



July 10, 2014

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

RE: Notice of Exempt Modification
1293 Bantam Road
Litchfield, CT 06759
Sprint Site #: NV2.5_CT33XC024
N 41° 43' 01.86"
W -73° 15' 39.34"

Dear Mr. Martin and Members of the Siting Council:

On behalf of Sprint Spectrum, SBA Communications is submitting an exempt modification application to the Connecticut Siting Council for modification of existing equipment at a tower facility located at 1293 Bantam Road, Litchfield, CT 06759.

The 1293 Bantam Road facility consists of a 149' MONOPOLE Tower owned and operated by SBA Towers V, LLC. In order to accommodate technological changes and enhance system performance in the State of Connecticut, Sprint Spectrum 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 Sprint's Network Vision modification project, Sprint 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 Sprint'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 Sprint Spectrum, 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 (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@sbsite.com



**Sprint Spectrum
Equipment Modification**

1293 Bantam Road, Litchfield, CT 06750

Tower Owner: SBA Towers V, LLC

Equipment Configuration: MONOPOLE Tower

Current and/or approved:

- (3) RFS APXVSP18-C-A20
- (3) Alcatel Lucent 1900 MHz RRHs
- (3) Alcatel Lucent 800 MHz RRHs
- (3) Alcatel Lucent 800 MHz Filters
- (4) RFS ACU-A20-N RETs
- (3) 1-1/4" Feed lines

Planned Modifications:

At 150'

- (3) RFS APXVSP18-C-A20
- (3) Alcatel Lucent 1900 MHz RRHs
- (3) Alcatel Lucent 800 MHz RRHs
- (3) Alcatel Lucent 800 MHz Filters
- (4) RFS ACU-A20-N RETs
- (3) 1-1/4" Feed lines

At 147.5'

- (3) RFS APXVTM14-C-I20
- (3) Alcatel Lucent TD-RRH8x20-25 RRHs
- (1) 1-1/4" 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 Sprint facility are 12.012% of the allowable FCC established general public limit. The anticipated composite MPE value for this site assuming all carriers present is 46.622% of the allowable FCC established general public limit sampled at the ground level.

Site Composite MPE %	
Carrier	MPE %
Sprint	12.012%
AT&T	19.470%
Verizon Wireless	15.140%
Total Site MPE %	46.622%



July 10, 2014

Mr. Leo Paul, Jr.
First Selectman
Town of Litchfield
74 West Street
Litchfield, CT 06759

RE: Telecommunications Facility @ 1293 Bantam Road, Litchfield, CT 06759

Dear Mr. Paul,

In order to accommodate technological changes and enhance system performance in the State of Connecticut, Sprint Spectrum 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 Sprint'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 Sprint'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,

A handwritten signature in black ink, appearing to read "Kri Pelletier", is positioned above the typed name.

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
kpelletier@sbsite.com



July 10, 2014

Robert & Judith Hammer
30 Revere Road
Washington CT 06793
and
William L. & Deborah A. Downes
89 Stoddard Road
Morris CT 06763

RE: Telecommunications Facility @ 1293 Bantam Road, Litchfield, CT 06759

Dear Mr. and Mrs. Hammer and Mr. and Mrs. Downes,

In order to accommodate technological changes and enhance system performance in the State of Connecticut, Sprint Spectrum 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 Sprint'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 Sprint'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
kpelletier@sbsite.com

RADIO FREQUENCY FCC REGULATORY COMPLIANCE
MAXIMUM PERMISSIBLE EXPOSURE (MPE) ASSESSMENT

Sprint Existing Facility

Site ID: CT33XC024

Aldenville 1

1293 Bantam Road
Litchfield, CT 06759

May 21, 2014

EBI Project Number: 62143083

May 21, 2014

Sprint
Attn: RF Engineering Manager
1 International Boulevard, Suite 800
Mahwah, NJ 07495

Re: Radio Frequency Maximum Permissible Exposure (MPE) Assessment for Site:
CT33XC024 - Aldenville 1

Site Total: 46.622% - MPE % in full compliance

EBI Consulting was directed to analyze the proposed upgrades to the existing Sprint facility located at 1293 Bantam Road, Litchfield, CT, for the purpose of determining whether the radio frequency (RF) exposure levels from the proposed Sprint equipment upgrades 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 (850 MHz Band) is approximately $567 \mu\text{W}/\text{cm}^2$, and the general population exposure limit for the 1900 MHz and 2500 MHz bands 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 upgrades to the existing Sprint Wireless antenna facility located at 1293 Bantam Road, Litchfield, CT, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. All calculations were performed assuming the main lobe of the antenna was focused at the base of the tower to present a worst case scenario. Actual values seen from this site will be dramatically less than those shown in this report. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

For all calculations, all emissions were calculated using the following assumptions:

- 1) 2 channels in the 1900 MHz Band were considered for each sector of the proposed installation.
- 2) 1 channel in the 800 MHz Band was considered for each sector of the proposed installation
- 3) 2 channels in the 2500 MHz Band 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 maximum gain of the antenna per the antenna manufactures supplied specifications was used in this direction.

- 6) The antennas used in this modeling are the RFS APXVSPP18-C-A20 and the RFS APXVTMM-C-120. This is based on feedback from the carrier with regards to anticipated antenna selection. The RFS APXVSPP18-C-A20 has a 15.9 dBd gain value at its main lobe at 1900 MHz and 13.4 dBd at its main lobe for 850 MHz. The RFS APXVTMM-C-120 has a 15.9 dBd gain value at its main lobe at 2500 MHz. All calculations were performed assuming the main lobe of the antenna was focused at the base of the tower to present a worst case scenario.
- 7) The antenna mounting height centerlines for the proposed antennas are 1 antenna per sector at **150 feet** above ground level (AGL) **and** 1 antenna per sector at **147.5 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	CT33XC024 - Aldenville 1
Site Address	1293 Bantam Road, Litchfield, CT 06759
Site Type	Monopole

Sector 1

Antenna Number	Antenna Make	Antenna Model	Radio Type	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 (dB)	ERP	Power Density Percentage
1a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	2	40	15.9	150	144	1/2 "	0.5	3	695.12033	1.20515%
1a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	150	144	1/2 "	0.5	3	195.44744	0.59762%
1B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	15.9	147.5	141.5	1/2 "	0.5	3	695.12033	2.20125%
Sector total Power Density Value:																4.004%

Sector 2

Antenna Number	Antenna Make	Antenna Model	Radio Type	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 (dB)	ERP	Power Density Percentage
2a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	2	40	15.9	150	144	1/2 "	0.5	3	695.12033	1.20515%
2a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	150	144	1/2 "	0.5	3	195.44744	0.59762%
2B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	15.9	147.5	141.5	1/2 "	0.5	3	695.12033	2.20125%
Sector total Power Density Value:																4.004%

Sector 3

Antenna Number	Antenna Make	Antenna Model	Radio Type	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 (dB)	ERP	Power Density Percentage
3a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	2	40	15.9	150	144	1/2 "	0.5	3	695.12033	1.20515%
3a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	150	144	1/2 "	0.5	3	195.44744	0.59762%
3B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	15.9	147.5	141.5	1/2 "	0.5	3	695.12033	2.20125%
Sector total Power Density Value:																4.004%

Site Composite MPE %	
Carrier	MPE %
Sprint	12.012%
AT&T	19.470%
Verizon Wireless	15.140%
Total Site MPE %	46.622%

Summary

All calculations performed for this analysis yielded results that were well within the allowable limits for general public Maximum Permissible Exposure (MPE) to radio frequency energy.

The anticipated Maximum Composite contributions from the Sprint facility are **12.012% (4.004% 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 **46.622%** of the allowable FCC established general public limit sampled at 6 feet above ground level. This total composite site value is based upon MPE values listed in the Connecticut Siting Council database for existing carrier emissions.

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



Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803



**Structural Analysis for
SBA Network Services, Inc.**

149' Monopole Tower

**SBA Site Name: Litchfield 3
SBA Site ID: CT12215-A-01
Sprint Site ID: CT33XC024**

FDH Project Number 1467DY1400

Analysis Results

Tower Components	99.9%	Sufficient
Foundation	94.1%	Sufficient

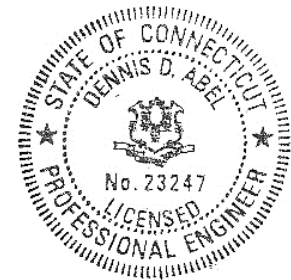
Prepared By:

Kristi Gardner, EI
Project Engineer

Reviewed By:

Dennis D. Abel, PE
Director – Structural Engineering
CT PE License No. 23247

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



June 26, 2014

TABLE OF CONTENTS

EXECUTIVE SUMMARY3

 Conclusions.....3

 Recommendations3

APPURTENANCE LISTING4

RESULTS5

GENERAL COMMENTS6

LIMITATIONS6

APPENDIX7

EXECUTIVE SUMMARY

At the request of SBA Network Services, Inc., FDH Engineering, Inc. performed a structural analysis of the monopole located in Bantam, 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 Building Code (CBC)*. Information pertaining to the existing/proposed antenna loading, current tower geometry, geotechnical data, foundation dimensions and member sizes was obtained from:

- Engineered Endeavors, Inc. (Job No. 12278) Structure and Foundation Design Calculations dated January 26, 2004
- Engineered Endeavors, Inc. (Job No. 12278) Design Calculations for a Spread Footer Foundation dated January 27, 2004
- Clarence Welti Associates, Inc. (Project Name: Sprint Site CT33XC204) Geotechnical Study dated January 24, 2004
- FDH, Inc. (Job No. 1300721700) TIA Inspection Report dated May 21, 2013
- FDH Engineering, Inc. (Project No. 12-06691E S3) Modification Drawings for a 149' Monopole dated February 6, 2013
- FDH, Inc. (Project No. 1300721700) Modification Inspection Report dated July 10, 2013
- FDH Engineering, Inc. (Project No. 1467DY1400) Modification Drawings for a 149' Monopole dated June 26, 2014
- SBA Network Services, Inc.

The *basic design wind speed* per the *TIA/EIA-222-F* standards and *2005 CBC* 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 Sprint in place at 150 ft and 147.5 ft, the tower meets the requirements of the *TIA/EIA-222-F* standards and *2005 CBC* provided the **Recommendations** listed below are satisfied. Furthermore, provided the foundation was constructed per the original design drawings (see Engineered Endeavors Job No. 12278) and using the given soil parameters (see Clarence Welti Project Name: Sprint Site CT33XC204), the foundation should have the necessary capacity to support both the proposed and existing 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 CBC* are met with the existing and proposed loading in place, we have the following recommendations:

1. The proposed feed line should be installed inside the pole's shaft.
2. RRU/RRH Stipulation: The equipment may be installed in any arrangement as determined by the client.
4. Modifications per FDH Engineering, Inc. (Project No. 1467DY1400) Modification Drawings for a 149' Monopole dated June 26, 2014 must be installed for this analysis to be valid.

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	Feed Lines ¹	Carrier	Mount Elevation (ft)	Mount Type
150	(3) RFS APXVSP18-C-A20 (3) Alcatel Lucent 1900 MHz RRHs (3) Alcatel Lucent 800 MHz RRHs (3) Alcatel Lucent 800 MHz Filters (4) RFS ACU-A20-N RETs	(3) 1-1/4"	Sprint	149	(1) 13.5' Low Profile Platform
138	(6) Antel LPA-80080/6CF (3) Antel BXA-70063/6CF-2 (3) Antel BXA-171085-12BF-2 (6) RFS FD9R6004/2C-3L Diplexers	(12) 1-5/8"	Verizon	136.5	(1) 13.5' Low Profile Platform
128.5	(6) Powerwave 7770 (3) KMW AM-X-CD-16-65-00T-RETs (12) Powerwave LGP21401 TMAs (6) Ericsson RRUS11 RRUs (1) Andrew ABT-DF-DMADBH Surge Arrestor (1) Raycap DC6-48-60-18-8F Surge Arrestor	(12) 1-5/8" (1) 7/16" Fiber ² (2) 3/4" Power ²	AT&T	126.5	(1) 13.5' Low Profile Platform
73.3	(1) GPS	(1) 1/2"	Sprint	71.8	(1) 3.5' Standoff

1. Feed lines installed inside the monopole's shaft unless otherwise noted.

2. Currently, New Cingular has (1) 7/16" fiber cable and (2) 3/4" power cables installed inside (1) 3" conduit.

Proposed Loading:

Antenna Elevation (ft)	Description	Feed Lines	Carrier	Mount Elevation (ft)	Mount Type
150	(3) RFS APXVSP18-C-A20 (3) Alcatel Lucent 1900 MHz RRHs (3) Alcatel Lucent 800 MHz RRHs (3) Alcatel Lucent 800 MHz Filters (4) RFS ACU-A20-N RETs	(3) 1-1/4"	Sprint	149	(1) 13.5' Low Profile Platform
147.5	(3) RFS APXVTM14-C-I20 (3) Alcatel Lucent TD-RRH8x20-25 RRHs	(1) 1-1/4" Fiber			

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	60 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	149 - 115	Pole	TP29.0321x18x0.1875	83.6	Pass
	115.0 - 100	Pole w/ Modifications		81.8	Pass
	100 - 96.17	Pole		90.7	Pass
L2	96.17 - 90.0	Pole	TP38.7008x27.793x0.25	95.7	Pass
	90.0 - 47.55	Pole w/ Modifications		99.4	Pass
L3	47.55 - 0	Pole w/ Modifications	TP48x37.0966x0.3125	90.0	Pass
		Anchor Bolts	(12) 2.25" Ø on 57" Ø BC	99.9	Pass
		Base Plate w/ Stiffeners	63" Ø x 1.75" thk PL	88.2	Pass

*Capacities include 1/3 allowable stress increase per TIA/EIA-222-F.

Table 4 - Maximum Base Reactions

Base Reactions	Current Analysis* (TIA/EIA-222-F)	Original Design (TIA/EIA-222-F)
Axial	42 k	20 k
Shear	24 k	18 k
Moment	2,540 ft	1,855 k-ft

*Foundation determined to be adequate per independent analysis.

