

RACHEL A. SCHWARTZMAN

Please Reply To: Bridgeport
Writer's Direct Dial: (203) 337-4110
E-Mail: rschwartzman@cohenandwolf.com

January 26, 2015

Attorney Melanie Bachman
Acting Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06501

RECEIVED
JAN 28 2015

**CONNECTICUT
SITING COUNCIL**

**Re: EM-T-MOBILE-002-130529
T-Mobile Site ID CT11810A
401 Wakelee Avenue, Ansonia, CT
Notice of Construction Completion**

ORIGINAL

Dear Attorney Bachman:

The Connecticut Siting Council ("Council") acknowledged the above referenced T-Mobile Northeast LLC ("T-Mobile") notice of exempt modification on June 27, 2013. T-Mobile hereby notifies the Council that construction of the acknowledged modifications were complete as of October 23, 2014.

Please don't hesitate to contact me with any questions.

Sincerely,

Rachel A. Schwartzman

cc: Samuel Simons, T-Mobile
Mark Richard, T-Mobile
Robert Stanford, Vertical Development, LLC
Julie Kohler, Esq.



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

December 23, 2014

Rachel A. Schwartzman, Esq.
Cohen and Wolf, P.C.
P.O. Box 1821
Bridgeport, CT 06601

RE: **EM-T-MOBILE-002-130529**, 401 Wakelee Avenue, Ansonia, Connecticut
EM-T-MOBILE-006-130528, 60 Rice Lane, Beacon Falls, Connecticut

Dear Attorney Schwartzman:

The Connecticut Siting Council (Council) is in receipt of your letter dated December 22, 2014, submitted on behalf of T-Mobile, requesting an extension of time to submit a notice of completion of construction and associated post modification inspection reports for the above-referenced exempt modifications.

The Council hereby grants a 60-day extension of time to submit a notice of completion of construction and associated post modification inspection reports for the above-referenced exempt modifications.

This extension is granted with the understanding that the Council will be notified should T-Mobile need additional time beyond 60 days to submit a notice of completion and associated post modification inspection reports or decide not to proceed with construction.

Thank you for your attention to this matter.

Sincerely,

Melanie A. Bachman
Acting Executive Director

MAB/cm

RACHEL A. SCHWARTZMAN

Please Reply To: Bridgeport
Writer's Direct Dial: (203) 337-4110
E-Mail: rschwartzman@cohenandwolf.com

December 22, 2014

Via Electronic and Overnight Mail

Attorney Melanie Bachman
Acting Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06501

**Re: T-Mobile Notice of Completion Filings (First and Second Quarter Audit)
Connecticut Siting Council Letter, dated August 27, 2014**

Dear Attorney Bachman:


T-Mobile Northeast, LLC (T-Mobile) respectfully requests an additional two-month extension of time to respond to the Council's request for notice of completion of construction and associated post-modification inspection reports (the "Compliance Filings") for the following sites:

EM-T-MOBILE-002-130529, 401 Wakelee Avenue, Ansonia, CT (Site ID 11810A)
EM-T-MOBILE-006-130528, 60 Rice Lane, Beacon Falls, CT (Site ID 11299D)

T-Mobile has filed the appropriate Compliance Filings for all first and second quarter audits, apart from the two above-referenced sites for which extension is sought. T-Mobile has diligently acquired much of the required documentation and is working with its vendors and engineers to acquire the proper closeout records. T-Mobile continues to actively compile the requested information but needs additional time to provide the necessary documentation.

Please do not hesitate to let me know if you have any questions.

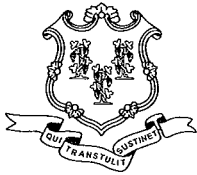
Sincerely,



Rachel A. Schwartzman

RAS/lcc

cc: Patricia Hennelly, T-Mobile Northeast, LLC (via electronic mail)
Samuel Simons, T-Mobile Northeast, LLC (via electronic mail)
Mark Richard, T-Mobile Northeast, LLC (via electronic mail)
Robert Stanford, Vertical Development, LLC (via electronic mail)
Julie Kohler, Esq. (via electronic mail)



June 27, 2013

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

Chris Bisson
Real Estate Consultant
Transcend Wireless
48 Spruce Street
Oakland, NJ 07436

RE: **EM-T-MOBILE-002-130529** – T-Mobile Northeast LLC notice of intent to modify an existing telecommunications facility located at 401 Wakelee Avenue, Ansonia, Connecticut.

Dear Mr. Bisson:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- Any deviation from the proposed modification as specified in this notice and supporting materials with the Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration;

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated May 15, 2013. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

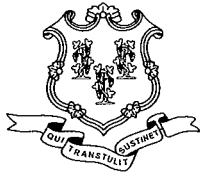
This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Very truly yours,

Melanie A. Bachman
Acting Executive Director

MAB/CDM/jb

c: The Honorable James T. DellaVolpe, Mayor, City of Ansonia
James Tanner, Zoning Enforcement Officer, City of Ansonia
American Tower



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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May 29, 2013

The Honorable James T. DellaVolpe
Mayor
City of Ansonia
City Hall
253 Main Street
Ansonia, CT 06401-1866

RE: **EM-T-MOBILE-002-130529** – T-Mobile Northeast LLC notice of intent to modify an existing telecommunications facility located at 401 Wakelee Avenue, Ansonia, Connecticut.

Dear Mayor DellaVolpe:

The Connecticut Siting Council (Council) received a request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72, a copy of which has already been provided to you.

If you have any questions or comments regarding the proposal, please call me or inform the Council by June 12, 2013.

Thank you for your cooperation and consideration.

Very truly yours,

Melanie Bachman
Acting Executive Director

MB/jb

c: James Tanner, Zoning Enforcement Officer, City of Ansonia

EM-T-MOBILE-002-130529

Transcend Wireless
48 Spruce Street
Oakland, NJ 07436
Phone: (203) 217-6200
Chris Bisson
Real Estate Consultant

05/15/2013

Hand Delivered

Ms. Linda Roberts
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

ORIGINAL

RECEIVED
MAY 29 2013
CONNECTICUT
SITING COUNCIL

RE: T-Mobile Northeast LLC notice of intent to modify an existing telecommunications facility located at 401 Wakelee Avenue, Ansonia, CT, Known to T-Mobile Northeast LLC as site CT11810A.

Dear Ms. Roberts:

In order to accommodate technological changes, implement Global System for Mobile Communications Access ("GSM") and/or Long Term Evolution ("LTE") capabilities, and enhance system performance in the state of Connecticut, T-Mobile Northeast LLC plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and its attachments is being sent to the chief elected official of the municipality in which affected cell site is located.

GSM employs Spread-Spectrum technology and special coding scheme to allow multiple users to be multiplexed over the same physical channel. LTE is a new high-performance air interface for cellular mobile communications. It is designed to increase the capacity and speed of mobile telephone networks.

As part of the project the new multi-mode 800/1900 antenna will replace existing antennas. These antennas will provide more flexibility for optimization by allowing fast and easy electrical tilt adjustment from remote location and will enable the transmission of multiple technologies from a single antenna. As T-Mobile Northeast LLC network evolves to meet the demands of its customers, it is essential for T-Mobile Northeast LLC to install modern equipment and antennas in order to provide reliable wireless voice and data services. The proposed equipment will include multi-mode radios that will allow T-Mobile Northeast LLC to transmit at different frequencies using different technologies, including LTE technology. Likewise, the proposed antennas are quad-pole multi-band

high gain antennas that will allow T-Mobile Northeast LLC to operate using its multiple frequency bands and technologies, including LTE technology. The proposed equipment and antennas will improve the reliability, coverage and capacity of T-Mobile Northeast LLC voice and data networks across T-Mobile Northeast LLC various FCC licensed frequency bands and significantly increase the data speeds of T-Mobile Northeast LLC 's network by utilizing the latest LTE technology. Without the proposed modifications T-Mobile Northeast LLC will be unable to provide reliable wireless voice and data service using the latest technologies.

T-Mobile Northeast LLC will have an interim (testing) period during the modification/installation prior to the final configuration. This antenna configuration is shown on the attached drawings of the planned modifications. Also included is the power density calculation reflecting the change in T-Mobile Northeast LLC operations at the site and documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

The changes to the facility do not constitute modification as defined Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for the R.C.S.A. Section 16-50j-72(b)(2).

1. The height of the overall structure will not be affected.
2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound.
3. The proposed changes will not increase the noise level at the existing facility by 6 decibels or more.
4. Radio Frequency power density may increase due to the use of one or more GSM transmissions. Moreover, LTE will utilize additional radio frequencies newly licensed by the FCC for cellular mobile communications. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons T-Mobile Northeast LLC respectfully submits that the proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (203) 217-6200 or email cbisson@transcendwireless.com with questions concerning this matter.

Thank you for your consideration.

Sincerely,

Chris Bisson
(203) 217-6200

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

T-Mobile Existing Facility

Site ID: CT11810A

Spectrasite Ansonia
401 Wakelee Avenue
Ansonia, CT 06401

May 28, 2013

EBI Project Number: 62136241

May 28, 2013

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

Re: Emissions Values for Site: **CT11810A - Spectrasite Ansonia**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at 401 Wakelee Avenue, Ansonia, CT, for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

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

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

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limit for the cellular band is $567 \mu\text{W}/\text{cm}^2$, and the general population exposure limit for the PCS band is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at 401 Wakelee Avenue, Ansonia, 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, the actual antenna pattern gain value in the direction of the sample area was used. For this report the sample point is a 6 foot person standing at the base of the tower

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

- 1) 2 GSM channels (1935.000 MHz—to 1945.000 MHz / 1980.000 MHz—to 1985.000 MHz) were considered for each sector of the proposed installation.
- 2) 2 UMTS channels (2110.000 MHz to 2120.000 MHz / 2140.000 MHz to 2145.000 MHz) were considered for each sector of the proposed installation
- 3) 2 LTE channels (2110.000 MHz to 2120.000 MHz / 2140.000 MHz to 2145.000 MHz) were considered for each sector of the proposed installation
- 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 six foot person standing at the base of the tower. The actual gain in this direction was used per the manufactures supplied specifications.
- 6) The antenna used in this modeling is the Ericsson AIR21 for LTE, UMTS and GSM. This is based on feedback from the carrier with regards to anticipated antenna selection. This antenna has a 15.6 dBd gain value at its main lobe. Actual antenna gain values were used for all calculations as per the manufacturers specifications

- 7) The antenna mounting height centerline of the proposed antennas is **148 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 calculation were done with respect to uncontrolled / general public threshold limits

Site ID	CT11810A - SpectraSite Ansonia
Site Address	401 Wakelee Avenue, Ansonia, CT 06401
Site Type	Self Support Tower

Sector 1

Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBA)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	148	142	None	0	0	48.326044	0.0861651	0.086165%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-	0	0	0	-3.95	148	142	None	0	0	0	0	0.000000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	148	142	1-5/8"	0	0	24.163022	0.430805	0.043088%
2B	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	148	142	1-5/8"	0	0	24.163022	0.430805	0.043088%
Sector total Power Density Value: 0.172%																	

Sector 2

Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBA)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	148	142	None	0	0	48.326044	0.0861651	0.086165%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-	0	0	0	-3.95	148	142	None	0	0	0	0	0.000000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	148	142	1-5/8"	0	0	24.163022	0.430805	0.043088%
2B	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	148	142	1-5/8"	0	0	24.163022	0.430805	0.043088%
Sector total Power Density Value: 0.172%																	

Sector 3

Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBA)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	148	142	None	0	0	48.326044	0.0861651	0.086165%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-	0	0	0	-3.95	148	142	None	0	0	0	0	0.000000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	148	142	1-5/8"	0	0	24.163022	0.430805	0.043088%
2B	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	148	142	1-5/8"	0	0	24.163022	0.430805	0.043088%
Sector total Power Density Value: 0.172%																	

Site Composite MPE %	
Carrier	MPE %
T-Mobile	0.517%
AT&T	14.610%
MetroPCS	2.760%
Clearwire	0.490%
Sprint Nextel	7.740%
Verizon Wireless	8.790%
Total Site MPE %	34.907%

Summary

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

The anticipated Maximum Composite contributions from the T-Mobile facility are **0.517% (0.172% from each sector)** of the allowable FCC established general public limit considering all three sectors simultaneously sampled at the ground level.

The anticipated composite MPE value for this site assuming all carriers present is **34.907%** 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 within the allowable 100% threshold standard per the federal government.



Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803

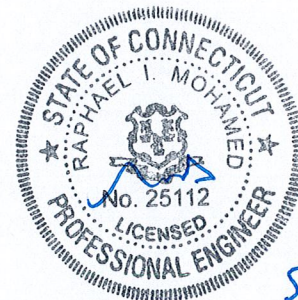


AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 196 ft Self Supported Tower
ATC Site Name : Ansonia Wakelee, CT
ATC Site Number : 302470
Engineering Number : 53054721
Proposed Carrier : T-Mobile
Carrier Site Name : N/A
Carrier Site Number : CT11810A
Site Location : 401 Wakelee Ave
Ansonia, CT 06401-1226
41.356069,-73.092000
County : New Haven
Date : April 23, 2013
Max Usage : 92%
Result : Pass

Amir H. Tabarestani, E.I.
Design Engineer



5/6/13



Table of Contents

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Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 196 ft self supported tower to reflect the change in loading by T-Mobile.

Supporting Documents

Tower Drawings	Rohn Drawing #A991899 dated July 7, 1999
Foundation Drawing	Rohn Drawing #A992523-1, dated September 22, 1999
Geotechnical Report	Tectonic Engineering Consultants W.O. #1170C754, dated May 20, 1999

Analysis

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

Basic Wind Speed:	105 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 3/4" radial ice concurrent
Code:	ANSI/TIA-222-G, Addendum 2 / 2003 IBC w/ 2005 CT Supplement & 2009 CT Amendment
Structure Class:	II
Exposure Category:	B
Topographic Category:	1

Conclusion

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

If you have any questions or require additional information, please contact me via email at amir.tabarestani@americantower.com or call 919-466-5046.

Existing and Reserved Equipment

Mount Elev. ¹ (ft)	Qty.	Antenna	Mount Type	Lines	Carrier
194.0	3	Argus LLPX310R	Sector Frames	(6) 5/16" Coax (2) 3" Conduit (2) 1/2" Coax	Clearwire
	2	DragonWave A-ANT-18G-2-C			
	3	NextNet BTS-2500			
	2	DragonWave Horizon Compact			
	3	KMW TTA (HB-X-WM-17-65-00T)			
	3	72" x 12" Panels			
	9	48" x 12" Panels			
183.0	2	Powerwave P40-16-XLPP-RRR	Sector Frames	(6) 7/8" Coax (3) 1 1/4" Hybriflex	Sprint Nextel
	6	Andrew DB980H90E-M			
	1	RFS APXVSP18-C-A20			
	3	Alcatel-Lucent 800 MHz RRH			
	3	Alcatel-Lucent 1900 MHz 4x45 R			
179.0	3	Antel BXA-171063-8CF-EDIN-X	Sector Frames	(12) 1 5/8" Coax	Verizon
	3	Antel BXA-80080/4CF			
	6	RFS FD9R6004/2C-3L			
	3	Powerwave P65-16-XL-2			
	3	Rymsa MGD3-800TX			
167.0	9	72" x 12" Panel	Sector Frames	(2) 0.78" 8 AWG 6 (12) 1 5/8" Coax (1) 3" Conduit (1) 0.39" Cable	AT&T Mobility
	3	36" x 8" x 6" Panel			
	6	Ericsson RRUS 11			
	1	Raycap DC6-48-60-18-8F			
	9	14" x 9" TTA			
157.0	3	Kathrein 742 213	Leg	(6) 1 5/8" Coax	Metro PCS
148.0	-	-	Sector Frames	(12) 1 5/8" Coax	T-Mobile
125.0	2	Motorola PTP54600	Leg	(2) 1/4" Coax	City Of Ansonia
104.0	2	2" x 8" GPS	Side Arm	(2) 1/2" Coax	Sprint Nextel
82.0	1	10' Omni	Side Arm	(1) 1/2" Coax	Ansonia Fire Dept.
76.0	1	PCTEL GPS-TMG-HR-26N	Side Arm	(1) 1/2" Coax	Sprint Nextel

Proposed Equipment

Elevation ¹ (ft)		Qty.	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
148.0	148.0	3	Ericsson KRY 112 144/1	Sector Frames	(1) 1 1/4" Hybriflex	T-Mobile
		3	Ericsson AIR 21, 1.3M, B4A B2P			
		3	Ericsson AIR 21, 1.3M, B2A B4P			

¹Mount elevation is defined as height above bottom of steel structure to the bottom of mount, RAD elevation is defined as center of antenna above ground level (AGL).

Install proposed coax stacked on top of existing T-Mobile coax.



Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Legs	92%	Pass
Diagonals	92%	Pass
Horizontals	13%	Pass
Anchor Bolts	59%	Pass
Leg Bolts	74%	Pass

Foundations

Reaction Component	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Uplift (Kips)	301.1	406.5	353.8	87%
Axial (Kips)	343.0	463.1	406.5	88%
Shear (Kips)	36.3	49.0	41.2	84%

* The design reactions are factored by 1.35 per ANSI/TIA-222-G, Sec. 15.5.1

The structure base reactions resulting from this analysis are acceptable when compared to those shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Deflection, Twist and Sway*

Antenna Elevation (ft)	Deflection (ft)	Twist (°)	Sway (Rotation) (°)
148.0	0.757	0.017	0.623

*Deflection, Twist and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-G



Standard Conditions

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

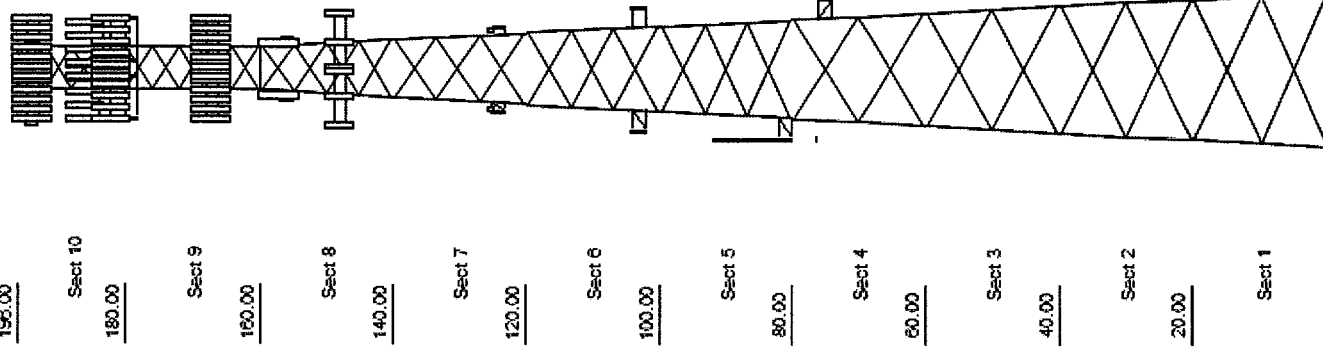
It is the responsibility of the client to ensure that the information provided to ATC Tower Services and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and that their capacity has not significantly changed from the "as new" condition.

