CTNH410A

March 4, 2014

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

RE: Notice of Exempt Modification
170 S. East Road, New Hartford, CT 06057
N 41° 49' 2"
W -72° 58' 15"

Dear Mr. Martin and Members of the Siting Council:

On behalf of T-Mobile, SBA Communications is submitting an exempt modification application to the Connecticut Siting council for modification of existing equipment at a tower facility located at 170 S. East Rd, New Hartford, CT.

The 170 S. East Rd, New Hartford, CT facility consists of a 160' Monopole Tower owned and operated by SBA Towers II LLC. In order to accommodate technological changes and enhance system performance in the State of Connecticut, T-Mobile 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 attachments is being sent to the chief elected official of the municipality in which the affected cell site is located.

As part of T-Mobile's modernization project, T-Mobile desires to upgrade their equipment to meet the new standards of 4G technology. The new equipment will allow customers to download files and browse the internet at a high rate of speed while also allowing their phones to be compatible with the latest 4G technology.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in T-Mobile's operations at the site along with the required fee of $625.

The changes to the facility do not constitute modifications as defined in 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 in R.C.S.A. Section 16-50j-72(b)(2).

1. The overall height of the structure will be unaffected.

2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound other than the new equipment cabinets.

3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.

4. The changes in radio frequency power density 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, SBA Communications on behalf of T-Mobile, respectfully submits that he 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 508.251.0720 x 3804 with any questions you may have concerning this matter.

Thank you,

Kri Pelletier
SBA Communications Corporation
33 Boston Post Road West Suite 320
Marlborough, MA 01752
508-251-0720 x 3804 + T
508-251-1755 + F
203-446-7700 + C
kpelletier@sbasite.com

T-Mobile

Equipment Modification

170 S. East Rd, New Hartford, CT
Site number CTNH410A

Tower Owner: SBA Towers II LLC

Equipment Configuration: Monopole Tower

Current and/or approved:

- (9) RFS APX16DWV-16DWV-S-E-ACU
- (6) Ericsson KRY 112 144-122 TMAs
- (12) 1-5/8" Coax and Lines

Planned Modifications:

- (3) Ericsson Air B2A B4P
- (3) Ericsson Air B4A B2P
- (3) Ericsson KRY112 144 TMAs
- (12) 1-5/8" Coax and Lines
- (1) 1-5/8" Fiber

Structural Information:

The attached structural analysis demonstrates that the tower and foundation will have adequate structural capacity to accommodate the proposed modifications.

Power Density:

The anticipated Maximum Composite contributions from the T-Mobile facility are 0.503% of the allowable FCC established general public limit. The anticipated composite MPE value for this site assuming all carriers present is 34.023% of the allowable FCC established general public limit sampled at the ground level.

Site Composite MPE %	
Carrier	MPE %
T-Mobile	0.503%
AT&T	20.540%
MetroPCS	5.630%
Sprint	5.270%
Verizon Wireless	2.080%
Total Site MPE %	34.023%

March 4, 2014

Mr. Daniel V. Jerram
First Selectman
Town of New Hartford
530 Main Street
New Hartford, CT 06057

RE: Telecommunications Facility @ 170 S. East Road, New Hartford, CT

Dear Mr. Jerram,

In order to accommodate technological changes and enhance system performance in the State of Connecticut, T-Mobile will be changing its equipment configuration at certain cell sites.

As required by Regulations of Connecticut State Agencies (R.C.S.A.) Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review T-Mobile's proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The accompanying letter to the Siting Council fully describes T-Mobile's proposal for the referenced cell site. However, if you have any questions or require any further information on our plans or the Siting Council's procedures, please call me at 508.251.0720 x 3804.

Thank you,

Kri Pelletier
SBA Communications Company
33 Boston Post Road West Suite 320
Marlborough, MA 01752
508-251-0720 x 3804 + T
508-251-1755 + F
203-446-7700 + C
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EBI Consulting
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RADIO FREQUENCY EMISSIONS ANALYSIS REPORT
EVALUATION OF HUMAN EXPOSURE POTENTIAL TO NON-IONIZING EMISSIONS

T-Mobile Existing Facility

Site ID: CTNH410A

Litchfield Bay Comm
170 Southeast Road
New Hartford, CT 06017

February 28, 2014

EBI PROJECT NUMBER: 62141020

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

EBI Consulting
environmental | engineering | due diligence

February 28, 2014

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

Re: Emissions Values for Site: **CTNH410A - Litchfield Bay Comm**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at 170 Southeast Road, New Hartford, CT, for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

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

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

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 (µW/cm2). The general population exposure limit for the cellular band is 567 µW/cm2, and the general population exposure limit for the PCS and AWS bands is 1000 µW/cm2. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure 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 170 Southeast Road, New Hartford, 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 (2140.000 MHz to 2145.000 MHz) were considered for each sector of the proposed installation
3) 2 LTE channels (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 **150 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	CTNH410A - Litchfield Bay Comm
Site Addresss	170 Southeast Road, New Hartford, CT 06017
Site Type	Monopole