GENERAL COMMENTS

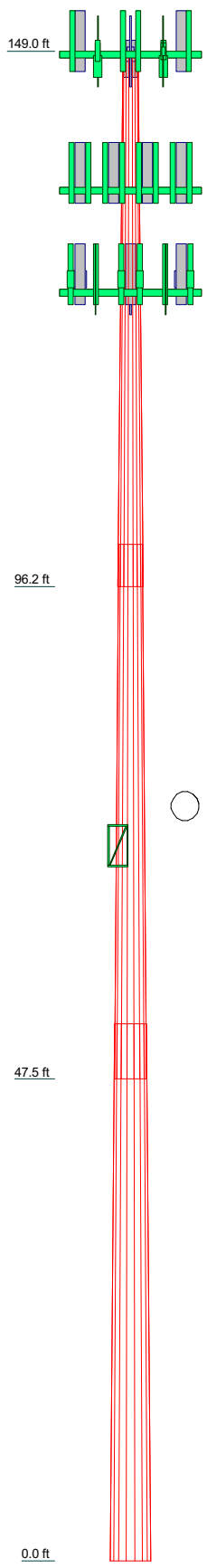
This engineering analysis is based upon the theoretical capacity of the structure. It is not a condition assessment of the tower and its foundation. It is the responsibility of SBA Network Services, Inc. to verify that the tower modeled and analyzed is the correct structure (with accurate antenna loading 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
Length (ft)	52.83	52.79	52.97
Number of Sides	18	18	18
Thickness (in)	0.1875	0.2500	0.3125
Socket Length (ft)	4.17	5.42	37.0713
Top Dia (in)	18.0000	27.7936	48.0000
Bot Dia (in)	29.0400	38.6900	
Grade		A572-65	
Weight (K)	2.5	4.7	7.5



DESIGNED APPURTENANCE LOADING


TYPE	ELEVATION	TYPE	ELEVATION
APXVTM14-C-I20 w/Mount Pipe	149	BXA-70063/6CF-2 w/ Mount Pipe	135.6
APXVTM14-C-I20 w/Mount Pipe	149	BXA-171085-12BF-2 w/ Mount Pipe	135.6
APXVTM14-C-I20 w/Mount Pipe	149	BXA-171085-12BF-2 w/ Mount Pipe	135.6
APXVSP18-C-A20 w/Mount Pipe	149	BXA-171085-12BF-2 w/ Mount Pipe	135.6
APXVSP18-C-A20 w/Mount Pipe	149	(2) FD9R6004/2C-3L Diplexer	135.6
APXVSP18-C-A20 w/Mount Pipe	149	(2) FD9R6004/2C-3L Diplexer	135.6
TD-RRH8x20-25	149	(2) FD9R6004/2C-3L Diplexer	135.6
TD-RRH8x20-25	149	13.5' Low Profile Platform	135.6
TD-RRH8x20-25	149	(2) 7770 w/Mount Pipe	125.5
1900 MHz RRH	149	(2) 7770 w/Mount Pipe	125.5
1900 MHz RRH	149	(2) 7770 w/Mount Pipe	125.5
800 MHz RRH	149	AM-X-CD-16-65-00T-RET w/ Mount Pipe	125.5
800 MHz RRH	149	AM-X-CD-16-65-00T-RET w/ Mount Pipe	125.5
800 MHz RRH	149	AM-X-CD-16-65-00T-RET w/ Mount Pipe	125.5
800 MHz Filter	149	AM-X-CD-16-65-00T-RET w/ Mount Pipe	125.5
800 MHz Filter	149	(4) LGP21401 TMA	125.5
800 MHz Filter	149	(4) LGP21401 TMA	125.5
800 MHz Filter	149	(4) LGP21401 TMA	125.5
ACU-A20-N RET	149	(2) RRUS 11	125.5
ACU-A20-N RET	149	(2) RRUS 11	125.5
(2) ACU-A20-N RET	149	(2) RRUS 11	125.5
13' Low Profile Platform	149	(2) RRUS 11	125.5
(2) Empty Mount Pipe	149	ABT-DFDM-ADB Surge Arrestor	125.5
(2) Empty Mount Pipe	149	DC6-48-60-18-8F Surge Arrestor	125.5
(2) Empty Mount Pipe	149	Empty Mount Pipe	125.5
Lightning Rod	148.77	Empty Mount Pipe	125.5
(2) LPA-80080/6CF w/ Mount Pipe	135.6	Empty Mount Pipe	125.5
(2) LPA-80080/6CF w/ Mount Pipe	135.6	Empty Mount Pipe	125.5
(2) LPA-80080/6CF w/ Mount Pipe	135.6	13.5' Low Profile Platform	125.5
BXA-70063/6CF-2 w/ Mount Pipe	135.6	(2) GPS	70.6
BXA-70063/6CF-2 w/ Mount Pipe	135.6	3' Standoff	70.6

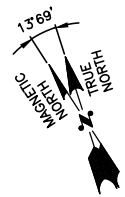
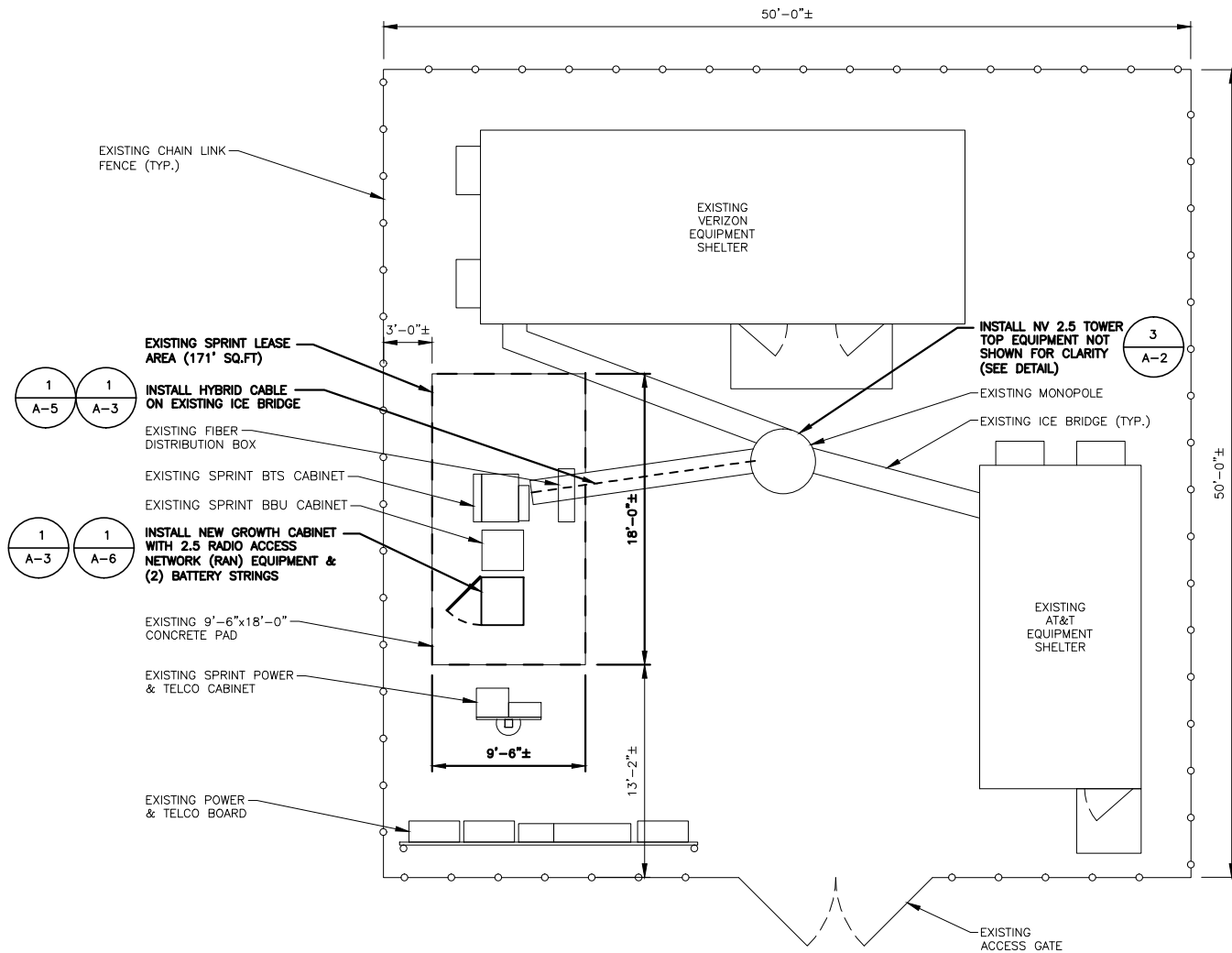
MATERIAL STRENGTH

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.

 FDH Engineering, Inc. 6521 Meriden Drive Raleigh, NC 27616 Phone: (919) 755-1012 FAX: (919) 755-1013	Job: Litchfield 3 CT12215-A-01 Project: 1462GN1400		
	Client: SBA Network Services, Inc. Code: TIA/EIA-222-F Path:	Drawn by: Kristi Gardner Date: 06/26/14	App'd: Scale: NTS Dwg No. E-1



COMPOUND PLAN

SCALE: 3/16"=1'-0"

1
A-1



SOURCE: SPRINT AUDIT 09-05-13

RAN EQUIPMENT PHOTO DETAIL

SCALE: N.T.S.

2
A-1



CHECKED BY: KB

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	06/09/14	ISSUED FOR CONSTRUCTION	JA
0	05/20/14	ISSUED FOR CONSTRUCTION	SF

SITE NUMBER:
CT33XC024-H

SITE NAME:
LITCHFIELD/HAMMER

SITE ADDRESS:
1291 BANTAM ROAD
LITCHFIELD, CT 06750

SHEET TITLE

COMPOUND PLAN

SHEET NUMBER

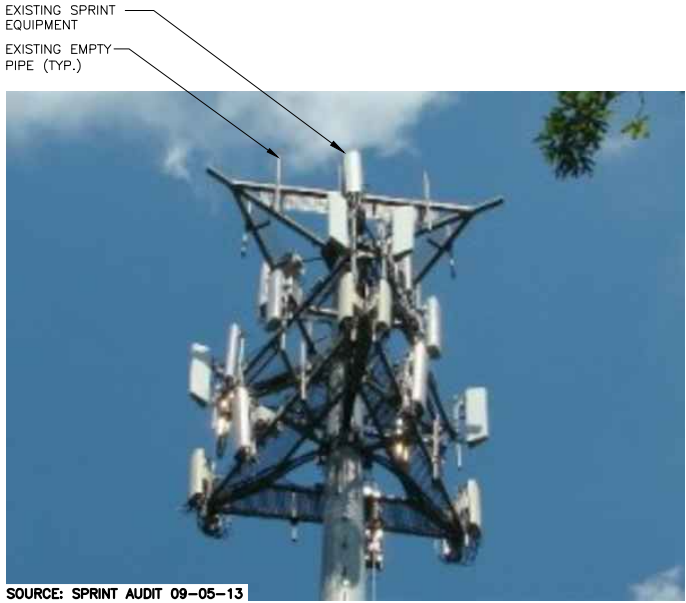
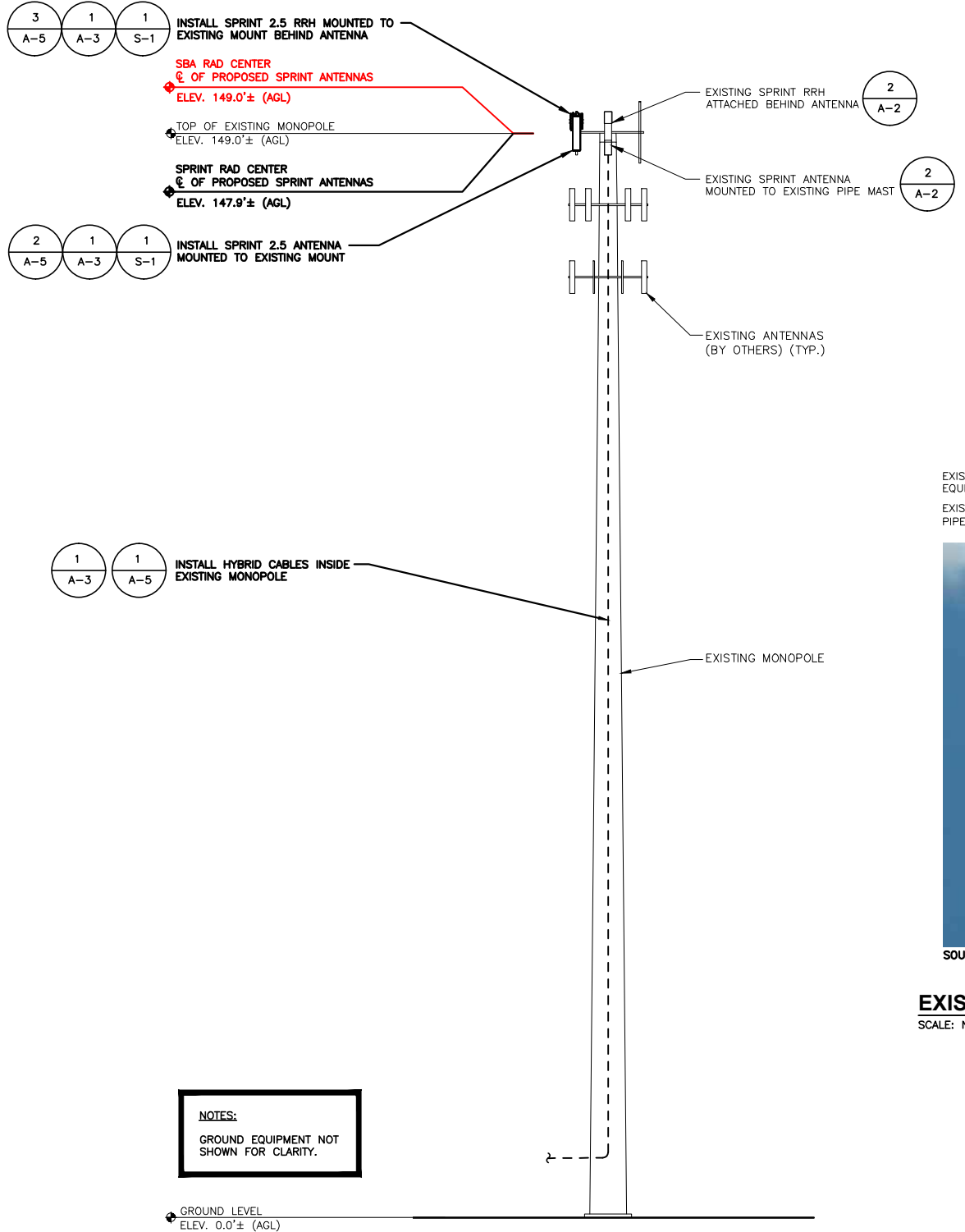
A-1

SPECIAL CONSTRUCTION NOTE:
 SPRINT TOWER TOP WORK IS CONTINGENT ON THE FOLLOWING:
 • COMPLETION OF A GLOBAL STRUCTURAL STABILITY ANALYSIS (PROVIDED BY TOWER OWNER).
 • COMPLETION OF AN ANTENNA/RRH MOUNT STRUCTURAL ASSESSMENT (PROVIDED BY A&E VENDOR).
 • GC SHALL FURNISH, INSTALL AND COMPLETE ALL REQUIRED STRUCTURAL MODIFICATIONS AS INDICATED IN BEFORE-MENTIONED ANALYSIS AND ASSESSMENT.
 • SBA COMMUNICATIONS CORPORATION SHALL PROVIDE WRITTEN ACCEPTANCE/APPROVAL FOR THE COMPLETION OF ALL TOWER/FOUNDATION STRUCTURAL MODIFICATIONS INCLUDING (AS NECESSARY) CONTROLLED CONSTRUCTION INSPECTIONS, SHOP-DRAWING APPROVALS, MATERIALS TEST RESULTS, AND FINAL ENGINEER'S AFFIDAVIT.

