

JULIE D. KOHLER

PLEASE REPLY TO: Bridgeport
WRITER'S DIRECT DIAL: (203) 337-4157
E-Mail Address: jkohler@cohenandwolf.com

April 14, 2015

Attorney Melanie Bachman
Acting Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

**Re: Notice of Exempt Modification
Town Square Media Group/T-Mobile equipment upgrade
T-Mobile Site ID CT11196A
37 Carmen Hill Road, Brookfield CT**

Dear Attorney Bachman:

This office represents T-Mobile Northeast LLC ("T-Mobile") and has been retained to file exempt modification filings with the Connecticut Siting Council on its behalf.

In this case, Town Square Media Group owns the existing telecommunications tower and related facility at 37 Carmen Hill Road, Brookfield Connecticut (latitude 41.49343, longitude -72.42873). T-Mobile intends to add three (3) antennas and add related equipment at this existing facility in Brookfield ("Brookfield Facility"). Please accept this letter as notification, pursuant to R.C.S.A. § 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the First Selectman, William N. Tinsley and the property owner, Florida Tower Partners.

The existing Brookfield Facility consists of a 454 foot (499 feet with appurtenances) self-supporting tower.¹ T-Mobile plans to add three (3) antennas on proposed pipe mounts at a centerline of 280 feet AGL. (Existing antennas would be relocated on new pipe mounts.) T-Mobile will also add an ice bridge, three (3) RRUs (remote radio units) to a proposed H-frame near T-Mobile's existing equipment, and add coax cables to the existing coax lines. (See the plans dated April 13, 2015 attached hereto as Exhibit A). The existing tower is structurally capable of supporting T-Mobile's proposed use, as indicated in the structural analysis dated

¹ While the online docket for the Connecticut Siting Council does not provide a docket or petition number for the approval of this structure, it does reference this structure in connection with notices of intent captioned EM-VER-018-140725, EM-SPRINT-018-130322, and TS-CING-018-111011.

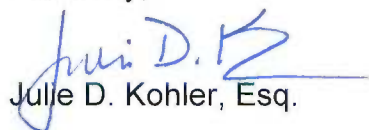
April 14, 2015
Site ID CT11196A
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March 18, 2015 and stamped March 19, 2015, attached hereto as Exhibit B. The planned modifications to the Brookfield Facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

- 1 . The proposed modification will not increase the height of the tower. T-Mobile's additional antennas will be installed at the 280 foot level. The enclosed tower drawing (Sheet A-1) confirms that the proposed modification will not increase the height of the tower.
- 2 . The installation of the T-Mobile equipment in the existing compound, as reflected on the attached site plan, will not require an extension of the site boundaries. (See Sheet A-1). T-Mobile's proposed equipment will be located entirely within the existing compound area.
- 3 . The proposed modification to the Facility will not increase the noise levels at the existing facility by six decibels or more.
- 4 . The operation of the additional antennas will not increase the total radio frequency (RF) power density, measured at the base of the tower, to a level at or above the applicable standard. According to a RF Exposure Analysis prepared by EBI dated April 7, 2015 T-Mobile's operations would add 1.46% of the FCC Standard. Therefore, the calculated "worst case" power density for the planned combined operation at the site including all of the proposed antennas would be 18.04% of the FCC Standard as calculated for a mixed frequency site as evidenced by the engineering exhibit attached hereto as Exhibit C.

For the foregoing reasons, T-Mobile respectfully submits that the proposed additional antennas and equipment at the Brookfield Facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2). Upon acknowledgement by the Council of this proposed exempt modification, T-Mobile shall commence construction approximately sixty days from the date of the Council's notice of acknowledgement.

Sincerely,


Julie D. Kohler, Esq.

cc: First Selectman William N. Tinsley, Town of Brookfield
Florida Tower Partners
Town Square Media Group
Jamie Marchini, Transcend Wireless

EXHIBIT A

SITE NAME: BROOKFIELD/JUNCTION RD.

**37 CARMEN HILL ROAD
BROOKFIELD, CT 06804
FAIRFIELD COUNTY
SITE NUMBER: CT11196A
L700 - 704BU CONFIGURATION**

T-MOBILE NORTHEAST LLC

35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002
OFFICE: (860) 648-1116

Transcend Wireless

TRANSCEND WIRELESS
10 INDUSTRIAL AVE
MADISON, NJ 07450
TEL: 201 984-0255
FAX: 201 984-0066



1600 OSOGOOD STREET
BUILDING 20 NORTH, SUITE 3090
N. ANDOVER, MA 01945
TEL: (978) 527-6533
FAX: (978) 524-9088



APPROVALS

CONSTRUCTION	DATE
RF ENGINEERING	DATE
ZONING/SITE ACQ.	DATE
OPERATIONS	DATE

TOWER OWNER	DATE
PROJECT NO:	CT11196A
DRAWN BY:	AS
CHECKED BY:	DR

4	04/13/15	ISSUED FOR REVIEW
3	03/23/15	ISSUED FOR REVIEW
2	08/18/14	ISSUED FOR REVIEW
1	08/11/14	ISSUED FOR REVIEW
0	08/07/14	ISSUED FOR REVIEW

SITE NUMBER: CT11196A
SITE NAME: BROOKFIELD/JUNCTION RD, 37 CARMEN HILL ROAD BROOKFIELD, CT 06804 FAIRFIELD COUNTY
SHEET TITLE
TITLE SHEET
SHEET NUMBER

GENERAL NOTES

1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF T-MOBILE. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.
2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE T-MOBILE NORTHEAST, LLC REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SPECIAL STRUCTURAL NOTES

