AS INDICATED ON DRAWING A -1. PROVIDE FULL LENGTH PULL ROPE INSTALLED TELCO CONDUIT. PROVIDE GREENLEE CONDUIT MEASURING TAPE AT EACH END.
- 10. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NAME 3R ENCLOSURE
- 11. GROUNDING SHALL COMPLY WITH NEC ART. 250
- 12. GROUNDING COAX CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURES COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER
- 13. USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSTALLATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE GROUND.
- 14. ALL GROUND CONNECTION TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
- 15. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AS RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY BOND ANY METER OBJECTS WITHIN 7 FEET OF PROPOSED EQUIPMENT OR CABINET TO MASTER GROUND BAR.
- 16. CONNECTIONS TO MGB SHALL BE ARRANGED IN THREE MAIN GROUPS: SURGE PROCEDURES (COAXIAL CABLE GROUND KITS, TELCO AND POWER PANEL GROUND); (GROUNDING ELECTRODE RING OR BUILDING STEEL); NON-SURGING OBJECTS (EGB GROUND IN RRS LINIT)
- 17. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
- 18. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTION
- 19. BOND ANTENNA MOUNTING BRACKETS, COAXIAL CABLE GROUND KITS, AND ALNA TO EGB PLACED NEAR THE ANTENNA LOCATION.
- 20 BOND ANTENNA EGB'S AND MGB TO WATER MAIN.
- 21. TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION.
- 22. BOND ANY METAL OBJECTS WITHIN 7 FEET OF PROPOSED EQUIPMENT OR CABINET TO MASTER GROUND BAR.
- 23. VERIFY PROPOSED SERVICE UPGRADE WITH LOCAL UTILITY COMPANY PRIOR TO CONSTRUCTION.





SPECIAL CONTRACTOR'S NOTES:

CONTRACTOR TO VERIFY THE POWER FEED & PHASE OF METER BANK AND THAT THE EXISTING AND PROPOSED CONDUITS AND WIRE SIZES ARE ADEQUATE FOR THE PROPOSED LOADING IN ACCORDANCE WITH NEC AND INCLUDE ELECTRICAL UPGRADES IN THE SCOPE OF WORK AS REQUIRED.



NOTES:

1. "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED. 2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

TYPICAL GROUND BAR CONNECTIONS DETAIL N.T.S.



TYPICAL ONE LINE DIAGRAM



APPLICANT: - Mobile

T-MOBILE NORTHEAST LLC

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002

860-692-7100

PROJECT MANAGER



420 MAIN STREET, BLDG 4 STURBRIDGE, MA 01566 203-275-6669

ENGINEERING CONSULTANT:



462 WALNUT STREET, SUITE 1 NEWTON, MA 02460 617-212-3123



THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF FORESITE, LLC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT.

DUPLICATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED. DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

REV	DESCRIPTION	DATE
Α	PRELIMINARY	07/14/22
0	FINAL ISSUED	07/19/22
1	REVISED PER NEW STATE CODES	01/23/23
2	REVISED PER COMMENTS	01/30/23
		,

SITE NUMBER: CT11527B SITE NAME: CT527 / CORDLESS

SITE ADDRESS: 47 TURNPIKE ROAD WILLINGTON, CT 06279

SHEET TITL

E-1: ELECTRICAL & GROUNDING DETAIL

Exhibit D

Structural Analysis Report



Report Date: February 17, 2023

Client: Everest Infrastructure Partners

ATTN: Andy Dykstra

Two Allegheny Center Nova Tower 2, Suite 1002

Pittsburgh, PA, 15212 Phone: (412) 489-0348

Email: andrew.dykstra@everestinfrastructure.com

Structure: 170ft Monopole
Site Name: Willington CDT

Site Reference #: 702498

Site Address: 47 Turnpike Road
City, County, State: Willington, Tolland, CT
Latitude, Longitude: 41.9255, -72.2524

PJF Project Number: A13323-0002.001.7805

Paul J. Ford and Company is pleased to submit this **Structural Analysis Report** to determine the tower stress level.

Analysis Criteria:

This analysis has been performed in accordance with the 2022 Connecticut Building Code based on an ultimate 3-second gust wind speed of 118 mph. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Proposed Appurtenance Loads:

The structure was analyzed with the proposed loading configuration shown in Table 1 of this report.

Summary of Analysis Results:

Existing Structure: Pass 73.4% Existing Foundation: Pass 69.6%

We at Paul J. Ford and Company appreciate the opportunity of providing our continuing professional services to you and Everest Infrastructure Partners. If you have any questions or need further assistance on this or any other projects, please give us a call.

Respectfully Submitted By: Paul J. Ford and Company

a Z. Campbell

Donna L. Campbell Structural Designer II

dcampbell@pauljford.com



TABLE OF CONTENTS

1) INTRODUCTION

2) ANALYSIS CRITERIA

Table 1 - Antenna Equipment and Cable Information

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

- 3.1) Analysis Method
- 3.2) Assumptions

4) ANALYSIS RESULTS

Table 3 - Section Capacity (Summary)

Table 4 - Tower Component Stresses vs Capacity

4.1) Recommendations

5) APPENDIX A

tnxTower Output

6) APPENDIX B

Additional Calculations

1) INTRODUCTION

This is a 170ft Monopole designed by Nudd in February of 2004.

2) ANALYSIS CRITERIA

TIA-222 Revision: TIA-222-H

Risk Category:

Wind Speed: 118 mph

Exposure Category: C
Topographic Factor: 1
Ice Thickness: 1.5 in
Ice Wind Speed: 50 mph
Service Wind Speed: 60 mph

Table 1 - Antenna Equipment and Cable Information

Status	Mounting Level (ft)	Ant. CL (ft)	Qty.	Antenna Model	Mount Type	Feed Line Qty.	Feed Line Size (in)	Coax Loca- tion	Owner/ Tenant												
Existing			3	DMP65R-BU6D w/ Mount Pipe																	
			3	HPA65R-BU6A w/ Mount Pipe																	
			3	OPA65R-BU6A w/ Mount Pipe		12	1-5/8														
			3	RRUS 32 B2																	
	170.0		3	RRUS 4449 B5/B12	(2) 12 T A																
		170.0	3	RRUS 8843 (3) 12' T-Arm Mounts	6 3	3/4 3/8	Inside	AT&T													
				3	7770 w/ Mount Pipe																
								6	LGP21401												
							2	DC6-48-60-18- 8C													
																				1	DC6-48-60-18-8F
															1	(3) 12' T-Arm Mounts					
Reserved			3	AIR 6419 B41 w/ Mount Pipe		-	-	-													
Existing		159.0		3	KRY 112 71	Valmont/SiteP	12	1-5/8	Inside												
Proposed	159.0		3	APXVAALL24_ 43-U-NA20 w/ Mount Pipe	ro1 Platform RMPQ-4096- HK	1	6/24	Inside	T-Mobile												
					3	RRU 4480 B71 B85															

	Mounting Level (ft)		Qty.	Antenna Model	Mount Type	Feed Line Qty.	Feed Line Size (in)	Coax Loca- tion	Owner/ Tenant
To Be			3	LNX-6515DS- A1M	Existing Platform	_			
Removed			3	EMS-RR90-17- 02DP	Existing Flationin		-	-	
	149.0		3	TA08025-B604					
			3 TA08025-B605		ı				
Existing			3	MX08FRO665-20 w/ Mount Pipe	Site Pro 1 SNP8HR-396	1	1-5/8	Inside	Dish
					1	RDIDC-9181-PF- 48			

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Structural Analysis	Nudd, 11/13/2016	116-23148	Everest
Mount Analysis	EFI Global	049.03533-2275026	Everest

3.1) Analysis Method

tnxTower (version 8.1.1.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

- 1) Tower and structures were maintained in accordance with the TIA-222 standard.
- 2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and the referenced drawings.
- 3) All coaxial cables are assumed to run internal to the monopole shaft.

This analysis may be affected if any assumptions are not valid or have been made in error. Paul J. Ford and Company should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 3 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
L1	170 - 160	Pole	TP26.25x22x0.25	1	-3.74	1206.91	8.7	Pass
L2	160 - 130	Pole	TP32.56x26.25x0.25	2	-12.80	1455.89	40.5	Pass
L3	130 - 84.5	Pole	TP41.63x31.1135x0.3125	3	-21.90	2330.31	59.4	Pass
L4	84.5 - 40	Pole	TP50.38x39.8482x0.375	4	-34.56	3386.50	61.4	Pass
L5	40 - 0	Pole	TP58x48.2609x0.375	5	-50.90	4012.41	73.4	Pass
						Summary		
						Pole (L5)	73.4	Pass
						Rating =	73.4	Pass

Table 4 - Tower Component Stresses vs Capacity

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail	
1	Anchor Rods	0	49.1	Pass	
1	Base Plate	0	59.4	Pass	
1	Base Foundation (Structure)	0	69.6	Pass	

Structure Rating (max from all components) =	73.4%
--	-------

Notes:

4.1) Recommendations

The tower and its foundation have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.

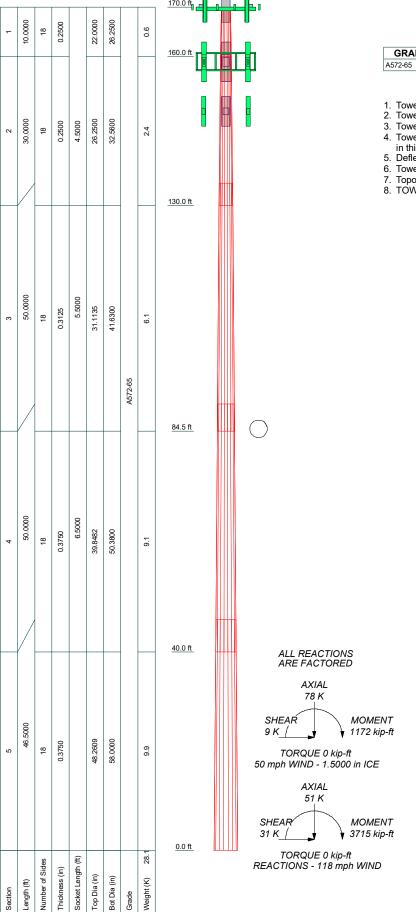
¹⁾ See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.