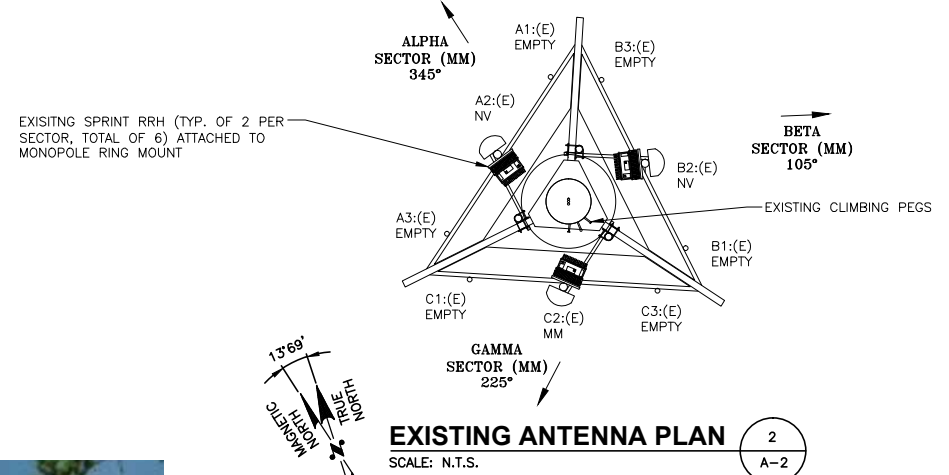
NOTE:
 EXISTING AZIMUTHS FROM SPRINT
 SITE AUDIT DATED 09/05/13

NOTE:
 SPRINT RAD CENTER SHOWN IN RED TEXT BASED ON SBA-PROVIDED COLLOCATION APPLICATION, EQUIPMENT DATABASE, AND STRUCTURAL ANALYSIS. THE SBA-PROVIDED ANTENNA RAD CENTER SHALL SUPERSEDE ANY CONFLICTING INFORMATION DERIVED FROM THE SPRINT NV 2.5 RFDS.

SPECIAL CONSTRUCTION NOTE:
 THE SPRINT NETWORK VISION 2.5 GHz TOWER TOP WORK IS CONTINGENT UPON COMPLETION OF ALL REQUIRED STRUCTURAL MODIFICATIONS, ENGINEERING CONSTRUCTION CONTROL INSPECTIONS, FINAL ENGINEERING AFFIDAVIT, AND ACCEPTANCE/APPROVAL BY SBA COMMUNICATIONS CORP.



EXISTING PARTIAL ELEVATION PHOTO DETAIL
 SCALE: N.T.S.



SPECIAL WORK NOTE:
 JUMPERS FROM 2.5 RRH TO 2.5 ANTENNA CAN NOT EXCEED 15'. NOTIFY SPRINT CONSTRUCTION MANAGER OF ANY DISCREPANCY.

NOTES:
 1) VERIFY PROPOSED AZIMUTHS WITH RF ENGINEER PRIOR TO INSTALLATION.

ANTENNA STATUS LEGEND:

EMPTY - EMPTY PIPE
 (E) - EXISTING
 (P) - INSTALL
 NV - SPRINT ANTENNA MODEL APXVSPP18-C-A20
 2.5 - SPRINT ANTENNA

Daniel P. Hamm
 STATE OF CONNECTICUT
 DANIEL P. HAMM
 No. 24178
 LICENSED PROFESSIONAL ENGINEER

CHECKED BY: KB
 APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	06/09/14	ISSUED FOR CONSTRUCTION	JA
0	05/20/14	ISSUED FOR CONSTRUCTION	SF

SITE NUMBER:
 CT33XC024-H
 SITE NAME:
 LITCHFIELD/HAMMER
 SITE ADDRESS:
 1291 BANTAM ROAD
 LITCHFIELD, CT 06750

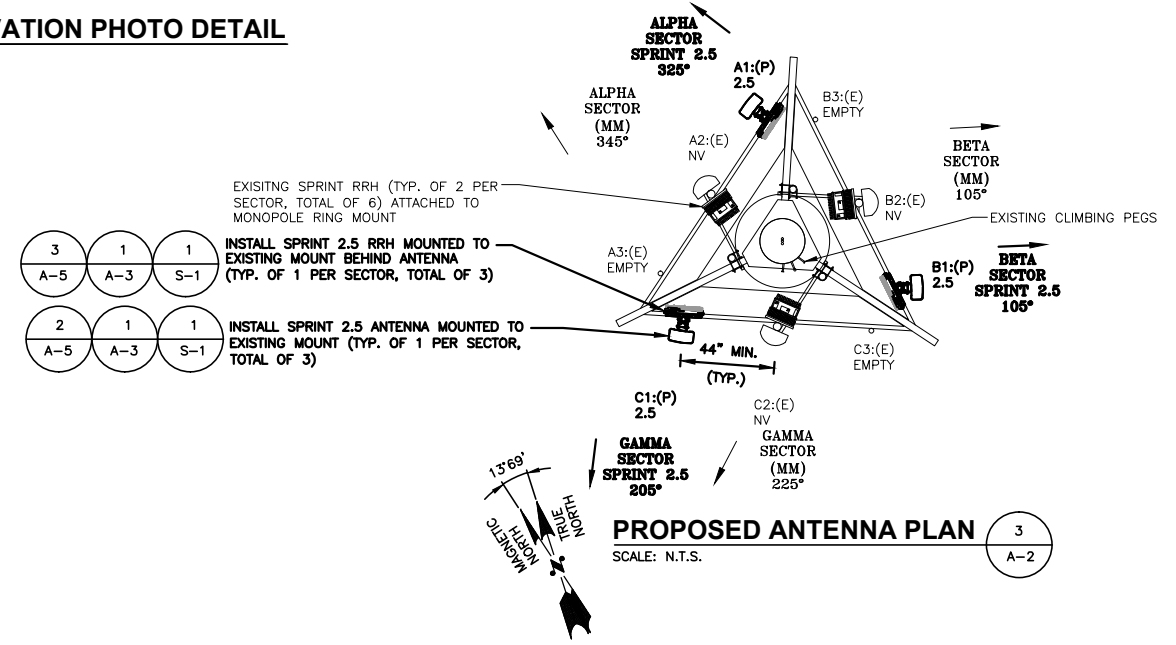
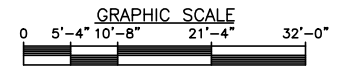
SHEET TITLE
 ELEVATION AND ANTENNA PLANS

SHEET NUMBER
 A-2

NOTES:
 GROUND EQUIPMENT NOT SHOWN FOR CLARITY.

GROUND LEVEL
 ELEV. 0.0'± (AGL)

ELEVATION
 SCALE: 3/32"=1'-0"



PCI CHECKLIST

CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED	REPORT ITEM
PRE-CONSTRUCTION	
X	PCI CHECKLIST DRAWING
N/A	EOR APPROVED SHOP DRAWINGS
N/A	FABRICATION INSPECTION
N/A	FABRICATOR CERTIFIED WELD INSPECTION
X	MATERIAL TEST REPORT (MTR)
N/A	FABRICATOR NDE INSPECTION
N/A	NDE REPORT OF MONOPOLE BASE PLATE (AS REQUIRED)
X	PACKING SLIPS
ADDITIONAL TESTING AND INSPECTIONS:	
CONSTRUCTION	
X	CONSTRUCTION INSPECTIONS
N/A	FOUNDATION INSPECTIONS
N/A	CONCRETE COMP. STRENGTH AND SLUMP TESTS
N/A	POST INSTALLED ANCHOR ROD VERIFICATION
N/A	BASE PLATE GROUT VERIFICATION
X	CONTRACTOR'S CERTIFIED WELD INSPECTION
N/A	EARTHWORK: LIFT AND DENSITY
X	ON SITE COLD GALVANIZING VERIFICATION
N/A	GUY WIRE TENSION REPORT
X	GC AS-BUILT DOCUMENTS
ADDITIONAL TESTING AND INSPECTIONS:	
POST-CONSTRUCTION	
X	PCI INSPECTOR REDLINE OR RECORD DRAWING(S)
N/A	POST INSTALLED ANCHOR ROD PULL-OUT TESTING
X	PHOTOGRAPHS
ADDITIONAL TESTING AND INSPECTIONS:	

NOTE: X DENOTES A DOCUMENT NEEDED FOR THE PCI REPORT
 N/A DENOTES A DOCUMENT THAT IS NOT REQUIRED FOR THE PCI REPORT

POST CONSTRUCTION INSPECTION NOTES:

GENERAL

1. THE POST CONSTRUCTION INSPECTION (PCI) IS A VISUAL INSPECTION OF TOWER MODIFICATIONS AND A REVIEW OF CONSTRUCTION INSPECTIONS AND OTHER REPORTS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NAMELY THE MODIFICATION DRAWINGS, AS DESIGNED BY THE ENGINEER OF RECORD (EOR).
2. THE PCI IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE MODIFICATION DESIGN ITSELF, NOR DOES THE PCI INSPECTOR TAKE OWNERSHIP OF THE MODIFICATION DESIGN. OWNERSHIP OF THE STRUCTURAL MODIFICATION DESIGN EFFECTIVENESS AND INTEGRITY RESIDES WITH THE EOR AT ALL TIMES.
3. ALL PCI'S SHALL BE CONDUCTED BY A PCI INSPECTOR THAT IS APPROVED TO PERFORM ELEVATED WORK FOR FDH ENGINEERING, INC.
4. TO ENSURE THAT THE REQUIREMENTS OF THE PCI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE PCI INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PO IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY. IF CONTACT INFORMATION IS NOT KNOWN, CONTACT YOUR FDH POINT OF CONTACT (POC).
5. REFER TO CCR-01 : CONTRACTOR CLOSEOUT REQUIREMENTS FOR FURTHER DETAILS AND REQUIREMENTS.

PCI INSPECTOR

1. THE PCI INSPECTOR IS REQUIRED TO CONTACT THE GC AS SOON AS RECEIVING A PO FOR THE PCI TO, AT A MINIMUM:
 - REVIEW THE REQUIREMENTS OF THE PCI CHECKLIST
 - WORK WITH THE GC TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS
2. THE PCI INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GENERAL CONTRACTOR (GC) INSPECTION AND TEST REPORTS, REVIEWING THE DOCUMENTS FOR ADHERENCE TO THE CONTRACT DOCUMENTS, CONDUCTING THE IN-FIELD INSPECTIONS, AND SUBMITTING THE PCI REPORT TO FDH.

CORRECTION OF FAILING PCI'S

1. IF THE MODIFICATION INSTALLATION WOULD FAIL THE PCI ("FAILED PCI"), THE GC SHALL WORK WITH FDH TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:
 - CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT PCI.
 - OR, WITH FDH'S APPROVAL, THE GC MAY WORK WITH THE EOR TO RE-ANALYZE THE MODIFICATION/REINFORCEMENT USING THE AS-BUILT CONDITION.

REQUIRED PHOTOS

1. BETWEEN THE GC AND THE PCI INSPECTOR THE FOLLOWING PHOTOGRAPHS, AT A MINIMUM, ARE TO BE TAKEN AND INCLUDED IN THE PCI REPORT:
 - PRE-CONSTRUCTION GENERAL SITE CONDITION
 - PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION CONSTRUCTION/ERECTION AND INSPECTION
 - RAW MATERIALS
 - PHOTOS OF ALL CRITICAL DETAILS
 - FOUNDATION MODIFICATIONS
 - WELD PREPARATION
 - BOLT INSTALLATION AND TORQUE
 - FINAL INSTALLED CONDITION
 - SURFACE COATING REPAIR
 - POST CONSTRUCTION PHOTOGRAPHS
 - FINAL INFIELD CONDITION
2. PHOTOS OF ELEVATED MODIFICATIONS TAKEN FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.