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 (dBd)	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	150	144	None	0	0	48.326044	0.837842	0.08378%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-			0	-3.95	150	144	None	0	0	0	0	0.00000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	150	144	1-5/8"	0	0	24.163022	0.418921	0.04189%
2B	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	150	144	1-5/8"	0	0	24.163022	0.418921	0.04189%
														Sector total Power Density Value:		0.168%	

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 (dBd)	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	150	144	None	0	0	48.326044	0.837842	0.08378%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-			0	-3.95	150	144	None	0	0	0	0	0.00000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	150	144	1-5/8"	0	0	24.163022	0.418921	0.04189%
28	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	150	144	1-5/8"	0	0	24.163022	0.418921	0.04189%
														Sector total Power Density Value:		0.168%	

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 (dBd)	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	150	144	None	0	0	48.326044	0.837842	0.08378%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-			0	-3.95	150	144	None	0	0	0	0	0.00000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	150	144	1-5/8"	0	0	24.163022	0.418921	0.04189%
28	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	150	144	1-5/8"	0	0	24.163022	0.418921	0.04189%
														Sector total Power Density Value:		0.168%	

Site Composite MPE %

Carrier	MPE %
T-Mobile	0.503%
AT&T	20.540%
MetroPCS	5.630%
Sprint	5.270%
Verizon Wireless	2.080%
Total Site MPE %	**34.023%**

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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 **0.503% (0.168% 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 **34.023%** 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

Structural Analysis for SBA Network Services, Inc.

159' Monopole Tower (160' A.G.L.)

SBA Site Name: New Hartford 2
SBA Site ID: CT12219-A-00
T-Mobile Site ID: CTNH410A

FDH Project Number 1422R71400

Analysis Results

Tower Components	51.9%	Sufficient
Foundation	63.0%	Sufficient

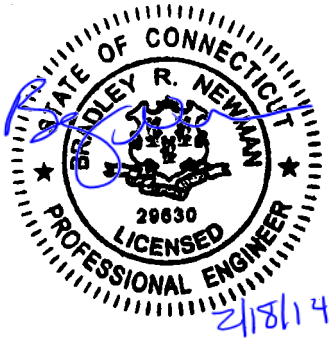
Prepared By:

Jarel Duncan

Jarel Duncan, EI
Project Engineer

Reviewed By:

Bradley R. Newman, PE
Senior Project Engineer
CT PE License No. 29630



FDH Engineering, Inc.
6521 Meridien Drive
Raleigh, NC 27616
(919) 755-1012
info@fdh-inc.com

February 18, 2014

Prepared pursuant to TIA/EIA-222-F Structural Standards for Steel Antenna Towers and Antenna Supporting Structures & 2005 Connecticut State Building Code

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EXECUTIVE SUMMARY

At the request of SBA Network Services, Inc., FDH Engineering, Inc. performed a structural analysis of the monopole located in New Hartford, CT to determine whether the tower is structurally adequate to support both the existing and proposed loads pursuant to the *Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, TIA/EIA-222-F and* 2005 Connecticut State Building Code. Information pertaining to the existing/proposed antenna loading, current tower geometry, foundation dimensions, geotechnical data, and member sizes was obtained from:

- Engineered Endeavors, Inc. (Job No. 15635) Structure Design Calculations dated October 9, 2008
- Engineered Endeavors, Inc. (Job No. 15635) Design Calculations For A Spread Footer Foundation dated October 16, 2008
- Dr. Clarence Welti, PE, PC Geotechnical Engineering (Project Name: Sprint Site CT33XC271) Geotechnical Study dated January 8, 2004
- FDH, Inc. (Project No. 09-11025T) TIA Inspection Report dated November 24, 2009
- SBA Network Services, Inc.

The *basic design wind speed* per the *TIA/EIA-222-F* standards and *2005 Connecticut State Building Code* is 80 mph without ice and 28 mph with 1 " radial ice. Ice is considered to increase in thickness with height.

Conclusions

With the existing and proposed antennas from T-Mobile in place at 150 ft, the tower meets the requirements of the *TIA/EIA-222-F* standards and *2005 Connecticut State Building Code* provided the **Recommendations** listed below are satisfied. Furthermore, provided the existing foundation was designed and constructed to support the original design reactions (see EEI Job No. 15635), the foundations should have the necessary capacity to support the existing and proposed loading. For a more detailed description of the analysis of the tower, see the **Results** section of this report.

Our structural analysis has been performed assuming all information provided to FDH Engineering, Inc. is accurate (i.e., the steel data, tower layout, existing antenna loading, and proposed antenna loading) and that the tower has been properly erected and maintained per the original design drawings.

Recommendations

To ensure the requirements of the *TIA/EIA-222-F* standards and *2005 Connecticut State Building Code* are met with the existing and proposed loading in place, we have the following recommendations:

1. The proposed coax should be installed inside the monopole's shaft.
2. The existing TMAs should be installed directly behind the proposed panel antennas.