Unless explicitly agreed by both the client and American Tower Corporation, all services will be performed in accordance with the current revision of ANSI/TIA -222. The design basic wind speed will be determined based on the minimum basic wind speed as prescribed in ANSI/TIA-222. Although every effort is taken to ensure that the loading considered is adequate to meet the requirements of all applicable regulatory entities, we can provide no assurance to meet any other local and state codes or requirements. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. ATC Tower Services is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

Job Information	
Tower : 302470	Location : Ansonia Wakelee, CT
Code : ANSI/TIA-222 Rev G	Shape : Triangle
Client : T-Mobile	Base Width : 23.00 ft
	Top Width : 6.65 ft

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 Loads: 105 mph no ice
 50 mph w/ 3/4" radial ice
 60 mph Serviceability
 105 mph Serviceability



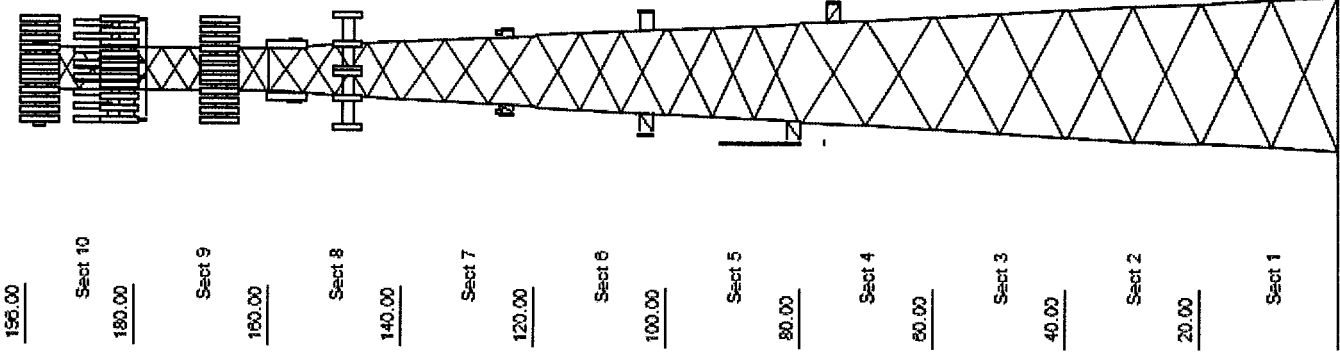
Sections Properties			
Section	Leg Members	Diagonal Members	Horizontal Members
1	PX 50 ksi 8" DIA PIPE	SAE 50 ksi 4X4X0.25	
2	PSP 50 ksi ROHN 8 EHS	SAE 50 ksi 4X4X0.25	
3	PSP 50 ksi ROHN 8 EHS	SAE 50 ksi 3.5X3.5X0.25	
4	PX 50 ksi 6" DIA PIPE	SAE 50 ksi 3.5X3.5X0.25	
5	PSP 50 ksi ROHN 6 EHS	SAE 50 ksi 3X3X0.25	
6-7	PX 50 ksi 5" DIA PIPE	SAE 36 ksi 2.5X2.5X0.25	
8	PX 50 ksi 4" DIA PIPE	SAE 36 ksi 2X2X0.25	SAE 36 ksi 2X2X0.125
9	PX 50 ksi 3" DIA PIPE	SAE 36 ksi 2X2X0.1875	SAE 36 ksi 2X2X0.125
10	PST 50 ksi 2-1/2" DIA PIPE	SAE 36 ksi 1.75X1.75X0.1875	SAE 36 ksi 2X2X0.125

Discrete Appurtenance			
Elev (ft)	Type	Qty	Description
194.00	Panel	3	Argus LLPX310R
194.00	Dish	2	DragonWave A-ANT-18G-2-C
194.00	Panel	3	NextNet BTS-2500
194.00	Panel	2	DragonWave Horizon Compact
194.00	Panel	3	KMMV TTA (HB-X-WM-17-65-00T)
194.00	Mounting Frame	3	Round Sector Frames
194.00	Panel	3	72" x 12" Panels
194.00	Panel	9	48" x 12" Panels
183.00	Panel	2	Powerwave P40-16-XLPP-RRR
183.00	Panel	6	Andrew DB980H90E-M
183.00	Panel	1	RFS APXVSP18-C-420
183.00	Panel	3	Alcatel-Lucent 800 MHz RRH
183.00	Panel	3	Alcatel-Lucent 1900 MHz 4x45 R
179.00	Mounting Frame	3	Round Sector Frames
179.00	Panel	3	Antel BXA-171063-8CF-EDIN-X
179.00	Panel	3	Antel BXA-80080/4CF
179.00	Panel	6	RFS FD9R6004/2C-3L
179.00	Mounting Frame	3	Flat Light Sector Frames
179.00	Panel	3	Powerwave P66-16-XL-2
179.00	Panel	3	Rymasa MGD3-800TX
167.00	Panel	9	72" x 12" Panel
167.00	Panel	3	36" x 8" x 6" Panel
167.00	Panel	6	Ericsson RRUS 41
167.00	Panel	1	Raycap DC6-48-60-18-8F
167.00	Mounting Frame	3	Round Sector Frames
167.00	Panel	9	14" x 9" TTA
157.00	Panel	3	Kathrein 742 213
148.00	Panel	3	Ericsson KRY112 144/1
148.00	Panel	3	Ericsson AIR 21, 1.3M, B4A B2P
148.00	Panel	3	Ericsson AIR 21, 1.3M, B2A B4P
125.00	Mounting Frame	3	Round Sector Frame
104.00	Panel	2	Motorola PTP54600
104.00	Straight Arm	2	Side Arms
82.00	Whip	1	2" x 8" GPS
82.00	Straight Arm	1	Side Arm
76.00	Whip	1	10' Omni
76.00	Straight Arm	1	Side Arm
76.00	Panel	1	PCTEL GPS-TMG-HR-26N

Linear Appurtenance			
Elev (ft)	From	To	Description
8,000	194.00	2	Wave Guide
8,000	194.00	6	5/16" Coax
8,000	194.00	2	3" Conduit
8,000	194.00	2	1/2" Coax
8,000	194.00	6	1 5/8" Coax
8,000	194.00	10	1 1/4" Coax

Uplift: 353.79 k
 Vert: 406.50 k
 Horiz: 41.20 k
 Moment: 7,672.50 ft-k
 Total Down: 63.93 k
 Total Shear: 67.42 k

Job Information			
Tower : 302470	Location : Ansonia Wakelee, CT	Base Width : 23.00 ft	Top Width : 6.65 ft
Code : ANSI/TIA-222 Rev G	Shape : Triangle		
Client : T-Mobile			



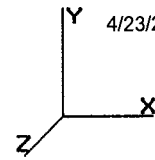
156.00	Sect 10
180.00	
	Sect 9
180.00	
	Sect 8
140.00	
	Sect 7
120.00	
	Sect 6
100.00	
	Sect 5
80.00	
	Sect 4
60.00	
	Sect 3
40.00	
	Sect 2
20.00	
	Sect 1

5.000	194.00	1	Climbing Ladder
8.000	183.00	1	Wave Guide
8.000	183.00	6	7/8" Coax
8.000	183.00	3	1 1/4" Hydriflex
8.000	179.00	6	1 5/8" Coax
8.000	179.00	6	1 5/8" Coax
8.000	167.00	1	Wave Guide
8.000	167.00	1	3" Conduit
8.000	167.00	12	1 5/8" Coax
8.000	167.00	2	0.78" 8 AWG 6
8.000	167.00	1	0.39" Cable
8.000	157.00	1	Waveguide
8.000	157.00	6	1 5/8" Coax
8.000	148.00	1	Wave Guide
8.000	148.00	12	1 5/8" Coax
8.000	148.00	1	1 1/4" Hydriflex
8.000	125.00	2	1/4" Coax
8.000	104.00	2	1/2" Coax
8.000	82.000	1	1/2" Coax
8.000	76.000	1	1/2" Coax

Uplift 353.79 k Moment 7,672.50 ft-k
 Vert 406.50 k Total Down 63.33 k
 Horiz 41.20 k Total Shear 67.42 k

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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4/23/2013 1:18:39 PM

Section Forces

LoadCase 1.2D + 1.6W Normal

105.00 mph Normal to Face with No Ice

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Sect Seq	Height (ft)	Wind qz (psf)	Total Area			Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Area		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat (sqft)	Round (sqft)	Ice Round (sqft)							Linear (sqft)	Linear (sqft)					
10	188.0	28.39	9.82	7.67	0.00	0.16	2.74	1.00	1.00	0.00	14.18	34.61	0.00	1,618.3	0.0	1,501.14	1,189.5	2,690.68
9	170.0	27.59	12.47	11.67	0.00	0.17	2.69	1.00	1.00	0.00	17.49	107.84	0.00	3,135.9	0.0	1,766.70	2,797.7	4,564.44
8	150.0	26.62	12.83	15.03	0.00	0.17	2.70	1.00	1.00	0.00	19.28	150.76	0.00	4,436.9	0.0	1,883.38	3,914.5	5,797.94
7	130.0	25.55	14.16	18.57	0.00	0.16	2.74	1.00	1.00	0.00	22.02	167.42	0.00	5,282.0	0.0	2,096.22	4,132.3	6,228.59
6	110.0	24.36	16.35	18.58	0.00	0.14	2.80	1.00	1.00	0.00	24.05	168.28	0.00	5,440.7	0.0	2,233.19	3,960.3	6,193.52
5	90.00	23.01	22.17	22.12	0.00	0.15	2.76	1.00	1.00	0.00	31.47	168.39	0.00	6,018.6	0.0	2,716.49	3,742.0	6,458.51
4	70.00	21.41	21.08	22.12	0.00	0.13	2.84	1.00	1.00	0.00	30.14	170.17	0.00	6,370.8	0.0	2,493.12	3,520.1	6,013.29
3	50.00	19.45	22.98	28.80	0.00	0.14	2.81	1.00	1.00	0.00	34.88	170.38	0.00	6,846.6	0.0	2,595.59	3,201.5	5,797.10
2	30.00	16.81	28.71	28.80	0.00	0.14	2.81	1.00	1.00	0.00	40.61	170.38	0.00	7,255.5	0.0	2,611.27	2,766.7	5,378.02
1	10.00	16.79	31.13	28.80	0.00	0.13	2.84	1.00	1.00	0.00	42.93	102.73	0.00	7,094.7	0.0	2,783.75	1,672.3	4,456.10
														53,500.0	0.0			53,578.19

LoadCase 1.2D + 1.6W 60 deg

105.00 mph 60 deg with No Ice

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Sect Seq	Height (ft)	Wind qz (psf)	Total Area			Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Area		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat (sqft)	Round (sqft)	Ice Round (sqft)							Linear (sqft)	Linear (sqft)					
10	188.0	28.39	9.82	7.67	0.00	0.16	2.74	0.80	1.00	0.00	12.22	34.61	0.00	1,618.3	0.0	1,293.18	1,189.5	2,482.72
9	170.0	27.59	12.47	11.67	0.00	0.17	2.69	0.80	1.00	0.00	15.00	107.84	0.00	3,135.9	0.0	1,514.76	2,797.7	4,312.50
8	150.0	26.62	12.83	15.03	0.00	0.17	2.70	0.80	1.00	0.00	16.72	150.76	0.00	4,436.9	0.0	1,632.73	3,914.5	5,547.30
7	130.0	25.55	14.16	18.57	0.00	0.16	2.74	0.80	1.00	0.00	19.19	167.42	0.00	5,282.0	0.0	1,826.65	4,132.3	5,959.02
6	110.0	24.36	16.35	18.58	0.00	0.14	2.80	0.80	1.00	0.00	20.78	168.28	0.00	5,440.7	0.0	1,929.55	3,960.3	5,889.88
5	90.00	23.01	22.17	22.12	0.00	0.15	2.76	0.80	1.00	0.00	27.04	168.39	0.00	6,018.6	0.0	2,333.73	3,742.0	6,075.75
4	70.00	21.41	21.08	22.12	0.00	0.13	2.84	0.80	1.00	0.00	25.93	170.17	0.00	6,370.8	0.0	2,144.37	3,520.1	5,664.54
3	50.00	19.45	22.98	28.80	0.00	0.14	2.81	0.80	1.00	0.00	30.29	170.38	0.00	6,846.6	0.0	2,253.54	3,201.5	5,455.05
2	30.00	16.81	28.71	28.80	0.00	0.14	2.81	0.80	1.00	0.00	34.87	170.38	0.00	7,255.5	0.0	2,242.01	2,766.7	5,008.76
1	10.00	16.79	31.13	28.80	0.00	0.13	2.84	0.80	1.00	0.00	36.70	102.73	0.00	7,094.7	0.0	2,380.02	1,672.3	4,052.37
														53,500.0	0.0			50,447.90

LoadCase 1.2D + 1.6W 90 deg

105.00 mph 90 deg with No Ice

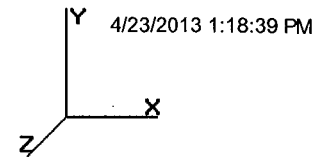
Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Sect Seq	Height (ft)	Wind qz (psf)	Total Area			Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Area		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat (sqft)	Round (sqft)	Ice Round (sqft)							Linear (sqft)	Linear (sqft)					
10	188.0	28.39	9.82	7.67	0.00	0.16	2.74	0.85	1.00	0.00	12.71	34.61	0.00	1,618.3	0.0	1,345.17	1,189.5	2,534.71

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Section Forces

9	170.0	27.59	12.47	11.67	0.00	0.17	2.69	0.85	1.00	0.00	15.62	107.84	0.00	3,135.9	0.0	1,577.75	2,797.7	4,375.49
8	150.0	26.62	12.83	15.03	0.00	0.17	2.70	0.85	1.00	0.00	17.36	150.76	0.00	4,436.9	0.0	1,695.39	3,914.5	5,609.96
7	130.0	25.55	14.16	18.57	0.00	0.16	2.74	0.85	1.00	0.00	19.90	167.42	0.00	5,282.0	0.0	1,894.05	4,132.3	6,026.41
6	110.0	24.36	16.35	18.58	0.00	0.14	2.80	0.85	1.00	0.00	21.59	168.28	0.00	5,440.7	0.0	2,005.46	3,960.3	5,965.79
5	90.00	23.01	22.17	22.12	0.00	0.15	2.76	0.85	1.00	0.00	28.14	168.39	0.00	6,018.6	0.0	2,429.42	3,742.0	6,171.44
4	70.00	21.41	21.08	22.12	0.00	0.13	2.84	0.85	1.00	0.00	26.98	170.17	0.00	6,370.8	0.0	2,231.56	3,520.1	5,751.72
3	50.00	19.45	22.98	28.80	0.00	0.14	2.81	0.85	1.00	0.00	31.44	170.38	0.00	6,846.6	0.0	2,339.06	3,201.5	5,540.57
2	30.00	16.81	28.71	28.80	0.00	0.14	2.81	0.85	1.00	0.00	36.30	170.38	0.00	7,255.5	0.0	2,334.33	2,766.7	5,101.07
1	10.00	16.79	31.13	28.80	0.00	0.13	2.84	0.85	1.00	0.00	38.26	102.73	0.00	7,094.7	0.0	2,480.95	1,672.3	4,153.30
														53,500.0	0.0	51,230.47		

LoadCase 0.9D + 1.6W Normal

105.00 mph Normal to Face with No Ice (Reduced DL)

Gust Response Factor : 0.85
 Dead Load Factor : 0.90
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Wind Sect Seq	Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
10	188.0	28.39	9.82	7.67	0.00	0.16	2.74	1.00	1.00	0.00	14.18	34.61	0.00	1,213.8	0.0	1,501.14	1,189.5	2,690.68
9	170.0	27.59	12.47	11.67	0.00	0.17	2.69	1.00	1.00	0.00	17.49	107.84	0.00	2,351.9	0.0	1,766.70	2,797.7	4,564.44
8	150.0	26.62	12.83	15.03	0.00	0.17	2.70	1.00	1.00	0.00	19.28	150.76	0.00	3,327.7	0.0	1,883.38	3,914.5	5,797.94
7	130.0	25.55	14.16	18.57	0.00	0.16	2.74	1.00	1.00	0.00	22.02	167.42	0.00	3,961.5	0.0	2,096.22	4,132.3	6,228.59
6	110.0	24.36	16.35	18.58	0.00	0.14	2.80	1.00	1.00	0.00	24.05	168.28	0.00	4,080.5	0.0	2,233.19	3,960.3	6,193.52
5	90.00	23.01	22.17	22.12	0.00	0.15	2.76	1.00	1.00	0.00	31.47	168.39	0.00	4,513.9	0.0	2,716.49	3,742.0	6,458.51
4	70.00	21.41	21.08	22.12	0.00	0.13	2.84	1.00	1.00	0.00	30.14	170.17	0.00	4,778.1	0.0	2,493.12	3,520.1	6,013.29
3	50.00	19.45	22.98	28.80	0.00	0.14	2.81	1.00	1.00	0.00	34.88	170.38	0.00	5,134.9	0.0	2,595.59	3,201.5	5,797.10
2	30.00	16.81	28.71	28.80	0.00	0.14	2.81	1.00	1.00	0.00	40.61	170.38	0.00	5,441.6	0.0	2,611.27	2,766.7	5,378.02
1	10.00	16.79	31.13	28.80	0.00	0.13	2.84	1.00	1.00	0.00	42.93	102.73	0.00	5,321.0	0.0	2,783.75	1,672.3	4,456.10
														40,125.0	0.0	53,578.19		

LoadCase 0.9D + 1.6W 60 deg

105.00 mph 60 deg with No Ice (Reduced DL)

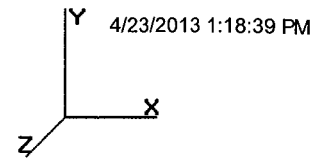
Gust Response Factor : 0.85
 Dead Load Factor : 0.90
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Wind Sect Seq	Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
10	188.0	28.39	9.82	7.67	0.00	0.16	2.74	0.80	1.00	0.00	12.22	34.61	0.00	1,213.8	0.0	1,293.18	1,189.5	2,482.72
9	170.0	27.59	12.47	11.67	0.00	0.17	2.69	0.80	1.00	0.00	15.00	107.84	0.00	2,351.9	0.0	1,514.76	2,797.7	4,312.50
8	150.0	26.62	12.83	15.03	0.00	0.17	2.70	0.80	1.00	0.00	16.72	150.76	0.00	3,327.7	0.0	1,632.73	3,914.5	5,547.30
7	130.0	25.55	14.16	18.57	0.00	0.16	2.74	0.80	1.00	0.00	19.19	167.42	0.00	3,961.5	0.0	1,826.65	4,132.3	5,959.02
6	110.0	24.36	16.35	18.58	0.00	0.14	2.80	0.80	1.00	0.00	20.78	168.28	0.00	4,080.5	0.0	1,929.55	3,960.3	5,889.88
5	90.00	23.01	22.17	22.12	0.00	0.15	2.76	0.80	1.00	0.00	27.04	168.39	0.00	4,513.9	0.0	2,333.73	3,742.0	6,075.75
4	70.00	21.41	21.08	22.12	0.00	0.13	2.84	0.80	1.00	0.00	25.93	170.17	0.00	4,778.1	0.0	2,144.37	3,520.1	5,664.54
3	50.00	19.45	22.98	28.80	0.00	0.14	2.81	0.80	1.00	0.00	30.29	170.38	0.00	5,134.9	0.0	2,253.54	3,201.5	5,455.05
2	30.00	16.81	28.71	28.80	0.00	0.14	2.81	0.80	1.00	0.00	34.87	170.38	0.00	5,441.6	0.0	2,242.01	2,766.7	5,008.76
1	10.00	16.79	31.13	28.80	0.00	0.13	2.84	0.80	1.00	0.00	36.70	102.73	0.00	5,321.0	0.0	2,380.02	1,672.3	4,052.37
														40,125.0	0.0	50,447.90		