PREPARED BY:



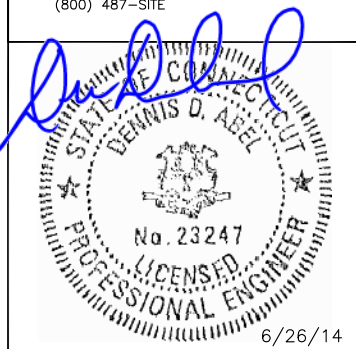
6521 MERIDIEN DRIVE
 RALEIGH, NC 27616
 PHONE: 919-755-1012
 FAX: 919-755-1031

ENGINEERING INNOVATION

PREPARED FOR:



5900 BROKEN SOUND PARKWAY, NW
 BOCA RATON, FL 33487
 (800) 487-SITE



DENNIS D. ABEL, P.E.
 CONNECTICUT LIC. NO. 23247

DRAWN BY: JAT
 CHECKED BY: KG
 ENG APPVD: DDA
 PROJECT NO: 1467DY1400

SUBMITTALS		
DATE	DESCRIPTION	REV
6/26/14	CONSTRUCTION	1

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF FDH ENGINEERING, INC. IS PROHIBITED.

SITE NAME:
LITCHFIELD 3

SITE NUMBER:
CT12215-A-01

SITE ADDRESS:
 1291 BANTAM ROAD
 BANTAM, CT 06750

SHEET TITLE
**POST CONSTRUCTION
 INSPECTION NOTES**

SHEET NUMBER

N-1

GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL PERMITS NECESSARY TO COMPLETE THE PROJECT AND ABIDE BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS AT THE SITE BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION DRAWINGS. ANY SUCH DISCREPANCY IN DIMENSION WHICH MAY BE FOUND SHALL BE SUBMITTED TO FDH ENGINEERING FOR CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREAS.
- INCORRECTLY FABRICATED, DAMAGED, OTHERWISE MISFITTING, OR NON-CONFORMING MATERIALS AND CONDITIONS SHALL BE REPORTED TO FDH ENGINEERING PRIOR TO ANY REMEDIAL OR CORRECTIVE ACTION. ALL ACTIONS SHALL REQUIRE FDH ENGINEERING APPROVAL.
- IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AFTER THE COMPLETION OF THE PROJECT.
- CONTRACTOR SHALL PROMPTLY REMOVE ANY & ALL DEBRIS FROM SITE AND RESTORE AS BEST AS POSSIBLE TO PRECONSTRUCTION CONDITION.

CONTRACTOR QUALIFICATION NOTES:

- ALL REPAIRS SHALL BE PERFORMED BY A TOWER CONTRACTOR WITH A MINIMUM 5 YEARS EXPERIENCE IN TOWER ERECTION AND RETROFIT AND WITH WORKING KNOWLEDGE OF THE TIA/EIA 222-F "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES".
- CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION MEANS AND METHODS. SHOULD THE CONTRACTOR REQUIRE DIRECT CONSULTATION, FDH ENGINEERING, INC. IS WILLING TO OFFER SERVICES BASED UPON AN AGREED FEE FOR THE WORK REQUIRED.
- ALL SUBMITTAL INFORMATION MUST BE SENT TO FDH ENGINEERING, INC. 6521 MERIDIEN DRIVE, RALEIGH NC, 27616, TEL. (919) 755-1012, FAX. (919) 755-1031, E-MAIL INFO@FDH-INC.COM. ANY VARIATION OF THESE SPECIFICATIONS OR DRAWINGS WITHOUT CONSENT FROM FDH ENGINEERING, INC. WILL VOID ANY RESPONSIBILITY OR LIABILITY FOR DAMAGE (MATERIAL OR PHYSICAL) TOWARDS FDH ENGINEERING, INC.

JOB SITE SAFETY & NOTES:

- NEITHER THE PROFESSIONAL ACTIVITIES OF FDH ENGINEERING, INC. NOR THE PRESENCE OF FDH ENGINEERING, INC. OR EMPLOYEES AND SUB-CONSULTANTS AT THE CONSTRUCTION SITE, SHALL RELIEVE THE GENERAL CONTRACTOR AND OR SUBCONTRACTORS AND ANY OTHER ENTITY OF THEIR OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING OR COORDINATING ALL PORTIONS OF THE WORK OF CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. THE GENERAL CONTRACTOR AND OR SUBCONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SAFETY, AND WARRANTS THAT THIS INTENT IS EVIDENT BY ACCEPTING THIS WORK.

SUBSTITUTES AND/OR EQUALS:

- IF CONTRACTOR WISHES TO FURNISH OR USE A SUBSTITUTE ITEM OF MATERIAL OR EQUIPMENT, CONTRACTOR SHALL FIRST MAKE WRITTEN APPLICATION TO ENGINEER OF RECORD FOR ACCEPTANCE THEREOF, CERTIFYING THAT THE PROPOSED SUBSTITUTE WILL PERFORM ADEQUATELY THE FUNCTIONS AND ACHIEVE THE RESULTS CALLED FOR BY THE GENERAL DESIGN, BE SIMILAR IN SUBSTANCE TO THAT SPECIFIED AND SUITED TO THE SAME USE AS THAT SPECIFIED. ALL VARIATIONS OF THE PROPOSED SUBSTITUTE FROM THAT SPECIFIED WILL BE IDENTIFIED IN THE APPLICATION AND AVAILABLE MAINTENANCE, REPAIR AND REPLACEMENT SERVICE WILL BE INDICATED. THE APPLICATION WILL ALSO CONTAIN AN ITEMIZED ESTIMATE OF ALL COSTS OR CREDITS THAT WILL RESULT DIRECTLY OR INDIRECTLY FROM ACCEPTANCE OF SUCH SUBSTITUTE INCLUDING COSTS OF REDESIGN AND CLAIMS OF OTHER CONTRACTORS AFFECTED BY THE RESULTING CHANGE, ALL OF WHICH WILL BE CONSIDERED BY ENGINEER OF RECORD IN EVALUATION OF THE PROPOSED SUBSTITUTE. ENGINEER OF RECORD MAY REQUIRE CONTRACTOR TO FURNISH ADDITIONAL DATA ABOUT THE PROPOSED SUBSTITUTE.

STEEL:

- ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST AISC CODE AND ASTM SPECIFICATIONS.
*ALL FLAT PLATE REINFORCEMENT STEEL SHALL BE ASTM A572-65 (Fy=65KSI) UNLESS OTHERWISE SPECIFIED.
*ALL BASE STIFFENER STEEL SHALL BE ASTM A572-65 (Fy=65KSI) UNLESS OTHERWISE SPECIFIED.
- ALL CONNECTIONS OF STRUCTURAL STEEL MEMBERS SHALL BE MADE USING SPECIFIED WELDS WITH WELDING ELECTRODES E-80XX OR SPECIFIED HIGH STRENGTH BOLTS TO BE ASTM A325N, THREAD INCLUDED WITH SHEAR PLANE (UNLESS OTHERWISE NOTED).
- ALL BOLTED CONNECTIONS TO BE INSTALLED TO A SNUG-TIGHTENED CONDITION IN ACCORDANCE WITH AISC 13 PART 16.2, "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", SECTION 8.1, UNLESS OTHERWISE SPECIFIED. WHEN "X" TYPE BOLTS ARE USED, CONTRACTOR MAY BE REQUIRED TO STACK ADDITIONAL WASHERS TO OBTAIN PROPER SNUG TIGHT INSTALLATION. ALL NUTS SHALL BE HEAVY HEX UNLESS OTHERWISE NOTED.
- ALL STEEL, AFTER FABRICATION, SHALL BE HOT DIPPED GALVANIZED PER ASTM A-123. ALL DAMAGED SURFACES, WELDED AREAS AND AUTHORIZED NON-GALVANIZED MEMBERS OR PARTS (EXISTING OR NEW) SHALL BE PAINTED WITH MULTIPLE COATS OF ZRC COLD GALVANIZING COMPOUND ACHIEVING A MINIMUM OF 4 MILS DRY FILM PER ASTM A 780.
- ALL SHOP AND FIELD WELDING SHALL BE DONE BY WELDERS QUALIFIED AS DESCRIBED IN THE "AMERICAN WELDING SOCIETY'S STANDARD QUALIFICATION PROCEDURE" TO PERFORM THE TYPE OF WORK REQUIRED. CONTRACTOR IS REQUIRED TO PROVIDE FDH ENGINEERING, INC. WITH A PASSING CERTIFIED WELDING INSPECTION FOR ALL WELDS.
- STRUCTURAL STEEL MAY NOT BE TORCH CUT FOR FABRICATION. ALL STEEL FABRICATION MUST FOLLOW AISC STANDARDS.

MISC. NOTES:

- ALL MODIFICATIONS ARE ASSUMED TO BE MADE ON AN EMPTY TOWER. CONTRACTOR IS RESPONSIBLE TO MAKE PROVISIONS TO SUPPORT OR WORK AROUND EXISTING ANTENNAS AND TRANSMISSION LINES. MODIFICATIONS MUST BE CONTINUOUS THROUGH ALL AREAS SHOWN.
- CONTRACTOR FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.

FABRICATION NOTES:

- ALL DIMENSIONS ARE PRELIMINARY UNTIL FIELD VERIFIED BY CONTRACTOR. ANY CHANGES MUST BE APPROVED BY ENGINEER OF RECORD IN WRITING PRIOR TO FABRICATION AND INSTALLATION.
- NEW STEEL MEMBERS MUST HAVE SINGLE DRILLED HOLES. SLOTTED AND DOUBLE DRILLED HOLES ARE NOT ACCEPTABLE MEANS OF FABRICATION.

COLD GALVANIZATION/SURFACE PREPARATION NOTES:

- CONTRACTOR TO USE ZINGA OR ZRC COLD GALVANIZATION COMPOUNDS OR APPROVED EQUIVALENT.
- PREPARE RUSTED/CORRODED SURFACE FOR TREATMENT ACCORDING TO MANUFACTURE'S RECOMMENDATIONS.
- CONTRACTOR TO APPLY (2) COATS OF COLD GALVANIZATION COMPOUND PER MANUFACTURER'S RECOMMENDATION. DRYING AND CURING TIMES MUST BE UTILIZED PER MANUFACTURER'S RECOMMENDATION.
- APPLY ALL COATINGS BY BRUSH IN CALM WIND CONDITIONS. THE USE OF AEROSOL IS NOT PERMITTED.
- IF THE TOWER IS PAINTED, BRUSH PAINT ALL TREATED AREAS TO MATCH TOWER AFTER COLD GALVANIZATION COMPOUND IS ALLOWED TO CURE.

STIFFENER PLATE NOTES:

- NEW STIFFENER PLATES TO BE PLACED EQUALLY BETWEEN EXISTING ANCHOR BOLTS.
- INSIDE POLE SHAFT TO BE SPRAYED WITH (2) COATS COLD GALVANIZATION PAINT WHERE ALL WELDED CONNECTIONS ARE PERFORMED.
- AFTER STIFFENER INSTALLATION CONTRACTOR TO BRUSH PAINT (2) COATS OF COLD GALVANIZATION PAINT THEN FINISH WITH (1) COAT OF COLD GALVANIZATION SPRAY.

SURFACE PREPARATION:

- PREPARE SURFACE TO BE WELDED BY REMOVING PAINT OR GALVANIZATION TO BARE METAL USING POWER WIRE BRUSHING IN ACCORDANCE WITH SSPC-SP11, (STEEL STRUCTURES PAINTING COUNCIL). FOLLOWING POWER WIRE BRUSHING CONTRACTOR SHALL POLISH METAL SURFACE WITH HIGH SPEED GRINDER WITH 400+ GRIT SANDPAPER.
- AFTER NEW STEEL INSTALLATION CONTRACTOR TO BRUSH PAINT (2) COATS OF ZRC OR ZINGA COLD GALVANIZATION COMPOUND PER MANUFACTURER'S SPECIFICATIONS.

STIFFENER PLATE WELDING:

- ALL WELDING TO THE EXISTING TOWER SHALL BE PERFORMED BY CERTIFIED WELDERS UTILIZING PROCEDURES QUALIFIED IN ACCORDANCE WITH AWS D1.1 AND AWS C5.4.
- CONTRACTOR SHALL COMPLY WITH AWS D1.1 FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS AND FOR METHODS USED IN CORRECTING WELDING. ALL WELDERS AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". CONTRACTOR SHALL SUBMIT CERTIFICATION OF WELDERS TO THE ENGINEER PRIOR TO COMMENCEMENT OF THE WORK.
- CONTRACTOR RESPONSIBLE FOR TEMPORARY HEAT SHIELDING AS REQUIRED DURING WELDING.
- ALL WELDS TO BE VISUALLY INSPECTED BY A CERTIFIED WELD INSPECTOR PER AWS D1.1.
- CONTRACTOR RESPONSIBLE FOR VIEWING EXISTING POLE FOR LOOSE AND FLAMMABLE MATERIAL PRIOR TO WELDING FLAT PLATE.
- CONTRACTOR TO VERIFY LOCATION OF ENTRY PORTHOLE PRIOR TO BASE PLATE STIFFENER INSTALLATION.

NEW FLAT PLATE REINFORCEMENT NOTES:

- CONTRACTOR TO FIELD VERIFY PROPOSED LOCATION OF FLAT PLATE TO ENSURE THAT PROPER SPACING CAN BE MET.
- CONTRACTOR TO REPLACE AND/OR RELOCATE ANY CLIMBING PEGS THAT INTERFERE WITH THE INSTALLATION OF FLAT PLATE.
- ALL AJAX CONNECTIONS TO USE HIGH TENSILE SLEEVE PROVIDED BY MANUFACTURER. AJAX BOLT ASSEMBLY TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS. SEE AJAX BOLT ASSEMBLY DETAIL.
- ALL SHEAR SLEEVES TO BE HOT DIPPED GALVANIZED PRIOR TO INSTALLATION.
- PRIOR TO FLAT PLATE INSTALLATION, SLIP JOINTS MUST BE TIGHTENED WITH A MINIMUM JACKING FORCE OF 6000 LBS.
- NEW FLAT PLATES TO BE INSTALLED ON THE CENTER OF PROPOSED SIDE UNLESS OTHERWISE NOTED.
- EXISTING COAX BANDS TO BE REPLACED AFTER FLAT PLATE INSTALLATION. NEW FLAT PLATE TO BE INSTALLED BENEATH EXISTING COAX BANDS.

