10 Industrial Avenue, Suite 3
Mahwah NJ, 07430
Phone: (201)-951-3869
Tom Kincaid
Real Estate Consultant

08/13/2014

Hand Delivered

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

CC Property Owner:
American Tower Corp.
10 Presidential Way
Woburn MA, 01801

RE: Sprint Spectrum L.P. notice of intent to modify an existing telecommunications facility located at 93 Old Amity Road, Bethany, CT 06524. Known to Sprint Spectrum L.P. as site CT03XC043.

Dear Ms. Bachman:

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

CDMA employs Spread-Spectrum technology and special coding scheme to allow multiple users to be multiplexed over the same physical channel.

LTE is a new high-performance air interface for cellular mobile communications. It is designed to increase the capacity and speed of mobile telephone networks.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in Sprint's operations at the site. Also included is documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

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

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

For the foregoing reasons Sprint Spectrum L.P. 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 (845) 499-4712 or email JNotaro@Transcendwireless.com with questions concerning this matter.
Thank you for your consideration.

Sincerely,

Jennifer Notaro
Real Estate Consultant

EBI Consulting
environmental | engineering | due diligence

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

Sprint Existing Facility

Site ID: CT03XC043

Bethany CT

93 Old Amity Road
Bethany, CT 06524

July 27, 2014

EBI Project Number: 62144043

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

EBI Consulting
environmental | engineering | due diligence

July 27, 2014

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

Re: Radio Frequency Maximum Permissible Exposure (MPE) Assessment for Site:
CT03XC043 - Bethany CT

Site Total: 34.01% - MPE% in full compliance

EBI Consulting was directed to analyze the proposed upgrades to the existing Sprint facility located at 93 Old Amity Road, Bethany, 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 97-01and 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 ($\mu W/cm^2$). The general population exposure limit for the cellular band (850 MHz Band) is approximately 567 $\mu W/cm^2$, and the general population exposure limit for the 1900 MHz and 2500 MHz bands is 1000 $\mu W/cm^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed upgrades to the existing Sprint Wireless antenna facility located at 93 Old Amity Road, Bethany, CT, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. All calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

For all calculations, all 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 minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

6) The antennas used in this modeling are the RFS APXVSPP18-C-A20 and the RFS APXVTM14-C-I20. 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 APXVTM14-C-I20 has a 15.9 dBd gain value at its main lobe at 2500 MHz. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
7) The antenna mounting height centerline for the proposed antennas is **240 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	CT03XC043 - Bethany CT
Site Addresss	93 Old Amity Road, TOWN, CT, 06524
Site Type	Self Support Tower

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 (10 db reduction)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss (dB)	ERP	Power Density Percentage
1a	RFS	APXVSPP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	2	40	5.9	240	234	1/2 "	0.5	0	138.69	0.09%
1a	RFS	APXVSPP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	3.4	240	234	1/2 "	0.5	0	39.00	0.05%
1B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	5.9	240	234	1/2 "	0.5	0	138.69	0.16%
														Sector total Power Density Value:		0.30%

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 (10 db reduction)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss (dB)	ERP	Power Density Percentage
2a	RFS	APXVSPP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	2	40	5.9	240	234	1/2 "	0.5	0	138.69	0.09%
2a	RFS	APXVSPP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	3.4	240	234	1/2 "	0.5	0	39.00	0.05%
2B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	5.9	240	234	1/2 "	0.5	0	138.69	0.16%
														Sector total Power Density Value:		0.30%

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 (10 db reduction)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss (dB)	ERP	Power Density Percentage
3a	RFS	APXVSPP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	2	40	5.9	240	234	1/2 "	0.5	0	138.69	0.09%
3a	RFS	APXVSPP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	3.4	240	234	1/2 "	0.5	0	39.00	0.05%
3B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	5.9	240	234	1/2 "	0.5	0	138.69	0.16%
														Sector total Power Density Value:		0.30%

Site Composite MPE %	
Carrier	MPE %
Sprint	0.89%
AT&T	11.98%
MetroPCS	6.81%
Verizon Wireless	6.24%
Industrial Comm.	1.59%
Nextel	1.60%
T-Mobile	0.91%
Rescue 21	2.10%
Dept of Homeland Sec	1.89%
Total Site MPE %	**34.01%**

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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 **0.89% (0.30% from sector 1, 0.30% from sector 2 and 0.30% from sector 3)** 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 **34.01%** 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

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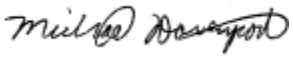
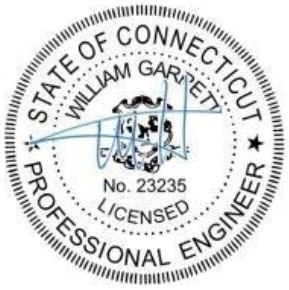
Structural Analysis Report

Structure	:	**337.5 ft Self Supported Tower**
ATC Site Name	:	**Bethany CT, CT**
ATC Site Number	:	**88008**
Engineering Number	:	**58994921**
Proposed Carrier	:	**Sprint Nextel**
Carrier Site Name	:	**Bethany CT**
Carrier Site Number	:	**CT03XC043**
Site Location	:	**93 Old Amity Road** **Bethany, CT 06524-3400** **41.404758, -72.999983**
County	:	**New Haven**
Date	:	**June 18, 2014**
Max Usage	:	**100%**
Result	:	**Pass**

Michael B. Davenport
Structural Engineer III





Jun 19 2014 7:47 AM

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Calculations ..... Attached

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 337.5 ft self supported tower to reflect the change in loading by Sprint Nextel.

Supporting Documents

Tower Drawings	CSEI Analysis (ATC Engineering #73115244 dated November 18, 2002)
Foundation Drawing	ETS #120302.01, dated June 18, 2012
Geotechnical Report	Geotel Engineering Report #E12-221, dated June 5, 2012
Modifications	ATC Engineering #44269933, dated January 6, 2010 ATC Engineering #49564732, dated July 5, 2012

Analysis

The tower was analyzed using Power Line Systems, Inc. tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/EIA-222.

Basic Wind Speed:	85 mph (Fastest Mile)
Basic Wind Speed w/ Ice:	74 mph (Fastest Mile)w/ 1/2" radial ice concurrent
Code:	ANSI/TIA/EIA-222-F / 2003 IBC , Sec. 1609.1.1, Exception (4) & Sec. 3108.4 w/ 2005 CT Supplement & 2009 CT Amendment

Conclusion

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

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

Existing and Reserved Equipment

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
338.0	338.0	-	-	-	(1) 7/8" Coax	-
	344.0	1	Rohde & Schwarz ADD090	Platform w/ Handrails	(2) 7/8" Coax	US Treasury
310.0	315.0	1	Sinclair SC381-HL (160")	Sector Frame	(2) 7/8" Coax	
	320.0	1	Sinclair SC281-L			
275.0	285.0	1	Sinclair SC281-L	Sector Frame	(1) 7/8" Coax	
250.0	250.0	12	Decibel DB844H90E-XY	Sector Frame	(12) 1 5/8" Coax	Sprint Nextel
240.0	240.0	3	Alcatel-Lucent 800MHz 2X50W RRH w/ Filter	Sector Frame	(3) 1 1/4" Hybriflex	
		3	Alcatel-Lucent 1900MHz 4X45 RRH			
		3	RFS APXVSPP18-C-A20			
220.0	220.0	6	RCU (Remote Control Unit)	Sector Frame	(12) 1 5/8" Coax (1) 0.32" Coax (1) 3/8" Coax	T-Mobile
		6	Remec S20057A1			
		3	RFS APX16PV-16PVL-E-00			
194.0	204.0	1	Andrew DB616E-BC	Side Arm	(1) 1 1/4" Coax	US Treasury
180.0	180.0	6	RFS FD9R6004/1C-3L	Sector Frame	(12) 1 5/8" Coax	Verizon Wireless
		3	Rymsa MGD3-800TX			
		6	Andrew DB844H90E-XY			
		3	Powerwave Allgon P65-16-XL-2			
165.0	165.0	3	Powerwave Allgon LGP21901	Sector Frame	(12) 1 5/8" Coax (2) 0.78" 8 AWG 6 (1) 3" conduit (1) 0.39" Cable	AT&T Mobility
		3	Raycap DC2-48-60-0-9E			
		6	Powerwave Allgon LGP21401			
		1	Raycap FC12-PC6-10E			
		6	Ericsson RRUS 11 (Band 12)			
		6	Powerwave Allgon 7770.00			
		1	KMW AM-X-CD-16-65-00T-RET			
		2	Andrew SBNH-1D6565C (60.8 lbs)			
100.0	100.0	3	RFS APXV18-206517S-C	Leg	(6) 1 5/8" Coax	Metro PCS
48.0	48.0	1	PCTEL GPS-TMG-HR-26N	Stand-Off	(1) 1/2" Coax	Sprint Nextel
20.0	20.0	1	Nortel NTGB01MA	Stand-Off	(1) 7/8" Coax	Metro PCS

Equipment to be Removed

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
204.8	204.8	6	Andrew DB980H90E-M	Leg	(6) 1 5/8" Coax	Sprint Nextel

Proposed Equipment

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
240.0	240.0	3	Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield	Sector Frame	(1) 1 1/4" Hybriflex	Sprint Nextel
		3	RFS RFS APXV9TM14-ALU-I20			

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

Install proposed coax alongside existing Sprint Nextel coax.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Legs	73%	Pass
Diagonals	99%	Pass
Horizontals	100%	Pass
Truss Horizontals	100%	Pass
Truss Diagonals	91%	Pass
Anchor Bolts	77%	Pass

Foundations

Reaction Component	Analysis Reactions
Uplift (Kips)	350.3
Axial (Kips)	471.8
Shear (Kips)	73.7

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.

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Standard Conditions

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

-- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.

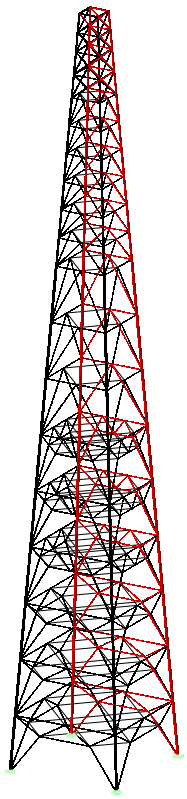
-- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

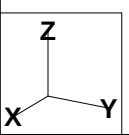
It is the responsibility of the client to ensure that the information provided to ATC Tower Services, Inc. and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with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

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

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

American Tower Corp., Project: "88008-sprint-06182014"
Tower Version 12.50, 12:00:04 PM Wednesday, June 18, 2014
Undeformed geometry displayed





Project Name : 88008 - Bethany CT, CT
Project Notes: 337.5' AT&T Tag Self Supported Tower
Project File : C:\Users\michael.davenport\Desktop\88008-sprint-06182014.tow
Date run   : 11:51:14 AM Wednesday, June 18, 2014
by   : Tower Version 12.50
Licensed to : American Tower Corp.

Successfully performed nonlinear analysis

The model has 0 warnings.

Member check option: TIA/EIA 222-F
Connection rupture check: Not Checked
Crossing diagonal check: Fixed
Included angle check: None
Climbing load check: None
Redundant members checked with: Actual Force
Loads from file: c:\users\michael.davenport\desktop\88008-sprint-06182014.eia

*** Analysis Results:

Maximum element usage is 100.43% for Angle "H 5P" in load case "W -90"   NG

Summary of Joint Support Reactions For All Load Cases:

Load Case	Joint Label	Long. Force (kips)	Tran. Force (kips)	Vert. Force (kips)	Shear Force (kips)	Tran. Moment (ft-k)	Long. Moment (ft-k)	Bending Moment (ft-k)	Vert. Moment (ft-k)	Found. Usage %
W 0	0P	-45.59	-24.49	-320.99	51.75	-0.46	-4.77	4.79	-2.58	0.00
W 0	0X	-44.42	25.17	-317.20	51.05	0.23	-4.58	4.59	2.58	0.00
W 0	0XY	-34.42	-14.40	199.88	37.31	0.55	-5.19	5.22	2.35	0.00
W 0	0Y	-35.43	13.73	201.14	37.99	-0.38	-5.39	5.40	-2.33	0.00
W 180	0P	35.43	13.57	199.11	37.94	-0.38	5.43	5.44	2.34	0.00
W 180	0X	34.42	-14.25	197.93	37.25	0.55	5.23	5.26	-2.35	0.00
W 180	0XY	44.41	25.01	-315.25	50.97	0.23	4.62	4.62	-2.59	0.00
W 180	0Y	45.59	-24.34	-318.96	51.68	-0.46	4.81	4.84	2.59	0.00
W 45	0P	-52.02	-52.18	-471.83	73.68	3.69	-3.66	5.20	0.00	0.00
W 45	0X	-21.89	-11.09	-57.89	24.54	4.28	-3.59	5.59	3.88	0.00
W 45	0XY	-42.29	-42.18	349.72	59.73	4.40	-4.43	6.24	-0.00	0.00
W 45	0Y	-10.97	-21.72	-57.16	24.34	3.57	-4.24	5.54	-3.88	0.00
W -45	0P	-22.75	11.57	-60.95	25.53	-4.45	-3.72	5.80	-3.88	0.00
W -45	0X	-51.16	52.66	-468.78	73.42	-3.86	-3.51	5.22	-0.00	0.00
W -45	0XY	-10.29	21.25	-57.69	23.61	-3.45	-4.10	5.36	3.89	0.00
W -45	0Y	-42.97	41.69	350.26	59.87	-4.29	-4.56	6.26	0.02	0.00
W 90	0P	-24.40	-45.75	-321.29	51.85	4.81	0.48	4.83	2.59	0.00
W 90	0X	13.64	-35.54	200.72	38.07	5.42	0.37	5.43	2.33	0.00
W 90	0XY	-14.43	-34.30	199.58	37.21	5.17	-0.56	5.20	-2.35	0.00
W 90	0Y	25.20	-44.25	-316.16	50.92	4.56	-0.20	4.57	-2.58	0.00
W -90	0P	13.54	35.54	199.42	38.04	-5.44	0.37	5.46	-2.34	0.00
W -90	0X	-24.31	45.75	-320.00	51.81	-4.83	0.48	4.86	-2.59	0.00
W -90	0XY	25.10	44.25	-314.94	50.87	-4.59	-0.20	4.59	2.59	0.00
W -90	0Y	-14.33	34.30	198.35	37.17	-5.20	-0.56	5.23	2.35	0.00
W 0 Ice	0P	-40.40	-22.14	-302.58	46.07	-1.73	-2.74	3.24	-2.18	0.00
W 0 Ice	0X	-39.23	22.79	-298.37	45.37	1.50	-2.55	2.96	2.18	0.00
W 0 Ice	0XY	-29.13	-12.04	153.73	31.52	1.81	-5.77	6.05	2.02	0.00
W 0 Ice	0Y	-30.05	11.40	154.38	32.14	-1.66	-5.95	6.18	-2.00	0.00
W 180 Ice	0P	30.05	11.19	151.58	32.06	-1.66	6.01	6.23	2.01	0.00
W 180 Ice	0X	29.13	-11.83	151.02	31.44	1.81	5.82	6.10	-2.03	0.00
W 180 Ice	0XY	39.23	22.57	-295.66	45.26	1.51	2.61	3.01	-2.19	0.00
W 180 Ice	0Y	40.40	-21.93	-299.78	45.97	-1.74	2.79	3.29	2.19	0.00
W 45 Ice	0P	-47.12	-47.29	-442.32	66.76	1.93	-1.89	2.70	0.00	0.00
W 45 Ice	0X	-19.97	-9.24	-71.97	22.00	5.11	-1.83	5.42	3.42	0.00
W 45 Ice	0XY	-37.17	-37.07	292.43	52.50	5.21	-5.23	7.39	-0.00	0.00
W 45 Ice	0Y	-9.14	-19.80	-70.99	21.81	1.81	-5.07	5.38	-3.42	0.00
W -45 Ice	0P	-20.84	9.70	-75.48	22.98	-5.28	-1.96	5.63	-3.42	0.00
W -45 Ice	0X	-46.26	47.74	-438.81	66.47	-2.10	-1.75	2.73	-0.01	0.00
W -45 Ice	0XY	-8.53	19.35	-70.95	21.15	-1.72	-4.93	5.22	3.43	0.00
W -45 Ice	0Y	-37.78	36.61	292.40	52.61	-5.12	-5.36	7.41	0.02	0.00
W 90 Ice	0P	-22.05	-40.57	-302.87	46.17	2.77	1.76	3.28	2.19	0.00
W 90 Ice	0X	11.31	-30.15	153.70	32.20	5.99	1.65	6.21	2.00	0.00
W 90 Ice	0XY	-12.06	-29.03	153.44	31.44	5.75	-1.82	6.03	-2.02	0.00
W 90 Ice	0Y	22.80	-39.06	-297.10	45.23	2.54	-1.48	2.93	-2.18	0.00
W -90 Ice	0P	11.17	30.15	151.87	32.15	-6.02	1.65	6.25	-2.01	0.00
W -90 Ice	0X	-21.91	40.57	-301.05	46.11	-2.81	1.76	3.32	-2.19	0.00
W -90 Ice	0XY	22.67	39.06	-295.37	45.16	-2.57	-1.48	2.97	2.19	0.00
W -90 Ice	0Y	-11.92	29.03	151.71	31.38	-5.79	-1.82	6.07	2.03	0.00

Summary of Joint Support Reactions For All Load Cases in Direction of Leg:

Load Case	Support Origin Joint	Joint Member Leg	Force In Leg Dir. (kips)	Residual Shear Perpendicular To Leg (kips)	Residual Shear Horizontal To Leg - Res. (kips)	Residual Shear Horizontal To Leg - Long. (kips)	Residual Shear Horizontal To Leg - Tran. (kips)	Total Long. Force (kips)	Total Tran. Force (kips)	Total Vert. Force (kips)
W 0	0P	1P L 1P	324.133	25.462	25.530	25.198	4.102	-45.59	-24.49	-320.99
W 0	0X	1X L 1X	320.331	24.713	24.782	24.268	-5.019	-44.42	25.17	-317.20
W 0	0XY	1XY L 1XY	-202.172	21.736	21.786	21.719	1.706	-34.42	-14.40	199.88
W 0	0Y	1Y L 1Y	-203.442	22.622	22.671	22.651	-0.949	-35.43	13.73	201.14
W 180	0P	1P L 1P	-201.412	22.751	22.800	-22.782	-0.925	35.43	13.57	199.11
W 180	0X	1X L 1X	-200.217	21.856	21.907	-21.843	1.676	34.42	-14.25	197.93
W 180	0XY	1XY L 1XY	318.375	24.826	24.896	-24.391	-4.990	44.41	25.01	-315.25
W 180	0Y	1Y L 1Y	322.103	25.586	25.654	-25.328	4.078	45.59	-24.34	-318.96
W 45	0P	1P L 1P	476.529	31.171	31.296	22.046	22.213	-52.02	-52.18	-471.83
W 45	0X	1X L 1X	58.346	23.446	23.447	18.215	14.765	-21.89	-11.09	-57.89
W 45	0XY	1XY L 1XY	-353.666	28.197	28.311	20.076	19.961	-42.29	-42.18	349.72
W 45	0Y	1Y L 1Y	57.615	23.251	23.252	14.604	18.093	-10.97	-21.72	-57.16
W -45	0P	1P L 1P	61.416	24.391	24.392	18.879	-15.445	-22.75	11.57	-60.95
W -45	0X	1X L 1X	473.464	31.191	31.316	21.382	-22.880	-51.16	52.66	-468.78
W -45	0XY	1XY L 1XY	58.154	22.448	22.449	13.953	-17.586	-10.29	21.25	-57.69
W -45	0Y	1Y L 1Y	-354.210	28.304	28.418	20.726	-19.442	-42.97	41.69	350.26
W 90	0P	1P L 1P	324.445	25.591	25.658	3.996	25.345	-24.40	-45.75	-321.29
W 90	0X	1X L 1X	-203.024	22.761	22.811	-0.889	22.793	13.64	-35.54	200.72
W 90	0XY	1XY L 1XY	-201.861	21.644	21.695	1.756	21.623	-14.43	-34.30	199.58
W 90	0Y	1Y L 1Y	319.289	24.634	24.703	-5.116	24.168	25.20	-44.25	-316.16
W -90	0P	1P L 1P	-201.724	22.845	22.894	-0.875	-22.877	13.54	35.54	199.42
W -90	0X	1X L 1X	323.146	25.671	25.738	3.981	-25.428	-24.31	45.75	-320.00
W -90	0XY	1XY L 1XY	318.063	24.704	24.774	-5.096	-24.244	25.10	44.25	-314.94
W -90	0Y	1Y L 1Y	-200.636	21.719	21.770	1.736	-21.700	-14.33	34.30	198.35
W 0 Ice	0P	1P L 1P	305.325	21.327	21.381	21.180	2.925	-40.40	-22.14	-302.58
W 0 Ice	0X	1X L 1X	301.094	20.585	20.641	20.282	-3.835	-39.23	22.79	-298.37
W 0 Ice	0XY	1XY L 1XY	-155.714	19.449	19.497	19.363	2.279	-29.13	-12.04	153.73
W 0 Ice	0Y	1Y L 1Y	-156.388	20.258	20.305	20.242	-1.595	-30.05	11.40	154.38
W 180 Ice	0P	1P L 1P	-153.584	20.433	20.480	-20.421	-1.559	30.05	11.19	151.58
W 180 Ice	0X	1X L 1X	-153.004	19.615	19.663	-19.535	2.237	29.13	-11.83	151.02
W 180 Ice	0XY	1XY L 1XY	298.383	20.745	20.801	-20.452	-3.794	39.23	22.57	-295.66
W 180 Ice	0Y	1Y L 1Y	302.522	21.497	21.552	-21.357	2.890	40.40	-21.93	-299.78
W 45 Ice	0P	1P L 1P	446.515	26.921	27.029	19.028	19.197	-47.12	-47.29	-442.32
W 45 Ice	0X	1X L 1X	72.356	20.683	20.683	15.398	13.809	-19.97	-9.24	-71.97
W 45 Ice	0XY	1XY L 1XY	-295.957	26.123	26.228	18.594	18.497	-37.17	-37.07	292.43
W 45 Ice	0Y	1Y L 1Y	71.379	20.497	20.497	13.650	15.291	-9.14	-19.80	-70.99
W -45 Ice	0P	1P L 1P	75.883	21.619	21.619	16.042	-14.493	-20.84	9.70	-75.48
W -45 Ice	0X	1X L 1X	442.993	26.961	27.069	18.384	-19.869	-46.26	47.74	-438.81
W -45 Ice	0XY	1XY L 1XY	71.347	19.756	19.757	13.038	-14.843	-8.53	19.35	-70.95
W -45 Ice	0Y	1Y L 1Y	-295.930	26.244	26.350	19.205	-18.040	-37.78	36.61	292.40
W 90 Ice	0P	1P L 1P	305.616	21.461	21.515	2.814	21.331	-22.05	-40.57	-302.87
W 90 Ice	0X	1X L 1X	-155.701	20.395	20.442	-1.546	20.384	11.31	-30.15	153.70
W 90 Ice	0XY	1XY L 1XY	155.424	19.374	19.422	2.314	19.284	-12.06	-29.03	153.44
W 90 Ice	0Y	1Y L 1Y	299.826	20.515	20.572	-3.932	20.193	22.80	-39.06	-297.10
W -90 Ice	0P	1P L 1P	-153.875	20.509	20.557	-1.524	-20.500	11.17	30.15	151.87
W -90 Ice	0X	1X L 1X	303.791	21.573	21.627	2.792	-21.446	-21.91	40.57	-301.05
W -90 Ice	0XY	1XY L 1XY	298.092	20.617	20.674	-3.905	-20.302	22.67	39.06	-295.37
W -90 Ice	0Y	1Y L 1Y	-153.691	19.480	19.528	2.287	-19.394	-11.92	29.03	151.71

Overturning Moment Summary For All Load Cases:

Load Case	Transverse Moment (ft-k)	Longitudinal Moment (ft-k)	Resultant Moment (ft-k)
W 0	65.648	26954.553	26954.633
W 180	65.706	-26747.997	26748.078
W 45	21290.116	21327.993	30135.565
W -45	-21159.079	21328.303	30043.355
W 90	26916.724	103.543	26916.923
W -90	-26785.873	103.591	26786.073
W 0 Ice	92.227	23578.730	23578.910
W 180 Ice	92.301	-23292.945	23293.128
W 45 Ice	19032.229	19082.896	26951.487
W -45 Ice	-18847.987	19083.175	26821.897
W 90 Ice	23528.107	142.917	23528.541
W -90 Ice	-23343.627	142.977	23344.065

EIA Sections Information:

Section Label	Top Z (ft)	Bottom Z (ft)	Joint Count	Member Count	Top Width (ft)	Bottom Width (ft)	Gross Area (ft^2)	Face Af Adjust Factor	Face Ar Adjust Factor	Dead Load Factor
328.9-337.5	337.500	328.917	8	20	9.00	10.09	81.93	1.1220	1.1220	1.346
320.3-328.9	328.917	320.334	8	16	10.09	11.18	91.28	1.1610	1.1610	1.393

310.2-320.3	320.334	310.167	8	16	11.18	12.47	120.24	1.1970	1.1970	1.436
300.0-310.2	310.167	300.000	12	24	12.47	13.76	133.37	1.1540	1.1540	1.385
287.5-300.0	300.000	287.500	16	24	13.76	15.35	181.97	1.2010	1.2010	1.442
275.0-287.5	287.500	275.000	16	24	15.35	16.94	201.82	1.2080	1.2080	1.449
262.5-275.0	275.000	262.500	16	24	16.94	18.53	221.67	1.2140	1.2140	1.457
250.0-262.5	262.500	250.000	16	24	18.53	20.12	241.52	1.2200	1.2200	1.464
237.5-250.0	250.000	237.500	16	24	20.12	21.70	261.37	1.2260	1.2260	1.471
225.0-237.5	237.500	225.000	16	24	21.70	23.29	281.22	1.2320	1.2320	1.478
200.0-225.0	225.000	200.000	16	24	23.29	26.47	621.99	1.2640	1.2640	1.516
175.0-200.0	200.000	175.000	16	24	26.47	29.64	701.39	1.2730	1.2730	1.528
150.0-175.0	175.000	150.000	20	32	29.64	32.82	780.79	1.2880	1.2880	1.545
125.0-150.0	150.000	125.000	36	76	32.82	36.00	860.19	1.2300	1.2300	1.476
100.0-125.0	125.000	100.000	36	76	36.00	39.17	939.58	1.2270	1.2270	1.473
75.00-100.0	100.000	75.000	32	68	39.17	42.35	1018.98	1.2320	1.2320	1.479
50.00-75.00	75.000	50.000	24	52	42.35	45.52	1098.38	1.3380	1.3380	1.606
25.00-50.00	50.000	25.000	24	52	45.52	48.70	1177.78	1.3250	1.3250	1.590
0.000-25.00	25.000	0.000	20	40	48.70	51.88	1257.18	1.3210	1.3210	1.585

*** Overall summary for all load cases - Usage = Maximum Stress / Allowable Stress
Printed capacities do not include EIA allowable stress increase for wind load cases.
Printed capacities do not include the strength factor entered for each load case.
The Group Summary reports on the member and load case that resulted in maximum usage which may not necessarily be the same as that which produces maximum force.

