NORTHEAST SITE SOLUTIONS
Turnkey Wireless Development

Northeast Site Solutions
Denise Sabo
199 Brickyard Rd Farmington, CT 06032
860-209-4690
denise@northeastsitesolutions.com

July 6, 2016

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

RE: Notice of Exempt Modification
75 Wells Road, Wethersfield CT 06109
Latitude: 41.705880
Longitude: -72.663330
T-Mobile Site#: CTHA506A_L700

Dear Ms. Bachman:

T-Mobile currently maintains three (3) antennas at the 95-foot level of the existing 103.5-foot monopole at 75 Wells Road, Wethersfield CT 06109. The tower is owned by Frontier Communications. The property is owned by Southern New England Telephone Co c/o Frontier Communications. T-Mobile now intends to relocate three (3) of its existing AIR21 antennas from the 75-foot level to the existing 95-foot level, install three (3) new 700 MHz antenna and extend (1) existing hybrid cable. The new antennas would be installed at the 95-foot level of the tower.

Planned Modifications:

Remove: NONE

Remove and Replace:
(3)AIR21 B2A /B4P (REMOVE from 75-Foot RAD) - (3)AIR21 B2A /B4P (REPLACE to 95-Foot RAD)

Install New:
(3)Ericsson KRC 118 057/1 Antenna
(3) RRUS11 B12
(3) T-Arm Mounts

Existing to Remain:
(6) 7/8" Coax
(1) Extend Existing 1-5/8" Hybrid Cable

This facility was approved by the Connecticut Siting Council. File No – Springwich Cellular Ltd. Partnership notice of intent to replace an existing telecommunications facility located at 75 Wells Rd., Wethersfield. Please see attached documentation.

NORTHEAST SITE SOLUTIONS

Turnkey Wireless Development

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies§ 16- SOj-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.SA. § 16-SOj-73, a copy of this letter is being sent to Town Manager Jeff Bridges, Elected Official for the Town of Wethersfield, as well as the property owner and the tower owner.

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

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,

Denise Sabo
Mobile: 860-209-4690
Fax: 413-521-0558
Office: 199 Brickyard Rd, Farmington, CT 06032
Email: denise@northeastsitesolutions.com

Attachments
cc: Jeff Bridges, Town Manager - as elected official
Frontier Communications - as tower owner

NORTHEAST
SITE SOLUTIONS
Turnkey Wireless Development

Southern New England Telephone Co c/o Frontier Communications - as property owner

54 Main Street Unit 3 | Sturbridge Ma 01566 | f: 413-521-0558 | www.northeastsitesolutions.com

Exhibit A

Town of Wethersfield
505 SILAS DEANE HIGHWAY
WETHERSFIELD, CONNECTICUT 06109

June 30, 2016

Victoria Masse
Northeast Site Solutions
199 Brickyard Road
Farmington, CT 06032

Re: Letter of Zoning Compliance/Approval
75 Wells Road, Wethersfield, CT 06109

Dear Ms. Masse:

Per your request, the property at 75 Wells Road, including the antenna, is in compliance with the Wethersfield Zoning Regulations. Attached please find a building permit from 1998. Please note that until 2014, the position of Zoning Officer was fulfilled by the Building Officials. As such, a building permit from 1998 constitutes Town zoning approval.

Please let me know if you have any further questions.

Sincerely,

Justin LaFountain
Zoning Enforcement/Property Maintenance Officer
Town of Wethersfield
860-721-2835

2566

BUILDING PERMIT APPLICATION #8737

Town of Wethersfield - Building Permit Application Screen Number #1

75 Wells Rd 75 WELLS ROAD

Seq. Num. [ ] Appl. Num. [8737] Appl. Date [10-16-98]

Owner [Snet Tel Co] Addr [227 Church St]

City [New Haven] State [Ct] Zip [06510] Phone [203 771 4699]

Est. Cost [$ 30.000-] Fee [$ 460-] Occupancy Fee [$]

Lot Number [ ] Side of Street [ ] Zone [ ]

Builder [Architectural Bld Systems Inc] Address [203 Locust St]

City [Htfd] State [Ct] Zip [06114] Phone [860 244-2491]

Architect [ ] Address [ ]

City [ ] State [ ] Zip [ ] Phone [ ]

Front Overall [ ] Deep Overall [ ] Net Area [ ]

Occ. Load [ ] Live Load [ ] Num. of Fam. [ ] Num. Story [ ]

Construction Type [ ] Num. Rooms 1 [ ] Num. Rooms 2 [ ]

Size of Lot [ ] Dist. from Street [ ] Dist. from Side [ ]

Purpose [Remove Existing Ant Tower
& Replace as per Plan]

Use Group [ ] [ ]

→ Steve Pozzeo - FYI and appropriate action

Springwich Cellular Limited Partnership

RECEIVED

APR 29 1998

Town of Wethersfield
Town Planning Division

500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7755
Fax: (860) 513-7614

Peter J. Tyrrell
General Counsel

RECEIVED AND RECORDED IN WETHERSFIELD LAND RECORDS
98 APR 28 PM 12:04
VOLUME ___ PAGE ___

April 20, 1998

The Honorable Wayne Sassano, Mayor
Town Hall
505 Silas Deane Highway
Wethersfield, Connecticut 06109

Dear Mayor Sassano:

Springwich Cellular Limited Partnership (SCLP) plans to install antennas and associated equipment at the existing tower facility owned by Southern New England Telephone and located at 75 Wells Road in Wethersfield. As required by Section 16-50j-73 of the Regulations of Connecticut State Agencies (R.C.S.A.), please accept this letter and the attached letter to the Connecticut Siting Council dated April 20, 1998, as notice of intent of the placement of associated equipment on an existing non-facility tower pursuant to R.C.S.A Section 16-50j-72(c).

The attached letter fully describes SCLP's proposal. However, if you have any questions or require any further information on our plans or the Siting Council's procedures, please call me at (860) 513-7755 or Mr. Joel Rinebold, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Peter J. Tyrrell

Enclosure

RECEIVED
APR 28 1998
TOWN MANAGER'S OFFICE

Springwich Cellular Limited Partnership

500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7755
Fax: (860) 513-7614

Peter J. Tyrrell
General Counsel

April 20, 1998

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Springwich Cellular Limited Partnership - Wethersfield Cell Site**

Dear Chairman Gelston:

Springwich Cellular Limited Partnership ("SCLP") requests the authority to replace the existing 100 foot monopole tower, which measures 12.45 inches at the base and tapers to 3.29 inches at the top of the tower. The tower is currently located on Southern New England Telephone (SNET) premises at 75 Wells Road in the town of Wethersfield, Connecticut. This proposal will allow SCLP the opportunity to extend its offering of digital service in the current service area. Please accept this letter as notice of intent, pursuant to R.C.S.A. Section 16-50j-72(b)(2) and (3) of the placement of associated equipment on an existing facility tower. In further compliance with R.C.S.A. Section 16-50j-73, a copy of this letter is being sent to the First Selectman of Wethersfield.

Our current antenna configuration of (2) panel antennas brings the existing tower to its design load capacity. These antennas are not capable of supporting our current plans of offering digital service. The digital system requires that we convert our existing antenna array to a directional system.

The existing monopole's current size does not permit use of this tower for future expansion or multiple carrier use. This tower was constructed by the parent company (SNET) in the early 1970's and is not capable of supporting either proposal listed below. Due to these circumstances, SCLP would like to offer two different proposals for the Council's consideration. They are:

First Proposal:

SCLP would like to replace the existing light duty monopole with a new 100 foot monopole, 34 inches in diameter at the base and tapering to 14 inches at the top, to support an antennna platform which will be mounted at the top of the tower (See attachment #1). This platform will support the mounting of (9) nine directional antennas (Swedcom ALP Model 11011N) which will be secured to the platform. SCLP also plans to install additional radio transmission equipment inside the existing central office building which is adjacent to the existing tower.

Second Proposal:

As an alternative, SCLP would like to suggest that the Council consider allowing SCLP to replace the existing tower with a 100 foot monopole, 34 inches in diameter at the base and tapering to 14 inches at the top, to support two (2) platforms for mounting two sets of directional antennas (See attachment #2). The first platform would be equipped as described in the first proposal. The second platform would be installed with approximately a ten (10) to fifteen (15) foot vertical separation. This arrangement would allow for diversity when considering the equipment space requirements of future clients, due to different antenna manufacturers' makes and models. These antennas would be mounted in the same fashion as described above, but on the second platform. Prior to SCLP installing this second platform for another wireless service provider, it would seek the approval from the Connecticut Siting Council.

Neither of these proposed applications of SCLP's antennas and equipment to this tower site does not constitute a substantial environmental impact, since such additions do not cause a significant change or alteration in the physical or environmental characteristics of the site (see attached site sketch). Rather, the planned changes to the existing facility tower falls squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b).

Finally, this proposed addition will not increase the noise levels at the existing facility by six decibels or more. The operation of the additional antennas will not increase the total radio frequency electromagnetic radiation power density to a level at or above the ANSI standard. A "worst-case" calculation, for both proposals, from a point of interest on the roof top indicates that SCLP's cellular operations result in a Power Density Calculation of .1657 %, which is 13.34 % of the maximum permissible emissions allowed in a uncontrolled environment. (See chart listings) This calculation was arrived at using a platform height of 99 ft. and an operating power of 100 watts per channel. Final calculations for additional users will be submitted if and when a formal application is submitted to the Connecticut Siting Council for approval. However, as you can see by the chart, adding an additional PCS provider is still well within the acceptable operating parameters.

Worst Case Scenario

Service/ Point of interest	Band (MHz)	Power per Channel (watts)	# Channels	Height (ft.)	Power Density (mW/cm^2)	% of MPE ($2.9333 mW/cm^2$) Controlled	% of MPE ($0.5867 mW/cm^2$) Uncontrolled
Cellular (Roof)	880 MHz	100 watts	19	99 ft.	0.1657	5.64%	13.34%
Future PCS (Roof)	1962.5 MHz	122 watts	11	84 ft.	0.1785	3.57%	17.85%
Total						**9.21%**	**31.19%**

For the foregoing reasons, Springwich Cellular Limited Partnership seeks a ruling that its proposed additions to the tower would not cause a significant change or alteration in the physical and environmental characteristics of the site, SCLP further submits that the changes comply with R.C.S.A. Sections 16-50j-72(b)(c) (2) and (3) and therefore requests a determination that the placement of the antennas and equipment on the existing facility tower site does not constitute a substantial environmental effect under R.C.S.A Section 16-50j-72(b).

Thank you for your cooperation and attention to this matter.

Sincerely,

Peter J. Tyrrell

Attachments

cc First Selectman of Wethersfield

Exhibit B

Property Location: 75 WELLS RD | **MAP ID:** 205/ 069/ / / | **Bldg Name:** | **State Use:** 400

Vision ID: 9038 | **Account #** 205-069- | **Bldg #:** 1 of 1 | **Sec #:** 1 of 1 | **Card** 1 of 1 | **Print Date:** 11/23/2015 13:47

CURRENT OWNER	TOPO.	UTILITIES	STRT./ROAD	LOCATION
SOUTHERN N E TELEPHONE CO C/O FRONTIER COMMUNICATIONS 401 MERRITT 7 TAX DEPT NORWALK, CT 06851 Additional Owners:				

SUPPLEMENTAL DATA

Other ID:		SIDE	N10
LOT NO	3A	SEQ NO	900130
CALLBACK		PENALTY	
CENSUS	4922	Notice 1 Val	$740,700
SECTION	3	DISBLD EX	
GIS ID: 205069		*ASSOC PID#*	

CURRENT ASSESSMENT

Description	Code	Appraised Value	Assessed Value
UTILITY	400	409,000	286,300
UTILITY	400	131,600	92,100
UTILITY	400	333,600	233,500
	Total	874,200	611,900

6159
WETHERSFIELD, CT

VISION

RECORD OF OWNERSHIP

	BK-VOL/PAGE	SALE DATE	q/u	v/i	SALE PRICE	V.C.
SOUTHERN N E TELEPHONE CO	0121/0472	11/30/1946	U		0	

PREVIOUS ASSESSMENTS (HISTORY)

Yr.	Code	Assessed Value	Yr.	Code	Assessed Value	Yr.	Code	Assessed Value
2012	400	680,500	2010	400	429,500	2008	400	429,500
2012	400	92,100	2010	400	92,100	2008	400	92,100
			2010	400	251,000	2008	400	251,000
	Total:	772,600	*Total:*		772,600	*Total:*		772,600

EXEMPTIONS

Year	Type	Description	Amount
		Total:	

OTHER ASSESSMENTS

Code	Description	Number	Amount	Comm. Int.

This signature acknowledges a visit by a Data Collector or Assessor

APPRAISED VALUE SUMMARY

Appraised Bldg. Value (Card)	409,000
Appraised XF (B) Value (Bldg)	0
Appraised OB (L) Value (Bldg)	333,600
Appraised Land Value (Bldg)	131,600
Special Land Value	0
Total Appraised Parcel Value	874,200
Valuation Method:	C
Adjustment:	0
Net Total Appraised Parcel Value	**874,200**

ASSESSING NEIGHBORHOOD

NBHD/ SUB	NBHD Name	Street Index Name	Tracing	Batch
0001/A				

NOTES

SNET/NOW FRONTIER
NO ACCESS TO UQS - STAIRS REMOVED
CONTROL SWITCH BUILDING
NO OFFICE FIT UP
ECON=MKT/USE FUNC=OVERBUILT
2009 NVI
ZONING CHANGE PER PLANNING
60 X 36 SLATE ROOF
TOWER VALUE= 3000 X 12= 36,000-15% EXP=
30,600/.11 CAP= 278,200/SITE
AT+T TELEPHONE/BAA#68

BUILDING PERMIT RECORD

Permit ID	Issue Date	Type	Description	Amount	Insp. Date	% Comp.	Date Comp.	Comments
E-15-251	07/20/2015	EL	Electric	2,000	09/22/2015	100	07/20/2015	INSTALL NEW 200 AMI
E-15-284	07/20/2015	EL	Electric	1,500	09/22/2015	100	10/01/2015	INSTALL SURFACE MC
B-15-26	03/05/2015	CM	Commercial	36,453	09/22/2015	100	10/01/2015	16x10 CONCRETE PAD,
E-13-8	01/14/2013	EL	Electric	1,800	04/11/2013	100	10/01/2013	INSTALL NEW 200 AMI
M-10-24	07/28/2010	HA	HVAC	38,000	10/14/2010	100	10/01/2010	Replace existing a/c split s
B-10-119	07/08/2010	BP		64,114	10/14/2010	100	10/01/2010	Instsall reinforcement to (
MP-0199	12/23/2009	HA	HVAC	137,900	10/14/2010	100	10/01/2010	Install 3 split a/c systems (

VISIT/ CHANGE HISTORY

Date	Type	IS	ID	Cd.	Purpose/Result
06/23/2015			CR	44	No Change Reinspectio
03/20/2014			CR	21	BAA Hearing-No Change
01/03/2014			JL	41	Hearing-Change
04/11/2013			CR	49	No Change After Inspe
10/14/2010			CR	49	No Change After Inspe

LAND LINE VALUATION SECTION

B #	Use Code	Use Description	Zone	D	Front	Depth	Units		Unit Price	I. Factor	S.A.		C. Factor	ST. Idx	Adj.	Notes- Adj	Special Pricing		S Adj Fact	Adj. Unit Price	Land Value
1	400C	Pub Utilit MDL-96	SRD/A				0.90	AC	135,000.00	1.0833	I		1.00	006	1.00				1.00	146,245.50	131,600

Total Card Land Units: 0.90 AC | Parcel Total Land Area: 0.9 AC | Total Land Value: 131,600

Property Location: 75 WELLS RD **MAP ID:** 205/ 069/ / / **Bldg Name:** **State Use:** 400

Vision ID: 9038 **Account #** 205-069- **Bldg #:** 1 of 1 **Sec #:** 1 of 1 **Card** 1 of 1 **Print Date:** 11/23/2015 13:47

CONSTRUCTION DETAIL

Element	Cd.	Ch.	Description
Style	79		Telephone Bldg
Model	96		Ind/Comm
Grade	03		Average
Occupancy	1		
Exterior Wall 1	20		Brick
Exterior Wall 2	27		Pre-finsh Metl
Roof Structure	01		Flat
Roof Cover	04		Tar + Gravel
Interior Wall 1	03		Plaster
Interior Wall 2			
Interior Floor 1	05		Vinyl/Asphalt
Interior Floor 2			
Heating Fuel	02		Oil/Gas
Heating Type	05		Hot Water
AC Type	03		Central
Bldg Use	400C		Pub Utilit MDL-96
Total Rooms			
Total Bedrms	00		
Total Baths	0		
Heat/AC	02		HEAT/AC SPLIT
Frame Type	03		MASONRY
Baths/Plumbing	02		AVERAGE
Ceiling/Wall	06		CEIL & WALLS
Rooms/Prtns	02		AVERAGE
Wall Height	10		
% Comn Wall	0		