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Section Forces

LoadCase 0.9D + 1.6W 90 deg

105.00 mph 90 deg with No Ice (Reduced DL)

Gust Response Factor : 0.85
 Dead Load Factor : 0.90
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Sect Seq	Wind Height (ft)	Wind qz (psf)	Total Flat	Total Round	Ice Round	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice		Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
			Area (sqft)	Area (sqft)	Area (sqft)								Linear Area (sqft)	Total Weight (lb)				Weight Ice (lb)
10	188.0	28.39	9.82	7.67	0.00	0.16	2.74	0.85	1.00	0.00	12.71	34.61	0.00	1,213.8	0.0	1,345.17	1,189.5	2,534.71
9	170.0	27.59	12.47	11.67	0.00	0.17	2.69	0.85	1.00	0.00	15.62	107.84	0.00	2,351.9	0.0	1,577.75	2,797.7	4,375.49
8	150.0	26.62	12.83	15.03	0.00	0.17	2.70	0.85	1.00	0.00	17.36	150.76	0.00	3,327.7	0.0	1,695.39	3,914.5	5,609.96
7	130.0	25.55	14.16	18.57	0.00	0.16	2.74	0.85	1.00	0.00	19.90	167.42	0.00	3,961.5	0.0	1,894.05	4,132.3	6,026.41
6	110.0	24.36	16.35	18.58	0.00	0.14	2.80	0.85	1.00	0.00	21.59	168.28	0.00	4,080.5	0.0	2,005.46	3,960.3	5,965.79
5	90.00	23.01	22.17	22.12	0.00	0.15	2.76	0.85	1.00	0.00	28.14	168.39	0.00	4,513.9	0.0	2,429.42	3,742.0	6,171.44
4	70.00	21.41	21.08	22.12	0.00	0.13	2.84	0.85	1.00	0.00	26.98	170.17	0.00	4,778.1	0.0	2,231.56	3,520.1	5,751.72
3	50.00	19.45	22.98	28.80	0.00	0.14	2.81	0.85	1.00	0.00	31.44	170.38	0.00	5,134.9	0.0	2,339.06	3,201.5	5,540.57
2	30.00	16.81	28.71	28.80	0.00	0.14	2.81	0.85	1.00	0.00	36.30	170.38	0.00	5,441.6	0.0	2,334.33	2,766.7	5,101.07
1	10.00	16.79	31.13	28.80	0.00	0.13	2.84	0.85	1.00	0.00	38.26	102.73	0.00	5,321.0	0.0	2,480.95	1,672.3	4,153.30
														40,125.0	0.0			51,230.47

LoadCase 1.2D + 1.0Di + 1.0Wi Normal

50.00 mph Normal with 0.75 in Radial Ice

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.00
 Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00
 Ice Importance Factor : 1.00

Sect Seq	Wind Height (ft)	Wind qz (psf)	Total Flat	Total Round	Ice Round	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice		Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
			Area (sqft)	Area (sqft)	Area (sqft)								Linear Area (sqft)	Total Weight (lb)				Weight Ice (lb)
10	188.0	6.44	7.86	30.08	29.93	0.33	2.22	1.00	1.00	1.79	30.73	52.99	22.69	5,224.7	3,606.4	373.67	369.41	743.09
9	170.0	6.26	9.98	37.08	34.68	0.32	2.24	1.00	1.00	1.77	38.06	144.86	148.13	11,520.4	8,384.5	453.30	1,034.2	1,487.51
8	150.0	6.04	12.83	50.06	35.03	0.37	2.12	1.00	1.00	1.75	44.09	200.76	200.59	15,141.8	10,705.	480.26	1,326.4	1,806.67
7	130.0	5.79	14.16	50.35	31.78	0.30	2.28	1.00	1.00	1.72	44.39	224.53	207.54	16,659.3	11,377.	499.25	1,443.2	1,942.44
6	110.0	5.52	16.35	52.79	34.21	0.27	2.37	1.00	1.00	1.69	47.56	224.54	215.64	17,028.0	11,587.	528.76	1,435.4	1,964.24
5	90.00	5.22	22.17	58.62	36.50	0.27	2.37	1.00	1.00	1.66	56.84	223.64	221.74	18,213.1	12,194.	596.25	1,376.9	1,973.20
4	70.00	4.86	21.08	53.00	30.88	0.22	2.52	1.00	1.00	1.62	51.75	224.19	226.64	18,139.9	11,769.	539.09	1,346.7	1,885.82
3	50.00	4.41	22.98	60.53	31.73	0.22	2.53	1.00	1.00	1.56	58.00	222.79	221.83	18,634.8	11,788.	549.66	1,205.9	1,755.55
2	30.00	3.81	28.71	60.76	31.96	0.21	2.55	1.00	1.00	1.49	63.77	220.45	213.27	18,897.8	11,642.	527.18	1,017.9	1,545.10
1	10.00	3.81	31.13	59.05	30.25	0.20	2.61	1.00	1.00	1.33	65.01	130.66	117.76	14,924.4	7,829.7	548.74	586.09	1,134.83
														154,384.2	100,884.			16,238.45

LoadCase 1.2D + 1.0Di + 1.0Wi 60 deg

50.00 mph 60 deg with 0.75 in Radial Ice

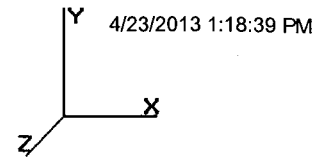
Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.00
 Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00
 Ice Importance Factor : 1.00

Sect Seq	Wind Height (ft)	Wind qz (psf)	Total Flat	Total Round	Ice Round	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice		Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
			Area (sqft)	Area (sqft)	Area (sqft)								Linear Area (sqft)	Total Weight (lb)				Weight Ice (lb)
10	188.0	6.44	7.86	30.08	29.93	0.33	2.22	0.80	1.00	1.79	29.16	52.99	22.69	5,224.7	3,606.4	354.57	369.41	723.98

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Section Forces

9	170.0	6.26	9.98	37.08	34.68	0.32	2.24	0.80	1.00	1.77	36.07	144.86	148.13	11,520.4	8,384.5	429.54	1,034.2	1,463.74	
8	150.0	6.04	12.83	50.06	35.03	0.37	2.12	0.80	1.00	1.75	41.52	200.76	200.59	15,141.8	10,705.	452.30	1,326.4	1,778.72	
7	130.0	5.79	14.16	50.35	31.78	0.30	2.28	0.80	1.00	1.72	41.56	224.53	207.54	16,659.3	11,377.	467.40	1,443.2	1,910.59	
6	110.0	5.52	16.35	52.79	34.21	0.27	2.37	0.80	1.00	1.69	44.29	224.54	215.64	17,028.0	11,587.	492.41	1,435.4	1,927.89	
5	90.00	5.22	22.17	58.62	36.50	0.27	2.37	0.80	1.00	1.66	52.40	223.64	221.74	18,213.1	12,194.	549.73	1,376.9	1,926.68	
4	70.00	4.86	21.08	53.00	30.88	0.22	2.52	0.80	1.00	1.62	47.54	224.19	226.64	18,139.9	11,769.	495.16	1,346.7	1,841.90	
3	50.00	4.41	22.98	60.53	31.73	0.22	2.53	0.80	1.00	1.56	53.40	222.79	221.83	18,634.8	11,788.	506.09	1,205.9	1,711.99	
2	30.00	3.81	28.71	60.76	31.96	0.21	2.55	0.80	1.00	1.49	58.03	220.45	213.27	18,897.8	11,642.	479.71	1,017.9	1,497.63	
1	10.00	3.81	31.13	59.05	30.25	0.20	2.61	0.80	1.00	1.33	58.79	130.66	117.76	14,924.4	7,829.7	496.19	586.09	1,082.28	
															154,384.2	100,884.			15,865.40

LoadCase 1.2D + 1.0Di + 1.0Wi 90 deg

50.00 mph 90 deg with 0.75 in Radial Ice

Gust Response Factor : 0.85

Dead Load Factor : 1.20

Wind Load Factor : 1.00

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00

Ice Importance Factor : 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Area		Ice Area		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Ice Weight (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat (sqft)	Round (sqft)	Round (sqft)	Round (sqft)													
10	188.0	6.44	7.86	30.08	29.93	0.33	2.22	0.85	1.00	1.79	29.56	52.99	22.69	5,224.7	3,606.4	359.34	369.41	728.76	
9	170.0	6.26	9.98	37.08	34.68	0.32	2.24	0.85	1.00	1.77	36.57	144.86	148.13	11,520.4	8,384.5	435.48	1,034.2	1,469.68	
8	150.0	6.04	12.83	50.06	35.03	0.37	2.12	0.85	1.00	1.75	42.17	200.76	200.59	15,141.8	10,705.	459.29	1,326.4	1,785.70	
7	130.0	5.79	14.16	50.35	31.78	0.30	2.28	0.85	1.00	1.72	42.27	224.53	207.54	16,659.3	11,377.	475.36	1,443.2	1,918.55	
6	110.0	5.52	16.35	52.79	34.21	0.27	2.37	0.85	1.00	1.69	45.11	224.54	215.64	17,028.0	11,587.	501.50	1,435.4	1,936.98	
5	90.00	5.22	22.17	58.62	36.50	0.27	2.37	0.85	1.00	1.66	53.51	223.64	221.74	18,213.1	12,194.	561.36	1,376.9	1,938.31	
4	70.00	4.86	21.08	53.00	30.88	0.22	2.52	0.85	1.00	1.62	48.59	224.19	226.64	18,139.9	11,769.	506.15	1,346.7	1,852.88	
3	50.00	4.41	22.98	60.53	31.73	0.22	2.53	0.85	1.00	1.56	54.55	222.79	221.83	18,634.8	11,788.	516.98	1,205.9	1,722.88	
2	30.00	3.81	28.71	60.76	31.96	0.21	2.55	0.85	1.00	1.49	59.46	220.45	213.27	18,897.8	11,642.	491.57	1,017.9	1,509.50	
1	10.00	3.81	31.13	59.05	30.25	0.20	2.61	0.85	1.00	1.33	60.35	130.66	117.76	14,924.4	7,829.7	509.33	586.09	1,095.42	
															154,384.2	100,884.			15,958.66

LoadCase 1.0D + 1.0W Service Normal

Serviceability - 60.00 Wind Normal

Gust Response Factor : 0.85

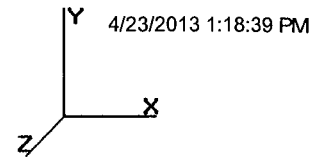
Dead Load Factor : 1.00

Wind Load Factor : 1.00

Wind Importance Factor : 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Area		Ice Area		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Ice Weight (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat (sqft)	Round (sqft)	Round (sqft)	Round (sqft)													
10	188.0	9.27	9.82	7.67	0.00	0.16	2.74	1.00	1.00	0.00	14.18	34.61	0.00	1,348.6	0.0	306.36	242.76	549.12	
9	170.0	9.01	12.47	11.67	0.00	0.17	2.69	1.00	1.00	0.00	19.12	107.84	0.00	2,613.3	0.0	394.21	563.94	958.15	
8	150.0	8.69	12.83	15.03	0.00	0.17	2.70	1.00	1.00	0.00	21.40	150.76	0.00	3,697.4	0.0	426.46	778.62	1,205.08	
7	130.0	8.34	14.16	18.57	0.00	0.16	2.74	1.00	1.00	0.00	24.72	167.42	0.00	4,401.7	0.0	480.19	843.34	1,323.53	
6	110.0	7.96	16.35	18.58	0.00	0.14	2.80	1.00	1.00	0.00	26.88	168.28	0.00	4,533.9	0.0	509.37	808.23	1,317.60	
5	90.00	7.51	22.17	22.12	0.00	0.15	2.76	1.00	1.00	0.00	31.47	168.39	0.00	5,015.5	0.0	554.39	763.68	1,318.06	
4	70.00	6.99	21.08	22.12	0.00	0.13	2.84	1.00	1.00	0.00	33.60	170.17	0.00	5,309.0	0.0	567.18	718.40	1,285.58	
3	50.00	6.35	22.98	28.80	0.00	0.14	2.81	1.00	1.00	0.00	34.88	170.38	0.00	5,705.5	0.0	529.71	653.37	1,183.08	
2	30.00	5.49	28.71	28.80	0.00	0.14	2.81	1.00	1.00	0.00	40.61	170.38	0.00	6,046.2	0.0	532.91	564.64	1,097.56	
1	10.00	5.48	31.13	28.80	0.00	0.13	2.84	1.00	1.00	0.00	42.93	102.73	0.00	5,912.3	0.0	568.11	341.30	909.41	
															44,583.4	0.0			11,147.16

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1



Section Forces

LoadCase 1.0D + 1.0W Service 60 deg

Serviceability - 60.00 Wind 60 deg

Gust Response Factor : 0.85
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Wind Importance Factor : 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total	Total	Ice	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)	Round Area (sqft)													
10	188.0	9.27	9.82	7.67	0.00	0.16	2.74	0.80	1.00	0.00	12.22	34.61	0.00	1,348.6	0.0	263.92	242.76	506.68
9	170.0	9.01	12.47	11.67	0.00	0.17	2.69	0.80	1.00	0.00	16.63	107.84	0.00	2,613.3	0.0	342.79	563.94	906.73
8	150.0	8.69	12.83	15.03	0.00	0.17	2.70	0.80	1.00	0.00	18.83	150.76	0.00	3,697.4	0.0	375.30	778.62	1,153.92
7	130.0	8.34	14.16	18.57	0.00	0.16	2.74	0.80	1.00	0.00	21.89	167.42	0.00	4,401.7	0.0	425.18	843.34	1,268.52
6	110.0	7.96	16.35	18.58	0.00	0.14	2.80	0.80	1.00	0.00	23.61	168.28	0.00	4,533.9	0.0	447.41	808.23	1,255.64
5	90.00	7.51	22.17	22.12	0.00	0.15	2.76	0.80	1.00	0.00	27.04	168.39	0.00	5,015.5	0.0	476.27	763.68	1,239.95
4	70.00	6.99	21.08	22.12	0.00	0.13	2.84	0.80	1.00	0.00	29.39	170.17	0.00	5,309.0	0.0	496.00	718.40	1,214.40
3	50.00	6.35	22.98	28.80	0.00	0.14	2.81	0.80	1.00	0.00	30.29	170.38	0.00	5,705.5	0.0	459.91	653.37	1,113.28
2	30.00	5.49	28.71	28.80	0.00	0.14	2.81	0.80	1.00	0.00	34.87	170.38	0.00	6,046.2	0.0	457.55	564.64	1,022.20
1	10.00	5.48	31.13	28.80	0.00	0.13	2.84	0.80	1.00	0.00	36.70	102.73	0.00	5,912.3	0.0	485.72	341.30	827.01
														44,583.4	0.0			10,508.33

LoadCase 1.0D + 1.0W Service 90 deg

105.00 Serviceability - 60.00 Wind 90 deg

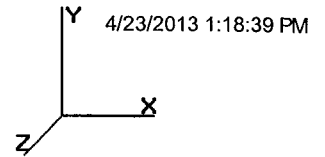
Gust Response Factor : 0.85
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Wind Importance Factor : 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total	Total	Ice	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)	Round Area (sqft)													
10	188.0	28.39	9.82	7.67	0.00	0.16	2.74	0.85	1.00	0.00	12.71	34.61	0.00	1,348.6	0.0	840.73	743.46	1,584.19
9	170.0	27.59	12.47	11.67	0.00	0.17	2.69	0.85	1.00	0.00	15.62	107.84	0.00	2,613.3	0.0	986.09	1,748.5	2,734.68
8	150.0	26.62	12.83	15.03	0.00	0.17	2.70	0.85	1.00	0.00	17.36	150.76	0.00	3,697.4	0.0	1,059.62	2,446.6	3,506.22
7	130.0	25.55	14.16	18.57	0.00	0.16	2.74	0.85	1.00	0.00	19.90	167.42	0.00	4,401.7	0.0	1,183.78	2,582.7	3,766.51
6	110.0	24.36	16.35	18.58	0.00	0.14	2.80	0.85	1.00	0.00	21.59	168.28	0.00	4,533.9	0.0	1,253.41	2,475.2	3,728.62
5	90.00	23.01	22.17	22.12	0.00	0.15	2.76	0.85	1.00	0.00	28.14	168.39	0.00	5,015.5	0.0	1,518.39	2,338.7	3,857.15
4	70.00	21.41	21.08	22.12	0.00	0.13	2.84	0.85	1.00	0.00	26.98	170.17	0.00	5,309.0	0.0	1,394.72	2,200.1	3,594.83
3	50.00	19.45	22.98	28.80	0.00	0.14	2.81	0.85	1.00	0.00	31.44	170.38	0.00	5,705.5	0.0	1,461.91	2,000.9	3,462.85
2	30.00	16.81	28.71	28.80	0.00	0.14	2.81	0.85	1.00	0.00	36.30	170.38	0.00	6,046.2	0.0	1,458.95	1,729.2	3,188.17
1	10.00	16.79	31.13	28.80	0.00	0.13	2.84	0.85	1.00	0.00	38.26	102.73	0.00	5,912.3	0.0	1,550.59	1,045.2	2,595.81
														44,583.4	0.0			32,019.04