Group Summary (Compression Portion):

Group Label	Group Desc.	Angle Type	Angle Size	Steel Strength (ksi)	Max Usage %	Usage Cont-rol	Max Use In Comp. %	Comp. Control Member	Comp. Force (kips)	Comp. Control Load Case	L/R Capacity (kips)	Comp. Connect. Shear Capacity (kips)	Comp. Connect. Bearing Capacity (kips)	RLX	RLY	RLZ	L/R	KL/R	Length Comp. Member (ft)	Curve No.	No. Of Bolts Comp.	
Leg S1	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	73.44	Comp	73.44	L 1P	-409.136	W 45	417.820	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0	
Leg S2	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	71.26	Comp	71.26	L 2P	-365.896	W 45	385.120	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0	
Leg S3	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	68.30	Comp	68.30	L 3P	-321.452	W 45	352.980	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0	
Leg S4	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	67.31	Comp	67.31	L 4P	-269.746	W 45	300.553	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0	
Leg S5	L 8" x 8" x 1"	SAE	8X8X1	36.0	63.09	Comp	63.09	L 5P	-226.659	W 45	269.473	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0	
Leg S6	L 8" x 8" x 1"	SAE	8X8X1	36.0	51.01	Comp	51.01	L 6P	-183.286	W 45	269.473	0.000	0.000	0.281	0.281	0.281	54.29	54.29	25.101	1	0	
Leg S7	L 8" x 8" x 0.875"	SAE	8X8X0.88	36.0	56.90	Comp	56.90	L 7P	-171.091	W 45	225.502	0.000	0.000	0.333	0.333	0.333	63.94	63.94	25.101	1	0	
Leg S8	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	52.05	Comp	52.05	L 8P	-135.631	W 45	195.450	0.000	0.000	0.333	0.333	0.333	63.54	63.54	25.101	1	0	
Leg S9	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	39.47	Comp	39.47	L 9P	-102.856	W 45	195.450	0.000	0.000	0.333	0.333	0.333	63.54	63.54	25.101	1	0	
Leg S10	L 6" x 6" x 0.875"	SAE	6X6X0.88	36.0	39.50	Comp	39.50	L 10P	-87.131	W 45	165.443	0.000	0.000	0.500	0.500	0.500	64.36	64.36	12.550	1	0	
Leg S11	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	38.28	Comp	38.28	L 11P	-73.245	W 45	143.509	0.000	0.000	0.500	0.500	0.500	64.36	64.36	12.550	1	0	
Leg S12	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	32.22	Comp	32.22	L 12P	-61.654	W 45	143.509	0.000	0.000	0.500	0.500	0.500	64.36	64.36	12.550	1	0	
Leg S13	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	34.35	Comp	34.35	L 13P	-50.232	W 45	109.680	0.000	0.000	0.500	0.500	0.500	63.82	63.82	12.550	1	0	
Leg S14	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	26.75	Comp	26.75	L 14P	-39.113	W 45	109.680	0.000	0.000	0.500	0.500	0.500	63.82	63.82	12.550	1	0	
Leg S15	L 6" x 6" x 0.4375"	SAE	6X6X0.44	36.0	24.24	Comp	24.24	L 15P	-27.982	W 45	86.579	0.000	0.000	0.500	0.500	0.500	63.28	63.28	12.550	1	0	
Leg S16	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	23.12	Comp	23.12	L 16P	-22.196	W 45	71.999	0.000	0.000	0.500	0.500	0.500	62.12	62.12	10.208	1	0	
Leg S17	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	14.78	Comp	14.78	L 17P	-14.192	W 45	71.999	0.000	0.000	0.500	0.500	0.500	62.12	62.12	10.208	1	0	
Leg S18	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	10.23	Comp	10.23	L 18P	-7.486	W 45 Ice	54.896	0.000	0.000	0.500	0.500	0.500	52.02	52.02	8.618	1	0	
Leg S19	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	5.04	Comp	5.04	L 19P	-3.687	W 45 Ice	54.896	0.000	0.000	0.500	0.500	0.500	52.02	52.02	8.618	1	0	
Diag S1	B/B L3"x4"x0.375"	DAS	4X3X0.38	36.0	54.23	Comp	54.23	D 2X	-45.206	W -90	62.516	0.000	0.000	0.333	0.667	0.333	103.12	103.12	22.664	1	0	
Diag S2	B/B L3"x4"x0.25"	DAS	4X3X0.25	36.0	76.17	Comp	76.17	D 4X	-44.957	W -90	44.268	0.000	0.000	0.333	0.667	0.333	99.05	99.05	22.190	1	0	
Diag S3	B/B L3"x4"x0.25"	DAS	4X3X0.25	36.0	73.45	Comp	73.45	D 6X	-44.192	W -90	45.126	0.000	0.000	0.333	0.667	0.333	97.03	97.03	21.736	1	0	
Diag S4	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	36.0	88.46	Comp	88.46	D 8X	-47.380	W -90	40.170	0.000	0.000	0.333	0.667	0.333	101.13	101.13	20.858	1	0	
Diag S5	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	36.0	84.54	Comp	84.54	D 10X	-46.091	W -90	40.889	0.000	0.000	0.333	0.667	0.333	99.32	99.32	20.484	1	0	
Diag S6	B/B L2.5"x3.5"x0.25"	DAS	3.5X2.5X0.25	36.0	99.11	Comp	99.11	D 12X	-44.647	W -90	33.788	0.000	0.000	0.333	0.667	0.333	109.55	109.55	20.132	1	0	
Diag S7	B/B L3"x3"x0.375"	DAE	3X3X0.38	36.0	68.09	Comp	68.09	D 13X	-29.088	W -90	32.040	0.000	0.000	0.300	0.600	0.300	152.92	140.25	29.947	6	0	
Diag S8	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	87.07	Comp	87.07	D 16Y	-24.986	W 180	21.522	0.000	0.000	0.300	0.600	0.300	144.53	135.09	29.107	6	0	
Diag S9	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	77.43	Comp	77.43	D 18Y	-23.020	W 180	22.297	0.000	0.000	0.300	0.600	0.300	140.68	132.72	28.331	6	0	
Diag S10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	63.96	Comp	63.96	D 20Y	-13.073	W 180	15.329	0.000	0.000	0.500	1.000	0.500	172.47	152.27	17.103	6	0	
Diag S11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	50.58	Comp	50.58	D 22Y	-10.798	W 180	16.014	0.000	0.000	0.500	1.000	0.500	167.12	148.98	16.572	6	0	
Diag S12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	42.39	Comp	42.39	D 24Y	-9.447	W 180	16.714	0.000	0.000	0.500	1.000	0.500	161.99	145.82	16.064	6	0	
Diag S13	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	62.85	Comp	62.85	D 26Y	-9.314	W 180	11.115	0.000	0.000	0.500	1.000	0.500	199.94	169.16	15.579	6	0	
Diag S14	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	54.66	Comp	54.66	D 28Y	-8.458	W 180	11.607	0.000	0.000	0.500	1.000	0.500	194.06	165.54	15.120	6	0	
Diag S15	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	49.66	Comp	49.66	D 29X	-8.010	W -90	12.098	0.000	0.000	0.500	1.000	0.500	188.54	162.15	14.690	6	0	
Diag S16	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	36.0	29.71	Comp	29.71	D 32X	-4.929	W -90	12.446	0.000	0.000	0.520	0.750	0.520	149.34	142.40	16.609	5	0	
Diag S17	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	36.0	21.56	Comp	21.56	D 34X	-3.949	W -90	13.736	0.000	0.000	0.520	0.750	0.520	140.35	135.55	15.609	5	0	
Diag S18	L 3" x 3" x 0.25"	SAE	3X3X0.25	36.0	16.71	Comp	16.71	D 36P	-2.500	W 90	11.217	0.000	0.000	0.520	0.750	0.520	144.17	138.46	13.678	5	0	
Diag S19	L 3" x 3" x 0.25"	SAE	3X3X0.25	36.0	12.54	Comp	12.54	D 38X	-2.070	W -90	12.380	0.000	0.000	0.520	0.750	0.520	135.43	131.80	12.848	5	0	
Horiz 1	B/B L4"x3"x0.25"	DAL	4X3X0.25	36.0	77.32	Comp	77.32	H 1P	-38.701	W -90	37.543	0.000	0.000	0.500	0.500	0.500	114.14	114.14	24.350	1	0	
Horiz 2	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	97.20	Comp	97.20	H 3P	-36.620	W -90	28.256	0.000	0.000	0.500	0.500	0.500	125.29	123.26	22.762	6	0	
Horiz 3	**B/B L3"x2.5"x0.25"**	**DAL**	**3X2.5X0.25**	**36.0**	**100.43**	**Comp**	**100.43**	**H 5P**	**-34.412**	**W -90**	**25.700**	**0.000**	**0.000**	**0.460**	**0.460**	**0.460**	**123.68**	**122.26**	**21.174**	**6**	**0**	**NG**
Horiz 4	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	98.85	Comp	98.85	H 7P	-34.885	W -90	26.470	0.000	0.000	0.900	0.900	0.900	129.37	125.76	13.057	6	0	
Horiz 5	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	90.17	Comp	90.17	H 9P	-31.837	W -90	26.482	0.000	0.000	1.000	1.000	1.000	132.09	127.44	11.998	6	0	
Horiz 6	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	95.10	Comp	95.10	H 11P	-28.741	W -90	22.665	0.000	0.000	1.000	1.000	1.000	138.92	131.63	10.940	6	0	
Horiz 7	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	71.13	Comp	71.13	H 14P	-14.200	W 180	14.974	0.000	0.000	1.000	1.000	1.000	188.21	161.95	14.822	6	0	
Horiz 8	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	48.61	Comp	48.61	H 16P	-11.381	W 180	17.560	0.000	0.000	1.000	1.000	1.000	168.05	149.55	13.234	6	0	
Horiz 9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	49.68	Comp	49.68	H 18P	-9.435	W 180	14.243	0.000	0.000	1.000	1.000	1.000	181.73	157.96	11.646	6	0	
Horiz 10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	37.91	Comp	37.91	H 20P	-7.947	W 180	15.724	0.000	0.000	1.000	1.000	1.000	169.34	150.34	10.852	6	0	
Horiz 11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	26.84	Comp	26.84	H 22P	-6.243	W 180	17.447	0.000	0.000	1.000	1.000	1.000	156.95	142.72	10.058	6	0	
Horiz 12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	20.21	Comp	20.21	H 24P	-5.247	W 180	19.471	0.000	0.000	1.000	1.000	1.000	144.56	135.10	9.264	6	0	
Horiz 13	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	18.54	Comp	18.54	H 26P	-5.406	W 180	21.868	0.000	0.000	1.000	1.000	1.000	132.17	127.48	8.470	6	0	
Horiz 14	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	13.66	Comp	13.66	H 27P	-4.470	W -90	24.547	0.000	0.000	1.000	1.200	1.000	119.78	119.78	7.676	1	0	
Horiz 15	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	9.44	Comp	9.44	H 29X	-3.600	W 90	28.609	0.000	0.000	1.000	1.070	1.000	107.39	107.39	6.882	1	0	
Horiz 16	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	36.0	4.90	Comp	4.90	H 31P	-0.718	W 180	10.999	0.000	0.000	0.500	0.520	0.500	141.73	133.36	12.472	6	0	
Horiz 17	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	1.45	Tens	1.01	H 34P	-0.370	W -90	27.518	0.000	0.000	0.500	1.000	0.500	118.73	118.73	11.181	1	0	
Horiz 18	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	36.0	1.97	Tens	0.32	H 36X	-0.059	W 90	13.967	0.000	0.000	0.500	0.600	0.500	114.66	117.33	10.090	3	0	
Horiz 19	C8x11.5	CHN	C8x11.5	36.0	1.29	Comp	1.29	H 38P	-0.374	W 180	21.711	0.000	0.000	1.000	1.000	1.000	172.80	152.47	9.000	6	0	
LD 1	B/B L3"x2.5"x0.3125"	DAL	3X2.5X0.31	36.0	73.40	Comp	73.40	LD 1X	-22.107	W -45	22.590	0.000	0.000	0.904	0.904	0.904	162.84	146.35	14.066	6	0	
LD 2	B/B L4"x3"x0.3125"	DAL	4X3X0.31	36.0	87.16	Comp	87.16	LD 3X	-49.883	W -90	42.927	0.000	0.000	0.904	0.904	0.904	120.15	120.09	14.066	6	0	
LD 4	B/B L3"x2"x0.25"	DAL	3X2X0.25	36.0	91.18	Comp	91.18	LD 7X	-20.153	W -45	16.578	0.000	0.000	0.904	0.904	0.904	162.96	146.42	13.384	6	0	
LD 5	B/B L4"x3"x0.25"	DAL	4X3X0.25	36.0	95.51	Comp	95.51	LD 9X	-48.225	W -90	37.871	0.000	0.000	0.904	0.904	0.904	113.43	113.43	13.384	1	0	
LD 7	B/B L2.5"x2.5"x0.375"	DAE	2.5X2.5X0.38	36.0	71.87	Comp	71.87	LD 13X	-19.675	W -45	20.532	0.000	0.000	0.904	0.904	0.904	183.19	158.86	12.716	6	0	
LD 8	B/B L3.5"x3"x0.25"	DAL	3.5X3X0.25	36.0	99.17	Comp	99.17	LD 15X	-46.028	W -90	34.810	0.000	0.000	0.904	0.904	0.904	124.27	122.63	12.716	6	0	
LD 10	B/B L3"x3"x0.25"	DAE	3X3X0.25	36.0	60.08	Comp	60.08	LD 19X	-23.338	W -45	29.133	0.000	0.000	0.830	0.830	0.830	121.89	121.16	11.381	6	0	
LD 11	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	87.48	Comp	87.48	LD 21X	-30.898	W -90	26.490	0.000	0.000	0.850	0.850	0.850	106.16	106.16	8.160	1	0	
LD 12	B/B L3"x2"x0.25"	DAL	3X2X0.25	36.0	90.41	Comp	90.41	LD 23P	-33.572	W -90	27.850	0.000	0.000	0.860	0.860	0.860	111.24	111.24	9.604	1	0	
LD 13	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	95.83	Comp	95.83	LD 25X	-22.155	W -45	17.340	0.000	0.000	0.830	0.830	0.830	137.12	130.53	10.793	6	0	
LD 14	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	83.28	Comp	83.28	LD 27X	-29.968	W -90	26.990	0.000	0.000	0.850	0.850	0.850	104.26	104.26	8.014	1	0	
LD 15	B/B L3"x3"x0.25"	DAE	3X3X0.25	36.0	66.62	Comp	66.62	LD 29P	-32.324	W -90	36.393	0.000	0.000	0.860	0.860	0.860	102.67	102.67	9.253	1	0	
LD 16	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	82.71	Comp	82.71	LD 31X	-20.820	W -45	18.880	0.000	0.000	0.830	0.830	0.830	129.95	126.12	10.229	6	0	
LD 17	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	80.09	Comp	80.09	LD 33X	-29.130	W -90	27.280	0.000	0.000	0.850	0.850	0.850	102.47	102.47	7.876	1	0	
LD 18	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	99.83	Comp	99.83	LD 35P	-30.442	W -90	22.870	0.000	0.000	0.860	0.860	0.860	117.40	117.40	8.919	1	0	
LH 1	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	56.72	Comp	56.72	LH 1P	-10.262	W 0	13.569	0.000	0.000	0.500	1.000	0.500	201.51	170.13	24.350	6	0	
LH 2	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	38.23	Comp	38.23	LH 3P	-7.623	W 0	14.956	0.000	0.000	0.500	1.000	0.500	188.37	162.05	22.762	6	0	
LH 3	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	35.82	Comp	35.82	LH 5P	-7.911	W 0	16.567	0.000	0.000	0.500	1.000	0.500	175.23	153.97	21.174	6	0	
LH 4	B/B L3"x3"x0.375"	DAE	3X3X0.38	36.0	71.82	Comp	71.82	LH 7X	-26.480	W -45	27.651	0.000	0.000	0.940	1.880	0.940	170.35	150.96	10.647	6	0	
LH 5	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	90.90	Comp	90.90	LH 9X	-24.230	W -45	19.992	0.000	0.000	0.940	1.880	0.940	152.78	140.16	9.820	6	0	
LH 6	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	72.73	Comp	72.73	LH 11X	-21.777	W -45	22.456	0.000	0.000	0.940	1.880	0.940	139.91	132.25	8.993	6	0	
DUM 1	Dummy Bracing Member	DUM	0.1X0.1X1	36.0	0.00		0.00	BR 15XY	-1.093	W 45	0.215	0.000	0.000	1.000	1.000	1.000	2.25	2.25	18.715	1	0	

Group Summary (Tension Portion):

Group Label	Group Desc.	Angle Type	Angle Size	Steel Strength (ksi)	Max Usage %	Usage Cont-rol	Max Use In Tens. %	Tension Control Member	Tension Force (kips)	Tension Control Load Case	Net Section Capacity (kips)	Tension Connect. Shear Capacity (kips)	Tension Connect. Bearing Capacity (kips)	Tension Connect. Rupture Capacity (kips)	Length Tens. Member (ft)	No. Of Bolts Tens.	No. Of Holes	Hole Diameter (in)
Leg S1	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	73.44	Comp	62.06	L 1Y	298.993	W -45	361.367	0.000	0.000	0.000	25.101	0	0.000	0
Leg S2	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	71.26	Comp	55.89	L 2Y	269.271	W -45	361.367	0.000	0.000	0.000	25.101	0	0.000	0
Leg S3	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	68.30	Comp	49.06	L 3XY	236.368	W 45	361.367	0.000	0.000	0.000	25.101	0	0.000	0
Leg S4	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	67.31	Comp	41.13	L 4XY	198.151	W 45	361.367	0.000	0.000	0.000	25.101	0	0.000	0
Leg S5	L 8" x 8" x 1"	SAE	8X8X1	36.0	63.09	Comp	38.55	L 5XY	166.539	W 45	323.999	0.000	0.000	0.000	25.101	0	0.000	0
Leg S6	L 8" x 8" x 1"	SAE	8X8X1	36.0	51.01	Comp	31.48	L 6XY	136.009	W 45	323.999	0.000	0.000	0.000	25.101	0	0.000	0
Leg S7	L 8" x 8" x 0.875"	SAE	8X8X0.88	36.0	56.90	Comp	34.23	L 7XY	130.406	W 45	285.768	0.000	0.000	0.000	25.101	0	0.000	0
Leg S8	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	52.05	Comp	31.13	L 8XY	102.572	W 45	247.104	0.000	0.000	0.000	25.101	0	0.000	0
Leg S9	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	39.47	Comp	22.93	L 9XY	75.542	W 45	247.104	0.000	0.000	0.000	25.101	0	0.000	0
Leg S10	L 6" x 6" x 0.875"	SAE	6X6X0.88	36.0	39.50	Comp	22.69	L 10XY	63.575	W 45	210.168	0.000	0.000	0.000	12.550	0	0.000	0
Leg S11	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	38.28	Comp	22.00	L 11XY	53.479	W 45	182.304	0.000	0.000	0.000	12.550	0	0.000	0
Leg S12	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	32.22	Comp	18.15	L 12Y	44.114	W -45	182.304	0.000	0.000	0.000	12.550	0	0.000	0
Leg S13	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	34.35	Comp	18.70	L 13Y	34.628	W -45	138.888	0.000	0.000	0.000	12.550	0	0.000	0
Leg S14	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	26.75	Comp	13.78	L 14Y	25.509	W -45	138.888	0.000	0.000	0.000	12.550	0	0.000	0
Leg S15	L 6" x 6" x 0.4375"	SAE	6X6X0.44	36.0	24.24	Comp	11.41	L 15Y	16.630	W -45	109.296	0.000	0.000	0.000	12.550	0	0.000	0
Leg S16	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	23.12	Comp	10.62	L 16Y	12.784	W -45	90.288	0.000	0.000	0.000	10.208	0	0.000	0
Leg S17	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	14.78	Comp	5.44	L 17Y	6.551	W -45	90.288	0.000	0.000	0.000	10.208	0	0.000	0
Leg S18	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	10.23	Comp	3.20	L 18Y	2.791	W -45	65.448	0.000	0.000	0.000	8.618	0	0.000	0
Leg S19	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	5.04	Comp	0.00	L 19Y	0.000		65.448	0.000	0.000	0.000	8.618	0	0.000	0
Diag S1	B/B L3"x4"x0.375"	DAS	4X3X0.38	36.0	54.23	Comp	27.21	D 2P	38.941	W -90	107.352	0.000	0.000	0.000	22.664	0	0.000	0
Diag S2	B/B L3"x4"x0.25"	DAS	4X3X0.25	36.0	76.17	Comp	40.10	D 4P	39.035	W -90	73.008	0.000	0.000	0.000	22.190	0	0.000	0
Diag S3	B/B L3"x4"x0.25"	DAS	4X3X0.25	36.0	73.45	Comp	39.98	D 6P	38.916	W -90	73.008	0.000	0.000	0.000	21.736	0	0.000	0
Diag S4	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	36.0	88.46	Comp	45.59	D 8P	41.099	W -90	67.608	0.000	0.000	0.000	20.858	0	0.000	0
Diag S5	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	36.0	84.54	Comp	44.87	D 10P	40.450	W -90	67.608	0.000	0.000	0.000	20.484	0	0.000	0
Diag S6	B/B L2.5"x3.5"x0.25"	DAS	3.5X2.5X0.25	36.0	99.11	Comp	46.64	D 12P	38.684	W -90	62.208	0.000	0.000	0.000	20.132	0	0.000	0
Diag S7	B/B L3"x3"x0.375"	DAE	3X3X0.38	36.0	68.09	Comp	22.30	D 13P	27.102	W -90	91.152	0.000	0.000	0.000	29.947	0	0.000	0
Diag S8	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	87.07	Comp	30.58	D 16P	23.165	W 180	56.808	0.000	0.000	0.000	29.107	0	0.000	0
Diag S9	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	77.43	Comp	28.69	D 18P	21.731	W 180	56.808	0.000	0.000	0.000	28.331	0	0.000	0
Diag S10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	63.96	Comp	17.65	D 20P	12.095	W 180	51.408	0.000	0.000	0.000	17.103	0	0.000	0
Diag S11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	50.58	Comp	14.48	D 22P	9.925	W 180	51.408	0.000	0.000	0.000	16.572	0	0.000	0
Diag S12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	42.39	Comp	12.69	D 24P	8.701	W 180	51.408	0.000	0.000	0.000	16.064	0	0.000	0
Diag S13	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	62.85	Comp	14.13	D 26P	8.671	W 180	46.008	0.000	0.000	0.000	15.579	0	0.000	0
Diag S14	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	54.66	Comp	12.85	D 28P	7.883	W 180	46.008	0.000	0.000	0.000	15.120	0	0.000	0
Diag S15	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	49.66	Comp	12.19	D 29P	7.476	W -90	46.008	0.000	0.000	0.000	14.690	0	0.000	0
Diag S16	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	36.0	29.71	Comp	8.49	D 32X	4.133	W 90	36.504	0.000	0.000	0.000	16.609	0	0.000	0
Diag S17	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	36.0	21.56	Comp	6.68	D 34X	3.252	W 90	36.504	0.000	0.000	0.000	15.609	0	0.000	0
Diag S18	L 3" x 3" x 0.25"	SAE	3X3X0.25	36.0	16.71	Comp	4.96	D 36P	2.055	W -90	31.104	0.000	0.000	0.000	13.678	0	0.000	0
Diag S19	L 3" x 3" x 0.25"	SAE	3X3X0.25	36.0	12.54	Comp	3.89	D 38X	1.611	W 90	31.104	0.000	0.000	0.000	12.848	0	0.000	0
Horiz 1	B/B L4"x3"x0.25"	DAL	4X3X0.25	36.0	77.32	Comp	43.13	H 1X	41.984	W -90	73.008	0.000	0.000	0.000	24.350	0	0.000	0
Horiz 2	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	97.20	Comp	48.47	H 3X	40.203	W -90	62.208	0.000	0.000	0.000	22.762	0	0.000	0