1. STRUCTURAL DESIGNS AND DETAILS FOR ANTENNA MOUNTS COMPLETED BY HUDSON DESIGN ON BEHALF OF T-MOBILE ARE INCLUSIVE OF THE ENTIRE ANTENNA SUPPORT STRUCTURE (GLOBAL STRUCTURAL STABILITY ANALYSIS BY OTHERS) EXISTING TOWER PLATFORM, EXISTING ANTENNA MOUNTS AND ALL OTHER ASPECTS OF THE STRUCTURE THAT WILL SUPPORT THE T-MOBILE MODERNIZATION EQUIPMENT DEPLOYMENT AS DEPICTED HEREIN.
2. HUDSON DESIGN ASSUMES THAT THE TOWER IS PROPERLY CONSTRUCTED AND MAINTAINED. ALL STRUCTURAL MEMBERS AND THEIR CONNECTION ARE ASSUMED TO BE IN GOOD CONDITION AND ARE FREE FROM DEFECTS WITH NO DETERIORATION TO ITS MEMBER CAPACITIES

T-MOBILE TECHNICIAN SITE SAFETY NOTES

LOCATION	SPECIAL RESTRICTIONS
SECTOR A:	ACCESS NOT PERMITTED
SECTOR B:	ACCESS NOT PERMITTED
SECTOR C:	ACCESS NOT PERMITTED
GPS/LMU:	UNRESTRICTED
RADIO CABINETS:	UNRESTRICTED
PPC DISCONNECT:	UNRESTRICTED
MAIN CIRCUIT D/C:	UNRESTRICTED
NU/T DEMARC:	UNRESTRICTED
OTHER/SPECIAL:	NONE



CALL

BEFORE YOU DIG

CALL TOLL FREE 800-922-4455

OR CALL 811

UNDERGROUND SERVICE ALERT

PROJECT INFORMATION

SCOPE OF WORK: UNMANNED TELECOMMUNICATIONS FACILITY T-MOBILE EQUIPMENT MODERNIZATION

ZONING JURISDICTION: BASED ON INFORMATION PROVIDED BY T-MOBILE, THIS TELECOMMUNICATIONS EQUIPMENT DEPLOYMENT IS AN ELIGIBLE FACILITY UNDER THE TAX RELIEF ACT OF 2012, 47 USC 1455(A), AND IS SUBJECT TO AN EXPEDITED ELIGIBLE FACILITIES REQUEST/REVIEW AND ZONING PRE-EMPTION FOR LOCAL DISCRETIONARY PERMITS (VARIANCE, SPECIAL PERMIT, SITE PLAN REVIEW).

SITE ADDRESS: 37 CARMEN HILL ROAD
BROOKFIELD, CT 06804

LATITUDE: 41° 29' 36.3474" N

LONGITUDE: 73° 25' 43.428" W

JURISDICTION: NATIONAL, STATE & LOCAL CODES OR ORDINANCES

CURRENT USE: TELECOMMUNICATIONS FACILITY

PROPOSED USE: TELECOMMUNICATIONS FACILITY

DRAWING INDEX

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GROUNDING NOTES

1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE AND GENERAL COMPLIANCE WITH TELECOM AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GESS) SHALL BE BONDED TOGETHER AT OR BELOW GRADE BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OFF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
5. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
7. APPROVED ANTI-OXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
11. METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
12. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/2 IN. OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250.50

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
 SUBCONTRACTOR – TRANSCEND WIRELESS
 CONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
 OWNER – T-MOBILE
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.
10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
13. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.
14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.

15. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E (Fy = 36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
16. CONSTRUCTION SHALL COMPLY WITH UMS SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF T-MOBILE SITES."
17. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
18. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
19. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
20. APPLICABLE BUILDING CODES:
 SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.
 BUILDING CODE: IBC 2003 W/ 2005 CT SUPPLEMENT + 2009 & 2013 AMENDMENT
 ELECTRICAL CODE: REFER TO ELECTRICAL DRAWINGS
 LIGHTENING CODE: REFER TO ELECTRICAL DRAWINGS

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

- AMERICAN CONCRETE INSTITUTE (ACI) 318: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION, ASD, FOURTEENTH EDITION;
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-F, STRUCTURAL STANDARDS FOR STEEL
- ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES: REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC ELECTRICAL STANDARDS.

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ABBREVIATIONS

AGL	ABOVE GRADE LEVEL	G.C.	GENERAL CONTRACTOR	RF	RADIO FREQUENCY
AWG	AMERICAN WIRE GAUGE	MGB	MASTER GROUND BUS	TBD	TO BE DETERMINED
BCW	BARE COPPER WIRE	MIN	MINIMUM	TBR	TO BE REMOVED
BTS	BASE TRANSCIVER STATION	PROPOSED	NEW	TBR	TO BE REMOVED
EXISTING	EXISTING	N.T.S.	NOT TO SCALE	TBR	TO BE REMOVED
EG	EQUIPMENT GROUND	REF	REFERENCE	REF	AND REPLACED
EGR	EQUIPMENT GROUND RING	REQ	REQUIRED	TYP	TYPICAL

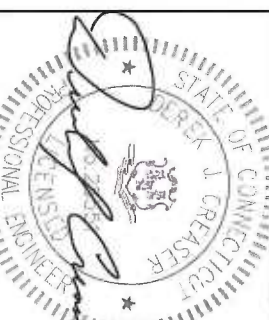
T-MOBILE NORTHEAST LLC
 35 GRIFFIN ROAD SOUTH
 BLOOMFIELD, CT 06002
 OFFICE: (860) 648-1116