APPURTENANCE LISTING

The proposed and existing antennas with their corresponding cables/coax lines are shown in **Table 1**. *If the actual layout determined in the field deviates from the layout, FDH Engineering, Inc. should be contacted to perform a revised analysis.*

Table 1 - Appurtenance Loading

Existing Loading:

Antenna Elevation (ft)	Description	Coax and Lines [1]	Carrier	Mount Elevation (ft)	Mount Type
163.25	(6) Swedcom SCE-6014	(12) 1-5/8"	Verizon	160	(1) 14' Low Profile Platform
162	(3) Antel BXA-70063-6CF (3) Antel BXA 185060/12CF				
150	(9) RFS APX16DWV-16DWV-S-E-ACU (6) Ericsson KRY 112 144-122 TMAs	(12) 1-5/8"	T-Mobile	150	(3) T-Arms
130	(3) Powerwave P65-17-XLH-RR (6) Ericsson RRUS-11 RRUs (1) Andrew ABT-DFDM-ADBH Surge Arrestor (1) Raycap DC6-48-60-18-8F Surge Arrestor	(24) 1-5/8" (1) 7/16" Fiber[2] (2) 3/4" DC[2]	New Cingular	129	(3) 12' T-Frames
129	(9) Powerwave 7770.00 (24) Powerwave LGP21401 TMAs				
108.75	(3) RFS APXV18-2065175	(6) 1-5/8"	Pocket	108.75	(3) 6' x 2" Pipe Mounts

1.) Coax installed inside the pole's shaft unless otherwise noted.

2.) New Cingular's (1) 7/16" fiber and (2) 3/4" DC power cables are installed inside (1) 3" conduit inside the pole's shaft.

Proposed Loading:

Antenna Elevation (ft)	Description	Coax and Lines	Carrier	Mount Elevation (ft)	Mount Type
150	(3) Ericsson Air B2A B4P (3) Ericsson Air B4A B2P (3) Ericsson KRY112 144 TMAs	(12) 1-5/8" (1) 1-5/8" Fiber	T-Mobile	150	(3) T-Arms

RESULTS

The following yield strength of steel for individual members was used for analysis:

Table 2 - Material Strength

Member Type	Yield Strength
Tower Shaft Sections	65 ksi
Base Plate	50 ksi
Anchor Bolts	75 ksi

Table 3 displays the summary of the ratio (as a percentage) of force in the member to their capacities. Values greater than 100% indicate locations where the maximum force in the member exceeds its capacity. *Note: Capacities up to 100% are considered acceptable.* **Table 4** displays the maximum foundation reactions.

If the assumptions outlined in this report differ from actual field conditions, FDH Engineering, Inc. should be contacted to perform a revised analysis. Furthermore, as no information pertaining to the allowable twist and sway requirements for the existing or proposed appurtenances was provided, deflection and rotation were not taken into consideration when performing this analysis.

See the **Appendix** for detailed modeling information

Table 3 - Summary of Working Percentage of Structural Components

Section No.	Elevation ft	Component Type	Size	% Capacity*	Pass Fail
L1	160 - 140.667	Pole	TP33.07x29x0.1875	13.7	Pass
L2	140.667 - 93.0837	Pole	TP42.6x31.7126x0.25	49.0	Pass
L3	93.0837 - 46.5	Pole	TP51.79x40.8846x0.375	48.8	Pass
L4	46.5 - 1	Pole	TP60.5x49.5836x0.4375	51.9	Pass
		Anchor Bolts	(24) 2.25"ø w/ BC = 68"	40.3	Pass
		Base Plate	74"ø PL x 3.25" thk.	27.1	Pass

* Capacities include a 1/3 allowable stress increase for wind.

Table 4 - Maximum Base Reactions

Base Reactions	Current Analysis *(TIA/EIA-222-F)*	Original Design *(ANSI/TIA-222-G)*
Axial	43 k	49 k
Shear	25 k	51 k
Moment	2,729 k-ft	5,847 k-ft

GENERAL COMMENTS

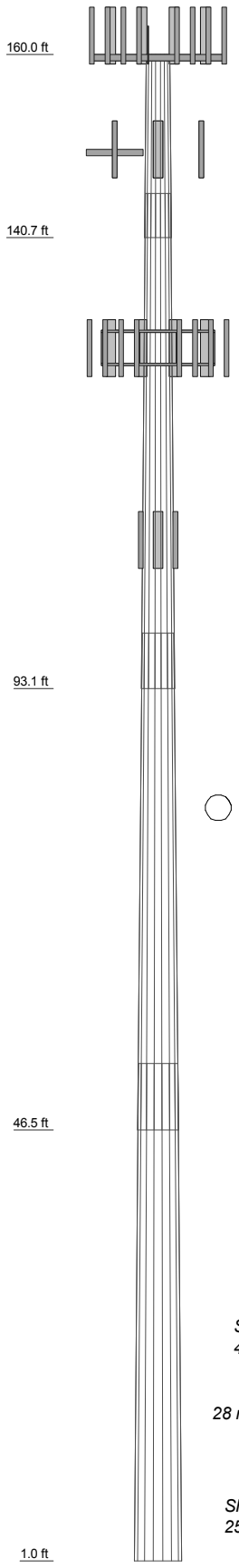
This engineering analysis is based upon the theoretical capacity of the structure. It is not a condition assessment of the tower and its foundation. It is the responsibility of SBA Network Services, Inc. to verify that the tower modeled and analyzed is the correct structure (with accurate antenna loading information) modeled. If there are substantial modifications to be made or the assumptions made in this analysis are not accurate, FDH Engineering, Inc. should be notified immediately to perform a revised analysis.