Horiz 3	**B/B L3"x2.5"x0.25"**	**DAL**	**3X2.5X0.25**	**36.0**	**100.43**	**Comp**	**50.15**	**H 5X**	**37.982**	**W -90**	**56.808**	**0.000**	**0.000**	**0.000**	**21.174**	**0**	**0.000**	**0**	**NG**
Horiz 4	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	98.85	Comp	46.08	H 7X	38.217	W -90	62.208	0.000	0.000	0.000	13.057	0	0.000	0	
Horiz 5	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	90.17	Comp	42.51	H 9X	35.262	W -90	62.208	0.000	0.000	0.000	11.998	0	0.000	0	
Horiz 6	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	95.10	Comp	40.30	H 11P	30.526	W 90	56.808	0.000	0.000	0.000	10.940	0	0.000	0	
Horiz 7	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	71.13	Comp	19.13	H 14P	14.492	W 0	56.808	0.000	0.000	0.000	14.822	0	0.000	0	
Horiz 8	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	48.61	Comp	15.21	H 16P	11.520	W 0	56.808	0.000	0.000	0.000	13.234	0	0.000	0	
Horiz 9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	49.68	Comp	14.36	H 18Y	9.844	W 180	51.408	0.000	0.000	0.000	11.646	0	0.000	0	
Horiz 10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	37.91	Comp	11.99	H 20Y	8.215	W 180	51.408	0.000	0.000	0.000	10.852	0	0.000	0	
Horiz 11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	26.84	Comp	9.54	H 22Y	6.536	W 180	51.408	0.000	0.000	0.000	10.058	0	0.000	0	
Horiz 12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	20.21	Comp	8.02	H 24Y	5.497	W 180	51.408	0.000	0.000	0.000	9.264	0	0.000	0	
Horiz 13	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	18.54	Comp	8.05	H 26P	5.518	W 0	51.408	0.000	0.000	0.000	8.470	0	0.000	0	
Horiz 14	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	13.66	Comp	6.64	H 27P	4.553	W 90	51.408	0.000	0.000	0.000	7.676	0	0.000	0	
Horiz 15	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	9.44	Comp	6.02	H 29X	4.129	W -90	51.408	0.000	0.000	0.000	6.882	0	0.000	0	
Horiz 16	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	36.0	4.90	Comp	4.69	H 31P	1.771W	45 Ice	28.296	0.000	0.000	0.000	12.472	0	0.000	0	
Horiz 17	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	1.45	Tens	1.45	H 33P	1.100	W 0 Ice	56.808	0.000	0.000	0.000	11.181	0	0.000	0	
Horiz 18	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	36.0	1.97	Tens	1.97	H 35P	0.743	W 0 Ice	28.296	0.000	0.000	0.000	10.090	0	0.000	0	
Horiz 19	C8x11.5	CHN	C8x11.5	36.0	1.29	Comp	0.51	H 38P	0.498	W 0	73.008	0.000	0.000	0.000	9.000	0	0.000	0	
LD 1	B/B L3"x2.5"x0.3125"	DAL	3X2.5X0.31	36.0	73.40	Comp	23.77	LD 2Y	22.178W	-45 Ic	69.984	0.000	0.000	0.000	14.066	0	0.000	0	
LD 2	B/B L4"x3"x0.3125"	DAL	4X3X0.31	36.0	87.16	Comp	37.58	LD 3P	45.239	W -90	90.288	0.000	0.000	0.000	14.066	0	0.000	0	
LD 4	B/B L3"x2"x0.25"	DAL	3X2X0.25	36.0	91.18	Comp	27.09	LD 8Y	18.570	W -45	51.408	0.000	0.000	0.000	13.384	0	0.000	0	
LD 5	B/B L4"x3"x0.25"	DAL	4X3X0.25	36.0	95.51	Comp	45.36	LD 9P	44.152	W -90	73.008	0.000	0.000	0.000	13.384	0	0.000	0	
LD 7	B/B L2.5"x2.5"x0.375"	DAE	2.5X2.5X0.38	36.0	71.87	Comp	18.24	LD 14Y	18.231	W -45	74.952	0.000	0.000	0.000	12.716	0	0.000	0	
LD 8	B/B L3.5"x3"x0.25"	DAL	3.5X3X0.25	36.0	99.17	Comp	47.49	LD 15P	42.812	W -90	67.608	0.000	0.000	0.000	12.716	0	0.000	0	
LD 10	B/B L3"x3"x0.25"	DAE	3X3X0.25	36.0	60.08	Comp	26.06	LD 20Y	21.617	W -45	62.208	0.000	0.000	0.000	11.381	0	0.000	0	
LD 11	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	87.48	Comp	44.22	LD 21P	27.124	W -90	46.008	0.000	0.000	0.000	8.160	0	0.000	0	
LD 12	B/B L3"x2"x0.25"	DAL	3X2X0.25	36.0	90.41	Comp	50.39	LD 23X	34.536	W -90	51.408	0.000	0.000	0.000	9.604	0	0.000	0	
LD 13	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	95.83	Comp	32.71	LD 26Y	20.066	W -45	46.008	0.000	0.000	0.000	10.793	0	0.000	0	
LD 14	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	83.28	Comp	43.72	LD 27P	26.818	W -90	46.008	0.000	0.000	0.000	8.014	0	0.000	0	
LD 15	B/B L3"x3"x0.25"	DAE	3X3X0.25	36.0	66.62	Comp	39.87	LD 29X	33.065	W -90	62.208	0.000	0.000	0.000	9.253	0	0.000	0	
LD 16	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	82.71	Comp	31.26	LD 32Y	19.178	W -45	46.008	0.000	0.000	0.000	10.229	0	0.000	0	
LD 17	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	80.09	Comp	41.39	LD 33P	25.388	W -90	46.008	0.000	0.000	0.000	7.876	0	0.000	0	
LD 18	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	99.83	Comp	50.73	LD 35X	31.122	W -90	46.008	0.000	0.000	0.000	8.919	0	0.000	0	
LH 1	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	56.72	Comp	16.59	LH 1Y	12.568	W 0 Ice	56.808	0.000	0.000	0.000	24.350	0	0.000	0	
LH 2	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	38.23	Comp	8.20	LH 3Y	6.210	W 0	56.808	0.000	0.000	0.000	22.762	0	0.000	0	
LH 3	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	35.82	Comp	8.55	LH 5Y	6.478	W 0	56.808	0.000	0.000	0.000	21.174	0	0.000	0	
LH 4	B/B L3"x3"x0.375"	DAE	3X3X0.38	36.0	71.82	Comp	19.59	LH 8Y	23.806	W -45	91.152	0.000	0.000	0.000	10.647	0	0.000	0	
LH 5	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	90.90	Comp	28.28	LH 10Y	21.417	W -45	56.808	0.000	0.000	0.000	9.820	0	0.000	0	
LH 6	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	72.73	Comp	25.86	LH 12Y	19.589	W -45	56.808	0.000	0.000	0.000	8.993	0	0.000	0	
DUM 1	Dummy Bracing Member	DUM	0.1X0.1X1	36.0	0.00		0.00	BR 15X	0.898	W -45	0.216	0.000	0.000	0.000	18.715	0	0.000	0	

*** Maximum Stress Summary for Each Load Case

Summary of Maximum Usages by Load Case:

Load Case	Maximum Usage %	Element Label	Element Type	
W 0	99.11	H 6Y	Angle	
W 180	99.88	H 6P	Angle	
W 45	93.48	H 6XY	Angle	
W -45	97.15	H 6Y	Angle	
W 90	99.93	H 5X	Angle	
W -90	**100.43**	**H 5P**	**Angle**	**NG**
W 0 Ice	88.27	D 11P	Angle	
W 180 Ice	89.60	D 11Y	Angle	
W 45 Ice	83.75	LD 25P	Angle	
W -45 Ice	87.67	LD 25X	Angle	
W 90 Ice	88.53	D 12P	Angle	
W -90 Ice	89.77	D 12X	Angle	

*** Weight of structure (lbs):
Weight of Angles*Section DLF: 179316.8
Total: 179316.8

*** End of Report

Site #:	68008
Name:	Bethany CT, CT

Engineer:	RD
Date:	06/18/14

Windspeed:	No Ice	85 mph	Ice	74 mph
Carrier:	Sprint Nextel			

Taper:	-0.127400
FW @ Base:	51.875 ft

Taper Change:	2.1731 ft
FW @ Top:	19 ft

Spreadsheet Version Last Updated: 2/24/2017

Joint Label	Symmetry Code	X Coord. (ft)	Y Coord. (ft)	Z Coord. (ft)	X Disp. Restr.	Y Disp. Restr.	Z Disp. Restr.	X Rot. Restr.	Y Rot. Restr.	Z Rot. Restr.	Drop Sub-Brace ? or blank	# Vert	Drop (ft)	Height (ft)	Type	Count	Z-Dim. (ft)	FW (ft)	# Sub-Brace
0	XY-Symmetry	25.9375	25.9375	0	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed		3	7.03	25	1	1	0	51.875	3
1	XY-Symmetry	24.34953704	24.34953704	25	Free	Free	Free	Free	Free	Free		3	7.03	25	1	2	25	48.69907407	3
2	XY-Symmetry	22.76157407	22.76157407	50	Free	Free	Free	Free	Free	Free		3	7.03	25	1	3	50	45.52314815	3
3	XY-Symmetry	21.17361111	21.17361111	75	Free	Free	Free	Free	Free	Free			7.03	25	2	4	75	42.34722222	3
4	XY-Symmetry	19.58564815	19.58564815	100	Free	Free	Free	Free	Free	Free			7.03	25	2	5	100	39.1712963	3
5	XY-Symmetry	17.99768519	17.99768519	125	Free	Free	Free	Free	Free	Free			7.03	25	2	6	125	35.99537037	3
6	XY-Symmetry	16.40972222	16.40972222	150	Free	Free	Free	Free	Free	Free				25	A	7	150	32.81944444	2
7	XY-Symmetry	14.82175926	14.82175926	175	Free	Free	Free	Free	Free	Free				25	A	8	175	29.64351852	2
8	XY-Symmetry	13.2337963	13.2337963	200	Free	Free	Free	Free	Free	Free				25	A	9	200	26.46759259	2
9	XY-Symmetry	11.64583333	11.64583333	225	Free	Free	Free	Free	Free	Free				12.5	A	10	225	23.29166667	1
10	XY-Symmetry	10.85185185	10.85185185	237.5	Free	Free	Free	Free	Free	Free				12.5	A	11	237.5	21.7037037	1
11	XY-Symmetry	10.05787037	10.05787037	250	Free	Free	Free	Free	Free	Free				12.5	A	12	250	20.11574074	1
12	XY-Symmetry	9.263888889	9.263888889	262.5	Free	Free	Free	Free	Free	Free				12.5	A	13	262.5	18.52777778	1
13	XY-Symmetry	8.469907407	8.469907407	275	Free	Free	Free	Free	Free	Free				12.5	A	14	275	16.93981481	1
14	XY-Symmetry	7.675925926	7.675925926	287.5	Free	Free	Free	Free	Free	Free				12.5	A	15	287.5	15.35185185	1
15	XY-Symmetry	6.881944444	6.881944444	300	Free	Free	Free	Free	Free	Free				10.167	X	16	300	13.7638889	1
16	XY-Symmetry	6.216151667	6.216151667	310.167	Free	Free	Free	Free	Free	Free		1		10.167	X	17	310.167	12.47230333	1
17	XY-Symmetry	5.590163889	5.590163889	320.334	Free	Free	Free	Free	Free	Free				8.583	X	18	320.334	11.18073778	1
18	XY-Symmetry	5.045179444	5.045179444	328.917	Free	Free	Free	Free	Free	Free				8.583	X	19	328.917	10.09035889	1
19	XY-Symmetry	4.5	4.5	337.5	Free	Free	Free	Free	Free	Free						20	337.5	9	

NOTES:

Types:

1: Built up Horizs. w/ A

2: Built up Horizs. w/ M

A: Typical A brace

B: Typical B brace

Drop: Use only for types 1 & 2

Sections: 19

A1	Y-Symmetry	24.34953704	0	25	Free	Free	Free	Free	Free	Free									
A2	X-Symmetry	0	24.34953704	25	Free	Free	Free	Free	Free	Free									
A3	Y-Symmetry	22.76157407	0	50	Free	Free	Free	Free	Free	Free									
A4	X-Symmetry	0	22.76157407	50	Free	Free	Free	Free	Free	Free									
A5	Y-Symmetry	21.17361111	0	75	Free	Free	Free	Free	Free	Free									
A6	X-Symmetry	0	21.17361111	75	Free	Free	Free	Free	Free	Free									
A7	XY-Symmetry	19.58564815	6.528549383	100	Free	Free	Free	Free	Free	Free									
A8	XY-Symmetry	6.528549383	19.58564815	100	Free	Free	Free	Free	Free	Free									
A9	XY-Symmetry	17.99768519	5.999228395	125	Free	Free	Free	Free	Free	Free									
A10	XY-Symmetry	5.999228395	17.99768519	125	Free	Free	Free	Free	Free	Free									
A11	XY-Symmetry	16.40972222	5.469907407	150	Free	Free	Free	Free	Free	Free									
A12	XY-Symmetry	5.469907407	16.40972222	150	Free	Free	Free	Free	Free	Free									
A13	Y-Symmetry	14.82175926	0	175	Free	Free	Free	Free	Free	Free									
A14	X-Symmetry	0	14.82175926	175	Free	Free	Free	Free	Free	Free									
A15	Y-Symmetry	13.2337963	0	200	Free	Free	Free	Free	Free	Free									
A16	X-Symmetry	0	13.2337963	200	Free	Free	Free	Free	Free	Free									
A17	Y-Symmetry	11.64583333	0	225	Free	Free	Free	Free	Free	Free									
A18	X-Symmetry	0	11.64583333	225	Free	Free	Free	Free	Free	Free									
A19	Y-Symmetry	10.85185185	0	237.5	Free	Free	Free	Free	Free	Free									
A20	X-Symmetry	0	10.85185185	237.5	Free	Free	Free	Free	Free	Free									
A21	Y-Symmetry	10.05787037	0	250	Free	Free	Free	Free	Free	Free									
A22	X-Symmetry	0	10.05787037	250	Free	Free	Free	Free	Free	Free									
A23	Y-Symmetry	9.263888889	0	262.5	Free	Free	Free	Free	Free	Free									
A24	X-Symmetry	0	9.263888889	262.5	Free	Free	Free	Free	Free	Free									
A25	Y-Symmetry	8.469907407	0	275	Free	Free	Free	Free	Free	Free									
A26	X-Symmetry	0	8.469907407	275	Free	Free	Free	Free	Free	Free									
A27	Y-Symmetry	7.675925926	0	287.5	Free	Free	Free	Free	Free	Free									
A28	X-Symmetry	0	7.675925926	287.5	Free	Free	Free	Free	Free	Free									
A29	Y-Symmetry	6.881944444	0	300	Free	Free	Free	Free	Free	Free									
A30	X-Symmetry	0	6.881944444	300	Free	Free	Free	Free	Free	Free									

H1	XY-Symmetry	24.79607222	12.17474852	17.97	Free	Free	Free	Free	Free	Free									
H2	XY-Symmetry	12.17474852	24.79607222	17.97	Free	Free	Free	Free	Free	Free									
H5	XY-Symmetry	23.20810926	11.38078704	42.97	Free	Free	Free	Free	Free	Free									
H6	XY-Symmetry	11.38078704	23.20810926	42.97	Free	Free	Free	Free	Free	Free									
H9	XY-Symmetry	21.6201463	10.58680556	67.97	Free	Free	Free	Free	Free	Free									
H10	XY-Symmetry	10.58680556	21.6201463	67.97	Free	Free	Free	Free	Free	Free									
H13	XY-Symmetry	20.03218333	10.64674074	92.97	Free	Free	Free	Free	Free	Free									
H14	XY-Symmetry	10.64674074	20.03218333	92.97	Free	Free	Free	Free	Free	Free									
H15	Y-Symmetry	20.03218333	0	92.97	Free	Free	Free	Free	Free	Free									
H16	X-Symmetry	0	20.03218333	92.97	Free	Free	Free	Free	Free	Free									
H17	XY-Symmetry	18.44422037	9.81972963	117.97	Free	Free	Free	Free	Free	Free									
H18	XY-Symmetry	9.81972963	18.44422037	117.97	Free	Free	Free	Free	Free	Free									
H19	Y-Symmetry	18.44422037	0	117.97	Free	Free	Free	Free	Free	Free									
H20	X-Symmetry	0	18.44422037	117.97	Free	Free	Free	Free	Free	Free									
H21	XY-Symmetry	16.85425741	8.992718519	142.97	Free	Free	Free	Free	Free	Free									
H22	XY-Symmetry	8.992718519	16.85425741	142.97	Free	Free	Free	Free	Free	Free									
H23	Y-Symmetry	16.85425741	0	142.97	Free	Free	Free	Free	Free	Free									
H24	X-Symmetry	0	16.85425741	142.97	Free	Free	Free	Free	Free	Free									

Legs

Site No.:	88008
Engineer:	BD
Date:	06/18/2014
Carrier:	Sprint Nextel

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations *(ft)*	Type of Shape [1]	Diameter or Length *(in)*	Thickness [2] *(in)*	F_Y *(ksi)*
1	0.000-25.00	L	8	1.125	36
2	25.00-50.00	L	8	1.125	36
3	50.00-75.00	L	8	1.125	36
4	75.00-100.0	L	8	1.125	36
5	100.0-125.0	L	8	1	36
6	125.0-150.0	L	8	1	36
7	150.0-175.0	L	8	0.875	36
8	175.0-200.0	L	8	0.75	36
9	200.0-225.0	L	8	0.75	36
10	225.0-237.5	L	6	0.875	36
11	237.5-250.0	L	6	0.75	36
12	250.0-262.5	L	6	0.75	36
13	262.5-275.0	L	6	0.5625	36
14	275.0-287.5	L	6	0.5625	36
15	287.5-300.0	L	6	0.4375	36
16	300.0-310.2	L	5	0.4375	36
17	310.2-320.3	L	5	0.4375	36
18	320.3-328.9	L	5	0.3125	36
19	328.9-337.5	L	5	0.3125	36

Notes:

[1] Type of Leg Shape: **R** = Round or **P** = Bent Plate or **S** = Schifflerized Angle. **L** = Even Leg

[2] For Solid Round Leg Shapes Thickness Equals Zero.

[3] Adjust for Bent Plate Leg Shapes.

Diagonals

Site No.:	88008
Engineer:	BD
Date:	06/18/2014
Carrier:	Sprint Nextel

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations *(ft)*	Type of Shape [1]	Diameter [2] *(in)*	Web Length [3] *(in)*	Flange Length [3] *(in)*	Thickness *(in)*	F_y *(ksi)*	Is Diag. Tension Only? *(Y/N)*
1	0.000-25.00	2L		3	4	0.375	36	
2	25.00-50.00	2L		3	4	0.25	36	
3	50.00-75.00	2L		3	4	0.25	36	
4	75.00-100.0	2L		3	3.5	0.25	36	
5	100.0-125.0	2L		3	3.5	0.25	36	
6	125.0-150.0	2L		2.5	3.5	0.25	36	
7	150.0-175.0	2L		3	3	0.375	36	
8	175.0-200.0	2L		2.5	3	0.25	36	
9	200.0-225.0	2L		2.5	3	0.25	36	
10	225.0-237.5	2L		2.5	2.5	0.25	36	
11	237.5-250.0	2L		2.5	2.5	0.25	36	
12	250.0-262.5	2L		2.5	2.5	0.25	36	
13	262.5-275.0	2L		2.5	2	0.25	36	
14	275.0-287.5	2L		2.5	2	0.25	36	
15	287.5-300.0	2L		2.5	2	0.25	36	
16	300.0-310.2	L		3.5	3.5	0.25	36	Y
17	310.2-320.3	L		3.5	3.5	0.25	36	Y
18	320.3-328.9	L		3	3	0.25	36	Y
19	328.9-337.5	L		3	3	0.25	36	Y

Notes:

[1] Type of Diagonal Shape: **R** = Round, **L** = Single-Angle or **2L** = Double-Angle.

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

Horizontals

Site No.:	88008
Engineer:	BD
Date:	06/18/2014
Carrier:	Sprint Nextel

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations *(ft)*	Type of Shape [1]	Diameter [2] *(in)*	Web Length [3] *(in)*	Flange Length [3] *(in)*	Thickness *(in)*	F_y *(ksi)*	
1	0.000-25.00	2L		4	3	0.25	36	
2	25.00-50.00	2L		3.5	2.5	0.25	36	
3	50.00-75.00	2L		3	2.5	0.25	36	
4	75.00-100.0	2L		3.5	2.5	0.25	36	
5	100.0-125.0	2L		3.5	2.5	0.25	36	
6	125.0-150.0	2L		3	2.5	0.25	36	
7	150.0-175.0	2L		3	2.5	0.25	36	
8	175.0-200.0	2L		3	2.5	0.25	36	
9	200.0-225.0	2L		2.5	2.5	0.25	36	
10	225.0-237.5	2L		2.5	2.5	0.25	36	
11	237.5-250.0	2L		2.5	2.5	0.25	36	
12	250.0-262.5	2L		2.5	2.5	0.25	36	
13	262.5-275.0	2L		2.5	2.5	0.25	36	
14	275.0-287.5	2L		2.5	2.5	0.25	36	
15	287.5-300.0	2L		2.5	2.5	0.25	36	
16	300.0-310.2	L		3	2.5	0.25	36	
17	310.2-320.3	2L		3	2.5	0.25	36	
18	320.3-328.9	L		3	2.5	0.25	36	
19	328.9-337.5	C		8	11.5		36	

Notes:

[1] Type of Horizontal Shape: **R** = Round, **L** = Single-Angle, **2L** = Double-Angle, **C** = Channel, **W** = W Shape

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

Built-up Diagonals

Site No.:	88008
Engineer:	BD
Date:	06/18/2014
Carrier:	Sprint Nextel

When inputting thickness values, include all decimal places.
Input diags. from left to center & from base section upward.

Tower Built-up Diag. #	Section Elevations *(ft)*	Type of Shape [1]	Diameter [2] *(in)*	Web Length [3] *(in)*	Flange Length [3] *(in)*	Thickness *(in)*	F_y *(ksi)*
1	0.000-25.00	2L		3	2.5	0.3125	36
2	0.000-25.00	2L		4	3	0.3125	36
3	25.00-50.00	2L		3	2	0.25	36
4	25.00-50.00	2L		4	3	0.25	36
5	50.00-75.00	2L		2.5	2.5	0.375	36
6	50.00-75.00	2L		3.5	3	0.25	36
7	75.00-100.0	2L		3	3	0.25	36
8	75.00-100.0	2L		2.5	2	0.25	36
9	75.00-100.0	2L		3	2	0.25	36
10	100.0-125.0	2L		2.5	2	0.25	36
11	100.0-125.0	2L		2.5	2	0.25	36
12	100.0-125.0	2L		3	3	0.25	36
13	125.0-150.0	2L		2.5	2	0.25	36
14	125.0-150.0	2L		2.5	2	0.25	36
15	125.0-150.0	2L		2.5	2	0.25	36

Notes:

[1] Type of Diagonal Shape: **R** = Round, **L** = Single-Angle or **2L** = Double-Angle.

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

Built-up Horizontals

Site No.:	88008
Engineer:	BD
Date:	06/18/2014
Carrier:	Sprint Nextel

When inputting thickness values, include all decimal places.

Tower Section #	Section Elevations *(ft)*	Type of Shape [1]	Diameter [2] *(in)*	Web Length [3] *(in)*	Flange Length [3] *(in)*	Thickness *(in)*	F_y *(ksi)*	Is Horiz. Tension Only? *(Y/N)*
1	0.000-25.00	2L		2.5	3	0.25	36	
2	25.00-50.00	2L		2.5	3	0.25	36	
3	50.00-75.00	2L		2.5	3	0.25	36	
4	75.00-100.0	2L		3	3	0.375	36	
5	100.0-125.0	2L		2.5	3	0.25	36	
6	125.0-150.0	2L		2.5	3	0.25	36	

Notes:

[1] Type of Horizontal Shape: **R** = Round, **L** = Single-Angle or **2L** = Double-Angle.

