



QC Development

PO Box 916

Storrs, CT 06268

860-670-9068

Mark.Roberts@QCDevelopment.net

February 16, 2017

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

Notice of Exempt Modification – New Cingular Wireless PCS, LLC (AT&T) – CT1855
Old Stagecoach Road / Aspen Ledges Road, Ridgefield, CT 06877
N 41-19-49.11
W 73-31-00.55

Dear Ms. Bachman:

AT&T currently maintains twelve (12) antennas at the 146-foot level of the existing 150-foot Monopole at Old Stagecoach Road / Aspen Ledges Road, Ridgefield, CT. The tower and the property are owned by Insite Towers. AT&T now intends to install three (3) Ericsson remote radio units (RRUS-12) and three (3) Ericsson RRUS-A2 units at the 146-foot level of the tower.

This facility was approved by the Connecticut Siting Council in Docket # 445 on September 4, 2014. This approval included a condition that the total tower height is not to exceed 150 feet AGL. Since no change to the existing tower height is proposed, this modification therefore complies with the aforementioned approval.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Mr. Rudy Marconi, First Selectman of the Town of Ridgefield, and the Ridgefield Planning & Zoning Department as well as the property and tower owner.

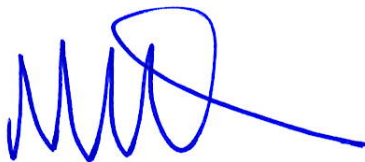
The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

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

Please feel free to call me at (860) 670-9068 with any questions regarding this matter. Thank you for your consideration.

Sincerely,



Mark Roberts
QC Development
Consultant for AT&T

Attachments

cc: Rudy Marconi - as elected official
Joanne Meder – as local Planning Director
Insite Towers - as tower and property owner (via e-mail)

Power Density

Existing Loading on Tower

Carrier	# of Channels	ERP/Ch (W)	Antenna Centerline Height (ft)	Power Density (mW/cm ²)	Freq. Band (MHz ^{**})	Limit S (mW/cm ²)	%MPE
Other Carriers*							1.20%
AT&T UMTS	2	500	146	0.0183	850	0.5667	0.32%
AT&T LTE	2	500	146	0.0183	700	0.4667	0.39%
AT&T LTE	2	500	146	0.0183	1900	1.0000	0.18%
AT&T LTE	2	500	146	0.0183	2100	1.0000	0.18%
Site Total							2.28%

*Per CSC Records (available upon request, includes calculation formulas)


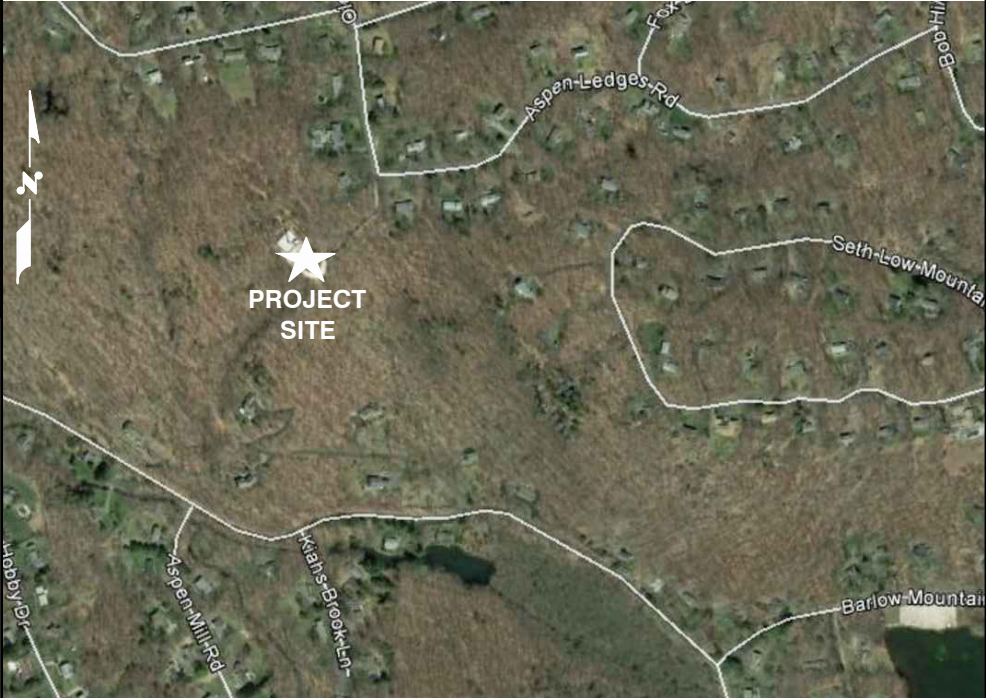


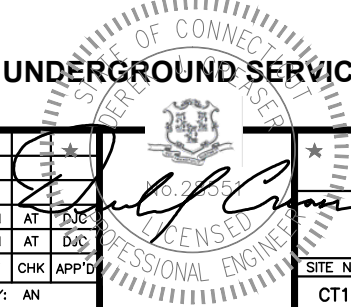



** If a range of frequencies are used, such as 880-894, enter the lowest value, i.e. 880

Proposed Loading on Tower

Carrier	# of Channels	ERP/Ch (W)	Antenna Centerline Height (ft)	Power Density (mW/cm ²)	Freq. Band (MHz ^{**})	Limit S (mW/cm ²)	%MPE
Other Carriers*							1.20%
AT&T UMTS	2	500	146	0.0183	850	0.5667	0.32%
AT&T LTE	2	1476	146	0.0542	700	0.4667	1.16%
AT&T LTE	2	2421	146	0.0888	1900	1.0000	0.89%
AT&T LTE	2	500	146	0.0183	2100	1.0000	0.18%
Site Total							3.75%

*Per CSC Records (available upon request, includes calculation formulas)

** If a range of frequencies are used, such as 880-894, enter the lowest value, i.e. 880

PROJECT INFORMATION			<div></div> <div>SITE NUMBER: CT1855</div> <div>SITE NAME: RIDGEFIELD</div> <div>PROJECT: LTE 2C 2017 UPGRADE</div>																																
SCOPE OF WORK: TELECOMMUNICATIONS FACILITY UPGRADE (LTE 2C 2017 UPGRADE):																																			
SITE ADDRESS: LEDGES ROAD RIDGEFIELD, CT 06877																																			
LATITUDE: 41.330308° N 41° 19' 49.11" N																																			
LONGITUDE: 73.516819° W 73° 31' 00.55" W																																			
TYPE OF SITE: MONOPOLE / INDOOR EQUIPMENT																																			
TOWER HEIGHT: 150'-0"±																																			
RAD CENTER: 146'-0"±																																			
CURRENT USE: TELECOMMUNICATIONS FACILITY																																			
PROPOSED USE: TELECOMMUNICATIONS FACILITY																																			
DRAWING INDEX			VICINITY MAP					GENERAL NOTES																											
SHEET NO.		DESCRIPTION	REV.	DIRECTIONS TO SITE:					1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF AT&T. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.																										
T-1		TITLE SHEET	1	<div>DEPART ENTERPRISE DR TOWARD CAPITOL BLVD 0.1 MI. TURN LEFT ONTO CAPITOL BLVD 0.2 MI. TURN LEFT ONTO WEST ST 0.3 MI. TAKE RAMP LEFT FOR I-91 S 9.1 MI. AT EXIT 18, TAKE RAMP RIGHT FOR I-691 WEST TOWARD WATERBURY / MERIDEN 8.0 MI. AT EXIT 1, TAKE RAMP LEFT FOR I-84 WEST TOWARD DANBURY / WATERBURY 37.0 MI. BEAR LEFT ONTO US-7 S 3.9 MI. TURN RIGHT ONTO BENNETTS FARM RD 1.5 MI. TURN RIGHT TO STAY ON BENNETTS FARM RD 1.2 MI. TURN LEFT ONTO KNOLLWOOD DR 0.3 MI. TURN RIGHT ONTO BOB HILL RD 0.4 MI. BEAR RIGHT ONTO ASPEN LEDGES RD 0.2 MI. ARRIVE AT ASPEN LEDGES RD</div> 					2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.																										
GN-1		GENERAL NOTES	1						3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T MOBILITY REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.																										
A-1		COMPOUND PLAN & EQUIPMENT PLAN	1																																
A-2		ANTENNA LAYOUTS & ELEVATION	1																																
A-3		DETAILS	1																																
RF-1		RF-PLUMBING DIAGRAM	1																																
G-1		GROUNDING DETAILS	1																																
			<div>72 HOURS</div> <div> CALL BEFORE YOU DIG </div> <div>CALL TOLL FREE 1-800-922-4455</div> <div>OR CALL 811</div> <div>UNDERGROUND SERVICE ALERT</div> <div></div>																																
 <div>1600 OSGOOD STREET BUILDING 20 NORTH, SUITE 3090 N. ANDOVER, MA 01845 TEL: (978) 557-5553 FAX: (978) 336-5586</div>		 <div>27 NORTHWESTERN DR. SALEM, NH 03079</div>		SITE NUMBER: CT1855 SITE NAME: RIDGEFIELD LEDGES ROAD RIDGEFIELD, CT 06877 FAIRFIELD COUNTY		 <div>550 COCHITUATE ROAD FRAMINGHAM, MA 01701</div>		<table><tr><td>NO.</td><td>DATE</td><td>REVISIONS</td><td>BY</td><td>CHK</td><td>APP'D</td></tr><tr><td>1</td><td>02/07/17</td><td>ISSUED FOR CONSTRUCTION</td><td>AN</td><td>AT</td><td>DJC</td></tr><tr><td>A</td><td>01/27/17</td><td>ISSUED FOR REVIEW</td><td>AN</td><td>AT</td><td>DJC</td></tr></table> <div>SCALE: AS SHOWN DESIGNED BY: AT DRAWN BY: AN</div>		NO.	DATE	REVISIONS	BY	CHK	APP'D	1	02/07/17	ISSUED FOR CONSTRUCTION	AN	AT	DJC	A	01/27/17	ISSUED FOR REVIEW	AN	AT	DJC	AT&T TITLE SHEET (LTE 2C) <table><tr><td>SITE NUMBER</td><td>DRAWING NUMBER</td><td>REV</td></tr><tr><td>CT1855</td><td>T-1</td><td>1</td></tr></table>		SITE NUMBER	DRAWING NUMBER	REV	CT1855	T-1	1
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CT1855	T-1	1																																	

GROUNDING NOTES

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

GENERAL NOTES

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

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

14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
15. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E (Fy = 36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
16. CONSTRUCTION SHALL COMPLY WITH LTE SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T SITES."
17. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
18. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
19. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
20. APPLICABLE BUILDING CODES:
SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.
BUILDING CODE: IBC 2012 WITH 2016 CT BUILDING CODE AMENDMENTS
ELECTRICAL CODE: REFER TO ELECTRICAL DRAWINGS
LIGHTENING CODE: REFER TO ELECTRICAL DRAWINGS

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

AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

MANUAL OF STEEL CONSTRUCTION, ASD, FOURTEENTH EDITION;

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL

EQUIPMENT AND ANTENNA SUPPORTING STRUCTURES; REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC ELECTRICAL STANDARDS.