STANDARD CONDITIONS FOR FURNISHING OF PROFESSIONAL ENGINEERING SERVICES ON EXISTING STRUCTURES BY PAUL J. FORD AND COMPANY

- 1) Paul J. Ford and Company has not made a field inspection to verify the monopole dimensions or the antenna/coax loading. If the existing conditions are not as represented on these sketches, we should be contacted immediately to reevaluate any conclusions stated in this report.
- 2) No allowance was made for any damaged, missing, or rusted materials. The analysis of this structure assumes that no physical deterioration has occurred in any of the structural components of the tower and that all the structural members have the same load carrying capacity as the day the tower was erected.
- 3) It is not possible to have all the detailed information to perform a thorough analysis of every structural sub-component of an existing structure. The structural analysis provided by Paul J. Ford and Company verifies the adequacy of the main structural members of the tower. Paul J. Ford and Company provides a limited scope of service in that we cannot verify the adequacy of every weld, plate connection detail, etc.

APPENDIX A

TNXTOWER OUTPUT

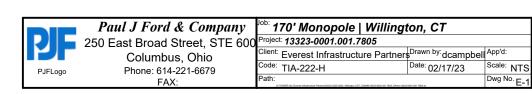


MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu	
A 572 65	65 kai	90 kaj				

TOWER DESIGN NOTES

- 1. Tower is located in Tolland County, Connecticut.
- 2. Tower designed for Exposure C to the TIA-222-H Standard.
- 3. Tower designed for a 118 mph basic wind in accordance with the TIA-222-H Standard.
- Tower is also designed for a 50 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
- 5. Deflections are based upon a 60 mph wind.
- 6. Tower Risk Category II.
- 7. Topographic Category 1 with Crest Height of 0.0000 ft 8. TOWER RATING: 73.4%



Tower Input Data

The tower is a monopole.

This tower is designed using the TIA-222-H standard.

The following design criteria apply:

- Tower is located in Tolland County, Connecticut.
- Tower base elevation above sea level: 680.0000 ft.
- Basic wind speed of 118 mph.
- Risk Category II.
- Exposure Category C.
- Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- Topographic Category: 1.
- Crest Height: 0.0000 ft.
- Nominal ice thickness of 1.5000 in.
- Ice thickness is considered to increase with height.
- Ice density of 56.00 pcf.
- A wind speed of 50 mph is used in combination with ice.
- Temperature drop of 50 °F.
- Deflections calculated using a wind speed of 60 mph.
- A non-linear (P-delta) analysis was used.
- Pressures are calculated at each section.
- Stress ratio used in pole design is 1.
- Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification

- √ Use Code Stress Ratios
- ✓ Use Code Safety Factors Guys Escalate Ice
 Always Use Max Kz
 Use Special Wind Profile

Include Bolts In Member Capacity

Leg Bolts Are At Top Of Section Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) SR Members Have Cut Ends SR Members Are Concentric Distribute Leg Loads As Uniform Assume Legs Pinned

- √ Assume Rigid Index Plate
- √ Use Clear Spans For Wind Area Use Clear Spans For KL/r Retension Guys To Initial Tension
- √ Bypass Mast Stability Checks
- √ Use Azimuth Dish Coefficients
- \checkmark Project Wind Area of Appurt.

Autocalc Torque Arm Areas

Add IBC .6D+W Combination Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Treat Feed Line Bundles As Cylinder Ignore KL/ry For 60 Deg. Angle Legs Use ASCE 10 X-Brace Ly Rules Calculate Redundant Bracing Forces Ignore Redundant Members in FEA SR Leg Bolts Resist Compression All Leg Panels Have Same Allowable Offset Girt At Foundation

 ✓ Consider Feed Line Torque Include Angle Block Shear Check Use TIA-222-H Bracing Resist. Exemption Use TIA-222-H Tension Splice Exemption

Poles

✓ Include Shear-Torsion Interaction
 Always Use Sub-Critical Flow
 Use Top Mounted Sockets
 Pole Without Linear Attachments
 Pole With Shroud Or No Appurtenances
 Outside and Inside Corner Radii Are
 Known

Tapered Pole Section Geometry

APPENDIX B ADDITIONAL CALCULATIONS

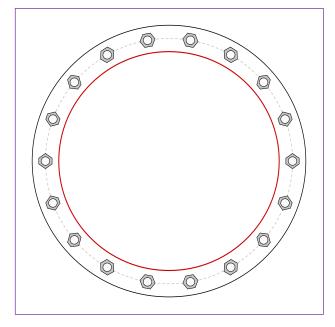
Monopole Base Plate Connection

Analysis Considerations								
TIA-222 Revision	Н							
Grout Considered:	No							
I _{ar} (in)	0							

Applied Loads							
Moment (kip-ft)	3715.03						
Axial Force (kips)	50.90						
Shear Force (kips)	30.92						

58" x 0.375" 18-sided pole (A572-65; Fy=65 ksi, Fu=80 ksi)

Pole Data



Connection Properties	Analysis Results						
Anchor Rod Data	Anchor Rod Summary	units of kips, kip-in)					
(18) 2-1/4" ø bolts (A687 N; Fy=105 ksi, Fu=125 ksi) on 65" BC	Pu_t = 149.51	φPn_t = 304.69	Stress Rating				
	Vu = 1.72	φVn = 186.38	49.1%				
Base Plate Data	Mu = n/a	φMn = n/a	Pass				
72" OD x 2.25" Plate (A572-50; Fy=50 ksi, Fu=65 ksi)							
	Base Plate Summary						
Stiffener Data	Max Stress (ksi):	26.73	(Flexural)				
N/A	Allowable Stress (ksi):	45					
	Stress Rating:	59.4%	Pass				

© Copyright 2023 by Paul J. Ford & Company, all rights reserved.

Effective: 7/26/2022

Job Number:	13323-0002.001.7805
Engineer:	
	2/17/2023
Site Name:	Willington CDT
Site Number:	
Client Project:	CT11527B
Client Project 1:	

PILE ANALYSIS

STRUCTURE SETTINGS

TIA Standard: **Capacity Normalization**

TIA-H Yes

(Apply 1.05 per Rev H, 15.5)

BP Dist. Above Fnd.: BC/Bearing Plate Width: 0.00 0.00

Square 5.42

0.50

PIER PROPERTIES

Pier Shape: Pier Width: Height Above Grade:

Total Pier Height:

Mu: ФМп: **3715.03** k-ft k-ft

Ratio: N/A

SOIL PROPERTIES

Groundwater Depth: Neglected Depth: Soil Density:

99.00 3.50

MATERIAL PROPERTIES

Concrete f'c: Rebar Fy:

60 ksi 150

Concrete Density:

Resultant Load Offset:

Applied Moment:

Applied Axial:

Applied Shear:

Pad Shape: Pad Width: Pad Thickness:

Height Above Grade: Depth to Bottom of Pad:

Location: Top Bar Quantity: Top Bar Size #: Top Clear Cover:

Bottom Bar Quantity: Bottom Bar Size #: **Bottom Clear Cover:**

Use Comp Side Rebar?

Mu (Compression): Mu (Tension): ΦMn (Compression): ΦMn (Tension):

Ratio (Compression): Ratio (Tension):

BASE REACTIONS FROM TNX

3715.03 k-ft kips 50.90

0.00

PAD PROPERTIES

Square 14.00 6.00 0.5 5.50

> Width Length

No

1609.42 1155.99 1155.99 k-ft k-ft 3320.93 0.00 3320.93

46.2% 33.2% N/A

of Piles Considered:

Pile#	X Coord. [ft]	Y Coord. [ft]	Pile Type	Pile Spec.	Max Net Comp. [kip]	Max Net Ten. [kip]	Comp. Override [kip]	Ten. Override [kip]	ФРп Comp. [kip]	ФРп Ten. [kip]	ΦPn Comp. Override [kip]	ФРп Ten. Override [kip]	Comp. Capacity Ratio	Ten. Capacity Ratio
1	5	0	Rock Anchor	1.75" Williams R71	227.82	170.38			312.00	312.00			69.5%	52.0%
2	3.536	3.536	Rock Anchor	1.75" Williams R71	170.73	113.29			312.00	312.00			52.1%	34.6%
3	0	5	Rock Anchor	1.75" Williams R71	227.82	170.38			312.00	312.00			69.5%	52.0%
4	-3.536	3.536	Rock Anchor	1.75" Williams R71	227.85	170.41			312.00	312.00			69.6%	52.0%
5	-5	0	Rock Anchor	1.75" Williams R71	227.82	170.38			312.00	312.00			69.5%	52.0%
6	-3.536	-3.536	Rock Anchor	1.75" Williams R71	170.73	113.29			312.00	312.00			52.1%	34.6%
7	0	-5	Rock Anchor	1.75" Williams R71	227.82	170.38			312.00	312.00			69.5%	52.0%
8	3.536	-3.536	Rock Anchor	1.75" Williams R71	227.85	170.41			312.00	312.00			69.6%	52.0%



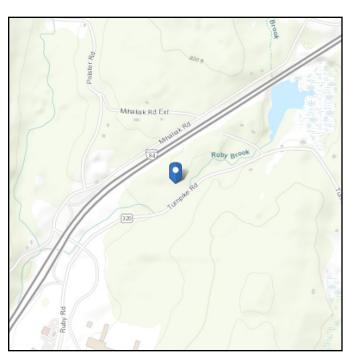
ASCE 7 Hazards Report

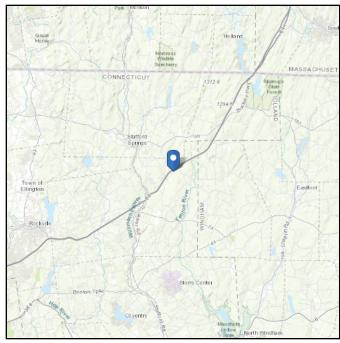
Address:

No Address at This Location

Standard: ASCE/SEI 7-16 Latitude: 41.925561
Risk Category: || Longitude: -72.252375

Soil Class: D - Stiff Soil Elevation: 680.42 ft (NAVD 88)





Wind

Results:

Wind Speed 118 Vmph
10-year MRI 75 Vmph
25-year MRI 84 Vmph
50-year MRI 90 Vmph
100-year MRI 98 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2

Date Accessed: Sat Feb 04 2023

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

Seismic

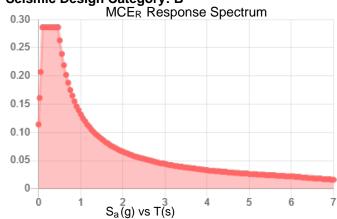
D - Stiff Soil

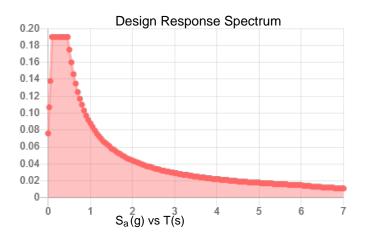
Site Soil Class:

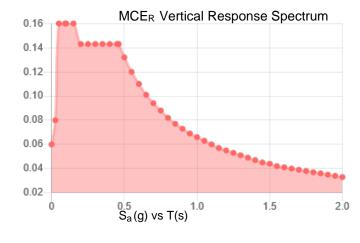
Results:

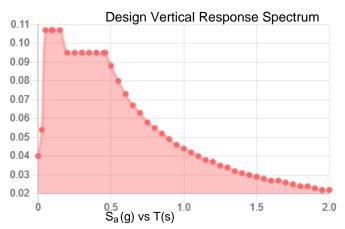
S _s :	0.179	S _{D1} :	0.088
S ₁ :	0.055	T_L :	6
F _a :	1.6	PGA:	0.095
F _v :	2.4	PGA _M :	0.152
S _{MS} :	0.286	F _{PGA} :	1.6
S _{M1} :	0.132	l _e :	1
Sns :	0.19	C _v :	0.7

Seismic Design Category: B









Data Accessed: Sat Feb 04 2023

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.



Ice

Results:

Ice Thickness: 1.50 in.

Concurrent Temperature: 5 F

Gust Speed 50 mph

Data Source: Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8

Date Accessed: Sat Feb 04 2023

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 500-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

The ASCE 7 Hazard Tool is provided for your convenience, for informational purposes only, and is provided "as is" and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE 7 standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE 7 standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE 7 Hazard Tool.

Exhibit E

Mount Analysis





Date: 1/18/2023

To: T-Mobile Northeast, LLC 35 Griffin Road South Bloomfield, CT 06002

Subject: Mount Structural Analysis Report – Replacement – Rev.1

T-Mobile Designation: Site ID: CT11527B

Site Name: CT527/ Cordless Wilington

EFI Designation: Project Number: 049.03533 - 2275026

Site Data: 47 Turnpike Road, Willington, CT 06279

Latitude 41.92553767°, Longitude -72.25236900°

EFI Global, Inc. is pleased to submit this "Mount Structural Analysis Report – Replacement – Rev.1" to determine the structural capacity of the antenna mounts utilized by T-Mobile at the above referenced site.

The purpose of the analysis is to determine acceptability of the mount stress level for the changes proposed by T-Mobile. Under the following load case we have determined the mounts to have:

Existing + Proposed Equipment

Adequate Capacity (28.1%)

Note: See Analysis Criteria for loading configuration

The analysis has been performed in accordance with TIA-222-H Standard and the 2022 Connecticut State Building Code (2018 IBC).

We at *EFI Global, Inc.* appreciate the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or any other projects, please give us a call.

Sincerely, EFI Global, Inc.

License No: PEC0001245

Ahmet Colakoglu, PE Connecticut Professional Engineer

License No: 27057



1) ANALYSIS CRITERIA

The analysis was performed for the existing and proposed appurtenances as specified in the loading information referenced below, and per the following loading criteria of Table 1.

Table 1 – Loading and Analysis Criteria

Rad Center	159'
Structure Type	Monopole
Exposure Category	В
Ultimate Wind Speed	120
Ultimate Ice Loading	1.50" with 50 mph Wind
Risk Category	II
Topographic Factor	Kzt = 1.0

Table 1.1 – Existing Appurtenance Configuration

Qty	Model
3	EMS-RR90-17-02DP – Antennas
3	LNX-6515DS-A1M – Antennas
3	Generic Twin Style 1A – PCS – TMAs

Table 1.2 – Proposed and Final Appurtenance Configuration

Qty	Model
3	RFS APXVAALL24_43-U-NA20 – Antennas
3	Radio 4480 B71 + B85 – RRUs*
3	Generic Twin Style 1A – PCS – TMAs*
1	Valmont/Site Pro 1 12'-6" Low Profile Platform with Twelve 2-7/8" Antenna Mounting Pipes, And Support Rail (P/N: RMQP-4096-HK)

^{*} To be mounted behind antennas

Table 1.3 – Assumed Material Properties

Member Type	ASTM Material Designation	Fy (ksi)	Fu (ksi)
Pipes	A53 Gr. B	35	60
Angles/Channels	A36	36	58
Rectangular HSS	A500 Gr. B - 46	46	58
Round HSS	A500 Gr. B - 42	42	58
Others (UNO)	A572 Gr. 50	50	65

2) ANALYSIS PROCEDURE

The analysis is based on the following information:

Table 2 – Documents

Document	Provided By	Date
RFDS	T-Mobile	07/07/2022
Site Photos	-	06/03/2022
Construction Drawings	EBI Consulting	04/21/2015
Structural Analysis Report	Fred A. Nudd Corporation	04/05/2015

2.1) Analysis Method

Risa-3D, a commercially available analysis software package, was used to create a three-dimensional model of the mount and calculate member stresses for various loading cases. Selected output from the analysis is included in the Appendix.

2.2) Analysis Conditions and Assumptions

- 1) The mount was built and installed in accordance with the manufacturer's specifications.
- 2) The mount has been maintained and will be maintained in accordance with the manufacturer's specifications. All structural members and connections of the mount are in good condition and can achieve theoretical strength.
- 3) The configuration of antennas is as specified in "1) Analysis Criteria".
- 4) The analysis was performed for the subject mount only. It does not include an evaluation of the other mounts or the tower, which should be analyzed by others.
- 5) The evaluation does not include any antenna rigging loads. The equipment should not be rigged using the subject antenna mount as the support.
- The analysis includes a minimum 250 lbf maintenance point load at the worst-case location on the mount, as well as a minimum 500 lbf maintenance point load at each antenna location in conjunction with a 30 mph wind load.
- 7) Any steel grating represented in this model is for loading purposes only and it is not considered to provide any structural restraint or support.
- 8) Member sizes per the available mount specifications and assumed based on our experience with similar structures. Please refer to calculation output in the appendix of this report for sizes and lengths assumed.
- 9) All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.

EFI Global, Inc. (EFI), must be notified immediately if any of these assumptions are discovered to be incorrect. The results of this analysis may be affected if any of the assumptions are not valid or have been made in error.

3) ANALYSIS RESULTS AND CONCLUSION

The analysis results are shown on the table below.

Table 3.1 – Mount Component Stresses vs. Capacity

Component	% Capacity	Pass / Fail
Platform Base Tube	<20.0	Pass
Platform Base Connection Plates	<20.0	Pass
Grating Angle	<20.0	Pass
Horizontal Face Pipe	<20.0	Pass
Antenna Mount Pipe	23.8	Pass
Support Rail Pipe	28.1	Pass
Support Rail Corner Angle	27.3	Pass
Platform Kickers	<20.0	Pass

<u>Platform Mount:</u> The proposed platform mount has **adequate** capacity for the proposed changes by T-Mobile. For the code specified load combinations and as a maximum, the mount members are stressed to **28.1%** of their structural capacity.

Note: EFI Global, Inc. has assumed that Valmont/Site Pro 1 12'-6" Low Profile Platform with Twelve 2-7/8" Antenna Mounting Pipes, And Support Rail (P/N: RMQP-4096-HK, Specs attached) will be installed at this site prior to the equipment installation proposed in this analysis. The analysis also assumes the following:

- The base of the platform is installed at 157'-6" A.G.L.
- The Support Rail is installed 42" above the base of the platform.
- (4) 96" long 2.5 STD mount pipes are equally spaced along the face at each sector.

APPENDIX

INPUT LOADS
ANALYSIS OUTPUT
MOUNT SPECS

Foresite LLC
CT11527B CLIENT: PROJECT: Antenna Loads - TIA 222 H Standard SUBJECT: Type of Mount Platform Tower Height ft Ultimate Wind Speed, V mph Basic Wind Speed mph w/ Ice, V_i Maintanence Load Load Factor for Maint. Load Cases Factor, L_{FM} (Basic Wind Speed=30 mph) Ultimate Ice Thickness, t_i inches Table 2-3 Importance Factors

Structure | Wind Load Without | Ice | 1 | | Ice Wind Load With Ice Earthquake Thickness Table 2-4 Exposure Category Coefficients

Exposure Ke Kzmin α 0.7 0.9 | Ground elevation factor, Ke | 2s | 678.57 | ft | Ke | 0.98 | Table 2-5 Topographic Categories
Kzt 1.000 Figure 2-2 Rooftop Wind Speed-Up Factor
Ks 1.00 Table 2-2 Wind Directionality Factor, Kd

Structure Type Kd

Monopole ▼ 0.95 Gust Effect Factor Gh
Structure Type
Monopole Gh 1.00 DOES NOT CHANGE Shielding Factor, Ka
Structure Type
Monopole 0.90 DOES NOT CHANGE Seismic Factors

▼			
m 0.55			

CLIENT:

PROJECT:

SUBJECT:

Antenna Loads - TIA 222 H Standard

Rad Center 158.00 ft
Antonna AND Mount Without Id

Antenna AND	Mount Witho	out Ice																		Pounds				
Mounting Pole	Height (ft)	Model Number	#	Weight (lbs)	H (in)	*W (in)	D (in)	Ka	**A _N (ft2)	***A _T (ft2)	Aspect (FRONT)	Aspect (SIDE)	Ca (FRONT)	Ca (SIDE)	Kz	q _z (psf)	Wind Load (Front)	Wind Load (Side)	Dead Load	Total Wind Load (Front)	Total Wind Load (Side)	Total Dead Load	Lateral Load (Seismic)	Vertical Load (Seismic)
Pos.1	158.00	RFS APXVAALL24_43-U-NA20	1	149.9	95.9	24.0	8.5	0.90	15.98	5.66	4.00	11.28	1.27	1.54	1.126	38.5	701.1	302.4	149.9	701	356	241	11	i Table 1
	158.00	Ericsson Radio 4480 B71+B85	1	84.0	21.8	N/A	7.5	0.90	-	1.14	-	2.91	-	1.22	1.126	38.5	0.0	47.9	84					
	158.00	Generic Twin Style 1A - PCS	1	7.0	6.3	N/A	3.1	0.90	-	0.14	-	2.03	-	1.20	1.126	38.5	0.0	5.6	7					
		Empty		0.0	-	-	-	0.90	-	-	-	-	-	-	-	-	0.0	0.0	0					
		Empty		0.0	-	-	-	0.90	-	-	-	-	-	-	-	-	0.0	0.0	0					
																				351	178	121	6	ز
		Empty		0.0	-	-	-	0.90	-	-	-	-	-	-	-	-	0.0	0.0	0	0	0	0	0	j
		Empty		0.0	-	-	-	0.90	-	-	-	-	-	-	-	-	0.0	0.0	0					
		Empty		0.0	-	-	-	0.90	-	-	-	-	-	-	-	-	0.0	0.0	0					
		Empty		0.0	-	-	-	0.90	-	-	-	-	-	-	-	-	0.0		0					
		Empty		0.0	-	-	-	0.90	-	-	-	-	-	-	-	-	0.0	0.0	0					
																				0	0	0	0	1

#REF!

DL

^{***} A_T is the product of H and D

Mount	Height (ft)	Member	*L (in)		D (in)	Weight (lb/ft)	*** Ca	K _z	q _z (psf)	Wind Load (PLF)	Lateral Load (Seismic)	Vertical Load (Seismic)
	158.00	3.0 STD Pipe	12.00	3.50	0.00		1.20	1.126	34.6	12	-	
	158.00	2.5 STD Pipe	12.00	2.88	0.00		1.20	1.126	34.6	10	-	
	158.00	2.0 STD Pipe	12.00	2.38	0.00		1.20	1.126	34.6	8	-	
	158.00	1/2" SR	0.00	0.50	0.00		-	-	-	-	-	
	158.00	(L4x4)	0.00	4.00	4.00		-	-	-	-	-	
	158.00	(L2.5x2.5)	12.00	2.50	2.50		2.00	1.126	34.6	14	-	
	158.00	(L2x2)	12.00	2.00	2.00		2.00	1.126	34.6	12	-	
	158.00	Plate (PL6x3/8)	12.00	6.00	0.38		2.00	1.126	34.6	35	-	
	158.00	Plate (PL6x1/2)	12.00	6.00	0.50		2.00	1.126	34.6	35	-	
	158.00	HSS4x4	12.00	4.00	4.00		2.00	1.126	34.6	23	-	
	158.00	HSS4X4X4	0.00	4.00	4.00		-	-	-	-	-	
	158.00	Double Angle (LL2.5x2.5x3x3)	12.00	5.00	2.50		2.00	1.126	34.6	29	-	
	158.00	Channel (C5X4X0.375)	0.00	4.00	5.00		-	-	-	-	-	
	158.00	Channel (2.75x2)	0.00	2.75	2.00		-	-	-	-	-	

^{*} Enter N/A in the W column for front sheilded apurtanances.
** A_N is the product of H and W

^{*}The dimension L is the longest dimension of the member

** The dimension W is the height or width of the member that resists wind load

*** Ca will equal 1.2 for round members and 2.0 for flat members

CLIENT:

PROJECT:

SUBJECT:

reduction 0.17361

				ti (in)	1.75430	07		1.1695379							reduction 0.17361								
Antenna ANI	Mount With	Ice		u (III)	1.73430	01		1.1093379							0.17301				Pounds				
Mounting Pole	Height (ft)	Model Number	#	H (in)	W (in)	ı i)	D Ka in)	*A _N (ft2)	*A _T (ft2)	*Volume Ice (ft3)	*Weight Ice (Ibs)	**Ca (FRONT)	**Ca (SIDE)	Kz	q _z (psf)	Ice Wind Load (Front)	Ice Wind Load (Side)	Combined Wind Load (Front)	Combined Wind Load (Side)	lce Dead Load	**Total Wind Load (Front)	**Total Wind Load (Side)	Total Ice Load
Pos.1	158.00	RFS APXVAALL24_43-U-NA20	1	9	5.9 24	1.0	8.5 0.90	3.01	2.63	7.68	430.21	0.72	0.83	1.126	6.7	13.1	13.1	134.8		430	135	80	539
	158.00	Ericsson Radio 4480 B71+B85	1	2	1.8 15	5.7	7.5 0.90	-	0.80	1.61	90.25	0.70	0.70	1.126	6.7	0.0	3.4	0.0	11.7	90			
	158.00	Generic Twin Style 1A - PCS	1		6.3 7	7.7	3.1 0.90	-	0.31	0.33	18.67	0.70	0.70	1.126	6.7	0.0	1.3	0.0	2.3	19 ¹			
		Empty			-	-	- 0.90	-	-	-	0.00	-	-	-	-	0.0	0.0	0.0	0.0	0			
		Empty			-	-	- 0.90	-	-	-	0.00	-	-	-	-	0.0	0.0	0.0	0.0	0			
																				ļ	68	40	270
		Empty			-	-	- 0.90	-	-	-	0.00	-	-	-	-	0.0	0.0	0.0	0.0	0	0	0	0
		Empty			-	-	- 0.90	-	-	-	0.00	-	-	-	-	0.0	0.0	0.0	0.0	0			
		Empty			-	-	- 0.90	-	-	-	0.00	-	-	-	-	0.0	0.0	0.0	0.0	0			
		Empty			-	-	- 0.90	-	-	-	0.00	-	-	-	-	0.0	0.0	0.0	0.0	0			
		Empty			-	-	- 0.90	-	-	-	0.00	-	-	-	-	0.0	0.0	0.0	0.0	0			
																				ļ	0	0	0

^{*} A_N ,A_T, Volume Ice and Weight Ice are calculated per unit
** Ca will equal 1.2 for all ice load calculations

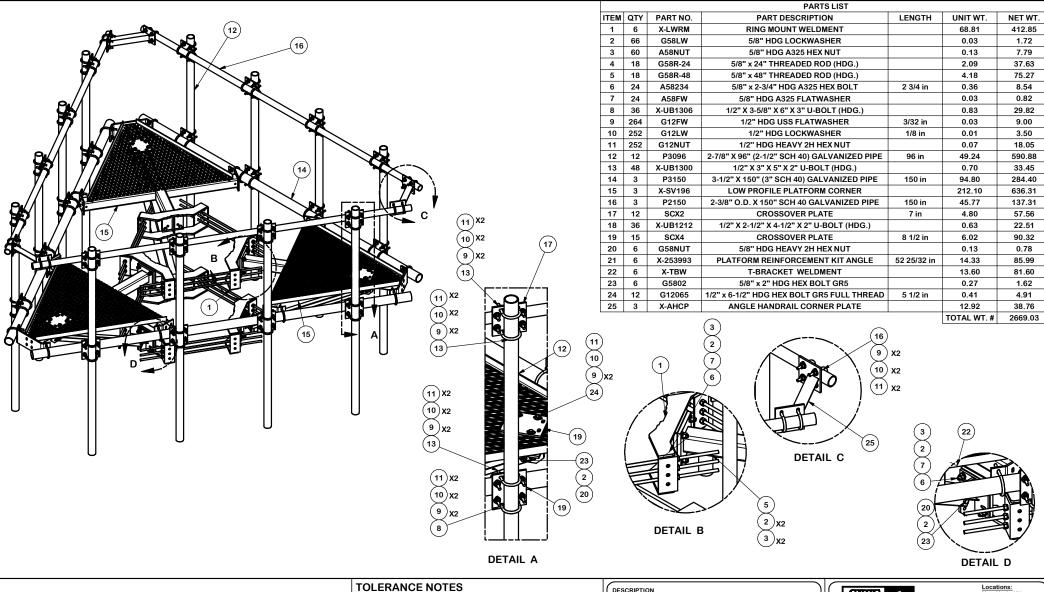
Mount	Height (ft)	Member	*L (in)	**W (in)	D (in)	***A _N (ft2)	Volume Ice (ft3)	Weight Ice (lbs)	****Ca (FRONT)	Kz	q _z (psf)	lce Wind Load (Front)	Combined Wind Load (Front)	lce Dead Load
	158.00	3.0 STD Pipe	12.00	3.50	0.00	0.46	0.20	11.26	1.20	1.126	6.0	3.3	5.4	1
	158.00	2.5 STD Pipe	12.00	2.88	0.00	0.45	0.18	9.93	1.20	1.126	6.0	3.2	5.0	1
	158.00	2.0 STD Pipe	12.00	2.38	0.00	0.44	0.16	8.85	1.20	1.126	6.0	3.1	4.6	
	158.00	1/2" SR	0.00	0.50	0.00	-	-	-	-	-	-	-	-	
	158.00	(L4x4)	0.00	4.00	4.00	-	-	-	-	-	-	-	-	
	158.00	(L2.5x2.5)	12.00	2.50	2.50	0.44	0.12	6.82	1.20	1.126	6.0	3.2	5.7	
	158.00	(L2x2)	12.00	2.00	2.00	0.43	0.10	5.46	1.20	1.126	6.0	3.1	5.1	
	158.00	Plate (PL6x3/8)	12.00	6.00	0.38	0.52	0.32	17.68	1.20	1.126	6.0	3.8	9.8	1
	158.00	Plate (PL6x1/2)	12.00	6.00	0.50	0.52	0.32	17.99	1.20	1.126	6.0	3.8	9.8	1
	158.00	HSS4x4	12.00	4.00	4.00	0.48	0.39	22.11	1.20	1.126	6.0	3.4	7.4	2
	158.00	HSS4X4X4	0.00	4.00	4.00	-	-	-	-	-	-	-	-	
	158.00	Double Angle (LL2.5x2.5x3x3)	12.00	5.00	2.50	0.50	0.30	17.06	1.20	1.126	6.0	3.6	8.6	1
	158.00	Channel (C5X4X0.375)	0.00	4.00	5.00	-	-	-	-	-	-	-	-	
	158.00	Channel (2.75x2)	0.00	2.75	2.00	-	-	-	-	-	-	_	-	