CONSTRUCTION DETAIL (CONTINUED)

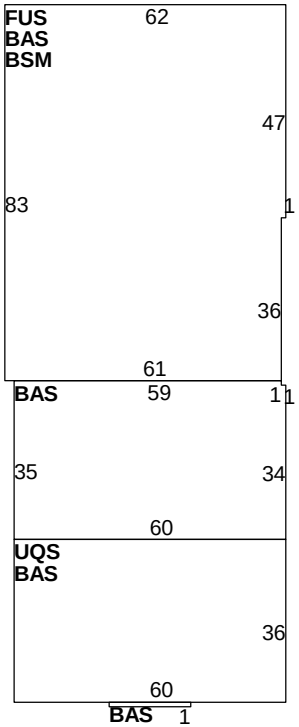
Element	Cd.	Ch.	Description

MIXED USE

Code	Description	Percentage
400C	Pub Utilit MDL-96	100

COST/MARKET VALUATION

Adj. Base Rate:	138.69
AYB	1939
Dep Code	G
Remodel Rating	
Year Remodeled	
Dep %	30
Functional Obslnc	35
External Obslnc	17
Cost Trend Factor	
Condition	
% Complete	
Overall % Cond	18
Apprais Val	409,000
Dep % Ovr	0
Dep Ovr Comment	
Misc Imp Ovr	0
Misc Imp Ovr Comment	
Cost to Cure Ovr	0
Cost to Cure Ovr Comment	

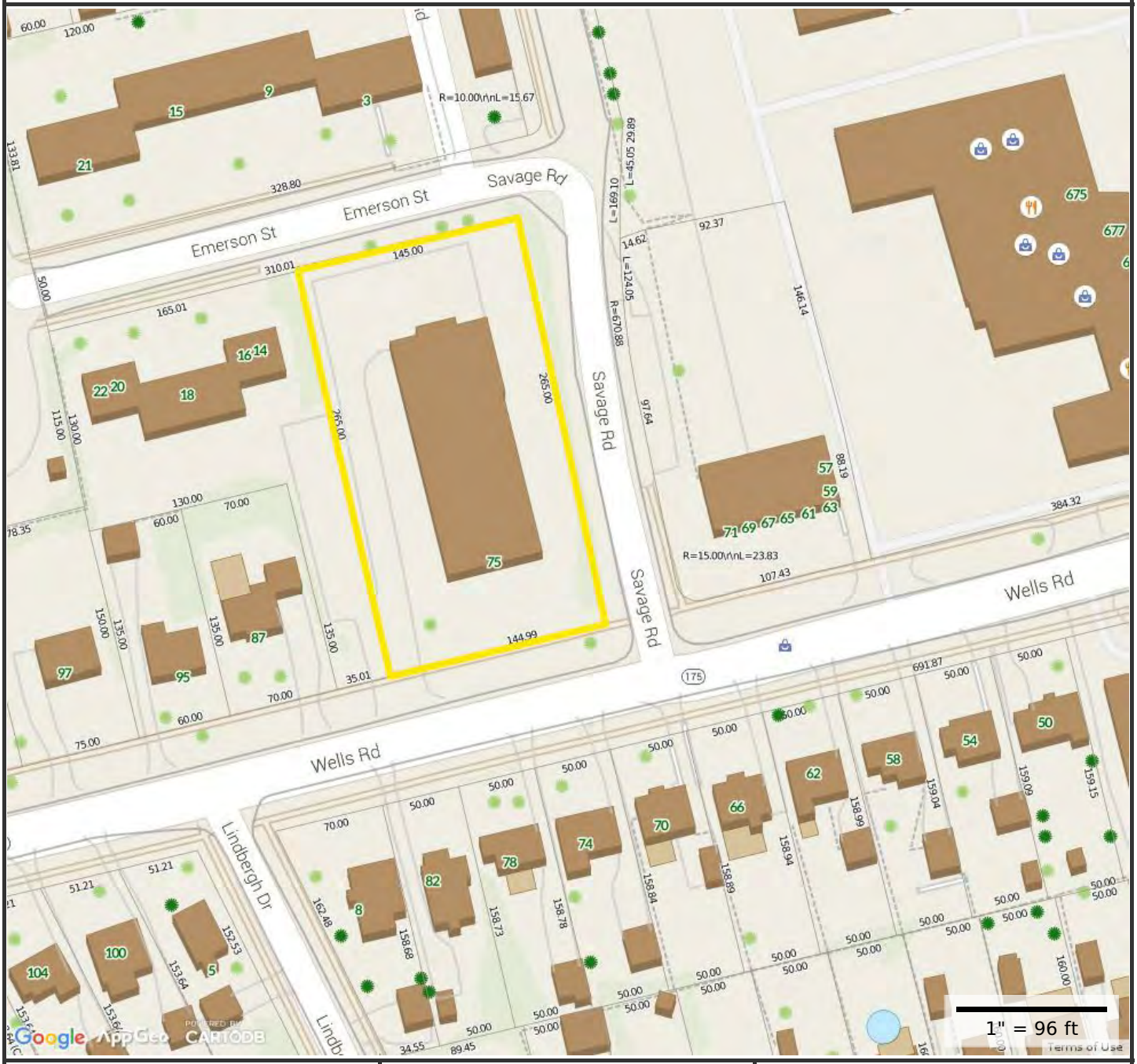


OB-OUTBUILDING & YARD ITEMS(L) / XF-BUILDING EXTRA FEATURES(B)

Code	Description	Sub	Sub Descript	L/B	Units	Unit Price	Yr	Gde	Dp Rt	Cnd	%Cnd	Apr Value
PAV1	Asphalt Paving			L	2,400	1.60	1999			G	75	2,900
CB3	PreCastConCel			L	200	350.00	2003			G	75	52,500
	CELL SITE			L	1	278,200.00						278,200

BUILDING SUB-AREA SUMMARY SECTION

Code	Description	Living Area	Gross Area	Eff. Area	Unit Cost	Undeprec. Value
BAS	First Floor	9,387	9,387			
BSM	Basement	0	5,110			
FUS	Finished Upper Story	5,110	5,110			
UQS	Unfinished 3/4 Story	0	2,160			
	Ttl. Gross Liv/Lease Area:	14,497	21,767			



Property Information

Property ID	205069
Location	75 WELLS RD
Owner	SOUTHERN N E TELEPHONE CO

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town of Wethersfield, CT makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Exhibit C

T-MOBILE NORTHEAST LLC

SITE #: CTHA506A

SITE NAME: AT&T WETHERSFIELD MONOPOLE

SITE ADDRESS:
75 WELLS ROAD
WETHERSFIELD, CT

EXISTING WIRELESS BROADBAND FACILITY MODIFICATION
CONSTRUCTION DRAWINGS
(PROPOSED CONFIGURATION 702CC)

VICINITY MAP

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CALL BEFORE YOU DIG:

WWW.CBYD.COM

CALL 800 922 4455, OR 811

CALL THREE WORKING DAYS PRIOR TO DIGGING

SAFETY PRECAUTIONS SHALL BE IMPLEMENTED BY CONTRACTOR(S) AT ALL TRENCHING IN ACCORDANCE WITH CURRENT OSHA STANDARDS.

COLOR CODE FOR UTILITY LOCATIONS

ELECTRIC	– RED	SEWER	– GREEN
GAS/OIL	– YELLOW	SURVEY	– PINK
TEL/CATV	– ORANGE	PROPOSED EXCAVATION	– WHITE
WATER	– BLUE	RECLAIMED WATER	– PURPLE

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 HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONSTRUCT 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 T–MOBILE REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF THE CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXPENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING OF ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
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 CONTRACT DOCUMENTS.
6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
7. 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.
8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUM OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER CONTRACT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS AND INSPECTIONS WHICH ARE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY, OR LOCAL GOVERNMENT AUTHORITY.
11. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC., DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
12. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
13. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS, AS WELL AS THE LATEST EDITIONS OF ANY PERTINENT STATE SAFETY REGULATIONS.
14. THE CONTRACTOR SHALL NOTIFY THE T–MOBILE REPRESENTATIVE 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 T–MOBILE REPRESENTATIVE.
15. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC., ON THE JOB.
16. THE CONTRACTOR SHALL RETURN ALL DISTURBED AREAS TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF WORK.
17. ATLANTIS GROUP, INC. HAS NOT CONDUCTED A STRUCTURAL ANALYSIS FOR THIS PROJECT AND DOES NOT ASSUME ANY LIABILITY FOR THE ADEQUACY OF THE STRUCTURE AND COMPONENTS.
18. REFER TO STRUCTURAL ANALYSIS DOCUMENT ENTITLED "RIGOROUS STRUCTURAL ANALYSIS REPORT" PREPARED BY MALOUF ENGINEERING INTL, INC. "T–MOBILE SITE ID CTHA506A", DATED JUNE 1, 2016.

PROJECT INFORMATION

SITE NUMBER:	CTHA506A
SITE NAME:	AT&T WETHERSFIELD MONOPOLE
SITE ADDRESS:	75 WELLS ROAD WETHERSFIELD, CT
LAT./LONG.:	N 41.705880 / W –72.663330
PROPERTY OWNER:	FRONTIER COMMUNICATION ELISSA E. MCOMBER SR. NETWORK ENGINEER ELISSA.MCOMBER@FTR.COM 931–528–1854 (O)
APPLICANT:	T–MOBILE NORTHEAST, LLC. 35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 (860) 692–7100
PROJECT MANAGER	NORTHEAST SITE SOLUTIONS 199 BRICKYARD ROAD FARMINGTON, CT 06032
ARCHITECT/ENGINEER:	FORESITE, LLC. 462 WALNUT STREET NEWTON, MA 02460 TEL:617–527–3031

PROJECT DESCRIPTION

INSTALLING NEW MOUNTS AT 95' LEVEL.
MOVING (3) AIR21 FROM 75' TO 95'
REMOVING (3) AIR21 FROM 75'
MOVING/EXTENDING (1) HYBRID LINE FROM 75' TO 95'
INSTALLING (6) 7/8" COAX AT 95'
INSTALLING (3) KRC 118 057/1 PANEL ANTENNAS AT 95'
INSTALLING (3) RRUS 11 B12 AT 95'
INSTALLING (P) 6131 CABINET TO REPLACE (E) 6201 CABINET.

SHEET INDEX

SHEET	DESCRIPTION
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N–1	CONTRACTOR'S NOTES
A–1	SITE LAYOUT AND SITE PLAN
A–2	SITE ELEVATION AND ANTENNA DETAILS
E–1	GROUNDING AND POWER ONE LINE DIAGRAM
E–2	GROUNDING DETAILS

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SUBMITTALS

DATE.	DESCRIPTION	REVISION
06/06/16	ISSUED FOR REVIEW	A
06/16/16	FINAL CD	0

DEPT.	DATE.	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO:	CTHA506A
DRAWN BY:	MS
CHECKED BY:	SM

STATE OF CONNECTICUT
HOSSEIN VAHEDI
NO. ARI. 11162
LICENSED ARCHITECT

PROFESSIONAL SEAL

SITE NUMBER
CTHA506A
SITE NAME
AT&T WETHERSFIELD MONOPOLE
SITE ADDRESS
75 WELLS ROAD
WETHERSFIELD, CT

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

ELECTRICAL NOTES:

WORK INCLUDED

1. INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, PLANT SERVICES AND ADMINISTRATIVE TASKS REQUIRED TO COMPLETE AND MAKE OPERABLE THE ELECTRICAL WORK SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
   A. PREPARE AND SUBMIT SHOP DRAWINGS, DIAGRAMS AND ILLUSTRATIONS.
   B. PROCURE ALL NECESSARY PERMITS AND APPROVALS AND PAY ALL REQUIRED FEES AND CHARGES IN CONNECTION WITH THE WORK OF THIS CONTRACT.
   C. SUBMIT AS-BUILT DRAWINGS, OPERATING AND MAINTENANCE INSTRUCTIONS AND MANUALS.
   D. EXECUTE ALL CUTTING, DRILLING, ROUGH AND FINISH PATCHING OF EXISTING OR NEWLY INSTALLED CONSTRUCTION REQUIRED FOR THE WORK OF THIS CONTRACT. FOR SLAB PENETRATIONS THROUGH POST TENSION SLABS, X-RAY EXACT AREA OF PENETRATION PRIOR TO PERFORMING WORK. COORDINATE ALL X-RAY WORK WITH BUILDING ENGINEER.
   E. PROVIDE HANGERS, SUPPORTS, FOUNDATIONS, STRUCTURAL FRAMING SUPPORTS, AND BASES FOR CONDUIT AND EQUIPMENT PROVIDED OR INSTALLED UNDER THE WORK OF HIS CONTRACT. PROVIDE COUNTER FLASHING, SLEEVES AND SEALS FOR FLOOR AND WALL PENETRATIONS.
   F. MAINTAIN ALL EXISTING ELECTRICAL SERVICES IN THE BUILDING AREAS NOT AFFECTED BY THE ALTERATION DURING THE PROGRESS OF THE WORK INCLUDING PROVIDING ALL TEMPORARY JUMPERS, CONDUITS, CAPS, PROTECTIVE DEVICES, CONNECTIONS AND EQUIPMENT REQUIRED. PROVIDE TEMPORARY LIGHT AND POWER FOR CONSTRUCTION PURPOSES.
2. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO CALL FOR AN INSTALLATION THAT IS COMPLETE IN EVERY RESPECT. IT IS NOT THE INTENT TO GIVE EVERY DETAIL ON THE DRAWINGS AND IN THE SPECIFICATIONS. IF AN ITEM OF WORK IS INDICATED IN THE DRAWINGS, IT IS CONSIDERED SUFFICIENT FOR INCLUSION IN THE CONTRACT. FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT USUALLY FURNISHED OR NEEDED TO MAKE A COMPLETE INSTALLATION WHETHER OR NOT SPECIFICALLY MENTIONED IN THE CONTRACT DOCUMENTS.

GENERAL REQUIREMENTS

1. PROVIDE ALL WORK IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND LOCAL AND STATE ELECTRICAL CODES.
2. THE ELECTRICAL PLANS ARE DIAGRAMMATIC ONLY. REFER TO THE ARCHITECTURAL PLANS FOR THE EXACT DIMENSIONS OF THE BUILDING.
3. LOAD CALCULATIONS ARE BASED ON EXISTING BUILDING INFORMATION/DRAWINGS PROVIDED TO ENGINEERING. CONTRACTOR IS TO VERIFY ALL EXISTING RATINGS AND LOADS PRIOR TO PURCHASING OF SPECIFIED EQUIPMENT FOR COMPLIANCE TO NEC. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES AND REQUEST FURTHER DIRECTION BY ENGINEER.
4. EXISTING BUILDING EQUIPMENT IS NOTED ON THE DRAWINGS. NEW OR RELOCATED EQUIPMENT IS SHOWN WITH SOLID LINES. FUTURE EQUIPMENT (NOT IN THIS CONTRACT) IS DEPICTED WITH SHADED LINES. REQUEST CLARIFICATION OF DRAWINGS OR OF SPECIFICATIONS PRIOR TO PRICING OR INSTALLATION.
5. GENERAL
   A. AFTER CAREFULLY STUDYING THE DRAWINGS AND SPECIFICATIONS, AND BEFORE SUBMITTING THE PROPOSAL, MAKE A MANDATORY SITE VISIT TO ASCERTAIN CONDITIONS OF THE SITE, AND THE NATURE AND EXACT QUANTITY OF WORK TO BE PERFORMED. NO EXTRA COMPENSATION WILL BE ALLOWED FOR FAILURE TO NOTIFY THE OWNER, IN WRITING, OF ANY DISCREPANCIES THAT MAY HAVE BEEN NOTED BETWEEN THE EXISTING CONDITIONS AND THE DRAWINGS AND SPECIFICATIONS.
   B. VERIFY ALL MEASUREMENTS AT THE SITE AND BE RESPONSIBLE FOR CORRECTNESS OF SAME.
6. QUALITY, WORKMANSHIP, MATERIALS AND SAFETY
   A. PROVIDE NEW MATERIALS AND EQUIPMENT OF A DOMESTIC MANUFACTURER BY THOSE REGULARLY ENGAGED IN THE PRODUCTION AND MANUFACTURE OF SPECIFIED MATERIALS AND EQUIPMENT. WHERE UL, OR OTHER AGENCY, HAS ESTABLISHED STANDARDS FOR MATERIALS, PROVIDE MATERIALS WHICH ARE LISTED AND LABELED ACCORDINGLY. THE COMMERCIALLY STANDARD ITEMS OF EQUIPMENT AND THE SPECIFIC NAMES MENTIONED HEREIN ARE INTENDED FOR THE PROPER FUNCTIONING OF THE WORK.
   B. WORK SHALL BE PERFORMED BY WORKMEN SKILLED IN THE TRADE REQUIRED FOR THE WORK. INSTALL MATERIALS AND EQUIPMENT TO PRESENT A NEAT APPEARANCE WHEN COMPLETED AND IN ACCORDANCE WITH THE APPROVED RECOMMENDATIONS OF THE MANUFACTURER AND IN ACCORDANCE WITH CONTRACT DOCUMENTS.
   C. PROVIDE LABOR, MATERIALS, APPARATUS AND APPLIANCES ESSENTIAL TO THE FUNCTIONING OF THE SYSTEMS DESCRIBED OR INDICATED HEREIN, OR WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL WHENEVER MENTIONED IN THE CONTRACT DOCUMENT OR NOT.
   D. MAKE WRITTEN REQUESTS FOR SUPPLEMENTARY INSTRUCTIONS TO ARCHITECT/ENGINEER IN CASE OF DOUBT AS TO WORK INTENDED OR IN EVENT OF NEED FOR EXPLANATION THEREOF.
   E. PERFORMANCE AND MATERIAL REQUIREMENTS SCHEDULED OR SPECIFIED ARE MINIMUM STANDARD ACCEPTABLE. THE RIGHT TO JUDGE THE QUALITY OF EQUIPMENT THAT DEVIATES FROM THE CONTRACT DOCUMENT REMAINS SOLELY WITH ARCHITECT/ENGINEER. CONTRACT DOCUMENT OR NOT.