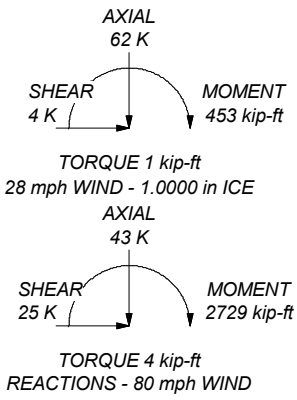
LIMITATIONS

All opinions and conclusions are considered accurate to a reasonable degree of engineering certainty based upon the evidence available at the time of this report. All opinions and conclusions are subject to revision based upon receipt of new or additional/updated information. All services are provided exercising a level of care and diligence equivalent to the standard and care of our profession. No other warranty or guarantee, expressed or implied, is offered. Our services are confidential in nature and we will not release this report to any other party without the client's consent. The use of this engineering work is limited to the express purpose for which it was commissioned and it may not be reused, copied, or distributed for any other purpose without the written consent of FDH Engineering, Inc.

APPENDIX

Section	1	2	3	4
Length (ft)	19.33	52.25	52.42	52.50
Number of Sides	18	18	18	18
Thickness (in)	0.1875	0.2500	0.3750	0.4375
Socket Length (ft)	4.67	5.83	7.00	
Top Dia (in)	29.0000	31.7126	40.8846	49.5836
Bot Dia (in)	33.0700	42.6000	51.7900	60.5000
Grade	A572-65			
Weight (K) 29.7	1.2	5.2	9.8	13.5





DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
(2) SCE-6014 w/ Mount Pipe	160	AIR B2A/B4P w/Mount Pipe	150
(2) SCE-6014 w/ Mount Pipe	160	(3) 7770.00 W/Mount Pipe	129
(2) SCE-6014 w/ Mount Pipe	160	(3) 7770.00 W/Mount Pipe	129
BXA-70063-6CF w/ Mount Pipe	160	P65-17-XLH-RR w/Mount Pipe	129
BXA-70063-6CF w/ Mount Pipe	160	P65-17-XLH-RR w/Mount Pipe	129
BXA-70063-6CF w/ Mount Pipe	160	P65-17-XLH-RR w/Mount Pipe	129
BXA 185060/12CF w/ Mount Pipe	160	(8) LGP21401 TMA	129
BXA 185060/12CF w/ Mount Pipe	160	(8) LGP21401 TMA	129
BXA 185060/12CF w/ Mount Pipe	160	(8) LGP21401 TMA	129
(1) 14' Low Profile Platform	160	(2) RRUS-11	129
Lightning Rod	159	(2) RRUS-11	129
AIR B2A/B4P w/Mount Pipe	150	(2) RRUS-11	129
AIR B2A/B4P w/Mount Pipe	150	ABT-DFDM-ADBH	129
AIR B4A/B2P w/Mount Pipe	150	DC6-48-60-18-8F Surge Arrestor	129
AIR B4A/B2P w/Mount Pipe	150	(3) 12' T-Frames	129
AIR B4A/B2P w/Mount Pipe	150	(3) 7770.00 W/Mount Pipe	129
KRY 112 144 TMA	150	APXV18-2065175 w/Mount Pipe	108.75
KRY 112 144 TMA	150	APXV18-2065175 w/Mount Pipe	108.75
KRY 112 144 TMA	150	APXV18-2065175 w/Mount Pipe	108.75
(3) T-Arms	150		