CONSTRUCTION NOTES:

- CONTRACTOR TO FIELD VERIFY PROPOSED FLAT PLATE LAYOUT PRIOR TO CONSTRUCTION. IF ISSUES ARE PRESENT IN THE FIT OF THE FLAT PLATE, CONTRACTOR TO CONTACT ENGINEER OF RECORD OR FDH ENGINEERING PROJECT MANAGER PRIOR TO PROCEEDING WITH PROPOSED MODIFICATION OR FABRICATION.

AJAX PRETENSION JOINTS:

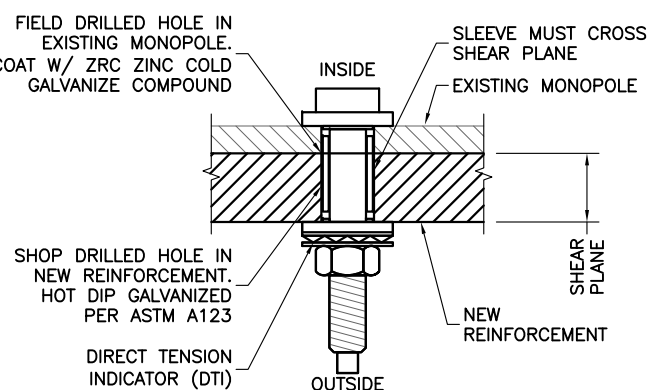
- ALL AJAX BOLTS SHALL BE INSTALLED USING DIRECT TENSION INDICATORS (DTI'S) & HARDENED WASHERS. ALL AJAX M20 BOLTS WITH REAR SLEEVES SHALL BE PRETENSIONED & TIGHTENED UNTIL DIRECT TENSION INDICATOR (DTI) WASHER SHOW THAT THE PROPER BOLT TENSION HAS BEEN REACHED.
- ALL DIRECT TENSION INDICATOR (DTI) WASHERS SHALL BE THE "SQUIRTER® STYLE" AS MANUFACTURED BY:
APPLIED BOLTING TECHNOLOGY PRODUCTS, INC.
1413 ROCKINGHAM ROAD
BELLINGS FALLS, VERMONT 05101, USA
PHONE: 1-800-552-1999
WEBSITE: WWW.APPLIEDBOLTING.COM
- USE DIRECT TENSION INDICATOR (DTI) WASHERS COMPATIBLE WITH 3/4" NOMINAL A325 BOLTS FOR THE AJAX M20 BOLTS. DTI'S SHALL NOT BE HOT-DIP GALVANIZED. DTI'S SHALL BE MECHANICALLY GALVANIZED (MG) BY THE COLD MECHANICAL PROCESS ONLY AS PROVIDED BY THE DTI MANUFACTURER.
- USE HARDENED WASHER FOR A 3/4" NOMINAL BOLT BETWEEN THE TOP OF DIRECT TENSION INDICATOR (DTI) WASHER AND THE NUT OF THE AJAX M20 BOLT. HARDENED WASHERS SHALL CONFORM TO ASTM F436 AND HAVE A MINIMUM HARDNESS OF RE 38 OR HIGHER. THE HARDENED WASHERS SHALL BE MECHANICALLY GALVANIZED BY COLD MECHANICAL PROCESS. ALTERNATIVELY, CORRECTLY MADE HOT DIP GALVANIZED HARDENED FLAT WASHERS HAVING A MINIMUM HARDNESS OF RC 38 CAN BE USED; CONTRACTOR SHALL PROVIDE DOCUMENTATION OF WASHER SPECIFICATION AND HARDNESS.
- CONTRACTOR SHALL FOLLOW DTI MANUFACTURER'S INSTRUCTION FOR INSTALLATION, LUBRICATION, TIGHTENING AND INSPECTION.

SURFACE PREPARATION:

- PREPARE SURFACE TO BE WELDED BY REMOVING PAINT OR GALVANIZATION TO BARE METAL USING POWER WIRE BRUSHING IN ACCORDANCE WITH SSPC-SP11, (STEEL STRUCTURES PAINTING COUNCIL). FOLLOWING POWER WIRE BRUSHING CONTRACTOR SHALL POLISH METAL SURFACE WITH HIGH SPEED GRINDER WITH 400+ GRIT SANDPAPER.
- AFTER NEW STEEL INSTALLATION CONTRACTOR TO BRUSH PAINT (2) COATS OF ZRC OR ZINGA COLD GALVANIZATION COMPOUND PER MANUFACTURER'S SPECIFICATIONS.

WELDING NOTES:

- ALL WELDING TO THE EXISTING TOWER SHALL BE PERFORMED BY CERTIFIED WELDERS UTILIZING PROCEDURES QUALIFIED IN ACCORDANCE WITH AWS D1.1 AND AWS C5.4.
- CONTRACTOR SHALL COMPLY WITH AWS D1.1 FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS AND FOR METHODS USED IN CORRECTING WELDING. ALL WELDERS AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". CONTRACTOR SHALL SUBMIT CERTIFICATION OF WELDERS TO THE ENGINEER PRIOR TO COMMENCEMENT OF THE WORK.
- CONTRACTOR RESPONSIBLE FOR TEMPORARY HEAT SHIELDING AS REQUIRED DURING WELDING.
- CONTRACTOR RESPONSIBLE FOR VIEWING EXISTING TOWER FOR LOOSE AND FLAMMABLE MATERIAL PRIOR TO WELDING FLAT PLATE.
- ALL WELDS TO BE VISUALLY INSPECTED BY A CERTIFIED WELD INSPECTOR PER AWS D1.1.



AJAX BOLT ASSEMBLY
SCALE: NTS

PREPARED BY:

6521 MERIDIEN DRIVE
RALEIGH, NC 27616
PHONE: 919-755-1012
FAX: 919-755-1031

ENGINEERING INNOVATION

PREPARED FOR:

5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800) 487-SITE

DENNIS D. ABEL, P.E.
CONNECTICUT LIC. NO. 23247

DRAWN BY:	JAT
CHECKED BY:	KG
ENG APPVD:	DDA
PROJECT NO:	1467DY1400

SUBMITTALS		
DATE	DESCRIPTION	REV
6/26/14	CONSTRUCTION	1

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF FDH ENGINEERING, INC. IS PROHIBITED.

SITE NAME:
LITCHFIELD 3

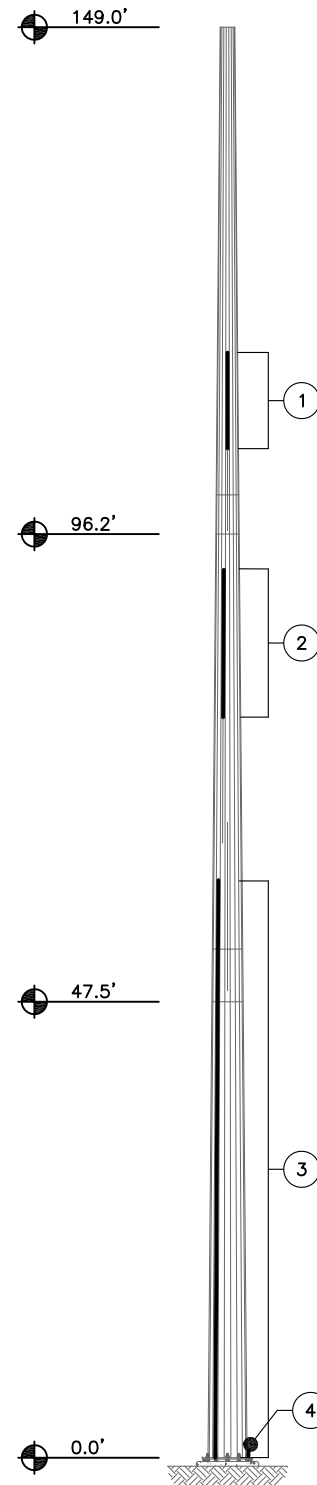
SITE NUMBER:
CT12215-A-01

SITE ADDRESS:
1291 BANTAM ROAD
BANTAM, CT 06750

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
N-2

LENGTH (FT)	52.83	52.79	52.97
# OF SIDES	18	0.2500	0.3125
THICKNESS (IN)	0.1875	5.42	N/A
SOCKET LENGTH (FT)	4.17	27.7936	37.0713
TOP DIAMETER (IN)	18.0000	38.6900	48.0000
BOT. DIAMETER (IN)	29.0400		



TOWER ELEVATION
SCALE: NTS

- APPURTENANCES MAY INTERFERE WITH PROPOSED MODIFICATIONS.
- ALL MODIFICATIONS TO BE INSTALLED CONTINUOUSLY THROUGH EXISTING EQUIPMENT. ALL EXISTING EQUIPMENT NOT TO BE DAMAGED OR TAKEN OFF AIR DURING INSTALLATION.
- ANTENNA GRAPHICS NOT SHOWN FOR CLARITY. SEE STRUCTURAL ANALYSIS REPORT FOR EXISTING ANTENNA LOADING.


TOWER MODIFICATION SCHEDULE			
NO.	TYPE OF MODIFICATION	BOTTOM ELEV. (FT)	TOP ELEV. (FT)
1	INSTALLATION OF NEW FLAT PLATE REINFORCEMENT. SEE S-2 THROUGH S-6 FOR DETAILS.	105.1±	115.1±
2	INSTALLATION OF NEW FLAT PLATE REINFORCEMENT. SEE S-2 THROUGH S-6 FOR DETAILS.	77.1±	92.1±
3	INSTALLATION OF NEW FLAT PLATE REINFORCEMENT. SEE S-2 THROUGH S-6 FOR DETAILS.	0.0±	60.2±
4	INSTALLATION OF REPLACEMENT BASE PLATE STIFFENERS. SEE S-7 FOR DETAILS.	0.0±	1.5±
TOWER FINISH: GALVANIZED			

PREPARED BY:

FDH
 ENGINEERING INNOVATION
 6521 MERIDEN DRIVE
 RALEIGH, NC 27616
 PHONE: 919-755-1012
 FAX: 919-755-1031

PREPARED FOR:

SBA
 5900 BROKEN SOUND PARKWAY, NW
 BOCA RATON, FL 33487
 (800) 487-SITE


 DENNIS D. ABEL, P.E.
 CONNECTICUT LIC. NO. 23247

DRAWN BY: JAT
 CHECKED BY: KG
 ENG APPVD: DDA
 PROJECT NO: 1467DY1400

SUBMITTALS		
DATE	DESCRIPTION	REV
6/26/14	CONSTRUCTION	1

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF FDH ENGINEERING, INC. IS PROHIBITED.