GUARANTEE

1. GUARANTEE MATERIALS, PARTS AND LABOR FOR WORK FOR ONE YEAR FROM THE DATE OF ISSUANCE OF OCCUPANCY PERMIT. DURING THAT PERIOD, MAKE GOOD FAULTS OR IMPERFECTIONS THAT MAY ARISE DUE TO DEFECTS OR OMISSIONS IN MATERIALS OR WORKMANSHIP WITH NO ADDITIONAL COMPENSATION AND AS DIRECTED BY ARCHITECT.

CLEANING

1. REMOVE ALL CONSTRUCTION DEBRIS RESULTING FROM THE WORK.
2. CLEAN EQUIPMENT AND SYSTEMS FOLLOWING THE COMPLETION OF THE PROJECT TO THE SATISFACTION OF THE ENGINEER.

COORDINATION AND SUPERVISION

1. CAREFULLY LAY OUT ALL WORK IN ADVANCE TO AVOID UNNECESSARY CUTTING, CHANNELING, CHASING OR DRILLING OF FLOORS, WALLS, PARTITIONS, CEILINGS OR OTHER SURFACES. WHERE SUCH WORK IS NECESSARY, HOWEVER, PATCH AND REPAIR THE WORK IN AN APPROVED MANNER BY SKILLED MECHANICS AT NO ADDITIONAL COST TO THE OWNER. RENDER FULL COOPERATION TO OTHER TRADES WHERE WORK WILL BE INSTALLED IN CLOSE PROXIMITY TO WORK OF OTHER TRADES. ASSIST IN WORKING OUT SPACE CONDITIONS. IF WORK IS INSTALLED BEFORE COORDINATION WITH OTHER TRADES, OR CAUSES INTERFERENCE, MAKE CHANGES NECESSARY TO CORRECT CONDITIONS WITHOUT EXTRA CHARGE.

SUBMITTALS

1. AS-BUILT DRAWINGS:
   A. UPON COMPLETION OF THE WORK, FURNISH TO THE OWNER "AS-BUILT" DRAWINGS.
2. SERVICE MANUALS:
   A. UPON COMPLETION OF THE WORK, FULLY INSTRUCT metroPCS AS TO THE OPERATION AND MAINTENANCE OF ALL MATERIAL, EQUIPMENT AND SYSTEMS.
   B. PROVIDE 3 COMPLETE BOUND SETS OF INSTRUCTIONS FOR OPERATING AND MAINTAINING ALL SYSTEMS AND EQUIPMENT.

CUTTING AND PATCHING

1. PROVIDE ALL CUTTING, DRILLING, ROUGH AND FINISH PATCHING REQUIRED TO COMPLETE THE WORK.
2. OBTAIN OWNER APPROVAL PRIOR TO CUTTING THROUGH FLOORS OR WALLS FOR PIPING OR CONDUIT.

TESTS, INSPECTION AND APPROVAL

1. BEFORE ENERGIZING ANY ELECTRICAL INSTALLATION, INSPECT EACH UNIT IN DETAIL. TIGHTEN ALL BOLTS AND CONNECTIONS (TORQUE-TIGHTEN WHERE REQUIRED) AND DETERMINE THAT ALL COMPONENTS ARE ALIGNED, AND THE EQUIPMENT IS IN SAFE, OPERATIONAL CONDITION.
2. PROVIDE THE COMPLETE ELECTRICAL SYSTEM FREE OF GROUND FAULTS AND SHORT CIRCUITS SUCH THAT THE SYSTEM WILL OPERATE SATISFACTORILY UNDER FULL LOAD CONDITIONS, WITHOUT EXCESSIVE HEATING AT ANY POINT IN THE SYSTEM.

SPECIAL REQUIREMENTS

1. DO NOT LEAVE ANY WORK INCOMPLETE NOR ANY HAZARDOUS SITUATIONS CREATED WHICH WILL AFFECT THE LIFE OR SAFETY OF THE PUBLIC AND/OR BUILDING OCCUPANTS. DO NOT INTERFERE WITH OR CUTOFF ANY OF THE EXISTING SERVICES WITHOUT THE OWNER'S WRITTEN PERMISSION.
2. WHEN NECESSARY TO TEMPORARILY DISCONNECT ANY EXISTING BUILDING UTILITIES AND SERVICE SYSTEMS, INCLUDING FEEDER OR BRANCH CIRCUITING SUPPLYING EXISTING FACILITIES, CONFER WITH THE OWNER AND ARRANGE THE PERIOD OF INTERRUPTION FOR A TIME MUTUALLY AGREED UPON. SHUTDOWN NOTE: SCHEDULE AND NOTIFY OWNER 48 HOURS PRIOR TO SHUTDOWN. ALL SHUTDOWN WORK TO BE SCHEDULED AT A TIME CONVENIENT TO OWNER.

GROUNDING

1. ROUTE ALL GROUNDING CONDUCTORS AS SHOWN ON CONDUIT/GROUNDING RISER.
2. ROUTE 500 KCMIL CU. THHN CONDUCTOR FROM THE MGB LOCATION TO BUILDING STEEL. VERIFY BUILDING STEEL IS EFFECTIVELY GROUNDED PER NEC TO THE MAIN SERVICE GROUNDING ELECTRODE CONDUCTOR (GEC).
3. MAKE ALL GROUND CONNECTIONS FROM MGB TO ELECTRICAL EQUIPMENT WITH 2 HOLE, CRIMP TYPE, BURNDY COMPRESSION TERMINATIONS, SIZED AS REQUIRED.
4. USE 1 HOLE, CRIMP TYPE, BURNDY COMPRESSIONS TERMINATIONS, SIZED AS REQUIRED, AT EQUIPMENT GROUND CONNECTIONS.
5. HIRE AN INDEPENDENT LAB TO PERFORM THE SPECIFIED OHMS TESTING. PROVIDE 4 SETS OF THE CERTIFIED DOCUMENTS TO THE OWNER FOR VERIFICATION PRIOR TO THE PROJECT COMPLETION.

RACEWAYS

1. ALL WIRING TO BE INSTALLED IN CONDUIT SYSTEMS IN ACCORDANCE WITH THE FOLLOWING:
   A. EXTERIOR FEEDERS AND CONTROL, WHERE UNDERGROUND, TO BE IN SCH 40 PVC.
   B. EXTERIOR, ABOVE GROUND POWER CONDUITS TO BE GALVANIZED RIGID STEEL (RGS).
   C. ALL TELECOMMUNICATION CONDUITS, INTERIOR/EXTERIOR, TO BE EMT.
   D. INSTALL PULL ROPES IN ALL NEW EMPTY CONDUITS INSTALLED ON THIS PROJECT.
   E. ALL TELECOM CONDUITS AND PULL BOXES INSTALLED ON THIS PROJECT TO BE LABELED "metroPCS". OWNER WILL PROVIDE LABELS FOR CONTRACTOR TO INSTALL.
   F. INTERIOR FEEDERS TO BE INSTALLED IN E.M.T. WITH STEEL COMPRESSION FITTINGS.
   G. MINIMUM SIZE CONDUIT TO BE ¾" TRADE SIZE UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
   H. FINAL CONNECTIONS TO MOTORS AND VIBRATING EQUIPMENT TO BE INSTALLED IN LIQUID-TIGHT FLEXIBLE METAL CONDUIT.
   I. CONDUIT TO BE RUN CONCEALED IN CEILINGS, FINISHED AREAS OR DRYWALL PARTITIONS, UNLESS OTHERWISE NOTED.
   J. THE ROUTING OF CONDUITS INDICATED ON THE DRAWINGS IS DIAGRAMMATIC. BEFORE INSTALLING ANY WORK, EXAMINE THE WORKING LAYOUTS AND SHOP DRAWINGS OF THE OTHER TRADES TO DETERMINE THE EXACT LOCATIONS AND CLEARANCES.
   K. ALL EXTERIOR MOUNTING HARDWARE TO BE GALVANIZED STEEL. COORDINATE WITH BUILDING ENGINEER PRIOR TO ATTACHING TO BUILDING STRUCTURE.

RACEWAYS CONT'D

   L. PENETRATIONS OF WALLS, FLOORS AND ROOFS, FOR THE PASSAGE OF ELECTRICAL RACEWAYS, TO BE PROPERLY SEALED AFTER INSTALLATION OF RACEWAYS SO AS TO MAINTAIN THE STRUCTURAL OR WATERPROOF INTEGRITY OF THE WALL, FLOOR OR ROOF SYSTEM TO BE PENETRATED. SEAL ALL CONDUIT PENETRATIONS THROUGH FIRE OR SMOKE RATED WALLS, CEILINGS OR SMOKE TIGHT CORRIDOR PARTITIONS TO MAINTAIN PROPER RATING OF WALL OR CEILING.
   M. PROVIDE ALL CONDUIT ENDS WITH INSULATED METALLIC GROUNDING BUSHINGS.
   N. CONDUIT TO BE SUPPORTED AT MAXIMUM DISTANCE OF 8'-0", OR AS REQUIRED BY NEC, IN HORIZONTAL AND VERTICAL DIRECTIONS.
   O. PROVIDE STAINLESS STEEL BLANK COVER PLATES FOR ALL JUNCTION BOXES AND/OR OUTLET BOXES NOT USED IN EXPOSED AREAS. PROVIDE ALL OTHER UNUSED BOXES WITH STANDARD STEEL COVER PLATES.
   P. WHERE APPLICABLE, PROVIDE ROOFTOP CONDUIT SUPPORT SYSTEM, CONFORMING TO ROOFTOP WARRANTY REQUIREMENTS, PER BUILDING.

WIRES AND CABLES

1. CONTRACTOR TO COORDINATE WITH EQUIPMENT SUPPLIER AND VENDOR FOR EXACT EQUIPMENT OVER-CURRENT PROTECTION VOLTAGE, WIRE SIZE AND PLUG CONFIGURATION, IF APPLICABLE, PRIOR TO BID.
2. ALL EQUIPMENT/DEVICES TO BE PROVIDED WITH INSULATED GROUND CONDUCTOR.
3. ALL WIRE AND CABLE TO BE 600VOLT, COPPER, WITH THWN/THHN INSULATION, EXCEPT AS NOTED.
4. WIRE FOR POWER AND LIGHTING WILL NOT BE LESS THAN NO. 12AWG. ALL WIRE NO. 8 AND LARGER TO BE STRANDED.
5. CONTROL WIRING IS NOT TO BE LESS THAN NO. 14AWG, FLEXIBLE IN SINGLE CONDUCTORS OR MULTI-CONDUCTOR CABLES. CONTROL WIRING WILL CONSIST OF MULTI-CONDUCTOR CABLES WHEREVER POSSIBLE. CABLES TO BE PROVIDED WITH AN OVERALL FLAME-RETARDANT, EXTRUDED JACKET AND RATED FOR PLENUM USE. ALL CONTROL WIRE TO BE 600VOLT RATED.
6. WIRE PREVIOUSLY PULLED INTO CONDUIT IS CONSIDERED USED AND IS NOT TO BE RE-PULLED.
7. HOME RUNS AND BRANCH CIRCUIT WIRING FOR 20A, 120V CIRCUITS:

LENGTH (FT.)	HOME RUN WIRE SIZE
0 TO 50	NO. 12
51 TO 100	NO. 10
101 TO 150	NO. 8

8. VOLTAGE DROP IS NOT TO EXCEED 3%.
9. MAKE ALL CONNECTIONS WITH UL APPROVED, SOLDERLESS, PRESSURE TYPE INSULATED CONNECTORS: SCOTCHLOK OR AND APPROVED EQUAL.

WIRING DEVICES

1. ALL RECEPTACLES INSTALLED IN THIS PROJECT TO BE GROUNDING TYPE, WITH GROUNDING PIN SLOT CONNECTED TO DEVICE GROUND SCREW FOR GROUND WIRE CONNECTION.

DISCONNECT SWITCHES AND FUSES

1. DISCONNECT SWITCHES TO BE VOLTAGE-RATED TO SUIT THE CHARACTERISTICS OF THE SYSTEM FROM WHICH THEY ARE SUPPLIED.
2. PROVIDE HEAVY-DUTY, METAL-ENCLOSED, EXTERNALLY-OPERATED DISCONNECT SWITCHES, FUSED OR UNFUSED, OF SUCH TYPE AND SIZE AS REQUIRED TO PROPERLY PROTECT OR DISCONNECT THE LOAD FOR WHICH THEY ARE INTENDED.
3. PROVIDE NEMA 1 DISCONNECT SWITCHES FOR INTERIOR INSTALLATION, NEMA 3R FOR EXTERIOR INSTALLATION.
4. DISCONNECT SWITCHES TO BE MANUFACTURED BY:
   A. GENERAL ELECTRIC COMPANY
   B. SQUARE-D
5. PROVIDE RK-1 TYPE FUSES, UNLESS NOTED OTHERWISE.

INSTALLATION

1. INSTALL DISCONNECT SWITCHES WHERE INDICATED ON DRAWINGS.
2. INSTALL FUSES IN FUSIBLE DISCONNECT SWITCHES. FUSES MUST MATCH IN TYPE AND RATING.
3. FUSES TO BE MOUNTED SO THAT THE LABELS SHOWING THEIR RATINGS CAN BE READ WITHOUT REQUIRING FUSE REMOVAL.
4. FURNISH AND DEPOSIT SPARE FUSES AT THE JOB SITE AS FOLLOWS:
   A. THREE SPARES FOR EACH TYPE AND SIZE, IN EXCESS OF 60A, USED FOR INITIAL FUSING.
   B. TEN PERCENT SPARES FOR EACH TYPE AND SIZE, UP TO AND INCLUDING 60A, USED FOR INITIAL FUSING. IN NO CASE WILL LESS THAN THREE FUSES OF ONE PARTICULAR TYPE AND SIZE BE FURNISHED.

GENERAL NOTES:

INTENT

1. THESE SPECIFICATIONS AND CONSTRUCTION DRAWINGS ACCOMPANYING THEM DESCRIBE THE WORK TO BE DONE AND THE MATERIALS TO BE FURNISHED FOR CONSTRUCTION.
2. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY. HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED, OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED IN BOTH
3. THE INTENTION OF THE DOCUMENTS IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.
4. THE PURPOSE OF THE SPECIFICATIONS IS TO INTERPRET THE INTENT OF THE DRAWINGS AND TO DESIGNATE THE METHOD OF THE PROCEDURE, TYPE AND QUALITY OF MATERIALS REQUIRED TO COMPLETE THE WORK.
5. MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED AS PART OF THE WORK. NO CHANGES THAT ALTER THE CHARACTER OF THE WORK WILL BE MADE OR PERMITTED BY THE OWNER WITHOUT ISSUING A CHANGE ORDER.

CONFLICTS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATIONS OF ALL MEASUREMENTS AT THE SITE BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION DRAWINGS. ANY SUCH DISCREPANCY IN DIMENSION WHICH MAY BE FOUND SHALL BE SUBMITTED TO THE OWNER FOR CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREAS.
2. THE BIDDER, IF AWARDED THE CONTRACT, WILL NOT BE ALLOWED ANY EXTRA COMPENSATION BY REASON OF ANY MATTER OR THING CONCERNING SUCH BIDDER MIGHT HAVE FULLY INFORMED THEMSELVES PRIOR TO THE BIDDING.
3. NO PLEA OF IGNORANCE OF CONDITIONS THAT EXIST, OR OF DIFFICULTIES OR CONDITIONS THAT MAY BE ENCOUNTERED, OR OF ANY OTHER RELEVANT MATTER CONCERNING THE WORK TO BE PERFORMED IN THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL EVERY DETAIL OF ALL THE REQUIREMENTS OF THE CONTRACT DOCUMENTS GOVERNING THE WORK.