MATERIAL STRENGTH

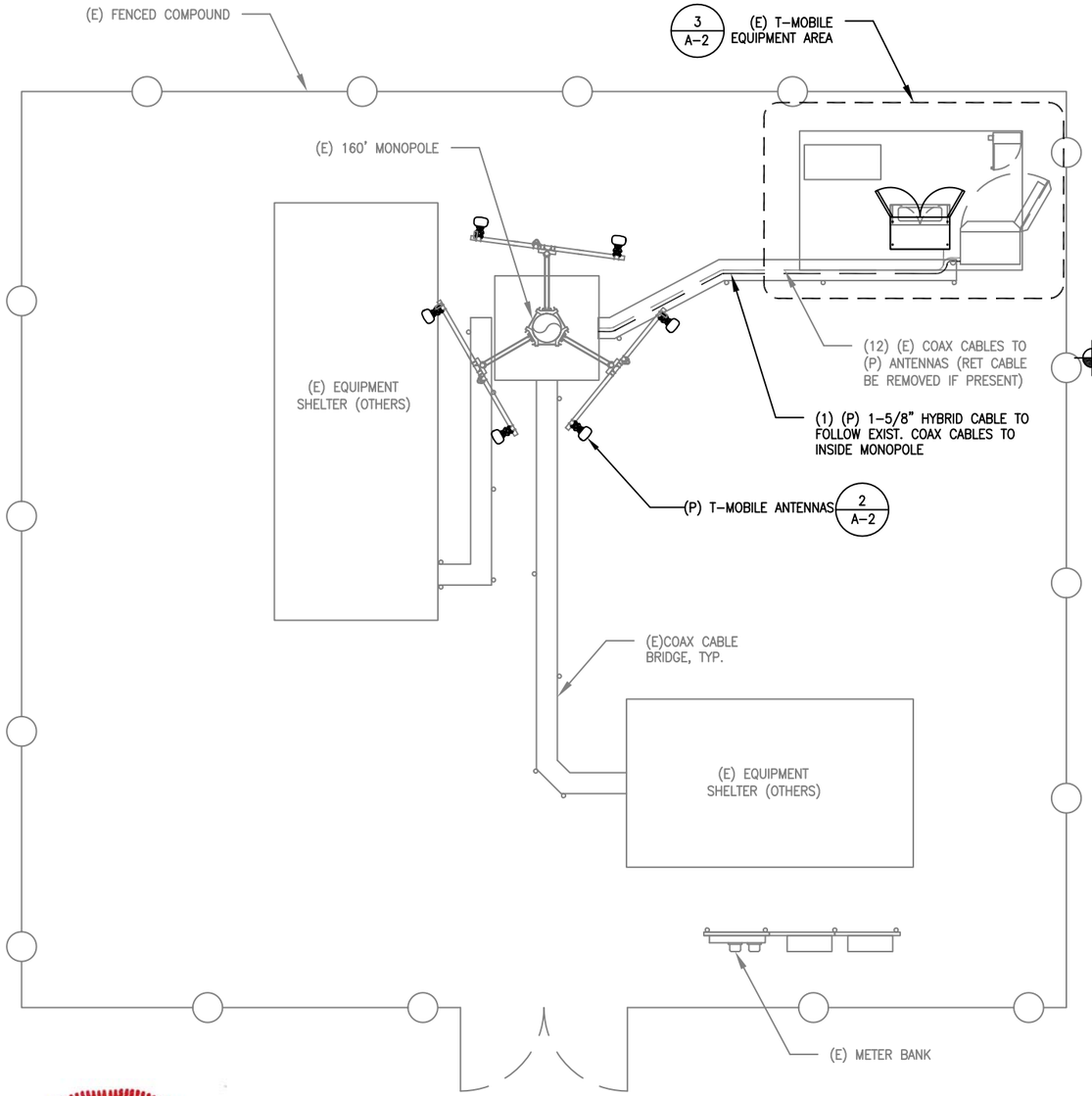
GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