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

ABBREVIATIONS					
AGL	ABOVE GRADE LEVEL	EQ	EQUAL	REQ	REQUIRED
AWG	AMERICAN WIRE GAUGE	GC	GENERAL CONTRACTOR	RF	RADIO FREQUENCY
BBU	BATTERY BACKUP UNIT	GRC	GALVANIZED RIGID CONDUIT	TBD	TO BE DETERMINED
BTCW	BARE TINNED SOLID COPPER WIRE	MGB	MASTER GROUND BAR	TBR	TO BE REMOVED
BGR	BURIED GROUND RING	MIN	MINIMUM	TBRR	TO BE REMOVED AND REPLACED
BTS	BASE TRANSCEIVER STATION	P	PROPOSED	TYP	TYPICAL
E	EXISTING	NTS	NOT TO SCALE	UG	UNDER GROUND
EGB	EQUIPMENT GROUND BAR	RAD	RADIATION CENTER LINE (ANTENNA)	VIF	VERIFY IN FIELD
EGR	EQUIPMENT GROUND RING	REF	REFERENCE		



SITE NUMBER: CT1855
SITE NAME: RIDGEFIELD

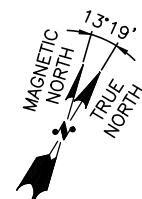
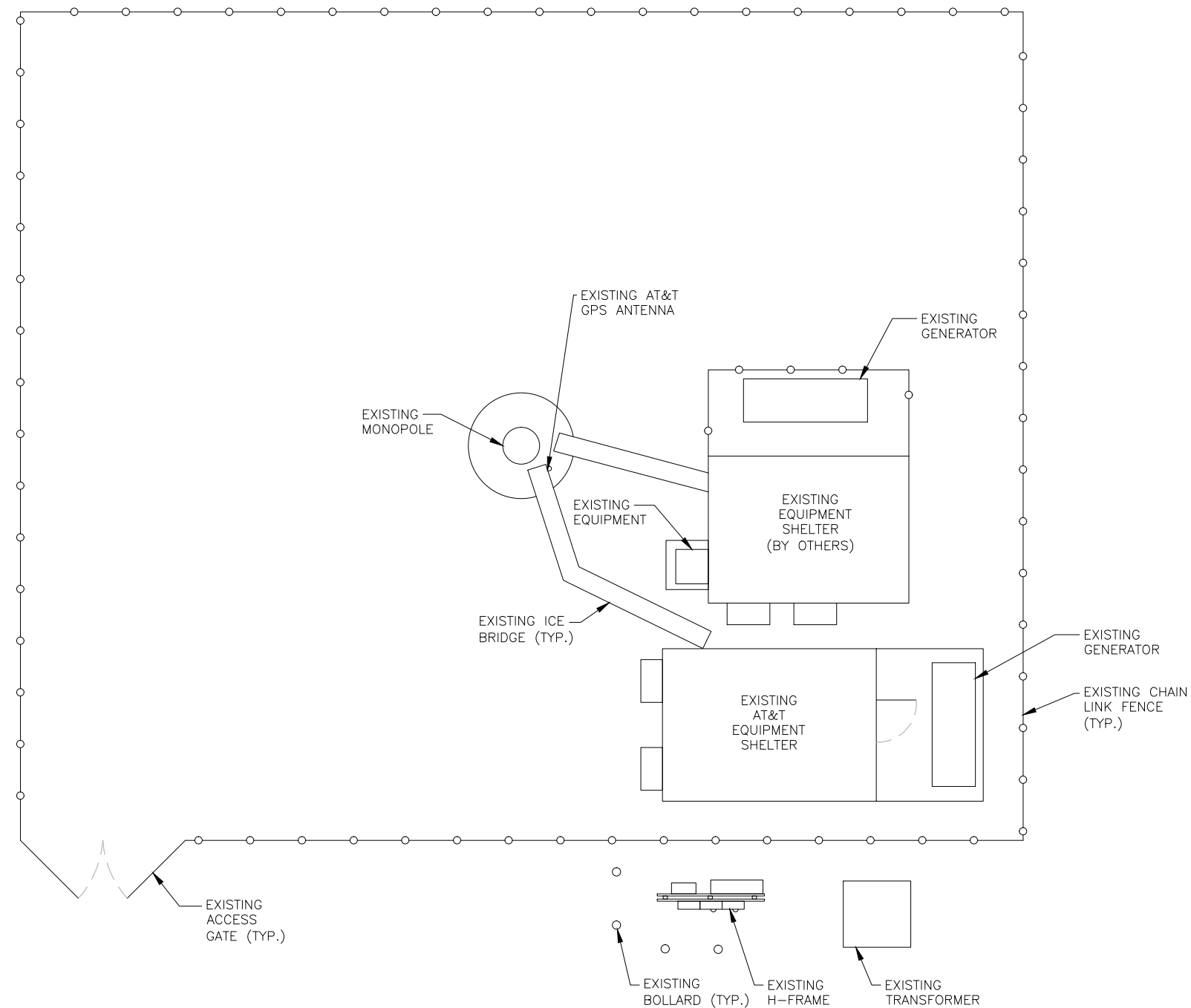
LEDGES ROAD
RIDGEFIELD, CT 06877
FAIRFIELD COUNTY



				AT&T		
				GENERAL NOTES (LTE 2C)		
NO.		DATE	REVISIONS	BY	CHK	APP'D
1		02/07/17	ISSUED FOR CONSTRUCTION	AN	AT	DJC
A		01/27/17	ISSUED FOR REVIEW	AN	AT	DJC
SCALE:		AS SHOWN	DESIGNED BY:	AT	DRAWN BY:	AN
SITE NUMBER		CT1855	DRAWING NUMBER		GN-1	
					1	

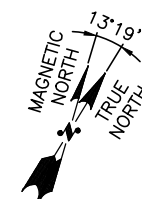
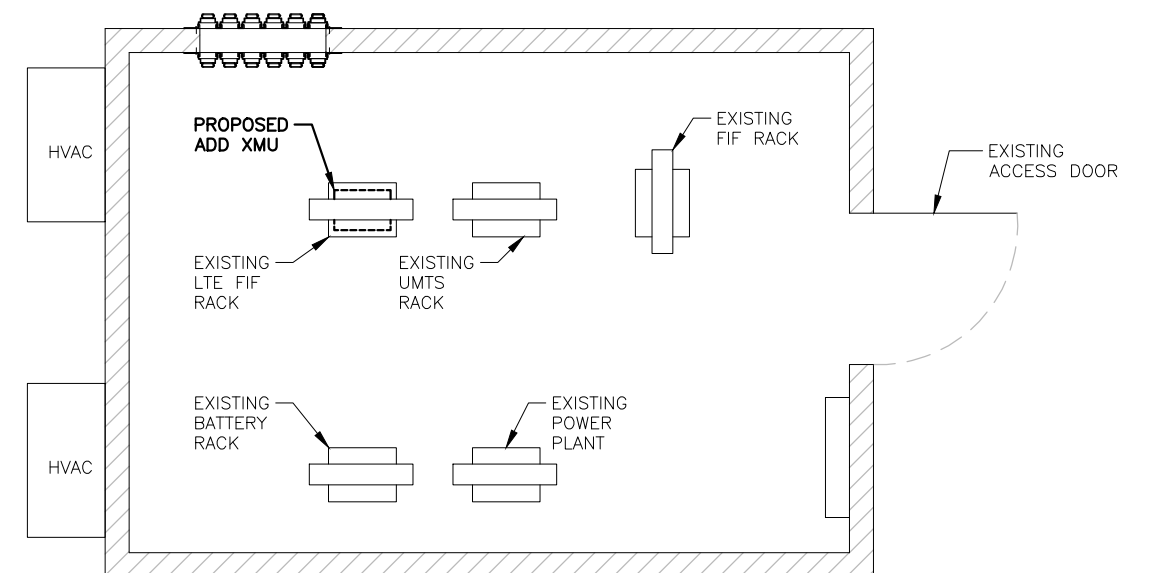
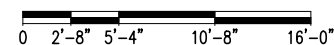
NOTE:
AN ANALYSIS FOR THE CAPACITY OF THE EXISTING **ANTENNA MOUNT** TO SUPPORT THE PROPOSED LOADING HAS BEEN COMPLETED BY:
HUDSON DESIGN GROUP, LLC.
DATED: JANUARY 10, 2017

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



COMPOUND PLAN
22x34 SCALE: 3/16"=1'-0"
11x17 SCALE: 3/32"=1'-0"

1
A-1



EQUIPMENT PLAN
22x34 SCALE: 1/2"=1'-0"
11x17 SCALE: 1/4"=1'-0"