CONTRACTS AND WARRANTIES

1. CONTRACTOR IS RESPONSIBLE FOR APPLICATION AND PAYMENT OF CONTRACTOR LICENSES AND BONDS.
2. SEE MASTER CONTRACTION SERVICES AGREEMENT FOR ADDITIONAL DETAILS.

STORAGE

1. ALL MATERIALS MUST BE STORED IN A LEVEL AND DRY FASHION AND IN A MANNER THAT DOES NOT NECESSARILY OBSTRUCT THE FLOW OF OTHER WORK. ANY STORAGE METHOD MUST MEET ALL RECOMMENDATIONS OF THE ASSOCIATED MANUFACTURER.

CLEANUP

1. THE CONTRACTORS SHALL, AT ALL TIMES, KEEP THE SITE FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY THEIR EMPLOYEES AT WORK AND AT THE COMPLETION OF THE WORK. THEY SHALL REMOVE ALL RUBBISH FROM AND ABOUT THE BUILDING AREA, INCLUDING ALL THEIR TOOLS, SCAFFOLDING AND SURPLUS MATERIALS AND SHALL LEAVE THEIR WORK CLEAN AND READY TO USE.
2. EXTERIOR
   A. VISUALLY INSPECT EXTERIOR SURFACES AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER.
   B. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
   C. IF NECESSARY, TO ACHIEVE A UNIFORM DEGREE OF CLEANLINESS, HOSE DOWN THE EXTERIOR OF THE STRUCTURE.
3. INTERIOR
   A. VISUALLY INSPECT INTERIOR SURFACE AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER FROM WALLS, FLOOR, AND CEILING.
   B. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
   C. REMOVE PAINT DROPPINGS, SPOTS, STAINS, AND DIRT FROM FINISHED SURFACES.

CHANGE ORDER PROCEDURE:

1. REFER TO SECTION 17 OF SIGNED MCSA: SEE PROFESSIONAL SERVICE AGREEMENT FOR MCSA.

RELATED DOCUMENTS AND COORDINATION

1. GENERAL CARPENTRY, ELECTRICAL AND ANTENNA DRAWINGS ARE INTERRELATED. IN PERFORMANCE OF THE WORK, THE CONTRACTOR MUST REFER TO ALL DRAWINGS. ALL COORDINATION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

SHOP DRAWINGS

1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AS REQUIRED AND LISTED IN THESE SPECIFICATIONS TO THE OWNER FOR APPROVAL.
2. ALL SHOP DRAWINGS SHALL BE REVIEWED, CHECKED AND CORRECTED BY CONTRACTOR PRIOR TO SUBMITTAL TO THE OWNER.

PRODUCTS AND SUBSTITUTIONS

1. SUBMIT 3 COPIES OF EACH REQUEST FOR SUBSTITUTION. IN EACH REQUEST, IDENTIFY THE PRODUCT OR FABRICATION OR INSTALLATION METHOD TO BE REPLACED BY THE SUBSTITUTION. INCLUDE RELATED SPECIFICATION SECTION AND DRAWING NUMBERS AND COMPLETE DOCUMENTATION SHOWING COMPLIANCE WITH THE REQUIREMENTS FOR SUBSTITUTIONS.
2. SUBMIT ALL NECESSARY PRODUCT DATA AND CUT SHEETS WHICH PROPERLY INDICATE AND DESCRIBE THE ITEMS, PRODUCTS AND MATERIALS BEING INSTALLED. THE CONTRACTOR SHALL, IF DEEMED NECESSARY BY THE OWNER, SUBMIT ACTUAL SAMPLES TO THE OWNER FOR APPROVAL IN LIEU OF CUT SHEETS.

QUALITY ASSURANCE

1. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THESE SHALL INCLUDE, BUT NOT BE LIMITED TO THE APPLICABLE CODES SET FORTH BY THE LOCAL GOVERNING BODY. SEE "CODE COMPLIANCE" T-1.

ADMINISTRATION

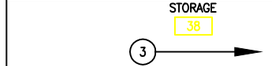
1. BEFORE THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR WILL ASSIGN A PROJECT MANAGER WHO WILL ACT AS A SINGLE POINT OF CONTACT FOR ALL PERSONNEL INVOLVED IN THIS PROJECT. THIS PROJECT MANAGER WILL DEVELOP A MASTER SCHEDULE FOR THE PROJECT WHICH WILL BE SUBMITTED TO THE OWNER PRIOR TO THE COMMENCEMENT OF ANY WORK.
2. SUBMIT A BAR TYPE PROGRESS CHART, NOT MORE THAN 3 DAYS AFTER THE DATE ESTABLISHED FOR COMMENCEMENT OF THE WORK ON THE SCHEDULE, INDICATING A TIME BAR FOR EACH MAJOR CATEGORY OR UNIT OF WORK TO BE PERFORMED AT THE SITE, PROPERLY SEQUENCED AND COORDINATED WITH OTHER ELEMENTS OF WORK AND SHOWING COMPLETION OF THE WORK SUFFICIENTLY IN ADVANCE OF THE DATE ESTABLISHED FOR SUBSTANTIAL COMPLETION OF THE WORK.
3. PRIOR TO COMMENCING CONSTRUCTION, THE OWNER SHALL SCHEDULE AN ON-SITE MEETING WITH ALL MAJOR PARTIES. THIS WOULD INCLUDE, BUT NOT LIMITED TO, THE OWNER, PROJECT MANAGER, CONTRACTOR, LAND OWNER REPRESENTATIVE, LOCAL TELEPHONE COMPANY, TOWER ERECTION FOREMAN (IF SUBCONTRACTED).
4. CONTRACTOR SHALL BE EQUIPPED WITH SOME MEANS OF CONSTANT COMMUNICATIONS, SUCH AS A MOBILE PHONE OR A BEEPER. THIS EQUIPMENT WILL NOT BE SUPPLIED BY THE OWNER, NOR WILL WIRELESS SERVICE BE ARRANGED.
5. DURING CONSTRUCTION, CONTRACTOR MUST ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AT ALL TIMES. CONTRACTOR WILL COMPLY WITH ALL WPCS SAFETY REQUIREMENTS IN THEIR AGREEMENT.
6. PROVIDE WRITTEN DAILY UPDATES ON SITE PROGRESS TO THE OWNER.
7. COMPLETE INVENTORY OF CONSTRUCTION MATERIALS AND EQUIPMENT IS REQUIRED PRIOR TO START OF CONSTRUCTION.
8. NOTIFY THE OWNER/PROJECT MANAGER IN WRITING NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, TOWER ERECTIONS, AND EQUIPMENT CABINET PLACEMENTS.

INSURANCE AND BONDS

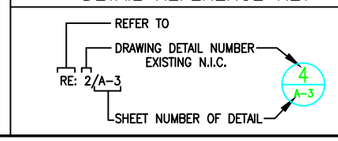
1. CONTRACTOR, AT THEIR OWN EXPENSE, SHALL CARRY AND MAINTAIN, FOR THE DURATION OF THE PROJECT, ALL INSURANCE, AS REQUIRED AND LISTED, AND SHALL NOT COMMENCE WITH THEIR WORK UNTIL THEY HAVE PRESENTED AN ORIGINAL CERTIFICATE OF INSURANCE STATING ALL COVERAGES TO THE OWNER. REFER TO THE MASTER AGREEMENT FOR REQUIRED INSURANCE LIMITS.
2. THE OWNER SHALL BE NAMED AS AN ADDITIONAL INSURED ON ALL POLICIES.
3. CONTRACTOR MUST PROVIDE PROOF OF INSURANCE.

ARCHITECTURAL SYMBOLS

STORAGE



DETAIL REFERENCE KEY



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PROJECT NO: CTHA506A
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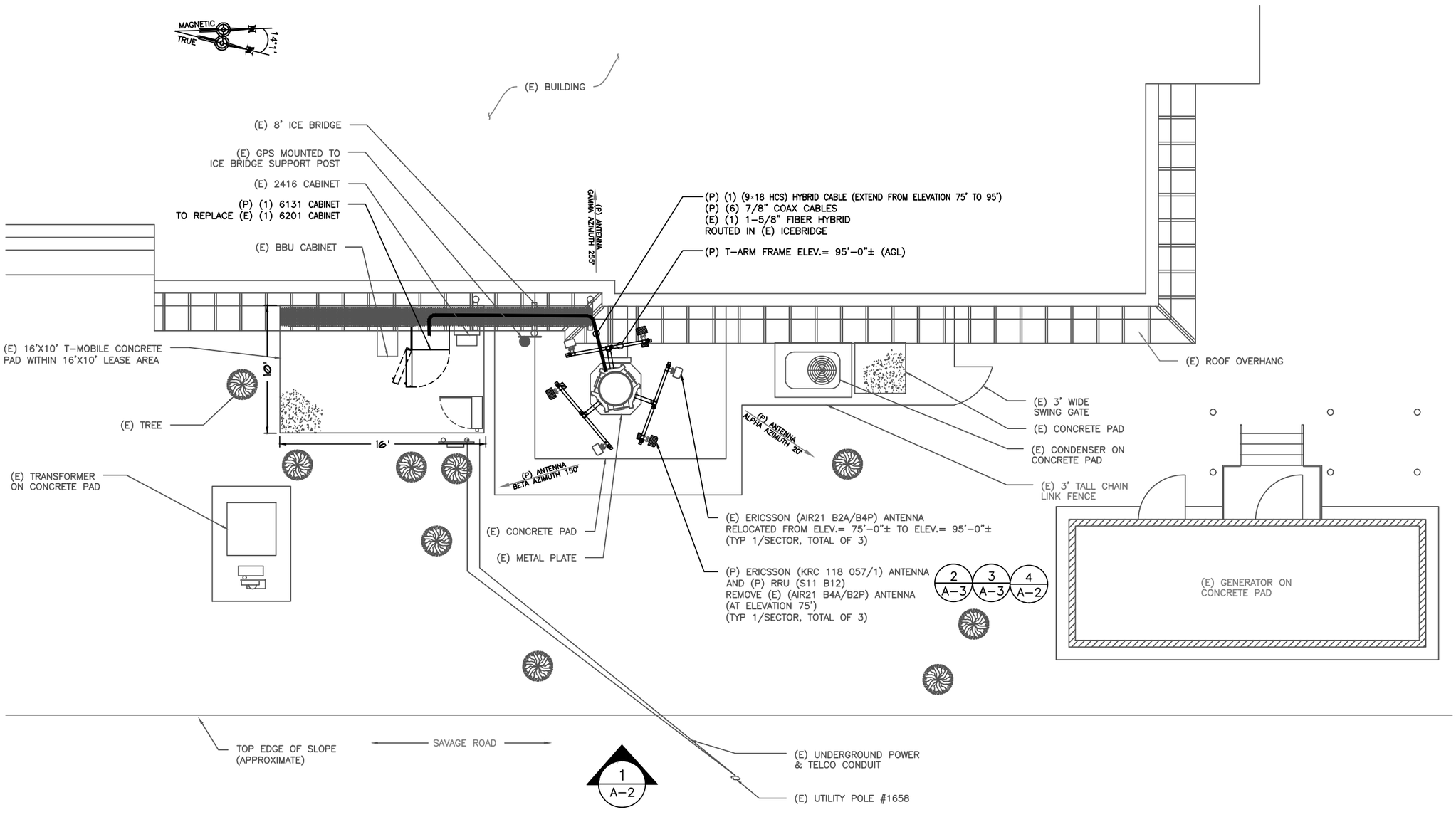
PROFESSIONAL SEAL

SITE NUMBER
CTHA506A
SITE NAME
AT&T WETHERSFIELD MONOPOLE
SITE ADDRESS
75 WELLS ROAD
WETHERSFIELD, CT

SHEET TITLE
CONTRACTOR'S NOTES

SHEET NUMBER
N-1

REFER TO STRUCTURAL ANALYSIS DOCUMENT ENTITLED "RIGOROUS STRUCTURAL ANALYSIS REPORT" PREPARED BY MALOUF ENGINEERING INTL, INC. "T-MOBILE SITE ID CTHA506A", DATED JUNE 1, 2016.



SITE PLAN

SCALE 1"=8' (11x17)
1"=4' (24x36)

1 A-1

0 8 16 24

SCALE 1"=8' (11x17)
1"=4' (24x36)

T-MOBILE NORTHEAST, LLC
35 GRIFFIN ROAD SOUTH
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462 WALNUT STREET
NEWTON, MA 02460
TEL:617-527-3031

SUBMITTALS

DATE.	DESCRIPTION	REVISION
06/06/16	ISSUED FOR REVIEW	A
06/16/16	FINAL CD	0

DEPT.	DATE.	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO:	CTHA506A
DRAWN BY:	MS
CHECKED BY:	SM

STATE OF CONNECTICUT
HOSSEIN VALEDI
NO. ARI. 11162
LICENSED ARCHITECT

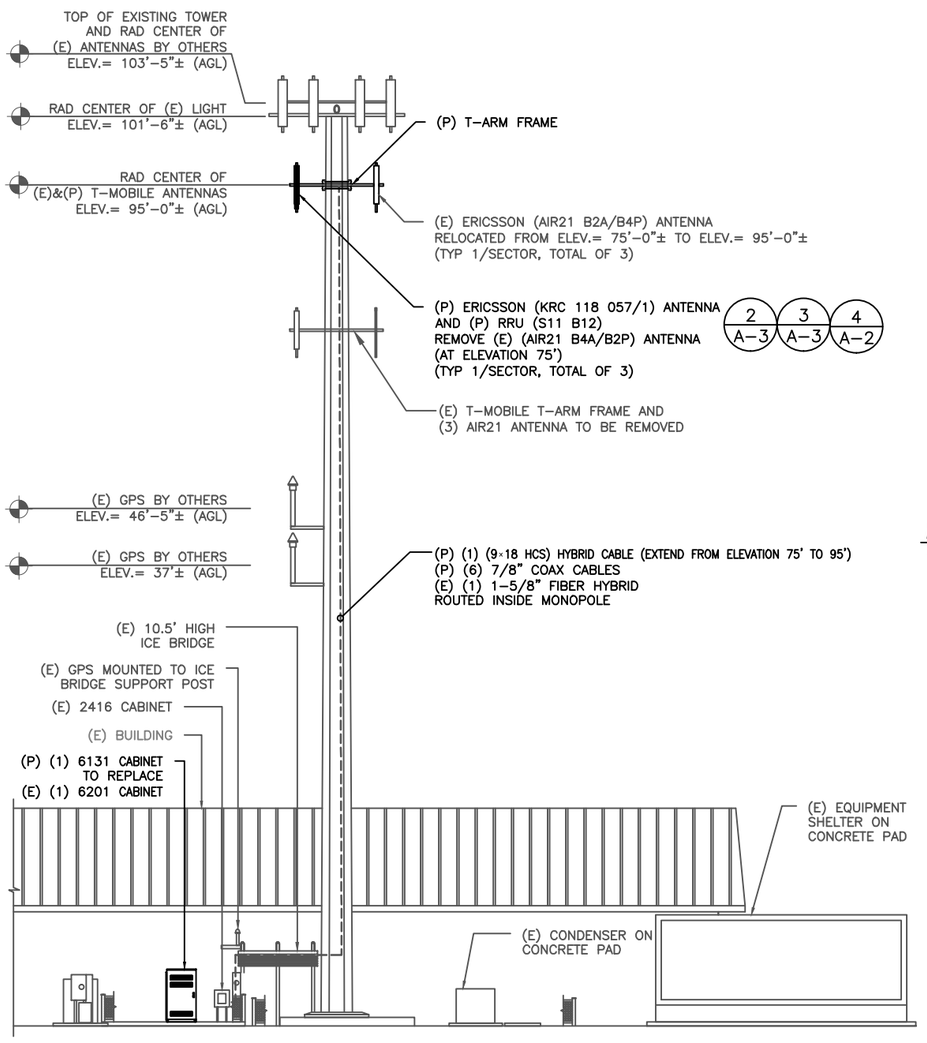
PROFESSIONAL SEAL

SITE NUMBER
CTHA506A
SITE NAME
AT&T WETHERSFIELD MONOPOLE
SITE ADDRESS
75 WELLS ROAD
WETHERSFIELD, CT

SHEET TITLE
KEY PLAN
AND
SITE PALN

SHEET NUMBER
A-1

REFER TO STRUCTURAL ANALYSIS DOCUMENT ENTITLED "RIGOROUS STRUCTURAL ANALYSIS REPORT" PREPARED BY MALOUF ENGINEERING INTL, INC. "T-MOBILE SITE ID CTHA506A", DATED JUNE 1, 2016.