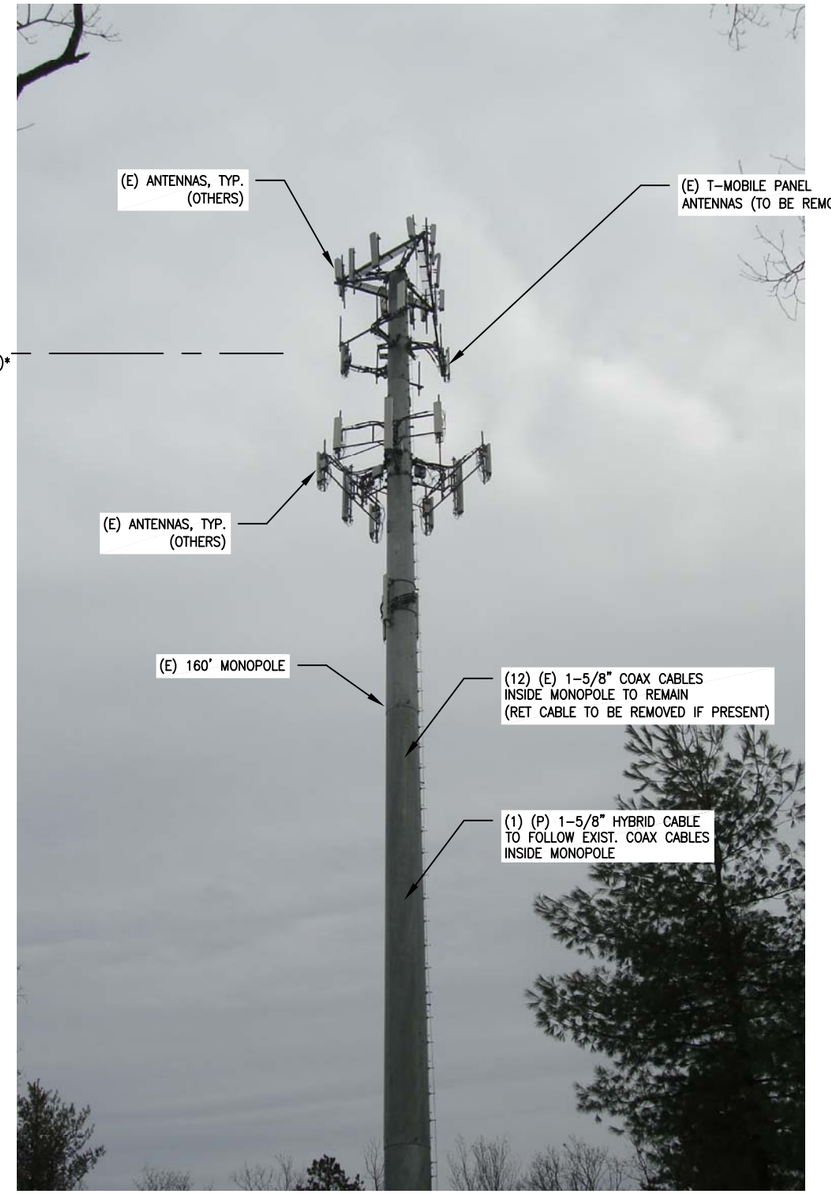
TOWER DESIGN NOTES

1. Tower is located in Litchfield County, Connecticut.
2. Tower designed for a 80 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 28 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 50 mph wind.
5. TOWER RATING: 51.9%

FDH Engineering, Inc.
6521 Meridien Drive
Raleigh, NC 27616
Phone: (919) 755-1012
FAX: (919) 755-1031
Tower Analysis

Job: *New Hartford 2, CT12219-A-00*			
Project: *1422R71400*			
Client: SBA Network Services, Inc.	Drawn by: Jarel Duncan	App'd:	
Code: TIA/EIA-222-F	Date: 02/18/14	Scale: NTS	
Path:		Dwg No. E-1	





STATE OF CONNECTICUT
MARC R. CHRETIEN
No. 29307
LICENSED
PROFESSIONAL ENGINEER

1 / A-1 **COMPOUND PLAN**
SCALE: 3/32"=1'-0"
0' 5'-4" 10'-8" 21'-4"

NOTE:
GROUND EQUIPMENT NOT SHOWN FOR CLARITY

2 / A-1 **EXISTING ELEVATION**
SCALE: NTS

*NOTE:
ANTENNA ELEVATION BASED ON CLIENT-PROVIDED INFORMATION

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SBA COMMUNICATIONS CORPORATION
33 BOSTON POST ROAD WEST, SUITE 320
MARLBOROUGH, MA 01752
PHONE: 508-366-5505

SITE NUMBER: CTNH410A
SITE NAME: SBA NEW HARTFORD 2, CT
170 S. EAST ROAD
NEW HARTFORD, CT 06057

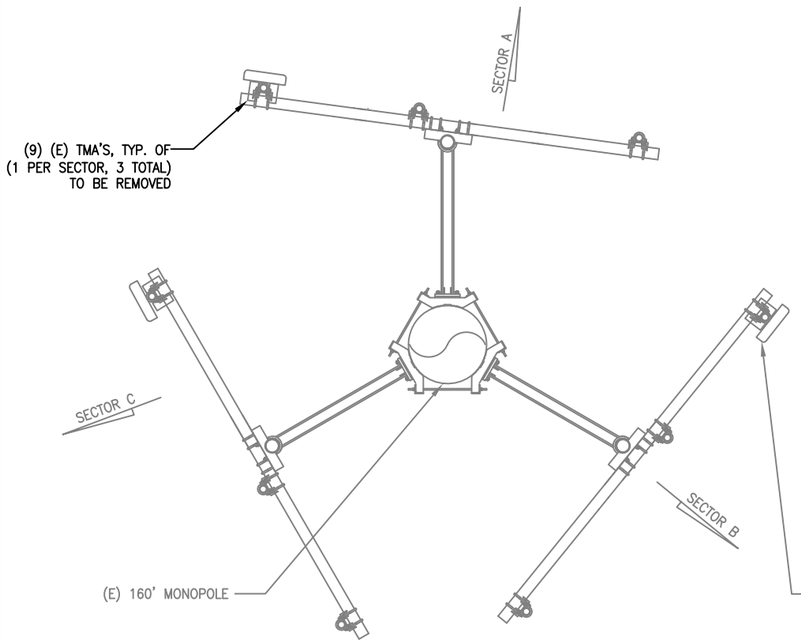
T-MOBILE NORTHEAST LLC
35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002
OFFICE: (860) 648-1116

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	02/03/14	CONSTRUCTION	SOS	MRC	MRC