^{*}The dimension L is the longest dimension of the member

** The dimension W is the height or width of the member that resists wind load

**** A_N is the area of ice built up on the LW plane

**** Ca will equal 1.2 for all ice load calculations



С	RELOCATED MOUNT PIPE POSITIONS	4488	JET	5/23/2021
В	CHANGED X-253992 TO X-TBW		CEK	9/20/2018
Α	REPLACED HCP WITH X-AHCP	4488	CEK	7/14/2014
REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
	REVISION HISTORY			

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE: SAWED, SHEARED AND GAS CUT EDGES (\pm 0.030") DRILLED AND GAS CUT HOLES (\pm 0.030") - NO CONING OF HOLES LASER CUT EDGES AND HOLES (\pm 0.010") - NO CONING OF HOLES BENDS ARE ± 1/2 DEGREE

ALL OTHER MACHINING (± 0.030") ALL OTHER ASSEMBLY (± 0.060")

PROPRIETARY NOTE:
THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT
INDUSTRIES AND CONSIDERED A TRADE SECRET, ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF
VALMONT INDUSTRIES IS STRUCTLY PROMISITED.

DESCRIPTION

12' 6" LOW PROFILE PLATFORM WITH TWELVE 2-7/8" ANTENNA MOUNTING PIPES, AND SUPPORT RAIL



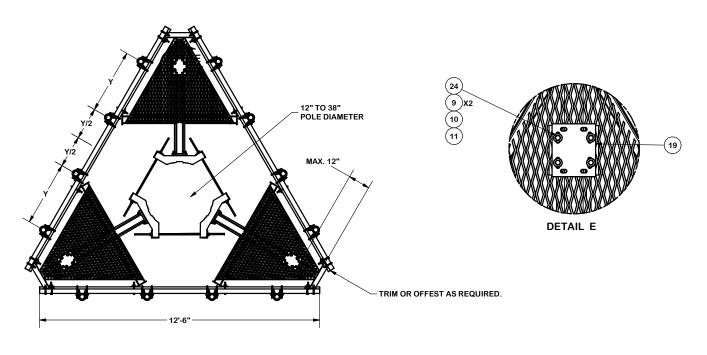
A valmont **Y comm**

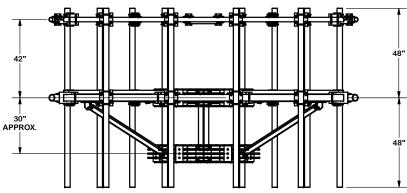
Engineering Support Team: 1-888-753-7446

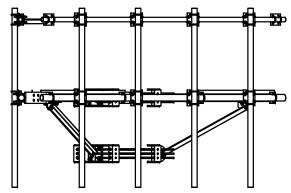
Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX

New York, NY

CPD N	0.	DRAWN BY	,	ENG. APP	ROVAL	PART NO.		
44	88	CEK	3/24/2014				RMQP-4096-HK	0
CLASS	SUB	DRAWING	USAGE	CHECKED	BY	DWG. NO.		ļ Ψ
81	02	cus	TOMER	вмс	7/14/2014		RMQP-4096-HK	ω







С	RELOCATED MOUNT PIPE POSITIONS	4488	JET	5/23/2021				
В	CHANGED X-253992 TO X-TBW		CEK	9/20/2018				
Α	REPLACED HCP WITH X-AHCP	4488	CEK	7/14/2014				
REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE				
REVISION HISTORY								

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE: SAWED, SHEARED AND GAS CUT EDGES (± 0.030") - NO CONING OF HOLES (± 0.000") - NO CONING OF HOLES LASER CUT EDGES AND HOLES (± 0.000") - NO CONING OF HOLES BENDS ARE ± 112 DEGREE

ALL OTHER MACHINING (± 0.030") ALL OTHER ASSEMBLY (± 0.060")

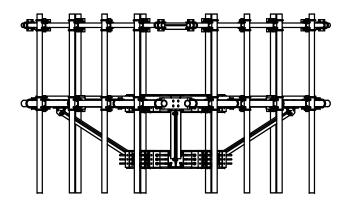
PROPRIETARY NOTE:
THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALIDIONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALIDONT NUMBER IS STRICTLY PROPRIETED.

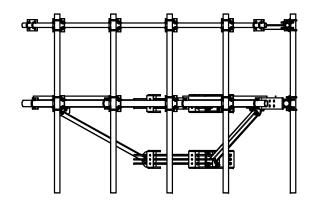
DESCRIPTION
12' 6" LOW PROFILE PLATFORM
12' 6" LOW PROFILE PLATFORM MOUN WITH TWELVE 2-7/8" ANTENNA MOUNTING PIPES, AND SUPPORT RAIL

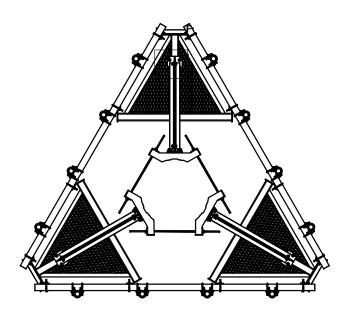
SITE PRO
A valmont COMMY

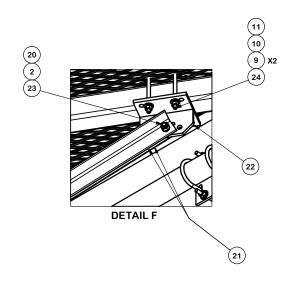
Locations: New York, NY Atlanta, GA Engineering Atlanta, GA
Support Team: Los Angeles, CA
1-888-753-7446 Plymouth, IN Salem, OR Dallas, TX

CPD N	0.	DRAWN BY	ENG. APPROVAL	PART NO.	2
44	00	CEK 3/24/2014		RMQP-4096-HK	10
44	88	CEK 3/24/2014		KIVIQP-4090-FIK	0
CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.	т
81	02	CUSTOMER	BMC 7/14/2014	RMQP-4096-HK	3
				71111-447-11111	









С	RELOCATED MOUNT PIPE POSITIONS	4488	JET	5/23/2021
В	CHANGED X-253992 TO X-TBW		CEK	9/20/2018
Α	REPLACED HCP WITH X-AHCP	4488	CEK	7/14/2014
REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
	REVISION HISTORY			

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE: SAWED, SHEARED AND GAS CUT EDGES (± 0.030") - NO CONING OF HOLES (± 0.030") - NO CONING OF HOLES LASER CUT EDGES AND HOLES (± 0.010") - NO CONING OF HOLES BENDS ARE ± 112 DEGREE

ALL OTHER MACHINING (± 0.030")

ALL OTHER ASSEMBLY (± 0.060")

PROPRIETANT NOTE:
THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT
INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF
VALMONT NOURTHERS IS STRENCY PROPRIETED.

DESCRIPTION

12' 6" LOW PROFILE PLATFORM WITH TWELVE 2-7/8" ANTENNA MOUNTING PIPES, AND SUPPORT RAIL



Engineering Support Team: 1-888-753-7446

A valmont ♥ common

Locations: New York, NY Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX

CPD N	0.	DRAWN BY	ENG. APPROVAL	PART NO.	з
44	88	CEK 3/24/2014		RMQP-4096-HK	o :
CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.	ן ייין
81	02	CUSTOMER	BMC 7/14/2014	RMQP-4096-HK	ω

Exhibit F

Power Density/RF Emissions Report



Radio Frequency Theoretical Modeling Report



T-Mobile Wireless Tower Facility

<u>Site ID</u>: CT11527B <u>Report Date:</u> 2/2/2023

<u>Site Name:</u> CT527/Cordless Wilington

Address: 47 Turnpike Road, Willington,

CT 06279

County: TollandReport Author:Mia StephensLatitude:41.925538Report Reviewer:Ryan McManus

Longitude: -72.252369 **FHPN**: 230101

Compliance Status:

T-Mobile will be compliant with FCC Regulations upon installation of recommended mitigation measures

Table of Contents

1.0	Introduction	
2.0	Site Information	
3.0	Results Snapshot	
4.0	Site Map	
5.0	Antenna Inventory	
6.0	Results and Compliance Recommendations	
7.0	Conclusion	
8.0	T-Mobile Signage Policy	14
9.0	FCC Guidelines	15
10.0	Calculation Methodology	17
-	The Cylindrical Model Implementation (Sula9)	17
-	The Far Field Model	18
11.0	Certifications	20

1.0 Introduction

Fox Hill Telecom, Inc. has been contracted by T-Mobile to produce a theoretical assessment of the potential radio frequency emissions at the proposed T-Mobile tower site. FCC OET Bulletin 65 – Edition 97-01 recommends that theoretical calculations should be done to yield a worst-case scenario. This theoretical analysis will provide a worst-case assessment of potential emissions and will assume all transmitters are operating at highest capacity and power. This will provide T-Mobile with a guideline of how to proceed with mitigating the site to ensure the site will be compliant with FCC regulations at any instance.

Many licensed wireless system operators are required to perform periodic assessments of potential impacts to humans due to radio frequency emissions from active transmitters at the site. The Federal Communications Commission ("FCC") considers two levels of standards based on access controls to the site and the level of knowledge of the effects of radio frequency to humans.