2
A-1



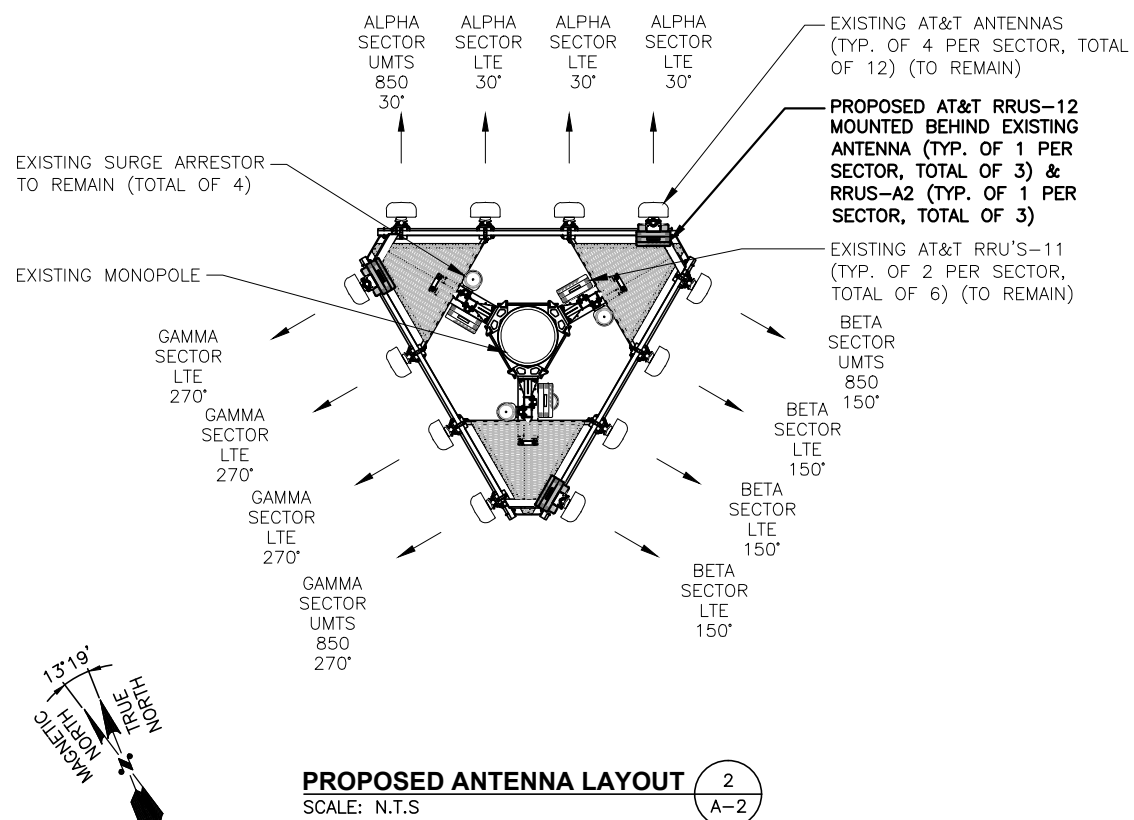
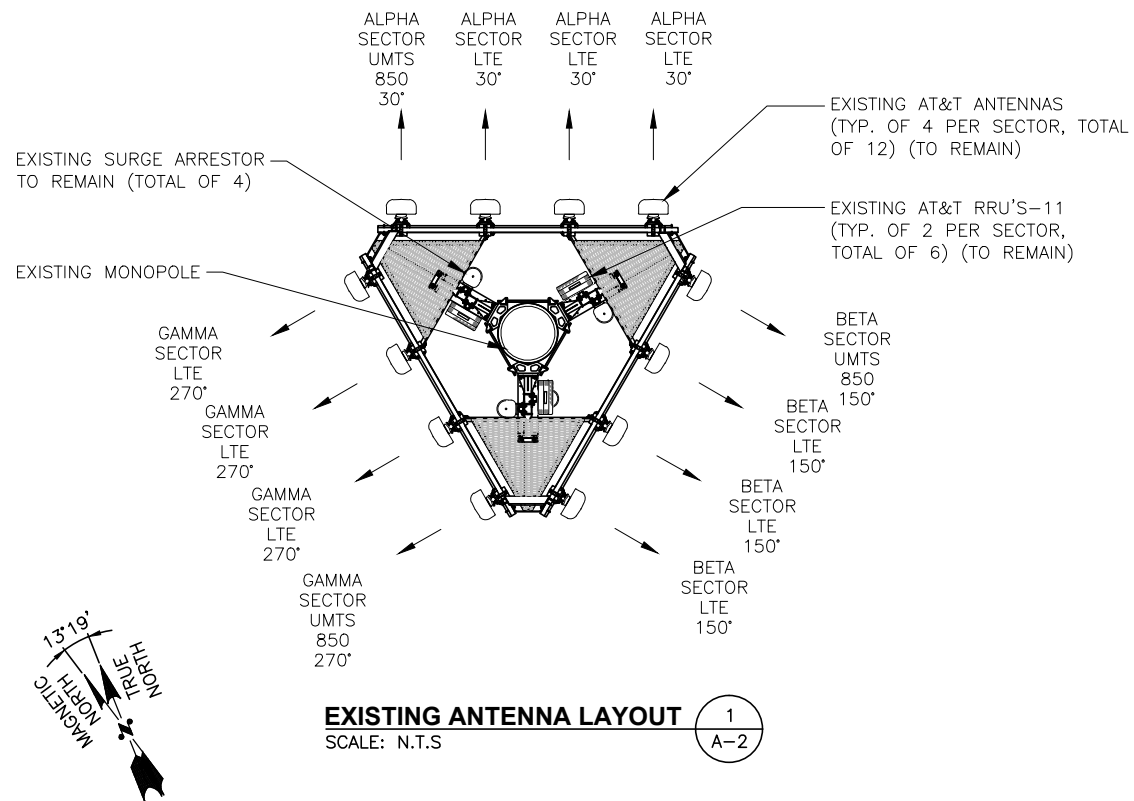
Hudson Design Group, LLC
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

SAI
27 NORTHWESTERN DR.
SALEM, NH 03079

SITE NUMBER: CT1855
SITE NAME: RIDGEFIELD
LEDGES ROAD
RIDGEFIELD, CT 06877
FAIRFIELD COUNTY

550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

				AT&T			
				PARTIAL ROOF & EQUIPMENT PLANS (LTE 2C)			
1	02/07/17	ISSUED FOR CONSTRUCTION	AN	AT	DJC	SITE NUMBER	CT1855
A	01/27/17	ISSUED FOR REVIEW	AN	AT	DJC	DRAWING NUMBER	A-1
NO.	DATE	REVISIONS	BY	CHK	APP'D	REV	1
SCALE: AS SHOWN		DESIGNED BY: AT		DRAWN BY: AN			



TOP OF MONOPOLE
ELEV. 150'-0"± (AGL)

CL OF EXISTING AT&T ANTENNAS
ELEV. 146'-0"± (AGL)

PROPOSED AT&T RRUS-12 MOUNTED
BEHIND EXISTING ANTENNA (TYP. OF 1
PER SECTOR, TOTAL OF 3) & RRUS-A2
(TYP. OF 1 PER SECTOR, TOTAL OF 3)

EXISTING DIPOLE ANTENNA

EXISTING AT&T RRU'S-11
(TYP. OF 2 PER SECTOR,
TOTAL OF 6) (TO REMAIN)

EXISTING SURGE ARRESTOR
TO REMAIN (TOTAL OF 4)

EXISTING AT&T ANTENNAS
(TYP. OF 4 PER SECTOR, TOTAL
OF 12) (TO REMAIN)

NOTE:

AN ANALYSIS FOR THE CAPACITY OF
THE EXISTING **ANTENNA MOUNT** TO
SUPPORT THE PROPOSED LOADING
HAS BEEN COMPLETED BY:
HUDSON DESIGN GROUP, LLC.
DATED: JANUARY 10, 2017

NOTE:

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

GROUND LEVEL
ELEV. 0'-0"± (AGL)

EXISTING OMNI
ANTENNA

EXISTING DISH
ANTENNA

EXISTING MONOPOLE

EXISTING
BOLLARDS
(TYP.)

EXISTING
H-FRAME

EXISTING
TRANSFORMER

EXISTING ICE
BRIDGE (TYP.)

EXISTING GPS
ANTENNA

EXISTING AT&T
SHELTER

EXISTING GENERATOR

EXISTING CHAIN
LINC FENCE (TYP.)

EXISTING TREE

ELEVATION

22x34 SCALE: 3/32"=1'-0"
11x17 SCALE: 3/64"=1'-0"

(3) A-2

0 5'-4" 10'-8" 21'-4" 32'-0"

Hudson Design Group, LLC
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

SAI
27 NORTHWESTERN DR.
SALEM, NH 03079

SITE NUMBER: CT1855
SITE NAME: RIDGEFIELD
LEDGES ROAD
RIDGEFIELD, CT 06877
FAIRFIELD COUNTY

at&t
550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	02/07/17	ISSUED FOR CONSTRUCTION	AN	AT	DJC
A	01/27/17	ISSUED FOR REVIEW	AN	AT	DJC

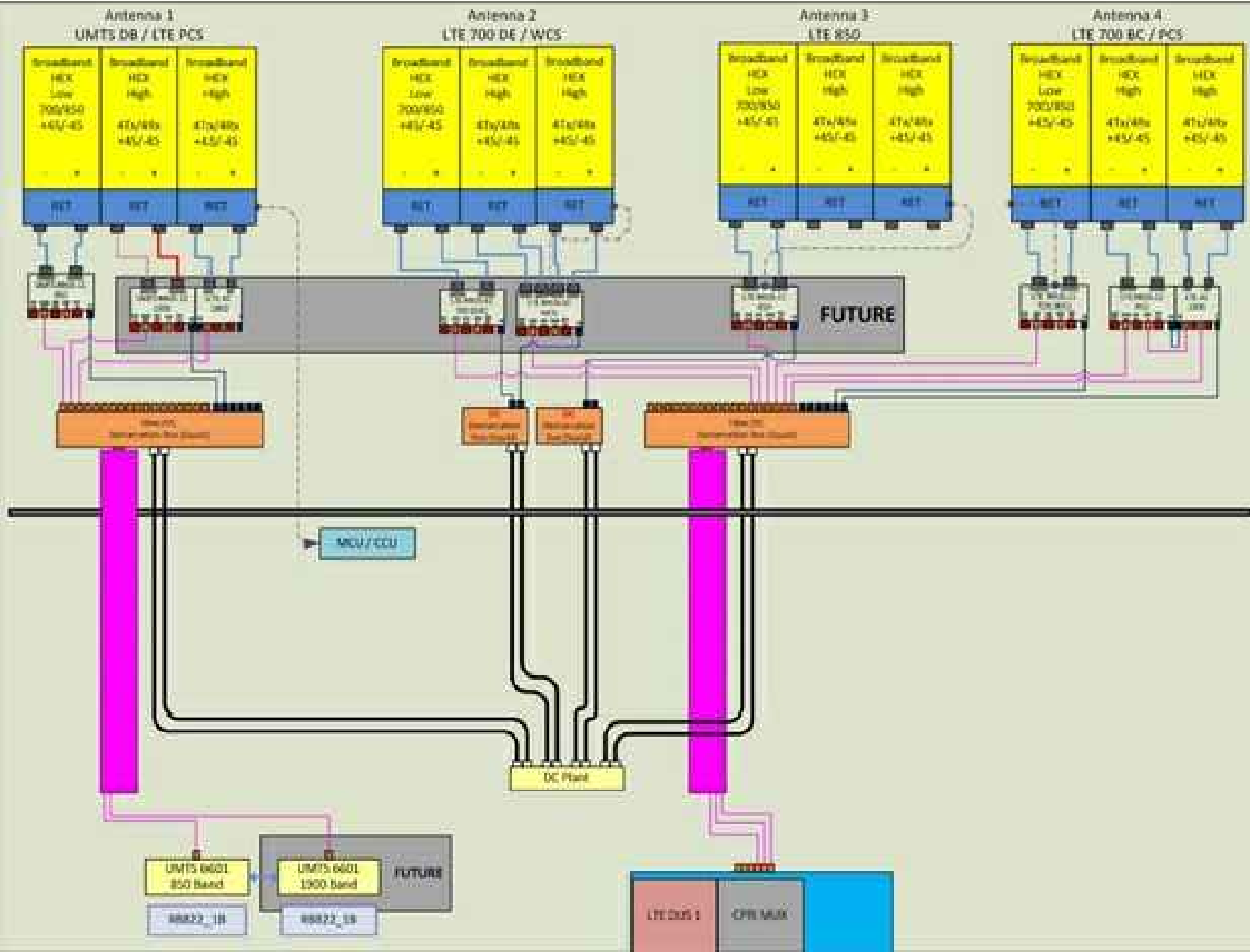
SCALE: AS SHOWN DESIGNED BY: AT DRAWN BY: AN

STATE OF CONNECTICUT
Derek J. Creaser
PROFESSIONAL ENGINEER
No. 25531

AT&T

ANTENNA LAYOUTS & ELEVATION
(LTE 2C)

SITE NUMBER	DRAWING NUMBER	REV
CT1855	A-2	1



RF PLUMBING DIAGRAM
SCALE: N.T.S.