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

Coax (p. 1 of 2)

Orig by MED, Last Updated by ABL on 29 March 2012

Site No.:	88008	**Date:**	06/18/14
Engineer:	BD	**Carrier:**	Sprint Nextel

Description	From (ft)	To (ft)	Quantity	Shape	Width or Diameter (in)	Perimeter (in)	Unit Weight (lb/ft)	Part of Face Solidity Ratio (Yes/No)	Include in Wind Load (Yes/No)
Aband 1	0	337.5	1	Round	1.09	3.4	0.144	Yes	Yes
USCG 1	0	337.5	2	Round	1.09	3.4	0.144	No	No
USCG 2	0	310	2	Round	1.09	3.4	0.144	No	No
USCG 3	0	275	1	Round	1.09	3.4	0.144	No	No
Sprint Nextel 1	0	250	12	Round	1.98	6.2	1.08	Yes	Yes
Sprint Nextel 2	0	240	4	Round	1.55	4.9	1	No	No
T-Mobile	0	220	1	Round	11.88	30.0	12.96	No	No
T-Mobile 2	0	220	1	Round	0.315	1.0	0.064	No	No
US Treasury 1	0	194	1	Round	1.55	4.9	0.664	No	No
Verizon 1	0	180	1	Round	11.88	30.0	12.96	Yes	Yes
AT&T Mobility 1	0	165	1	Round	11.88	30.0	12.96	No	No
Metro PCS	0	100	6	Round	1.98	6.2	1.08	No	No
Sprint Nextel 3	0	48	1	Round	0.63	2.0	0.144	No	No
AT&T Mobility 2	0	165	1	Round	3.5	11.0	7.58	No	No
AT&T Mobility 3	0	165	1	Round	0.39	1.2	0.07	No	No
AT&T Mobility 4	0	165	1	Round	0.78	4.0	0.59	No	No
Metro PCS 3	0	20	1	Round	1.09	3.4	0.144	No	No
T-Mobile3	0	220	1	Round	0.44	1.4	0.084	No	No

Coax (p. 2 of 2)

Tia Code: TIA-222-F

α	7	$k_{z\ max}$	2.58
z_g	33	$k_{z\ min}$	1
e		t	

Site No.:	88008	**Date:**	06/18/14
Engineer:	BD	**Carrier:**	Sprint Nextel

Description	From (ft)	To (ft)	Quantity	Face # (1-4, A-D)	Coax Width (in)	Considered Coax Shape (Block / Flat / Ind)	% Exposed	Spacing (in)	Shape (Round/Flat)	Block Width (# coax)	Block Depth (# coax)	Perimeter (in)	Unit Weight (lb/ft)	In Face Zone (Yes/No)	Include in Wind Load (Yes/No)
Aband 1	0	337.5	1	4	1.09	Ind	100		Round	1	1	3.4	0.144	Yes	Yes
USCG 1	0	337.5	2	2	1.09	Ind	100	0	Round	2	1	3.4	0.144	No	No
USCG 2	0	310	2	2	1.09	Ind	100		Round	2	1	3.4	0.144	No	No
USCG 3	0	275	1	2	1.09	Ind	100	0	Round	1	1	3.4	0.144	No	No
Sprint Nextel 1	0	250	12	4	1.98	Ind	100		Round	12	1	6.2	1.08	Yes	Yes
Sprint Nextel 2	0	240	4	B	1.55	Ind	100	0	Round	4	1	4.9	1	No	No
T-Mobile	0	220	12	1	1.98	Ind	50		Round	6	2	30.0	12.96	No	No
T-Mobile 2	0	220	1	1	0.32	Ind	0	0	Round	1	1	1.0	0.064	No	No
US Treasury 1	0	194	1	2	1.55	Ind	100		Round	1	1	4.9	0.664	No	No
Verizon 1	0	180	12	4	1.98	Ind	50	0	Round	6	2	30.0	12.96	Yes	Yes
														No	No
AT&T Mobility 1	0	165	12	2	1.98	Ind	50	0	Round	6	2	30.0	12.96	No	No
Metro PCS	0	100	6	1	1.98	Ind	100		Round	6	1	6.2	1.08	No	No
Sprint Nextel 3	0	48	1	2	0.63	Ind	100	0	Round	1	1	2.0	0.144	No	No
							100							No	No
AT&T Mobility 2	0	165	1	2	3.50	Ind	0	0	Round	1	1	11.0	7.58	No	No
AT&T Mobility 3	0	165	1	2	0.39	Ind	0		Round	1	1	1.2	0.07	No	No
AT&T Mobility 4	0	165	2	2	0.78	Ind	0	0	Round	1	2	4.0	0.59	No	No
Metro PCS 3	0	20	1	1	1.09	Ind	100		Round	1	1	3.4	0.144	No	No
														No	No
T-Mobile3	0	220	1	1	0.44	Ind	100		Round	1	1	1.4	0.084	No	No
							100	0						No	No
							100							No	No
							100	0						No	No
							100							No	No
							100	0						No	No
							100							No	No
							100	0						No	No
							100							No	No
							100	0						No	No
							100							No	No
							100	0						No	No
							100							No	No
							100	0						No	No
							100							No	No
							100	0						No	No
							100							No	No
							100	0						No	No
							100							No	No
							100	0						No	No

Site #:	88008
Name:	Sprint Nextel

Engineer:	BD
Date:	06/18/14

Section Label	Section Color	Joint Defining Bottom Section	Dead Load Adj. Factor					Adj. Factor Flat	Adj. Factor Round	Area Multiplier	Weight Multiplier
0.000-25.00		0P	1.585195713					1.320996427	1.320996427	1	1.2
25.00-50.00		1P	1.590007719					1.325006432	1.325006432	1	1.2
50.00-75.00		2P	1.605588167					1.337990139	1.337990139	1	1.2
75.00-100.0		3P	1.472051441					1.226709534	1.226709534	1	1.2
100.0-125.0		4P	1.46985131					1.224876092	1.224876092	1	1.2
125.0-150.0		5P	1.47553471					1.229612258	1.229612258	1	1.2
150.0-175.0		6P	1.529754954					1.274795795	1.274795795	1	1.2
175.0-200.0		7P	1.527887654					1.273239712	1.273239712	1	1.2
200.0-225.0		8P	1.516391419					1.263659516	1.263659516	1	1.2
225.0-237.5		9P	1.478249179					1.231874316	1.231874316	1	1.2
237.5-250.0		10P	1.471209196					1.226007664	1.226007664	1	1.2
250.0-262.5		11P	1.464012143					1.220010119	1.220010119	1	1.2
262.5-275.0		12P	1.456672479					1.213893733	1.213893733	1	1.2
275.0-287.5		13P	1.449208368					1.20767364	1.20767364	1	1.2
287.5-300.0		14P	1.441641869					1.201368224	1.201368224	1	1.2
300.0-310.2		15P	1.384856588					1.154047156	1.154047156	1	1.2
310.2-320.3		16P	1.436421012					1.19701751	1.19701751	1	1.2
320.3-328.9		17P	1.393105127					1.160920939	1.160920939	1	1.2
328.9-337.5		18P	1.346209977					1.121841647	1.121841647	1	1.2

Site #:	88008
Name:	Sprint Nextel

Engineer:	BD
Date:	06/18/14

Group Label	Group Description	Angle Type	Angle Size	Material Type	Element Type	Group Type	Optimize Group
Leg S1	L 8" x 8" x 1.125"	SAE	8X8X1.13	A 36	Beam	Leg	None
Leg S2	L 8" x 8" x 1.125"	SAE	8X8X1.13	A 36	Beam	Leg	None
Leg S3	L 8" x 8" x 1.125"	SAE	8X8X1.13	A 36	Beam	Leg	None
Leg S4	L 8" x 8" x 1.125"	SAE	8X8X1.13	A 36	Beam	Leg	None
Leg S5	L 8" x 8" x 1"	SAE	8X8X1	A 36	Beam	Leg	None
Leg S6	L 8" x 8" x 1"	SAE	8X8X1	A 36	Beam	Leg	None
Leg S7	L 8" x 8" x 0.875"	SAE	8X8X0.88	A 36	Beam	Leg	None
Leg S8	L 8" x 8" x 0.75"	SAE	8X8X0.75	A 36	Beam	Leg	None
Leg S9	L 8" x 8" x 0.75"	SAE	8X8X0.75	A 36	Beam	Leg	None
Leg S10	L 6" x 6" x 0.875"	SAE	6X6X0.88	A 36	Beam	Leg	None
Leg S11	L 6" x 6" x 0.75"	SAE	6X6X0.75	A 36	Beam	Leg	None
Leg S12	L 6" x 6" x 0.75"	SAE	6X6X0.75	A 36	Beam	Leg	None
Leg S13	L 6" x 6" x 0.5625"	SAE	6X6X0.56	A 36	Beam	Leg	None
Leg S14	L 6" x 6" x 0.5625"	SAE	6X6X0.56	A 36	Beam	Leg	None
Leg S15	L 6" x 6" x 0.4375"	SAE	6X6X0.44	A 36	Beam	Leg	None
Leg S16	L 5" x 5" x 0.4375"	SAE	5X5X0.44	A 36	Beam	Leg	None
Leg S17	L 5" x 5" x 0.4375"	SAE	5X5X0.44	A 36	Beam	Leg	None
Leg S18	L 5" x 5" x 0.3125"	SAE	5X5X0.31	A 36	Beam	Leg	None
Leg S19	L 5" x 5" x 0.3125"	SAE	5X5X0.31	A 36	Beam	Leg	None
Diag S1	B/B L3"x4"x0.375"	DAS	4X3X0.38	A 36	Beam	Other	None
Diag S2	B/B L3"x4"x0.25"	DAS	4X3X0.25	A 36	Beam	Other	None
Diag S3	B/B L3"x4"x0.25"	DAS	4X3X0.25	A 36	Beam	Other	None
Diag S4	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	A 36	Beam	Other	None
Diag S5	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	A 36	Beam	Other	None
Diag S6	B/B L2.5"x3.5"x0.25"	DAS	3.5X2.5X0.25	A 36	Beam	Other	None
Diag S7	B/B L3"x3"x0.375"	DAE	3X3X0.38	A 36	Beam	Other	None
Diag S8	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None
Diag S9	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None
Diag S10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Diag S11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Diag S12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Diag S13	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
Diag S14	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
Diag S15	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
Diag S16	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	A 36	T-Only	Other	None
Diag S17	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	A 36	T-Only	Other	None
Diag S18	L 3" x 3" x 0.25"	SAE	3X3X0.25	A 36	T-Only	Other	None
Diag S19	L 3" x 3" x 0.25"	SAE	3X3X0.25	A 36	T-Only	Other	None
Horiz 1	B/B L4"x3"x0.25"	DAL	4X3X0.25	A 36	Beam	Other	None
Horiz 2	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	A 36	Beam	Other	None
Horiz 3	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	A 36	Beam	Other	None
Horiz 4	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	A 36	Beam	Other	None
Horiz 5	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	A 36	Beam	Other	None
Horiz 6	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	A 36	Beam	Other	None
Horiz 7	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	A 36	Beam	Other	None
Horiz 8	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	A 36	Beam	Other	None
Horiz 9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 13	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 14	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 15	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 16	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	A 36	Beam	Other	None
Horiz 17	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	A 36	Beam	Other	None
Horiz 18	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	A 36	Beam	Other	None
Horiz 19	C8x11.5	CHN	C8x11.5	A 36	Beam	Other	None
LD 1	B/B L3"x2.5"x0.3125"	DAL	3X2.5X0.31	A 36	Beam	Other	None
LD 2	B/B L4"x3"x0.3125"	DAL	4X3X0.31	A 36	Beam	Other	None
LD 4	B/B L3"x2"x0.25"	DAL	3X2X0.25	A 36	Beam	Other	None
LD 5	B/B L4"x3"x0.25"	DAL	4X3X0.25	A 36	Beam	Other	None
LD 7	B/B L2.5"x2.5"x0.375"	DAE	2.5X2.5X0.38	A 36	Beam	Other	None
LD 8	B/B L3.5"x3"x0.25"	DAL	3.5X3X0.25	A 36	Beam	Other	None
LD 10	B/B L3"x3"x0.25"	DAE	3X3X0.25	A 36	Beam	Other	None

Group Label	Group Description	Angle Type	Angle Size	Material Type	Element Type	Group Type	Optimize Group
LD 11	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LD 12	B/B L3"x2"x0.25"	DAL	3X2X0.25	A 36	Beam	Other	None
LD 13	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LD 14	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LD 15	B/B L3"x3"x0.25"	DAE	3X3X0.25	A 36	Beam	Other	None
LD 16	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LD 17	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LD 18	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LH 1	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None
LH 2	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None
LH 3	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None
LH 4	B/B L3"x3"x0.375"	DAE	3X3X0.38	A 36	Beam	Other	None
LH 5	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None
LH 6	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None
DUM 1	Dummy Bracing Member	DUM	0.1X0.1X1	A 36	Beam	Fictitious	None

Group Label	Group Description	Angle Type	Angle Size	Material Type	Element Type	Group Type	Optimize Group

Site #:	88008
Name:	Sprint Nextel

Engineer:	BD
Date:	06/18/14

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
L 1	Leg S1		XY-Symmetry	0P	1P	1	4	0.2812	0.2812	0.2812
L 2	Leg S2		XY-Symmetry	1P	2P	1	4	0.2812	0.2812	0.2812
L 3	Leg S3		XY-Symmetry	2P	3P	1	4	0.2812	0.2812	0.2812
L 4	Leg S4		XY-Symmetry	3P	4P	1	4	0.2812	0.2812	0.2812
L 5	Leg S5		XY-Symmetry	4P	5P	1	4	0.2812	0.2812	0.2812
L 6	Leg S6		XY-Symmetry	5P	6P	1	4	0.2812	0.2812	0.2812
L 7	Leg S7		XY-Symmetry	6P	7P	1	4	0.333333333	0.333333333	0.333333333
L 8	Leg S8		XY-Symmetry	7P	8P	1	4	0.333333333	0.333333333	0.333333333
L 9	Leg S9		XY-Symmetry	8P	9P	1	4	0.333333333	0.333333333	0.333333333
L 10	Leg S10		XY-Symmetry	9P	10P	1	4	0.5	0.5	0.5
L 11	Leg S11		XY-Symmetry	10P	11P	1	4	0.5	0.5	0.5
L 12	Leg S12		XY-Symmetry	11P	12P	1	4	0.5	0.5	0.5
L 13	Leg S13		XY-Symmetry	12P	13P	1	4	0.5	0.5	0.5
L 14	Leg S14		XY-Symmetry	13P	14P	1	4	0.5	0.5	0.5
L 15	Leg S15		XY-Symmetry	14P	15P	1	4	0.5	0.5	0.5
L 16	Leg S16		XY-Symmetry	15P	16P	1	4	0.5	0.5	0.5
L 17	Leg S17		XY-Symmetry	16P	17P	1	4	0.5	0.5	0.5
L 18	Leg S18		XY-Symmetry	17P	18P	1	4	0.5	0.5	0.5
L 19	Leg S19		XY-Symmetry	18P	19P	1	4	0.5	0.5	0.5
D 1	Diag S1		XY-Symmetry	0P	H2P	1	6	0.333333333	0.666666667	0.333333333
D 2	Diag S1		XY-Symmetry	0P	H1P	1	6	0.333333333	0.666666667	0.333333333
D 3	Diag S2		XY-Symmetry	1P	H6P	1	6	0.333333333	0.666666667	0.333333333
D 4	Diag S2		XY-Symmetry	1P	H5P	1	6	0.333333333	0.666666667	0.333333333
D 5	Diag S3		XY-Symmetry	2P	H10P	1	6	0.333333333	0.666666667	0.333333333
D 6	Diag S3		XY-Symmetry	2P	H9P	1	6	0.333333333	0.666666667	0.333333333
D 7	Diag S4		XY-Symmetry	3P	H14P	1	6	0.333333333	0.666666667	0.333333333
D 8	Diag S4		XY-Symmetry	3P	H13P	1	6	0.333333333	0.666666667	0.333333333
D 9	Diag S5		XY-Symmetry	4P	H18P	1	6	0.333333333	0.666666667	0.333333333
D 10	Diag S5		XY-Symmetry	4P	H17P	1	6	0.333333333	0.666666667	0.333333333
D 11	Diag S6		XY-Symmetry	5P	H22P	1	6	0.333333333	0.666666667	0.333333333
D 12	Diag S6		XY-Symmetry	5P	H21P	1	6	0.333333333	0.666666667	0.333333333
D 13	Diag S7		XY-Symmetry	6P	A13P	1	6	0.3	0.6	0.3
D 14	Diag S7		XY-Symmetry	6P	A14P	1	6	0.3	0.6	0.3
D 15	Diag S8		XY-Symmetry	7P	A15P	1	6	0.3	0.6	0.3
D 16	Diag S8		XY-Symmetry	7P	A16P	1	6	0.3	0.6	0.3
D 17	Diag S9		XY-Symmetry	8P	A17P	1	6	0.3	0.6	0.3
D 18	Diag S9		XY-Symmetry	8P	A18P	1	6	0.3	0.6	0.3
D 19	Diag S10		XY-Symmetry	9P	A19P	1	6	0.5	1	0.5
D 20	Diag S10		XY-Symmetry	9P	A20P	1	6	0.5	1	0.5
D 21	Diag S11		XY-Symmetry	10P	A21P	1	6	0.5	1	0.5
D 22	Diag S11		XY-Symmetry	10P	A22P	1	6	0.5	1	0.5

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
D 23	Diag S12		XY-Symmetry	11P	A23P	1	6	0.5	1	0.5
D 24	Diag S12		XY-Symmetry	11P	A24P	1	6	0.5	1	0.5
D 25	Diag S13		XY-Symmetry	12P	A25P	1	6	0.5	1	0.5
D 26	Diag S13		XY-Symmetry	12P	A26P	1	6	0.5	1	0.5
D 27	Diag S14		XY-Symmetry	13P	A27P	1	6	0.5	1	0.5
D 28	Diag S14		XY-Symmetry	13P	A28P	1	6	0.5	1	0.5
D 29	Diag S15		XY-Symmetry	14P	A29P	1	6	0.5	1	0.5
D 30	Diag S15		XY-Symmetry	14P	A30P	1	6	0.5	1	0.5
D 31	Diag S16		XY-Symmetry	15P	16Y	2	6	0.52	0.75	0.52
D 32	Diag S16		XY-Symmetry	15P	16X	2	5	0.52	0.75	0.52
D 33	Diag S17		XY-Symmetry	16P	17Y	2	5	0.52	0.75	0.52
D 34	Diag S17		XY-Symmetry	16P	17X	2	5	0.52	0.75	0.52
D 35	Diag S18		XY-Symmetry	17P	18Y	2	5	0.52	0.75	0.52
D 36	Diag S18		XY-Symmetry	17P	18X	2	5	0.52	0.75	0.52
D 37	Diag S19		XY-Symmetry	18P	19Y	2	5	0.52	0.75	0.52
D 38	Diag S19		XY-Symmetry	18P	19X	2	5	0.52	0.75	0.52
H 1	Horiz 1		XY-Symmetry	1P	A1P	1	6	0.5	0.5	0.5
H 2	Horiz 1		XY-Symmetry	1P	A2P	1	6	0.5	0.5	0.5
H 3	Horiz 2		XY-Symmetry	2P	A3P	1	6	0.5	0.5	0.5
H 4	Horiz 2		XY-Symmetry	2P	A4P	1	6	0.5	0.5	0.5
H 5	Horiz 3		XY-Symmetry	3P	A5P	1	6	0.46	0.46	0.46
H 6	Horiz 3		XY-Symmetry	3P	A6P	1	6	0.46	0.46	0.46
H 7	Horiz 4		XY-Symmetry	4P	A7P	1	6	0.9	0.9	0.9
H 8	Horiz 4		XY-Symmetry	4P	A8P	1	6	0.9	0.9	0.9

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
H 9	Horiz 5		XY-Symmetry	5P	A9P	1	6	1	1	1
H 10	Horiz 5		XY-Symmetry	5P	A10P	1	6	1	1	1
H 11	Horiz 6		XY-Symmetry	6P	A11P	1	6	1	1	1
H 12	Horiz 6		XY-Symmetry	6P	A12P	1	6	1	1	1
H 13	Horiz 7		XY-Symmetry	7P	A13P	1	6	1	1	1
H 14	Horiz 7		XY-Symmetry	7P	A14P	1	6	1	1	1
H 15	Horiz 8		XY-Symmetry	8P	A15P	1	6	1	1	1
H 16	Horiz 8		XY-Symmetry	8P	A16P	1	6	1	1	1
H 17	Horiz 9		XY-Symmetry	9P	A17P	1	6	1	1	1
H 18	Horiz 9		XY-Symmetry	9P	A18P	1	6	1	1	1
H 19	Horiz 10		XY-Symmetry	10P	A19P	1	6	1	1	1
H 20	Horiz 10		XY-Symmetry	10P	A20P	1	6	1	1	1
H 21	Horiz 11		XY-Symmetry	11P	A21P	1	6	1	1	1
H 22	Horiz 11		XY-Symmetry	11P	A22P	1	6	1	1	1
H 23	Horiz 12		XY-Symmetry	12P	A23P	1	6	1	1	1
H 24	Horiz 12		XY-Symmetry	12P	A24P	1	6	1	1	1
H 25	Horiz 13		XY-Symmetry	13P	A25P	1	6	1	1	1
H 26	Horiz 13		XY-Symmetry	13P	A26P	1	6	1	1	1
H 27	Horiz 14		XY-Symmetry	14P	A27P	1	6	1	1.2	1
H 28	Horiz 14		XY-Symmetry	14P	A28P	1	6	1	1.2	1
H 29	Horiz 15		XY-Symmetry	15P	A29P	1	6	1	1.07	1
H 30	Horiz 15		XY-Symmetry	15P	A30P	1	6	1	1.07	1
H 31	Horiz 16		Y-Symmetry	16P	16X	3	6	0.5	0.52	0.5
H 32	Horiz 16		X-Symmetry	16P	16Y	3	6	0.5	0.52	0.5
H 33	Horiz 17		Y-Symmetry	17P	17X	1	6	0.5	1	0.5
H 34	Horiz 17		X-Symmetry	17P	17Y	1	6	0.5	1	0.5
H 35	Horiz 18		Y-Symmetry	18P	18X	3	6	0.5	0.6	0.5
H 36	Horiz 18		X-Symmetry	18P	18Y	3	6	0.5	0.6	0.5
H 37	Horiz 19		Y-Symmetry	19P	19X	3	6	1	1	1
H 38	Horiz 19		X-Symmetry	19P	19Y	3	6	1	1	1

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
H 45	Horiz 4		Y-Symmetry	A7P	A7X	1	6	1	1	1
H 46	Horiz 4		X-Symmetry	A8P	A8Y	1	6	1	1	1
H 47	Horiz 5		Y-Symmetry	A9P	A9X	1	6	1	1	1
H 48	Horiz 5		X-Symmetry	A10P	A10Y	1	6	1	1	1
H 49	Horiz 6		Y-Symmetry	A11P	A11X	1	6	1	1	1
H 50	Horiz 6		X-Symmetry	A12P	A12Y	1	6	1	1	1
LH 1	LH 1		Y-Symmetry	H1P	H1X	1	6	0.5	1	0.5
LH 2	LH 1		X-Symmetry	H2P	H2Y	1	6	0.5	1	0.5
LH 3	LH 2		Y-Symmetry	H5P	H5X	1	6	0.5	1	0.5
LH 4	LH 2		X-Symmetry	H6P	H6Y	1	6	0.5	1	0.5
LH 5	LH 3		Y-Symmetry	H9P	H9X	1	6	0.5	1	0.5
LH 6	LH 3		X-Symmetry	H10P	H10Y	1	6	0.5	1	0.5
LH 7	LH 4		XY-Symmetry	H13P	H15P	1	6	0.94	1.88	0.94
LH 8	LH 4		XY-Symmetry	H14P	H16P	1	6	0.94	1.88	0.94
LH 9	LH 5		XY-Symmetry	H17P	H19P	1	6	0.94	1.88	0.94
LH 10	LH 5		XY-Symmetry	H18P	H20P	1	6	0.94	1.88	0.94
LH 11	LH 6		XY-Symmetry	H21P	H23P	1	6	0.94	1.88	0.94
LH 12	LH 6		XY-Symmetry	H22P	H24P	1	6	0.94	1.88	0.94

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
LD 1	LD 1		XY-Symmetry	H1P	1P	1	6	0.904	0.904	0.904
LD 2	LD 1		XY-Symmetry	H2P	1P	1	6	0.904	0.904	0.904
LD 3	LD 2		XY-Symmetry	H1P	A1P	1	6	0.904	0.904	0.904
LD 4	LD 2		XY-Symmetry	H2P	A2P	1	6	0.904	0.904	0.904
LD 7	LD 4		XY-Symmetry	H5P	2P	1	6	0.904	0.904	0.904
LD 8	LD 4		XY-Symmetry	H6P	2P	1	6	0.904	0.904	0.904
LD 9	LD 5		XY-Symmetry	H5P	A3P	1	6	0.904	0.904	0.904
LD 10	LD 5		XY-Symmetry	H6P	A4P	1	6	0.904	0.904	0.904
LD 13	LD 7		XY-Symmetry	H9P	3P	1	6	0.904	0.904	0.904
LD 14	LD 7		XY-Symmetry	H10P	3P	1	6	0.904	0.904	0.904
LD 15	LD 8		XY-Symmetry	H9P	A5P	1	6	0.904	0.904	0.904
LD 16	LD 8		XY-Symmetry	H10P	A6P	1	6	0.904	0.904	0.904
LD 19	LD 10		XY-Symmetry	H13P	4P	1	6	0.83	0.83	0.83
LD 20	LD 10		XY-Symmetry	H14P	4P	1	6	0.83	0.83	0.83
LD 21	LD 11		XY-Symmetry	H13P	A7P	1	6	0.85	0.85	0.85
LD 22	LD 11		XY-Symmetry	H14P	A8P	1	6	0.85	0.85	0.85
LD 23	LD 12		XY-Symmetry	A7P	H15P	1	6	0.86	0.86	0.86
LD 24	LD 12		XY-Symmetry	A8P	H16P	1	6	0.86	0.86	0.86
LD 25	LD 13		XY-Symmetry	H17P	5P	1	6	0.83	0.83	0.83
LD 26	LD 13		XY-Symmetry	H18P	5P	1	6	0.83	0.83	0.83
LD 27	LD 14		XY-Symmetry	H17P	A9P	1	6	0.85	0.85	0.85
LD 28	LD 14		XY-Symmetry	H18P	A10P	1	6	0.85	0.85	0.85
LD 29	LD 15		XY-Symmetry	A9P	H19P	1	6	0.86	0.86	0.86
LD 30	LD 15		XY-Symmetry	A10P	H20P	1	6	0.86	0.86	0.86
LD 31	LD 16		XY-Symmetry	H21P	6P	1	6	0.83	0.83	0.83
LD 32	LD 16		XY-Symmetry	H22P	6P	1	6	0.83	0.83	0.83
LD 33	LD 17		XY-Symmetry	H21P	A11P	1	6	0.85	0.85	0.85
LD 34	LD 17		XY-Symmetry	H22P	A12P	1	6	0.85	0.85	0.85
LD 35	LD 18		XY-Symmetry	A11P	H23P	1	6	0.86	0.86	0.86
LD 36	LD 18		XY-Symmetry	A12P	H24P	1	6	0.86	0.86	0.86

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
BR 1	DUM 1		XY-Symmetry	A1P	A2P	1	4	1	1	1
BR 3	DUM 1		XY-Symmetry	A3P	A4P	1	4	1	1	1
BR 5	DUM 1		XY-Symmetry	A5P	A6P	1	4	1	1	1
BR 7	DUM 1		XY-Symmetry	A7P	A8P	1	4	1	1	1
BR 8	DUM 1		XY-Symmetry	A7P	A8XY	1	4	1	1	1
BR 9	DUM 1		XY-Symmetry	A9P	A10P	1	4	1	1	1
BR 10	DUM 1		XY-Symmetry	A9P	A10XY	1	4	1	1	1
BR 11	DUM 1		XY-Symmetry	A11P	A12P	1	4	1	1	1
BR 12	DUM 1		XY-Symmetry	A11P	A12XY	1	4	1	1	1
BR 13	DUM 1		XY-Symmetry	A13P	A14P	1	4	1	1	1
BR 15	DUM 1		XY-Symmetry	A15P	A16P	1	4	1	1	1
BR 17	DUM 1		XY-Symmetry	A17P	A18P	1	4	1	1	1
BR 19	DUM 1		XY-Symmetry	A19P	A20P	1	4	1	1	1
BR 21	DUM 1		XY-Symmetry	A21P	A22P	1	4	1	1	1
BR 23	DUM 1		XY-Symmetry	A23P	A24P	1	4	1	1	1
BR 25	DUM 1		XY-Symmetry	A25P	A26P	1	4	1	1	1
BR 27	DUM 1		XY-Symmetry	A27P	A28P	1	4	1	1	1
BR 29	DUM 1		XY-Symmetry	A29P	A30P	1	4	1	1	1

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
BR 61	DUM 1		XY-Symmetry	H1P	H2P	1	4	1	1	1
BR 62	DUM 1		XY-Symmetry	H1P	H2XY	1	4	1	1	1
BR 64	DUM 1		XY-Symmetry	H5P	H6P	1	4	1	1	1
BR 65	DUM 1		XY-Symmetry	H5P	H6XY	1	4	1	1	1
BR 67	DUM 1		XY-Symmetry	H9P	H10P	1	4	1	1	1
BR 68	DUM 1		XY-Symmetry	H9P	H10XY	1	4	1	1	1
BR 70	DUM 1		XY-Symmetry	H13P	H14P	1	4	1	1	1
BR 71	DUM 1		XY-Symmetry	H13P	H14XY	1	4	1	1	1
BR 72	DUM 1		XY-Symmetry	H15P	H16P	1	4	1	1	1
BR 73	DUM 1		XY-Symmetry	H17P	H18P	1	4	1	1	1
BR 74	DUM 1		XY-Symmetry	H17P	H18XY	1	4	1	1	1
BR 75	DUM 1		XY-Symmetry	H19P	H20P	1	4	1	1	1
BR 76	DUM 1		XY-Symmetry	H21P	H22P	1	4	1	1	1
BR 77	DUM 1		XY-Symmetry	H21P	H22XY	1	4	1	1	1
BR 78	DUM 1		XY-Symmetry	H23P	H24P	1	4	1	1	1