A controlled/occupational environment assumes that anyone accessing the site is fully trained in RF safety and is aware of the effects of the exposure to radio frequency emissions to humans.

An uncontrolled/general population environment assumes that access is not restricted to RF trained individuals and other members of the general population may be able to access the site for any reason, occupation or otherwise.

2.0 Site Information

The existing site is located on a 170' tower located at 47 Turnpike Road in Willington, CT.

3.0 Results Snapshot

Based on the theoretical modeling analysis performed, there are no areas that exceed the FCC's General Public and/or Occupational limits at this site. T-Mobile must ensure proper mitigation is installed at the site in order to bring the site into compliance.

Table 1.0 below provides a snapshot of the highest T-Mobile and composite emissions at each pertinent location at and around the site.

T-Mobile MPE Contribution								
	% FCC General	% FCC Occupational						
Ground Level	0.03	0.006						
Composite MPE Contribution								
Ground Level 0.05 0.01								

Table 1.0 MPE Contribution

Based on the data provided by T-Mobile, there are antennas from other wireless providers on site. These other carrier antennas were also included in the modeling analysis using assumed values based on existing industry standards.

Section 6.0 will show the areas of exposure, if any, at each T-Mobile Sector.

A site scaled map can be found in section 4.0 which details the locations where mitigation should be installed to bring the site into compliance with FCC regulations.

Below is a summary of **recommended mitigation** at this T-Mobile facility.

Access Point:

No signage required

Sector A:

• No signage required

Sector B:

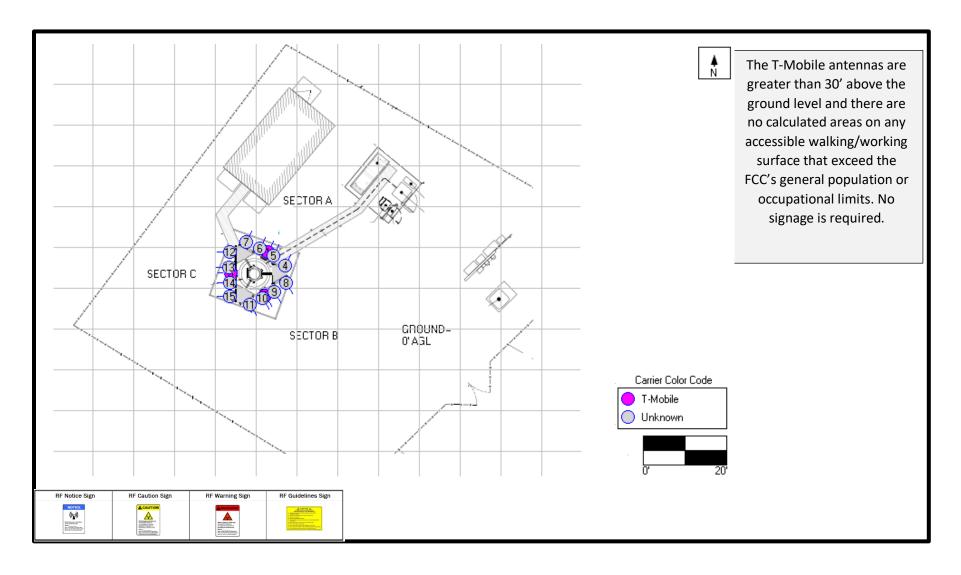
• No signage required

Sector C:

No signage required

The T-Mobile antennas are greater than 30' above the ground level and there are no calculated areas on any accessible walking/working surface that exceed the FCC's general population or occupational limits, therefore no mitigation is required on this site.

4.0 Site Map



5.0 Antenna Inventory

Antenna		Antenna Make and			TX Power	# of	ERP	Azimuth	Gain	BW	Length		
ID	Operator	Model	Туре	Freq (MHz)	(Watts)	TX	(Watts)	(°)	(dBd)	(°)	(ft)	х	У
1	T-Mobile	RFS - APXVAALL24_43-U- NA20	Panel	LTE / 5G NR 600	80	2	3156	30	12.95	67	7.99	36.4	45.2
1	T-Mobile	RFS - APXVAALL24_43-U- NA20	Panel	LTE 700	40	2	1854	30	13.65	62	7.99	36.4	45.2
1	T-Mobile	RFS - APXVAALL24_43-U- NA20	Panel	LTE 1900	40	4	5610.17	30	15.45	64	7.99	36.4	45.2
1	T-Mobile	RFS - APXVAALL24_43-U- NA20	Panel	GSM 1900	15	1	526.03	30	15.45	64	7.99	36.4	45.2
2	T-Mobile	RFS - APXVAALL24_43-U- NA20	Panel	LTE / 5G NR 600	80	2	3156	150	12.95	67	7.99	35.7	34.4
2	T-Mobile	RFS - APXVAALL24_43-U- NA20	Panel	LTE 700	40	2	1854	150	13.65	62	7.99	35.7	34.4
2	T-Mobile	RFS - APXVAALL24_43-U- NA20	Panel	LTE 1900	40	4	5610.17	150	15.45	64	7.99	35.7	34.4
2	T-Mobile	RFS - APXVAALL24_43-U- NA20	Panel	GSM 1900	15	1	526.03	150	15.45	64	7.99	35.7	34.4
3	T-Mobile	RFS - APXVAALL24_43-U- NA20	Panel	LTE / 5G NR 600	80	2	3156	270	12.95	67	7.99	27.2	40
3	T-Mobile	RFS - APXVAALL24_43-U- NA20	Panel	LTE 700	40	2	1854	270	13.65	62	7.99	27.2	40
3	T-Mobile	RFS - APXVAALL24_43-U- NA20	Panel	LTE 1900	40	4	5610.17	270	15.45	64	7.99	27.2	40
3	T-Mobile	RFS - APXVAALL24_43-U- NA20	Panel	GSM 1900	15	1	526.03	270	15.45	64	7.99	27.2	40
4	Unknown	Unknown	Panel	850	100	1	1419	30	11.52	61	4.00	40.7	41.8
5	Unknown	Unknown	Panel	1900	100	1	2916.02	30	14.65	65	4.00	37.8	44.3
6	Unknown	Unknown	Panel	850	100	1	1419	30	11.52	61	4.00	34.4	46.1
7	Unknown	Unknown	Panel	1900	100	1	2916.02	30	14.65	65	4.00	31	47.6
8	Unknown	Unknown	Panel	850	100	1	1419	150	11.52	61	4.00	40.9	37.5

Antenna ID	Operator	Antenna Make and Model	Туре	Freq (MHz)	TX Power (Watts)	# of TX	ERP (Watts)	Azimuth (°)	Gain (dBd)	BW (°)	Length (ft)	x	у
9	Unknown	Unknown	Panel	1900	100	1	2916.02	150	14.65	65	4.00	38	35.3
10	Unknown	Unknown	Panel	850	100	1	1419	150	11.52	61	4.00	35.1	33.7
11	Unknown	Unknown	Panel	1900	100	1	2916.02	150	14.65	65	4.00	31.9	32.1
12	Unknown	Unknown	Panel	850	100	1	1419	270	11.52	61	4.00	27	45.2
13	Unknown	Unknown	Panel	1900	100	1	2916.02	270	14.65	65	4.00	26.7	41.3
14	Unknown	Unknown	Panel	850	100	1	1419	270	11.52	61	4.00	27	37.5
15	Unknown	Unknown	Panel	1900	100	1	2916.02	270	14.65	65	4.00	27	34.2

Antenna ID	Operator	Antenna Centerline AGL (ft)	Ant Z Value Ground Level (ft)
1	T-Mobile	159.00	155.00
2	T-Mobile	159.00	155.00
3	T-Mobile	159.00	155.00
4	Unknown	170.00	168.00
5	Unknown	170.00	168.00
6	Unknown	170.00	168.00
7	Unknown	170.00	168.00
8	Unknown	170.00	168.00
9	Unknown	170.00	168.00
10	Unknown	170.00	168.00
11	Unknown	170.00	168.00
12	Unknown	170.00	168.00
13	Unknown	170.00	168.00
14	Unknown	170.00	168.00
15	Unknown	170.00	168.00

^{*}The Z values refer to the distance from the bottom of the antenna to the referenced level.

6.0 Results and Compliance Recommendations

At the **ground level (0' AGL**), the maximum power density value (% MPE) calculated for T-Mobile's antennas is **0.03** % of the FCC's allowable limit for General Population exposure to radio frequency emissions (**0.01** % of the FCC's allowable Occupational limit).

T-Mobile will be compliant with the installation of recommended mitigation measures. Each sector is broken down below.

Sector A:

The maximum power density value (% MPE) calculated for **T-Mobile's Sector A antennas** on the ground level is **0.03** % of the FCC's allowable limit for General Population exposure to radio frequency emissions (**0.01** % of the FCC's allowable Occupational limit).

There are no accessible areas at any forementioned level that exceed the FCC's General Population or Occupational limit for exposure to radio frequency emissions in front of the Sector A antennas. All areas of concern extend into free space.

Sector B:

The maximum power density value (% MPE) calculated for **T-Mobile's Sector B antennas** on the ground level is **0.03** % of the FCC's allowable limit for General Population exposure to radio frequency emissions (**0.01** % of the FCC's allowable Occupational limit).

There are no accessible areas at any forementioned level that exceed the FCC's General Population or Occupational limit for exposure to radio frequency emissions in front of the Sector B antennas. All areas of concern extend into free space.

Sector C:

The maximum power density value (% MPE) calculated for **T-Mobile's Sector C antennas** on the ground level is **0.03** % of the FCC's allowable limit for General Population exposure to radio frequency emissions (**0.01** % of the FCC's allowable Occupational limit).