Transcend Wireless

TRANSCEND WIRELESS
 10 INDUSTRIAL AVE
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 TEL: (201) 684-0255
 FAX: (201) 684-0664



1600 ORCHARD STREET
 BUILDING 20 NORTH, SUITE 3090
 N. ANDOVER, MA 01845
 TEL: (978) 557-5533
 FAX: (978) 354-9888



APPROVALS

CONSTRUCTION	DATE
RF ENGINEERING	DATE
ZONING/SITE ACQ.	DATE
OPERATIONS	DATE
TOWER OWNER	DATE
PROJECT NO:	CT11196A
DRAWN BY:	AS
CHECKED BY:	DR

4	04/13/15	ISSUED FOR REVIEW
3	03/23/15	ISSUED FOR REVIEW
2	09/18/14	ISSUED FOR REVIEW
1	09/11/14	ISSUED FOR REVIEW
0	08/07/14	ISSUED FOR REVIEW

SITE NUMBER: CT11196A

SITE NAME:
BROOKFIELD/JUNCTION RD,
 37 CARMEN HILL ROAD
 BROOKFIELD, CT 06804
 FAIRFIELD COUNTY

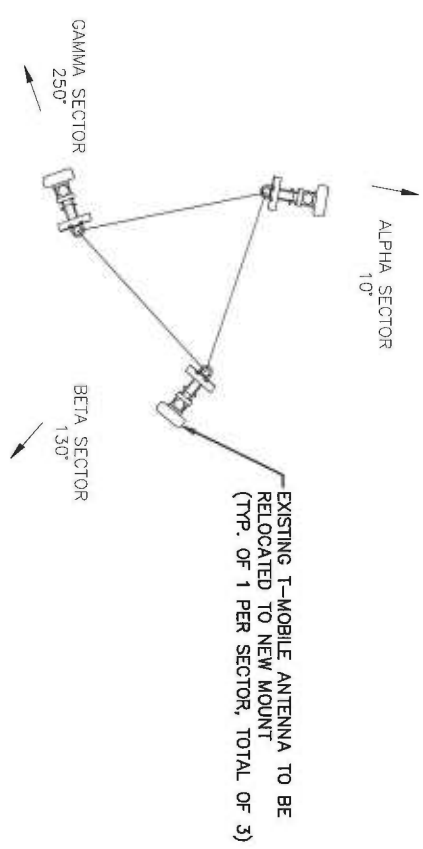
SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-1

STRUCTURAL NOTE:
 STRUCTURAL INFORMATION TAKEN
 FROM STRUCTURAL ANALYSIS
 PERFORMED BY STAINLESS LLC
 DATED: MARCH 6, 2015

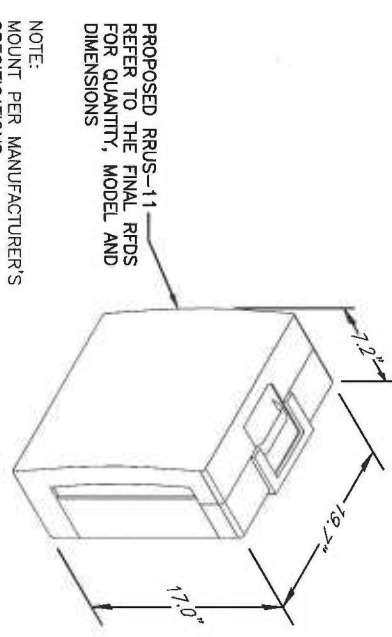


1 EXISTING ANTENNA PLAN
 SCALE: N.T.S.

NOTE:
 REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

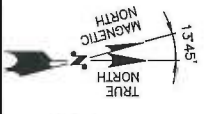
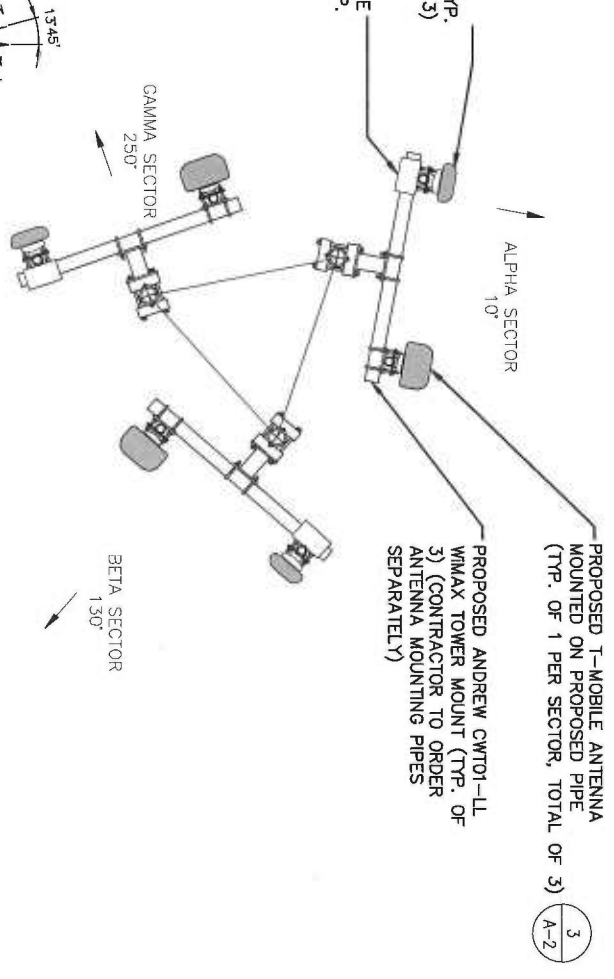
EXISTING ANTENNA SCHEDULE			
SECTOR	MAKE	MODEL #	SIZE (INCHES)
ALPHA:	EMS	RR90-18-02DP	72X8X2.8
BETA:	EMS	RR90-18-02DP	72X8X2.8
GAMMA:	EMS	RR90-18-02DP	72X8X2.8