SCALE: AS SHOWN | DESIGNED BY: MRC | DRAWN BY: SOS

T-MOBILE
COMPOUND PLAN AND ELEVATION

JOB NUMBER	DRAWING NUMBER	REV
CTNH410A	A-1	0



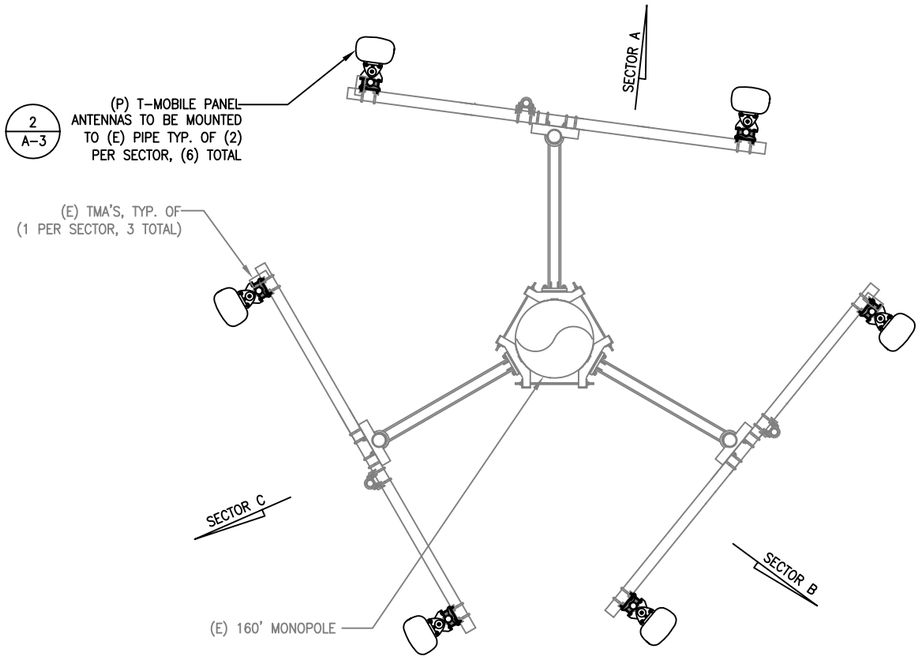
EXISTING ANTENNA SCHEDULE

SECTOR	MAKE	MODEL#	SIZE (INCHES)
SECTOR A:	KAT	APX16DWV-16DWV-S	13x3.15x59.9
SECTOR B:	RFS	APX16DWV-16DWV-S	13x3.15x59.9
SECTOR C:	RFS	APX16DWV-16DWV-S	13x3.15x59.9

PROPOSED ANTENNA SCHEDULE

SECTOR	MAKE	MODEL#	SIZE (INCHES)
SECTOR A:	ERICSSON	AIR21 B2A/B4P	12x8x56
	ERICSSON	AIR21 B2A/B4P	12x8x56
SECTOR B:	ERICSSON	AIR21 B2A/B4P	12x8x56
	ERICSSON	AIR21 B2A/B4P	12x8x56
SECTOR C:	ERICSSON	AIR21 B2A/B4P	12x8x56
	ERICSSON	AIR21 B2A/B4P	12x8x56

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



1 A-2 EXISTING ANTENNA PLAN

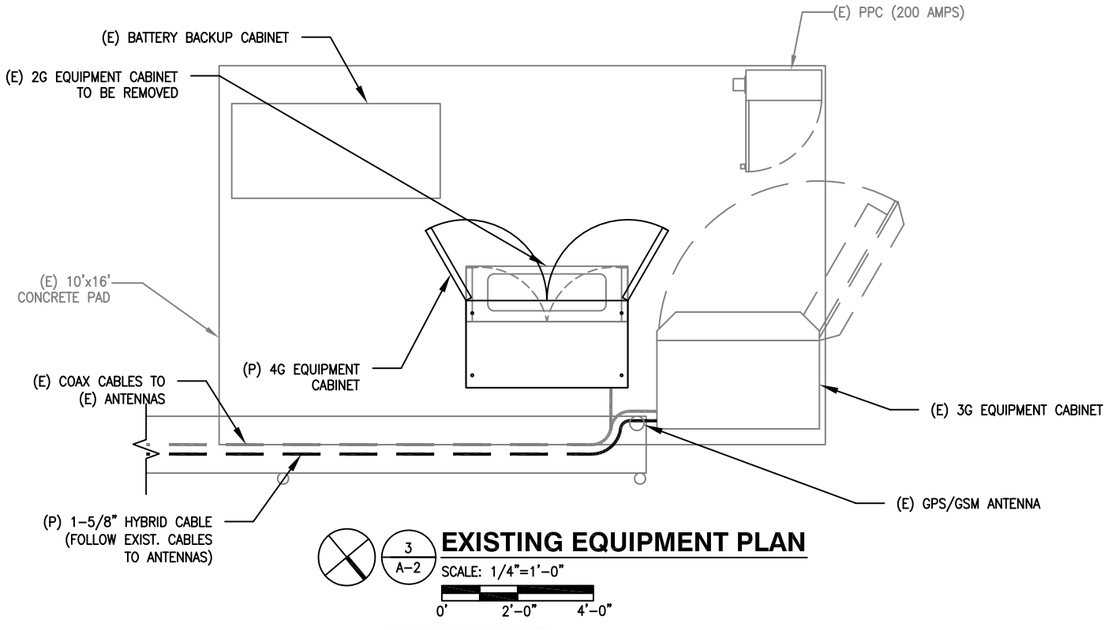
SCALE: 1/4"=1'-0"

0' 2'-0" 4'-0"

2 A-2 PROPOSED ANTENNA PLAN

SCALE: 1/4"=1'-0"

0' 2'-0" 4'-0"



3 A-2 EXISTING EQUIPMENT PLAN

SCALE: 1/4"=1'-0"

0' 2'-0" 4'-0"

4 A-3 EXISTING EQUIPMENT AREA.

N.T.S.