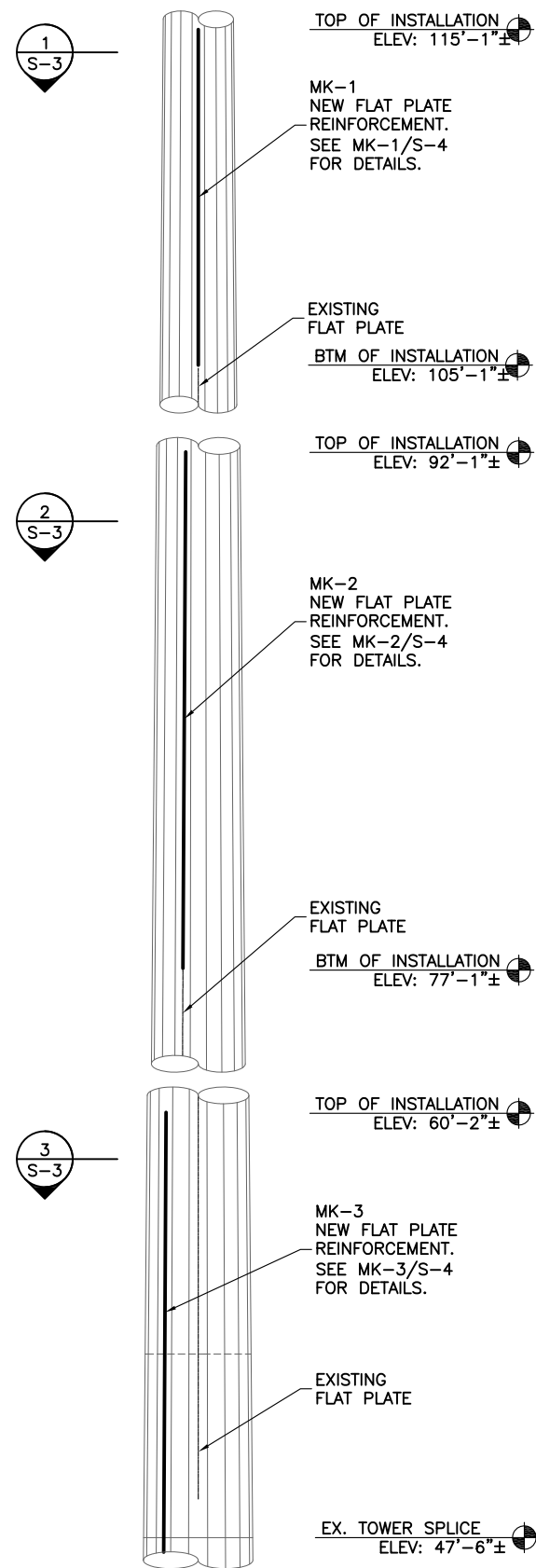
SITE NAME:
LITCHFIELD 3

SITE NUMBER:
CT12215-A-01

SITE ADDRESS:
**1291 BANTAM ROAD
BANTAM, CT 06750**

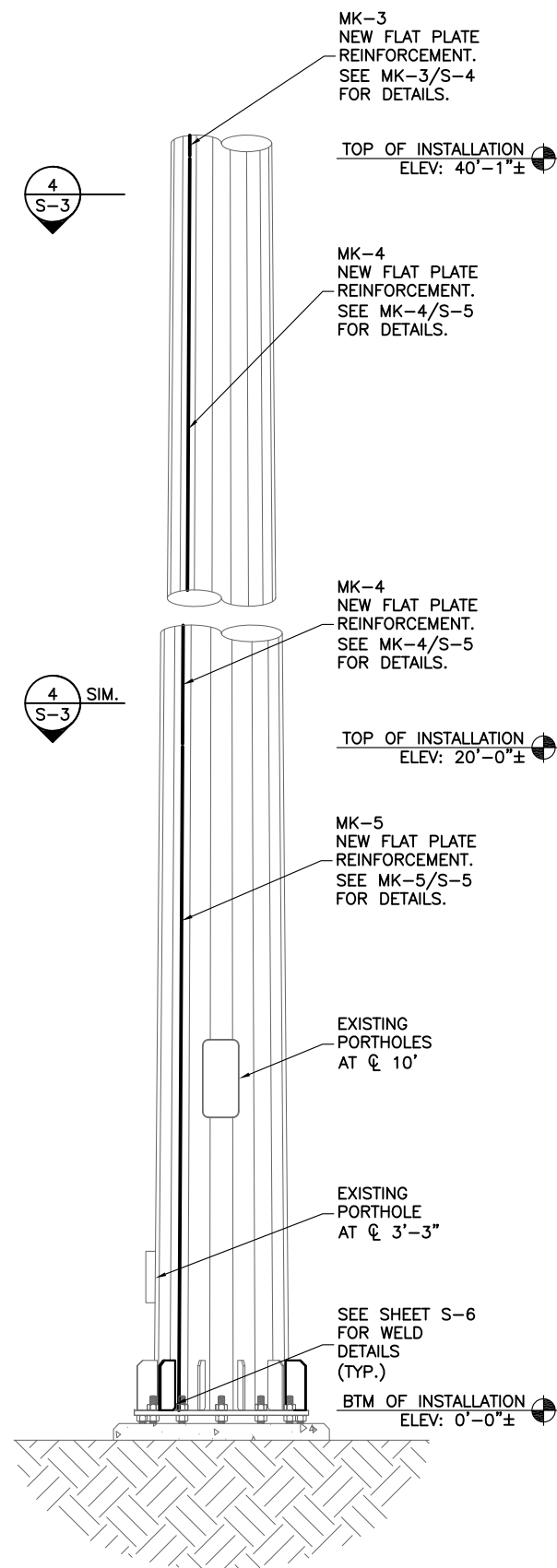
SHEET TITLE
MODIFICATION
SCHEDULE

SHEET NUMBER
S-1



FLAT PLATE REINFORCEMENT LAYOUT
ELEVATION VIEW

1
S-2
ELEVATION
SCALE: 3/16" = 1'-0"



FLAT PLATE REINFORCEMENT LAYOUT
ELEVATION VIEW

2
S-2
ELEVATION
SCALE: 3/16" = 1'-0"

FLAT PLATE INSTALLATION SCHEDULE				
PART #	QTY.	DESCRIPTION	ELEVATION	FLATS
MK-1	3	FLAT PLATE REINFORCEMENT	105'-1"± TO 115'-1"±	3 - 9 - 15
SP-1	3	SPLICE PLATE	105'-0"±	3 - 9 - 15
MK-2	3	FLAT PLATE REINFORCEMENT	77'-1"± TO 92'-1"±	4 - 10 - 16
SP-2	3	SPLICE PLATE	77'-0"±	4 - 10 - 16
MK-3	3	FLAT PLATE REINFORCEMENT	40'-2"± TO 60'-2"±	5 - 11 - 17
SP-3	3	SPLICE PLATE	40'-0"±	5 - 11 - 17
MK-4	3	FLAT PLATE REINFORCEMENT	20'-1"± TO 40'-1"±	5 - 11 - 17
SP-4	3	SPLICE PLATE	20'-0"±	5 - 11 - 17
MK-5	3	FLAT PLATE REINFORCEMENT	0'-0"± TO 20'-0"±	5 - 11 - 17
-	351	20MM AJAX BOLTS	VARIES	VARIES

ALL NEW FLAT PLATE STEEL TO HAVE Fy=65 KSI

PREPARED BY:
FDH
ENGINEERING INNOVATION
6521 MERIDEN DRIVE
RALEIGH, NC 27616
PHONE: 919-755-1012
FAX: 919-755-1031

PREPARED FOR:
SBA
5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800) 487-SITE

Dennis D. Abel
STATE OF CONNECTICUT
DENNIS D. ABEL
No. 23247
LICENSED PROFESSIONAL ENGINEER
6/26/14
DENNIS D. ABEL, P.E.
CONNECTICUT LIC. NO. 23247

DRAWN BY: JAT
CHECKED BY: KG
ENG APPVD: DDA
PROJECT NO: 1467DY1400

SUBMITTALS		
DATE	DESCRIPTION	REV
6/26/14	CONSTRUCTION	1

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF FDH ENGINEERING, INC. IS PROHIBITED.

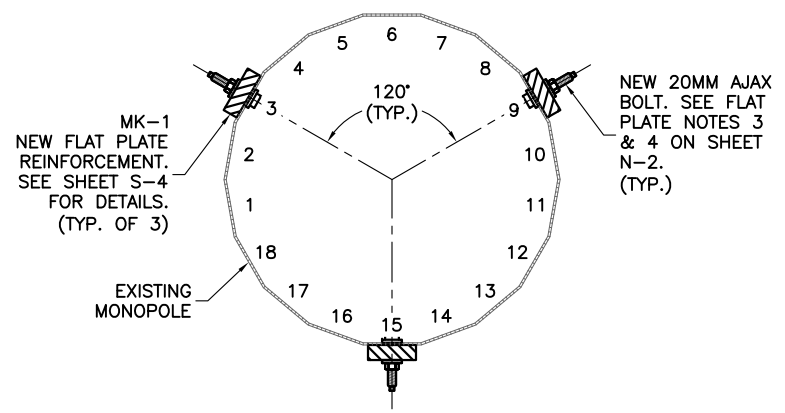
SITE NAME:
LITCHFIELD 3

SITE NUMBER:
CT12215-A-01

SITE ADDRESS:
**1291 BANTAM ROAD
BANTAM, CT 06750**

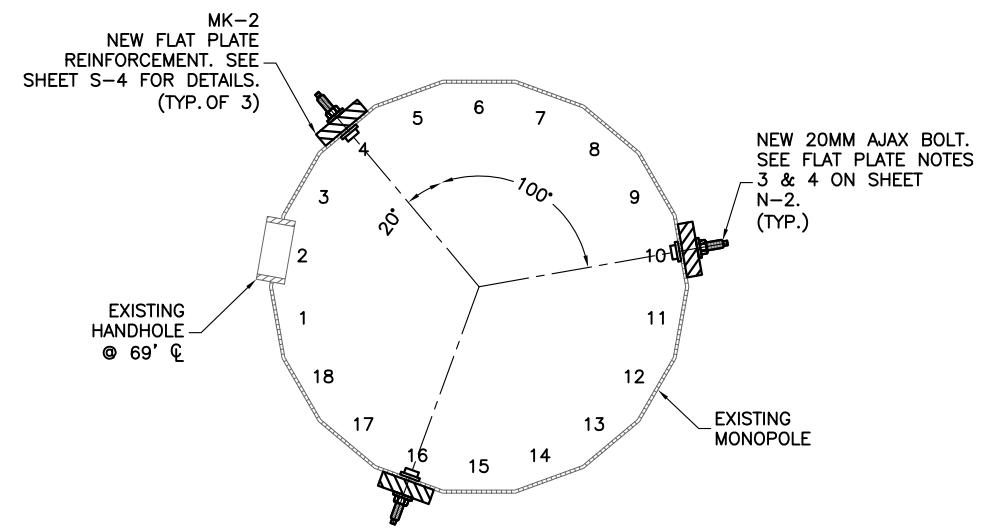
SHEET TITLE
**FLAT PLATE REINFORCEMENT
DETAILS I**

SHEET NUMBER
S-2



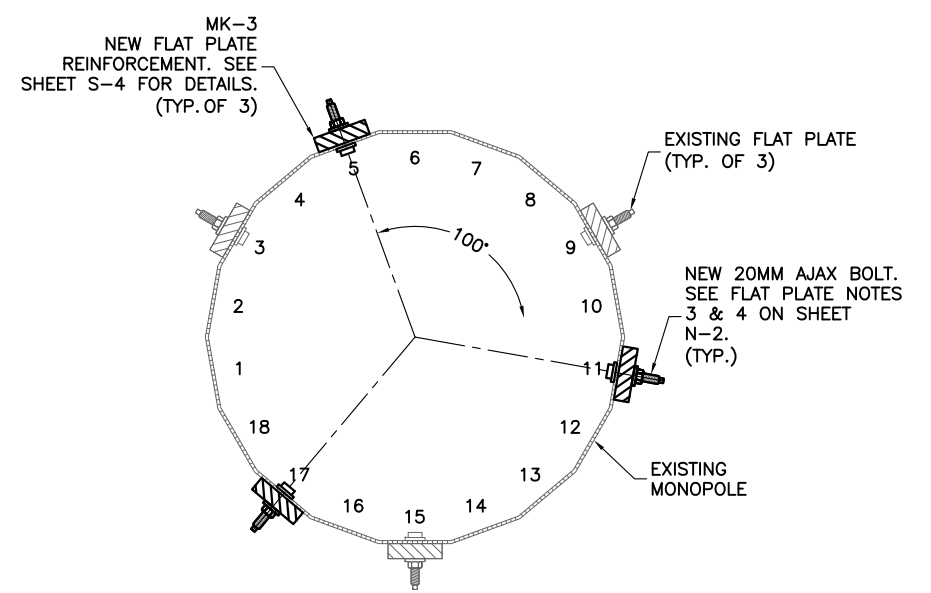
NEW FLAT PLATE REINFORCEMENT LAYOUT SECTION VIEW

1 SECTION
S-3 SCALE: 3/4" = 1'-0"



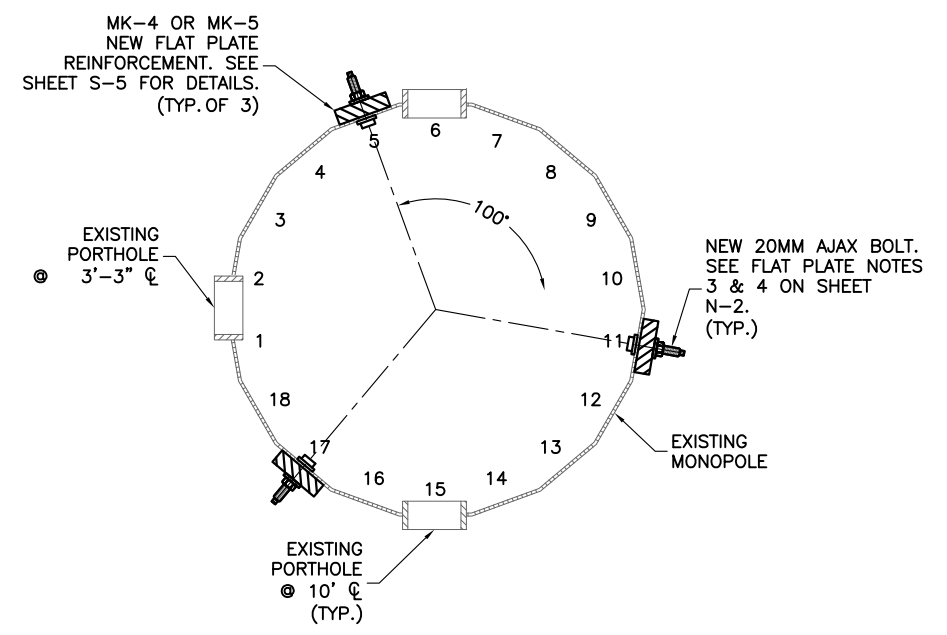
NEW FLAT PLATE REINFORCEMENT LAYOUT SECTION VIEW

2 SECTION
S-3 SCALE: 3/4" = 1'-0"



NEW FLAT PLATE REINFORCEMENT LAYOUT SECTION VIEW

3 SECTION
S-3 SCALE: 3/4" = 1'-0"



NEW FLAT PLATE REINFORCEMENT LAYOUT SECTION VIEW

4 SECTION
S-3 SCALE: 3/4" = 1'-0"

PREPARED BY:
FDH 6521 MERIDIEN DRIVE
RALEIGH, NC 27616
PHONE: 919-755-1012
FAX: 919-755-1031
ENGINEERING INNOVATION

PREPARED FOR:
SBA
5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800) 487-SITE

Dennis D. Abel
STATE OF CONNECTICUT
DENNIS D. ABEL
No. 23247
LICENSED PROFESSIONAL ENGINEER
6/26/14
DENNIS D. ABEL, P.E.
CONNECTICUT LIC. NO. 23247

DRAWN BY: JAT
CHECKED BY: KG
ENG APPVD: DDA
PROJECT NO: 1467DY1400

SUBMITTALS		
DATE	DESCRIPTION	REV
6/26/14	CONSTRUCTION	1

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF FDH ENGINEERING, INC. IS PROHIBITED.

SITE NAME:
LITCHFIELD 3

SITE NUMBER:
CT12215-A-01

SITE ADDRESS:
**1291 BANTAM ROAD
BANTAM, CT 06750**

SHEET TITLE
**FLAT PLATE REINFORCEMENT
DETAILS II**

SHEET NUMBER
S-3

SUBMITTALS		
DATE	DESCRIPTION	REV
6/26/14	CONSTRUCTION	1

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF FDH ENGINEERING, INC. IS PROHIBITED.