PROPOSED ANTENNA SCHEDULE			
SECTOR	MAKE	MODEL #	SIZE (INCHES)
ALPHA:	EMS	RR90-18-02DP	72X8X2.8
	COMMSCOPE	LNX-6515DS-VTM	96.4X11.9X7.1
BETA:	EMS	RR90-18-02DP	72X8X2.8
	COMMSCOPE	LNX-6515DS-VTM	96.4X11.9X7.1
GAMMA:	EMS	RR90-18-02DP	72X8X2.8
	COMMSCOPE	LNX-6515DS-VTM	96.4X11.9X7.1

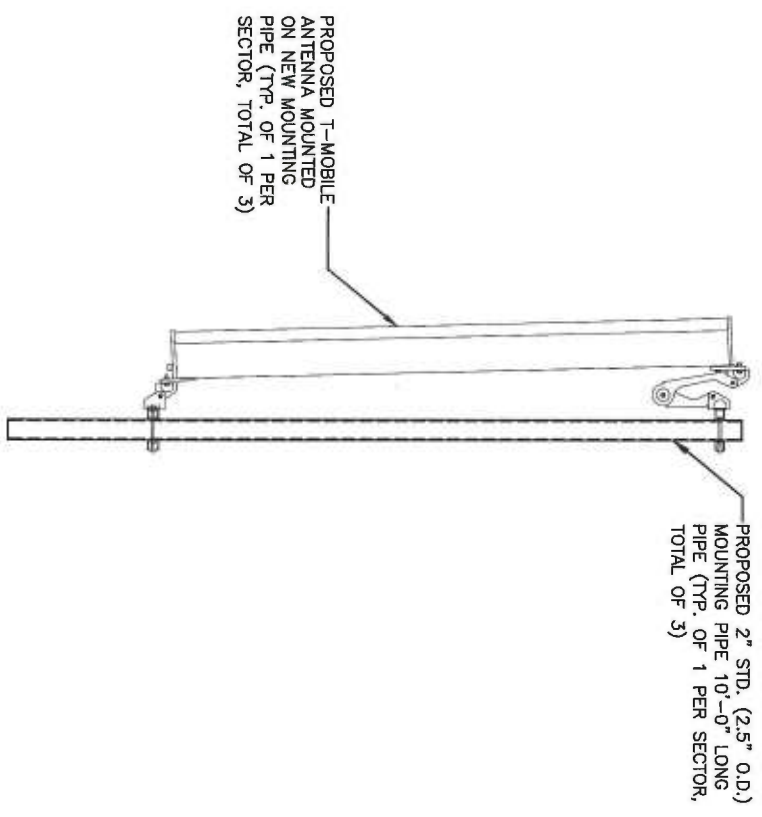


NOTE:
 MOUNT PER MANUFACTURER'S SPECIFICATIONS.

RRU DETAIL
 SCALE: N.T.S.



2 PROPOSED ANTENNA PLAN
 SCALE: N.T.S.



3 ANTENNA MOUNT (TYP.)
 SCALE: N.T.S.

T-MOBILE NORTHEAST LLC
 35 GRIFIN ROAD SOUTH
 BLOOMFIELD, CT 06002
 OFFICE: (860) 648-1116



TRANSCEND WIRELESS
 10 REDBURN AVE
 MARCHAND, NJ 07040
 TEL: (201) 684-0355
 FAX: (201) 684-0369



1600 OSGOOD STREET
 BUILDING 20 NORTH SUITE 2090
 N. ANDOVER, MA 01945
 TEL: (978) 557-5559
 FAX: (978) 354-5966

APPROVALS

STATE OF CONNECTICUT
 REGISTERED PROFESSIONAL ENGINEER
 [Signature]

CONSTRUCTION	DATE
RF ENGINEERING	DATE
ZONING/SITE ACQ.	DATE
OPERATIONS	DATE
TOWER OWNER	DATE
PROJECT NO:	CT11196A
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SITE NUMBER: CT11196A
SITE NAME:
 BROOKFIELD/JUNCTION RD.
 37 CARMEN HILL ROAD
 BROOKFIELD, CT 06804
 FAIRFIELD COUNTY

SHEET TITLE
 ANTENNA PLAN
 & DETAILS

SHEET NUMBER
 A-2

EXHIBIT B



REPORT 361113

SITE ID: CT11196A

SITE NAME: BROOKFIELD/JUNCTION RD

ADDRESS: 37 CARMEN HILL ROAD, BROOKFIELD, CT 06804

DATE: 3/6/2015

STRUCTURAL ANALYSIS
 FOR A 499' G-48 GUYED TOWER
 BROOKFIELD, CONNECTICUT

PREPARED BY: AP

APPROVED: AP 3/15/15

CHECKED BY: PCC

Rev A: AP 3/18/15



PROFESSIONAL ENGINEER
 I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of CONNECTICUT
 Print Name: Gregg A. Fehrman
 Signature: [Signature]
 Date: 3/18/15 License #: 27523

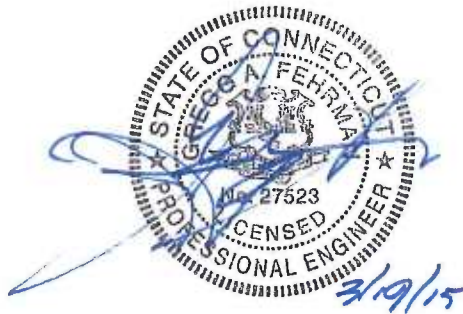
Date	Pages	Remarks
3/18/15	1,2	Rev A: Deleted proposed hybrid cable