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Tower Loading

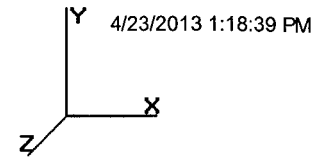
Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice		Ice		Len (ft)	Width (in)	Depth (in)	Ka	Orientation Factor	Vert Ecc (ft)
			Weight (lb)	CaAa (sf)	Weight (lb)	CaAa (sf)						
194.0	Argus LLPX310R	3	28.60	4.290	38.81	5.822	3.500	11.80	4.500	0.80	0.73	0.000
194.0	DragonWave A-ANT-18G-2-C	2	27.10	5.680	127.12	7.708	2.170	0.000	0.000	0.80	1.00	0.000
194.0	NextNet BTS-2500	3	35.00	1.820	47.50	2.470	1.583	11.30	5.100	0.80	0.50	0.000
194.0	DragonWave Horizon	2	10.60	0.360	14.38	0.488	0.392	9.300	9.300	0.80	0.50	0.000
194.0	KMW TTA (HB-X-WM-17-65-	3	15.90	0.560	21.58	0.760	1.325	7.300	3.700	0.80	0.50	0.000
194.0	Round Sector Frames	3	300.00	14.400	677.01	31.365	0.000	0.000	0.000	0.75	0.75	0.000
194.0	72" x 12" Panels	3	40.00	8.130	54.28	11.033	6.000	12.00	6.000	0.80	0.67	0.000
194.0	48" x 12" Panels	9	30.00	5.070	40.71	6.880	4.000	12.00	6.000	0.80	0.67	0.000
183.0	Powerwave P40-16-XLPP-	2	64.00	9.070	279.33	10.346	4.500	20.00	6.500	0.80	0.69	2.000
183.0	Andrew DB980H90E-M	6	8.50	3.900	105.35	4.974	5.000	6.300	3.000	0.80	0.79	2.000
183.0	RFS APXVSPP18-C-A20	1	57.00	8.020	262.15	9.346	6.000	11.80	7.000	0.80	1.00	2.000
183.0	Alcatel-Lucent 800 MHz RRH	3	53.00	2.130	142.87	2.761	1.640	13.00	10.80	0.80	0.67	2.000
183.0	Alcatel-Lucent 1900 MHz	3	60.00	2.320	157.84	3.010	2.090	11.10	10.70	0.80	0.67	2.000
183.0	Round Sector Frames	3	300.00	14.400	621.31	24.682	0.000	0.000	0.000	0.75	0.75	0.000
179.0	Antel BXA-171063-8CF-EDIN-X	3	10.50	2.940	95.19	3.819	4.040	6.100	4.100	0.80	0.87	3.000
179.0	Antel BXA-80080/4CF	3	14.30	4.800	143.95	5.773	4.010	11.20	5.900	0.80	0.80	3.000
179.0	RFS FD9R6004/2C-3L	6	3.10	0.310	16.54	0.586	0.483	6.500	1.500	0.80	0.50	3.000
179.0	Flat Light Sector Frames	3	400.00	17.900	705.37	33.210	0.000	0.000	0.000	0.75	0.75	0.000
179.0	Powerwave P65-16-XL-2	3	33.00	8.130	217.53	9.447	6.000	12.00	5.000	0.80	0.75	3.000
179.0	Rymsa MGD3-800TX	3	15.40	3.340	20.84	4.521	4.530	6.300	3.500	0.80	0.82	3.000
167.0	72" x 12" Panel	9	45.00	8.130	239.56	9.447	6.000	12.00	6.000	0.80	0.67	0.000
167.0	36" x 8" x 6" Panel	3	25.00	2.580	109.90	3.323	3.000	8.000	6.000	0.80	0.67	0.000
167.0	Ericsson RRUS 11	6	55.00	2.520	136.67	3.174	1.480	17.00	7.200	0.80	0.67	0.000
167.0	Raycap DC6-48-60-18-8F	1	31.80	2.200	126.19	2.862	2.000	11.00	11.00	0.80	1.00	0.000
167.0	Round Sector Frames	3	300.00	14.400	618.10	24.579	0.000	0.000	0.000	0.75	0.75	0.000
167.0	14" x 9" TTA	9	10.00	1.050	13.53	1.198	1.167	9.000	6.000	0.80	0.50	0.000
157.0	Kathrein 742 213	3	22.00	5.140	134.99	6.407	6.370	6.100	2.700	1.00	0.78	0.000
148.0	Ericsson KRY 112 144/1	3	11.00	0.350	27.39	0.635	0.580	6.100	2.700	0.80	0.50	0.000
148.0	Ericsson AIR 21, 1.3M, B4A	3	81.50	6.090	250.49	7.193	4.670	12.10	7.900	0.80	0.85	0.000
148.0	Ericsson AIR 21, 1.3M, B2A	3	83.00	6.050	252.04	7.148	4.670	12.00	8.000	0.80	0.86	0.000
148.0	Round Sector Frame	3	300.00	14.400	668.59	30.986	0.000	0.000	0.000	0.75	0.75	0.000
125.0	Motorola PTP54600	2	12.10	1.750	16.26	2.352	1.210	14.50	3.800	1.00	0.73	0.000
104.0	Side Arms	2	200.00	2.000	267.68	2.271	0.000	0.000	0.000	1.00	0.80	0.000
104.0	2" x 8" GPS	2	0.26	0.140	0.40	0.466	0.670	2.000	2.000	0.90	1.00	0.000
82.00	Side Arm	1	200.00	2.000	266.33	2.265	0.000	0.000	0.000	1.00	1.00	0.000
82.00	10' Omni	1	25.00	3.000	33.29	3.995	10.00	3.000	3.000	1.00	1.00	5.000
76.00	Side Arm	1	200.00	2.000	264.69	2.259	0.000	0.000	0.000	1.00	1.00	0.000
76.00	PCTEL GPS-TMG-HR-26N	1	0.60	0.080	9.99	0.313	0.417	3.200	3.200	1.00	1.00	0.000
Totals		123	8691.72		21585.27					Number of Appurtenances : 38		

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	Pct In Block	Spread On Faces	Bundling Arrangement	Cluster Dia (in)	Out Of Zone	Spacing (in)	Orientation Factor	Ka Override
5.00	194.0	Climbing Ladder	1	2.00	6.90	0	Lin App	Individual	0.00	N	1.00	1.00	0.00
8.00	194.0	1 1/4" Coax	10	1.55	0.63	70	3	Block	0.00	N	0.00	1.00	0.00
8.00	194.0	1 5/8" Coax	6	1.98	0.82	50	3	Block	0.00	N	0.00	1.00	0.00

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

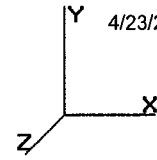


Tower Loading

8.00	194.0	1/2" Coax	2	0.63	0.15	0	2	Individual	0.00	N	1.00	1.00	0.00
8.00	194.0	3" Conduit	2	3.00	7.58	0	Lin App	Individual	0.00	N	1.00	1.00	0.00
8.00	194.0	5/16" Coax	6	0.00	0.04	50	2	Block	0.00	N	0.00	0.00	0.01
8.00	194.0	Wave Guide	2	1.00	5.00	50	3	Block	0.00	N	0.00	1.00	0.00
8.00	183.0	1 1/4" Hybriflex	3	0.00	1.00	0	Lin App	Individual	0.00	N	0.00	1.00	0.00
8.00	183.0	7/8" Coax	6	1.09	0.33	0	2	Cluster	9.84	N	0.00	1.00	0.00
8.00	183.0	Wave Guide	1	1.00	5.00	0	2	Individual	0.00	N	0.00	1.00	0.00
8.00	179.0	1 5/8" Coax	6	1.98	0.82	0	3	Individual	0.00	N	0.00	1.00	0.01
8.00	179.0	1 5/8" Coax	6	1.98	0.82	0	Lin App	Individual	0.00	N	1.00	1.00	0.00
8.00	167.0	0.39" Cable	1	0.39	0.07	0	Lin App	Individual	0.00	N	0.00	1.00	0.00
8.00	167.0	0.78" 8 AWG 6	2	0.78	0.59	0	Lin App	Individual	0.00	N	0.00	1.00	0.00
8.00	167.0	1 5/8" Coax	12	1.98	0.82	0	1	Cluster	12.25	N	0.00	1.00	0.00
8.00	167.0	3" Conduit	1	3.50	7.58	0	Lin App	Individual	0.00	N	1.00	1.00	0.00
8.00	167.0	Wave Guide	1	1.00	5.00	0	1	Individual	0.00	N	0.00	1.00	0.00
8.00	157.0	1 5/8" Coax	6	1.98	0.82	0	1	Cluster	7.81	N	0.00	1.00	0.00
8.00	157.0	Waveguide	1	0.00	6.00	0	Lin App	Individual	0.00	N	1.00	1.00	0.00
8.00	148.0	1 1/4" Hybriflex	1	1.54	1.00	0	Lin App	Individual	0.00	N	1.00	1.00	0.01
8.00	148.0	1 5/8" Coax	12	1.98	0.82	50	3	Block	0.00	N	0.00	1.00	0.00
8.00	148.0	Wave Guide	1	1.00	5.00	0	3	Individual	0.00	N	0.00	1.00	0.00
8.00	125.0	1/4" Coax	2	0.34	0.06	0	1	Individual	0.00	N	0.00	1.00	0.00
8.00	104.0	1/2" Coax	2	0.00	0.15	0	3	Individual	0.00	N	0.00	1.00	0.00
8.00	82.00	1/2" Coax	1	0.63	0.15	0	1	Individual	0.00	N	0.00	1.00	0.00
8.00	76.00	1/2" Coax	1	0.63	0.15	0	2	Individual	0.00	N	0.00	1.00	0.00

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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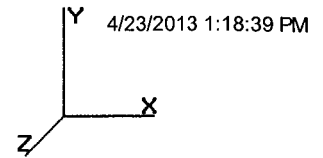
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Force/Stress Summary

Section: 1		15N25		Bot Elev (ft): 0.00				Height (ft): 20.000								
Max Compression Member		Force (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	Fy (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 8" DIA PIPE	-397.65	1.2D + 1.6W	9.77	100	100	100	40.7	50.0	510.32	0	0	0.00	0.00	77	Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 4X4X0.25	-12.38	1.2D + 1.6W 90	23.62	50	50	50	178.3	43.5	13.79	1	1	17.89	23.40	89	Member Z
Max Tension Member		Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls				
LEG	PX - 8" DIA PIPE	355.71	0.9D + 1.6W 60	50	65	576.00	0	0	0.00	0.00	61	Member				
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0					
DIAG	SAE - 4X4X0.25	12.15	1.2D + 1.6W 90	50	65	62.93	1	1	0.00	23.40	19	Member				
Max Splice Forces		Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type									
Top Tension		324.33	0.9D + 1.6W 60	0.00	0	0										
Top Compression		371.95	1.2D + 1.6W	0.00	0											
Bot Tension		355.70	0.9D + 1.6W 60	605.70	59	10	1" A354-BC									
Bot Compression		407.72	1.2D + 1.6W	0.00	0											

Section: 2		14N46		Bot Elev (ft): 20.00				Height (ft): 20.000								
Max Compression Member		Force (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	Fy (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PSP - ROHN 8 EHS	-360.43	1.2D + 1.6W	9.77	100	100	100	40.1	50.0	388.80	0	0	0.00	0.00	92	Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 4X4X0.25	-11.95	1.2D + 1.6W 90	22.69	50	50	50	171.3	43.5	14.94	1	1	17.89	23.40	79	Member Z
Max Tension Member		Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls				
LEG	PSP - ROHN 8 EHS	324.67	0.9D + 1.6W 60	50	65	437.40	0	0	0.00	0.00	74	Member				
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0					
DIAG	SAE - 4X4X0.25	11.61	1.2D + 1.6W 90	50	65	62.93	1	1	0.00	23.40	18	Member				
Max Splice Forces		Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type									
Top Tension		290.47	0.9D + 1.6W 60	0.00	0	0										
Top Compression		332.23	1.2D + 1.6W	0.00	0											
Bot Tension		324.33	0.9D + 1.6W 60	436.16	74	8	1 A325									
Bot Compression		371.95	1.2D + 1.6W	0.00	0											

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1



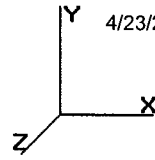
Force/Stress Summary

Section: 3		13N88		Bot Elev (ft): 40.00				Height (ft): 20.000							
		Force	Len	Bracing %			F'y	phi	Shear		Bear		Use		
Max Compression Member		(kip)	(ft)	X	Y	Z	(ksi)	Pn	Num	Num	phiRnv	phiRn	%	Controls	
		Load Case							Bolts	Holes	(kip)	(kip)			
LEG	PSP - ROHN 8 EHS	-321.22	9.77	100	100	100	40.1	50.0	0	0	0.00	0.00	82	Member X	
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0	0	0.00	0.00	0		
DIAG	SAE - 3.5X3.5X0.25	-10.79	20.87	50	50	50	180.5	49.5	1	1	17.89	23.40	92	Member Z	
Max Tension Member		Force	Fy	Fu	phi	Pn	Num	Num	Shear	Bear	Use	Controls			
		(KIP)	(ksi)	(ksi)	(kip)		Bolts	Holes	Cap (kip)	Cap (kip)	%				
		Load Case													
LEG	PSP - ROHN 8 EHS	290.95	50	65	437.40	0	0	0	0.00	0.00	66	Member			
HORIZ		0.00	0	0	0.00	0	0	0	0.00	0.00	0				
DIAG	SAE - 3.5X3.5X0.25	10.54	50	65	53.79	1	1	0.00	0.00	23.40	19	Member			
Max Splice Forces		Force	Capacity	Use	Num										
		(kip)	(kip)	%	Bolts	Bolt Type									
		Load Case													
Top Tension		257.07	0.00	0	0										
Top Compression		293.09	0.00	0											
Bot Tension		290.47	436.16	67	8	1 A325									
Bot Compression		332.23	0.00	0											

Section: 4		12N50		Bot Elev (ft): 60.00				Height (ft): 20.000							
		Force	Len	Bracing %			F'y	phi	Shear		Bear		Use		
Max Compression Member		(kip)	(ft)	X	Y	Z	(ksi)	Pn	Num	Num	phiRnv	phiRn	%	Controls	
		Load Case							Bolts	Holes	(kip)	(kip)			
LEG	PX - 6" DIA PIPE	-281.51	9.77	100	100	100	53.4	50.0	0	0	0.00	0.00	91	Member X	
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0	0	0.00	0.00	0		
DIAG	SAE - 3.5X3.5X0.25	-10.54	19.04	50	50	50	164.6	49.5	1	1	17.89	23.40	74	Member Z	
Max Tension Member		Force	Fy	Fu	phi	Pn	Num	Num	Shear	Bear	Use	Controls			
		(KIP)	(ksi)	(ksi)	(kip)		Bolts	Holes	Cap (kip)	Cap (kip)	%				
		Load Case													
LEG	PX - 6" DIA PIPE	257.43	50	65	378.00	0	0	0	0.00	0.00	68	Member			
HORIZ		0.00	0	0	0.00	0	0	0	0.00	0.00	0				
DIAG	SAE - 3.5X3.5X0.25	10.28	50	65	53.79	1	1	0.00	0.00	23.40	19	Member			
Max Splice Forces		Force	Capacity	Use	Num										
		(kip)	(kip)	%	Bolts	Bolt Type									
		Load Case													
Top Tension		220.79	0.00	0	0										
Top Compression		251.17	0.00	0											
Bot Tension		257.07	436.16	59	8	1 A325									
Bot Compression		293.09	0.00	0											

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Force/Stress Summary

Section: 5 11N223 Bot Elev (ft): 80.00 Height (ft): 20.000

Max Compression Member		Force (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	Fy (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PSP - ROHN 6 EHS	-242.24	1.2D + 1.6W	6.51	100	100	100	35.1	50.0	275.92	0	0	0.00	0.00	87	Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 3X3X0.25	-9.59	1.2D + 1.6W 90	15.90	50	50	50	161.2	50.0	12.52	1	1	17.89	23.40	76	Member Z

Max Tension Member		Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG	PSP - ROHN 6 EHS	221.12	0.9D + 1.6W 60	50	65	301.95	0	0	0.00	0.00	73	Member
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 3X3X0.25	9.38	1.2D + 1.6W 90	50	65	44.65	1	1	0.00	23.40	21	Member

Max Splice Forces		Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension		181.92	0.9D + 1.6W 60	0.00	0	0	
Top Compression		206.77	1.2D + 1.6W	0.00	0		
Bot Tension		220.79	0.9D + 1.6W 60	327.12	67	6	1 A325
Bot Compression		251.17	1.2D + 1.6W	0.00	0		

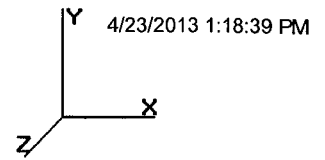
Section: 6 10N152 Bot Elev (ft): 100.0 Height (ft): 20.000

Max Compression Member		Force (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	Fy (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 5" DIA PIPE	-198.61	1.2D + 1.6W	6.51	100	100	100	42.5	50.0	240.98	0	0	0.00	0.00	82	Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 2.5X2.5X0.25	-8.15	1.2D + 1.6W 90	14.13	50	50	50	172.8	36.0	9.01	1	1	12.43	17.40	90	Member Z

Max Tension Member		Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG	PX - 5" DIA PIPE	182.24	0.9D + 1.6W 60	50	65	274.95	0	0	0.00	0.00	66	Member
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 2.5X2.5X0.25	8.18	1.2D + 1.6W 90	36	58	32.71	1	1	0.00	17.40	25	Member

Max Splice Forces		Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension		143.82	0.9D + 1.6W 60	0.00	0	0	
Top Compression		163.83	1.2D + 1.6W	0.00	0		
Bot Tension		181.92	0.9D + 1.6W 60	327.12	56	6	1 A325
Bot Compression		206.77	1.2D + 1.6W	0.00	0		

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1



Force/Stress Summary

Section: 7 9N216 Bot Elev (ft): 120.0 Height (ft): 20.000

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
				X	Y	Z								
LEG PX - 5" DIA PIPE	-154.97	1.2D + 1.6W	6.51	100	100	100	42.5	50.0	240.99	0	0	0.00	0.00	64 Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG SAE - 2.5X2.5X0.25	-7.84	1.2D + 1.6W 90	12.33	50	50	50	150.7	36.0	11.83	1	1	12.43	17.40	66 Member Z

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PX - 5" DIA PIPE	144.04	0.9D + 1.6W 60	50	65	274.95	0	0	0.00	0.00	52	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 2.5X2.5X0.25	7.98	1.2D + 1.6W 90	36	58	32.71	1	1	0.00	17.40	24	Member

Max Splice Forces	Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension	101.23	0.9D + 1.6W 60	0.00	0	0	
Top Compression	116.91	1.2D + 1.6W	0.00	0		
Bot Tension	143.82	0.9D + 1.6W 60	218.08	66	4	1 A325
Bot Compression	163.83	1.2D + 1.6W	0.00	0		

Section: 8 A780252 Bot Elev (ft): 140.0 Height (ft): 20.000

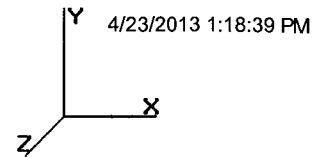
Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
				X	Y	Z								
LEG PX - 4" DIA PIPE	-110.13	1.2D + 1.6W	4.88	100	100	100	39.6	50.0	176.95	0	0	0.00	0.00	62 Member X
HORIZ SAE - 2X2X0.125	-0.35	1.2D + 1.6W 60	6.760	100	100	100	203.8	36.0	2.61	1	1	12.43	8.70	13 Member Z
DIAG SAE - 2X2X0.25	-6.58	1.2D + 1.6W 90	9.847	50	50	50	151.1	36.0	9.30	1	1	12.43	17.40	70 Member Z

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PX - 4" DIA PIPE	101.49	0.9D + 1.6W 60	50	65	198.45	0	0	0.00	0.00	51	Member
HORIZ SAE - 2X2X0.125	0.23	1.2D + 1.6W	36	58	12.60	1	1	0.00	8.70	1	Member
DIAG SAE - 2X2X0.25	6.56	1.2D + 1.6W 90	36	58	24.55	1	1	0.00	17.40	26	Member