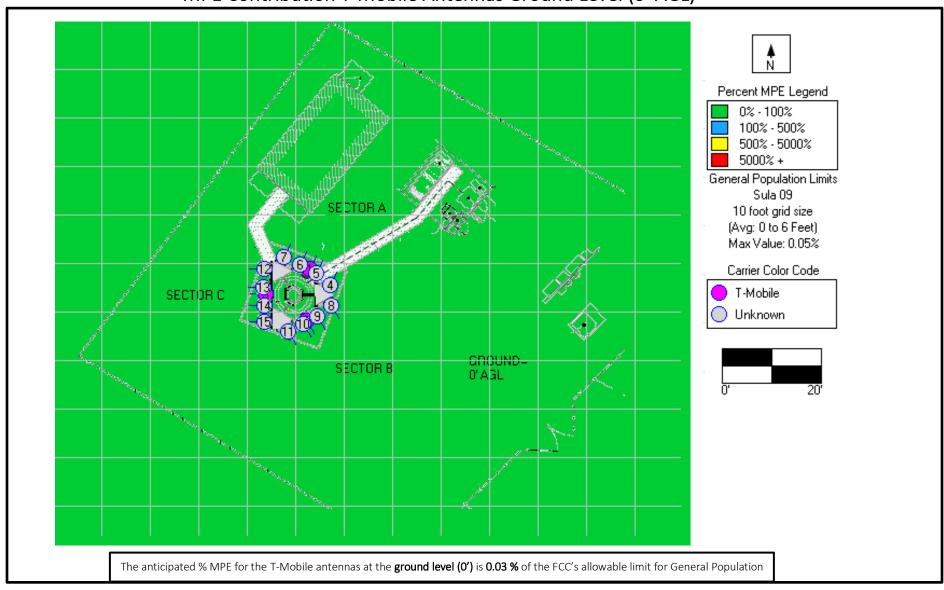
There are no accessible areas at any forementioned level that exceed the FCC's General Population or Occupational limit for exposure to radio frequency emissions in front of the Sector C antennas. All areas of concern extend into free space.

The FCC mandates that if a site is found to be out of compliance with regard to emissions that any system operator contributing 5% or more to areas exceeding the FCC's allowable limits, as outlined in this report, will be responsible for bringing the site into compliance.

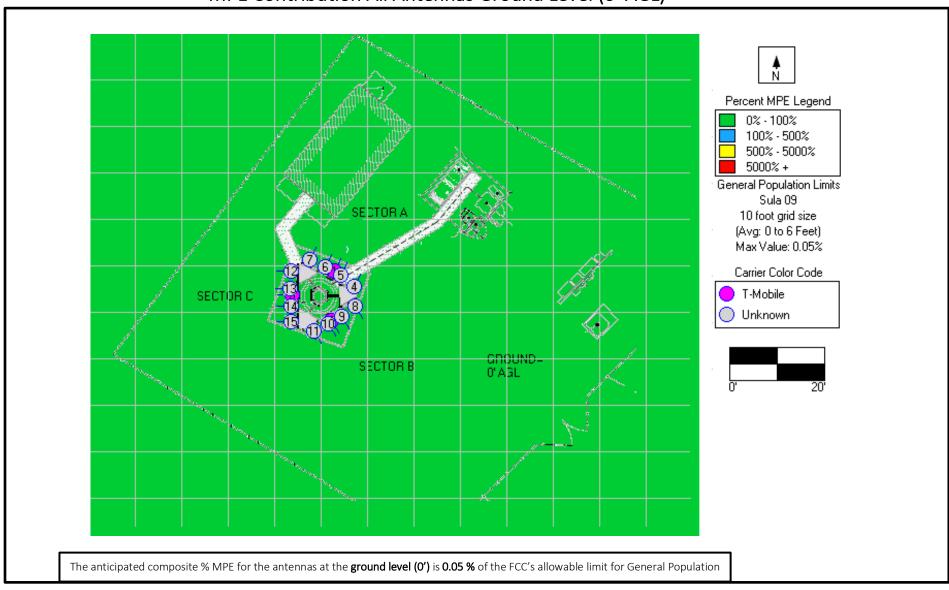
There are no areas of exposure in front of the unknown carrier antennas.

At the **ground level (O' AGL)**, the composite maximum power density value (% MPE) calculated for the antennas is **0.05** % of the FCC's allowable limit for General Population exposure to radio frequency emissions (**0.01** % of the FCC's allowable Occupational limit).

MPE Contribution T-Mobile Antennas Ground Level (0' AGL)



MPE Contribution All Antennas Ground Level (0' AGL)



7.0 Conclusion

Fox Hill Telecom performed a theoretical modeling analysis for the existing tower located at 47 Turnpike Road in Willington, CT.

Based on the calculations, T-Mobile is in compliance with FCC Regulations. No further action is required by T-Mobile.

Access Point:

• No signage required

Sector A:

• No signage required

Sector B:

• No signage required

Sector C:

• No signage required

The T-Mobile antennas are greater than 30' above the ground level and there are no calculated areas on any accessible walking/working surface that exceed the FCC's general population limit or occupational limits, therefore no mitigation is required on this site.

8.0 T-Mobile Signage Policy

Sign	Description
A NOTICE III A NOTICE III A STATE OF THE S	RF Guidelines Sign Gives guidelines on how to proceed in areas that may exceed either the FCC's General Population or Occupational emissions limits.
Radio frequency transmitters ere in very combine size. See No. See No. John Son Combined St. See No. John Son Combined St. John Son Son Combined St. John Son Son Son St. John Son Son Son Son Son Son Son Son Son So	Blue Notice Sign Used to inform individuals that they are entering an area that may exceed the FCC's General Population limits. Must be placed anywhere the public can get within 30 feet vertically or horizontally of an antenna.
Radio frequency finds may seem of the control of th	Yellow Caution Sign Used to inform individuals that they are entering an area that may exceed the either the FCC's General Population or Occupational Emissions limits. It must be placed so it is visible from all approachable sides. It must also be just outside of the area predicted to exceed the MPE limits so it can be read without standing within the affected area.
Final began yellow may asserted FO character for the constitution of the constitution plan to asserted plant.	Red Warning Sign Used to inform individuals that they are entering an area that may exceed 5x the FCC's Occupational emissions limit. It must be placed so it is visible from all approachable sides. It must also be just outside of the area predicted to exceed the MPE limits so it can be read without standing within the affected area.

9.0 FCC Guidelines

All power density values used in this report were analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μ W/cm²). The number of μ W/cm² calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) - (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

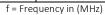
<u>General Population/Uncontrolled exposure</u> limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, 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.

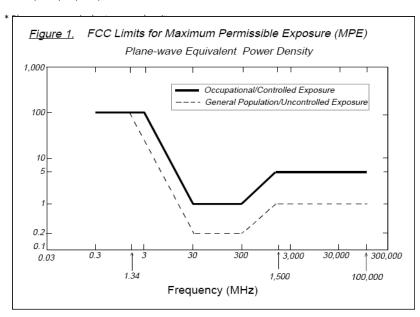
Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter (μ W/cm²). The general population exposure limit for the 700 and 800 MHz Bands is approximately 467 μ W/cm² and 567 μ W/cm² respectively, and the general population exposure limit for the 1900 MHz PCS and 2100 MHz AWS bands is 1000 μ W/cm². Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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, have been properly trained in RF safety 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, have been trained in RF safety and can exercise control over his or her exposure by leaving the area or by some other appropriate means. The Occupational/Controlled exposure limits all utilized frequency bands is five (5) times the FCC's General Public / Uncontrolled exposure limit.

Additional details can be found in FCC OET 65.

Table 1: Limits for Maximum Permissible Exposure (MPE) (A) Limits for Occupational/Controlled Exposure								
0.3-3.0	614	1.63	(100)*	6				
3.0-30	1842/f	4.89/f	(900/f²)*	6				
30-300	61.4	0.163	1.0	6				
300-1,500			f/300	6				
1,500-100,000			5	6				
(B) Limits for General Publ	lic/Uncontrolled Exposure			·				
Frequency Range (MHz)	Electric Field Strength (E)	Magnetic Field Strength (H)	Power Density (S)	Averaging Time [E] ² , [H] ² , or S				
	(V/m)	(A/m)	(mW/cm²)	(minutes)				
0.3-1.34	614	1.63	(100)*	30				
1.34-30	824/f	2.19/f	(180/f²)*	30				
30-300	27.5	0.073	0.2	30				
300-1,500			f/1,500	3				
1,500-100,000			1.0	30				





10.0 Calculation Methodology

NSS has performed theoretical calculations on all transmission equipment located on this facility. All calculations have been performed using Waterford Consultants' RoofMaster™ 2015 Version 19.9.7.19. RoofMaster™ employs several power density prediction models based on the computational approaches set forth in the Federal Communications Commission's Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields, OET Bulletin 65 utilizing both cylindrical and far-field modelling (calculated using antenna manufacturers pattern data).

The Cylindrical Model Implementation (Sula9)

In OET-65, the Cylindrical Model is presented as an approach to determine the spatially averaged power density in the near field directly in front of an antenna. In order to implement this model in all directions, RoofMaster™ utilizes the antenna manufacturer horizontal pattern data. Additionally, RoofMaster™ incorporates factors that reduce the power density by the inverse square of horizontal and vertical distance beyond the near field region.

Power density is calculated as follows:

$$S = \left(\left(\frac{360}{Beamwidth} \right) \frac{P_{in}G_H H_r V_r}{2\pi Rh} \right) \frac{\mu W}{cm^2}$$

§ S is the spatially averaged power density value

- R is the horizontal distance meters to the study point
- h is the aperture length in meters
- P_{in} is power into the antenna input port in Watts
- RoofMasterTM Implementation:
 - G_H is gain offset to study point as specified in manufacturer horizontal pattern
 - P_{in} is adjusted by the portion of the antenna aperture in the 0-6 ft vertical study zone
 - H_r accounts for $1/R^2$ Far Field roll off which starts at 2xh
 - V_r accounts for 1/ (vertical distance)² roll off from antenna bottom to the top of the 0-6ft study zone (or antenna top to bottom of 0-6ft study zone)

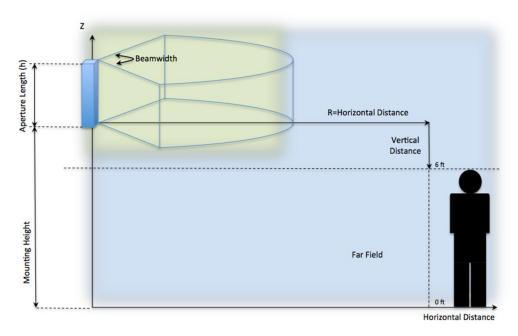


Figure 1: Cylindrical Model Implementation.