1
RF-1



1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586



27 NORTHWESTERN DR.
SALEM, NH 03079

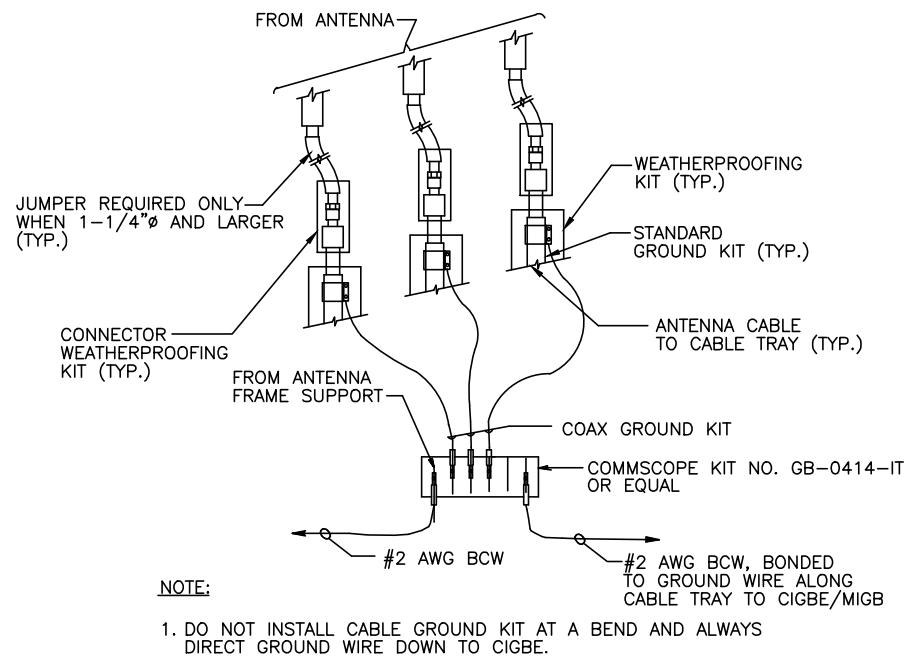
SITE NUMBER: CT1855
SITE NAME: RIDGEFIELD

LEDGES ROAD
RIDGEFIELD, CT 06877
FAIRFIELD COUNTY



550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

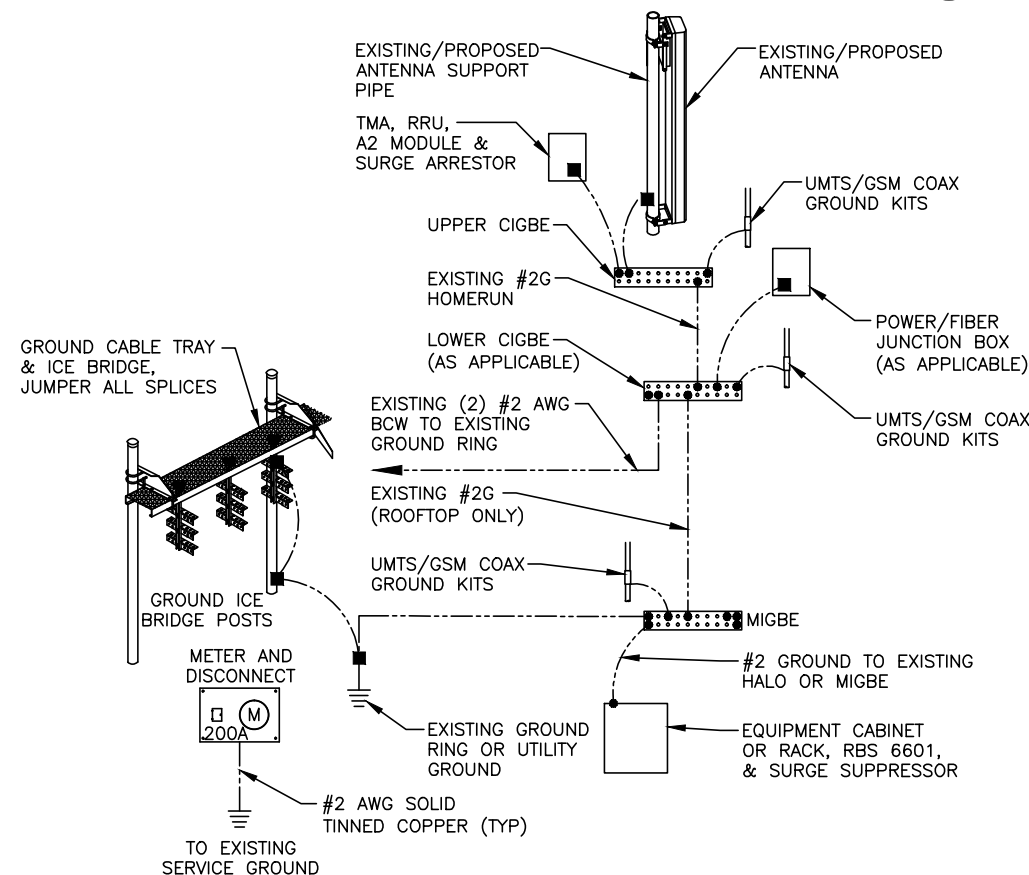
				AT&T				
				RF PLUMBING DIAGRAM				
1	02/07/17	ISSUED FOR CONSTRUCTION	AN	AT	DJC	(LTE 2C)		
A	01/27/17	ISSUED FOR REVIEW	AN	AT	DJC			
NO.	DATE	REVISIONS	BY	CHK	APP'D	SITE NUMBER	DRAWING NUMBER	REV
SCALE: AS SHOWN		DESIGNED BY: AT	DRAWN BY: AN		CT1855		RF-1	1



GROUND WIRE TO GROUND BAR CONNECTION DETAIL

SCALE: N.T.S

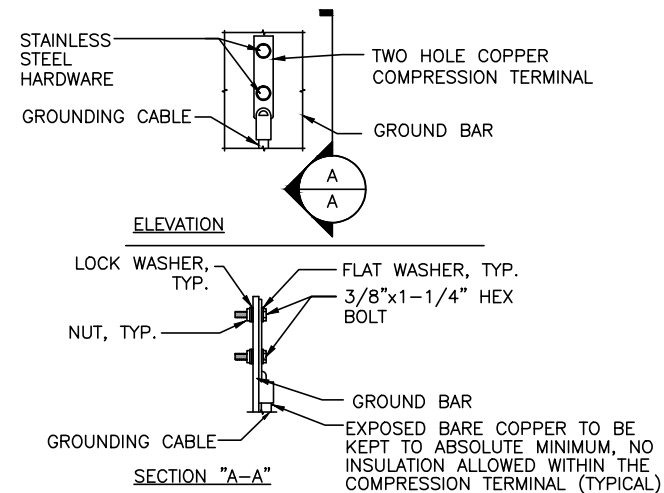
1
G-1



GROUNDING RISER DIAGRAM

SCALE: N.T.S

2
G-1



TYPICAL GROUND BAR CONNECTION DETAIL

SCALE: N.T.S

3
G-1

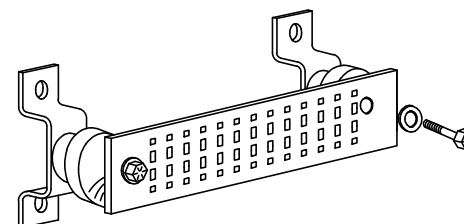
EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION.

SECTION "P" - SURGE PRODUCERS

CABLE ENTRY PORTS (HATCH PLATES) (#2)
GENERATOR FRAMEWORK (IF AVAILABLE) (#2)
TELCO GROUND BAR
COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2)
+24V POWER SUPPLY RETURN BAR (#2)
-48V POWER SUPPLY RETURN BAR (#2)
RECTIFIER FRAMES.

SECTION "A" - SURGE ABSORBERS

INTERIOR GROUND RING (#2)
EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2)
METALLIC COLD WATER PIPE (IF AVAILABLE) (#2)
BUILDING STEEL (IF AVAILABLE) (#2)



GROUND BAR - DETAIL

SCALE: N.T.S

4
G-1



1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586



27 NORTHWESTERN DR.
SALEM, NH 03079

SITE NUMBER: CT1855
SITE NAME: RIDGEFIELD

LEDGES ROAD
RIDGEFIELD, CT 06877
FAIRFIELD COUNTY



550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

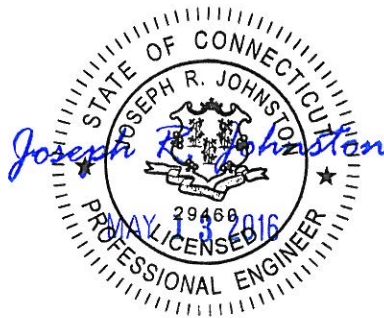
						AT&T		
						GROUNDING DETAILS (LTE 2C)		
1	02/07/17	ISSUED FOR CONSTRUCTION	AN	AT	DJC	SITE NUMBER	DRAWING NUMBER	REV
A	01/27/17	ISSUED FOR REVIEW	AN	AT	DJC	CT1855	G-1	1
NO.	DATE	REVISIONS	BY	CHK	APP'D			
SCALE: AS SHOWN		DESIGNED BY: AT		DRAWN BY: AN				

Structural Analysis Report

May 13, 2016

Site Name	CT897 Ridgefield
Infinigy Job Number	337-000
Client	Insite Wireless
Proposed Carrier	T-Mobile
Site Location	320 Old Stagecoach Road, Ridgefield, CT 06877 41° 19' 49.1088" N NAD83 73° 31' 0.5478" W NAD83
Structure Type	Monopole
Structural Usage Ratio	47.6%
Overall Result	PASS

Upon reviewing the results of this analysis, it is our opinion that the structure meets the specified TIA code requirements. The tower and foundations are therefore deemed adequate to support the existing and proposed loading as listed in this report.