Max Splice Forces	Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension	57.50	0.9D + 1.6W 60	0.00	0	0	
Top Compression	68.46	1.2D + 1.6W	0.00	0		
Bot Tension	101.23	0.9D + 1.6W 60	218.08	46	4	1 A325
Bot Compression	116.91	1.2D + 1.6W	0.00	0		

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Force/Stress Summary

Section: 9 A780178 Bot Elev (ft): 160.0 Height (ft): 20.000

Max Compression Member	Force		Len (ft)	Bracing %			F'y (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear		Bear		Use %	Controls
	(kip)	Load Case		X	Y	Z					KL/R	phiRnv (kip)	phiRn (kip)			
LEG PX - 3" DIA PIPE	-61.12	1.2D + 1.6W	3.90	100	100	100	41.1	50.0	120.14	0	0	0.00	0.00	50	Member X	
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0		
DIAG SAE - 2X2X0.1875	-7.15	1.2D + 1.6W 90	7.798	50	50	50	119.1	36.0	10.98	2	1	24.86	26.10	65	Member Z	

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PX - 3" DIA PIPE	57.22	0.9D + 1.6W 60	50	65	135.90	0	0	0.00	0.00	42	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 2X2X0.1875	7.05	1.2D + 1.6W 90	36	58	18.74	2	1	0.00	26.10	37	Member

Max Splice Forces	Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension	10.07	0.9D + 1.6W 60	0.00	0	0	
Top Compression	14.76	1.2D + 1.6W	0.00	0		
Bot Tension	57.50	0.9D + 1.6W 60	166.24	35	4	7/8 A325
Bot Compression	68.46	1.2D + 1.6W	0.00	0		

Section: 10 A780178 Bot Elev (ft): 180.0 Height (ft): 16.000

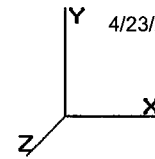
Max Compression Member	Force		Len (ft)	Bracing %			F'y (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear		Bear		Use %	Controls
	(kip)	Load Case		X	Y	Z					KL/R	phiRnv (kip)	phiRn (kip)			
LEG PST - 2-1/2" DIA PIP	-14.61	1.2D + 1.6W	0.25	100	100	100	3.2	50.0	76.62	0	0	0.00	0.00	19	Member X	
HORIZ SAE - 2X2X0.125	-0.35	1.2D + 1.6W 90	6.646	100	100	100	200.4	36.0	2.70	1	1	12.43	8.70	13	Member Z	
DIAG SAE - 1.75X1.75X0.18	-3.31	1.2D + 1.6W	7.757	50	50	50	135.7	36.0	7.62	1	1	12.43	13.05	43	Member Z	

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	10.18	0.9D + 1.6W 60	50	65	76.68	0	0	0.00	0.00	13	Member
HORIZ SAE - 2X2X0.125	0.37	1.2D + 1.6W 60	36	58	12.60	1	1	0.00	8.70	2	Member
DIAG SAE - 1.75X1.75X0.18	2.90	1.2D + 1.6W 60	36	58	15.67	1	1	0.00	13.05	18	Member

Max Splice Forces	Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension	0.00		0.00	0	0	
Top Compression	0.35	1.2D + 1.0Di +	0.00	0		
Bot Tension	10.07	0.9D + 1.6W 60	120.40	8	4	3/4 A325
Bot Compression	14.76	1.2D + 1.6W	0.00	0		

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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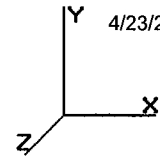
Support Forces Summary

Load Case	Node	FX (kip)	FY (kip)	FZ (kip)	(-) = Uplift (+) = Down
1.0D + 1.0W Service 90 deg	1b	-17.97	-184.32	-8.66	
	1a	-19.79	219.83	9.77	
	1	-2.92	17.76	-1.11	
1.0D + 1.0W Service 60 deg	1b	-5.90	-58.98	-3.40	
	1a	-4.83	56.07	1.84	
	1	-0.82	56.19	-5.10	
1.0D + 1.0W Service Normal	1b	-2.17	-22.01	-2.26	
	1a	2.17	-22.01	-2.26	
	1	0.00	97.29	-9.41	
1.2D + 1.0Di + 1.0Wi 90 deg	1b	-8.48	-33.26	-4.11	
	1a	-9.02	151.73	4.43	
	1	-1.36	59.24	-0.32	
1.2D + 1.0Di + 1.0Wi 60 deg	1b	-9.40	-47.20	-5.43	
	1a	-5.69	112.40	1.94	
	1	-1.16	112.51	-5.90	
1.2D + 1.0Di + 1.0Wi Normal	1b	-4.04	5.19	-3.73	
	1a	4.04	5.19	-3.73	
	1	0.00	167.33	-11.68	
0.9D + 1.6W 90 deg	1b	-29.50	-307.17	-14.26	
	1a	-30.90	339.13	15.21	
	1	-4.68	15.99	-0.96	
0.9D + 1.6W 60 deg	1b	-32.44	-353.79	-18.72	
	1a	-19.32	200.58	6.63	
	1	-3.92	201.16	-20.06	
0.9D + 1.6W Normal	1b	-14.40	-176.33	-13.29	
	1a	14.40	-176.33	-13.29	
	1	0.00	400.60	-40.85	
1.2D + 1.6W 90 deg	1b	-29.21	-302.33	-14.10	
	1a	-31.20	344.94	15.39	
	1	-4.67	21.32	-1.30	
1.2D + 1.6W 60 deg	1b	-32.15	-349.02	-18.56	
	1a	-19.61	206.18	6.81	
	1	-3.91	206.77	-20.40	
1.2D + 1.6W Normal	1b	-14.12	-171.29	-13.11	
	1a	14.12	-171.29	-13.11	
	1	0.00	406.50	-41.20	

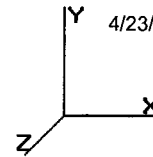
Max Uplift:	353.79 (kip)	Moment:	7,672.50 (ft-kip)	1.2D + 1.6W Normal
Max Down:	406.50 (kip)	Total Down:	63.93 (kip)	
Max Shear:	41.20 (kip)	Total Shear:	67.42 (kip)	

Site Number: 302470
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Struct Class : II
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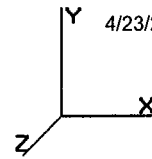
Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1



Deflections and Rotations

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)
Serviceability - 60.00 Wind 60 deg	79.75	0.0657	0.0051	0.1061
	80.25	0.0667	0.0051	0.1064
	106.75	0.1205	0.0068	0.1350
	126.75	0.1738	0.0082	0.1648
	150.00	0.2488	0.0099	0.2053
	154.88	0.2664	0.0101	0.2074
	168.05	0.3179	0.0124	0.2347
	179.75	0.3665	0.0143	0.2582
	184.19	0.3853	0.0149	0.2286
Serviceability - 60.00 Wind Normal	192.06	0.4185	0.0149	0.2413
	79.75	0.0682	0.0037	0.1083
	80.25	0.0691	0.0037	0.1091
	106.75	0.1248	0.0046	0.1394
	126.75	0.1797	0.0051	0.1699
	150.00	0.2570	0.0053	0.2121
	154.88	0.2752	0.0051	0.2145
	168.05	0.3282	0.0049	0.2431
	179.75	0.3786	0.0040	0.2940
105.00 Serviceability - 60.00 Wind 90 deg	184.19	0.3984	0.0037	0.2637
	192.06	0.4329	0.0036	0.2521
	79.75	0.1997	0.0093	0.3166
	80.25	0.2025	0.0094	0.3176
	106.75	0.3663	0.0120	0.4109
	126.75	0.5283	0.0142	0.5012
	150.00	0.7566	0.0166	0.6231
	154.88	0.8100	0.0170	0.6344
	168.05	0.9667	0.0198	0.7150
105.00 mph 60 deg with No Ice (Reduced DL)	179.75	1.1144	0.0215	0.7493
	184.19	1.1715	0.0223	0.6678
	192.06	1.2724	0.0224	0.7342
	79.75	0.3172	0.0398	0.5070
	80.25	0.3217	0.0400	0.5092
	106.75	0.5818	0.0594	0.6529
	126.75	0.8391	0.0783	0.7980
	150.00	1.2017	0.1076	0.9938
	154.88	1.2870	0.1148	1.0077
105.00 mph 60 deg with No Ice	168.05	1.5358	0.1599	1.1377
	179.75	1.7711	0.2073	1.2544
	184.19	1.8623	0.2243	1.1084
	192.06	2.0230	0.2257	1.1699
	79.75	0.3177	0.0399	0.5082
	80.25	0.3222	0.0401	0.5104
	106.75	0.5828	0.0596	0.6544
	126.75	0.8408	0.0785	0.7999
	150.00	1.2042	0.1079	0.9963
154.88	1.2898	0.1151	1.0102	
168.05	1.5393	0.1603	1.1406	
179.75	1.7751	0.2079	1.2579	

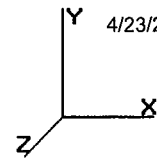
Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
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	184.19	1.8667	0.2249	1.1114
	192.06	2.0277	0.2263	1.1731
105.00 mph 90 deg with No Ice (Reduced DL)	79.75	0.3195	0.0150	0.5058
	80.25	0.3240	0.0150	0.5079
	106.75	0.5858	0.0194	0.6570
	126.75	0.8449	0.0230	0.8013
	150.00	1.2098	0.0269	0.9959
	154.88	1.2953	0.0277	1.0142
	168.05	1.5457	0.0325	1.1429
	179.75	1.7818	0.0352	1.1973
	184.19	1.8730	0.0368	1.0673
	192.06	2.0342	0.0370	1.1736
105.00 mph 90 deg with No Ice	79.75	0.3200	0.0150	0.5065
	80.25	0.3245	0.0151	0.5087
	106.75	0.5869	0.0195	0.6584
	126.75	0.8466	0.0230	0.8032
	150.00	1.2124	0.0270	0.9985
	154.88	1.2981	0.0278	1.0168
	168.05	1.5492	0.0325	1.1460
	179.75	1.7859	0.0352	1.2009
	184.19	1.8773	0.0369	1.0705
	192.06	2.0389	0.0371	1.1768
105.00 mph Normal to Face with No Ice (Reduced	79.75	0.3290	0.0176	0.5284
	80.25	0.3337	0.0176	0.5314
	106.75	0.6027	0.0216	0.6750
	126.75	0.8688	0.0243	0.8243
	150.00	1.2443	0.0249	1.0295
	154.88	1.3323	0.0241	1.0413
	168.05	1.5911	0.0230	1.1805
	179.75	1.8362	0.0172	1.4305
	184.19	1.9324	0.0166	1.2827
	192.06	2.1000	0.0164	1.2256
105.00 mph Normal to Face with No Ice	79.75	0.3295	0.0176	0.5291
	80.25	0.3343	0.0176	0.5323
	106.75	0.6038	0.0217	0.6765
	126.75	0.8706	0.0243	0.8263
	150.00	1.2470	0.0250	1.0322
	154.88	1.3352	0.0242	1.0440
	168.05	1.5947	0.0231	1.1838
	179.75	1.8404	0.0173	1.4344
	184.19	1.9369	0.0167	1.2860
	192.06	2.1049	0.0165	1.2289
50.00 mph 60 deg with 0.75 in Radial Ice	79.75	0.0924	0.0071	0.1485
	80.25	0.0937	0.0071	0.1487
	106.75	0.1669	0.0093	0.1829
	126.75	0.2387	0.0111	0.2216
	150.00	0.3389	0.0133	0.2726
	154.88	0.3620	0.0136	0.2751
	168.05	0.4301	0.0164	0.3101
	179.75	0.4939	0.0187	0.3394
	184.19	0.5187	0.0194	0.3040
	192.06	0.5623	0.0194	0.3169
50.00 mph 90 deg with 0.75 in Radial Ice	79.75	0.0924	0.0040	0.1469
	80.25	0.0937	0.0040	0.1469

Site Number: 302470
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50.00 mph Normal with 0.75 in Radial Ice

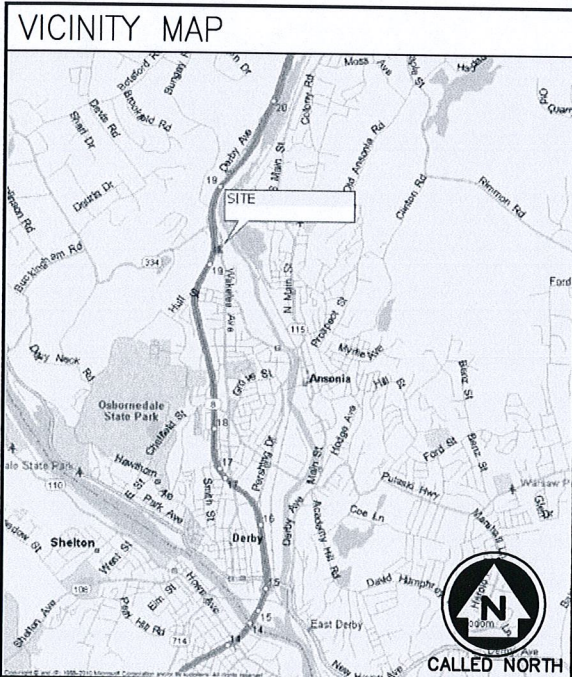
106.75	0.1671	0.0050	0.1838
126.75	0.2391	0.0059	0.2220
150.00	0.3395	0.0067	0.2731
154.88	0.3627	0.0068	0.2772
168.05	0.4309	0.0077	0.3106
179.75	0.4948	0.0082	0.3302
184.19	0.5195	0.0083	0.2974
192.06	0.5631	0.0083	0.3174
79.75	0.0928	0.0056	0.1449
80.25	0.0941	0.0056	0.1461
106.75	0.1684	0.0069	0.1858
126.75	0.2413	0.0077	0.2244
150.00	0.3431	0.0082	0.2777
154.88	0.3666	0.0080	0.2802
168.05	0.4359	0.0082	0.3154
179.75	0.5010	0.0073	0.3703
184.19	0.5264	0.0070	0.3330
192.06	0.5709	0.0070	0.3246
192.06	0.0000	0.0000	0.0000

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(2C CONFIGURATION)



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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.

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- GENERAL NOTES**
- 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.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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.
 - THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS, AS WELL AS THE LATEST EDITIONS OF ANY PERTINENT STATE SAFETY REGULATIONS.
 - 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.
 - THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC., ON THE JOB.
 - THE CONTRACTOR SHALL RETURN ALL DISTURBED AREAS TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF WORK.

PROJECT SUMMARY

SITE NUMBER:	CT11810A	APPLICANT:	T-MOBILE NORTHEAST LLC
SITE NAME:	SPECTRASITE - ANSONIA		12050 BALTIMORE AVENUE
SITE ADDRESS:	401 WAKELEE AVENUE		BELTSVILLE, MD 20705
	ANSONIA, CT 06401		
PROPERTY OWNER:	TBD	PROJECT MANAGER:	AMERICAN TOWER CORPORATION
			10 PRESIDENTIAL WAY
PARCEL:	TBD		WOBURN, MA 01801
CURRENT ZONING:	TBD	CONTACT:	TARA RUSSO
JURISDICTION:	TBD		717-695-2942
ATC SITE NUMBER:	302470	ARCHITECT/ENGINEER:	INFINIGY ENGINEERING
LAT./LONG.:	N 41.35617' / W 73.09193'		11 HERBERT DRIVE
CONSTRUCTION TYPE:	-		LATHAM, NY 12110
USE GROUP:	-	CONTACT:	AJ DESANTIS
			518-690-0790

PROJECT DESCRIPTION

<input checked="" type="checkbox"/> EXISTING MONOPOLE	<input checked="" type="checkbox"/> EXISTING CABINET(S)	<input checked="" type="checkbox"/> OUTDOOR
<input type="checkbox"/> EXISTING LATTICE TOWER	<input type="checkbox"/> EXISTING RBS 2106	<input type="checkbox"/> INDOOR
<input type="checkbox"/> EXISTING TRANSMISSION TOWER	<input type="checkbox"/> EXISTING RBS 3106	<input checked="" type="checkbox"/> EXISTING CONCRETE PAD
<input type="checkbox"/> EXISTING WATER TANK	<input type="checkbox"/> PROPOSED RBS 6102	<input type="checkbox"/> EXISTING STEEL PLATFORM
<input type="checkbox"/> EXISTING BUILDING	<input type="checkbox"/> SITE SUPPORT KIT	<input checked="" type="checkbox"/> EXISTING PPC
<input type="checkbox"/> EXISTING FLAGPOLE	<input type="checkbox"/> SITE SUPPORT CABINET	<input type="checkbox"/> PANELBOARD
<input type="checkbox"/> EXISTING FORT WORTH	<input checked="" type="checkbox"/> GPS	

T-MOBILE NORTHEAST LLC PROPOSES THE MODIFICATION OF AN UNMANNED WIRELESS BROADBAND FACILITY. REPLACEMENT OF EXISTING PANEL ANTENNAS & TTA'S WITH PROPOSED PANEL ANTENNAS AND ASSOCIATED CABLING. REUSE EXISTING GPS ANTENNA AND EXISTING EQUIPMENT CABINETS.

SHEET INDEX

SHEET	DESCRIPTION	REVISION
T-1	TITLE SHEET	0
C-1	SITE PLAN	0
C-2	COMPOUND PLAN & ELEVATION	0
C-3	ANTENNA DETAIL & RF SCHEDULE	0
S-1	EQUIPMENT SPECIFICATIONS	0
E-1	GROUNDING AND POWER DIAGRAMS	0
E-2	COAX/FIBER PLUMBING DIAGRAM	0
N-1	GENERAL AND ELECTRICAL NOTES	0

T-Mobile
T-MOBILE NORTHEAST LLC
12050 BALTIMORE AVENUE BELTSVILLE, MD 20705
Tel (240) 264-8600 Fax (240) 264-8610

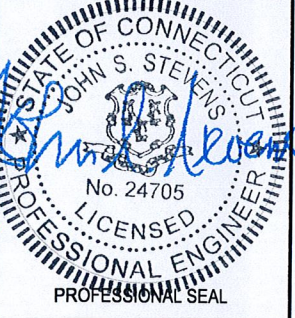
INFINIGY
Design, Build, Deliver.
11 HERBERT DRIVE
LATHAM, NY 12110
OFFICE: (518) 690-0790
FAX: (518) 690-0795

SUBMITTALS

DATE	DESCRIPTION	REVISION
4/24/13	REVIEW	A
5/3/13	FOR PERMIT	0

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

PROJECT NO: 317-0973
DRAWN BY: EKM
CHECKED BY: AJD



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SITE NAME
CT11810A
SPECTRASITE - ANSONIA
401 WAKELEE AVENUE
ANSONIA, CT 06401

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

INFINIGY
 Design. Build. Deliver.
 11 HERBERT DRIVE
 OFFICE (518) 680-0790
 FAX (518) 680-0793

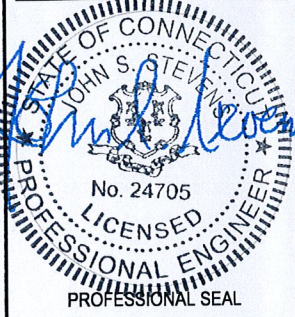
- GENERAL SITE NOTES:**
1. A COMPLETE BOUNDARY SURVEY OF THE HOST PARCEL HAS NOT BEEN PERFORMED BY INFINIGY ENGINEERING. BOUNDARY INFORMATION WAS OBTAINED FROM INFORMATION PROVIDED BY OTHERS. PROPERTY IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
 2. BASEMAPPING INFORMATION BASED ON PROVIDED INFORMATION.
 3. CONTRACTOR TO FIELD VERIFY DIMENSIONS AS NECESSARY BEFORE CONSTRUCTION.
 4. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE SIGNS OF ADVERTISING.
 5. THE PROPOSED DEVELOPMENT IS UNMANNED AND THEREFORE DOES NOT REQUIRE A MEANS OF WATER SUPPLY OR SEWAGE DISPOSAL.
 6. NO LANDSCAPING WORK IS PROPOSED IN CONJUNCTION WITH THIS DEVELOPMENT OTHER THAN THAT WHICH IS SHOWN.
 7. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES.
 8. UTILITIES SHOWN ON PLAN ARE TAKEN FROM OWNERS RECORDS AND FIELD LOCATION OF VISIBLE SURFACE FEATURES. THE EXISTENCE, EXTENT AND EXACT HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES HAS NOT BEEN VERIFIED. ANY CONTRACTOR PERFORMING WORK ON THIS SITE MUST CONTACT MISS UTILITY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK.
 9. ALL OBSOLETE OR UNUSED FACILITIES SHALL BE REMOVED WITHIN 12 MONTHS OF CESSATION OF OPERATIONS.