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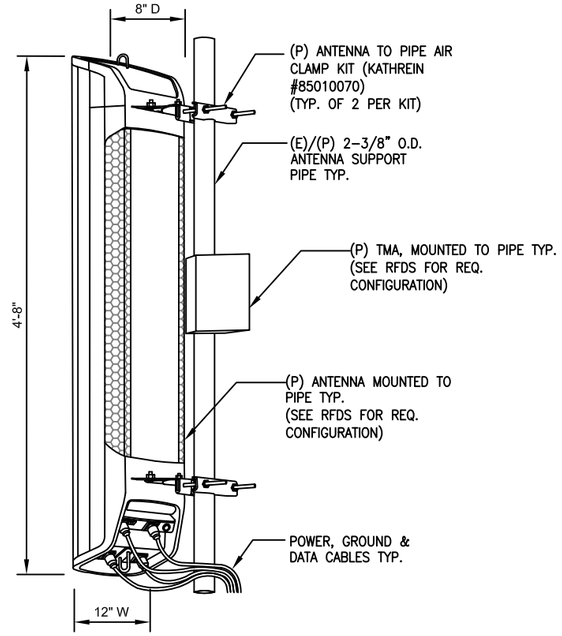
PLANS AND ANTENNA SCHEDULES

JOB NUMBER	DRAWING NUMBER	REV
CTNH410A	A-2	0

1/A-3 **EXISTING ANTENNA MOUNT TYP.**
N.T.S.

2/A-3 **PROPOSED ANTENNA MOUNT TYP.**
N.T.S.

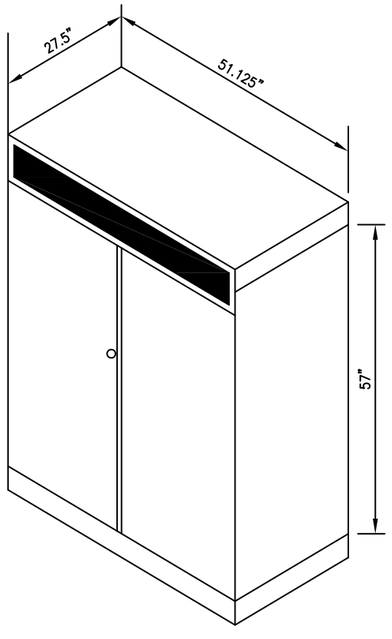


3/A-3 **ANTENNA MOUNT TYP.**
SCALE: NTS

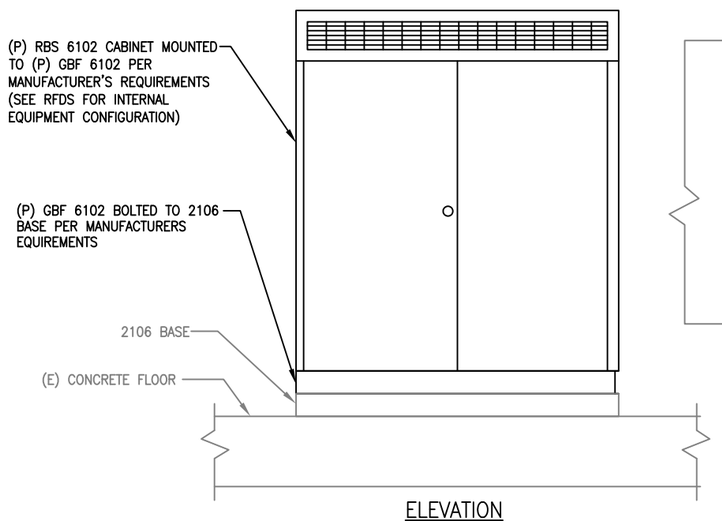
RBS 6102 OUTDOOR DIMENSIONS	
CABINET	DEPTH x WIDTH x HEIGHT
OUTDOOR RBS 6102	27.5" x 51.125" x 57"

RBS 6102 OUTDOOR WEIGHT		
CABINET	APPROX. MAX WEIGHT	MAX. FLOOR LOADING
OUTDOOR RBS 6102	1028 LBS.	

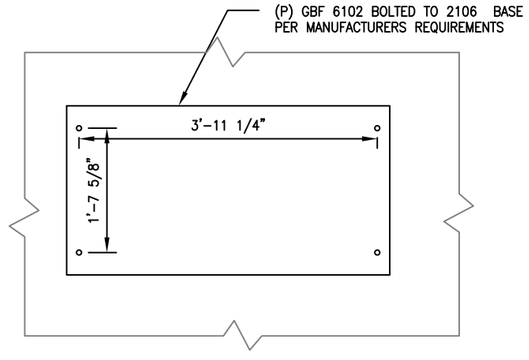
RBS 6102 MINIMUM CLEARANCE	
DIRECTION	MINIMUM CLEARANCE
CABINET REAR	8"
CABINET SIDES	4"
ABOVE THE CABINET	20"
IN FRONT OF THE CABINET	28"



4/A-3 **RBS 6102 CABINET**
SCALE: N.T.S.



ELEVATION



PLAN

5/A-3 **RBS 6102 MOUNTING DETAIL**
SCALE: 1"=2'-0"

0' 6" 1' 2'

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DETAILS

JOB NUMBER	DRAWING NUMBER	REV
CTNH410A	A-3	0