Aaron Estabrooks
Structural Engineer I

Contents

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Analysis Code Requirements.....	3
Conclusion.....	3
Existing and Reserved Loading.....	4
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Assumptions and Limitations.....	6
Calculations.....	Appended

May 13, 2016

Introduction

Infinigy Engineering has been requested to perform a structural analysis on the existing Monopole. All supporting documents have been obtained from the client and are assumed to be accurate and applicable to this site. The tower was analyzed using tnxTower version 7.0.5.1 tower analysis software.

Supporting Documentation

Design Drawings:	Valmont Order # 273806-P1, dated November 25, 2014
Existing Loading:	AT&T Exhibit A-1, dated December 18, 2014
Existing Loading:	Town of Ridgefield Exhibit A, dated April 12, 2016
Proposed Loading:	T-Mobile Exhibit A, dated May 31, 2016

Analysis Code Requirements

Wind Speed	100 mph (3-Second Gust)
Wind Speed w/ ice	50 mph (3-Second Gust) w/ 3/4" Ice
TIA Revision	ANSI/TIA-222-G
Adopted IBC	2003 IBC
Jurisdictional Code	2005 CT Supplement & 2009 CT Amendment
Structure Class	II
Exposure Category	B
Topographic Category	5
Calculated Crest Height	137.55 ft

Conclusion

Upon reviewing the results of this analysis, it is our opinion that the structure meets the specified TIA code requirements. The tower and foundations are therefore deemed adequate to support the existing and proposed loading as listed in this report.

If you have any questions, require additional information, or actual conditions differ from those as detailed in this report please contact me via the information below:

Aaron Estabrooks
Structural Engineer I | **INFINIGY**
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aestabrooks@infinigy.com | www.infinigy.com

May 13, 2016

Existing and Reserved Loading

Mount Height (ft)	Qty.	Appurtenance	Mount Type	Coax & Lines	Carrier
150.0	1	RFI BA40-41	Side Arm	(1) 7/8"	Town of Ridgefield
146.0	4	Raycap DC6-48-60-18-8F	Low Profile Platform	(2) 1/2" Fiber (3) 3/8" RET (8) 5/8" DC Power	New Cingular Wireless
	3	Ericsson RRUS- 32			
	3	Ericsson RRUS- E2			
	6	Ericsson A2 Module			
	6	Ericsson RRUS-12			
	9	Ericsson RRUS-11			
	12	CCI HPA-65R-BUU-118			
70.0	1	Commscope VHLP3-11W-6GR	Leg	(1) EW90	Town of Ridgefield
66.0	1	Sinclair SD210R-SF2P90LDF	Side Arm	(1) 7/8"	

To Be Removed Loading

Mount Height (ft)	Qty.	Appurtenance	Mount Type	Coax & Lines	Carrier
No Loads are considered To Be Removed					

Proposed Loading

Mount Height (ft)	Qty.	Appurtenance	Mount Type	Coax & Lines	Carrier
126.0	3	Commscope LNX-6515DS-A1M	T-Arm	(1) 1/2" Fiber Trunk	T-Mobile
	3	Ericsson RRUS-11 B12			
	3	Ericsson RRUS-11 B4			
	3	RFS APXV18-206516S-A20			

May 13, 2016

Final Configuration

Mount Height (ft)	Qty.	Appurtenance	Mount Type	Coax & Lines	Carrier
150.0	1	RFI BA40-41	Side Arm	(1) 7/8"	Town of Ridgefield
146.0	4	Raycap DC6-48-60-18-8F	Low Profile Platform	(2) 1/2" Fiber (3) 3/8" RET (8) 5/8" DC Power	New Cingular Wireless
	3	Ericsson RRUS-32			
	3	Ericsson RRUS-E2			
	6	Ericsson A2 Module			
	6	Ericsson RRUS-12			
	9	Ericsson RRUS-11			
	12	CCI HPA-65R-BUU-118			
126.0	3	Commscope LNX-6515DS-A1M	T-Arm	(1) 1/2" Fiber Trunk	T-Mobile
	3	Ericsson RRUS-11 B12			
	3	Ericsson RRUS-11 B4			
	3	RFS APXV18-206516S-A20			
70.0	1	Commscope VHLP3-11W-6GR	Leg	(1) EW90	Town of Ridgefield
66.0	1	Sinclair SD210R-SF2P90LDF	Side Arm	(1) 7/8"	

Install proposed coax inside monopole.

Structure Usages

Pole (L2)	45.1	Pass
Base Plate	47.6	Pass
RATING =	47.6	Pass

Foundation Reactions

Reaction Data	Design Reactions	Analysis Reactions	Result
Moment (kip-ft)	6846.0	2907.2	42.5%
Shear (kip)	59.0	28.5	48.3%
Axial (kip)	57.6	41.1	71.4%

Tower base reactions are acceptable when compared to the original design reactions.

Deflection, Twist, and Sway

Antenna Elevation (ft)	Deflection (in)	Twist (°)	Sway (°)
126.0	8.931	0.012	0.738

*Per ANSI/TIA-222-G Section 2.8.2 maximum serviceability structural deflection limit is 3% of structure height.

*Per ANSI/TIA-222-G Section 2.8.2 maximum serviceability structural twist and sway limit is 4 degrees.

*Per ANSI/TIA-222-G Section 2.8.3 deflection, Twist, and sway values were calculated using a basic 3-second gust wind speed of 60 mph.

*It is the responsibility of the client to ensure their proposed and/or existing equipment will meet ANSI/TIA-222-G Annex D or other appropriate microwave signal degradation limits based on the provided values above.

Assumptions and Limitations

Our structural calculations are completed assuming all information provided to Infinigy Engineering is accurate and applicable to this site. For the purposes of calculations, we assume an overall structure condition of “like new” and all members and connections to be free of corrosion and/or structural defects. The structure owner and/or contractor shall verify the structure’s condition prior to installation of any proposed equipment. If actual conditions differ from those described in this report Infinigy Engineering should be notified immediately to complete a revised evaluation.

Our evaluation is completed using standard TIA, AISC, ACI, and ASCE methods and procedures. Our structural results are proprietary and should not be used by others as their own. Infinigy Engineering is not responsible for decisions made by others that are or are not based on our supplied assumptions and conclusions.

This report is an evaluation of the tower structure only and does not reflect adequacy of any existing antenna mounts, mount connections, or coax mounting attachments. These elements are assumed to be adequate for the purposes of this analysis and are assumed to have been installed per their manufacturer requirements.

Section	1	2	3	4	
Length (ft)	32.33	31.75	48.25	52.67	
Number of Sides	18	18	18	18	
Thickness (in)	0.2190	0.3130	0.4380	0.5000	
Socket Length (ft)	4.33	5.25	6.42	43.3340	
Top Dia (in)	20.5000	27.2583	33.4528	43.3340	
Bot Dia (in)	28.8100	35.4300	45.8600	56.8800	
Grade			A572-65		
Weight (lb)	1868.8	3330.6	8951.7	14108.9	28260.0

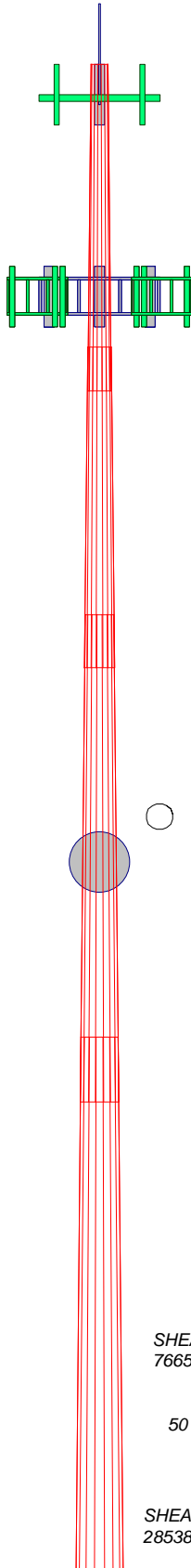
149.0 ft

116.7 ft

89.3 ft

46.3 ft

0.0 ft



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
BA40-41 (Town of Ridgefield)	150	DC6-48-60-18-8F (New Cingular Wireless)	146
Angle Side Arm (Town of Ridgefield)	150	DC6-48-60-18-8F (New Cingular Wireless)	146
(4) HPA-65R-BUU-H8 (New Cingular Wireless)	146	Angle Low Profile Platform (new Cingular Wireless)	146
(4) HPA-65R-BUU-H8 (New Cingular Wireless)	146	APXV18-206516S-A20 (T-Mobile)	126
(4) HPA-65R-BUU-H8 (New Cingular Wireless)	146	APXV18-206516S-A20 (T-Mobile)	126
(3) RRUS-11 (New Cingular Wireless)	146	APXV18-206516S-A20 (T-Mobile)	126
(3) RRUS-11 (New Cingular Wireless)	146	LNK-6515DS-A1M (T-Mobile)	126
(3) RRUS-11 (New Cingular Wireless)	146	LNK-6515DS-A1M (T-Mobile)	126
(2) A2 Module (New Cingular Wireless)	146	LNK-6515DS-A1M (T-Mobile)	126
(2) A2 Module (New Cingular Wireless)	146	Angle T-Arm (T-Mobile)	126
(2) A2 Module (New Cingular Wireless)	146	Angle T-Arm (T-Mobile)	126
RRUS- E2 (New Cingular Wireless)	146	Angle T-Arm (T-Mobile)	126
RRUS- E2 (New Cingular Wireless)	146	RRUS 11 (Band 4) (T-Mobile)	126
RRUS- E2 (New Cingular Wireless)	146	RRUS 11 (Band 4) (T-Mobile)	126
(2) RRUS-12 (New Cingular Wireless)	146	RRUS 11 (Band 12) (T-Mobile)	126
(2) RRUS-12 (New Cingular Wireless)	146	RRUS 11 (Band 12) (T-Mobile)	126
(2) RRUS-12 (New Cingular Wireless)	146	RRUS 11 (Band 12) (T-Mobile)	126
RRUS- 32 (New Cingular Wireless)	146	Dish Pipe Mount (Town of Ridgefield)	70
RRUS- 32 (New Cingular Wireless)	146	VHLP3-11W-6GR (Town of Ridgefield)	70
RRUS- 32 (New Cingular Wireless)	146	Angle Side Arm (Town of Ridgefield)	66
(2) DC6-48-60-18-8F (new Cingular Wireless)	146	SD210R-SF2P90LDF (Town of Ridgefield)	66

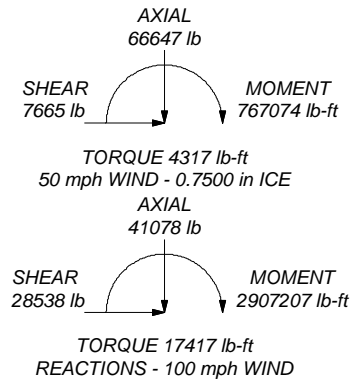
MATERIAL STRENGTH

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

TOWER DESIGN NOTES

1. Tower is located in Fairfield 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 50 mph basic wind with 0.75 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 5 with Crest Height of 137.55 ft
8. TOWER RATING: 47.6%

ALL REACTIONS
ARE FACTORED



Infinigy Engineering, PLLC
1033 Watervliet Shaker Road
Albany, NY 12205
Phone: (518) 690-0790
FAX: (518) 690-0793

Job: **CT897 Ridgefield**

Project: **337-000**

Client: **Insite**

Code: **TIA-222-G**

Path:

Drawn by: **ATE**

Date: **05/13/16**

Scale: **NTS**

App'd:

Scale: **NTS**

Dwg No. **E-1**

<i>tnxTower</i> <i>Infinigy Engineering, PLLC</i> <i>1033 Watervliet Shaker Road</i> <i>Albany, NY 12205</i> <i>Phone: (518) 690-0790</i> <i>FAX: (518) 690-0793</i>	Job CT897 Ridgefield	Page 1 of 10
	Project 337-000	Date 09:54:09 05/13/16
	Client Insite	Designed by ATE

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 Fairfield County, Connecticut.