SUBMITTALS

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5/3/13	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
R/E			
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ZONING			
OPS			
CONSTR.			
SITE AC.			

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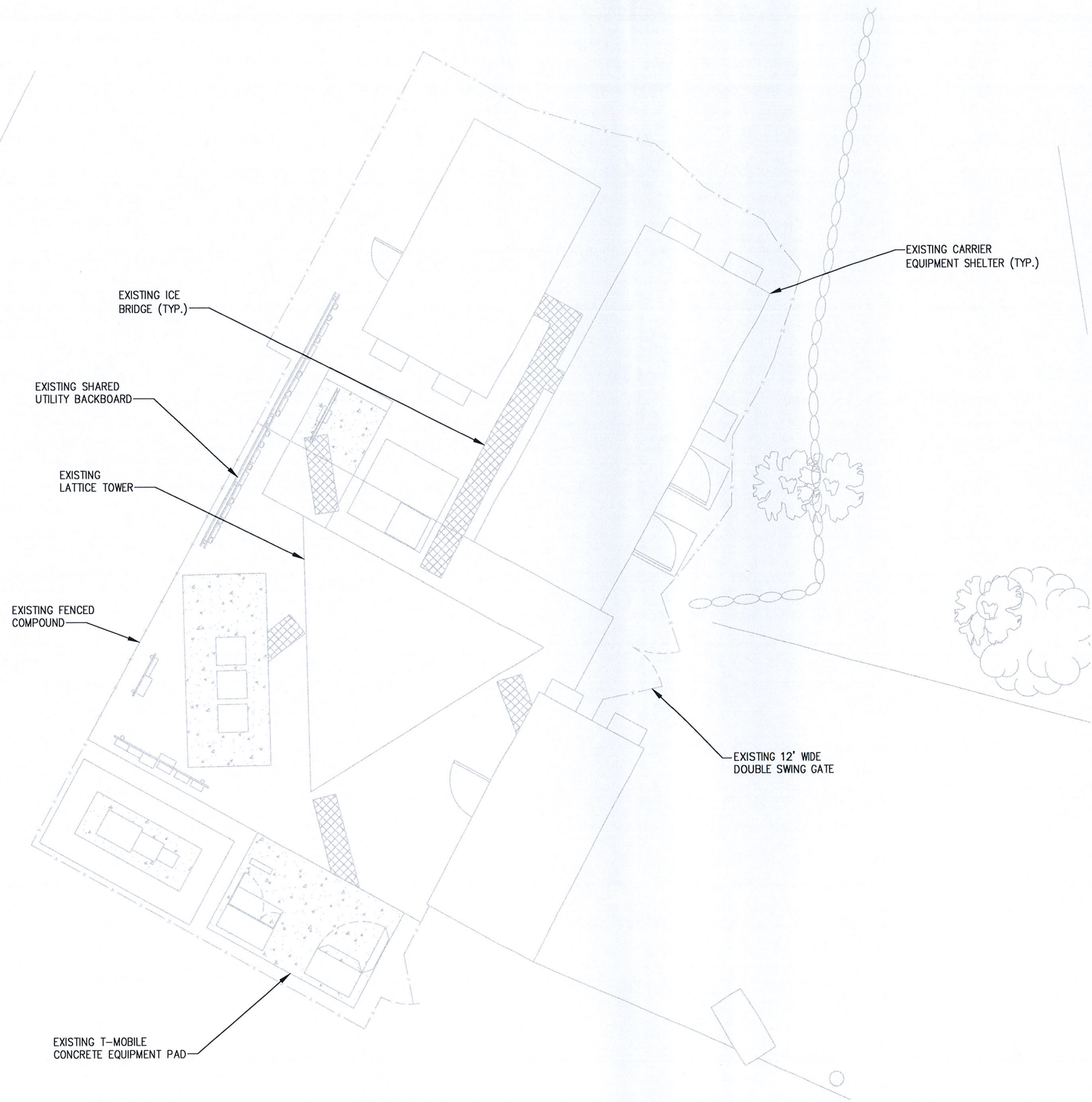
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401 WAKELEE AVENUE
ANSONIA, CT 06401