ELEVATION

1 A-2

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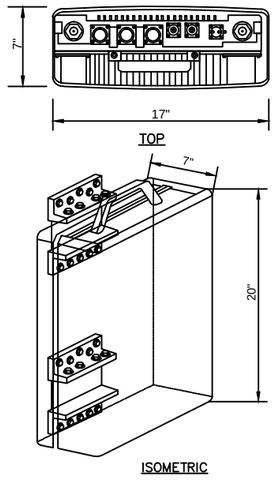
1"=8' (24x36)

0 16 32 48

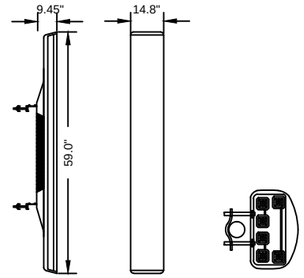
SCALE 1"=16' (11x17)
1"=8' (24x36)



RRU S11 B12 DETAILS

SCALE: N.T.S

2 A-2

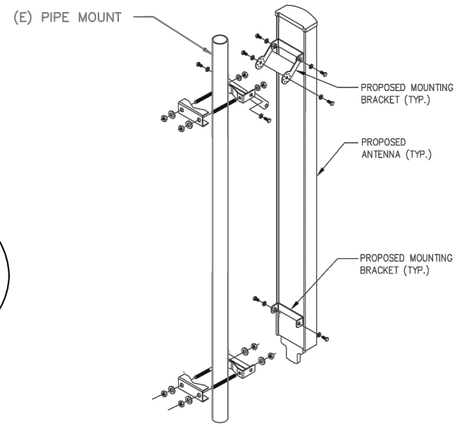


MANUFACTURER: ERICSSON
MODEL NO.: KRC 118 057/1
DIMENSIONS – HxWxD, (IN) 59.0x14.8x9.45
WEIGHT – 124 LB

ERICSSON KRC- 118 057/1 ANTENNA DETAIL

SCALE: N.T.S

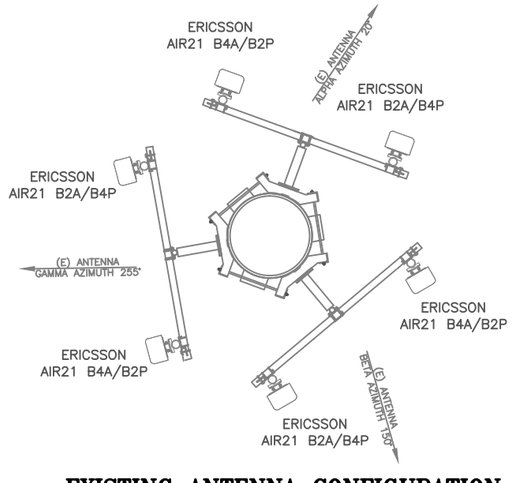
3 A-2



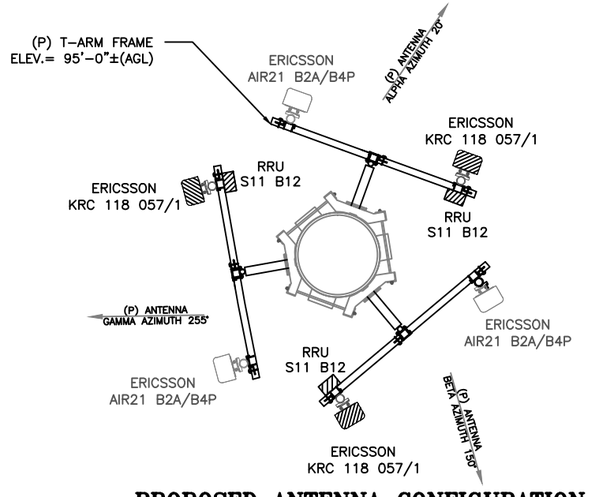
ANTENNA MOUNT DETAIL

SCALE: N.T.S

4 A-2



EXISTING ANTENNA CONFIGURATION



PROPOSED ANTENNA CONFIGURATION

ANTENNA PLAN

SCALE: N.T.S

5 A-2

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DEPT.	DATE.	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO:	CTHA506A
DRAWN BY:	MS
CHECKED BY:	SM

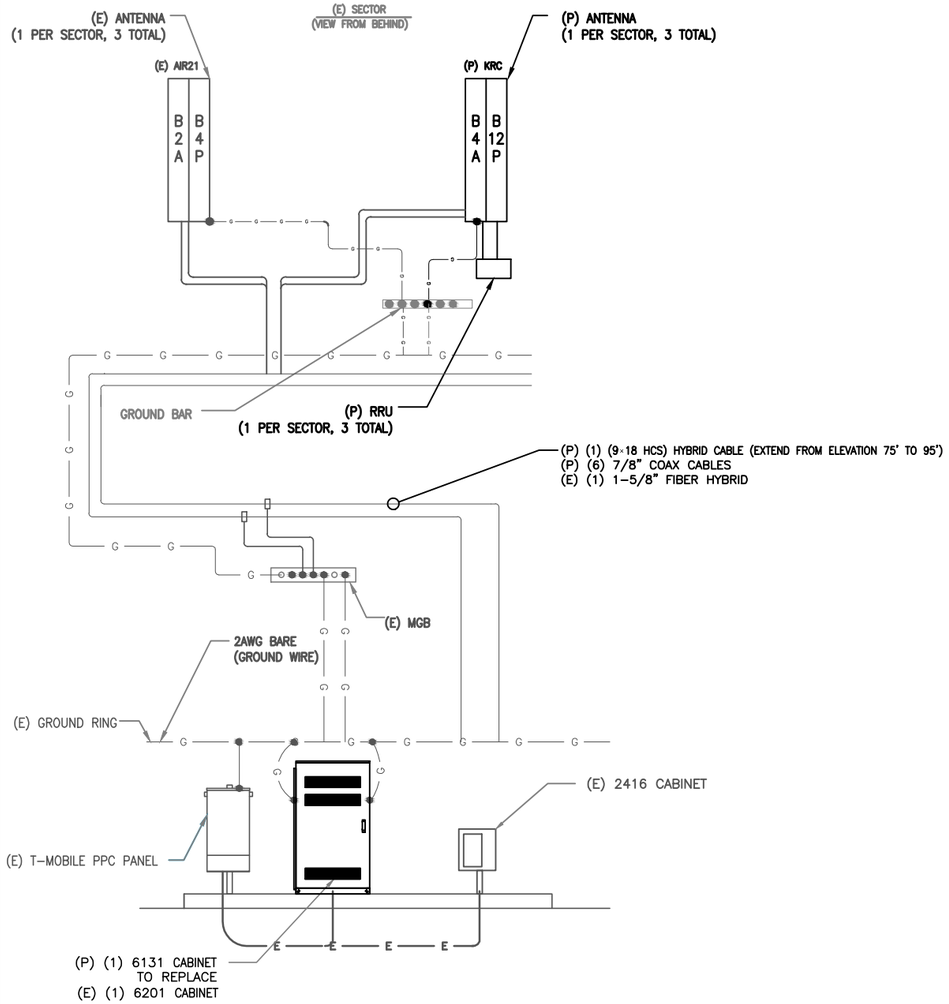
STATE OF CONNECTICUT HOSSEIN VAHEDI NO. ARI. 11161 LICENSED ARCHITECT

PROFESSIONAL SEAL

SITE NUMBER
CTHA506A
SITE NAME
AT&T WETHERSFIELD MONOPOLE
SITE ADDRESS
75 WELLS ROAD
WETHERSFIELD, CT

SHEET TITLE
SITE ELEVATION AND ANTENNA DETAILS

SHEET NUMBER
A-2



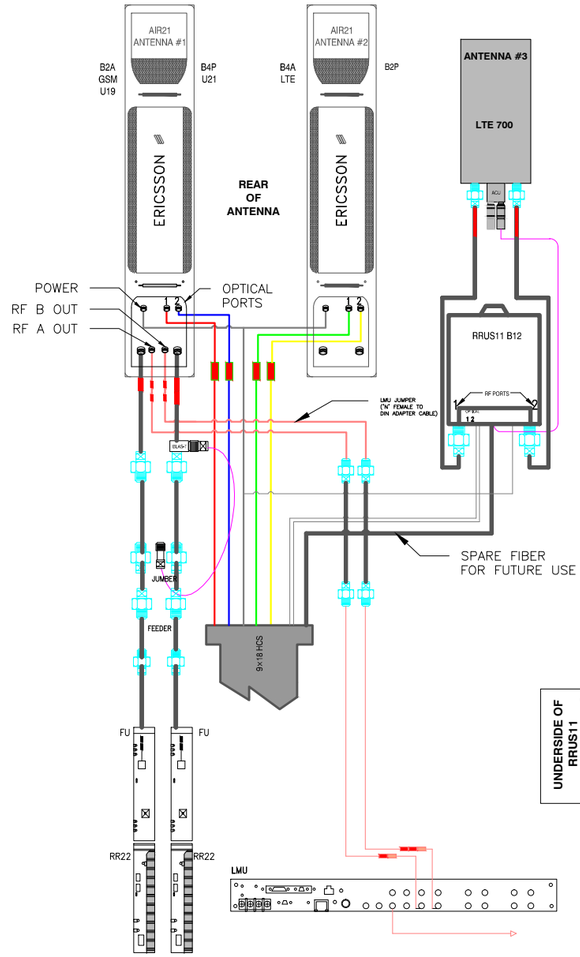
NOTES:

A. PROVIDE #2AWG GROUNDING CONDUCTOR, U.O.N.
B. DO NOT INSTALL GROUND KIT AT BEND. DIRECT GROUND WIRE DOWN TO ANTENNA BUSSBAR.
C. PROVIDE GROUNDING ELECTRODES IN QUANTITY, TYPE AND SIZE AS INDICATED ON SITE GROUNDING PLAN.
D. ADD COAX GROUND KIT CONNECTION TO BUSSBAR WHEN LENGTH OF COAX RUN (FROM EQUIPMENT TO ANTENNA) IS GREATER THAN 20'-0".
E. GROUND HCS BOX W/ #2AWG GROUNDING CONDUCTOR ATTACHED TO GOOD GROUND AS DIRECT AND SHORT AS POSSIBLE. USE GREEN STRANDED INSULATED CONDUCTOR TO CONNECT TO BUSSBAR/GROUND HALO OR BARE TINNED SOLID COPPER CONDUCTOR TO CONNECT TO GROUND RING.

GROUNDING DIAGRAM

1 / E-1

SCALE: N.T.S



702CC CONFIGURATIONANTENNA DETAILS
COAX/FIBER PLUMBING DIAGRAM

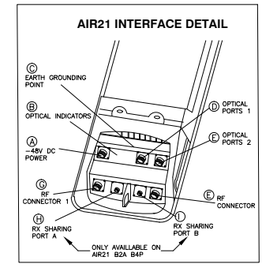
2 / E-1

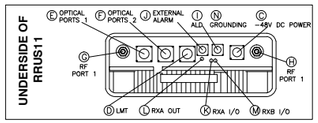
SCALE: N.T.S

702CU
ALPHA ANTENNA VIEW

LEGEND

RF COAX CABLING	HYBRID CABLE
LINE BANDING	GMS
ALPHA	U19
BETA	L21 1ST PORT
GAMMA	L21 2ND PORT
DELTA	L700 1ST PORT
EPILSON	L700 2ND PORT
ZETA	DC POWER





TRUNK FIBER NOTES:

1. IN GENERAL THIS CABLE WILL HANDLE SIMILARLY TO 7/8" COAXIAL CABLE, AND SIMILAR INSTALLATION TECHNIQUES APPLY. ALL CABLES ARE INDIVIDUALLY SERIALIZED, BE SURE TO WRITE DOWN THE CABLE SERIAL NUMBER FOR FUTURE REFERENCE.
2. THE TERMINATED FIBER ENDS (THE BROKEN OUT FIBERS PLUS CONNECTORS) HOWEVER ARE FRAGILE, AND THESE MUST BE PROTECTED DURING THE INSTALLATION PROCESS.
3. LEAVE THE PROTECTIVE TUBE AND SOCK AROUND THE FIBER TAILS AND CONNECTORS IN PLACE DURING HOISTING AND SECURING THE CABLE. REMOVE THIS ONLY JUST PRIOR TO MAKING THE FINAL CONNECTIONS TO THE OVP BOX.
4. DO NOT BEND THE FIBER ENDS (IN THE ORANGE FURCATION TUBES) TIGHTER THAN ¾" (19MM) BEND RADIUS, ELSE THERE IS A RISK OF BREAKING THE GLASS FIBERS.
5. BE SURE THAT THE LACE UP ENDS AND FIBER CONNECTORS ARE NOT DAMAGED BY ATTACHMENT OF A HOISTING GRIP OR DURING THE HOISTING PROCESS. ATTACH A HOISTING GRIP ON THE JACKETED CABLE NO LESS THAN 6 INCHES BELOW THE FIBER BREAKOUT POINT. IF A HOISTING GRIP IS NOT EASILY ATTACHED, USE A SIMPLE LINE ATTACHED BELOW THE FIBER BREAK-OUT POINT (I.E. AT THE CABLE OUTER JACKET). PREVENT THE FIBER TAILS (IN PROTECTIVE TUBE) AT THE CABLE END FROM UNDUE MOVEMENT DURING HOISTING BY SECURING THE PROTECTIVE TUBE (WITH OUTER SOCK) TO THE HOISTING LINE.
6. DURING HOISTING ENSURE THAT THERE IS A FREE PATH AND THAT THE CABLE, AND ESPECIALLY THE FIBER ENDS, WILL NOT BE SNAGGED ON TOWER MEMBERS OR OTHER OBSTACLES.
7. INSTALLATION TEMPERATURE RANGE IS -22F TO 158F (-30C TO +70C).
8. MINIMUM CABLE BEND RADII ARE 22.2" (565MM) LOADED (WITH TENSION ON THE CABLE) AND 11.1" (280MM) UNLOADED.
9. MAXIMUM CABLE TENSILE LOAD IS 3560 N (800 LB) SHORT TERM (DURING INSTALLATION) AND 1070 N (240 LB) LONG TERM.
10. COMMSCOPE NON LACE UP GRIP RECOMMENDED FOR MONOPOLE INSTALLATIONS.
11. MAXIMUM HANGER SPACING 3FT (0.9 M).

HYBRID FIBER/POWER JUMPER NOTES:

1. IN GENERAL THIS CABLE WILL HANDLE SIMILARLY TO A 3/8" COAXIAL CABLE.
2. THE TERMINATED FIBER ENDS HOWEVER ARE FRAGILE AND MUST BE PROTECTED DURING INSTALLATION. LEAVE THE PACKAGING AROUND THE FIBER ENDS IN PLACE UNTIL READY TO CONNECT THE JUMPER BETWEEN OVP AND RRU OR BBU.
3. DO NOT BEND THE FIBER BREAKOUT CABLE (BETWEEN THE MAIN CABLE AND THE FIBER CONNECTOR) TIGHTER THAN ¾" (19MM) RADIUS, ELSE THERE IS A RISK OF BREAKING THE GLASS.
4. ATTACH THE MAIN CABLE SECURELY TO THE STRUCTURE OR EQUIPMENT USING HANGERS AND/OR CABLE TIES TO PREVENT STRAIN ON CONNECTIONS FROM MOVEMENT IN WIND OR SNOW/ICE CONDITIONS.
5. ENSURE THE LC FIBER CONNECTORS ARE SEATED FIRMLY IN PANEL IN OVP OR IN EQUIPMENT.
6. INSTALLATION TEMPERATURE RANGE IS -22F TO 158F (-30C TO 70C).
7. MINIMUM CABLE BEND RADII ARE 10.3 INCH (265MM) LOADED (WITH TENSION ON THE CABLE) AND 5.2 INCH (130MM) UNLOADED.
8. MAXIMUM CABLE TENSILE LOAD IS 350 LB (1560N) SHORT TERM (DURING INSTALLATION) AND 105 LB (470N) LONG TERM.
9. STANDARD LENGTHS AVAILABLE ARE 6 FEET, 15 FEET AND 20 FEET

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DEPT.	DATE.	APP'D	REVISIONS
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RF MAN.			
ZONING			
OPS.			
CONSTR.			
SITE AC.			