Basic wind speed of 100 mph.

Structure Class II.

Exposure Category B.

Topographic Category 5.

Crest Height 137.55 ft.

SEAW RSM-03 procedures for wind speed-up calculations are used.

Topographic Feature: Continuous Escarpment.

Slope Distance L: 1425.60 ft.

Distance from Crest x: 26.00 ft.

Nominal ice thickness of 0.7500 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

A wind speed of 50 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

Stress ratio used in pole design is 1.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Horizontals	Assume Legs Pinned	√ Calculate Redundant Bracing Forces
Consider Moments - Diagonals	√ Assume Rigid Index Plate	Ignore Redundant Members in FEA
Use Moment Magnification	√ Use Clear Spans For Wind Area	SR Leg Bolts Resist Compression
√ Use Code Stress Ratios	√ Use Clear Spans For KL/r	√ All Leg Panels Have Same Allowable
√ Use Code Safety Factors - Guys	√ Retension Guys To Initial Tension	Offset Girt At Foundation
Escalate Ice	Bypass Mast Stability Checks	Consider Feed Line Torque
Always Use Max Kz	√ Use Azimuth Dish Coefficients	Include Angle Block Shear Check
Use Special Wind Profile	√ Project Wind Area of Appurt.	Use TIA-222-G Bracing Resist. Exemption
√ Include Bolts In Member Capacity	√ Autocalc Torque Arm Areas	Use TIA-222-G Tension Splice Exemption
√ Leg Bolts Are At Top Of Section	Add IBC .6D+W Combination	Poles
√ Secondary Horizontal Braces Leg	Sort Capacity Reports By Component	Include Shear-Torsion Interaction
Use Diamond Inner Bracing (4 Sided)	√ Triangulate Diamond Inner Bracing	Always Use Sub-Critical Flow
SR Members Have Cut Ends	Treat Feed Line Bundles As Cylinder	Use Top Mounted Sockets
SR Members Are Concentric		

Tapered Pole Section Geometry

tnxTower Infinigy Engineering, PLLC 1033 Watervliet Shaker Road Albany, NY 12205 Phone: (518) 690-0790 FAX: (518) 690-0793	Job	CT897 Ridgefield	Page	2 of 10
	Project	337-000	Date	09:54:09 05/13/16
	Client	Insite	Designed by	ATE

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	149.00-116.67	32.33	4.33	18	20.5000	28.8100	0.2190	0.8760	A572-65 (65 ksi)
L2	116.67-89.25	31.75	5.25	18	27.2583	35.4300	0.3130	1.2520	A572-65 (65 ksi)
L3	89.25-46.25	48.25	6.42	18	33.4528	45.8600	0.4380	1.7520	A572-65 (65 ksi)
L4	46.25-0.00	52.67		18	43.3340	56.8800	0.5000	2.0000	A572-65 (65 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	It/Q in ²	w in	w/t
L1	20.8162	14.0974	732.5826	7.1998	10.4140	70.3459	1466.1291	7.0501	3.2226	14.715
	29.2544	19.8738	2052.4686	10.1498	14.6355	140.2392	4107.6379	9.9388	4.6851	21.393
L2	28.8113	26.7691	2455.4840	9.5656	13.8472	177.3270	4914.1989	13.3871	4.2466	13.567
	35.9766	34.8874	5435.5179	12.4665	17.9984	301.9994	10878.1881	17.4470	5.6848	18.162
L3	35.3397	45.8975	6320.3829	11.7202	16.9940	371.9183	12649.0823	22.9531	5.1168	11.682
	46.5675	63.1462	16459.5229	16.1248	23.2969	706.5119	32940.7036	31.5791	7.3005	16.668
L4	45.6783	67.9775	15757.2224	15.2061	22.0137	715.7929	31535.1786	33.9952	6.7468	13.494
	57.7575	89.4751	35932.6785	20.0149	28.8950	1243.5587	71912.6381	44.7460	9.1309	18.262

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A _f	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
ft	ft ²	in							
L1 149.00-116.67				1	1	1			
L2 116.67-89.25				1	1	1			
L3 89.25-46.25				1	1	1			
L4 46.25-0.00				1	1	1			

Monopole Base Plate Data

Base Plate Data	
Base plate is square	
Base plate is grouted	
Anchor bolt grade	A615
Anchor bolt size	2.2500 in
Number of bolts	22
Embedment length	54.0000 in
f _c	4 ksi
Grout space	2.0000 in
Base plate grade	A572-50
Base plate thickness	3.5000 in
Bolt circle diameter	64.2500 in
Outer diameter	70.2500 in
Inner diameter	55.5000 in
Base plate type	Plain Plate

<i>tnxTower</i> <i>Infinigy Engineering, PLLC</i> 1033 Watervliet Shaker Road Albany, NY 12205 Phone: (518) 690-0790 FAX: (518) 690-0793	Job	CT897 Ridgefield	Page	3 of 10
	Project	337-000	Date	09:54:09 05/13/16
	Client	Insite	Designed by	ATE

Feed Line/Linear Appurtenances - Entered As Area

<i>Description</i>	<i>Face or Leg</i>	<i>Allow Shield</i>	<i>Component Type</i>	<i>Placement ft</i>	<i>Total Number</i>		<i>C_AA_A ft²/ft</i>	<i>Weight plf</i>
7/8" (Town of Ridgfield)	A	No	Inside Pole	149.00 - 5.00	1	No Ice	0.00	0.54
						1/2" Ice	0.00	0.54
						1" Ice	0.00	0.54
1/2" Fiber (new circular wireless)	A	No	Inside Pole	146.00 - 5.00	2	No Ice	0.00	0.09
						1/2" Ice	0.00	0.09
						1" Ice	0.00	0.09
3/8" RET (new circular wireless)	A	No	Inside Pole	146.00 - 5.00	3	No Ice	0.00	0.08
						1/2" Ice	0.00	0.08
						1" Ice	0.00	0.08
5/8" DC Power (new circular wireless)	A	No	Inside Pole	146.00 - 5.00	8	No Ice	0.00	0.40
						1/2" Ice	0.00	0.40
						1" Ice	0.00	0.40
7/8" (Town of Ridgfield)	A	No	Inside Pole	66.00 - 5.00	1	No Ice	0.00	0.54
						1/2" Ice	0.00	0.54
						1" Ice	0.00	0.54
EW90 (Town of Ridgfield)	A	No	Inside Pole	70.00 - 5.00	1	No Ice	0.00	0.32
						1/2" Ice	0.00	0.32
						1" Ice	0.00	0.32
1/2" Fiber Trunk (T-Mobile)	A	No	Inside Pole	126.00 - 5.00	1	No Ice	0.00	0.57
						1/2" Ice	0.00	0.57
						1" Ice	0.00	0.57

Feed Line/Linear Appurtenances Section Areas

<i>Tower Section</i>	<i>Tower Elevation ft</i>	<i>Face</i>	<i>A_R ft²</i>	<i>A_F ft²</i>	<i>C_AA_A In Face ft²</i>	<i>C_AA_A Out Face ft²</i>	<i>Weight lb</i>
L1	149.00-116.67	A	0.000	0.000	0.000	0.000	128.73
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L2	116.67-89.25	A	0.000	0.000	0.000	0.000	129.46
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L3	89.25-46.25	A	0.000	0.000	0.000	0.000	221.31
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L4	46.25-0.00	A	0.000	0.000	0.000	0.000	230.26
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00

Feed Line/Linear Appurtenances Section Areas - With Ice

<i>Tower Section</i>	<i>Tower Elevation ft</i>	<i>Face or Leg</i>	<i>Ice Thickness in</i>	<i>A_R ft²</i>	<i>A_F ft²</i>	<i>C_AA_A In Face ft²</i>	<i>C_AA_A Out Face ft²</i>	<i>Weight lb</i>
L1	149.00-116.67	A	1.832	0.000	0.000	0.000	0.000	128.73
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
L2	116.67-89.25	A	1.798	0.000	0.000	0.000	0.000	129.46
		B		0.000	0.000	0.000	0.000	0.00

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<i>Tower Section</i>	<i>Tower Elevation ft</i>	<i>Face or Leg</i>	<i>Ice Thickness in</i>	<i>A_R</i> <i>ft²</i>	<i>A_F</i> <i>ft²</i>	<i>C_AA_A</i> <i>In Face ft²</i>	<i>C_AA_A</i> <i>Out Face ft²</i>	<i>Weight lb</i>
L3	89.25-46.25	C	1.738	0.000	0.000	0.000	0.000	0.00
		A		0.000	0.000	0.000	0.000	221.31
		B		0.000	0.000	0.000	0.000	0.00
L4	46.25-0.00	C	1.576	0.000	0.000	0.000	0.000	0.00
		A		0.000	0.000	0.000	0.000	230.26
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00

Shielding Factor Ka

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a</i> <i>No Ice</i>	<i>K_a</i> <i>Ice</i>
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Discrete Tower Loads