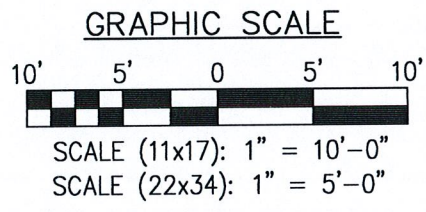
SHEET TITLE
SITE PLAN

SHEET NUMBER
C-1
SHEET 2 OF 8 SHEETS



SITE LEGEND

- SITE PROPERTY LINE
- ===== STREET OR ROAD
- - - - - CHAIN LINK FENCE
- OPAQUE WOODEN FENCE
- BOARD ON BOARD FENCE
- (Tree symbols) DECIDUOUS TREES/SHRUBS
- (Tree symbols) EVERGREEN TREES/SHRUBS
- ~~~~~ TREE LINE
- (X symbol) UTILITY POLE
- (E) EXISTING
- (N) NEW
- (P) PROPOSED
- (F) FUTURE
- (Antenna symbol) PROP. GSM ANTENNA
- (Antenna symbol) PROP. UMTS ANTENNA
- (Antenna symbol) EX. GSM ANTENNA
- (Antenna symbol) EX. UMTS ANTENNA



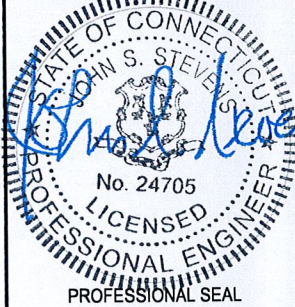
NOTE:
 INFINIGY ENGINEERING HAS NOT EVALUATED THE TOWER OR LOADING FOR THIS SITE, AND ASSUMES NO RESPONSIBILITY FOR ITS STRUCTURAL INTEGRITY REGARDING ITS EXISTING OR PROPOSED LOADING. FINAL INSTALLATION TO COMPLY WITH RESULTS OF PASSING STRUCTURAL ANALYSIS.

SUBMITTALS

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4/24/13	REVIEW	A
5/3/13	FOR PERMIT	0

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 CHECKED BY: AJD



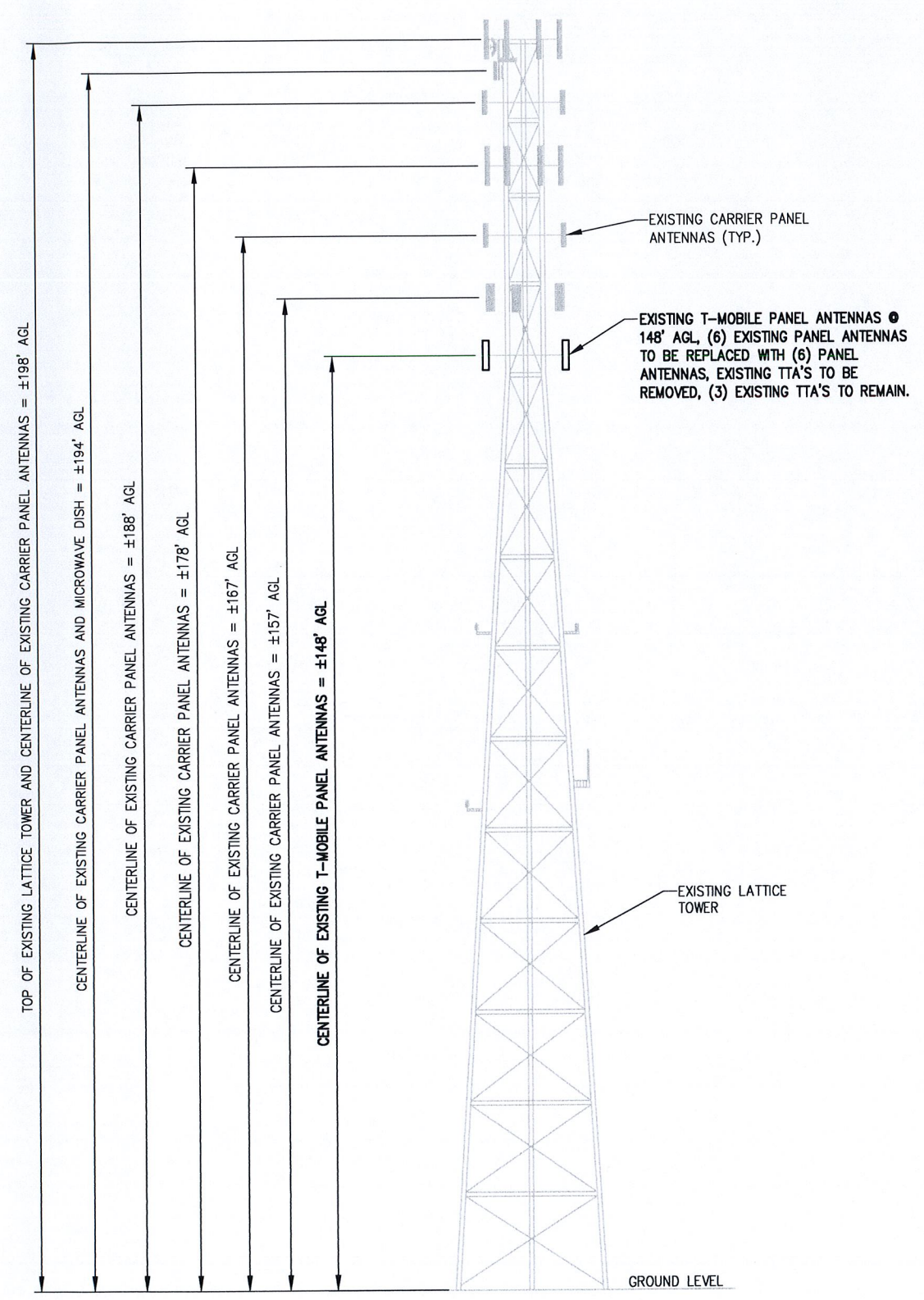
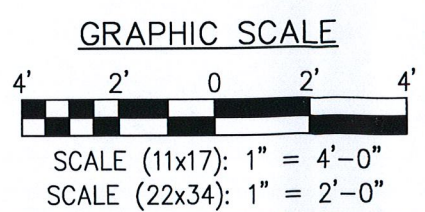
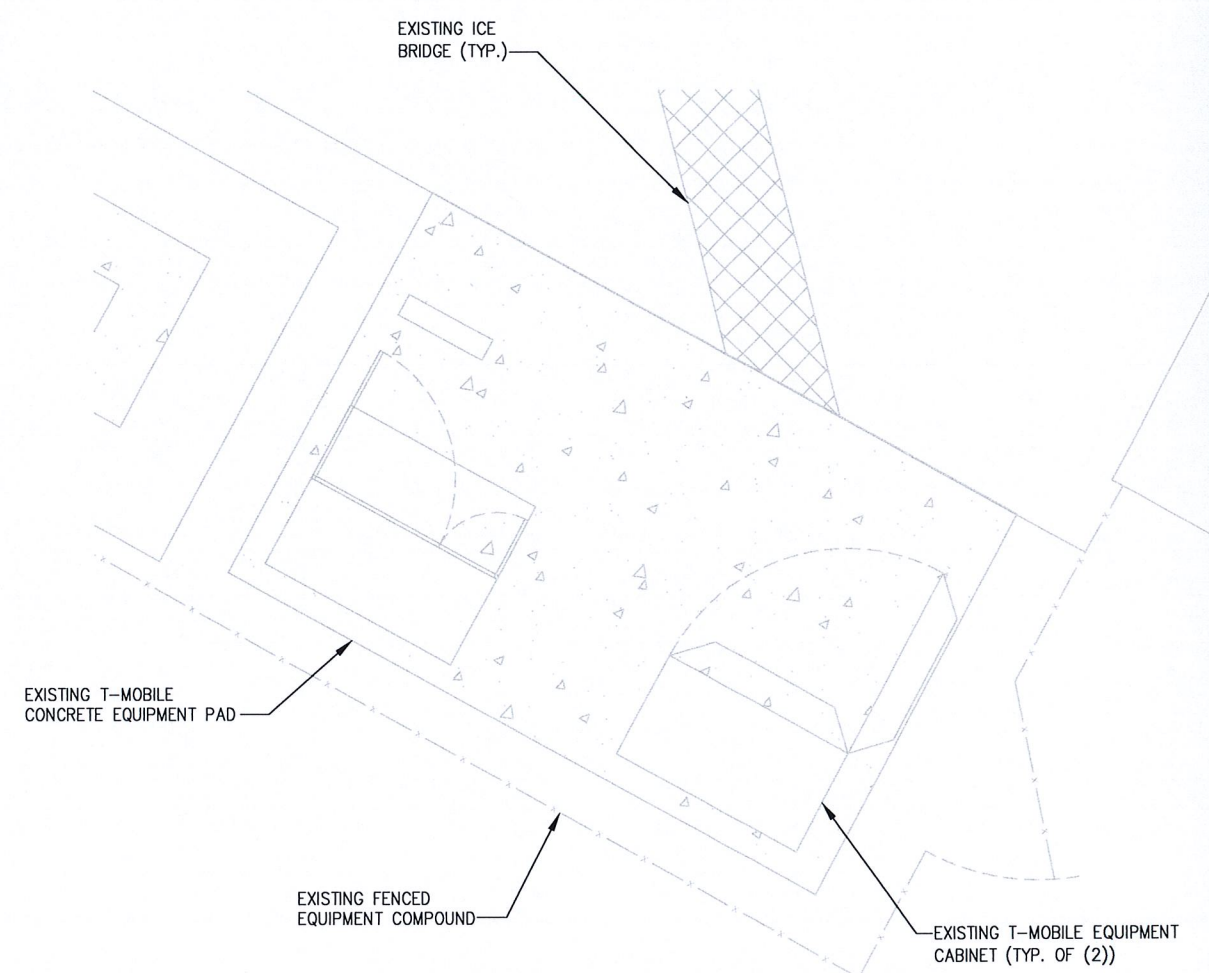
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SITE NAME
 CT11810A
 SPECTRASITE - ANSONIA
 401 WAKELEE AVENUE
 ANSONIA, CT 06401

SHEET TITLE
COMPOUND PLAN & ELEVATION

SHEET NUMBER
C-2
 SHEET 3 OF 8 SHEETS



INFINIGY & ASSOCIATES
 Design. Build. Deliver.
 11 HERBERT DRIVE
 ROCKVILLE, MD 20850
 OFFICE: (301) 850-0790
 FAX: (301) 850-0793

RF SYSTEM SCHEDULE (2C CONFIGURATION)

SECTOR	TECHNOLOGY	ANTENNA PORT	BAND	ANTENNA MODEL #	VENDOR	AZIMUTH	M-TILT	E-TILT	ANTENNA CENTERLINE	TMA MODEL #	VENDOR	CABLE LENGTH	CABLE DIAMETER	CABLE TYPE	CABLE MODEL #	VENDOR	CABLE TAGGING	COLOR CODING	JUMPER TYPE	JUMPER TAGGING	COLOR CODING									
A	UMTS AWS	RF #1	B4P	AIR21	ERICSSON	0°	0°	2°	148'-0"	ATMAA1412D	N/A	EXISTING	1-5/8"	COAX	EXISTING	N/A	UMTS AWS A1	B	COAX	UMTS AWS A1	B									
		RF #2										EXISTING	1-5/8"	COAX	EXISTING	N/A	UMTS AWS A2	B	COAX	UMTS AWS A2	B									
	LMU	LMU #1	-									EXISTING	1-5/8"	COAX	EXISTING	N/A	LMU A1	-	COAX	LMU A1	-									
		LMU #2										EXISTING	1-5/8"	COAX	EXISTING	N/A	LMU A2	-	COAX	LMU A2	-									
	GSM	OPTICAL #1	B2A									-	-	-	-	-	-	-	-	-	-	-	-	-	-	FIBER	GSM 1900 A1	R		
	UMTS	OPTICAL #2																								FIBER	UMTS 1900 A2	G		
LTE AWS	OPTICAL #1	B4A	AIR21	ERICSSON	0°	0°	2°	148'-0"	-	-	-	185'±	-	HYBRID	MASTERLINE EXTREME HYBRID (3x6)	ERICSSON	FIBER 1	0	FIBER	LTE FIBER 1	Y									
B	UMTS AWS	RF #1	B4P	AIR21	ERICSSON	100°	0°	2°	148'-0"	ATMAA1412D	N/A	EXISTING	1-5/8"	COAX	EXISTING	N/A	UMTS AWS B1	BB	COAX	UMTS AWS B1	BB									
		RF #2										EXISTING	1-5/8"	COAX	EXISTING	N/A	UMTS AWS B2	BB	COAX	UMTS AWS B2	BB									
	LMU	LMU #1	-									EXISTING	1-5/8"	COAX	EXISTING	N/A	LMU B1	-	COAX	LMU B1	-									
		LMU #2										EXISTING	1-5/8"	COAX	EXISTING	N/A	LMU B2	-	COAX	LMU B2	-									
	GSM	OPTICAL #1	B2A									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HYBRID	GSM 1900 B1	RR	
	UMTS	OPTICAL #2																									HYBRID	UMTS 1900 B2	GG	
LTE AWS	OPTICAL #1	B4A	AIR21	ERICSSON	100°	0°	2°	148'-0"	-	-	-	-	-	-	-	-	-	-	HYBRID	LTE FIBER 2	YY									
C	UMTS AWS	RF #1	B4P	AIR21	ERICSSON	200°	0°	2°	148'-0"	ATMAA1412D	N/A	EXISTING	1-5/8"	COAX	EXISTING	N/A	UMTS AWS C1	BBB	COAX	UMTS AWS C1	BBB									
		RF #2										EXISTING	1-5/8"	COAX	EXISTING	N/A	UMTS AWS C2	BBB	COAX	UMTS AWS C2	BBB									
	LMU	LMU #1	-									EXISTING	1-5/8"	COAX	EXISTING	N/A	LMU C1	-	COAX	LMU C1	-									
		LMU #2										EXISTING	1-5/8"	COAX	EXISTING	N/A	LMU C2	-	COAX	LMU C2	-									
	GSM	OPTICAL #1	B2A									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	HYBRID	GSM 1900 C1	RRR
	UMTS	OPTICAL #2																										HYBRID	UMTS 1900 C2	GGG
LTE AWS	OPTICAL #1	B4A	AIR21	ERICSSON	200°	0°	2°	148'-0"	-	-	-	-	-	-	-	-	-	-	HYBRID	LTE FIBER 3	YYY									

SUBMITTALS

DATE	DESCRIPTION	REVISION
4/24/13	REVIEW	A
5/3/13	FOR PERMIT	0

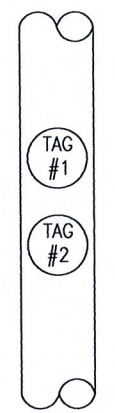
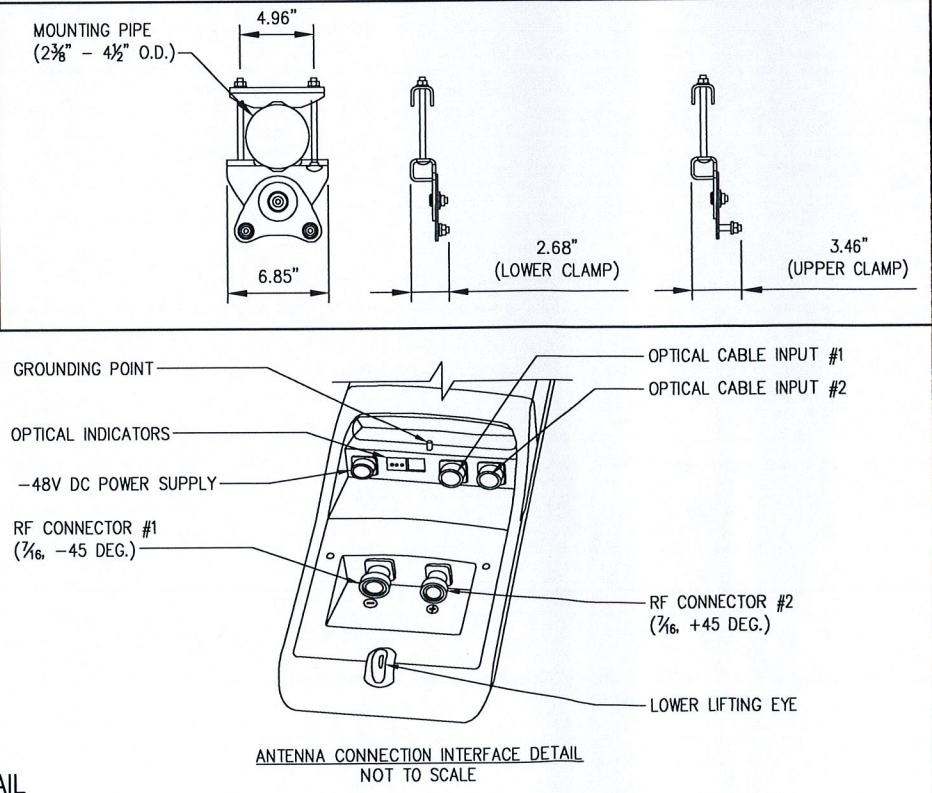
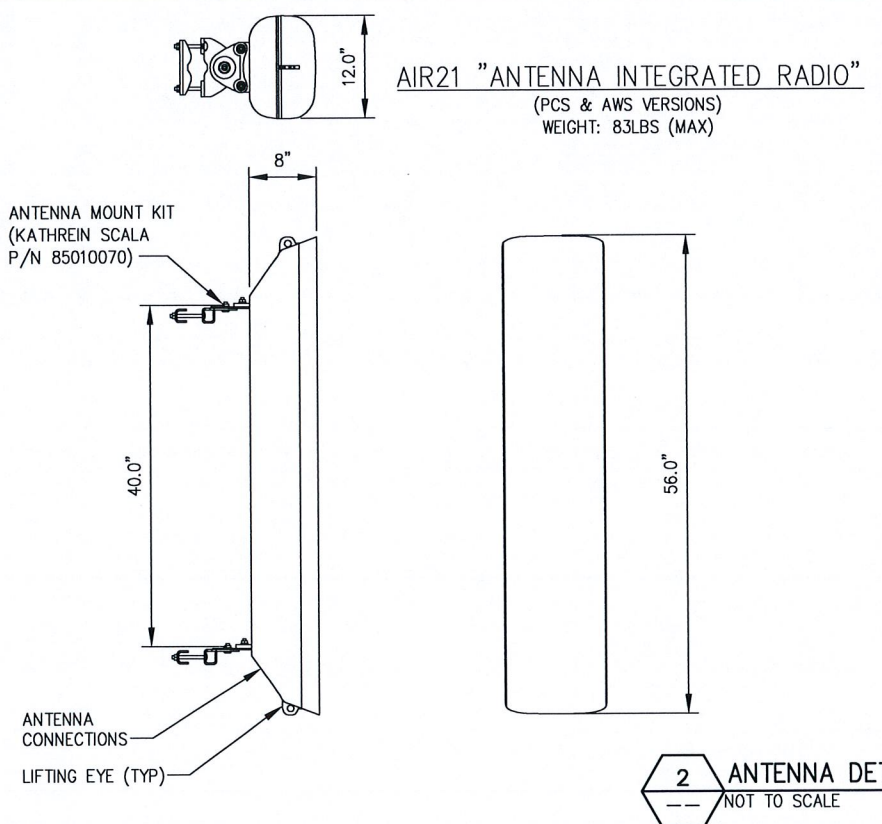
DEPT.	DATE	APP'D	REVISIONS
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RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO: 317-0973
 DRAWN BY: EKM
 CHECKED BY: AJD

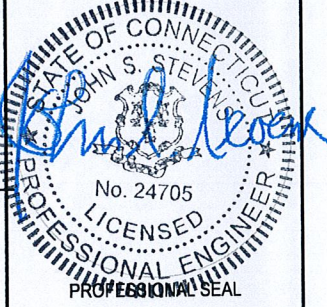
KEY

EXISTING	R - RED - GSM
PROPOSED	G - GREEN - UMTS 1900
FIBER CONNECTION	B - BLUE - UMTS AWS
	Y - YELLOW - LTE
	O - ORANGE - FIBER CABLE

1 RF SCHEDULE
 NOT TO SCALE



- METALLIC TAG NOTES:**
- TWO METALLIC TAGS SHALL BE ATTACHED AT EACH END OF EVERY CABLE LONGER THAN (3) THREE FEET.
 - CABLES LESS THAN (3) THREE FEET WILL HAVE TWO METALLIC TAGS ATTACHED AT THE CENTER OF THE CABLE.
 - TAGS WILL BE FASTENED WITH STAINLESS STEEL ZIP TIES APPROPRIATE FOR CABLE DIAMETER.
 - STANDARDIZED METALLIC TAG KITS WILL BE ASSEMBLED WITH TAGS ALREADY ENGRAVED TO ACCOMMODATE ALL CONFIGURATIONS.



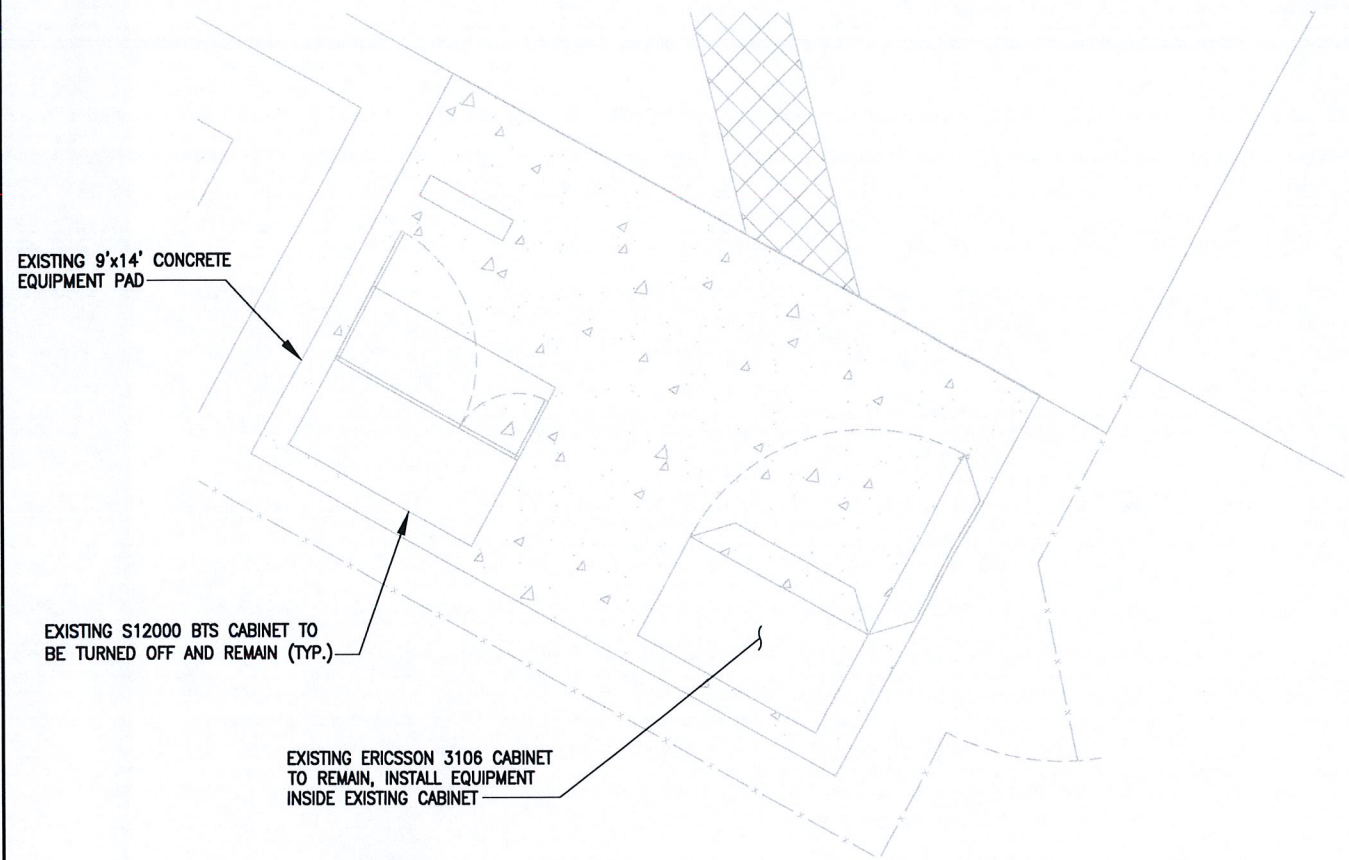
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SITE NAME
 CT11810A
 SPECTRASITE - ANSONIA
 401 WAKELEE AVENUE