Rev.	Date	Description
A	3/18/15	Deleted proposed hybrid cable

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APPENDIX

GENERAL ARRANGEMENT	A-1
LINEAR APPURTENANCES	A-2



PROFESSIONAL ENGINEER	
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of <u>CONNECTICUT</u>	
Print Name:	<u>Gregg A. Fehrman</u>
Signature:	<u>[Handwritten Signature]</u>
Date	<u>3/19/15</u> License # <u>27523</u>

Rev.	Date	Description
A	3/18/15	Deleted proposed hybrid cable

A. AUTHORIZATION/PURPOSE

As authorized by Tom Abernatha of Transcend Wireless LLC. a structural analysis was performed to investigate the adequacy of a 499' G-48 guyed tower located at 37 Carmen Hill Road, Brookfield, Connecticut to support specified equipment.

B. TOWER HISTORY

The tower was originally designed and furnished in 1995 by Stainless, Inc. It was designed in accordance with ANSI/EIA/TIA Standard 222-E for a basic wind speed of 85 mph with no ice and 73.6 mph with 1/2" radial ice thickness while supporting the following equipment:

1. One (1) ERI FML half-wave 4-bay antenna with radome side mounted on a pole at the top of the tower, and fed by one (1) 3" line.
2. One (1) 1-bay FM antenna at the 245' level, fed by one (1) 3" line.
3. Thirty (30) whip antennas on 6-position mounts, six (6) each at the 430', 390', 350', 310', and 270' levels, fed by either thirty (30) 7/8" or 1-5/8" lines.
4. Three (3) 10' diameter grid dishes at the 220' level, each fed by one (1) 1-5/8" line.
5. One (1) three-wire detuning skirt from the ground to the 250' level.
6. One (1) inside climbing ladder with cable type safety device for the full height of the tower.
7. One (1) FAA red lighting system with circuits contained within one (1) 3/4" conduit for the full height of the tower.

Stainless LLC does not have any records of any structural modifications performed on the tower or its foundations since its original installation.

C. CONDITIONS INVESTIGATED

The analysis was performed for the tower supporting specified equipment based upon the following sources:

- Stainless LLC Report 361111 dated 7/28/2014.
- Stainless LLC Contract Proposal P14_3611_002 dated 12/12/2014.
- Emails from Tom Abernatha dated 11/4/2014, 11/11/2014, 3/3/2015 and 3/6/2015 with details of tower existing and proposed equipment.
- Stainless LLC Tower Mapping Report 361114 dated 2/26/2015.
- Structural Analysis Report 28758 dated 8/29/2014 prepared by Ramaker & Associates, Inc.
- Structural Analysis Report dated 9/8/2014 prepared by Hudson Design Group.
- T-Mobile RFDS dated 7/21/2014.
- Email from Justin Duncan of Transcend Wireless dated 3/18/2015 to remove proposed hybrid cable.

Rev.	Date	Description
A	3/18/15	Deleted proposed hybrid cable

1. One (1) 2-bay FM antenna side mounted on a pole at the top of the tower, and fed by one (1) 3" line.
2. One (1) small Yagi antenna mounted to the top support mast at the 460' level, fed by one (1) 7/8" line.
3. One (1) outside transfer platform at the 446' level.
4. One (1) Andrew 4' diameter dish at the 353' level, fed by one (1) 5/8" line.
5. One (1) 2' x 4' Scala paralector on a 5' side arm at the 340' level, fed by one (1) 7/8" line.
6. One (1) 10' whip antenna on a 5' side arm at the 305' level, fed by one (1) 1-1/4" line.
7. One (1) 6' whip antenna on a 5' side arm at the 293' level, fed by one (1) 1/2" Alumaflex line.
8. Three (3) EMS RR90-18-02DP existing and three (3) Commscope LNX-6515DS-VTM **proposed** panel antennas on three (3) proposed sector mounts at the 280' level, fed by six (6) existing, six (6) **proposed** 1-5/8" lines.
9. One (1) RFS APXVSPPI8-C-A20, and one (1) EMS RR65-18-02DPL2 panel antennas; two (2) ALU 800 and 1900 MHz RRHs, and three (3) sector mounts at the 258' level, fed by one (1) 1-1/4" fiber cable.
10. One (1) 10' diameter grid dish at the 254' level, fed by one (1) 7/8" line.
11. One (1) 10' diameter grid dish at the 250' level, fed by one (1) 7/8" line.
12. One (1) 2-bay dipole antenna on a 6' side arm at the 140' level, fed by one (1) 7/8" line.
13. One (1) 2-bay dipole antenna on a 6' side arm at the 125' level, fed by one (1) 7/8" line.
14. One (1) 2-bay dipole antenna on a 6' side arm at the 108' level, fed by one (1) 7/8" line.
15. Three (3) detuning skirts from the ground to the 220' level.
16. One (1) #6 tinned ground wire for the full height of the tower.
17. One (1) 1-1/2" support conduit for the full height of the tower.
18. One (1) inside climbing ladder with cable type safety device for the full height of the tower.
19. One (1) FAA red lighting system with circuits contained within one (1) 3/4" conduit for the full height of the tower.

The locations of the existing transmission lines were based upon Stainless LLC Tower Mapping Report 361114 dated 2/26/2015. Proposed transmission lines were located to minimize wind load on the tower. The locations of all transmission lines are shown on page A-2 of this Report. Deviating from these appurtenance arrangements may invalidate the results presented in this Report.