PROJECT NO:	CTHA506A
DRAWN BY:	MS
CHECKED BY:	SM

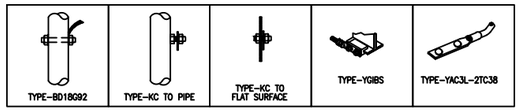
STATE OF CONNECTICUT
HOSSEIN VAHEDI
NO. ARI. 11162
LICENSED ARCHITECT

PROFESSIONAL SEAL

SITE NUMBER
CTHA506A
SITE NAME
AT&T WETHERSFIELD MONOPOLE
SITE ADDRESS
75 WELLS ROAD
WETHERSFIELD, CT

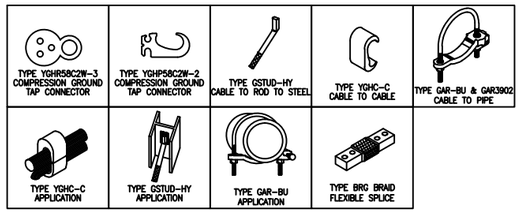
SHEET TITLE
GROUNDING AND ONE LINE DIAGRAM
COAX/FIBER DIAGRAM

SHEET NUMBER
E-1



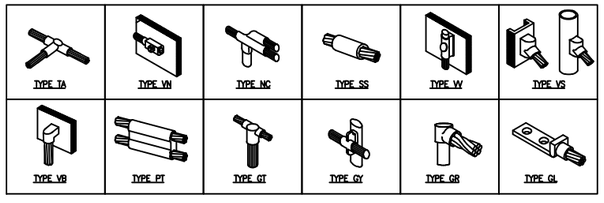
BURNDY GROUNDING DETAILS (1 / E-2)

SCALE: N.T.S



BURNDY GROUNDING PRODUCTS (2 / E-2)

SCALE: N.T.S



CADWELD GROUNDING CONNECTION PRODUCTS (3 / E-2)

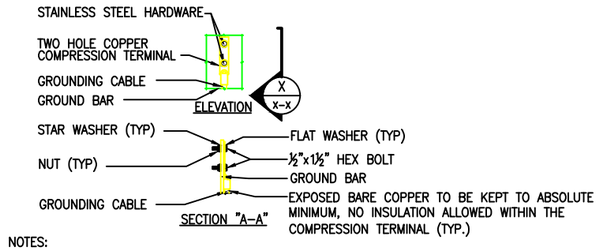
SCALE: N.T.S

TERMINATION TYPES:
A. MECHANICAL COMPRESSION LUG
B. DOUBLE BARRELL COMPRESSION CONNECTOR
C. EXOTHERMIC TERMINATION
D. BEAM CLAMP

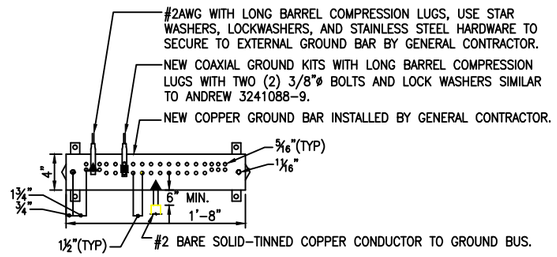
	SOLID #2 TINNED COPPER	#6 GROUND LEAD	#2/0 STRANDED MAIN DOWN CONDUCTOR	MASTER GRND BAR	STRUCTURAL OR TOWER STEEL	BLDG SERVICE ENTR OR GRND RING	GROUND ROD
SOLID #2 TINNED COPPER	B OR C	B OR C		C	A, C, OR D		C
#6 GROUND LEAD	B OR C			A	A, C, OR D		
#2/0 STRANDED GRNDG ELECTRODE CONDUCTOR				A	A, C, OR D	A	
MASTER GROUND BAR	C	A	A				
STRUCTURAL OR TOWER STEEL	A, C, OR D	A, C, OR D	A, C, OR D				
GROUND RING	C		C				C

GROUNDING TERMINATION MATRIX (7 / E-2)

SCALE: N.T.S



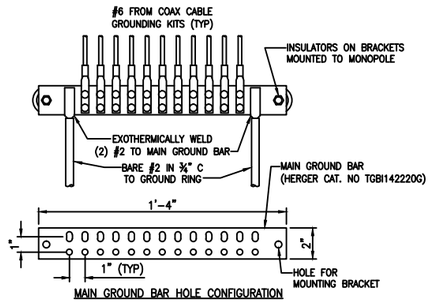
NOTES:
1. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.



NOTES:
1. ALL HARDWARE STAINLESS STEEL COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY: INSERT A TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH KOPR-SHIELD.
3. ALL HOLES ARE COUNTERSUNK 1/16".

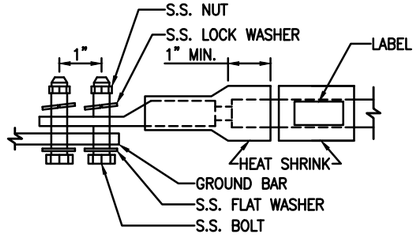
TYPICAL GROUND BAR CONNECTIONS DETAIL (4 / E-2)

SCALE: N.T.S



GROUND BAR DETAIL (5 / E-2)

SCALE: N.T.S



LUG NOTES:
1. ALL HARDWARE IS 18-8 STAINLESS STEEL, INCLUDING LOCK WASHERS.
2. ALL HARDWARE SHALL BE S.S. 3/8"ø OR LARGER.
3. FOR GROUND BOND TO STEEL ONLY: INSERT A DRAGON TOOTH WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH ANTI-OXIDIZATION COMPOUND PRIOR TO MATING.

GROUND BAR DETAIL (6 / E-2)

SCALE: N.T.S

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SITE AC.			

PROJECT NO:	CTHA506A
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CHECKED BY:	SM

PROFESSIONAL SEAL

SITE NUMBER
CTHA506A
SITE NAME
AT&T WETHERSFIELD MONOPOLE
SITE ADDRESS
75 WELLS ROAD
WETHERSFIELD, CT

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
E-2

Exhibit D

Rigorous Structural Analysis Report

T-Mobile – AT&T Wethersfield Monopole #CTHA506A

Owner: Frontier Communications - Wethersfield CO Site

Wethersfield, Connecticut

June 01, 2016

MEI PROJECT ID: CT04861M-16V2

MALOUF ENGINEERING INTL., INC.

STRUCTURAL CONSULTANTS

17950 PRESTON ROAD, SUITE 720 ▪ DALLAS, TEXAS 75252 ▪ TEL. 972 -783-2578 FAX 972-783-2583

www.maloufengineering.com

PROFESSIONAL MEMBER

ACEC MEMBER

MALOUF ENGINEERING INTL., INC.

STRUCTURAL CONSULTANTS

June 01, 2016

Mr. Sheldon Freincle
Northeast Site Solutions
Farmington, CT 06032

RIGOROUS STRUCTURAL ANALYSIS

Structure/Make/Model:	101 ft **Monopole**		Not Known / 18-Sided	
Client/Site Name/#:	**Northeast Site Solutions / T-Mobile**		**AT&T Weathersfield Monopole #CTHA506A**	
Owner/Site Name/#:	Frontier Communications		Wethersfield CO	
MEI Project ID:	**CT04861M-16V2**			
Location:	75 Wells Rd Wethersfield, CT 06109		Hartford County FCC #1200438	
	LAT	41-42-21.2 N	LON	72-39-48.0 W

EXECUTIVE SUMMARY:

Malouf Engineering Int'l (MEI), as requested, has performed a rigorous structural analysis of the above mentioned structure to assess the impact of the changed condition as noted in Table 1.

Based on the stress analysis performed, the existing structure **is in conformance** with the Int'l Building Code (IBC) / ANSI/TIA-**222-G** Standard for the loading considered under the criteria listed and referenced in the report sections – tower rated at 89.7% - Foundation.

The installation of the proposed changed condition as noted in Table 1 is structurally acceptable. Please refer to Appendix 1 for Schematic Lines Layout.

MEI appreciates the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or other projects please contact us.

Respectfully submitted,

MALOUF ENGINEERING INT'L, INC.

Analysis performed by:

Helder Lopez, PE
Sr. Project Engineer

Reviewed & Approved by:

E. Mark Malouf, PE
Connecticut #17715
972-783-2578 ext. 106
mmalouf@maloufengineering.com

TABLE OF CONTENTS

1. INTRODUCTION & SCOPE

A rigorous structural analysis was performed by Malouf Engineering Int'l (MEI), as requested and authorized by Mr. Sheldon Freincle, Northeast Site Solutions, on behalf of T-Mobile, to determine the acceptance of the proposed changed conditions in conformance with the IBC / ANSI/TIA-222-G Standard, "*Structural Standard for Antenna Supporting Structures and Antennas*".

The scope of this independent analysis is to determine the overall stability and the adequacy of structural members, foundations, and member connections, as available and stated. This analysis considers the structure to have been properly installed and maintained with no structural defects. Installation procedures and related loading are not within the scope of this analysis and should be performed and evaluated by a competent person of the erection contractor.

The different report sections detail the applicable information used in this evaluation, relating to the tower data, the appurtenances configuration and the wind and ice loading considered.

2. SOURCE OF DATA

The following information has been used in this evaluation as source data that accurately represent the existing structure and the related appurtenances:

	Source	Information	Reference
STRUCTURE			
Tower	MEI Records	Previous Structural Analysis	ID CT04861M-16V1 Dated 05/04/2016
Foundation	MEI Records	Previous Structural Analysis	ID CT04861M-16V1 Dated 05/04/2016
Material Grade	Not available from supplied documents-Assumed based on typical towers of this type-refer to Appendix		
CURRENT APPURTENANCES			
	MEI Records	Previous Structural Analysis	ID CT04861M-16V1 Dated 05/04/2016
CHANGED CONDITION			
	Frontier Comm. / Ms. Elissa McOmber	Prelim Data Questionnaire	Dated 04/20/2016

Background Information:

Based on available information, the following is known regarding this structure:

DESIGNER / FABRICATOR	Not Known / 18-Sided
ORIGINAL DESIGN CRITERIA	TIA/EIA 222-Unknown
PRIOR STRUCTURAL MODIFICATIONS	As per GPD Group base plate and anchor rod modifications Job #2009264.50 dated 06/12/2009; pole shaft modifications by others as per B+T mapping report dated 07/17/2014 – considered properly installed.

3. ANALYSIS CRITERIA

The structural analysis performed used the following criteria:

CODE / STANDARD	2009 Int'l Building Code / ANSI/TIA-222-G-2 Standard	
LOADING CASES	*Full Wind*:	100 Mph (3-Sec Gust) - with No Radial Ice
	Iced Case:	40 Mph + 1.25" Radial Ice
	Service:	60 Mph
STRUCTURE CRITERIA	*Structure Classification*: Class II	
	Exposure Category: '**B**' – *Topographic Category:* 1	

Appurtenances Configuration

The following appurtenances configuration is denoted by the *summation of Tables 1 & 2*:

Table 1: Proposed Changed Condition Appurtenances

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
95	T-Mobile	3	Ericsson KRC 118 057/1 Panel Ants.	(3) 12.5ft LP T-Arm Mounts (SitePro1 RMV12-3XX)	6	7/8"-(I)
		3	RRUS-11 B12 Boxes			
To Be Removed (See Below)						
75	T-Mobile	3	AIR21 Panel Antennas	(3) LP T-Arm Mounts		

Table 2: Remaining Current and Reserved/Future Appurtenances

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
103.5	AT&T	6	AXCM-800/1900-90-13.5 Panel Ants.	Top Platform w/ Rails (& Ladder)	12	1-5/8"
		3	AM-X-CD-16-65-00T-RET Panel Ants.		2	2-1/4" Hybrid Cables-(I)
		12	14.5"x9"x2.5" RRU/TMAs			
		3	17"x16.5"x6.5" RRU/TMAs		1	ATCB-B01-xxx Homerun Cable-(I/E)
		1	18"x19" (OVP / RRU) Boxes			
101		1	5ft Lightning Rod			
		1	Beacon/Strobe		1	1/2"-(I)
95	T-Mobile	3	AIR21 Panel Antennas ***[Relocated from Elev. 75ft to Elev. 95tf]***		1	1-5/8" Hybrid-Fiber-(I) **[Extended as required]**
46.5		1	GPS Antenna	18in Approx. Standoff Arm	1	3/8"-(E)
37		1	GPS Antenna	18in Approx. Standoff Arm	1	3/8"-(E)

Notes:
1. All elevations are measured from tower base.
2. Please note appurtenances not listed above are to be removed/not present as per data supplied.
3. (I) = Internal; (E) = External; (FZ) = Within Face Zone; (OFZ) = Outside Face Zone - as per TIA-222-G.
4. The above appurtenances represent MEI's understanding of the appurtenances configuration. If different than above, the analysis is invalid. Please contact MEI if any discrepancies are found.

4. ANALYSIS PROCEDURE

The subject structure is analyzed for feasibility of the installation of the proposed changed condition previously noted. The data records furnished were reviewed and a computer stress analysis was performed in accordance with the TIA-222 Standard provisions and with the agreed scope of work terms and the results of this analysis are reported.

Analysis Program

The computer program used to model the structure is a rigorous Finite Element Analysis program, tnxTower (ver. 7.0.5), a commercially available program by Tower Numerics Inc. The latticed structures members are modeled using beam/truss and cable members and the pole members using tubular beam elements. The structural parameters and geometry of the members are included in the model. The dead and temperature loads and the wind loads are internally calculated by the program for the different wind directions and then applied as external loads on the structure. Any applicable exemptions, as per Section 15.6 of the TIA-222-G Standard for existing structures originally designed in accordance with a previous revision of the TIA-222 Standard, have been taken.

Assumptions

This engineering study is based on the theoretical capacity of the members and is not a condition assessment of the structure. This analysis is based on information supplied, and therefore, its results are based on and as accurate as that supplied data. MEI has made no independent determination, nor is it required to, of its accuracy. The following assumptions were made for this structural stress analysis:

- This existing tower is assumed, for the purpose of this analysis, to have been properly maintained and to be in good condition with no structural defects and with no deterioration to its member capacities ('as-new' condition).
- The tower member sizes and configuration are considered accurate as supplied. The material grade is as per data supplied and/or as assumed and as stated.
- The appurtenances configuration is as supplied and/or as stated in the report. It is assumed to be complete and accurate. All antennas, mounts, coax and waveguides are assumed to be properly installed and supported as per manufacturer requirements.
- Some assumptions are made regarding antennas and mounts sizes and their projected areas based on best interpretation of data supplied and of best knowledge of antenna type & industry practice.
- Mounts/Platforms are considered adequate to support the loading. No actual analysis of the platform/mount itself is performed, with the analysis being limited to analyzing the structure.
- The soil parameters are as per data supplied or as assumed and stated in the calculations. Refer to the Appendix. If no data is available, the foundation system is assumed to support the structure with its new reactions.
- All welds and connections are assumed to develop at least the member capacity, unless determined otherwise and explicitly stated in this report.
- All prior structural modifications, if any, are assumed to be as per data supplied/available, and to have been properly installed and to be fully effective.

If any of the above assumptions are not valid or have been made in error, this analysis results may be invalided, MEI should be contacted to review any contradictory information to determine its effect.

5. ANALYSIS RESULTS

The results of the structural stress analysis based on data available and with the previous listed criteria, indicated the following:

Table 3: Stress Analysis Results

Component Type	Maximum Stress Ratio	Controlling Elev. (ft) / Component	Pass/Fail	Comment
POLE	75.7%	88 – 61.25	**Pass**	
BASE PLATE	76.4%	Bending	**Pass**	
ANCHOR RODS	47.0%	Tension	**Pass**	
FOUNDATION	**89.7%**	**Moment**	**Pass**	

Table 4: Serviceability Requirements

	Maximum Value	TIA Requirement (10dB)	Pass/Fail	Comment
TWIST/SWAY	1.5485 Deg.	4 Deg. from Vert. or Horiz. Axis	**Pass**	
HORIZONTAL DISPLACEMENT	16.601 In./ 1.36% of Ht.	3.0% of Height	**Pass**	

Notes:
1. The Maximum Stress Ratio is the percentage that the maximum load in the member is relative to the allowable load as determined by Code requirements.
2. Refer to the Appendix 1 for more details on the member loads.
3. A maximum stress ratio between 100% and 105% may be considered as *Acceptable* according to industry standard practice.

6. FINDINGS & RECOMMENDATIONS

- Based on the rigorous stress analysis results, the subject structure is **rated at 89.7%** of its support capacity (controlling component: Foundation) with the proposed changed condition considered. Please refer to Table 3 and to Appendix 1 for more details of the analysis results.
- Based on the stress analysis performed, the existing structure **is in conformance** with the IBC / ANSI/TIA **222-G** Standard for the loading considered under the criteria listed and referenced in the report sections.
- ***The installation of the proposed changed condition as noted in Table 1 is structurally acceptable***. Please refer to Appendix 1 for Schematic Lines Layout.
- This structure has limited additional support capacity for the appurtenances and loading criteria considered. Therefore, no changes to the configuration considered should be made without performing a new proper evaluation.

Rigging and temporary supports required for the erection/modification shall be determined, documented, furnished and installed by the erector/contractor accounting for the loads imposed on the structure due to the proposed construction method.