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ

Point Loads

Tower Height:	337.5	ft
Gh:	1.08	
Wind Speed:	85.00	mph
Wind Speed (Ice):	73.61	mph
Radial Ice Diameter:	0.5	in

Site No.:	88008
Engineer:	BD
Date:	06/18/2014
Carrier:	Sprint Nextel

KS-15676 Horn Antennas: ~128 ft^2

No.	Carrier	Elevation (ft)	Quantity	Number of Azimuths	Model	Height (in)	Width (in)	Depth (in)	Weight (lbs/ea)	Flat/Round (F/R)	Reduction Factor	C_AA_C (ft^2/ea)	Weight (k/ea)	H/W	C_A	q_z (psf)	q_z (Ice) (psf)
1	US Treasury	338	1	1	Rohde & Schwarz ADD090	78.7	31.5	31.5	88.2	F	1.000			2.50	1.40	35.96	26.96
			1	4	Platform						1.000	70.00	6.00	-	-		
2	US Treasury	310	1	1	Sinclair SC381-HL	160	4.5	4.5	47	R	1.000			35.56	1.20	35.08	26.31
			1	1	Sector Frame						0.900	15.00	0.30	-	-		
3	US Treasury	310	1	1	Sinclair SC281-L	251	5	5	79	R	1.000			50.20	1.20	35.08	26.31
														-	-		
4	US Treasury	275	1	1	Sinclair SC281-L	251	5	5	79	R	1.000			50.20	1.20	33.90	25.42
			1	1	Sector Frame						0.900	15.00	0.30	-	-		
5	Sprint Nextel	250	12	3	Decibel DB844H90E-XY	48	8	6.5	14	F	0.730			6.00	1.40	32.99	24.74
			3	3	Pipes						0.667	8.00	0.20	-	-		
6	Sprint Nextel	240	3	3	Alcatel-Lucent 1900 MHz 4X45 RRH	25.1	11.1	10.7	60	F	0.500			2.26	1.40	32.60	24.45
			3	3	Sector Frames						0.667	15.00	0.30	-	-		
7	T-Mobile	220	3	3	RFS APX16PV-16PVL-E-00	53	12.9	3.1	39.6	F	0.590			4.11	1.40	31.80	23.85
			3	3	Sector Frames + (12) TTA's						0.667	19.60	0.40	-	-		
8	Verizon	180	6	3	Andrew DB844H90E-XY	48	8.5	6	10	F	0.730			5.65	1.40	30.03	22.52
			3	3	Sector Frames + (6) RFS Diplexers						0.667	14.74	0.31	-	-		
9	Verizon	180	3	3	Powerwave P65-16-XL-2	72	12	5	33	F	0.640			6.00	1.40	30.03	22.52
			3	3	Rymsa MGD3-800T0 + GPS						0.690	3.65	0.02	-	-		
10	AT&T Mobility	165	6	3	Allgon 7770.00	55	11	5	35	F	0.640			5.00	1.40	29.29	21.97
			3	3	Sector Frames + (6) TTA's						0.667	16.80	0.35	-	-		
11	Metro PCS	100	3	3	RFS APXV18-206517S-C	72	6.8	3.2	26.4	F	0.680			10.59	1.52	25.39	19.04
											0.001	0.00	0.00	-	-		
12	Sprint Nextel	48												0.00	0.00	20.59	15.44
			1	1	PCTEL GPS-TMG-HR-26N						1.000	0.09	0.01	-	-		
13	Metro PCS	20	1	1	Nortel NTGB01MA	4	4	4	1	R	1.000			1.00	0.80	18.50	13.87
														-	-		
14	US Treasury	194	1	1	Andrew DB616E-BC	231	3.5	3.5	51	R	1.000			66.00	1.20	30.68	23.01
			1	1	Side Arm						1.000	5.20	0.15	-	-		
15	Sprint Nextel	240	3	3	RFS APXVSPP18-C-A20	72	11.8	7	57	F	0.680			6.10	1.40	32.60	24.45
	Sprint Nextel		3	3	Alcatel-Lucent 800 MHz 2X50W RRH						0.500	2.40	0.06	-	-		
16	-	320												0.00	0.00	35.40	26.55
			1	4	Catwalk						1.000	55.00	4.00	-	-		
17	-	237												0.00	0.00	32.49	24.36
			1	4	Working Platform						1.000	25.00	2.50	-	-		
18	-	150												0.00	0.00	28.51	21.38
			1	1	Rest Platform						1.000	20.00	1.00	-	-		
19	-	125												0.00	0.00	27.06	20.29
			1	2	Working Platform						1.000	25.00	2.00	-	-		
20	AT&T Mobility	165	3	3	Raycap DC2-48-60-0-9E	10.2	10.2	6.2	16	F	0.333			1.00	1.40	29.29	21.97
			3	3	Powerwave LGP21901						0.333	0.23	0.01	-	-		
21	AT&T Mobility	165	1	1	Raycap FC12-PC6-10E	15.5	16.3	6.6	25	F	0.333			0.95	1.40	29.29	21.97
			6	3	Ericsson RRUS 11 (Band 12)						0.500	2.99	0.05	-	-		
22	AT&T Mobility	165	2	2	Andrew SBNH-1D6565C	96.4	11.9	7.1	60.8	F	0.700			8.10	1.44	29.29	21.97
			1	1	KMW AM-X-CD-65-00T-RET						0.660	8.26	0.05	-	-		
23	-	200												0.00	0.00	30.95	23.21
			1	1	Rest Platform						1.000	12.00	0.50	-	-		
24	-	287.5												0.00	0.00	34.33	25.75
			1	1	Rest Platform						1.000	12.00	0.50	-	-		
25	Sprint Nextel	240	3	3	RFS APXV9TM14-ALU-I20	56.3	12.6	6.3	55.1	F	0.650			4.47	1.40	32.60	24.45
			3	3	Alcatel-Lucent TD-RRH8x20-25 w/ SS						0.500	4.72	0.07	-	-		
26																	
27																	
28																	
29																	
30																	

No.	Elevation (ft)	C_AA_C (ft^2)	C_AA_C (Ice) (ft^2)	Force (k)	Force (Ice) (k)	Weight (k)	Weight (Ice) (k)	Σ Force (k)	Σ Force (Ice) (k)	Σ Weight (k)	Σ Weight (Ice) (k)
1	338	24.10	25.18	0.936	0.734	0.088	0.286	3.66	3.49	6.09	8.09
		70.00	94.50	2.719	2.753	6.000	7.800				
2	310	6.00	7.38	0.227	0.210	0.047	0.100	0.74	0.73	0.35	0.49
		13.50	18.23	0.512	0.518	0.300	0.390				
3	310	10.46	12.60	0.396	0.358	0.079	0.170	0.40	0.36	0.08	0.17
		0.00	0.00	0.000	0.000	0.000	0.000				
4	275	10.46	12.60	0.383	0.346	0.079	0.170	0.88	0.85	0.38	0.56
		13.50	18.23	0.494	0.501	0.300	0.390				
5	250	32.70	37.56	1.166	1.004	0.168	0.484	1.74	1.58	0.77	1.26
		16.01	21.61	0.571	0.578	0.600	0.780				
6	240	4.06	4.61	0.143	0.122	0.180	0.249	1.20	1.19	1.08	1.42
		30.02	40.52	1.057	1.070	0.900	1.170				
7	220	11.77	12.92	0.404	0.333	0.119	0.212	1.75	1.70	1.32	1.77
		39.22	52.95	1.348	1.364	1.200	1.560				
8	180	17.37	19.82	0.564	0.482	0.060	0.218	1.52	1.45	0.98	1.41
		29.49	39.82	0.957	0.969	0.919	1.194				
9	180	16.13	17.71	0.523	0.431	0.099	0.233	0.77	0.68	0.16	0.31
		7.56	10.20	0.245	0.248	0.059	0.077				
10	165	22.59	25.09	0.715	0.595	0.210	0.406	1.78	1.67	1.26	1.77
		33.62	45.38	1.064	1.077	1.050	1.365				
11	100	10.54	12.26	0.289	0.252	0.079	0.159	0.29	0.25	0.08	0.16
		0.00	0.00	0.000	0.000	0.000	0.000				
12	48	0.00	0.00	0.000	0.000	0.000	0.000	0.00	0.00	0.01	0.01
		0.09	0.12	0.002	0.002	0.005	0.007				
13	20	0.09	0.14	0.002	0.002	0.001	0.003	0.00	0.00	0.00	0.00
		0.00	0.00	0.000	0.000	0.000	0.000				
14	194	6.74	8.70	0.223	0.216	0.051	0.112	0.40	0.39	0.20	0.31
		5.20	7.02	0.172	0.175	0.150	0.195				
15	240	16.85	18.53	0.594	0.490	0.171	0.320	0.72	0.62	0.36	0.57
		3.60	4.86	0.127	0.128	0.192	0.250				
16	320	0.00	0.00	0.000	0.000	0.000	0.000	2.10	2.13	4.00	5.20
		55.00	74.25	2.103	2.130	4.000	5.200				
17	237	0.00	0.00	0.000	0.000	0.000	0.000	0.88	0.89	2.50	3.25
		25.00	33.75	0.878	0.888	2.500	3.250				
18	150	0.00	0.00	0.000	0.000	0.000	0.000	0.62	0.62	1.00	1.30
		20.00	27.00	0.616	0.624	1.000	1.300				
19	125	0.00	0.00	0.000	0.000	0.000	0.000	0.73	0.74	2.00	2.60
		25.00	33.75	0.731	0.740	2.000	2.600				
20	165	1.01	1.22	0.032	0.029	0.048	0.073	0.04	0.04	0.06	0.09
		0.23	0.31	0.007	0.007	0.017	0.021				
21	165	0.82	0.92	0.026	0.022	0.025	0.041	0.31	0.31	0.33	0.43
		8.97	12.11	0.284	0.287	0.300	0.390				
22	165	16.02	17.55	0.507	0.417	0.122	0.253	0.68	0.59	0.17	0.32
		5.45	7.36	0.173	0.175	0.049	0.063				
23	200	0.00	0.00	0.000	0.000	0.000	0.000	0.40	0.41	0.50	0.65
		12.00	16.20	0.401	0.406	0.500	0.650				
24	287.5	0.00	0.00	0.000	0.000	0.000	0.000	0.45	0.45	0.50	0.65
		12.00	16.20	0.445	0.451	0.500	0.650				
25	240	13.45	14.77	0.474	0.390	0.165	0.284	0.72	0.64	0.38	0.56
		7.08	9.56	0.249	0.253	0.210	0.273				
26											
27											
28											
29											
30											

Site:	88008
Carrier:	Sprint Nextel

Engineer:	BD
Date:	06/18/14

Load Case Description	Dead Load Factor	Wind Load Factor	Ice Load Factor	Strength Factor	Allowable Stress Inc. Factor	Basic Wind Speed	Wind Dir.	Ice Thick.	Ice Density	Temp.	Point Loads
W 0	1.1	1	1	1	1.333333333	85	0	0	56	50	
W 180	1.1	1	1	1	1.333333333	85	180	0	56	50	
W 45	1.1	1	1	1	1.333333333	85	45	0	56	50	
W -45	1.1	1	1	1	1.333333333	85	-45	0	56	50	
W 90	1.1	1	1	1	1.333333333	85	90	0	56	50	
W -90	1.1	1	1	1	1.333333333	85	-90	0	56	50	
W 0 Ice	1.1	1	1	1	1.333333333	73.61	0	0.5	56	10	
W 180 Ice	1.1	1	1	1	1.333333333	73.61	180	0.5	56	10	
W 45 Ice	1.1	1	1	1	1.333333333	73.61	45	0.5	56	10	
W -45 Ice	1.1	1	1	1	1.333333333	73.61	-45	0.5	56	10	
W 90 Ice	1.1	1	1	1	1.333333333	73.61	90	0.5	56	10	
W -90 Ice	1.1	1	1	1	1.333333333	73.61	-90	0.5	56	10	

Angle:	-90

No Ice

Joint Label	Force X-Dir (lbs)	Force Y-Dir (lbs)	Force Vertical (lbs)	Moment X-Axis (ft-lbs)	Moment Y-Axis (ft-lbs)	Moment Z-Axis (ft-lbs)
19P	0.00	-1616.12	1588.2			
19X	0.00	-679.83	1500			
19Y	0.00	-679.83	1500			
19XY	0.00	-679.83	1500			
16P	0.00	-739.03	347			
16X	0.00	0.00	0			
16Y	0.00	0.00	0			
16XY	0.00	0.00	0			
16P	0.00	-396.36	79			
16X	0.00	0.00	0			
16Y	0.00	0.00	0			
16XY	0.00	0.00	0			
13P	0.00	-877.45	379			
13X	0.00	0.00	0			
13Y	0.00	0.00	0			
13XY	0.00	0.00	0			
11P	0.00	-578.70	256			
11X	0.00	-578.70	256			
11Y	0.00	-578.70	256			
11XY	0.00	0.00	0			
10P	0.00	-400.15	360			
10X	0.00	-400.15	360			
10Y	0.00	-400.15	360			
10XY	0.00	0.00	0			
9P	0.00	-583.98	439.6			
9X	0.00	-583.98	439.6			
9Y	0.00	-583.98	439.6			
9XY	0.00	0.00	0			
7P	0.00	-506.92	326.2			
7X	0.00	-506.92	326.2			
7Y	0.00	-506.92	326.2			
7XY	0.00	0.00	0			
7P	0.00	-256.15	52.8			
7X	0.00	-256.15	52.8			
7Y	0.00	-256.15	52.8			
7XY	0.00	0.00	0			
7P	0.00	-592.95	420			
7X	0.00	-592.95	420			
7Y	0.00	-592.95	420			
7XY	0.00	0.00	0			
4P	0.00	-96.37	26.4			
4X	0.00	-96.37	26.4			
4Y	0.00	-96.37	26.4			
4XY	0.00	0.00	0			
2P	0.00	-2.00	5			
2X	0.00	0.00	0			
2Y	0.00	0.00	0			
2XY	0.00	0.00	0			
1P	0.00	-1.78	1			
1X	0.00	0.00	0			
1Y	0.00	0.00	0			
1XY	0.00	0.00	0			
8P	0.00	-395.72	201			
8X	0.00	0.00	0			
8Y	0.00	0.00	0			
8XY	0.00	0.00	0			
10P	0.00	-240.13	121			
10X	0.00	-240.13	121			
10Y	0.00	-240.13	121			
10XY	0.00	0.00	0			
17P	0.00	-525.86	1000			
17X	0.00	-525.86	1000			
17Y	0.00	-525.86	1000			
17XY	0.00	-525.86	1000			
10P	0.00	-219.38	625			
10X	0.00	-219.38	625			
10Y	0.00	-219.38	625			
10XY	0.00	-219.38	625			
6P	0.00	-616.00	1000			
6X	0.00	0.00	0			
6Y	0.00	0.00	0			
6XY	0.00	0.00	0			
5P	0.00	-365.46	1000			
5X	0.00	-365.46	1000			
5Y	0.00	0.00	0			
5XY	0.00	0.00	0			
7P	0.00	-13.08	21.5			
7X	0.00	-13.08	21.5			
7Y	0.00	-13.08	21.5			
7XY	0.00	0.00	0			
7P	0.00	-120.52	125			
7X	0.00	-94.63	100			
7Y	0.00	-94.63	100			
7XY	0.00	0.00	0			
7P	0.00	-426.12	109.3			
7X	0.00	-253.57	60.8			
7Y	0.00	0.00	0			
7XY	0.00	0.00	0			
8P	0.00	-401.26	500			
8X	0.00	0.00	0			
8Y	0.00	0.00	0			
8XY	0.00	0.00	0			
14P	0.00	-445.10	500			
14X	0.00	0.00	0			
14Y	0.00	0.00	0			
14XY	0.00	0.00	0			
10P	0.00	-241.05	125.1			
10X	0.00	-241.05	125.1			
10Y	0.00	-241.05	125.1			
10XY	0.00	0.00	0			

With Ice

Joint Label	Force X-Dir (lbs)	Force Y-Dir (lbs)	Force Vertical (lbs)
19P	0.00	-1421.96	2235.659954
19X	0.00	-688.28	1950
19Y	0.00	-688.28	1950
19XY	0.00	-688.28	1950
16P	0.00	-727.74	489.8321759
16X	0.00	0.00	0
16Y	0.00	0.00	0
16XY	0.00	0.00	0
16P	0.00	-358.13	169.6435185
16X	0.00	0.00	0
16Y	0.00	0.00	0
16XY	0.00	0.00	0
13P	0.00	-846.65	559.6435185
13X	0.00	0.00	0
13Y	0.00	0.00	0
13XY	0.00	0.00	0
11P	0.00	-527.17	421.1944444
11X	0.00	-527.17	421.1944444
11Y	0.00	-527.17	421.1944444
11XY	0.00	0.00	0
10P	0.00	-397.39	473.1340278
10X	0.00	-397.39	473.1340278
10Y	0.00	-397.39	473.1340278
10XY	0.00	0.00	0
9P	0.00	-565.76	590.6459722
9X	0.00	-565.76	590.6459722
9Y	0.00	-565.76	590.6459722
9XY	0.00	0.00	0
7P	0.00	-483.76	470.5924074
7X	0.00	-483.76	470.5924074
7Y	0.00	-483.76	470.5924074
7XY	0.00	0.00	0
7P	0.00	-226.42	103.2677778
7X	0.00	-226.42	103.2677778
7Y	0.00	-226.42	103.2677778
7XY	0.00	0.00	0
7P	0.00	-557.57	590.2685185
7X	0.00	-557.57	590.2685185
7Y	0.00	-557.57	590.2685185
7XY	0.00	0.00	0
4P	0.00	-84.06	53.12833333
4X	0.00	-84.06	53.12833333
4Y	0.00	-84.06	53.12833333
4XY	0.00	0.00	0
2P	0.00	-2.03	6.5
2X	0.00	0.00	0
2Y	0.00	0.00	0
2XY	0.00	0.00	0
1P	0.00	-2.08	2.976851852
1X	0.00	0.00	0
1Y	0.00	0.00	0
1XY	0.00	0.00	0
8P	0.00	-390.80	306.5451389
8X	0.00	0.00	0
8Y	0.00	0.00	0
8XY	0.00	0.00	0
10P	0.00	-206.00	189.7185185
10X	0.00	-206.00	189.7185185
10Y	0.00	-206.00	189.7185185
10XY	0.00	0.00	0
17P	0.00	-532.40	1300
17X	0.00	-532.40	1300
17Y	0.00	-532.40	1300
17XY	0.00	-532.40	1300
10P	0.00	-222.11	812.5
10X	0.00	-222.11	812.5
10Y	0.00	-222.11	812.5
10XY	0.00	-222.11	812.5
6P	0.00	-623.67	1300
6X	0.00	0.00	0
6Y	0.00	0.00	0
6XY	0.00	0.00	0
5P	0.00	-370.01	1300
5X	0.00	-370.01	1300
5Y	0.00	0.00	0
5XY	0.00	0.00	0
7P	0.00	-12.09	31.515
7X	0.00	-12.09	31.515
7Y	0.00	-12.09	31.515
7XY	0.00	0.00	0
7P	0.00	-117.75	171.26625
7X	0.00	-95.81	130
7Y	0.00	-95.81	130
7XY	0.00	0.00	0
7P	0.00	-382.98	189.7177315
7X	0.00	-208.29	126.6677315
7Y	0.00	0.00	0
7XY	0.00	0.00	0
8P	0.00	-406.26	650
8X	0.00	0.00	0
8Y	0.00	0.00	0
8XY	0.00	0.00	0
14P	0.00	-450.64	650
14X	0.00	0.00	0
14Y	0.00	0.00	0
14XY	0.00	0.00	0
10P	0.00	-214.27	185.6256944
10X	0.00	-214.27	185.6256944
10Y	0.00	-214.27	185.6256944
10XY	0.00	0.00	0

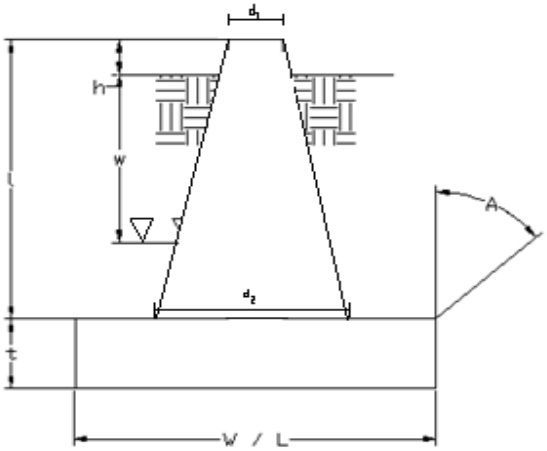
Foundation

Site No.:	88008
Engineer:	BD
Date:	06/18/14
Carrier:	Sprint Nextel

Design Loads (Factored)

Compression/Leg:	471.80	k
Uplift/Leg:	350.30	k

Face Width @ Top of Pier (d_1):	4.00	ft
Face Width @ Bottom of Pier (d_2):	7.50	ft
Total Length of Pier (l):	7.25	ft
Height of Pedestal Above Ground (h):	0.50	ft
Width of Pad (W):	21.50	ft
Length of Pad (L):	21.50	ft
Thickness of Pad (t):	2.50	ft
Water Table Depth (w):	20	ft
Unit Weight of Concrete:	150.0	pcf
Unit Weight of Soil (Above Water Table):	131.0	pcf
Unit Weight of Soil (Below Water Table):	65.0	pcf
Friction Angle of Uplift (A):	0	°
Allowable Compressive Bearing Pressure:	8700	psf
Allowable Skin Friction:	630	psf



Volume Pier (Total):	247.10	ft³
Volume Pad (Total):	1155.63	ft³
Volume Soil (Total):	2881.58	ft³
Volume Pier (Buoyant):	0.00	ft³
Volume Pad (Buoyant):	0.00	ft³
Volume Soil (Buoyant):	0.00	ft³
Weight Pier:	37.07	k
Weight Pad:	173.34	k
Weight Soil:	377.49	k

Ultimate Skin Friction:	135.45	k
Difference in Soil Volume 1:	993.04	ft³
Difference in Soil Volume 2:	168.92	ft³
Difference in Soil Weight:	152.22	k

Uplift Check

Uplift Resistance (k)	Ratio	Result
361.67	0.97	**OK**

Axial Check

Axial Resistance (k)	Ratio	Result
4021.58	0.12	**OK**

Anchor Bolt Check

Bolt Description: (6) 2-1/4" A36

ϕRnt	Ratio	Result
456.60	0.77	**OK**

Sprint

AMERICAN TOWER CORPORATION

PROJECT:	2.5 EQUIPMENT DEPLOYMENT
SITE NAME:	BETHANY CT
SITE CASCADE:	CT03XC043
SITE NUMBER:	88008
SITE ADDRESS:	93 OLD AMITY ROAD BETHANY, CT 06524
SITE TYPE:	SELF SUPPORT TOWER
MARKET:	SOUTHERN CONNECTICUT

SITE INFORMATION

TOWER OWNER:
AMERICAN TOWER CORPORATION
10 PRESIDENTIAL WAY
WOBURN, MA 01801

LATITUDE (NAD83):
41° 24' 17.02" N
41.404728°

LONGITUDE (NAD83):
73° 00' 0" W
-73.000000°

COUNTY:
NEW HAVEN

ZONING JURISDICTION:
CONNECTICUT SITING COUNCIL

ZONING DISTRICT:
BUSINESS AND INDUSTRY

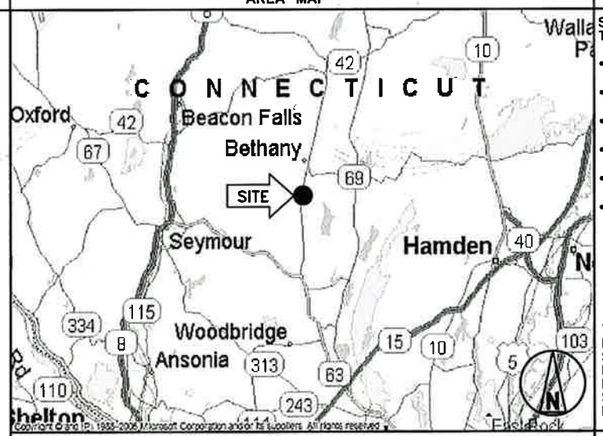
POWER COMPANY:
CL&P
(800) 286-2000

AAV PROVIDER:
AT&T
(800) 288-2020

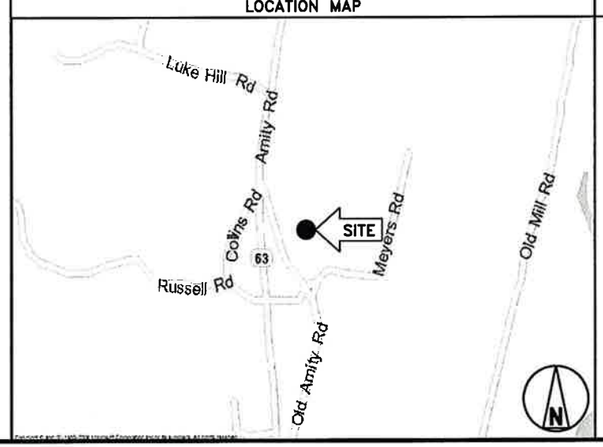
SPRINT CM:
GARY WOOD
(860) 940-9168
GARY.WOOD@SPRINT.COM

AMERICAN TOWER PM:
KATHRYN WINDSOR
(816) 351-6208
KATHRYN.WINDSOR@AMERICANTOWER.COM

AREA MAP



LOCATION MAP



PROJECT DESCRIPTION

SPRINT PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY.

- INSTALL 2.5 EQUIPMENT IN EXISTING NV MMBS CABINET
- INSTALL (3) PANEL ANTENNAS
- INSTALL (3) RRU'S TO TOWER
- INSTALL (27) JUMPER CABLES
- INSTALL (1) HYBRID CABLE
- INSTALL (4) BATTERIES IN EXISTING BBU CABINET

THESE PLANS HAVE BEEN DEVELOPED FOR THE MODIFICATION OF AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY OWNED OR LEASED BY SPRINT IN ACCORDANCE WITH THE SCOPE OF WORK PROVIDED BY SPRINT. INFINIGY HAS INCORPORATED THIS SCOPE OF WORK IN THE PLANS. THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS ACCOMPANIED BY A PASSING STRUCTURAL STABILITY ANALYSIS PREPARED BY A LICENSED STRUCTURAL ENGINEER. STRUCTURAL ANALYSIS MUST INCLUDE BOTH TOWER AND MOUNT.