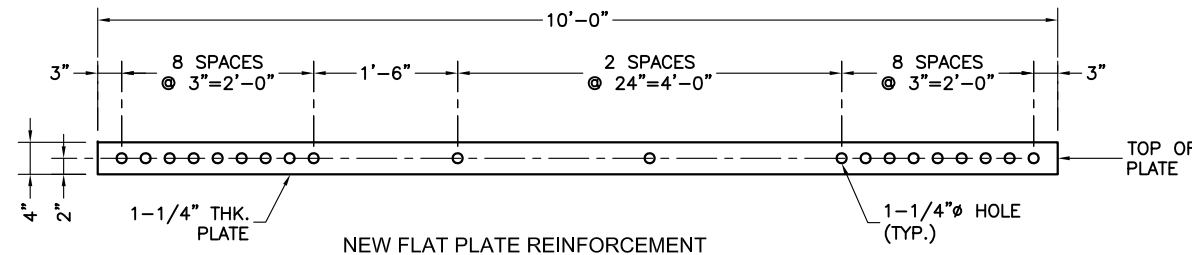
SITE NAME:
LITCHFIELD 3

SITE NUMBER:
CT12215-A-01

SITE ADDRESS:
 1291 BANTAM ROAD
 BANTAM, CT 06750

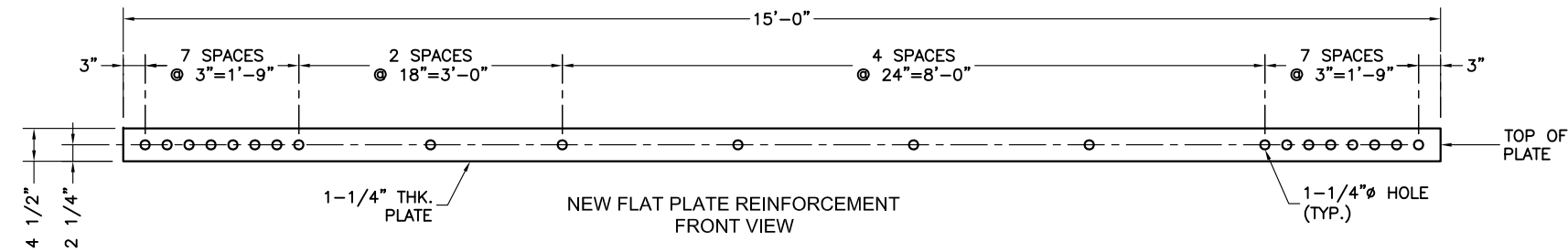
SHEET TITLE
**FLAT PLATE REINFORCEMENT
 DETAILS III**

SHEET NUMBER
S-4



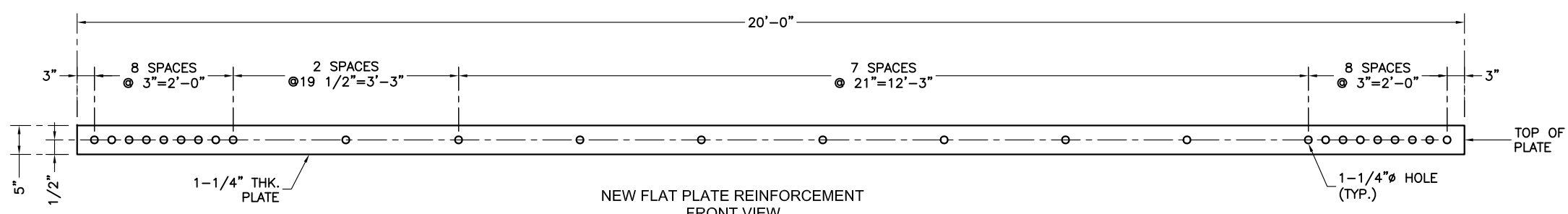
NEW FLAT PLATE REINFORCEMENT
 FRONT VIEW

MK-1
 S-4
DETAIL
 SCALE: 1/2" = 1'-0"



NEW FLAT PLATE REINFORCEMENT
 FRONT VIEW

MK-2
 S-4
DETAIL
 SCALE: 1/2" = 1'-0"



NEW FLAT PLATE REINFORCEMENT
 FRONT VIEW

MK-3
 S-4
DETAIL
 SCALE: 1/2" = 1'-0"

SUBMITTALS		
DATE	DESCRIPTION	REV
6/26/14	CONSTRUCTION	1

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF FDH ENGINEERING, INC. IS PROHIBITED.

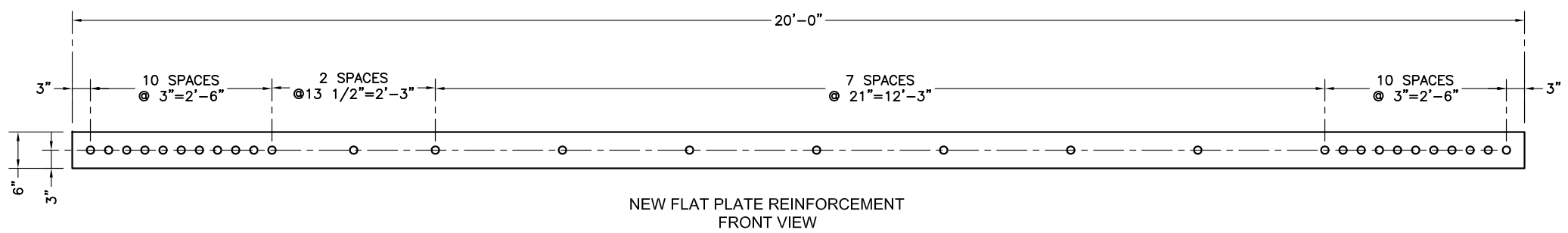
SITE NAME:
LITCHFIELD 3

SITE NUMBER:
CT12215-A-01

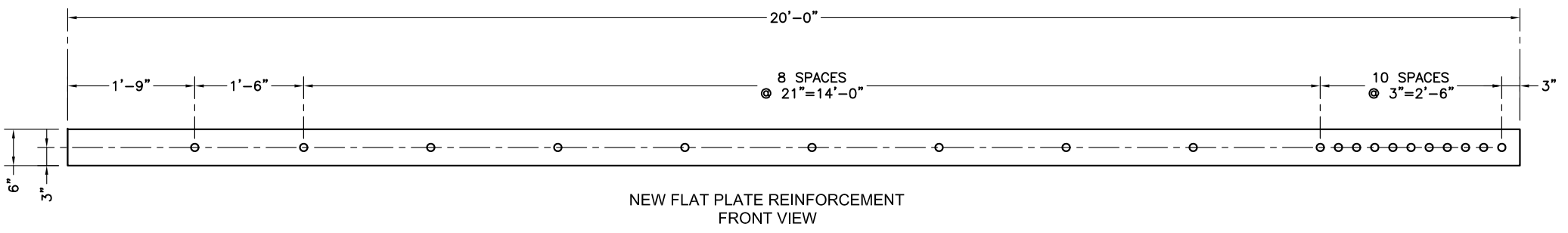
SITE ADDRESS:
 1291 BANTAM ROAD
 BANTAM, CT 06750

SHEET TITLE
**FLAT PLATE REINFORCEMENT
 DETAILS IV**

SHEET NUMBER
S-5



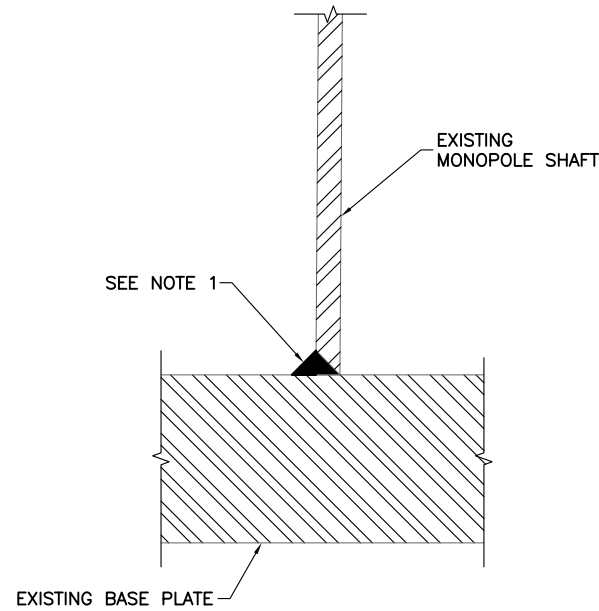
MK-4
 S-5
DETAIL
 SCALE: 1/2" = 1'-0"



MK-5
 S-5
DETAIL
 SCALE: 1/2" = 1'-0"

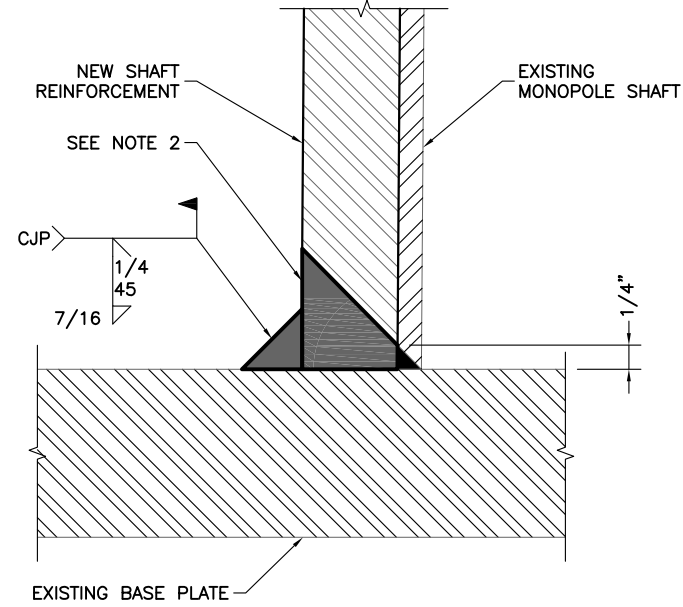
NOTES - OPTION 1:

1. GRIND EXISTING FILLET WELD FLUSH TO BASE PLATE & POLE FOR THE WIDTH OF THE REINFORCEMENT PLATE PLUS 1/4" ON EACH SIDE (DO NOT OVER GRIND).
2. PERFORM CJP WELD WITH REINFORCING FILLET WELD USING POLE AS BACKING BAR.



EXISTING WELD SECTION VIEW

1
S-6
DETAIL
SCALE: NTS

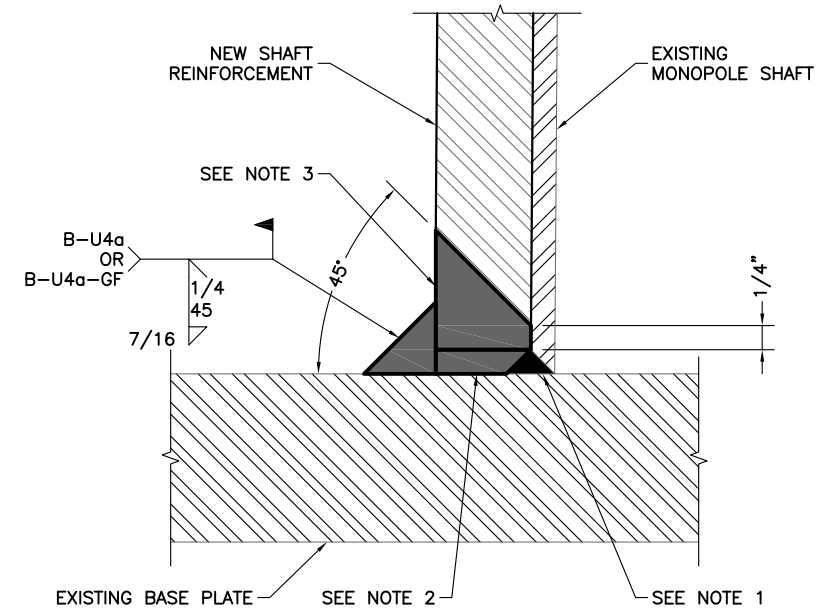


TERMINATION WELD - OPTION 1 SECTION VIEW

2
S-6
DETAIL
SCALE: NTS

NOTES - OPTION 2:

1. CLEAN EXISTING WELD FROM GALVANIZING.
2. BUILD A PLATFORM WITH WELD AT THE SAME HEIGHT OF THE EXISTING FILLET WELD (TO REDUCE THE AMOUNT OF WELD TO BUILD THE PLATFORM, IT IS ALLOWABLE TO PARTIALLY GRIND THE HEIGHT OF THE EXISTING FILLET WELD TO A 1/4" MINIMUM).
3. PERFORM CJP WELD WITH REINFORCING FILLET WELD USING POLE AS BACKING BAR.



TERMINATION WELD - OPTION 2 SECTION VIEW

3
S-6
DETAIL
SCALE: NTS

PREPARED BY:



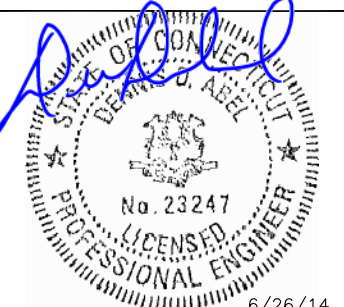
6521 MERIDIEN DRIVE
RALEIGH, NC 27616
PHONE: 919-755-1012
FAX: 919-755-1031

ENGINEERING INNOVATION

PREPARED FOR:



5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800) 487-SITE



DENNIS D. ABEL, P.E.
CONNECTICUT LIC. NO. 23247

DRAWN BY: JAT
CHECKED BY: KG
ENG APPVD: DDA
PROJECT NO: 1467DY1400

SUBMITTALS		
DATE	DESCRIPTION	REV
6/26/14	CONSTRUCTION	1

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF FDH ENGINEERING, INC. IS PROHIBITED.