All deadlines and antennas on the tower will be removed and hence are not included in the analysis. The analysis is invalid if these unused equipment are not removed.

Rev.	Date	Description
A	3/18/15	Deleted proposed hybrid cable

D. LOADS AND STRESSES

The analysis was performed using a basic wind speed of 85 mph with no ice and 31 mph with 1" radial ice thickness. This load was calculated and applied in accordance with the provisions of ANSI/TIA/EIA Standard 222-F, Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, effective March 29, 1996.

Allowable unit stresses and minimum safety factors used to evaluate the adequacy of the structure were also in accordance with this TIA/EIA Standard.

E. METHOD OF ANALYSIS

The analysis was performed using Stainless LLC's Beam-Column Analysis Program, a computer operation which idealizes the tower as a continuous beam-column on non-linear, elastic supports (guys) subject to simultaneous transverse (wind) and axial (dead, ice and vertical components of guy tensions) loads.

F. RESULTS

The results of the analysis show the following ratings:

COMPONENT	SPAN	RATING %
Tower top	--	90
Leg Compression	8	48
	7	60
	6	63
	5	55
	4	51
	3	54
	2	55
	1	55
Leg Tension	8	--
	7	--
	6	--
	5	--
	4	--
	3	--
	2	--
	1	--

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Diagonals	8	64
	7	51
	6	78
	5	75
	4	76
	3	90
	2	72
	1	41
Guys	8	62
	7	62
	6	63
	5	69
	4	71
	3	81
	2	86
	1	72
Foundations	Base	62
	Inner anchors	100
	Outer anchors	72

Ratings of up to 105% are considered acceptable due to tolerances in calculating the applied loads on the tower as well as member design capacities.

G. CONCLUSIONS AND RECOMMENDATIONS

Based on the preceding results, the following conclusion may be drawn:

1. The tower, supporting the equipment as specified in Section C above, is adequate to achieve a basic wind speed of 85 mph with no ice and 31 mph with 1" radial ice thickness in accordance with the provisions of ANSI/TIA/EIA Standard 222-F.

H. PROVISIONS OF ANALYSIS

The analysis performed and the conclusions contained herein are based on the assumption that the tower has been properly installed and maintained, including, but not limited to the following:

1. Proper alignment and plumbness.
2. Correct guy tensions.
3. Correct bolt tightness.
4. No significant deterioration or damage to any component.

Rev.	Date	Description
A	3/18/15	Deleted proposed hybrid cable

Furthermore, the information and conclusions contained in this Report were determined by application of the current "state-of-the-arts" engineering and analysis procedures and formulae, and Stainless LLC assumes no obligations to revise any of the information or conclusions contained in this Report in the event that such engineering and analysis procedures and formulae are hereafter modified or revised. In addition, under no circumstances will Stainless LLC have any obligation or responsibility whatsoever for or on account of consequential or incidental damages sustained by any person, firm or organization as a result of any information or conclusions contained in the Report, and the maximum liability of Stainless LLC, if any, pursuant to this Report shall be limited to the total funds actually received by Stainless LLC for preparation of this Report.

Customer has requested Stainless LLC to prepare and submit to Customer an engineering analysis with respect to the Subject Tower and has further requested Stainless LLC to make appropriate recommendations regarding suggested structural modifications and changes to the Subject Tower. In making such request of Stainless LLC, Customer has informed Stainless LLC that Customer will make a determination as to whether or not to implement any of the changes or modifications which may be suggested by Stainless LLC and that Customer will have any such changes or modifications made by riggers, erectors and other subcontractors of Customer's choice.

Customer hereby agrees and acknowledges that Stainless LLC shall have no liability whatsoever to Customer or to others for any work or services performed by any persons other than Stainless LLC in connection with the implementation of any structural changes or modifications recommended by Stainless LLC including but not limited to any services rendered for Customer or for others by riggers, erectors or other subcontractors. Customer acknowledges and agrees that any riggers, erectors or subcontractors retained or employed by Customer shall be solely responsible to Customer and to others for the quality of work performed by them and that Stainless LLC shall have no liability or responsibility whatsoever as a result of any negligence or breach of contract by any such rigger, erector or subcontractor.

DISCRETE APPURTENANCES		ELEV.
1.	1 TOP BEACON	496.5'
2.	1 ERI 2-BAY FM ANT	484'
3.	1 TOP POLE	475'
4.	1 SMALL YAGI	460'
5.	1 ANTENNA POLE PLATFORM	455'
6.	1 TRANSFER PLATFORM	446'
7.	3 OBSTRN LIGHTS	357'
8.	1 (1)4' DIA. STD MMW DISH	353'
9.	1 2X 4' PARAFLECTOR & MT	340'
10.	1 10' WHIP & MT	305'
11.	1 6' WHIP & MT	293'
12.	1 (3)EXT&(3)PROP ANTS, ETC	280'
13.	1 (2)PNL ANTS,(3)MTS, ETC	258'
14.	1 (1)10'GRID DISH (2700 MHZ)	254'
15.	1 (1)10'GRID DISH (2700 MHZ)	250'
16.	2 BEACON	238'
17.	1 2-BAY DIPOLE/MT	140'
18.	1 2-BAY DIPOLE/MT	125'
19.	3 OBSTRN LIGHTS	118'
20.	1 2-BAY DIPOLE/MT	108'