APPLICABLE CODES

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALL IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1. INTERNATIONAL BUILDING CODE (2012 IBC)
2. TIA-EIA-222-G OR LATEST EDITION
3. NFPA 780 – LIGHTNING PROTECTION CODE
4. 2011 NATIONAL ELECTRIC CODE OR LATEST EDITION
5. ANY OTHER NATIONAL OR LOCAL APPLICABLE CODES, MOST RECENT EDITIONS
6. CT BUILDING CODE
7. LOCAL BUILDING CODE
8. CITY/COUNTY ORDINANCES

811 Know what's below. Call before you dig. www.call811.com

DRAWING INDEX

SHEET NO.	SHEET TITLE	REV.
T-1	TITLE SHEET & PROJECT DATA	0
SP-1	SPRINT SPECIFICATIONS	0
SP-2	SPRINT SPECIFICATIONS	0
SP-3	SPRINT SPECIFICATIONS	0
A-1	SITE PLAN	0
A-2	TOWER ELEVATION & CABLE PLAN	0
A-3	ANTENNA LAYOUT & MOUNTING DETAILS	0
A-4	COLOR CODING & NOTES	0
A-5	EQUIPMENT & MOUNTING DETAILS	0
A-6	CIVIL DETAILS	0
A-7	PLUMBING DIAGRAM	0
E-1	ELECTRICAL & GROUNDING PLAN	0
E-2	ELECTRICAL & GROUNDING DETAILS	0

PLANS PREPARED FOR:
Sprint
6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:
INFINIGY Design. Build. Deliver.
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793
JOB NUMBER 340-000

MLA PARTNER:
AMERICAN TOWER CORPORATION
10 PRESIDENTIAL WAY
WOBURN, MA 01801

ENGINEERING LICENSE:
STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER

DRAWING NOTICE:

REVISIONS:

DESCRIPTION	DATE	BY	REV
REVISED PER COMMENTS	7/9/14	AHS	2
REVISED PER COMMENTS	06/19/14	AHS	1
ISSUED FOR PERMIT	6/5/2014	MPS	0
ISSUED FOR REVIEW	05/28/14	MAP	A

SITE NAME:
BETHANY CT

SITE CASCADE:
CT03XC043

SITE ADDRESS:
93 OLD AMITY ROAD
BETHANY, CT 06524

SHEET DESCRIPTION:
TITLE SHEET
& PROJECT DATA

SHEET NUMBER:
T-1

THESE OUTLINE SPECIFICATIONS IN CONJUNCTION WITH THE SPRINT STANDARD CONSTRUCTION SPECIFICATIONS, INCLUDING CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.

SECTION 01 100 – SCOPE OF WORK

PART 1 – GENERAL

1.1 THE WORK: THESE STANDARD CONSTRUCTION SPECIFICATIONS IN CONJUNCTION WITH THE SPRINT CONSTRUCTION STANDARDS FOR WIRELESS SITES, CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.

1.2 RELATED DOCUMENTS:

A. THE REQUIREMENTS OF THIS SECTION APPLY TO ALL SECTIONS IN THIS SPECIFICATION.

B. SPRINT "STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES" ARE INCLUDED IN AND MADE A PART OF THESE SPECIFICATIONS HEREWITH.

1.3 PRECEDENCE: SHOULD CONFLICTS OCCUR BETWEEN THE STANDARD CONSTRUCTION SPECIFICATIONS FOR WIRELESS SITES INCLUDING THE STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES AND THE CONSTRUCTION DRAWINGS, INFORMATION ON THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE. NOTIFY SPRINT CONSTRUCTION MANAGER IF THIS OCCURS.

1.4 NATIONALLY RECOGNIZED CODES AND STANDARDS:

A. THE WORK SHALL COMPLY WITH APPLICABLE NATIONAL AND LOCAL CODES AND STANDARDS, LATEST EDITION, AND PORTIONS THEREOF, INCLUDED BUT NOT LIMITED TO THE FOLLOWING:

1. GR–63–CORE NEBS REQUIREMENTS: PHYSICAL PROTECTION
5. GR–78–CORE GENERIC REQUIREMENTS FOR THE PHYSICAL DESIGN AND MANUFACTURE OF TELECOMMUNICATIONS EQUIPMENT.
3. GR–1089 CORE, ELECTROMAGNETIC COMPATIBILITY AND ELECTRICAL SAFETY –GENERIC CRITERIA FOR NETWORK TELECOMMUNICATIONS EQUIPMENT.
4. NATIONAL FIRE PROTECTION ASSOCIATION CODES AND STANDARDS (NFPA) INCLUDING NFPA 70 (NATIONAL ELECTRICAL CODE – "NEC") AND NFPA 101 (LIFE SAFETY CODE).
5. AMERICAN SOCIETY FOR TESTING OF MATERIALS (ASTM)
6. INSTITUTE OF ELECTRONIC AND ELECTRICAL ENGINEERS (IEEE)
7. AMERICAN CONCRETE INSTITUTE (ACI)
8. AMERICAN WIRE PRODUCERS ASSOCIATION (AWPA)
9. CONCRETE REINFORCING STEEL INSTITUTE (CRSI)
10. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)
11. PORTLAND CEMENT ASSOCIATION (PCA)
12. NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA)
13. BRICK INDUSTRY ASSOCIATION (BIA)
14. AMERICAN WELDING SOCIETY (AWS)
15. NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA)
16. SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION (SMACNA)
17. DOOR AND HARDWARE INSTITUTE (DHI)
18. OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)
19. APPLICABLE BUILDING CODES INCLUDING UNIFORM BUILDING CODE, SOUTHERN BUILDING CODE, BOCA, AND THE INTERNATIONAL BUILDING CODE.

1.5 DEFINITIONS:

A. WORK: THE SUM OF TASKS AND RESPONSIBILITIES IDENTIFIED IN THE CONTRACT DOCUMENTS.

B. COMPANY: SPRINT CORPORATION

C. ENGINEER: SYNONYMOUS WITH ARCHITECT & ENGINEER AND "A&E". THE DESIGN PROFESSIONAL HAVING PROFESSIONAL RESPONSIBILITY FOR DESIGN OF THE PROJECT.

D. CONTRACTOR: CONSTRUCTION CONTRACTOR; CONSTRUCTION VENDOR; INDIVIDUAL OR ENTITY WHO AFTER EXECUTION OF A CONTRACT IS BOUND TO ACCOMPLISH THE WORK.

E. THIRD PARTY VENDOR OR AGENCY: A VENDOR OR AGENCY ENGAGED SEPARATELY BY THE COMPANY, A&E, OR CONTRACTOR TO PROVIDE MATERIALS OR TO ACCOMPLISH SPECIFIC TASKS RELATED TO BUT NOT INCLUDED IN THE WORK.

F. OFCI: OWNER FURNISHED, CONTRACTOR INSTALLED EQUIPMENT.

G. CONSTRUCTION MANAGER – ALL PROJECTS RELATED COMMUNICATION TO FLOW THROUGH SPRINT REPRESENTATIVE IN CHARGE OF PROJECT...

1.6 SITE FAMILIARITY: CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE SPRINT CONSTRUCTION MANAGER PRIOR TO THE COMMENCEMENT OF WORK. NO COMPENSATION WILL BE AWARDED BASED ON CLAIM OF LACK OF KNOWLEDGE OR FIELD CONDITIONS.

1.7 POINT OF CONTACT: COMMUNICATION BETWEEN SPRINT AND THE CONTRACTOR SHALL FLOW THROUGH THE SINGLE SPRINT CONSTRUCTION MANAGER APPOINTED TO MANAGE THE PROJECT FOR SPRINT.

1.8 ON–SITE SUPERVISION: THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL EMPLOY A COMPETENT SUPERINTENDENT WHO SHALL BE IN ATTENDANCE AT THE SITE AT ALL TIMES DURING PERFORMANCE OF THE WORK.

1.9 DRAWINGS, SPECIFICATIONS AND DETAILS REQUIRED AT JOBSITE: THE CONSTRUCTION CONTRACTOR SHALL MAINTAIN A FULL SET OF THE CONSTRUCTION DRAWINGS, STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES AND THE STANDARD CONSTRUCTION SPECIFICATIONS FOR WIRELESS SITES AT THE JOBSITE FROM MOBILIZATION THROUGH CONSTRUCTION COMPLETION.

A. THE JOBSITE DRAWINGS, SPECIFICATIONS AND DETAILS SHALL BE CLEARLY MARKED DAILY IN RED PENCIL WITH ANY CHANGES IN CONSTRUCTION OVER WHAT IS DEPICTED IN THE DOCUMENTS. AT CONSTRUCTION COMPLETION, THIS JOBSITE MARKUP SET SHALL BE DELIVERED TO THE COMPANY OR COMPANY'S DESIGNATED REPRESENTATIVE TO BE FORWARDED TO THE COMPANY'S A&E VENDOR FOR PRODUCTION OF "AS–BUILT" DRAWINGS.

B. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK. CONTRACTOR SHALL NOTIFY SPRINT CONSTRUCTION MANAGER OF ANY VARIATIONS PRIOR TO PROCEEDING WITH THE WORK.

C. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS NOTED OTHERWISE. SPACING BETWEEN EQUIPMENT IS THE REQUIRED CLEARANCE. SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, EXISTING CONDITIONS AND/OR DESIGN INTENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE SPRINT CONSTRUCTION MANAGER PRIOR TO PROCEEDING WITH THE WORK.

1.10 USE OF JOB SITE: THE CONTRACTOR SHALL CONFINE ALL CONSTRUCTION AND RELATED OPERATIONS INCLUDING STAGING AND STORAGE OF MATERIALS AND EQUIPMENT, PARKING, TEMPORARY FACILITIES, AND WASTE STORAGE TO THE LEASE PARCEL UNLESS OTHERWISE PERMITTED BY THE CONTRACT DOCUMENTS.

1.11 UTILITIES SERVICES: WHERE NECESSARY TO CUT EXISTING PIPES, ELECTRICAL WIRES, CONDUITS, CABLES, ETC., OF UTILITY SERVICES, OR OF FIRE PROTECTION OR COMMUNICATIONS SYSTEMS, THEY SHALL BE CUT AND CAPPED AT SUITABLE PLACES OR WHERE SHOWN. ALL SUCH ACTIONS SHALL BE COORDINATED WITH THE UTILITY COMPANY INVOLVED:

1.12 PERMITS / FEES: WHEN REQUIRED THAT A PERMIT OR CONNECTION FEE BE PAID TO A PUBLIC UTILITY PROVIDER FOR NEW SERVICE TO THE CONSTRUCTION PROJECT, PAYMENT OF SUCH FEE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

1.13 CONTRACTOR SHALL TAKE ALL MEASURES AND PROVIDE ALL MATERIAL NECESSARY FOR PROTECTING EXISTING EQUIPMENT AND PROPERTY.

1.14 METHODS OF PROCEDURE (MOPS) FOR CONSTRUCTION: CONTRACTOR SHALL PERFORM WORK AS DESCRIBED IN THE FOLLOWING INSTALLATION AND COMMISSIONING MOPS.

NOTE: IN SHORT–FORM SPECIFICATIONS ON THE DRAWINGS, A/E TO INSERT LIST OF APPLICABLE MOPS INCLUDING EN–2012–001, EN–2013–002, EL–0568, AND TS–0193

1.15 USE OF ELECTRONIC PROJECT MANAGEMENT SYSTEMS:

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 TEMPORARY UTILITIES AND FACILITIES: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY UTILITIES AND FACILITIES NECESSARY EXCEPT AS OTHERWISE INDICATED IN THE CONSTRUCTION DOCUMENTS. TEMPORARY UTILITIES AND FACILITIES INCLUDE POTABLE WATER, HEAT, HVAC, ELECTRICITY, SANITARY FACILITIES, WASTE DISPOSAL FACILITIES, AND TELEPHONE/COMMUNICATION SERVICES. PROVIDE TEMPORARY UTILITIES AND FACILITIES IN ACCORDANCE WITH OSHA AND THE AUTHORITY HAVING JURISDICTION. CONTRACTOR MAY UTILIZE THE COMPANY ELECTRICAL SERVICE IN THE COMPLETION OF THE WORK WHEN IT BECOMES AVAILABLE. USE OF THE LESSORS OR SITE OWNER'S UTILITIES OR FACILITIES IS EXPRESSLY FORBIDDEN EXCEPT AS OTHERWISE ALLOWED IN THE CONTRACT DOCUMENTS.

3.2 ACCESS TO WORK: THE CONTRACTOR SHALL PROVIDE ACCESS TO THE JOB SITE FOR AUTHORIZED COMPANY PERSONNEL AND AUTHORIZED REPRESENTATIVES OF THE ARCHITECT/ENGINEER DURING ALL PHASES OF THE WORK.

3.3 TESTING: REQUIREMENTS FOR TESTING BY THIS CONTRACTOR SHALL BE AS INDICATED HEREWITH, ON THE CONSTRUCTION DRAWINGS, AND IN THE INDIVIDUAL SECTIONS OF THESE SPECIFICATIONS. SHOULD COMPANY CHOOSE TO ENGAGE ANY THIRD–PARTY TO CONDUCT ADDITIONAL TESTING, THE CONTRACTOR SHALL COOPERATE WITH AND PROVIDE A WORK AREA FOR COMPANY'S TEST AGENCY.

3.4 DIMENSIONS: VERIFY DIMENSIONS INDICATED ON DRAWINGS WITH FIELD DIMENSIONS BEFORE FABRICATION OR ORDERING OF MATERIALS. DO NOT SCALE DRAWINGS.

3.5 EXISTING CONDITIONS: NOTIFY THE SPRINT CONSTRUCTION MANAGER OF EXISTING CONDITIONS DIFFERING FROM THOSE INDICATED ON THE DRAWINGS. DO NOT REMOVE OR ALTER STRUCTURAL COMPONENTS WITHOUT PRIOR WRITTEN APPROVAL FROM THE ARCHITECT AND ENGINEER.

SECTION 01 200 – COMPANY FURNISHED MATERIAL AND EQUIPMENT

PART 1 – GENERAL

1.1 THE WORK: THESE STANDARD CONSTRUCTION SPECIFICATIONS IN CONJUNCTION WITH THE OTHER CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.

1.2 RELATED DOCUMENTS:

A. THE REQUIREMENTS OF THIS SECTION APPLY TO ALL SECTIONS IN THIS SPECIFICATION.

B. SPRINT "STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES" ARE INCLUDED IN AND MADE A PART OF THESE SPECIFICATIONS HEREWITH.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 RECEIPT OF MATERIAL AND EQUIPMENT:

A. A COMPANY FURNISHED MATERIAL AND EQUIPMENT IS IDENTIFIED ON THE RF DATA SHEET IN THE CONSTRUCTION DOCUMENTS.

B. THE CONTRACTOR IS RESPONSIBLE FOR SPRINT PROVIDED MATERIAL AND EQUIPMENT AND UPON RECEIPT SHALL:

1 ACCEPT DELIVERIES AS SHIPPED AND TAKE RECEIPT.
2. VERIFY COMPLETENESS AND CONDITION OF ALL DELIVERIES.
3. TAKE RESPONSIBILITY FOR EQUIPMENT AND PROVIDE INSURANCE PROTECTION AS REQUIRED IN AGREEMENT.
4. RECORD ANY DEFECTS OR DAMAGES AND WITHIN TWENTY–FOUR HOURS AFTER RECEIPT, REPORT TO SPRINT OR ITS DESIGNATED PROJECT REPRESENTATIVE OF SUCH.
5. PROVIDE SECURE AND NECESSARY WEATHER PROTECTED WAREHOUSING.
6. COORDINATE SAFE AND SECURE TRANSPORTATION OF MATERIAL AND EQUIPMENT, DELIVERING AND OFF–LOADING FROM CONTRACTOR'S WAREHOUSE TO SITE.

3.2 DELIVERABLES:

A. COMPLETE SHIPPING AND RECEIPT DOCUMENTATION IN ACCORDANCE WITH COMPANY PRACTICE.

B. IF APPLICABLE, COMPLETE LOST/STOLEN/DAMAGED DOCUMENTATION REPORT AS NECESSARY IN ACCORDANCE WITH COMPANY PRACTICE, AND AS DIRECTED BY COMPANY.

C. UPLOAD DOCUMENTATION INTO SPRINT SITE MANAGEMENT SYSTEM (SMS) AND/OR PROVIDE HARD COPY DOCUMENTATION AS REQUESTED.

SECTION 01 300 – CELL SITE CONSTRUCTION CO.

PART 1 – GENERAL

1.1 THE WORK: THESE STANDARD CONSTRUCTION SPECIFICATIONS IN CONJUNCTION WITH THE OTHER CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.

1.2 RELATED DOCUMENTS:

A. THE REQUIREMENTS OF THIS SECTION APPLY TO ALL SECTIONS IN THIS SPECIFICATION.

B. SPRINT "STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES" ARE INCLUDED IN AND MADE A PART OF THESE SPECIFICATIONS HEREWITH.

1.3 NOTICE TO PROCEED

A. NO WORK SHALL COMMENCE PRIOR TO COMPANY'S WRITTEN NOTICE TO PROCEED AND THE ISSUANCE OF THE WORK ORDER.

B. UPON RECEIVING NOTICE TO PROCEED, CONTRACTOR SHALL FULLY PERFORM ALL WORK NECESSARY TO PROVIDE SPRINT WITH AN OPERATIONAL WIRELESS FACILITY.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 FUNCTIONAL REQUIREMENTS:

A. THE ACTIVITIES DESCRIBED IN THIS PARAGRAPH REPRESENT MINIMUM ACTIONS AND PROCESSES REQUIRED TO SUCCESSFULLY COMPLETE THE WORK. THE ACTIVITIES DESCRIBED ARE NOT EXHAUSTIVE, AND CONTRACTOR SHALL TAKE ANY AND ALL ACTIONS AS NECESSARY TO SUCCESSFULLY COMPLETE THE CONSTRUCTION OF A FULLY FUNCTIONING WIRELESS FACILITY AT THE SITE IN ACCORDANCE WITH COMPANY PROCESSES.

B. SUBMIT SPECIFIC DOCUMENTATION AS INDICATED HEREIN, AND OBTAIN REQUIRED APPROVALS WHILE THE WORK IS BEING PERFORMED.

C. MANAGE AND CONDUCT ALL FIELD CONSTRUCTION SERVICE RELATED ACTIVITIES

D. PROVIDE CONSTRUCTION ACTIVITIES TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

PLANS PREPARED FOR:

Sprint

6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:

INFINIGY Design. Build. Deliver.

1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

JOB NUMBER 340-000

MLA PARTNER:

AMERICAN TOWER CORPORATION

10 PRESIDENTIAL WAY
WOBURN, MA 01801

ENGINEERING LICENSE:

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER

DRAWING NOTICE:

REVISIONS:

DESCRIPTION	DATE	BY	REV
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ISSUED FOR PERMIT	8/5/2014	MPS	0
ISSUED FOR REVIEW	05/28/14	MAP	A

SITE NAME:

BETHANY CT

SITE CASCADE:

CT03XC043

SITE ADDRESS:

93 OLD AMITY ROAD
BETHANY, CT 06524

SHEET DESCRIPTION:

SPRINT SPECIFICATIONS

SHEET NUMBER:

SP-1

CONTINUE FROM SP-1

1. PERFORM ANY REQUIRED SITE ENVIRONMENTAL MITIGATION.
2. PREPARE GROUND SITES; PROVIDE DE-GRUBBING; AND ROUGH AND FINAL GRADING, AND COMPOUND SURFACE TREATMENTS.
3. MANAGE AND CONDUCT ALL ACTIVITIES FOR INSTALLATION OF UTILITIES INCLUDING ELECTRICAL AND TELCO BACKHAUL.
4. INSTALL UNDERGROUND FACILITIES INCLUDING UNDERGROUND POWER AND COMMUNICATIONS CONDUITS, AND UNDERGROUND GROUNDING SYSTEM.
5. INSTALL ABOVE GROUND GROUNDING SYSTEMS.
6. PROVIDE NEW HVAC INSTALLATIONS AND MODIFICATIONS.
7. INSTALL "H-FRAMES", CABINETS AND SHELTERS AS INDICATED.
8. INSTALL ROADS, ACCESS WAYS, CURBS AND DRAINS AS INDICATED.
9. ACCOMPLISH REQUIRED MODIFICATION OF EXISTING FACILITIES.
10. PROVIDE ANTENNA SUPPORT STRUCTURE FOUNDATIONS.
11. PROVIDE SLABS AND EQUIPMENT PLATFORMS.
12. INSTALL COMPOUND FENCING, SIGHT SHIELDING, LANDSCAPING AND ACCESS BARRIERS.
13. PERFORM INSPECTION AND MATERIAL TESTING AS REQUIRED HEREINAFTER.
14. CONDUCT SITE RESISTANCE TO EARTH TESTING AS REQUIRED HEREINAFTER
15. INSTALL FIXED GENERATOR SETS AND OTHER STANDBY POWER SOLUTIONS.
16. INSTALL TOWERS, ANTENNA SUPPORT STRUCTURES AND PLATFORMS ON EXISTING TOWERS AS REQUIRED.
17. INSTALL CELL SITE RADIOS, MICROWAVE, GPS, COAXIAL MAINLINE, ANTENNAS, CROSS BAND COUPLERS, TOWER TOP AMPLIFIERS, LOW NOISE AMPLIFIERS AND RELATED EQUIPMENT.
18. PERFORM, DOCUMENT, AND CLOSE OUT ANY CONSTRUCTION CONTROL DOCUMENTS THAT MAY BE REQUIRED BY GOVERNMENT AGENCIES AND LANDLORDS.
19. PERFORM ANTENNAL AND COAX SWEEP TESTING AND MAKE ANY AND ALL NECESSARY CORRECTIONS.
20. REMAIN ON SITE MOBILIZED THROUGHOUT HAND-OFF AND INTEGRATION TO ASSIST AS NEEDED UNTIL SITE IS DEEMED SUBSTANTIALLY COMPLETE AND PLACED "ON AIR."

3.2 GENERAL REQUIREMENTS FOR CIVIL CONSTRUCTION:

A. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH. AT THE COMPLETION OF THE WORK, CONTRACTOR SHALL REMOVE FROM THE SITE ALL REMAINING RUBBISH, IMPLEMENTS, TEMPORARY FACILITIES, AND SURPLUS MATERIALS.

B. EQUIPMENT ROOMS SHALL AT ALL TIMES BE MAINTAINED "BROOM CLEAN" AND CLEAR OF DEBRIS.

C. CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO DISCOVER AND LOCATE ANY HAZARDOUS CONDITION.

1. IN THE EVENT CONTRACTOR ENCOUNTERS ANY HAZARDOUS CONDITION WHICH HAS NOT BEEN ABATED OR OTHERWISE MITIGATED, CONTRACTOR AND ALL OTHER PERSONS SHALL IMMEDIATELY STOP WORK IN THE AFFECTED AREA AND NOTIFY COMPANY IN WRITING. THE WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED EXCEPT BY WRITTEN NOTIFICATION BY COMPANY.
2. CONTRACTOR AGREES TO USE CARE WHILE ON THE SITE AND SHALL NOT TAKE ANY ACTION THAT WILL OR MAY RESULT IN OR CAUSE THE HAZARDOUS CONDITION TO BE FURTHER RELEASED IN THE ENVIRONMENT, OR TO FURTHER EXPOSE INDIVIDUALS TO THE HAZARD.

D. CONTRACTOR'S ACTIVITIES SHALL BE RESTRICTED TO THE PROJECT LIMITS. SHOULD AREAS OUTSIDE THE PROJECT LIMITS BE AFFECTED BY CONTRACTOR'S ACTIVITIES, CONTRACTOR SHALL IMMEDIATELY RETURN THEM TO ORIGINAL CONDITION

E. CONDUCT TESTING AS REQUIRED HEREIN.

3.3 DELIVERABLES:

A. CONTRACTOR SHALL REVIEW, APPROVE, AND SUBMIT TO SPRINT SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND SIMILAR SUBMITTALS AS REQUIRED HEREINAFTER

B. PROVIDE DOCUMENTATION INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING. DOCUMENTATION SHALL BE FORWARDED IN ORIGINAL FORMAT AND/OR UPLOADED INTO SMS.

1. ALL CORRESPONDENCE AND PRELIMINARY CONSTRUCTION REPORTS.
2. PROJECT PROGRESS REPORTS.
3. CIVIL CONSTRUCTION START DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
4. ELECTRICAL SERVICE COMPLETION DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
5. LINES AND ANTENNA INSTALL DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
6. POWER INSTALL DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
7. TELCO READY DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
8. PPC (OR SHELTER) INSTALL DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
9. TOWER CONSTRUCTION START DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
10. TOWER CONSTRUCTION COMPLETE DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
11. BTS AND RADIO EQUIPMENT DELIVERED AT SITE DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
12. NETWORK OPERATIONS HANDOFF CHECKLIST (HOC WALK) COMPLETE (UPLOAD FORM IN SMS)
13. CIVIL CONSTRUCTION COMPLETE DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
14. SITE CONSTRUCTION PROGRESS PHOTOS UNLOADED INTO SMS.

SECTION 01 400 - SUBMITTALS & TESTS

PART 1 - GENERAL

1.1 THE WORK: THESE STANDARD CONSTRUCTION SPECIFICATIONS IN CONJUNCTION WITH THE OTHER CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.

1.2 RELATED DOCUMENTS:

A. THE REQUIREMENTS OF THIS SECTION APPLY TO ALL SECTIONS IN THIS SPECIFICATION.

B. SPRINT "STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES" ARE INCLUDED IN AND MADE A PART OF THESE SPECIFICATIONS HEREWITH.