The Far Field Model

In OET-65, a far field model is presented to calculate the spatial peak power density. The RoofMasterTM implementation of this model incorporates antenna manufacturer's horizontal and vertical pattern data to determine the power density in all directions. Power density is calculated as follows:

$$S = \frac{13.05 P_{in} G}{R^2} \frac{\mu W}{cm^2}$$

- Does not include 100% reflection factor
- P_{in} is Watts
- R is meters to study point
- G is gain to study point as specified in manufacturer horizontal and vertical patterns

A worst-case prediction is described in OET-65 where field strength may double due to 100% reflection of the incoming radiation. Considering an EPA recommendation that a multiplier of 1.6 is a more realistically representation of this effect is rewritten as follow:

$$S_{FF} = \frac{33.4 \cdot P_{in} \cdot G_{dBd}}{R^2} \quad (\mu \text{W/cm}^2)$$

This model yields the power density at a single point in space. In order to determine the spatial power density for comparison to the FCC limits, the average of several points calculated within the human profile (0 to 6 feet) must be conducted.

RoofMaster[™] calculates seven power density values between 0 and 6 feet above the specified study plane and performs a linear spatial average.

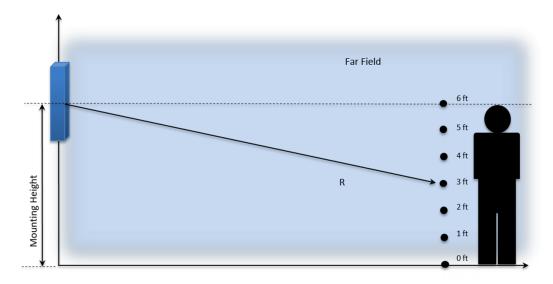


Figure 2 Far Field Model Implementation.

Predicted power densities are displayed as a percentage of the applicable FCC standards.

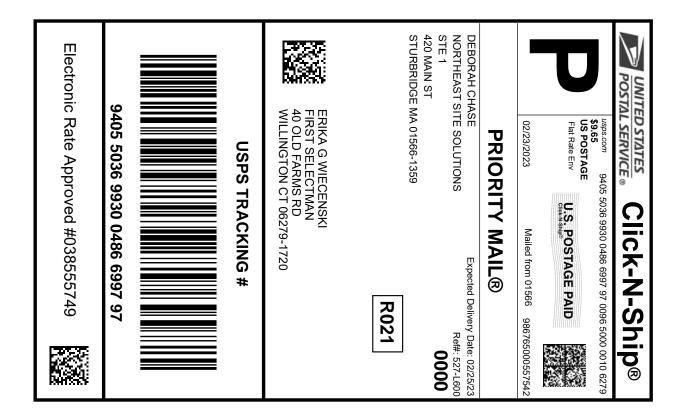
11.0 Certifications

I, Mia Stephens, preparer of this report certify that I am fully trained and aware of the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I have been trained in the procedures and requirements outlined in T-Mobile's FCC Regulatory Compliance Manual.

I, Ryan McManus, reviewer and approver of this report certify that I am fully trained and aware of the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I have been trained in the procedures and requirements outlined in T-Mobile's FCC Regulatory Compliance Manual.

Exhibit G

Recipient Mailings





Instructions

- 1. Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO **COPY OR ALTER LABEL.**
- 2. Place your label so it does not wrap around the edge of the package.
- 3. Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.
- 4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
- 5. Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING #: 9405 5036 9930 0486 6997 97

Trans. #: 583217603 Print Date: 02/23/2023 02/23/2023 02/25/2023 Delivery Date:

Priority Mail® Postage: Total:

\$9.65 \$9.65

Ref#: 527-L600

From: **DEBORAH CHASE**

NORTHEAST SITE SOLUTIONS

STE 1

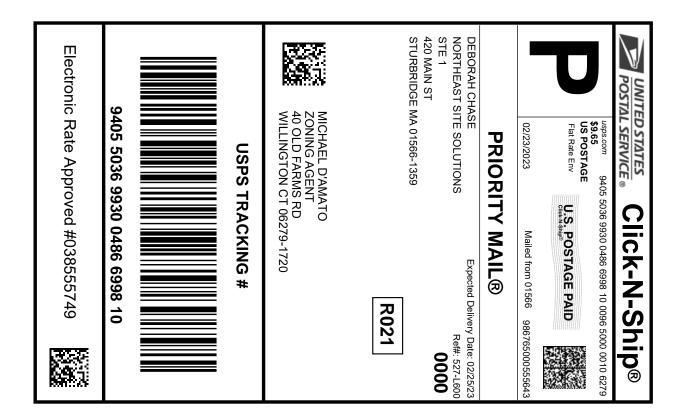
420 MAIN ST

STURBRIDGE MA 01566-1359

ERIKA G WIECENSKI

FIRST SELECTMAN 40 OLD FARMS RD

WILLINGTON CT 06279-1720





Instructions

- 1. Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO **COPY OR ALTER LABEL.**
- 2. Place your label so it does not wrap around the edge of the package.
- 3. Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.
- 4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
- 5. Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING #: 9405 5036 9930 0486 6998 10

Trans. #: 583217603 Print Date: 02/23/2023 02/23/2023 Delivery Date: 02/25/2023 Priority Mail® Postage: Total:

\$9.65 \$9.65

Ref#: 527-L600

From: **DEBORAH CHASE**

NORTHEAST SITE SOLUTIONS

STE 1

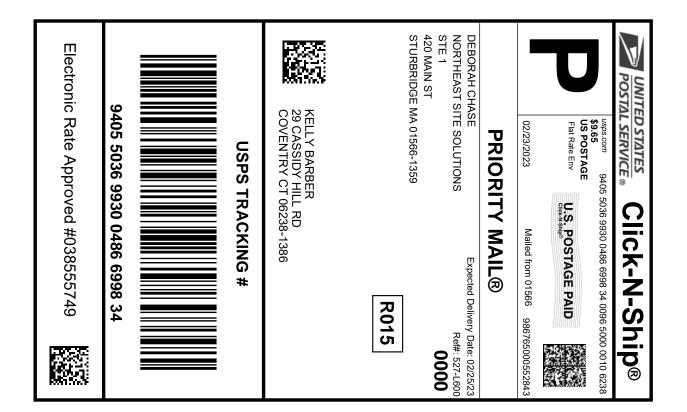
420 MAIN ST

STURBRIDGE MA 01566-1359

MICHAEL D'AMATO

ZONING AGENT 40 OLD FARMS RD

WILLINGTON CT 06279-1720





Instructions

- 1. Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO **COPY OR ALTER LABEL.**
- 2. Place your label so it does not wrap around the edge of the package.
- 3. Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.
- 4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
- 5. Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING #: 9405 5036 9930 0486 6998 34

Trans. #: 583217603 Print Date: 02/23/2023 02/23/2023 Delivery Date: 02/25/2023 Priority Mail® Postage: Total:

\$9.65 \$9.65

Ref#: 527-L600

From: **DEBORAH CHASE**

NORTHEAST SITE SOLUTIONS

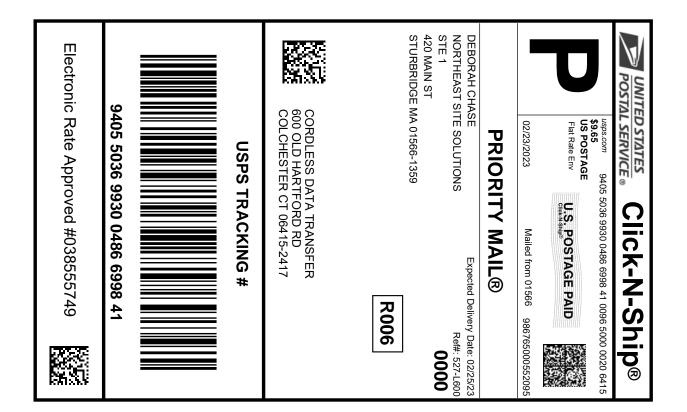
STE 1

420 MAIN ST

STURBRIDGE MA 01566-1359

KELLY BARBER

29 CASSIDY HILL RD COVENTRY CT 06238-1386





Instructions

- 1. Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO **COPY OR ALTER LABEL.**
- 2. Place your label so it does not wrap around the edge of the package.
- 3. Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.
- 4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
- 5. Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING #: 9405 5036 9930 0486 6998 41

Trans. #: 583217603 Print Date: 02/23/2023 02/23/2023 Delivery Date: 02/25/2023 Priority Mail® Postage: Total:

\$9.65 \$9.65

Ref#: 527-L600

From: **DEBORAH CHASE**

NORTHEAST SITE SOLUTIONS

STE 1

420 MAIN ST

STURBRIDGE MA 01566-1359

CORDLESS DATA TRANSFER

600 OLD HARTFORD RD **COLCHESTER CT 06415-2417**

CT115274 - TMOBILE



LINCOLN MALL 560 LINCOLN ST STE 8 WORCESTER, MA 01605-1925 (800)275-8777							
02/23/2023	00/2/0	,,,,	03	3:42 PM			
Product	Qty	Unit Price		Price			
Prepaid Mail Willington, CT Weight: 0 lb Acceptance Dat Thu 02/23/ Tracking #: 9405 5036	13.90 oz e: 2023			\$0.00			
Prepaid Mail Willington, CT Weight: O lb Acceptance Dat Thu 02/23/ Tracking #: 9405 5036	13.10 oz e: 2023		97	\$0.00			
Prepaid Mail Colchester, CT Weight: O lb Acceptance Dat Thu 02/23/ Tracking #: 9405 5036	06415 13.20 o: e: 2023		41	\$0.00			
Prepaid Mail	1			\$0.00			

Coventry, CT 06238 Weight: 0 lb 13.20 oz