7. REPORT DISCLAIMER

The engineering services rendered by **M**alouf **E**ngineering **I**nternational, Inc. *('MEI') in connection with this Structural Analysis are limited to a computer analysis of the tower structure, size and capacity of its members. MEI does not analyze the fabrication, including welding and connection capacities, except as included in this Report.*

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:

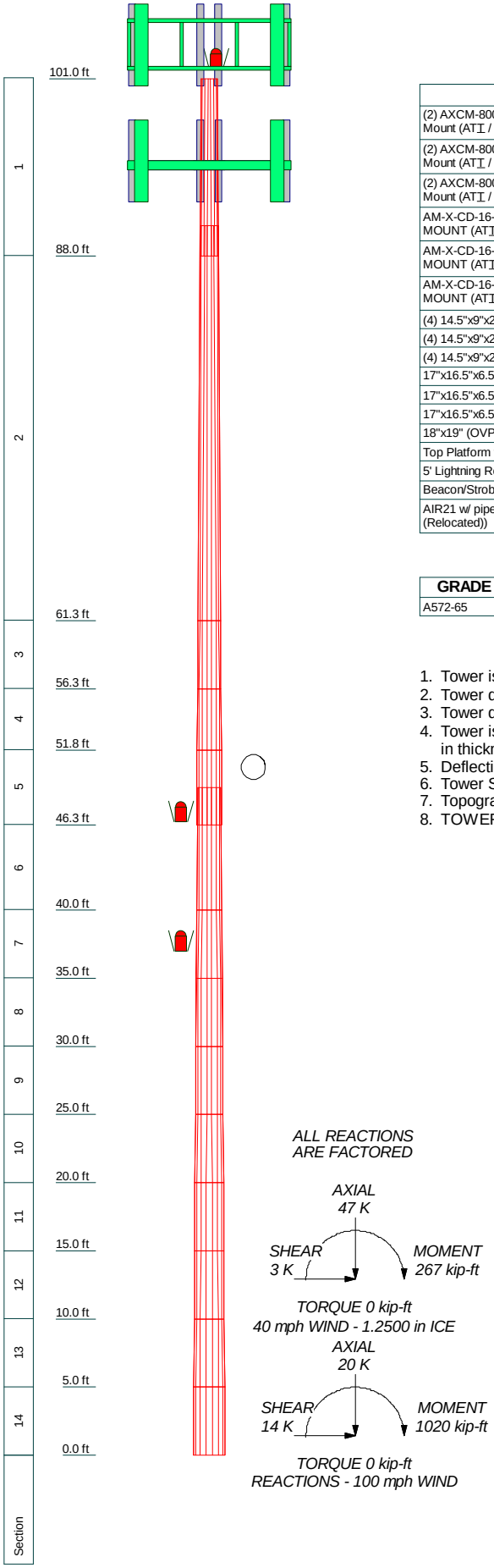
1. Proper alignment and plumbness.
2. Correct guy tensions, as applicable.
3. Correct bolt tightness or slip jacking of sleeved connections.
4. No significant deterioration or damage to any structural component.

Furthermore, the information and conclusions contained in this Report were determined by application of the current "state-of-the-art" engineering and analysis procedures and formulae. MALOUF ENGINEERING INTERNATIONAL, INC. assumes no obligation 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 MALOUF ENGINEERING INTERNATIONAL, INC. 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 MALOUF ENGINEERING INTERNATIONAL, INC., if any, pursuant to this Report shall be limited to the total funds actually received by MALOUF ENGINEERING INTERNATIONAL, INC. for preparation of this Report.

Customer has requested MALOUF ENGINEERING INTERNATIONAL, INC. to prepare and submit to Customer an engineering analysis with respect to the Subject Tower and has further requested MALOUF ENGINEERING INTERNATIONAL, INC. to make appropriate recommendations regarding suggested structural modifications and changes to the Subject Tower. In making such request of MALOUF ENGINEERING INTERNATIONAL, INC., Customer has informed MALOUF ENGINEERING INTERNATIONAL, INC. that Customer will make a determination as to whether or not to implement any of the changes or modifications which may be suggested by MALOUF ENGINEERING INTERNATIONAL, INC. and that Customer will have any such changes or modifications made by riggers, erectors and other subcontractors of Customer's choice. MALOUF ENGINEERING INTERNATIONAL, INC. shall have the right to rely upon the accuracy of the information supplied by the customer and shall not be held responsible for the Customer's misrepresentation or omission of relevant fact whether intentional or otherwise.

Customer hereby agrees and acknowledges that MALOUF ENGINEERING INTERNATIONAL, INC. shall have no liability whatsoever to Customer or to others for any work or services performed by any persons other than MALOUF ENGINEERING INTERNATIONAL, INC. in connection with the implementation of services 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 MALOUF ENGINEERING INTERNATIONAL, INC. shall have no liability or responsibility whatsoever as a result of any negligence or breach of contract by any such rigger, erector or subcontractor and that Customer and rigger, erector, or subcontractor will provide MALOUF ENGINEERING INTERNATIONAL, INC. with a Certificate of Insurance naming MALOUF ENGINEERING INTERNATIONAL, INC. as additional insured.

APPENDIX 1 - ANALYSIS PRINTOUT & GRAPHICS



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
(2) AXCM-800/1900-90-13.5 w/ Pipe Mount (AT⌶ / E)	103.5	AIR21 w/ pipe Mount (T-Mobile / E (Relocated))	95
(2) AXCM-800/1900-90-13.5 w/ Pipe Mount (AT⌶ / E)	103.5	AIR21 w/ pipe Mount (T-Mobile / E (Relocated))	95
(2) AXCM-800/1900-90-13.5 w/ Pipe Mount (AT⌶ / E)	103.5	Ericsson KRC 118 057/1 w/ pipe Mount (T-Mobile / P)	95
AM-X-CD-16-65-00T-RET w/ PIPE MOUNT (AT⌶ / E)	103.5	Ericsson KRC 118 057/1 w/ pipe Mount (T-Mobile / P)	95
AM-X-CD-16-65-00T-RET w/ PIPE MOUNT (AT⌶ / E)	103.5	Ericsson KRC 118 057/1 w/ pipe Mount (T-Mobile / P)	95
AM-X-CD-16-65-00T-RET w/ PIPE MOUNT (AT⌶ / E)	103.5	RRUS-11 B12 (T-Mobile / P)	95
(4) 14.5"x9"x2.5" RRU/TMA (AT⌶ / E)	103.5	RRUS-11 B12 (T-Mobile / P)	95
(4) 14.5"x9"x2.5" RRU/TMA (AT⌶ / E)	103.5	RRUS-11 B12 (T-Mobile / P)	95
(4) 14.5"x9"x2.5" RRU/TMA (AT⌶ / E)	103.5	12.5 ft. L.P. T-Arm Mount (SitePro1 RMV12-3XX) (Prop.)	95
17"x16.5"x6.5" RRU/TMA (AT⌶ / E)	103.5	12.5 ft. L.P. T-Arm Mount (SitePro1 RMV12-3XX) (Prop.)	95
17"x16.5"x6.5" RRU/TMA (AT⌶ / E)	103.5	12.5 ft. L.P. T-Arm Mount (SitePro1 RMV12-3XX) (Prop.)	95
17"x16.5"x6.5" RRU/TMA (AT⌶ / E)	103.5	GPS (E)	46.5
18"x19" (OVP / RRU) (AT⌶ / E)	103.5	18" Approx. Standoff Arm (E)	46.5
Top Platform w/ Rails (Ladder) (E)	103.5	GPS (E)	37
5' Lightning Rod (E)	101	18" Approx. Standoff Arm (E)	37
Beacon/Strobe (E)	101		
AIR21 w/ pipe Mount (T-Mobile / E (Relocated))	95		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi	A572-60	60 ksi	75 ksi

TOWER DESIGN NOTES

1. Tower is located in Hartford County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-G Standard.
3. Tower designed for a 100 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 40 mph basic wind with 1.25 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Structure Class II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 76.4%

MALOUF ENGINEERING INTL., INC. STRUCTURAL CONSULTANTS
maloufengineering.com

MALOUF ENGINEERING INT'L. INC.
17950 PRESTON RD. SUITE 720
DALLAS, TEXAS - 75252
Phone: (972) 783-2578
FAX: (972) 783-2583

Job:	***101 ft. MNP. / AT&T Wethersfield Site #CTHA506A***		
Project:	***CT04861M-16V2***		
Client: Northeast Site Solutions / T-Mobile		Drawn by: HLopez	App'd:
Code: TIA-222-G		Date: 06/01/16	Scale: NTS
Path: C:\ME\Projects\16files\MNP\CT04861M-16V2\CT04861M-16V2_Rev-G.eri			Dwg No. E-1

No.	QTY.	DESCRIPTION	ELEV.	TENANT
1	1	1/2	101'	E (Lighting)
2	12	1 5/8	101'	AT&T / E
3	2	Hybrid Cable (2 1/4)	101'	AT&T / E
4	1	ATCB-B01-xxx HR Cable (Ext.)	62'-101'	AT&T / E
5	1	ATCB-B01-xxx HR Cable (Int.)	62'	AT&T / E
6	1	1 5/8 (Hybrid-Fiber)	95'	T-Mobile / E
7	6	7/8	95'	T-Mobile / P
8	1	3/8 (Shielded)	46'	E
9	1	3/8 (Shielded)	37'	E

LEGEND:

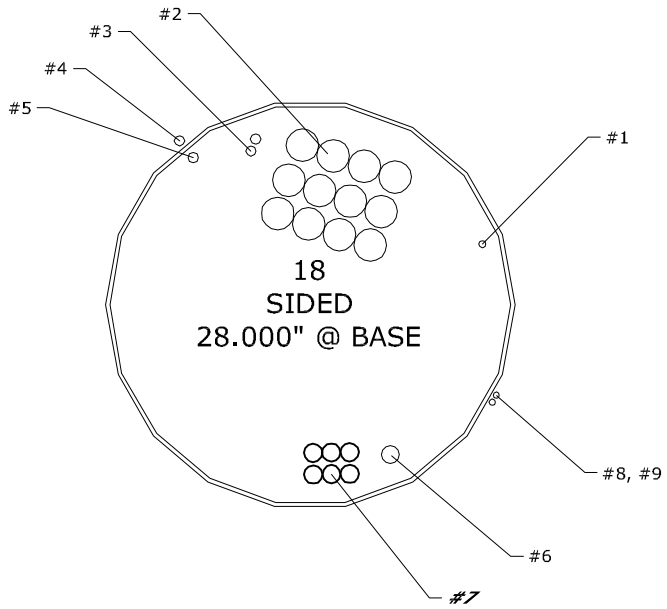
E = EXISTING #X

P = PROPOSED #X

F = FUTURE #X

R = REMOVE #X

TO RELOCATE



101 PLAN: SCHEMATIC Tx-LINE LAYOUT

SCALE: NOT TO SCALE

NOTES:
1. Tx LINE LAYOUT IS SCHEMATIC ONLY, BASED UPON LIMITED DATA AND PHOTOS PROVIDED.
2. NEW BRACKET SUPPORT SPECIFICATION BY OTHERS.

JUN 01, 2016

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T-Mobile

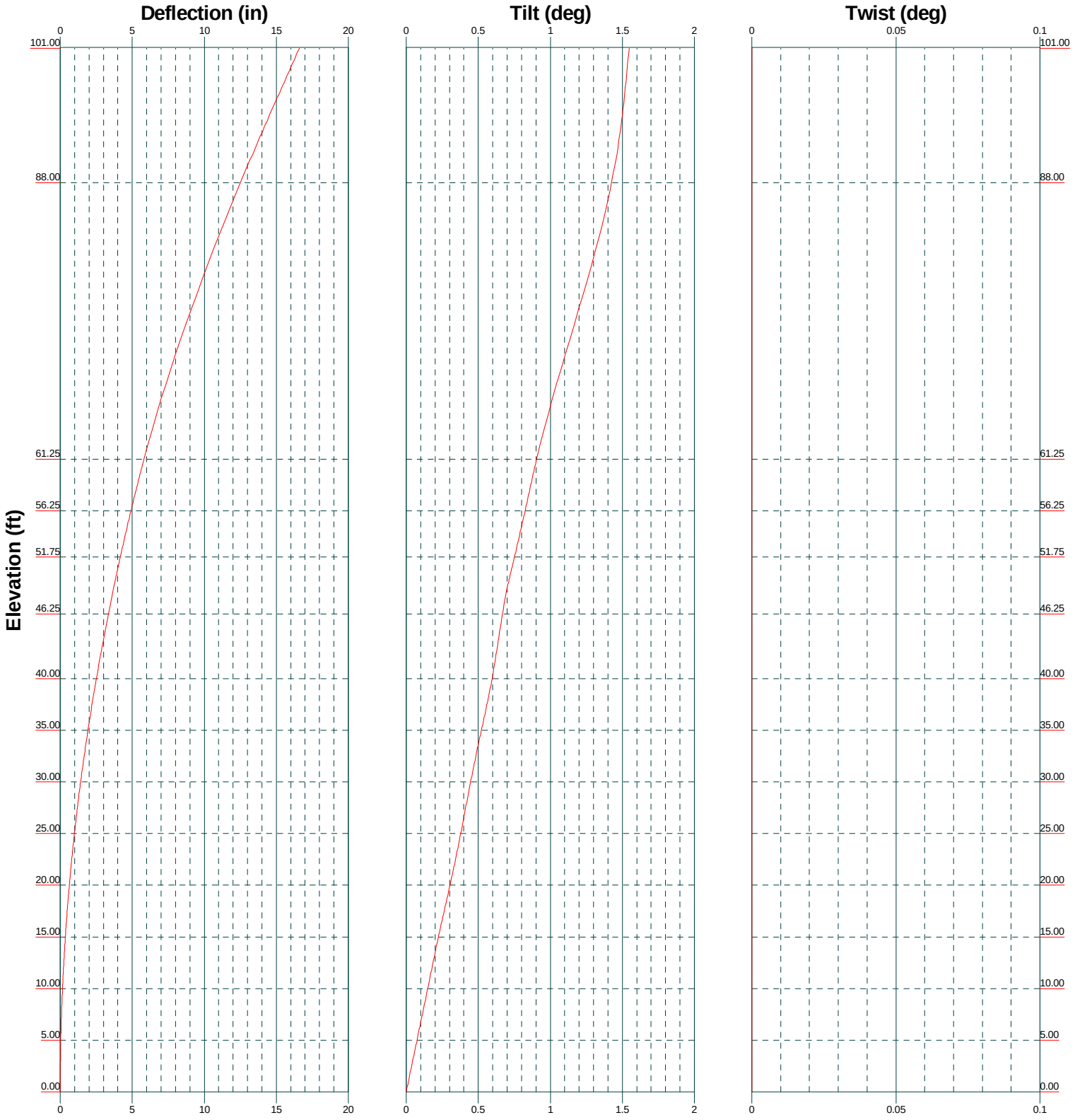
101 ft. MNP. / AT&T Wethersfield Site #CTHA506A

MONOPOLE TxLINE LAYOUT

MEI PROJECT ID	SHEET NUMBER	REV.
CT04861M-16V2	**L01**	0

TIA-222-G - Service - 60 mph

Maximum Values



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Phone: (972) 783-2578
FAX: (972) 783-2583

Job: ***101 ft. MNP. / AT&T Wethersfield Site #CTHA506A***			
Project: ***CT04861M-16V2***			
Client: Northeast Site Solutions / T-Mobile	Drawn by: HLopez	App'd:	
Code: TIA-222-G	Date: 06/01/16	Scale: NTS	
Path: C:\ME\Projects\16files\MNP\CT04861M-16V2\CT04861M-16V2_Rev-G.eri		Dwg No. E-5	

Tower Input Data

There is a pole section.
This tower is designed using the TIA-222-G standard.
The following design criteria apply:

Tower is located in Hartford County, Connecticut.
Basic wind speed of 100 mph.
Structure Class II.
Exposure Category B.
Topographic Category 1.
Crest Height 0.00 ft.
Nominal ice thickness of 1.2500 in.
Ice thickness is considered to increase with height.
Ice density of 56 pcf.
A wind speed of 40 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.