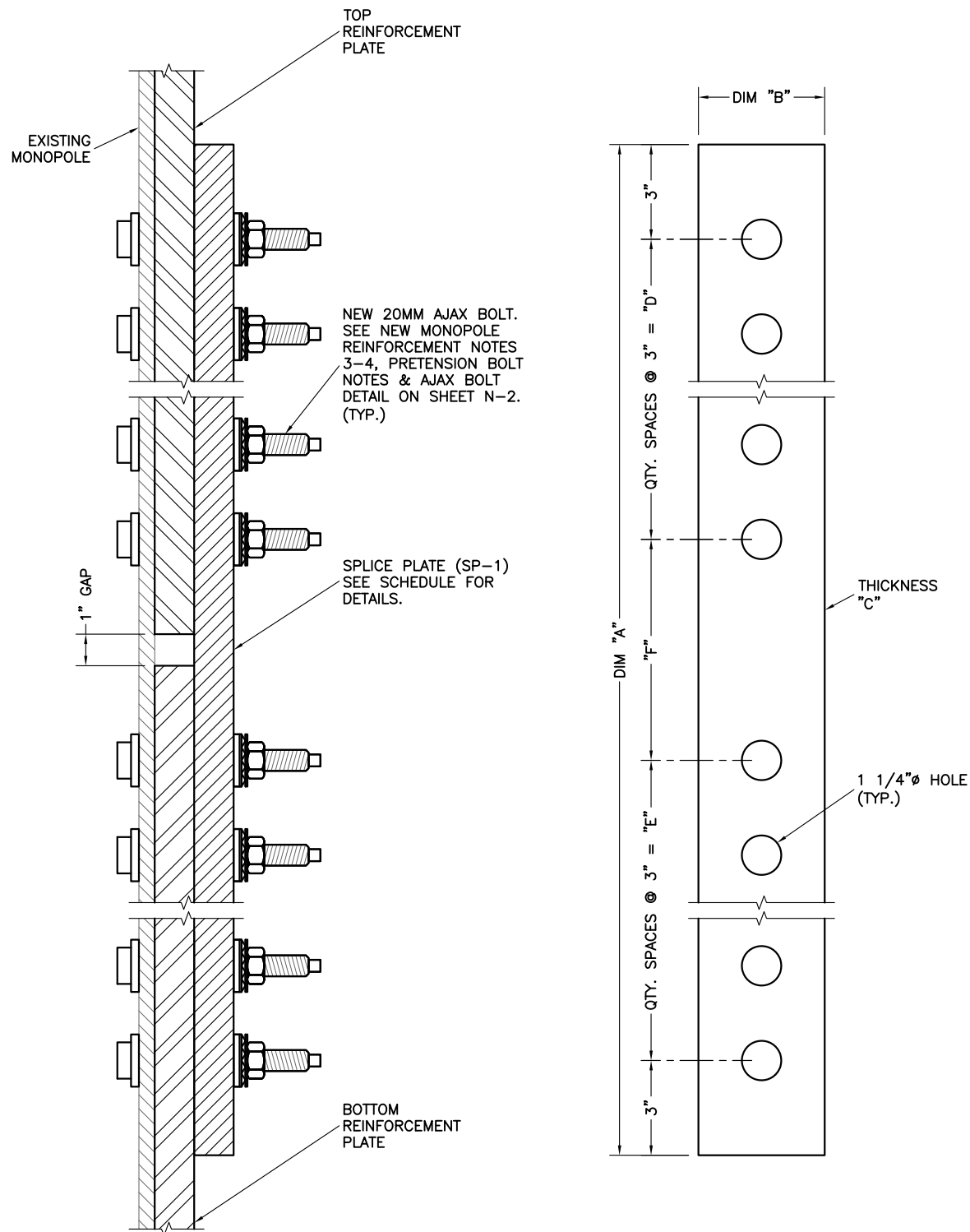
SITE NAME:
LITCHFIELD 3

SITE NUMBER:
CT12215-A-01

SITE ADDRESS:
**1291 BANTAM ROAD
BANTAM, CT 06750**

SHEET TITLE
**FLAT PLATE
REINFORCEMENT DETAILS V**

SHEET NUMBER
S-6



SPLICE PLATE ASSEMBLY
FRONT AND SIDE VIEW

1
S-7

DETAIL
NTS

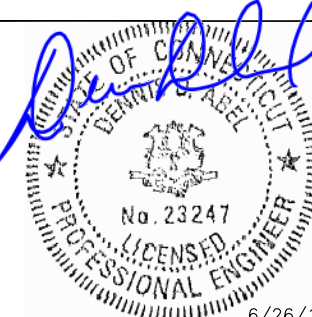
SPLICE PLATE INSTALLATION SCHEDULE								
PART NO.	QUANTITY	DIMENSION "A"	DIMENSION "B"	THICKNESS "C"	QTY. SPACES @ 3" = "D"	QTY. SPACES @ 3" = "E"	TOP/BTM. REINF. PLATE	"F"
SP-1	3	5'-0"	4"	1 1/4"	8 SPACES @ 3"=2'-0"	8 SPACES @ 3"=2'-0"	MK-1 / EXISTING PLATE	6"
SP-2	3	4'-6"	4 1/2"	1 1/4"	7 SPACES @ 3"=1'-9"	7 SPACES @ 3"=1'-9"	MK-2 / EXISTING PLATE	6"
SP-3	3	5'-7"	5"	1 1/4"	8 SPACES @ 3"=2'-0"	10 SPACES @ 3"=2'-6"	MK-3 / MK-4	7"
SP-4	3	6'-1"	6"	1 1/4"	10 SPACES @ 3"=2'-6"	10 SPACES @ 3"=2'-6"	MK-4 / MK-5	7"

PREPARED BY:

FDH
 ENGINEERING INNOVATION
 6521 MERIDIEN DRIVE
 RALEIGH, NC 27616
 PHONE: 919-755-1012
 FAX: 919-755-1031

PREPARED FOR:

SBA
 5900 BROKEN SOUND PARKWAY, NW
 BOCA RATON, FL 33487
 (800) 487-SITE


 DENNIS D. ABEL, P.E.
 CONNECTICUT LIC. NO. 23247

DRAWN BY: JAT
 CHECKED BY: KG
 ENG APPVD: DDA
 PROJECT NO: 1467DY1400

SUBMITTALS		
DATE	DESCRIPTION	REV
6/26/14	CONSTRUCTION	1

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF FDH ENGINEERING, INC. IS PROHIBITED.

SITE NAME:
LITCHFIELD 3

SITE NUMBER:
CT12215-A-01

SITE ADDRESS:
**1291 BANTAM ROAD
BANTAM, CT 06750**

SHEET TITLE
**SPLICE PLATE
INSTALLATION
DETAILS**

SHEET NUMBER
S-7

BASE PLATE STIFFENER INSTALLATION SCHEDULE

PART. NO	QUANTITY	DESCRIPTION	ELEVATION
MK-6	3	BASE PLATE STIFFENER	0'-0"± TO 1'-6"±

ALL NEW BASE PLATE STIFFENER STEEL TO HAVE $F_y=65$ KSI

PREPARED BY:

6521 MERIDIEN DRIVE
RALEIGH, NC 27616
PHONE: 919-755-1012
FAX: 919-755-1031

ENGINEERING INNOVATION

PREPARED FOR:

5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800) 487-SITE

DENNIS D. ABEL, P.E.
CONNECTICUT LIC. NO. 23247

DRAWN BY: JAT
CHECKED BY: KG
ENG APPVD: DDA
PROJECT NO: 1467DY1400

SUBMITTALS		
DATE	DESCRIPTION	REV
6/26/14	CONSTRUCTION	1

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF FDH ENGINEERING, INC. IS PROHIBITED.

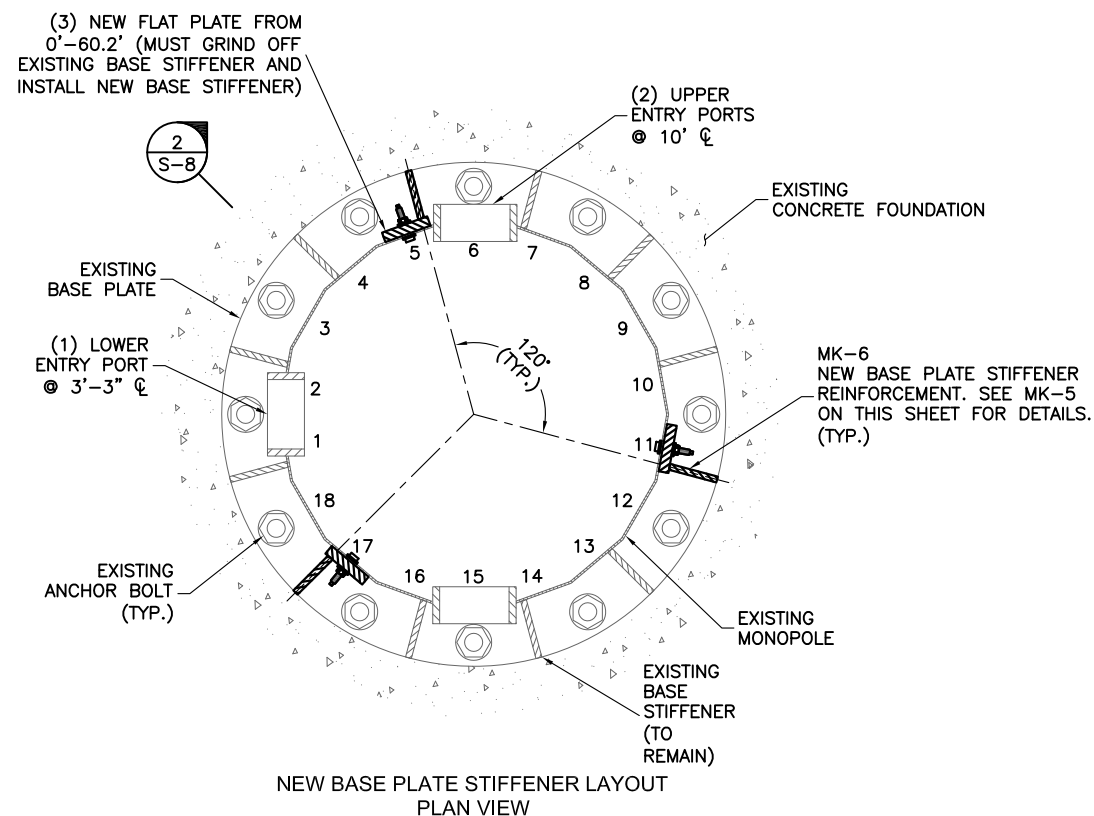
SITE NAME:
LITCHFIELD 3

SITE NUMBER:
CT12215-A-01

SITE ADDRESS:
1291 BANTAM ROAD
BANTAM, CT 06750

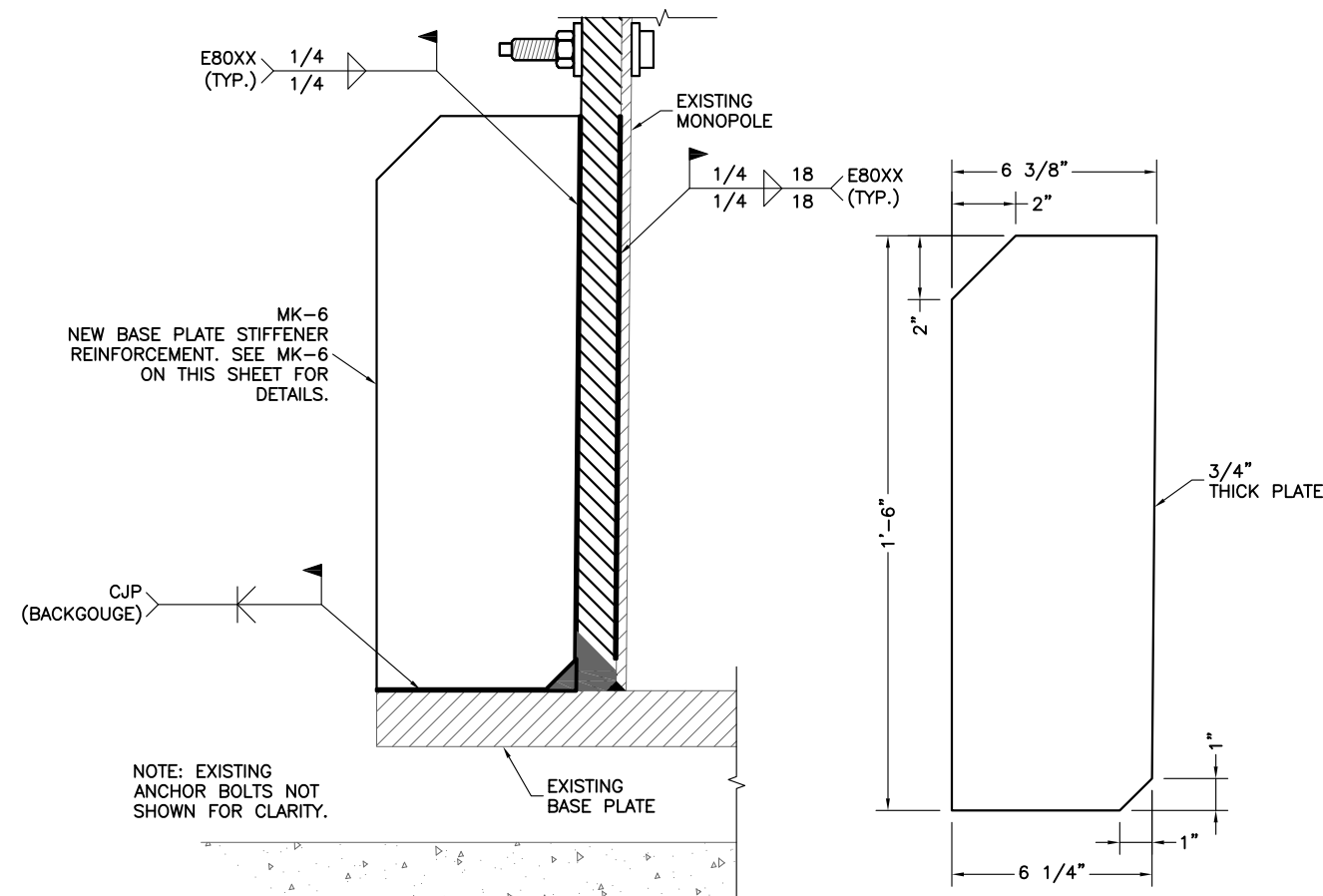
SHEET TITLE
BASE PLATE STIFFENER
REPLACEMENT
DETAILS

SHEET NUMBER
S-8



1
S-8

SECTION
SCALE: 1/2" = 1'-0"



NEW BASE PLATE STIFFENER WELD DETAIL
FRONT VIEW

2
S-8

DETAIL
NTS

NEW BASE PLATE STIFFENER
FRONT VIEW

MK-6
S-8

DETAIL
NTS