 ANSONIA, CT 06401

SHEET TITLE
ANTENNA DETAIL & RF SCHEDULE

SHEET NUMBER
C-3
 SHEET 4 OF 8 SHEETS



1 EQUIPMENT PAD LAYOUT PLAN
--- NOT TO SCALE

STRUCTURAL NOTES:
 1. SPECIFICATIONS / CODES:
 -CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE ACI CODE
 -STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH AISC STEEL CONSTRUCTION MANUAL, 9TH EDITION.
 -WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1-92 "STRUCTURAL WELDING" CODE-STEEL.
 -REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE."
 2. MATERIALS:
 -CONCRETE: f'_c - 3000psi. (MIN. U.N.O.)
 -REINFORCING STEEL: ASTM A615, GRADE 60.
 -WIRE MESH: ASTM A185.
 -STRUCTURAL STEEL: ASTM A36.
 -ELECTRODES FOR WELDING: E 70xx.
 -GALVANIZING: ASTM A153 (BOLTS) OR ASTM A123 (SHAPES, PLATES).
 -EXPANSION BOLTS: HILTI KWIK BOLT II, STAINLESS STEEL, 3/4"Øx43/4" EMBEDMENT OR AN APPROVED EQUAL.

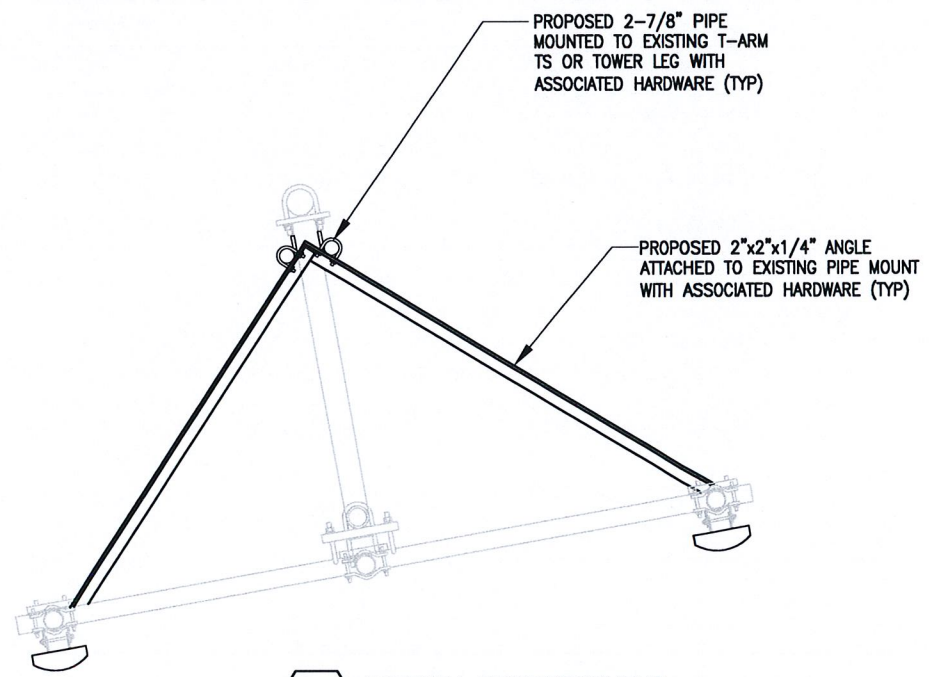
INFINIGY &
 Design. Build. Deliver.
 11 HERBERT DRIVE
 BELTSVILLE, MD 20705
 OFFICE: (301) 680-0790
 FAX: (301) 680-0793

SUBMITTALS		
DATE	DESCRIPTION	REVISION
4/24/13	REVIEW	A
5/3/13	FOR PERMIT	D

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

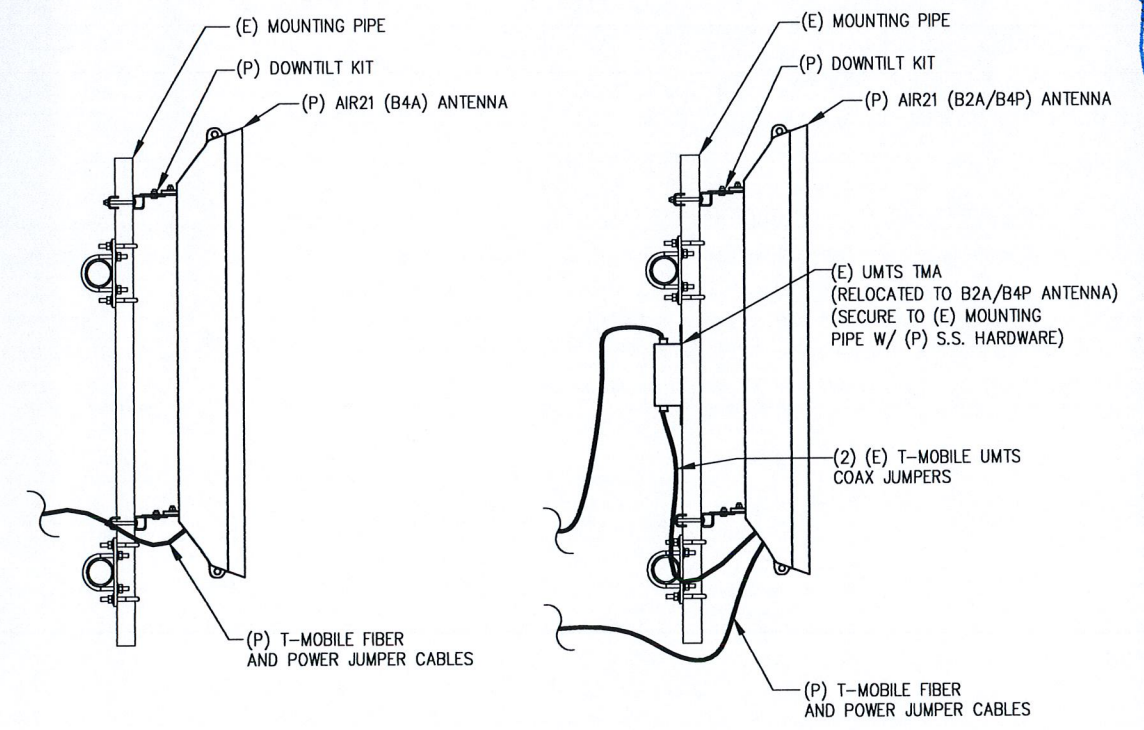
PROJECT NO: 317-0973
 DRAWN BY: EKM
 CHECKED BY: AJD

2 NOT USED
--- NOT TO SCALE

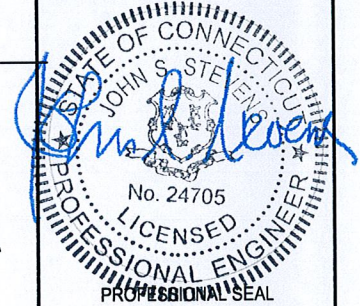


3 ANTENNA REINFORCEMENT
--- NOT TO SCALE

***USE WHEN EXISTING ANTENNA PIPE MOUNT HAS ONLY ONE POINT OF ATTACHMENT**



4 ANTENNA MOUNTING DETAIL
--- NOT TO SCALE



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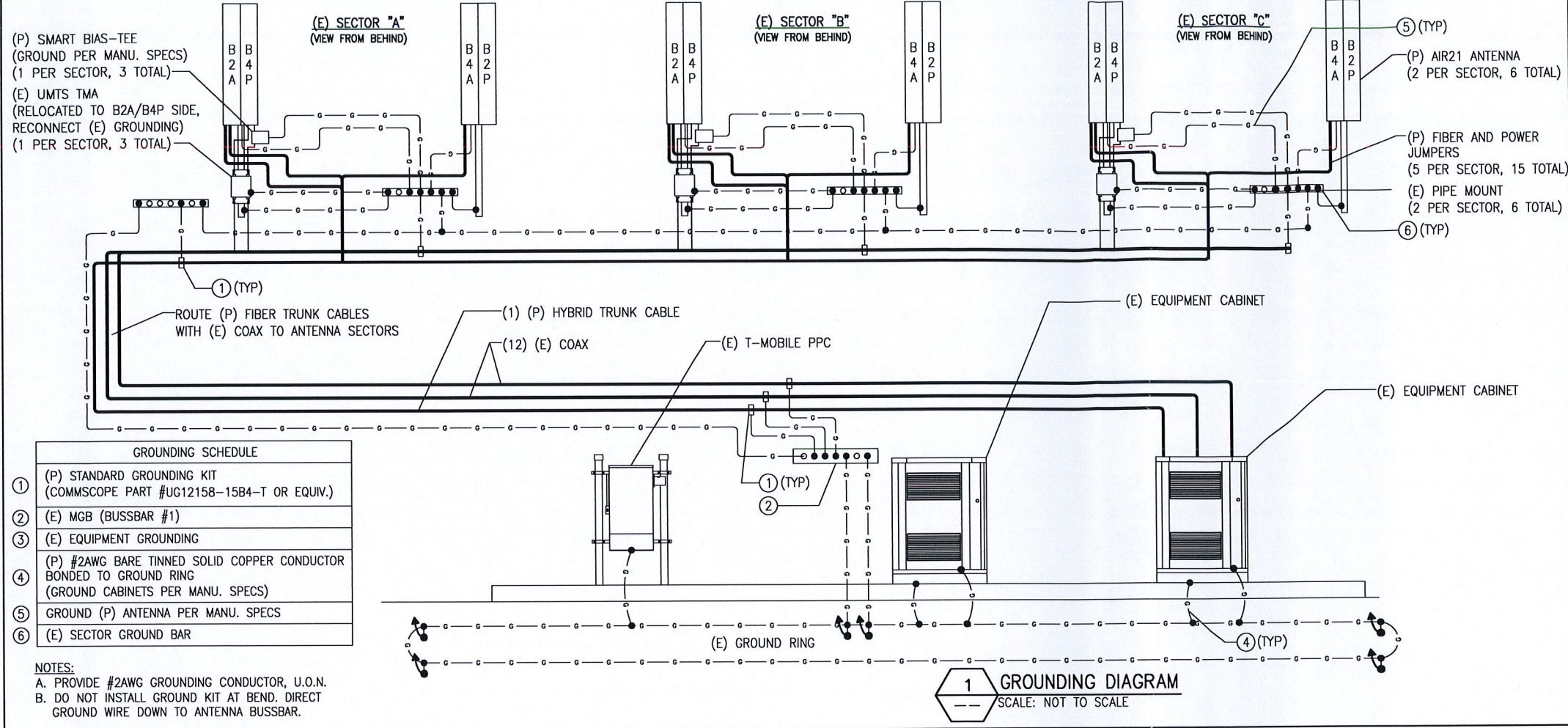
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 ANSONIA, CT 06401

SHEET TITLE
EQUIPMENT SPECIFICATIONS

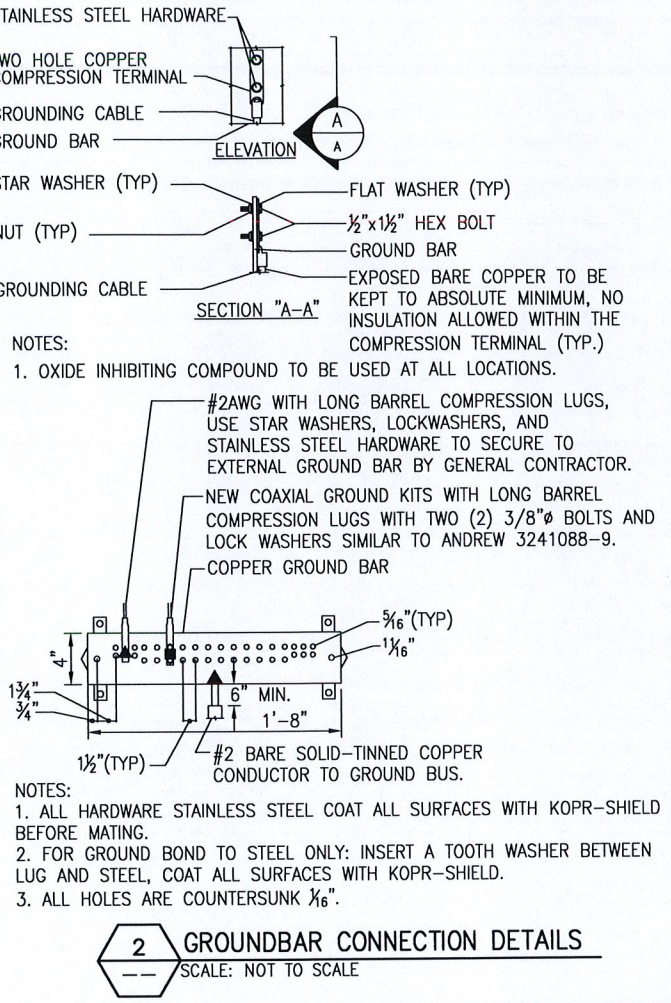
SHEET NUMBER
S-1

INFINIGY
 Design. Build. Deliver.
 11 HERBERT DRIVE
 LATHAM, NY 12110-0790
 OFFICE: (518) 690-0790
 FAX: (518) 690-0793



GROUNDING SCHEDULE	
①	(P) STANDARD GROUNDING KIT (COMMSCOPE PART #UG12158-15B4-T OR EQUIV.)
②	(E) MGB (BUSSBAR #1)
③	(E) EQUIPMENT GROUNDING
④	(P) #2AWG BARE TINNED SOLID COPPER CONDUCTOR BONDED TO GROUND RING (GROUND CABINETS PER MANU. SPECS)
⑤	GROUND (P) ANTENNA PER MANU. SPECS
⑥	(E) SECTOR GROUND BAR

NOTES:
 A. PROVIDE #2AWG GROUNDING CONDUCTOR, U.O.N.
 B. DO NOT INSTALL GROUND KIT AT BEND. DIRECT GROUND WIRE DOWN TO ANTENNA BUSSBAR.



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

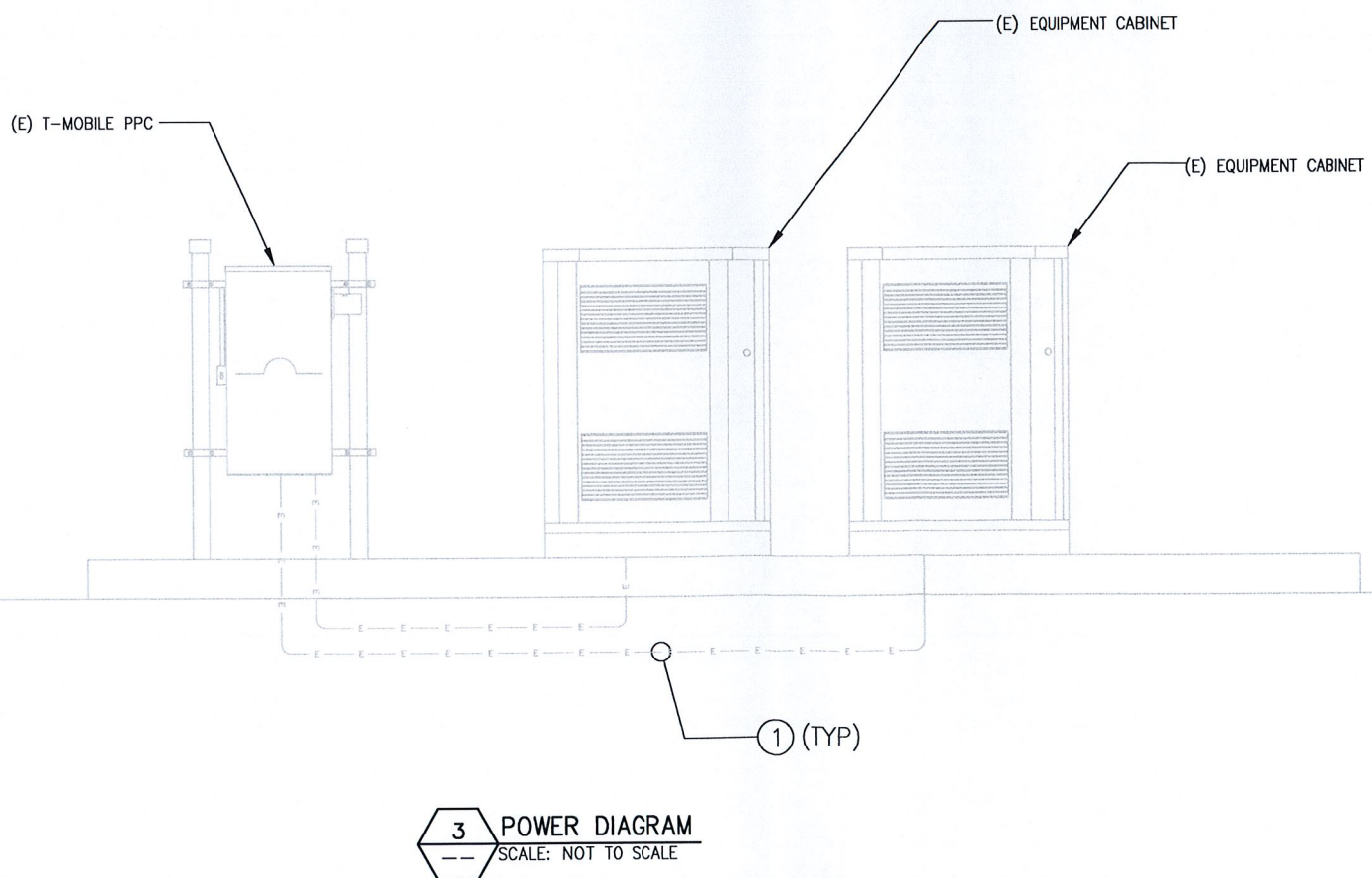
#2AWG WITH LONG BARREL COMPRESSION LUGS, USE STAR WASHERS, LOCKWASHERS, AND STAINLESS STEEL HARDWARE TO SECURE TO EXTERNAL GROUND BAR BY GENERAL CONTRACTOR.

NEW COAXIAL GROUND KITS WITH LONG BARREL COMPRESSION LUGS WITH TWO (2) 3/8" Ø BOLTS AND LOCK WASHERS SIMILAR TO ANDREW 3241088-9.

COPPER GROUND BAR

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 1/8".

CONDUIT SCHEDULE	
①	(E) POWER CONDUIT

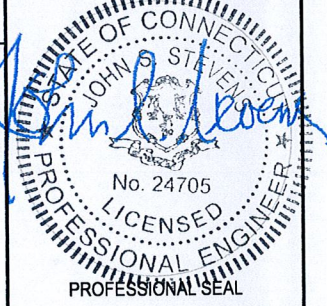


3 POWER DIAGRAM
 SCALE: NOT TO SCALE

SUBMITTALS		
DATE	DESCRIPTION	REVISION
4/24/13	REVIEW	A
5/3/13	FOR PERMIT	0

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

PROJECT NO: 317-0973
 DRAWN BY: EKM
 CHECKED BY: AJD



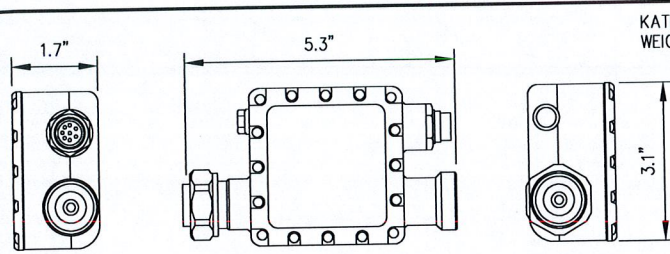
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NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NAME
CT11810A
 SPECTRASITE - ANSONIA
 401 WAKELEE AVENUE
 ANSONIA, CT 06401

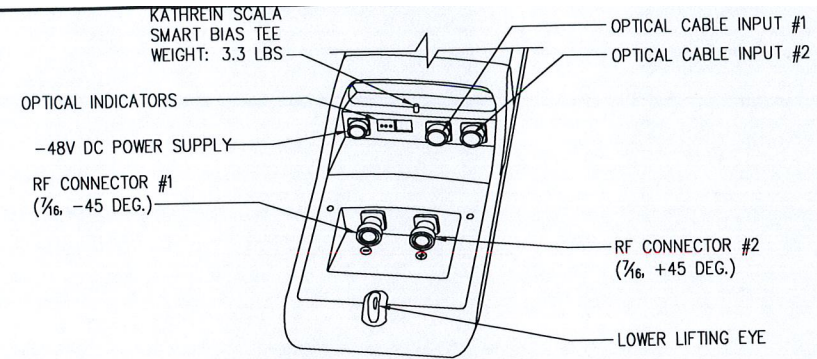
SHEET TITLE
GROUNDING & POWER DIAGRAMS

SHEET NUMBER
E-1
 SHEET 6 OF 8 SHEETS



KATHREIN SCALA SMART BIAS TEE
WEIGHT: 3.3 LBS

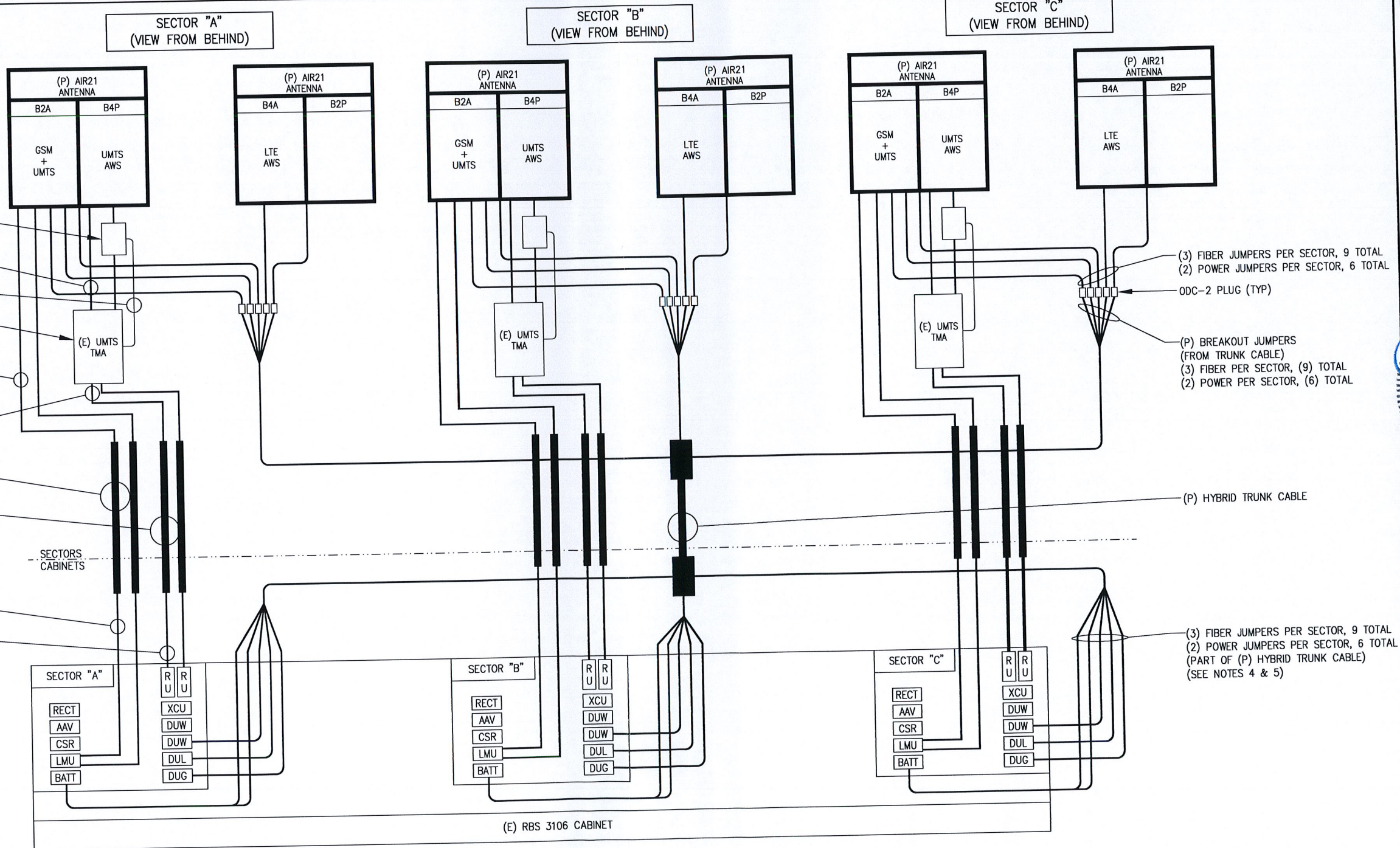
1 SMART BIAS-TEE DETAIL
NOT TO SCALE



2 ANTENNA CONNECTION INTERFACE
NOT TO SCALE

- NOTES:**
1. TAG ALL EXISTING AND PROPOSED CABLES/JUMPERS PER T-MOBILE SPECIFICATIONS (SEE RF SCHEDULE/C-3)
 2. SEE RF SCHEDULE/C-3 FOR CABLE AND JUMPER LENGTHS.
 3. IF NEW GPS ADDED TO SITE, CAP AND WEATHERPROOF ANY UNUSED COAX FOR FUTURE USE.
 4. TRIM POWER JUMPERS PER MANU. SPECS TO CORRECT LENGTH FOR CONNECTION.
 5. COIL EXCESS FIBER IN CABINET BASE.

- (P) SMART BIAS-TEE
(1) PER SECTOR, (3) TOTAL
- (E) UMTS JUMPERS (TO ANTENNA)
(2) PER SECTOR, (6) TOTAL
- (P) AISG CABLE
(1) PER SECTOR, (3) TOTAL
- (E) UMTS TMA
(1) PER SECTOR, (3) TOTAL
- (E) COAX JUMPERS (TO FEED LMUs AS NECESSARY, SEE NOTE 3)
(2) PER SECTOR, (6) TOTAL
- (E) UMTS JUMPERS (TO TMA)
(2) PER SECTOR, (6) TOTAL
- (E) COAX (TO FEED LMUs AS NECESSARY, SEE NOTE 3)
(2) PER SECTOR, (6) TOTAL
- (E) UMTS COAX
(2) PER SECTOR, (6) TOTAL
- (E) JUMPER (TO FEED LMUs AS NECESSARY, SEE NOTE 3)
(2) PER SECTOR, (6) TOTAL
- (E) UMTS JUMPERS (TO COAX)
(2) PER SECTOR, (6) TOTAL



3 2C CONFIGURATION COAX/FIBER PLUMBING DIAGRAM
NOT TO SCALE

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FAX: (518) 890-0763

SUBMITTALS		
DATE	DESCRIPTION	REVISION
4/24/13	REVIEW	A
5/3/13	FOR PERMIT	0

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

PROJECT NO: 317-0973
DRAWN BY: EKM
CHECKED BY: AJD



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SPECTRASITE - ANSONIA
401 WAKELEE AVENUE
ANSONIA, CT 06401

SHEET TITLE
COAX/FIBER PLUMBING DIAGRAM

SHEET NUMBER
E-2
SHEET 7 OF 8 SHEETS