- GROUND LEVEL
BOTTOM OF BASE PLATE
- LINEAR APPURTENANCES
- (1) 16-3/4" LADDER-3/4" VERTICAL
 - (1) CABLE TYPE SAFETY DEVICE
 - (1) 3/4" CONDUIT
 - (1) 1-1/2" SUPPORT CONDUIT
 - (1) 3" AIR HELIAX
 - (1) 7/8" AIR HELIAX
 - (1) 5/8" AIR HELIAX
 - (1) 7/8" AIR HELIAX
 - (1) 1-1/4" FOAM HELIAX
 - (6) 1-5/8" AIR HELIAX
 - (1) 7/8" AIR HELIAX
 - (1) 7/8" AIR HELIAX
 - (1) 7/8" AIR HELIAX
 - (1) 7/8" AIR HELIAX
 - (1) 7/8" AIR HELIAX
 - (1) 7/8" AIR HELIAX
 - (6) DETUNING SKIRTS
 - (6) 1-5/8" HELIAX (PROP)
 - (1) 1/2" ALUMAFLEX
 - (1) 1-1/4" FIBER CABLE
 - (1) 1/4" GROUND WIRE

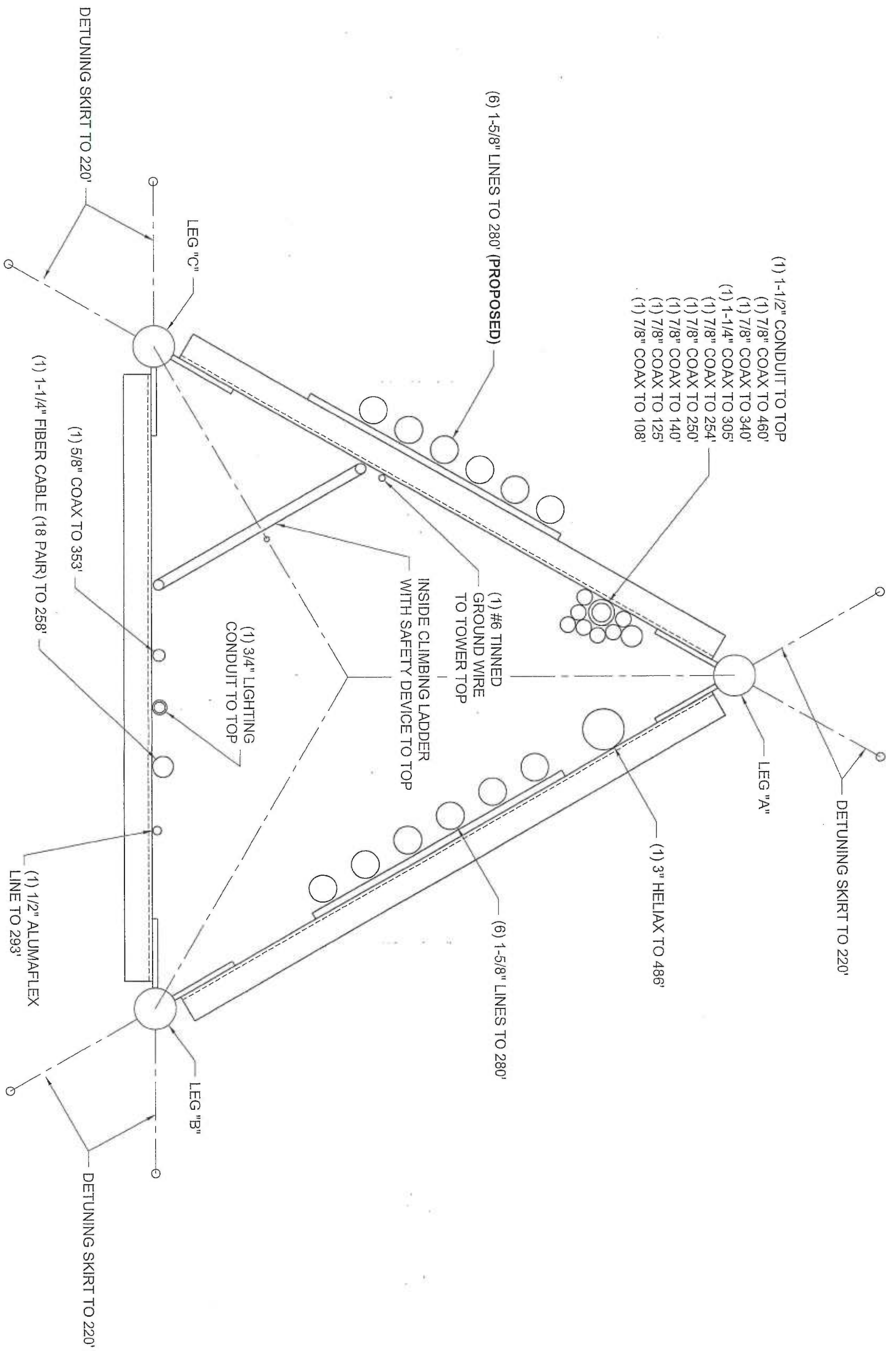
TOWER TYPE: G-45
 STD: EIA/TIA-222-F
 LOAD CASE(S)
 85 MPH BASIC WIND SPEED WITH NO ICE
 31 MPH BASIC WIND SPEED WITH 1" BASIC RADIAL ICE
 THICKNESS



GENERAL ARRANGEMENT
 BROOKFIELD, CT

THIS DRAWING IS THE PROPERTY OF STAINLESS LLC AND TRANSMITTED IN CONFIDENCE, AND THE REPRODUCTION, USE OR DISCLOSURE, IN WHOLE OR IN PART, OF THE DESIGN AND DETAILS CONTAINED HEREIN IS PROHIBITED WITHOUT THE PRIOR WRITTEN PERMISSION OF STAINLESS LLC.