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	*Placement* *ft*	*Total Number*
ATCB-B01-xxx Homerun Cable (AT&T / E)	101.00 - 62.00	1
3/8 (Shielded) (E)	46.50 - 0.00	1
3/8 (Shielded) (E)	37.00 - 0.00	1

Feed Line/Linear Appurtenances - Entered As Area

Description	*Allow Shield*	*Component Type*	*Placement* *ft*	*Total Number*
Safety Line 3/8 (E)	No	CaAa (Out Of Face)	101.00 - 0.00	1
Step Bolts (E)	No	CaAa (Out Of Face)	101.00 - 0.00	1
1/2 (E (Lighting))	No	Inside Pole	101.00 - 0.00	1
1 5/8 (AT&T / E)	No	Inside Pole	101.00 - 0.00	12
Hybrid Cable (2 1/4) (AT&T / E)	No	Inside Pole	101.00 - 0.00	2
ATCB-B01-xxx Homerun Cable (AT&T / E)	No	Inside Pole	62.00 - 0.00	1
1 5/8 (Hybrid-Fiber) (T-Mobile / E)	No	Inside Pole	95.00 - 0.00	1
7/8 (T-Mobile / P)	No	Inside Pole	95.00 - 0.00	6
MP303 (Mods)	No	CaAa (Out Of Face)	62.00 - 47.00	1
MP303 (Mods)	No	CaAa (Out Of Face)	62.00 - 47.00	1
MP304 (Mods)	No	CaAa (Out Of Face)	45.50 - 0.00	1
MP304 (Mods)	No	CaAa (Out Of Face)	45.50 - 0.00	1

Discrete Tower Loads

Description	Face or Leg	Placement ft
5' Lightning Rod (E)	A	101.00
Beacon/Strobe (E)	B	101.00
(2) AXCM-800/1900-90-13.5 w/ Pipe Mount (AT&T / E)	A	103.50
(2) AXCM-800/1900-90-13.5 w/ Pipe Mount (AT&T / E)	B	103.50
(2) AXCM-800/1900-90-13.5 w/ Pipe Mount (AT&T / E)	C	103.50
AM-X-CD-16-65-00T-RET w/ PIPE MOUNT (AT&T / E)	A	103.50
AM-X-CD-16-65-00T-RET w/ PIPE MOUNT (AT&T / E)	B	103.50
AM-X-CD-16-65-00T-RET w/ PIPE MOUNT (AT&T / E)	C	103.50
(4) 14.5"x9"x2.5" RRU/TMA (AT&T / E)	A	103.50
(4) 14.5"x9"x2.5" RRU/TMA (AT&T / E)	B	103.50
(4) 14.5"x9"x2.5" RRU/TMA (AT&T / E)	C	103.50
17"x16.5"x6.5" RRU/TMA (AT&T / E)	A	103.50
17"x16.5"x6.5" RRU/TMA (AT&T / E)	B	103.50
17"x16.5"x6.5" RRU/TMA (AT&T / E)	C	103.50
18"x19" (OVP / RRU) (AT&T / E)	B	103.50
Top Platform w/ Rails (& Ladder) (E)	A	103.50

Description	Face or Leg	Placement ft
AIR21 w/ pipe Mount (T-Mobile / E (Relocated))	A	95.00
AIR21 w/ pipe Mount (T-Mobile / E (Relocated))	B	95.00
AIR21 w/ pipe Mount (T-Mobile / E (Relocated))	C	95.00
Ericsson KRC 118 057/1 w/ pipe Mount (T-Mobile / P)	A	95.00
Ericsson KRC 118 057/1 w/ pipe Mount (T-Mobile / P)	B	95.00
Ericsson KRC 118 057/1 w/ pipe Mount (T-Mobile / P)	C	95.00
RRUS-11 B12 (T-Mobile / P)	A	95.00
RRUS-11 B12 (T-Mobile / P)	B	95.00
RRUS-11 B12 (T-Mobile / P)	C	95.00
12.5 ft. L.P. T-Arm Mount (SitePro1 RMV12-3XX) (Prop.)	A	95.00
12.5 ft. L.P. T-Arm Mount (SitePro1 RMV12-3XX) (Prop.)	B	95.00
12.5 ft. L.P. T-Arm Mount (SitePro1 RMV12-3XX) (Prop.)	C	95.00
GPS (E)	A	46.50
18" Approx. Standoff Arm (E)	A	46.50
GPS (E)	A	37.00
18" Approx. Standoff Arm (E)	A	37.00

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	101 - 88	16.601	40	1.5485	0.0016
L2	90.25 - 61.25	13.196	40	1.4568	0.0010
L3	61.25 - 56.25	5.820	40	0.9045	0.0004
L4	56.25 - 51.75	4.914	40	0.8257	0.0003
L5	51.75 - 46.25	4.170	40	0.7525	0.0003
L6	49 - 40	3.750	40	0.7066	0.0003
L7	40 - 35	2.511	40	0.5951	0.0002
L8	35 - 30	1.926	40	0.5228	0.0002
L9	30 - 25	1.417	40	0.4495	0.0001
L10	25 - 20	0.985	40	0.3755	0.0001
L11	20 - 15	0.631	40	0.3009	0.0001
L12	15 - 10	0.355	40	0.2259	0.0001
L13	10 - 5	0.158	40	0.1507	0.0000
L14	5 - 0	0.039	40	0.0754	0.0000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
103.50	(2) AXCM-800/1900-90-13.5 w/ Pipe Mount	40	16.601	1.5485	0.0016	8968
101.00	5' Lightning Rod	40	16.601	1.5485	0.0016	8968
95.00	AIR21 w/ pipe Mount	40	14.680	1.5053	0.0013	7473
46.50	GPS	40	3.385	0.6720	0.0002	4704
37.00	GPS	40	2.151	0.5528	0.0002	3909

Base Plate Design Data

Plate Thickness in	Number of Anchor Bolts	Anchor Bolt Size in	Actual Allowable Ratio Bolt Tension K	Actual Allowable Ratio Concrete Stress ksi	Actual Allowable Ratio Plate Stress ksi	Actual Allowable Ratio Stiffener Stress ksi	Controlling Condition	Critical Ratio
2.500	8	1.7500	100.67 216.48 0.47	2.354 4.080 0.58	34.390 45.000 0.76		Plate	0.76 ✔

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	101 - 88	Pole	TP16.36x14.64x0.1875	1	-24.01	41.36	63.9	Pass
L2	88 - 61.25	Pole	TP19.7689x15.6873x0.25	2	-8.40	114.37	75.7	Pass
L3	61.25 - 56.25	Pole	TP20.4726x19.7689x0.250*	3	-9.06	195.73	55.9	Pass
L4	56.25 - 51.75	Pole	TP21.1059x20.4726x0.250*	4	-9.67	212.78	58.9	Pass
L5	51.75 - 46.25	Pole	TP21.88x21.1059x0.250*	5	-10.05	222.19	61.0	Pass
L6	46.25 - 40	Pole	TP22.28x20.725x0.3125*	6	-11.89	317.79	53.6	Pass
L7	40 - 35	Pole	TP22.995x22.28x0.3125*	7	-12.81	346.20	55.9	Pass
L8	35 - 30	Pole	TP23.71x22.995x0.3125*	8	-13.72	375.94	58.2	Pass
L9	30 - 25	Pole	TP24.425x23.71x0.3125*	9	-14.66	407.78	60.2	Pass
L10	25 - 20	Pole	TP25.14x24.425x0.3125*	10	-15.61	441.07	62.2	Pass
L11	20 - 15	Pole	TP25.855x25.14x0.3125*	11	-16.59	475.81	64.1	Pass
L12	15 - 10	Pole	TP26.57x25.855x0.3125*	12	-17.58	513.03	65.8	Pass
L13	10 - 5	Pole	TP27.285x26.57x0.3125*	13	-18.60	551.86	67.5	Pass
L14	5 - 0	Pole	TP28x27.285x0.3125*	14	-19.64	592.30	69.1	Pass
							Summary	
						Pole (L2)	75.7	Pass
						Base Plate	76.4	Pass
						RATING =	**76.4**	**Pass**

***Modified w/ MP304 & MP303 Channels**

APPENDIX 2 – SOURCE / CHANGED CONDITION

Tower / Radio Information - Call Sign information needs to be tied to a specific antenna(s). Adjust letters as needed.

A	Call Sign	KNLF202
	Class of Station	CW
	Emission Type	UMTS
	Transmit Frequency	1930-1945 MHz
	Output Power (watts)	40W
	Transmitter ERP (dBm)	2 x 62,5 dBm
	Receive Frequency	1850-1865 MHz

A	Call Sign	WQJQ696
	Class of Station	WY
	Emission Type	LTE
	Transmit Frequency	728-734
	Output Power (watts)	40W
	Transmitter ERP (dBm)	2 x 62,5 dBm
	Receive Frequency	698-704

A	Call Sign	WQGA731
	Class of Station	AW
	Emission Type	LTE
	Transmit Frequency	2135-2140
	Output Power (watts)	40W
	Transmitter ERP (dBm)	2 x 62,5 dBm
	Receive Frequency	1735-1740

A	Call Sign	WQKF358
	Class of Station	AW
	Emission Type	LTE
	Transmit Frequency	2130-2135
	Output Power (watts)	40W
	Transmitter ERP (dBm)	2 x 62,5 dBm
	Receive Frequency	1730-1735

A	Call Sign	WQGB373
	Class of Station	AW
	Emission Type	LTE
	Transmit Frequency	2140-2145
	Output Power (watts)	40W
	Transmitter ERP (dBm)	2 x 62,5 dBm
	Receive Frequency	1740-1745

A	Call Sign	WQPZ969
	Class of Station	AW
	Emission Type	LTE
	Transmit Frequency	2145-2155
	Output Power (watts)	40W
	Transmitter ERP (dBm)	2 x 62,5 dBm
	Receive Frequency	1745-1755

Coax / Waveguide / Cable Information

Type:	Coax
Size:	7/8"
Length:	95
# of runs:	6
Type:	Hybrid / fiber
Size:	1-5/8"
Length:	95
# of runs:	1
Type:	
Size:	
Length:	
# of runs:	
Type:	
Size:	
Length:	
# of runs:	

	Antenna & Ancillary Equipment Information		**Check one**					**Heights** - Above Ground Level (feet)			
@	Make	Model	Existing	Proposed	Size / Dimensions	Weight	Azimuth	RAD Center	Attachment	Tip	**Notes:** (including removals, ice shields, etc.)
A	Ericsson	KRC 118 057/1		x	4.9' x 14.8" x 9.5"	124 lbs	20	95	95	99	
A	Ericsson	KRC 118 057/1		x	4.9' x 14.8" x 9.5"	124 lbs	150	95	95	99	
A	Ericsson	KRC 118 057/1		x	4.9' x 14.8" x 9.5"	124 lbs	255	95	95	99	
A	Ericsson	AIR21	x		56" x 12" x 8"	91 lbs	20	95	95	97	Existing to be removed
A	Ericsson	AIR21	x		56" x 12" x 8"	91 lbs	20	95	95	97	Existing to be relocated
A	Ericsson	AIR21	x		56" x 12" x 8"	91 lbs	150	95	95	97	Existing to be removed
A	Ericsson	AIR21	x		56" x 12" x 8"	91 lbs	150	95	95	97	Existing to be relocated
A	Ericsson	AIR21	x		56" x 12" x 8"	91 lbs	255	95	95	97	Existing to be removed
A	Ericsson	AIR21	x		56" x 12" x 8"	91 lbs	255	95	95	97	Existing to be relocated
	Ericsson	RRUS 11 B12		x	19.69" x 16.97" x 7.17" ea	50.71 lbs ea		95	95		Three (3) RRU units

Exhibit E

June 29, 2016

Mr. Saeed Mossavat
Atlantis Group, Inc.
1340 Centre Street, Suite 212
Newtown, MA 02459

Re: 3rd Party Review

T-Mobile Site Name:	AT&T Wethersfield Monopole
T-Mobile Site ID:	CTHA506A
Site Address:	75 Wells Road, Wethersfield, Hartford County, CT 06109
Destek Job Number:	1617016

Per your request, Destek Engineering, LLC (Destek) has reviewed the following documents and checked the analysis for conformance to currently adopted building codes and industry standards.

- Structural Analysis Report prepared by Malouf Engineering Intl., Inc., Project ID: CT04861M-16V2, dated 06/01/2016, with E. Mark Malouf, PE as Engineer of Record.

Based on the information provided to Destek, it is our opinion that structural analysis prepared by Malouf Engineering Intl., Inc.:

- **Was not prepared to the currently adopted building code in this jurisdiction. More specifically, the analysis was prepared in accordance ANSI/TIA-222-G-2 and The 2009 International Building Code. Currently, the entire state of Connecticut has adopted the 2005 Connecticut State Building Code, with various Supplements and Amendments. The State Building Code is modeled in accordance with the 2003 International Building Code. The 2003 International Building Code pre-dates the adoption of ANSI/TIA-222-G, and thus the analysis should be prepared in accordance with ANSI/TIA/EIA-222-F.**

- **Is missing the foundation calculations and/or reaction comparison. Thus, the reported maximum stress ratio for this element cannot be verified.**

- **Provides limited software output and/or calculations related to the monopole and previous modification installations. Thus, the reported maximum stress ratios for these elements cannot be verified.**

Should you need any clarifications about this letter, please contact me at (770) 693-0835 or acolakoglu@destekengineering.com.

Sincerely,
Destek Engineering, LLC

06/29/2016

Ahmet Colakoglu, PE
CT Professional Engineer
License No: 27057

DESTEK ENGINEERING, LLC
1281 Kennestone Circle, Suite 100, Marietta, GA 30066 - Tel: (770) 693-0835

Exhibit F

EBI Consulting
environmental | engineering | due diligence

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

T-Mobile Existing Facility

Site ID: CTHA506A

AT&T Wethersfield Monopole
75 Wells Road
Wethersfield, CT 06109

June 17, 2016

EBI Project Number: 6216002918

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general public allowable limit:	7.30 %

21 B Street · Burlington, MA 01803 · Tel: (781) 273.2500 · Fax: (781) 273.3311

EBI Consulting
environmental | engineering | due diligence

June 17, 2016

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

Emissions Analysis for Site: **CTHA506A – AT&T Wethersfield Monopole**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **75 Wells Road, Wethersfield, 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 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μW/cm2). The number of $\mu W/cm^2$ 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 ($\mu W/cm^2$). The general population exposure limit for the 700 MHz Band is 467 $\mu W/cm^2$, and the general population exposure limit for the 1900 MHz (PCS) and 2100 MHz (AWS) bands is 1000 $\mu W/cm^2$. 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 **75 Wells Road, Wethersfield, 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 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.

2) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.

3) 1 LTE channel (700 MHz Band) was considered for each sector of the proposed installation. This channel has a transmit power of 30 Watts.

4) 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.

5) For the following calculations the sample point was the top of a 6-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.

6) The antennas used in this modeling are the **Ericsson AIR21 B2A/B4P** for 1900 MHz (PCS) and 2100 MHz (AWS) channels and the **Ericsson AIR21 B4A/B12P** for 2100 MHz (AWS) and 700 MHz channels. This is based on feedback from the carrier with regards to anticipated antenna selection. The **Ericsson AIR21 B2A/B4P** has a maximum gain of **15.9 dBd** at its main lobe at 1900 MHz and 2100 MHz. The **Ericsson AIR21 B4A/B12P** has a maximum gain of **15.9 dBd** at its main lobe at 1900 MHz and 2100 MHz and has a maximum gain of **13.6 dBd** at its main lobe at 700 MHz. 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.

7) The antenna mounting height centerline of the proposed antennas is **95 feet** above ground level (AGL).

8) 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:	Ericsson AIR21 B2A/B4P	Make / Model:	Ericsson AIR21 B2A/B4P	Make / Model:	Ericsson AIR21 B2A/B4P
Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 dBd
Height (AGL):	95	Height (AGL):	95	Height (AGL):	95
Frequency Bands	1900 MHz (PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz (PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz (PCS) / 2100 MHz (AWS)
Channel Count	2	Channel Count	2	Channel Count	2
Total TX Power(W):	60	Total TX Power(W):	60	Total TX Power(W):	60
ERP (W):	2,334.27	ERP (W):	2,334.27	ERP (W):	2,334.27
Antenna A1 MPE%	1.06	Antenna B1 MPE%	1.06	Antenna C1 MPE%	1.06
Antenna #:	**2**	Antenna #:	**2**	Antenna #:	**2**
Make / Model:	Ericsson AIR21 B4A/B12P	Make / Model:	Ericsson AIR21 B4A/B12P	Make / Model:	Ericsson AIR21 B4A/B12P
Gain:	15.9 / 13.6 dBd	Gain:	15.9 / 13.6 dBd	Gain:	15.9 / 13.6 dBd
Height (AGL):	95	Height (AGL):	95	Height (AGL):	95
Frequency Bands	2100 MHz (AWS) / 700 MHz	Frequency Bands	2100 MHz (AWS) / 700 MHz	Frequency Bands	2100 MHz (AWS) / 700 MHz
Channel Count	3	Channel Count	3	Channel Count	3
Total TX Power(W):	150	Total TX Power(W):	150	Total TX Power(W):	150
ERP (W):	5,355.80	ERP (W):	5,355.80	ERP (W):	5,355.80
Antenna A2 MPE%	2.79	Antenna B2 MPE%	2.79	Antenna C2 MPE%	2.79

Site Composite MPE%	
Carrier	**MPE%**
T-Mobile	**3.85 %**
AT&T	3.38 %
MetroPCS	0.07 %
Site Total MPE %:	**7.30 %**

T-Mobile Sector A Total:	3.85 %
T-Mobile Sector B Total:	3.85 %
T-Mobile Sector C Total:	3.85 %
Site Total:	7.30 %

T-Mobile _per sector	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu W/cm^2$)	Frequency (MHz)	Allowable MPE ($\mu W/cm^2$)	Calculated % MPE
T-Mobile 2100 MHz (AWS) LTE	**2**	**2334.27**	**95**	**21.19**	**2100**	**1000**	**2.12 %**
T-Mobile 1900 MHz (PCS) UMTS	**2**	**1167.14**	**95**	**10.59**	**1900**	**1000**	**1.06 %**
T-Mobile 700 MHz LTE	**1**	**687.26**	**95**	**3.12**	**700**	**467**	**0.67 %**
						Total:	**3.85 %**

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 A:	3.85 %
Sector B:	3.85 %
Sector C:	3.85 %
T-Mobile Total:	3.85 %
Site Total:	7.30 %
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **7.30%** 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.