<i>Description</i>	<i>Face or Leg</i>	<i>Offset Type</i>	<i>Offsets: Horiz Lateral Vert ft ft ft</i>	<i>Azimuth Adjustment °</i>	<i>Placement ft</i>	<i>C_AA_A Front ft²</i>	<i>C_AA_A Side ft²</i>	<i>Weight lb</i>
BA40-41 (Town of Ridgefield)	A	From Leg	4.00 0.00 0.00	0.0000	150.00	No Ice 3.85 1/2" Ice 6.50 1" Ice 7.20	3.85 6.50 7.20	31.97 69.13 113.93
Angle Side Arm (Town of Ridgefield)	A	From Leg	3.00 0.00 0.00	0.0000	150.00	No Ice 0.82 1/2" Ice 1.10 1" Ice 1.40	6.23 8.47 10.20	150.00 230.00 310.00

(4) HPA-65R-BUU-H8 (New Cingular Wireless)	A	From Leg	4.00 0.00 0.00	0.0000	146.00	No Ice 9.66 1/2" Ice 10.13 1" Ice 10.61	6.45 6.91 7.38	51.00 113.99 183.38
(4) HPA-65R-BUU-H8 (New Cingular Wireless)	B	From Leg	4.00 0.00 0.00	0.0000	146.00	No Ice 9.66 1/2" Ice 10.13 1" Ice 10.61	6.45 6.91 7.38	51.00 113.99 183.38
(4) HPA-65R-BUU-H8 (New Cingular Wireless)	C	From Leg	4.00 0.00 0.00	0.0000	146.00	No Ice 9.66 1/2" Ice 10.13 1" Ice 10.61	6.45 6.91 7.38	51.00 113.99 183.38
(3) RRUS-11 (New Cingular Wireless)	A	From Leg	4.00 0.00 0.00	0.0000	146.00	No Ice 3.79 1/2" Ice 4.04 1" Ice 4.29	1.46 1.63 1.81	55.00 80.77 109.98
(3) RRUS-11 (New Cingular Wireless)	B	From Leg	4.00 0.00 0.00	0.0000	146.00	No Ice 3.79 1/2" Ice 4.04 1" Ice 4.29	1.46 1.63 1.81	55.00 80.77 109.98
(3) RRUS-11 (New Cingular Wireless)	C	From Leg	4.00 0.00 0.00	0.0000	146.00	No Ice 3.79 1/2" Ice 4.04 1" Ice 4.29	1.46 1.63 1.81	55.00 80.77 109.98
(2) A2 Module (New Cingular Wireless)	A	From Leg	4.00 0.00 0.00	0.0000	146.00	No Ice 1.60 1/2" Ice 1.76 1" Ice 1.92	0.38 0.47 0.57	21.20 31.53 44.07
(2) A2 Module (New Cingular Wireless)	B	From Leg	4.00 0.00 0.00	0.0000	146.00	No Ice 1.60 1/2" Ice 1.76 1" Ice 1.92	0.38 0.47 0.57	21.20 31.53 44.07
(2) A2 Module	C	From Leg	4.00	0.0000	146.00	No Ice 1.60	0.38	21.20

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<i>Description</i>	<i>Face or Leg</i>	<i>Offset Type</i>	<i>Offsets: Horz Lateral Vert ft ft ft</i>	<i>Azimuth Adjustment °</i>	<i>Placement ft</i>	<i>C_AA_A Front ft²</i>	<i>C_AA_A Side ft²</i>	<i>Weight lb</i>	
(New Cingular Wireless)			0.00			1/2" Ice	1.76	0.47	31.53
			0.00			1" Ice	1.92	0.57	44.07
RRUS- E2	A	From Leg	4.00	0.0000	146.00	No Ice	3.40	1.82	76.98
(New Cingular Wireless)			0.00			1/2" Ice	3.63	2.09	108.45
			0.00			1" Ice	3.86	2.38	144.12
RRUS- E2	B	From Leg	4.00	0.0000	146.00	No Ice	3.40	1.82	76.98
(New Cingular Wireless)			0.00			1/2" Ice	3.63	2.09	108.45
			0.00			1" Ice	3.86	2.38	144.12
RRUS- E2	C	From Leg	4.00	0.0000	146.00	No Ice	3.40	1.82	76.98
(New Cingular Wireless)			0.00			1/2" Ice	3.63	2.09	108.45
			0.00			1" Ice	3.86	2.38	144.12
(2) RRUS-12	A	From Leg	4.00	0.0000	146.00	No Ice	3.15	1.29	50.00
(New Cingular Wireless)			0.00			1/2" Ice	3.36	1.44	73.22
			0.00			1" Ice	3.59	1.60	99.64
(2) RRUS-12	B	From Leg	4.00	0.0000	146.00	No Ice	3.15	1.29	50.00
(New Cingular Wireless)			0.00			1/2" Ice	3.36	1.44	73.22
			0.00			1" Ice	3.59	1.60	99.64
(2) RRUS-12	C	From Leg	4.00	0.0000	146.00	No Ice	3.15	1.29	50.00
(New Cingular Wireless)			0.00			1/2" Ice	3.36	1.44	73.22
			0.00			1" Ice	3.59	1.60	99.64
RRUS- 32	A	From Leg	4.00	0.0000	146.00	No Ice	2.69	1.92	67.30
(New Cingular Wireless)			0.00			1/2" Ice	2.91	2.23	93.17
			0.00			1" Ice	3.14	2.56	123.05
RRUS- 32	B	From Leg	4.00	0.0000	146.00	No Ice	2.69	1.92	67.30
(New Cingular Wireless)			0.00			1/2" Ice	2.91	2.23	93.17
			0.00			1" Ice	3.14	2.56	123.05
RRUS- 32	C	From Leg	4.00	0.0000	146.00	No Ice	2.69	1.92	67.30
(New Cingular Wireless)			0.00			1/2" Ice	2.91	2.23	93.17
			0.00			1" Ice	3.14	2.56	123.05
(2) DC6-48-60-18-8F	A	From Leg	4.00	0.0000	146.00	No Ice	1.90	1.90	20.00
(new Cingular Wireless)			0.00			1/2" Ice	2.09	2.09	39.25
			0.00			1" Ice	2.28	2.28	61.47
DC6-48-60-18-8F	B	From Leg	4.00	0.0000	146.00	No Ice	1.90	1.90	20.00
(New Cingular Wireless)			0.00			1/2" Ice	2.09	2.09	39.25
			0.00			1" Ice	2.28	2.28	61.47
DC6-48-60-18-8F	C	From Leg	4.00	0.0000	146.00	No Ice	1.90	1.90	20.00
(New Cingular Wireless)			0.00			1/2" Ice	2.09	2.09	39.25
			0.00			1" Ice	2.28	2.28	61.47
Angle Low Profile Platform	A	From Leg	3.00	0.0000	146.00	No Ice	26.10	26.10	1500.00
(new Cingular Wireless)			0.00			1/2" Ice	31.60	31.60	1700.00
			0.00			1" Ice	37.10	37.10	1900.00

Dish Pipe Mount	A	From Leg	0.50	0.0000	70.00	No Ice	1.94	1.94	54.66
(Town of Ridgefield)			0.00			1/2" Ice	2.46	2.46	80.59
			0.00			1" Ice	2.85	2.85	110.49

SD210R-SF2P90LDF	A	From Leg	4.00	0.0000	66.00	No Ice	27.00	27.00	37.00
(Town of Ridgefield)			0.00			1/2" Ice	27.64	27.64	346.98
			0.00			1" Ice	28.28	28.28	668.04
Angle Side Arm	A	From Leg	3.00	0.0000	66.00	No Ice	0.82	6.23	150.00
(Town of Ridgefield)			0.00			1/2" Ice	1.10	8.47	230.00
			0.00			1" Ice	1.40	10.20	310.00

APXV18-206516S-A20	A	From Leg	4.00	0.0000	126.00	No Ice	3.76	2.60	15.00
(T-Mobile)			0.00			1/2" Ice	4.11	2.94	38.02
			0.00			1" Ice	4.47	3.29	65.52
APXV18-206516S-A20	B	From Leg	4.00	0.0000	126.00	No Ice	3.76	2.60	15.00

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<i>Description</i>	<i>Face or Leg</i>	<i>Offset Type</i>	<i>Offsets: Horz Lateral Vert ft ft ft</i>	<i>Azimuth Adjustment °</i>	<i>Placement ft</i>	<i>C_AA_A Front ft²</i>	<i>C_AA_A Side ft²</i>	<i>Weight lb</i>
(T-Mobile)			0.00			1/2" Ice 4.11	2.94	38.02
			0.00			1" Ice 4.47	3.29	65.52
APXV18-206516S-A20	C	From Leg	4.00	0.0000	126.00	No Ice 3.76	2.60	15.00
(T-Mobile)			0.00			1/2" Ice 4.11	2.94	38.02
			0.00			1" Ice 4.47	3.29	65.52
LNx-6515DS-A1M	A	From Leg	4.00	0.0000	126.00	No Ice 11.47	7.72	43.70
(T-Mobile)			0.00			1/2" Ice 12.09	8.31	109.70
			0.00			1" Ice 12.72	8.91	183.38
LNx-6515DS-A1M	B	From Leg	4.00	0.0000	126.00	No Ice 11.47	7.72	43.70
(T-Mobile)			0.00			1/2" Ice 12.09	8.31	109.70
			0.00			1" Ice 12.72	8.91	183.38
LNx-6515DS-A1M	C	From Leg	4.00	0.0000	126.00	No Ice 11.47	7.72	43.70
(T-Mobile)			0.00			1/2" Ice 12.09	8.31	109.70
			0.00			1" Ice 12.72	8.91	183.38
Angle T-Arm	A	From Leg	3.00	0.0000	126.00	No Ice 12.90	4.39	250.00
(T-Mobile)			0.00			1/2" Ice 15.30	6.00	314.00
			0.00			1" Ice 17.70	7.61	378.00
Angle T-Arm	B	From Leg	3.00	0.0000	126.00	No Ice 12.90	4.39	250.00
(T-Mobile)			0.00			1/2" Ice 15.30	6.00	314.00
			0.00			1" Ice 17.70	7.61	378.00
Angle T-Arm	C	From Leg	3.00	0.0000	126.00	No Ice 12.90	4.39	250.00
(T-Mobile)			0.00			1/2" Ice 15.30	6.00	314.00
			0.00			1" Ice 17.70	7.61	378.00
RRUS 11 (Band 4)	A	From Leg	4.00	0.0000	126.00	No Ice 2.57	1.07	44.00
(T-Mobile)			0.00			1/2" Ice 2.76	1.21	63.57
			0.00			1" Ice 2.97	1.36	86.08
RRUS 11 (Band 4)	B	From Leg	4.00	0.0000	126.00	No Ice 2.57	1.07	44.00
(T-Mobile)			0.00			1/2" Ice 2.76	1.21	63.57
			0.00			1" Ice 2.97	1.36	86.08
RRUS 11 (Band 4)	C	From Leg	4.00	0.0000	126.00	No Ice 2.57	1.07	44.00
(T-Mobile)			0.00			1/2" Ice 2.76	1.21	63.57
			0.00			1" Ice 2.97	1.36	86.08
RRUS 11 (Band 12)	A	From Leg	4.00	0.0000	126.00	No Ice 2.52	1.07	55.00
(T-Mobile)			0.00			1/2" Ice 2.72	1.21	74.32
			0.00			1" Ice 2.92	1.36	96.56
RRUS 11 (Band 12)	B	From Leg	4.00	0.0000	126.00	No Ice 2.52	1.07	55.00
(T-Mobile)			0.00			1/2" Ice 2.72	1.21	74.32
			0.00			1" Ice 2.92	1.36	96.56
RRUS 11 (Band 12)	C	From Leg	4.00	0.0000	126.00	No Ice 2.52	1.07	55.00
(T-Mobile)			0.00			1/2" Ice 2.72	1.21	74.32
			0.00			1" Ice 2.92	1.36	96.56