PREPARED BY	AP	3/7/2015					
CHECKED BY							
ENGINEER REVIEW							
PROJECT NUMBER	361113						
DRAWING NUMBER	A-1						
REV	BY	DATE	REVISION DESCRIPTION	D.CK	DATE	E.CK	DATE
A	AP	3/18/15	DELETED PROPOSED HYBRID CABLE				
K:\361113\eng\361113_A1.dwg							



TYPICAL TOWER CROSS SECTION


 Stainless LLC 100 West Main Street, Suite 400 Lansdale, PA 19446							PREPARED BY	GH	3/4/15
							CHECKED BY		
							ENGINEER REVIEW		
							PROJECT NUMBER	361113	
TYPICAL TOWER CROSS SECTION BROOKFIELD, CT							DRAWING NUMBER	A-2	
THIS DRAWING IS THE PROPERTY OF STAINLESS LLC AND TRANSMITTED IN CONFIDENCE, AND THE REPRODUCTION, USE OR DISCLOSURE, IN WHOLE OR IN PART, OF THE DESIGN AND DETAILS CONTAINED HEREIN IS PROHIBITED WITHOUT THE PRIOR WRITTEN PERMISSION OF STAINLESS LLC.	REV A	BY AP	DATE 3/19/15	DELETED PROPOSED HYBRID CABLE	REVISION DESCRIPTION	D.CK DATE	E.CK DATE		

EXHIBIT C

RADIO FREQUENCY EMISSIONS ANALYSIS REPORT
EVALUATION OF HUMAN EXPOSURE POTENTIAL
TO NON-IONIZING EMISSIONS

T-Mobile Existing Facility

Site ID: CT11196A

Brookfield/Junction Rd.
37 Carmen Hill Road
Brookfield, CT 06804

April 7, 2015

EBI Project Number: 6215001650

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general public allowable limit:	18.04 %

April 7, 2015

T-Mobile USA
Attn: Jason Overbey, RF Manager
35 Griffin Road South
Bloomfield, CT 06002

Emissions Analysis for Site: **CT11196A – Brookfield/Junction Rd.**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **37 Carmen Hill Road, Brookfield, CT**, for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ 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.

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

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limit for the 700 MHz Band is $467 \mu\text{W}/\text{cm}^2$, and the general population exposure limit for the PCS band is $1000 \mu\text{W}/\text{cm}^2$. 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 and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at **37 Carmen Hill Road, Brookfield, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

For all calculations, all equipment was calculated using the following assumptions:

- 1) 2 GSM channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel
- 2) 2 UMTS channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 3) 2 LTE channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.
- 4) 1 LTE channel (700 MHz Band) was considered for each sector of the proposed installation. This channel has a transmit power of 30 Watts.
- 5) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.

- 6) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 7) The antennas used in this modeling are the **EMS RR90-18-02DP** for 1900 MHz (PCS) channels and the **Commscope LNX-6515DS-VTM** for 700 MHz channels. This is based on feedback from the carrier with regards to anticipated antenna selection. The **EMS RR90-18-02DP** has a maximum gain of **15.4 dBd** at its main lobe. The **Commscope LNX-6515DS-VTM** has a maximum gain of **14.6 dBd** at its main lobe. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 8) The antenna mounting height centerline of the proposed antennas is **280 feet** above ground level (AGL).
- 9) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

All calculations were done with respect to uncontrolled / general public threshold limits.

T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C
Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	EMS RR90-18-02DP	Make / Model:	EMS RR90-18-02DP	Make / Model:	EMS RR90-18-02DP
Gain:	15.4 dBd	Gain:	15.4 dBd	Gain:	15.4 dBd
Height (AGL):	280	Height (AGL):	280	Height (AGL):	280
Frequency Bands	1900 MHz(PCS)	Frequency Bands	1900 MHz(PCS)	Frequency Bands	1900 MHz(PCS)
Channel Count	6	Channel Count	6	# PCS Channels:	6
Total TX Power:	240	Total TX Power:	240	# AWS Channels:	240
ERP (W):	8,321.68	ERP (W):	8,321.68	ERP (W):	8,321.68
Antenna A1 MPE%	0.40	Antenna B1 MPE%	0.40	Antenna C1 MPE%	0.40
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM
Gain:	14.6 dBd	Gain:	14.6 dBd	Gain:	14.6 dBd
Height (AGL):	280	Height (AGL):	280	Height (AGL):	280
Frequency Bands	700 MHz	Frequency Bands	700 MHz	Frequency Bands	700 MHz
Channel Count	1	Channel Count	1	Channel Count	1
Total TX Power:	30	Total TX Power:	30	Total TX Power:	30
ERP (W):	865.21	ERP (W):	865.21	ERP (W):	865.21
Antenna A2 MPE%	0.09	Antenna B2 MPE%	0.09	Antenna C2 MPE%	0.09

Site Composite MPE%	
Carrier	MPE%
T-Mobile	1.46
Sprint	1.52 %
Clearwire	0.65 %
AT&T	5.76 %
Per CSC MPE Database - On site measurement baseline including WKRI FM Radio, WINE AM Radio, Town Fire Dept., Town Police Dept., and Town PW Dept.	8.65 %
Site Total MPE %:	18.04 %

T-Mobile Sector 1 Total:	0.49 %
T-Mobile Sector 2 Total:	0.49 %
T-Mobile Sector 3 Total:	0.49 %
Site Total:	18.04 %

Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general public exposure to RF Emissions.

The anticipated maximum composite contributions from the T-Mobile facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general public exposure to RF Emissions are shown here:

T-Mobile Sector	Power Density Value (%)
Sector 1:	0.49 %
Sector 2:	0.49 %
Sector 3 :	0.49 %
T-Mobile Total:	1.46 %
Site Total:	18.04 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **18.04%** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.



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