Dishes

<i>Description</i>	<i>Face or Leg</i>	<i>Dish Type</i>	<i>Offset Type</i>	<i>Offsets: Horz Lateral Vert ft</i>	<i>Azimuth Adjustment °</i>	<i>3 dB Beam Width °</i>	<i>Elevation ft</i>	<i>Outside Diameter ft</i>	<i>Aperture Area ft²</i>	<i>Weight lb</i>
VHLP3-11W-6GR	A	Paraboloid	From	1.00	0.0000		70.00	3.00	No Ice 7.07	67.90
(Town of Ridgefield)		w/Shroud (HP)	Leg	0.00					1/2" Ice 7.47	106.25

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Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft	Aperture Area ft ²	Weight lb
				0.00				1" Ice	7.86	144.59

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.6 Wind 0 deg - No Ice
3	0.9 Dead+1.6 Wind 0 deg - No Ice
4	1.2 Dead+1.6 Wind 90 deg - No Ice
5	0.9 Dead+1.6 Wind 90 deg - No Ice
6	1.2 Dead+1.6 Wind 180 deg - No Ice
7	0.9 Dead+1.6 Wind 180 deg - No Ice
8	1.2 Dead+1.0 Ice+1.0 Temp
9	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
10	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
11	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
12	Dead+Wind 0 deg - Service
13	Dead+Wind 90 deg - Service
14	Dead+Wind 180 deg - Service

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	149 - 116.667	12.902	12	0.8741	0.0000
L2	121 - 89.2503	8.151	12	0.7036	0.0000
L3	94.5003 - 46.2503	4.760	12	0.5012	0.0000
L4	52.667 - 0	1.425	13	0.2519	0.0000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
150.00	BA40-41	12	12.902	0.8741	0.0240	34016
146.00	(4) HPA-65R-BUU-H8	12	12.366	0.8573	0.0223	34016
126.00	APXV18-206516S-A20	12	8.931	0.7378	0.0122	7394
70.00	VHLP3-11W-6GR	13	2.519	0.3442	0.0039	8863
66.00	SD210R-SF2P90LDF	13	2.230	0.3219	0.0036	8814

Maximum Tower Deflections - Design Wind


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Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	149 - 116.667	63.302	4	4.1322	0.0000
L2	121 - 89.2503	40.425	4	3.4538	0.0000
L3	94.5003 - 46.2503	23.699	4	2.4861	0.0000
L4	52.667 - 0	7.103	4	1.2555	0.0000

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
150.00	BA40-41	4	63.302	4.1322	0.1191	7776
146.00	(4) HPA-65R-BUU-H8	4	60.732	4.0703	0.1107	7776
126.00	APXV18-206516S-A20	4	44.208	3.6023	0.0607	1688
70.00	VHLP3-11W-6GR	4	12.556	1.7125	0.0192	1787
66.00	SD210R-SF2P90LDF	4	11.117	1.6025	0.0177	1778

Base Plate Design Data

Plate Thickness in	Number of Anchor Bolts	Anchor Bolt Size in	Actual Allowable Ratio Bolt Tension lb	Actual Allowable Ratio Bolt Compression lb	Actual Allowable Ratio Plate Stress ksi	Actual Allowable Ratio Stiffener Stress ksi	Controlling Condition	Ratio
3.5000	22	2.2500	95852.28 201288.96 0.48	99585.34 334139.67 0.30	14.753 45.000 0.33		Bolt T	0.48 

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L _u ft	KL/r	A in ²	P _u lb	φP _n lb	Ratio $\frac{P_u}{\phi P_n}$
L1	149 - 116.667 (1)	TP28.81x20.5x0.219	32.33	149.00	183.3	19.0996	-7082.87	128420.00	0.055
L2	116.667 - 89.2503 (2)	TP35.43x27.2583x0.313	31.75	149.00	149.2	33.5450	-10983.40	340599.00	0.032
L3	89.2503 - 46.2503 (3)	TP45.86x33.4528x0.438	48.25	149.00	115.1	60.8523	-21690.80	1038320.00	0.021
L4	46.2503 - 0 (4)	TP56.88x43.334x0.5	52.67	149.00	89.3	89.4751	-41063.70	2532460.00	0.016

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Pole Bending Design Data

Section No.	Elevation ft	Size	M_{ux} lb-ft	ϕM_{nx} lb-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} lb-ft	ϕM_{ny} lb-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L1	149 - 116.667 (1)	TP28.81x20.5x0.219	284745.00	750611.67	0.379	0.00	750611.67	0.000
L2	116.667 - 89.2503 (2)	TP35.43x27.2583x0.313	709700.83	1694158.33	0.419	0.00	1694158.33	0.000
L3	89.2503 - 46.2503 (3)	TP45.86x33.4528x0.438	1543883.33	4060708.33	0.380	0.00	4060708.33	0.000
L4	46.2503 - 0 (4)	TP56.88x43.334x0.5	2907208.33	7454024.67	0.390	0.00	7454024.67	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u lb	ϕV_n lb	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u lb-ft	ϕT_n lb-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	149 - 116.667 (1)	TP28.81x20.5x0.219	14870.90	664304.00	0.022	8791.25	1503058.33	0.006
L2	116.667 - 89.2503 (2)	TP35.43x27.2583x0.313	17239.90	1221690.00	0.014	8777.92	3392450.00	0.003
L3	89.2503 - 46.2503 (3)	TP45.86x33.4528x0.438	23227.20	2260510.00	0.010	17427.25	8131341.33	0.002
L4	46.2503 - 0 (4)	TP56.88x43.334x0.5	28558.10	3217940.00	0.009	17417.50	14926249.33	0.001

Pole Interaction Design Data

Section No.	Elevation ft	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Ratio $\frac{V_u}{\phi V_n}$	Ratio $\frac{T_u}{\phi T_n}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	149 - 116.667 (1)	0.055	0.379	0.000	0.022	0.006	0.435 ✓	1.000	4.8.2 ✓
L2	116.667 - 89.2503 (2)	0.032	0.419	0.000	0.014	0.003	0.451 ✓	1.000	4.8.2 ✓
L3	89.2503 - 46.2503 (3)	0.021	0.380	0.000	0.010	0.002	0.401 ✓	1.000	4.8.2 ✓
L4	46.2503 - 0 (4)	0.016	0.390	0.000	0.009	0.001	0.406 ✓	1.000	4.8.2 ✓

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
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<i>tnxTower</i> <i>Infinigy Engineering, PLLC</i> <i>1033 Watervliet Shaker Road</i> <i>Albany, NY 12205</i> <i>Phone: (518) 690-0790</i> <i>FAX: (518) 690-0793</i>	Job	CT897 Ridgefield	Page	10 of 10
	Project	337-000	Date	09:54:09 05/13/16
	Client	Insite	Designed by	ATE

<i>Section No.</i>	<i>Elevation ft</i>	<i>Component Type</i>	<i>Size</i>	<i>Critical Element</i>	<i>P lb</i>	<i>ϕP_{allow} lb</i>	<i>% Capacity</i>	<i>Pass Fail</i>
L1	149 - 116.667	Pole	TP28.81x20.5x0.219	1	-7082.87	128420.00	43.5	Pass
L2	116.667 - 89.2503	Pole	TP35.43x27.2583x0.313	2	-10983.40	340599.00	45.1	Pass
L3	89.2503 - 46.2503	Pole	TP45.86x33.4528x0.438	3	-21690.80	1038320.00	40.1	Pass
L4	46.2503 - 0	Pole	TP56.88x43.334x0.5	4	-41063.70	2532460.00	40.6	Pass
Summary								
Pole (L2)							45.1	Pass
Base Plate							47.6	Pass
RATING =							47.6	Pass

Google Maps Old Stagecoach Rd



Map data ©2017 Google 100 ft

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2012.



Information on the Property Records for the Municipality of Ridgefield was last updated on 1/18/2017.

Parcel Information

Location:	320 OLD STAGECOACH RD	Property Use:	Residential	Primary Use:	Residential
Unique ID:	D080124	Map Block Lot:	D08-0124	Acres:	3.18
490 Acres:	0.00	Zone:	RAAA	Volume / Page:	0993/0673
Developers Map / Lot:	9269/D-1	Census:			

Value Information

	Appraised Value	70% Assessed Value
Land	186,363	130,460

	Appraised Value	70% Assessed Value
Buildings	0	0
Detached Outbuildings	613,630	429,540
Total	799,993	560,000

Detached Outbuildings

Type:	Construction:	Year Built:	Length:	Width:	Area:
Other	Utility Lines	2014	0.00	0.00	0

Owner History - Sales

Volume	Page	Sale Date	Deed Type	Valid Sale	Sale Price
0890	1029	05/04/2009	Foreclosure	No	\$0

Information Published With Permission From The Assessor

Mark Roberts

From: Assessor <assessorsoffice@ridgefieldct.org>
Sent: Thursday, February 16, 2017 12:22 PM
To: Mark Roberts
Subject: Re: PARCEL OWNERSHIP INFORMATION REQUEST

We have as owners for that parcel:
Insite Towers Development LLC
199 N Fairfax St. Ste 700
Alexandra, VA 22314

Have a great Day!

----- Original Message -----

From: "Mark Roberts" <mark.roberts@qcdevelopment.net>
To: "Assessor" <assessorsoffice@ridgefieldct.org>
Sent: Thursday, February 16, 2017 12:17:02 PM
Subject: PARCEL OWNERSHIP INFORMATION REQUEST

Hi Leslie - Per our telephone conversation, please send me the ownership entity and mailing address for:

Parcel # D08-0124

Thanks

Mark Roberts
QC Development
PO Box 916
Storrs, CT 06268
Mark.Roberts@QCDevelopment.net<mailto:Mark.Roberts@QCDevelopment.net>
860-670-9068