1.3 SUBMITTALS:

A. THE WORK IN ALL ASPECTS SHALL COMPLY WITH THE CONSTRUCTION DRAWINGS AND THESE SPECIFICATIONS.

B. SUBMIT THE FOLLOWING TO COMPANY REPRESENTATIVE FOR APPROVAL.

1. CONCRETE MIX-DESIGNS FOR TOWER FOUNDATIONS, ANCHORS PIERS, AND CONCRETE PAVING.
2. CONCRETE BREAK TESTS AS SPECIFIED HEREIN.
3. SPECIAL FINISHES FOR INTERIOR SPACES, IF ANY.
4. ALL EQUIPMENT AND MATERIALS SO IDENTIFIED ON THE CONSTRUCTION DRAWINGS.
5. CHEMICAL GROUNDING DESIGN

D. ALTERNATES: AT THE COMPANY'S REQUEST, ANY ALTERNATIVES TO THE MATERIALS OR METHODS SPECIFIED SHALL BE SUBMITTED TO SPRINT'S CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO BEING SHIPPED TO SITE. SPRINT WILL REVIEW AND APPROVE ONLY THOSE REQUESTS MADE IN WRITING. NO VERBAL APPROVALS WILL BE CONSIDERED. SUBMITTAL FOR APPROVAL SHALL INCLUDE A STATEMENT OF COST REDUCTION PROPOSED FOR USE OF ALTERNATE PRODUCT.

1.4 TESTS AND INSPECTIONS:

A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION TESTS, INSPECTIONS AND PROJECT DOCUMENTATION.

B. CONTRACTOR SHALL ACCOMPLISH TESTING INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. COAX SWEEPS AND FIBER TESTS PER TS-0200 REV 4 ANTENNA LINE ACCEPTANCE STANDARDS.
2. AGL, AZIMUTH AND DOWNTILT USING ELECTRONIC COMMERCIAL MADE-FOR-THE-PURPOSE ANTENNA ALIGNMENT TOOL.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL CORRECTIONS TO ANY WORK IDENTIFIED AS UNACCEPTABLE IN SITE INSPECTION ACTIVITIES AND/OR AS A RESULT OF TESTING.

C. REQUIRED CLOSEOUT DOCUMENTATION INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING;

1. AZIMUTH, DOWNTILT, AGL - UPLOAD REPORT FROM ANTENNA ALIGNMENT TOOL TO SITERRA TASK 465. INSTALLED AZIMUTH, DOWNTILT, AND AGL MUST CONFORM TO THE RF DATA SHEETS. SWEEP AND FIBER TESTS
2. SCANABLE BARCODE PHOTOGRAPHS OF TOWER TOP AND INACCESSIBLE SERIALIZED EQUIPMENT
3. ALL AVAILABLE JURISDICTIONAL INFORMATION
4. PDF SCAN OF REDLINES PRODUCED IN FIELD
5. ELECTRONIC AS-BUILT DRAWINGS IN AUTOCAD AND PDF FORMATS. ANY FIELD CHANGE MUST BE REFLECTED BY MODIFYING THE PLANS, ELEVATIONS, AND DETAILS IN THE DRAWING SETS. GENERAL NOTES INDICATING MODIFICATIONS WILL NOT BE ACCEPTED. CHANGES SHALL BE HIGHLIGHTED AS "CLOUDS" IDENTIFIED AS THE "AS-BUILT" CONDITION.
6. LIEN WAIVERS
7. FINAL PAYMENT APPLICATION
8. REQUIRED FINAL CONSTRUCTION PHOTOS
9. CONSTRUCTION AND COMMISSIONING CHECKLIST COMPLETE WITH NO DEFICIENT ITEMS
10. ALL POST NTP TASKS INCLUDING DOCUMENT UPLOADS COMPLETED IN SITERRA (SPRINTS DOCUMENT REPOSITORY OF RECORD).

1.5 COMMISSIONING: PERFORM ALL COMMISSIONING AS REQUIRED BY APPLICABLE MOPs

1.6 INTEGRATION: PERFORM ALL INTEGRATION ACTIVITIES AS REQUIRED BY APPLICABLE MOPs

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 REQUIREMENTS FOR TESTING:

A. THIRD PARTY TESTING AGENCY:

1. WHEN THE USE OF A THIRD PARTY INDEPENDENT TESTING AGENCY IS REQUIRED, THE AGENCY THAT IS SELECTED MUST PERFORM SUCH WORK ON A REGULAR BASIS IN THE STATE WHERE THE PROJECT IS LOCATED AND HAVE A THOROUGH UNDERSTANDING OF LOCAL AVAILABLE MATERIALS, INCLUDING THE SOIL, ROCK, AND GROUNDWATER CONDITIONS.
2. THE THIRD PARTY TESTING AGENCY IS TO BE FAMILIAR WITH THE APPLICABLE REQUIREMENTS FOR THE TESTS TO BE DONE, EQUIPMENT TO BE USED, AND ASSOCIATED HEALTH AND SAFETY ISSUES.
3. EXPERIENCE IN SOILS, CONCRETE, MASONRY, AGGREGATE, AND ASPHALT TESTING USING ASTM, AASJTO, AND OTHER METHODS IS NEEDED.
4. EXPERIENCE IN SOILS, CONCRETE, MASONRY, AGGREGATE, AND ASPHALT TESTING USING ASTM, AASJTO, AND OTHER METHODS IS NEEDED.

3.2 REQUIRED TESTS:

A. CONTRACTOR SHALL ACCOMPLISH TESTING INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. CONCRETE CYLINDER BREAK TESTS FOR THE TOWER AND ANCHOR FOUNDATIONS AS SPECIFIED IN SECTION: PORTLAND CEMENT CONCRETE PAVING.
2. ASPHALT ROADWAY COMPACTED THICKNESS, SURFACE SMOOTHNESS, AND COMPACTED DENSITY TESTING AS SPECIFIED IN SECTION: HOT MIX ASPHALT PAVING.
3. FIELD QUALITY CONTROL TESTING AS SPECIFIED IN SECTION: PORTLAND CEMENT CONCRETE PAVING.
4. TESTING REQUIRED UNDER SECTION: AGGREGATE BASE FOR ACCESS ROADS, PADS AND ANCHOR LOCATIONS
5. STRUCTURAL BACKFILL COMPACTION TESTS FOR THE TOWER FOUNDATION.
6. SITE RESISTANCE TO EARTH TESTING PER EXHIBIT: CELL SITE GROUNDING SYSTEM DESIGN.
7. ANTENNA AND COAX SWEEP TESTS PER EXHIBIT: ANTENNA TRANSMISSION LINE ACCEPTANCE STANDARDS.
8. GROUNDING AT ANTENNA MASTS FOR GPS AND ANTENNAS
9. ALL OTHER TESTS REQUIRED BY COMPANY OR JURISDICTION.

3.3 REQUIRED INSPECTIONS

A. SCHEDULE INSPECTIONS WITH COMPANY REPRESENTATIVE.

B. CONDUCT INSPECTIONS INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. GROUNDING SYSTEM INSTALLATION PRIOR TO EARTH CONCEALMENT DOCUMENTED WITH DIGITAL PHOTOGRAPHS BY CONTRACTOR, APPROVED BY A&E OR SPRINT REPRESENTATIVE.
2. FORMING FOR CONCRETE AND REBAR PLACEMENT PRIOR TO POUR DOCUMENTED WITH DIGITAL PHOTOGRAPHS BY CONTRACTOR, APPROVED BY A&E OR SPRINT REPRESENTATIVE.
3. COMPACTION OF BACKFILL MATERIALS; AGGREGATE BASE FOR ROADS, PADS, AND ANCHORS; ASPHALT PAVING; AND SHAFT BACKFILL FOR CONCRETE AND WOOD POLES, BY INDEPENDENT THIRD PARTY AGENCY.
4. PRE- AND POST-CONSTRUCTION ROOFTOP AND STRUCTURAL INSPECTIONS ON EXISTING FACILITIES.
5. TOWER ERECTION SECTION STACKING AND PLATFORM ATTACHMENT DOCUMENTED BY DIGITAL PHOTOGRAPHS BY THIRD PARTY AGENCY.
6. ANTENNA AZIMUTH , DOWN TILT AND PER SUNLIGHT TOOL SUNSIGHT INSTRUMENTS - ANTENNALIGN ALIGNMENT TOOL (AAT)

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JOB NUMBER 340-000

MLA PARTNER:

AMERICAN TOWER CORPORATION

10 PRESIDENTIAL WAY
WOBURN, MA 01801

ENGINEERING LICENSE:

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER

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SITE NAME:

BETHANY CT

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CT03XC043

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93 OLD AMITY ROAD
BETHANY, CT 06524

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SPRINT SPECIFICATIONS

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SP-2

CONTINUE FROM SP-2

7. VERIFICATION DOCUMENTED WITH THE ANTENNA CHECKLIST REPORT, BY A&E, SITE DEVELOPMENT REP, OR RF REP.

8. FINAL INSPECTION CHECKLIST AND HANDOFF WALK (HOC.). SIGNED FORM SHOWING ACCEPTANCE BY FIELD OPS IS TO BE UPLOADED INTO SMS.

9. COAX SWEEP AND FIBER TESTING DOCUMENTS SUBMITTED VIA SMS FOR RF APPROVAL.

10. SCAN-ABLE BARCODE PHOTOGRAPHS OF TOWER TOP AND INACCESSIBLE SERIALIZED EQUIPMENT

11. ALL AVAILABLE JURISDICTIONAL INFORMATION

12. PDF SCAN OF REDLINES PRODUCED IN FIELD

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL CORRECTIONS TO ANY WORK IDENTIFIED AS UNACCEPTABLE IN SITE INSPECTION ACTIVITIES AND/OR AS A RESULT OF TESTING.

D. CONSTRUCTION INSPECTIONS AND CORRECTIVE MEASURES SHALL BE DOCUMENTED BY THE CONTRACTOR WITH WRITTEN REPORTS AND PHOTOGRAPHS. PHOTOGRAPHS MUST BE DIGITAL AND OF SUFFICIENT QUALITY TO CLEARLY SHOW THE SITE CONSTRUCTION. PHOTOGRAPHS MUST CLEARLY IDENTIFY THE PHOTOGRAPHED ITEM AND BE LABELED WITH THE SITE CASCADE NUMBER, SITE NAME, DESCRIPTION, AND DATE.

3.4 DELIVERABLES: TEST AND INSPECTION REPORTS AND CLOSEOUT DOCUMENTATION SHALL BE UPLOADED TO THE SMS AND/OR FORWARDED TO SPRINT FOR INCLUSION INTO THE PERMANENT SITE FILES.

A. THE FOLLOWING TEST AND INSPECTION REPORTS SHALL BE PROVIDED AS APPLICABLE.

1. CONCRETE MIX AND CYLINDER BREAK REPORTS.

2. STRUCTURAL BACKFILL COMPACTION REPORTS.

3. SITE RESISTANCE TO EARTH TEST.

4. ANTENNA AZIMUTH AND DOWN TILT VERIFICATION

5. TOWER ERECTION INSPECTIONS AND MEASUREMENTS DOCUMENTING TOWER INSTALLED PER SUPPLIER'S REQUIREMENTS AND THE APPLICABLE SECTIONS HEREIN.

6. COAX CABLE SWEEP TESTS PER COMPANY'S "ANTENNA LINE ACCEPTANCE STANDARDS".

B. REQUIRED CLOSEOUT DOCUMENTATION INCLUDES THE FOLLOWING;

1. TEST WELLS AND TRENCHES: PHOTOGRAPHS OF ALL TEST WELLS; PHOTOGRAPHS SHOWING ALL OPEN EXCAVATIONS AND TRENCHING PRIOR TO BACKFILLING SHOWING A TAPE MEASURE VISIBLE IN THE EXCAVATIONS INDICATING DEPTH.

2. CONDUITS, CONDUCTORS AND GROUNDING: PHOTOGRAPHS SHOWING TYPICAL INSTALLATION OF CONDUCTORS AND CONNECTORS; PHOTOGRAPHS SHOWING TYPICAL BEND RADIUS OF INSTALLED GROUND WIRES AND GROUND ROD SPACING;

3. CONCRETE FORMS AND REINFORCING: CONCRETE FORMING AT TOWER AND EQUIPMENT/SHELTER PAD/FOUNDATIONS – PHOTOGRAPHS SHOWING ALL REINFORCING STEEL, UTILITY AND CONDUIT STUB OUTS; PHOTOGRAPHS SHOWING CONCRETE POUR OF SHELTER SLAB/FOUNDATION, TOWER FOUNDATION AND GUY ANCHORS WITH VIBRATOR IN USE; PHOTOGRAPHS SHOWING EACH ANCHOR ON GUYED TOWERS, BEFORE CONCRETE POUR.

4. TOWER, ANTENNAS AND MAINLINE: INSPECTION AND PHOTOGRAPHS OF SECTION STACKING; INSPECTION AND PHOTOGRAPHS OF PLATFORM COMPONENT ATTACHMENT POINTS; PHOTOGRAPHS OF TOWER TOP GROUNDING; PHOTOS OF TOWER COAX LINE COLOR CODING AT THE TOP AND AT GROUND LEVEL; INSPECTION AND PHOTOGRAPHS OF OPERATIONAL OF TOWER LIGHTING, AND PLACEMENT OF FAA REGISTRATION SIGN; PHOTOGRAPHS SHOWING ADDITIONAL GROUNDING POINTS FOR TOWERS GREATER THAN 200 FEET.; PHOTOS OF ANTENNA GROUND BAR, EQUIPMENT GROUND BAR, AND MASTER GROUND BAR; PHOTOS OF GPS ANTENNA(S); PHOTOS OF EACH SECTOR OF ANTENNAS; ONE PHOTOGRAPH LOOKING AT THE SECTOR AND ONE FROM BEHIND SHOWING THE PROJECTED COVERAGE AREA; PHOTOS OF COAX WEATHERPROOFING – TOP AND BOTTOM; PHOTOS OF COAX GROUNDING--TOP AND BOTTOM; PHOTOS OF ANTENNA AND MAST GROUNDING; PHOTOS OF COAX CABLE ENTRY INTO SHELTER; PHOTOS OF PLATFORM MECHANICAL CONNECTIONS TO TOWER/MONOPOLE.

5. ROOF TOPS: PRE-CONSTRUCTION AND POST-CONSTRUCTION VISUAL INSPECTION AND PHOTOGRAPHS OF THE ROOF AND INTERIOR TO DETERMINE AND DOCUMENT CONDITIONS; ROOF TOP CONSTRUCTION INSPECTIONS AS REQUIRED BY THE JURISDICTION; PHOTOGRAPHS OF CABLE TRAY AND/OR ICE BRIDGE; PHOTOGRAPHS OF DOGHOUSE/CABLE EXIT FROM ROOF;

6. SITE LAYOUT – PHOTOGRAPHS OF THE OVERALL COMPOUND, INCLUDING EQUIPMENT PLATFORM FROM ALL FOUR CORNERS.

7. FINISHED UTILITIES: CLOSE-UP PHOTOGRAPHS OF THE PPC BREAKER PANEL; CLOSE-UP PHOTOGRAPH OF THE INSIDE OF THE TELCO PANEL AND NIU; CLOSE-UP PHOTOGRAPH OF THE POWER METER AND DISCONNECT; PHOTOS OF POWER AND TELCO ENTRANCE TO COMPANY ENCLOSURE; PHOTOGRAPHS AT METER BOX AND/OR FACILITY DISTRIBUTION PANEL.

8. REQUIRED MATERIALS CERTIFICATIONS: CONCRETE MIX DESIGNS; MILL CERTIFICATION FOR ALL REINFORCING AND STRUCTURAL STEEL; AND ASPHALT PAVING MIX DESIGN.

9. ANY AND ALL SUBMITTALS BY THE JURISDICTION OR COMPANY.

SECTION 01 400 – SUBMITTALS & TESTS

PART 1 – GENERAL

1.1 THE WORK: THESE STANDARD CONSTRUCTION SPECIFICATIONS IN CONJUNCTION WITH THE OTHER CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.

1.2 RELATED DOCUMENTS:

A. THE REQUIREMENTS OF THIS SECTION APPLY TO ALL SECTIONS IN THIS SPECIFICATION.

B. SPRINT "STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES" ARE INCLUDED IN AND MADE A PART OF THESE SPECIFICATIONS HEREWITH.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 WEEKLY REPORTS:

A. CONTRACTOR SHALL PROVIDE SPRINT WITH WEEKLY REPORTS SHOWING PROJECT STATUS. THIS STATUS REPORT FORMAT WILL BE PROVIDED TO THE CONTRACTOR BY SPRINT. THE REPORT WILL CONTAIN SITE ID NUMBER, THE MILESTONES FOR EACH SITE, INCLUDING THE BASELINE DATE, ESTIMATED COMPLETION DATE AND ACTUAL COMPLETION DATE.

B. REPORT INFORMATION WILL BE TRANSMITTED TO SPRINT VIA ELECTRONIC MEANS AS REQUIRED. THIS INFORMATION WILL PROVIDE A BASIS FOR PROGRESS MONITORING AND PAYMENT.

3.2 PROJECT CONFERENCE CALLS:

A. SPRINT MAY HOLD WEEKLY PROJECT CONFERENCE CALLS. CONTRACTOR WILL BE REQUIRED TO COMMUNICATE SITE STATUS, MILESTONE COMPLETIONS AND UPCOMING MILESTONE PROJECTIONS, AND ANSWER ANY OTHER SITE STATUS QUESTIONS AS NECESSARY.

3.3 PROJECT TRACKING IN SMS:

A. CONTRACTOR SHALL PROVIDE SCHEDULE UPDATES AND PROJECTIONS IN THE SMS SYSTEM ON A WEEKLY BASIS.

3.4 ADDITIONAL REPORTING:

A. ADDITIONAL OR ALTERNATE REPORTING REQUIREMENTS MAY BE ADDED TO THE REPORT AS DETERMINED TO BE REASONABLY NECESSARY BY COMPANY.

3.5 PROJECT PHOTOGRAPHS:

A. FILE DIGITAL PHOTOGRAPHS OF COMPLETED SITE IN JPEG FORMAT IN THE SMS PHOTO LIBRARY FOR THE RESPECTIVE SITE. PHOTOGRAPHS SHALL BE CLEARLY LABELED WITH SITE NUMBER, NAME AND DESCRIPTION, AND SHALL INCLUDE AT A MINIMUM THE FOLLOWING AS APPLICABLE:

1. 1SHELTER AND TOWER OVERVIEW.

2. TOWER FOUNDATION(S) – FORMS AND STEEL BEFORE POUR (EACH ANCHOR ON GUYED TOWERS).

3. TOWER FOUNDATION(S) POUR WITH VIBRATOR IN USE (EACH ANCHOR ON GUYED TOWERS).

4. TOWER STEEL AS BEING INSTALLED INTO HOLE (SHOW ANCHOR STEEL ON GUYED TOWERS).

5. PHOTOS OF TOWER SECTION STACKING.

6. CONCRETE TESTING / SAMPLES.

7. PLACING OF ANCHOR BOLTS IN TOWER FOUNDATION.

8. BUILDING/WATER TANK FROM ROAD FOR TENANT IMPROVEMENTS OR COMMENTS.

9. SHELTER FOUNDATION--FORMS AND STEEL BEFORE POURING.

10. SHELTER FOUNDATION POUR WITH VIBRATOR IN USE.

11. COAX CABLE ENTRY INTO SHELTER.

12. PLATFORM MECHANICAL CONNECTIONS TO TOWER/MONOPOLE.

13. ROOFTOP PRE AND POST CONSTRUCTION PHOTOS TO INCLUDE PENETRATIONS AND INTERIOR CEILING.

14. PHOTOS OF TOWER TOP COAX LINE COLOR CODING AND COLOR CODING AT GROUND LEVEL.

15. PHOTOS OF ALL APPROPRIATE COMPANY OR REGULATORY SIGNAGE.

16. PHOTOS OF EQUIPMENT BOLT DOWN INSIDE SHELTER.

17. POWER AND TELCO ENTRANCE TO COMPANY ENCLOSURE AND POWER AND TELCO SUPPLY LOCATIONS INCLUDING METER/DISCONNECT.

18. ELECTRICAL TRENCH(S) WITH ELECTRICAL / CONDUIT BEFORE BACKFILL.

19. ELECTRICAL TRENCH(S) WITH FOIL-BACKED TAPE BEFORE FURTHER BACKFILL.

20. TELCO TRENCH WITH TELEPHONE / CONDUIT BEFORE BACKFILL.

21. TELCO TRENCH WITH FOIL-BACKED TAPE BEFORE FURTHER BACKFILL.

22. SHELTER GROUND-RING TRENCH WITH GROUND-WIRE BEFORE BACKFILL (SHOW ALL CAD WELDS AND BEND RADII).

23. TOWER GROUND-RING TRENCH WITH GROUND-WIRE BEFORE BACKFILL (SHOW ALL CAD WELDS AND BEND RADII).

24. FENCE GROUND-RING TRENCH WITH GROUND-WIRE BEFORE BACKFILL (SHOW ALL CAD WELDS AND BEND RADII).

25. ALL BTS GROUND CONNECTIONS.

26. ALL GROUND TEST WELLS.

27. ANTENNA GROUND BAR AND EQUIPMENT GROUND BAR.

28. ADDITIONAL GROUNDING POINTS ON TOWERS ABOVE 200'.

29. HVAC UNITS INCLUDING CONDENSERS ON SPLIT SYSTEMS.

30. GPS ANTENNAS.

31. CABLE TRAY AND/OR WAVEGUIDE BRIDGE.

32. DOGHOUSE/CABLE EXIT FROM ROOF.

33. EACH SECTOR OF ANTENNAS; ONE PHOTOGRAPH LOOKING AT THE SECTOR AND ONE FROM BEHIND SHOWING THE PROJECTED COVERAGE AREA.

34. MASTER BUS BAR.

35. TELCO BOARD AND NIU.

36. ELECTRICAL DISTRIBUTION WALL.

37. CABLE ENTRY WITH SURGE SUPPRESSION.

38. ENTRANCE TO EQUIPMENT ROOM.

39. COAX WEATHERPROOFING-TOP AND BOTTOM OF TOWER.

40. COAX GROUNDING -TOP AND BOTTOM OF TOWER.

41. ANTENNA AND MAST GROUNDING.

42. LANDSCAPING – WHERE APPLICABLE.

3.6 FINAL PROJECT ACCEPTANCE: COMPLETE ALL REQUIRED REPORTING TASKS PER CONTRACT, CONTRACT DOCUMENTS OR THE SPRINT INTEGRATED CONSTRUCTION STANDARDS FOR WIRELESS SITES AND UPLOAD INTO SITERRA.

PLANS PREPARED FOR:

Sprint

6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:

INFINIGY Design. Build. Deliver.

1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

JOB NUMBER 340-000

MLA PARTNER:

AMERICAN TOWER CORPORATION

10 PRESIDENTIAL WAY
WOBURN, MA 01801

ENGINEERING LICENSE:

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER

DRAWING NOTICE:

REVISIONS:

DESCRIPTION	DATE	BY	REV
REVISED PER COMMENTS	7/9/14	AHS	2
REVISED PER COMMENTS	06/19/14	AHS	1
ISSUED FOR PERMIT	8/5/2014	MPS	0
ISSUED FOR REVIEW	05/28/14	MAP	A

SITE NAME:

BETHANY CT

SITE CASCADE:

CT03XC043

SITE ADDRESS:

93 OLD AMITY ROAD
BETHANY, CT 06524

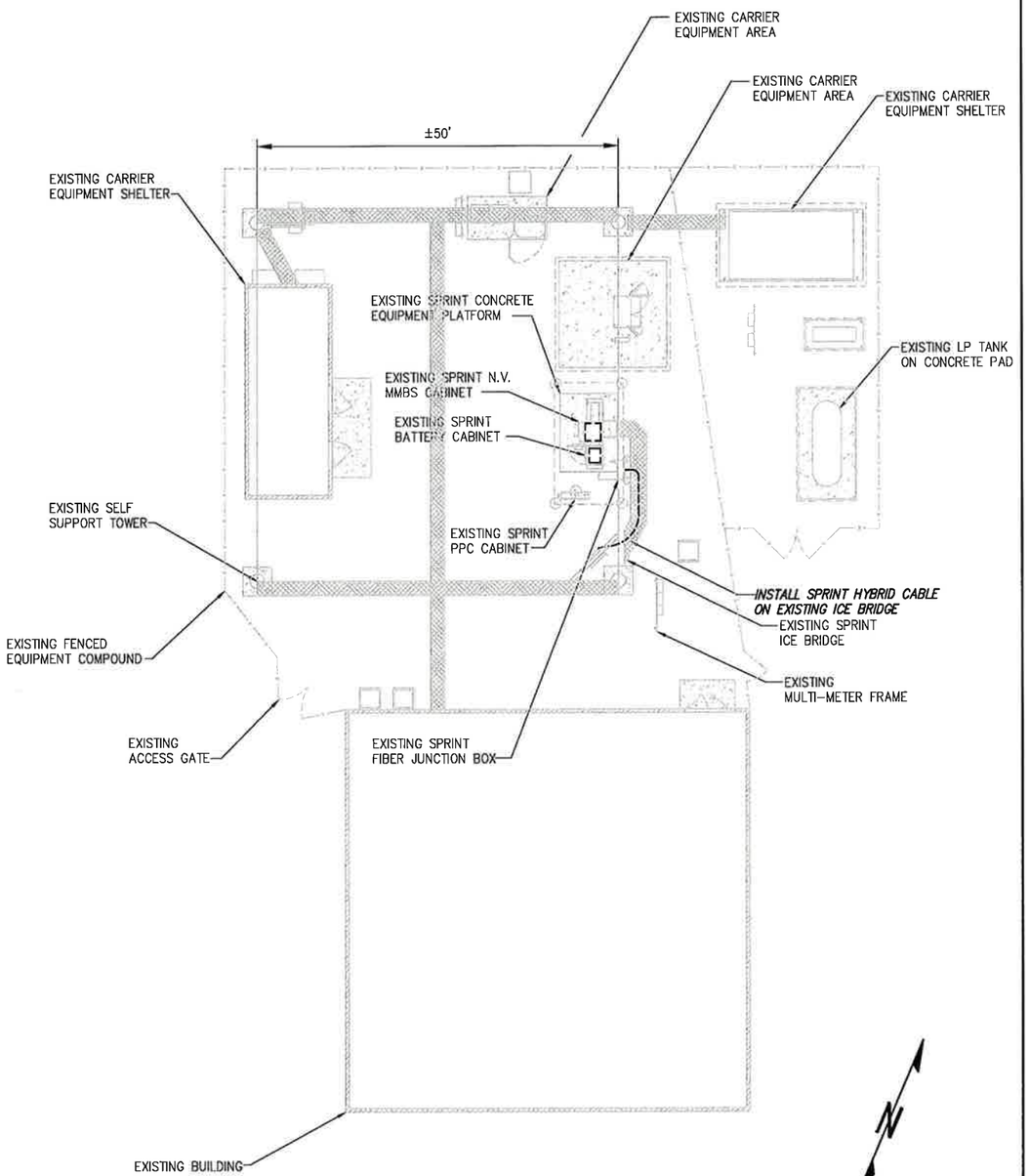
SHEET DESCRIPTION:

SPRINT SPECIFICATIONS

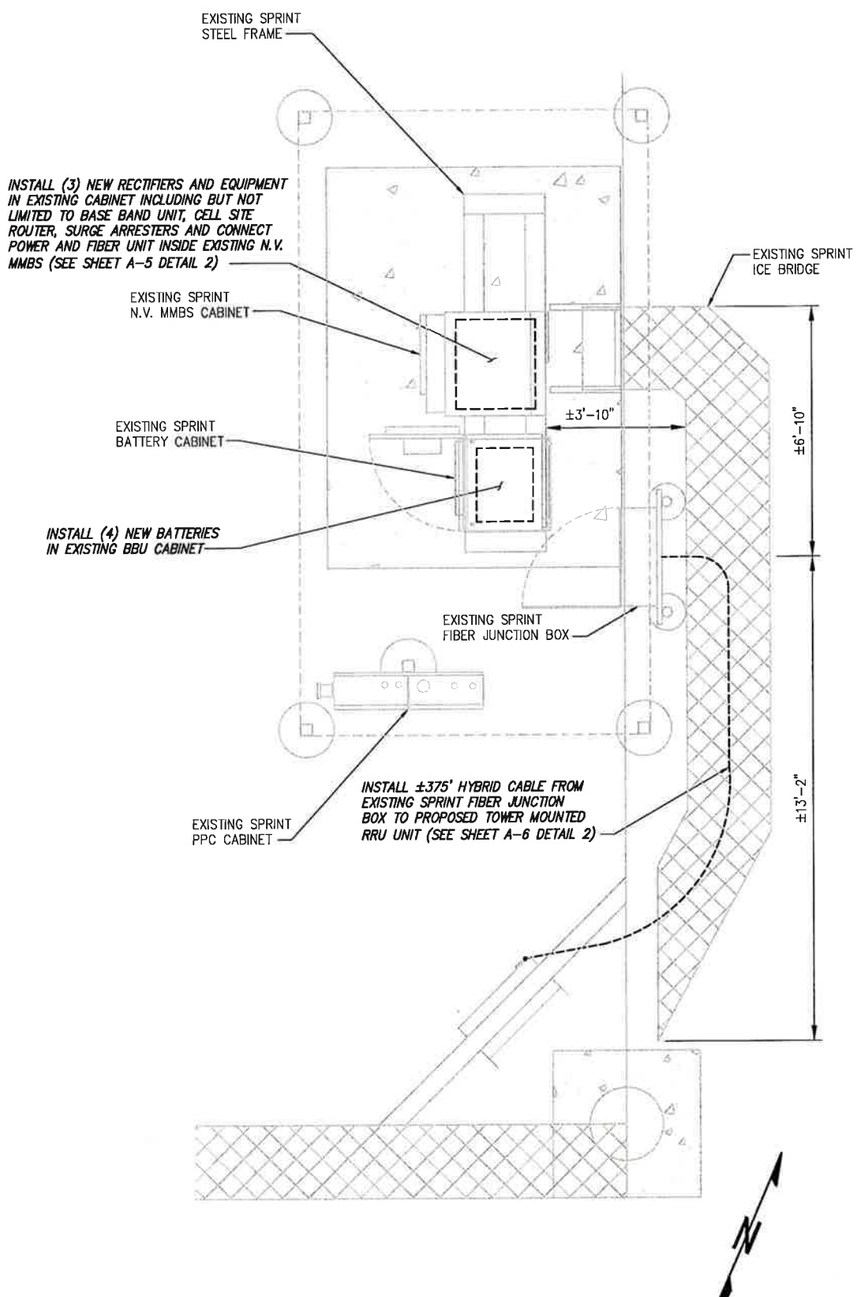
SHEET NUMBER:

SP-3

INFORMATION CONTAINED WITHIN DRAWINGS ARE BASED ON PROVIDED INFORMATION AND ARE NOT THE RESULT OF A FIELD SURVEY.



OVERALL SITE PLAN | SCALE: AS NOTED | 1



SPRINT EQUIPMENT PLAN | SCALE: AS NOTED | 2

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SHEET DESCRIPTION:

SITE PLAN

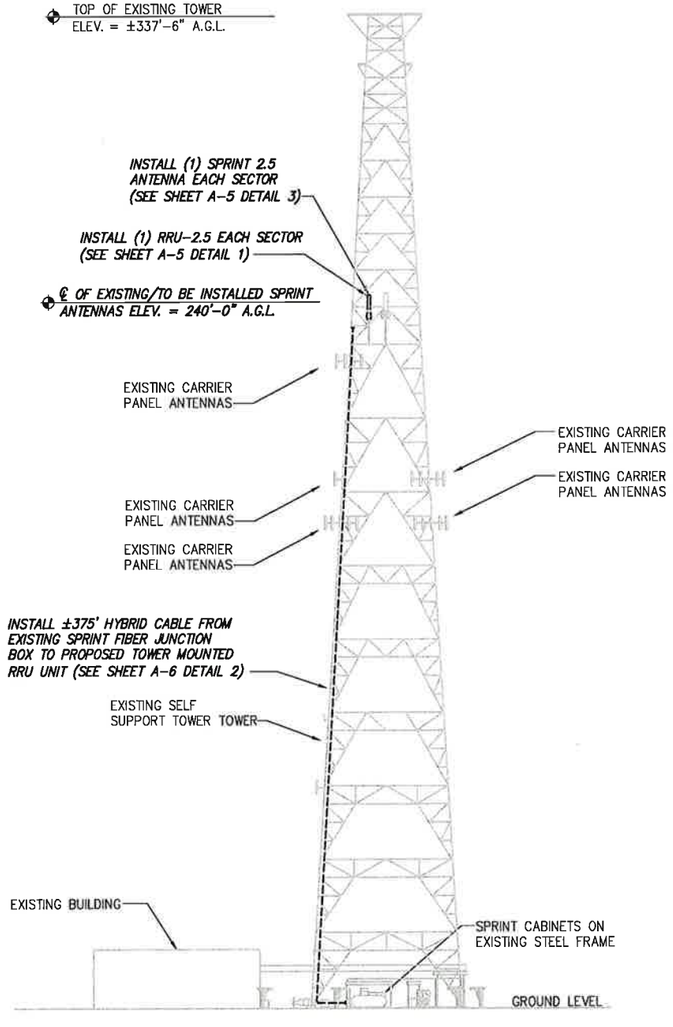
SHEET NUMBER:

A-1

NOTE:
SPRINT TOWER TOP WORK CONTINGENT ON FOLLOWING: COMPLETION OF STRUCTURAL ANALYSIS PROVIDED BY AMERICAN TOWER CORP., COMPLETION OF ANTENNA/RRU MOUNTING ASSESSMENT (PROVIDED BY AE)

NOTE:
INFINIGY ENGINEERING HAS NOT EVALUATED THE EXISTING TOWER OR MOUNT FOR THIS SITE, AND ASSUMES NO RESPONSIBILITY FOR ITS STRUCTURAL INTEGRITY. REFER TO STRUCTURAL ANALYSIS BY OTHERS PRIOR TO ANY CONSTRUCTION.

NOTE:
SEE DETAIL 2 ON A-3 FOR ANTENNA LAYOUT



TOWER ELEVATION | NO SCALE | 1

DETAIL NOT USED | NO SCALE | 2

DETAIL NOT USED | NO SCALE | 3

DETAIL NOT USED | NO SCALE | 4

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93 OLD AMITY ROAD
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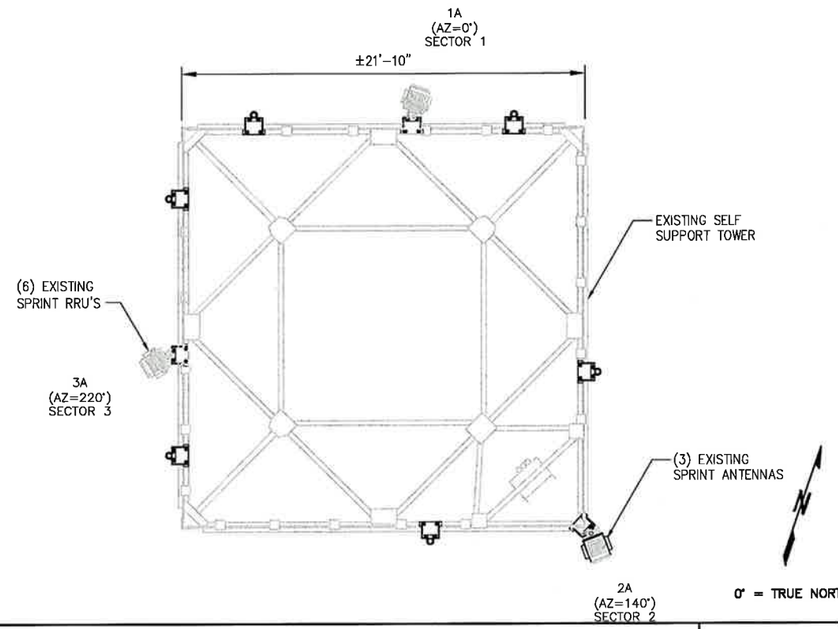
SHEET DESCRIPTION:

TOWER ELEVATION
& CABLE PLAN

SHEET NUMBER:

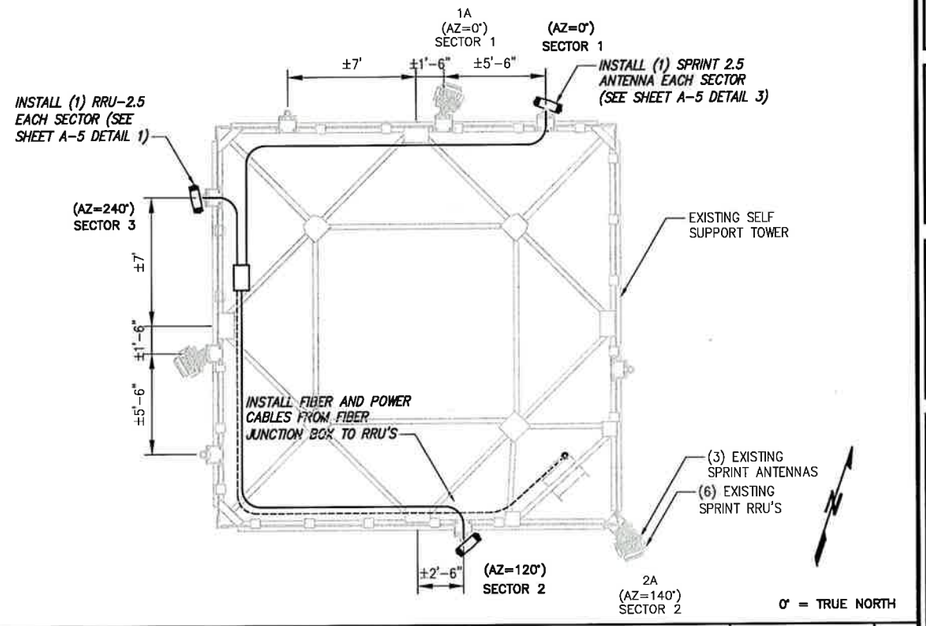
A-2



EXISTING ANTENNA & RRU LAYOUT | NO SCALE | 1

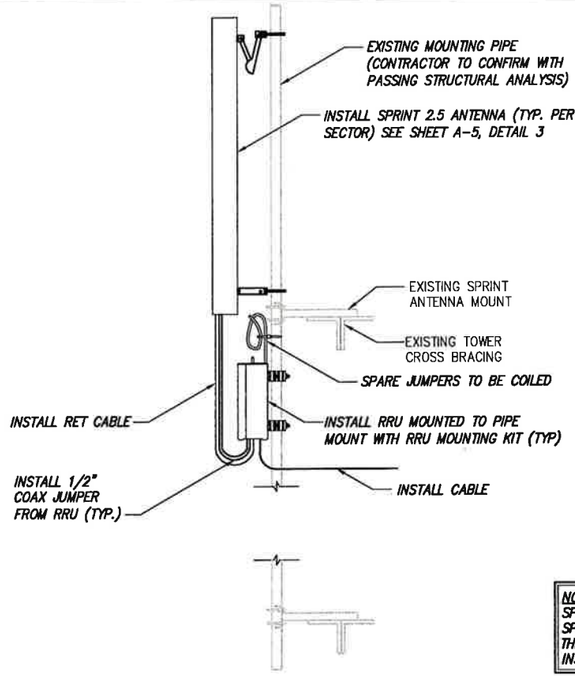
THE CONFIGURATION PLANS ARE BASED ON PROVIDED INFORMATION AND ARE FOR CONCEPTUAL PURPOSES ONLY. CONTRACTOR TO VERIFY FIELD CONDITIONS PRIOR TO CONSTRUCTION.

NOTE:
JUMPERS FROM 2.5 RRH TO THE 2.5 ANTENNA CANNOT EXCEED 15 FEET



FINAL ANTENNA LAYOUT | NO SCALE | 2

DETAIL NOT USED | NO SCALE | 3



NOTES:

1. CUT DC CONDUCTORS TO LENGTH.
2. COIL FIBER CABLE AND SECURE AT SIDE OF RRU.
3. DO NO EXCEED BEND RADIUS.

NOTE:
CONTRACTOR TO POSITION RRU ON MOUNT BEHIND ANTENNA SUCH THAT THE RRU DOES NOT INTERFERE WITH THE EXISTING PLATFORM/T-ARM MOUNTING HARDWARE.

NOTE:
THE DIAGRAM IS FOR CONCEPTUAL PURPOSES ONLY. CONTRACTOR IS TO REFER TO PASSING STRUCTURAL ANALYSIS FOR ANTENNA AND RRU MOUNTING DETAILS

NOTE:
SPARE DC CABLES ARE COILED UP ON NV RRHS AT SPRINT ARRAY. THESE ARE TO BE USED TO POWER UP THE 2.5 RRHS AND TIED INTO EXISTING DC BREAKERS INSIDE THE FIBER JUNCTION BOX LOCATED AT EQUIPMENT.

TYPICAL ANTENNA & RRU MOUNTING DETAILS | NO SCALE | 4

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ENGINEERING LICENSE:

DRAWING NOTICE:

REVISIONS:

DESCRIPTION	DATE	BY	REV
REVISED PER COMMENTS	7/9/14	AHS	2
REVISED PER COMMENTS	06/19/14	AHS	1
ISSUED FOR PERMIT	8/5/2014	MPS	0
ISSUED FOR REVIEW	05/28/14	MAP	A

SITE NAME:

BETHANY CT

SITE CASCADE:

CT03XC043

SITE ADDRESS:

93 OLD AMITY ROAD
BETHANY, CT 06524

SHEET DESCRIPTION:

ANTENNA LAYOUT
& MOUNTING DETAILS

SHEET NUMBER:

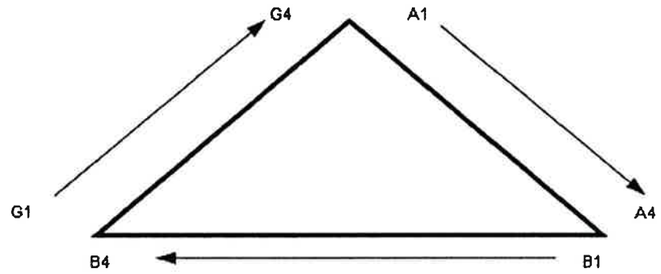
A-3

NV CABLES			
BAND	INDICATOR	PORT	COLOR
800-1	YEL GRN	NV-1	GRN
1900-1	YEL RED	NV-2	BLU
1900-2	YEL BRN	NV-3	BRN
1900-3	YEL BLU	NV-4	WHT
1900-4	YEL SLT	NV-5	RED
800-2	YEL ORG	NV-6	SLT
SPARE	YEL WHT	NV-7	PPL
2500	YEL PPL	NV-8	ORG

HYBRID	
HYBRID	COLOR
1	GRN
2	BLU
3	BRN
4	WHT
5	RED
6	SLT
7	PPL
8	ORG

2.5 Band		
2500 Radio 1		COLOR
YEL	WHT	GRN
YEL	WHT	BLU
YEL	WHT	BRN
YEL	WHT	WHT
YEL	WHT	RED
YEL	WHT	SLT
YEL	WHT	PPL
YEL	WHT	ORG

Figure 1: Antenna Orientation



NOTES:

1. ALL CABLES SHALL BE MARKED WITH 2" WIDE, UV STABILIZED, UL APPROVED TAPE.

2. THE FIRST RING SHALL BE CLOSEST TO THE END OF THE CABLE AND SPACED APPROXIMATELY 2" FROM THE END CONNECTOR, WEATHERPROOFING, OR BREAK-OUT CYLINDER. THERE SHALL BE A 1" SPACE BETWEEN EACH RING FOR THE CABLE IDENTIFIER, AND NO SPACES BETWEEN THE FREQUENCY BANDS.

3. A 2" GAP SHALL SEPARATE THE CABLE COLOR CODE FROM THE FREQUENCY COLOR CODE. THE 2" COLOR RINGS FOR THE FREQUENCY CODE SHALL BE PLACED NEXT TO EACH OTHER WITH NO SPACES.

4. THE 2" COLORED TAPE(S) SHALL EACH BE WRAPPED A MINIMUM OF 3 TIMES AROUND THE INDIVIDUAL CABLES, AND THE TAPE SHALL BE KEPT IN THE SAME LOCATION AS MUCH AS POSSIBLE.

5. SITES WITH MORE THAN FOUR (4) SECTORS WILL REQUIRE ADDITIONAL RINGS FOR EACH SECTOR, FOLLOWING THE PATTERN. HIGH CAPACITY SITES WILL USE THE NEXT COLOR IN THE SEQUENCE FOR ADDITIONAL CABLES IN EACH SECTOR.

6. HYBRID FIBER CABLE SHALL BE SECTOR IDENTIFIED INSIDE THE CABINET ON FREQUENCY BUNDLES, ON THE SEALTITE, ON THE MAIN LINE UPON EXIT OF SEALTITE, AND BEFORE AND AFTER THE BREAKOUT UNIT (MEDUSA), AS WELL AS BEFORE AND AFTER ANY ENTRANCE OR EXIT.

7. HFC "MAIN TRUNK" WILL NOT BE MARKED WITH THE FREQUENCY CODES, AS IT CONTAINS ALL FREQUENCIES.

8. INDIVIDUAL POWER PAIRS AND FIBER BUNDLES SHALL BE LABELED WITH BOTH THE CABLE AND FREQUENCY.

Sector	Cable	First Ring	Second Ring	Third Ring
1 Alpha	1	Green	No Tape	No Tape
1	2	Black	No Tape	No Tape
1	3	Brown	No Tape	No Tape
1	4	White	No Tape	No Tape
1	5	Red	No Tape	No Tape
1	6	Grey	No Tape	No Tape
1	7	Purple	No Tape	No Tape
1	8	Orange	No Tape	No Tape
2 Beta	1	Green	Green	No Tape
2	2	Black	Black	No Tape
2	3	Brown	Brown	No Tape
2	4	White	White	No Tape
2	5	Red	Red	No Tape
2	6	Grey	Grey	No Tape
2	7	Purple	Purple	No Tape
2	8	Orange	Orange	No Tape
3 Gamma	1	Green	Green	Green
3	2	Black	Black	Black
3	3	Brown	Brown	Brown
3	4	White	White	White
3	5	Red	Red	Red
3	6	Grey	Grey	Grey
3	7	Purple	Purple	Purple
3	8	Orange	Orange	Orange

NV FREQUENCY	INDICATOR	ID
800-1	YEL	GRN
1900-1	YEL	RED
1900-2	YEL	BRN
1900-3	YEL	BLU
1900-4	YEL	SLT
800-1	YEL	ORG
RESERVED	YEL	WHT
RESERVED	YEL	PPL

2.5 FREQUENCY	INDICATOR		ID
2500 -1	YEL	WHT	GRN
2500 -2	YEL	WHT	RED
2500 -3	YEL	WHT	BRN
2500 -4	YEL	WHT	BLU
2500 -5	YEL	WHT	SLT
2500 -6	YEL	WHT	ORG
2500 -7	YEL	WHT	WHT
2500 -8	YEL	WHT	PPL

Example – Sector 2, Cable 2, 800mhz Radio #1

Example – Sector 3, Cable 1, 1900mhz Radio #1

Example – Sector 1, Cable 4, 800 mhz Radio #1
and 1900mhz Radio #1

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Sprint
6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:
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1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793
JOB NUMBER J40-000

MLA PARTNER:
AMERICAN TOWER CORPORATION
10 PRESIDENTIAL WAY
WOBURN, MA 01801

ENGINEERING LICENSE:
STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER

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CT03XC043

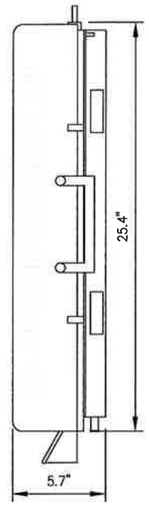
SITE ADDRESS:
93 OLD AMITY ROAD
BETHANY, CT 06524

SHEET DESCRIPTION:
COLOR CODING AND NOTES

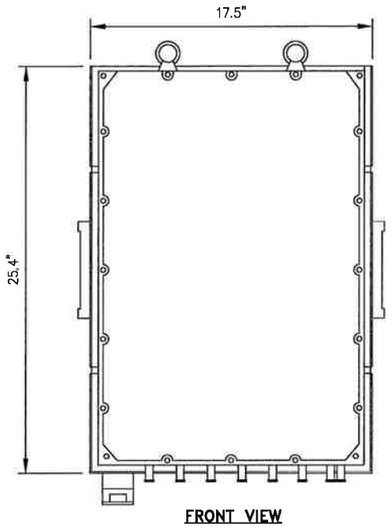
SHEET NUMBER:
A-4

RRU: ALCATEL LUCENT TD-RRH8X20

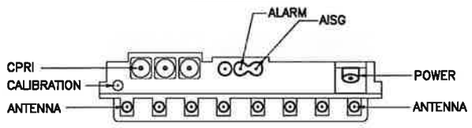
COLOR: LIGHT GREY
WEIGHT: 70 LBS.



SIDE VIEW



FRONT VIEW

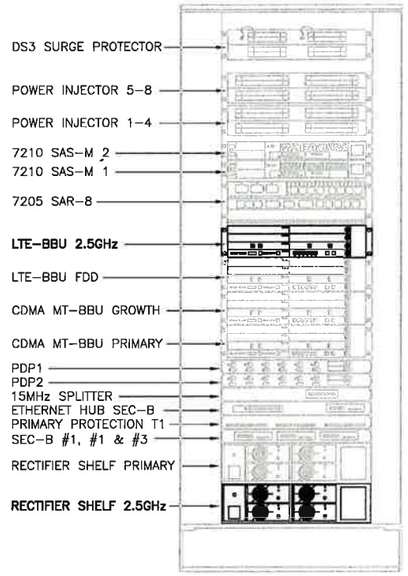


PLAN VIEW

NOTES

COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRU'S RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING. DO NOT OPEN RRU PACKAGES IN THE RAIN.

2.5 RRU	NO SCALE	1

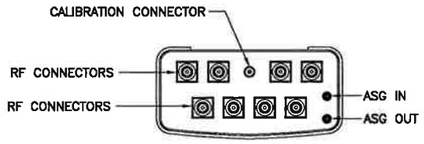


FRONT VIEW

NEW EQUIPMENT IN EXISTING CABINET	NO SCALE	2

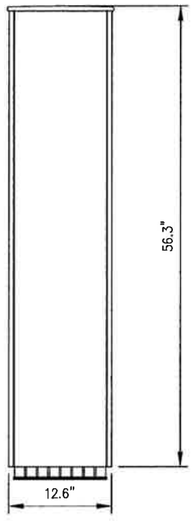
ANTENNA: RFS APXVTM14-C-I20

RADOME MATERIAL:	ASA
RADOME COLOR:	LIGHT GREY
DIMENSIONS, HxWxD.in(mim):	56.3"x12.6"x6.3" (1430x320x160mm)
WEIGHT:	52.9 lbs
CONNECTORS:	(8) 4.1/9.5 DIN FEMALE (1) NF - CALIBRATION CONNECTOR



PLAN VIEW

SIDE VIEW



FRONT VIEW

2.5 ANTENNA	NO SCALE	3

DETAIL NOT USED	NO SCALE	4

PLANS PREPARED FOR:

Sprint
6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:

INFINIGY Design. Build. Deliver.
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

JOB NUMBER 340-000

MLA PARTNER:

AMERICAN TOWER CORPORATION
10 PRESIDENTIAL WAY
WOBURN, MA 01801

ENGINEERING LICENSE:

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER

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CT03XC043

SITE ADDRESS:

93 OLD AMITY ROAD
BETHANY, CT 06524

SHEET DESCRIPTION:

EQUIPMENT & MOUNTING DETAILS

SHEET NUMBER:

A-5

RFS HYBRIFLEX RISER CABLE SCHEDULE

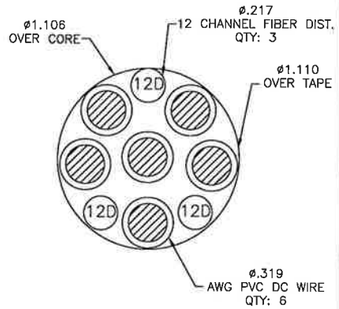
Fiber Only (Existing DC Power)	Hybrid cable MN: HB058-M12-050F 12x multi-mode fiber pairs, Top: Outdoor protected connectors, Bottom: LC Connectors, 5/8 cable, 50 ft	50 ft
	MN: HB058-M12-075F	75 ft
	MN: HB058-M12-100F	100 ft
	MN: HB058-M12-125F	125 ft
	MN: HB058-M12-150F	150 ft
	MN: HB058-M12-175F	175 ft
	MN: HB058-M12-200F	200 ft
8 AWG Power	Hybrid cable MN: HB114-08U3M12-050F 3x 8 AWG power pairs, 12x multi-mode fiber pairs, Outdoor rated connectors & LC Connectors, 1 1/4 cable, 50 ft	50 ft
	MN: HB114-08U3M12-075F	75 ft
	MN: HB114-08U3M12-100F	100 ft
	MN: HB114-08U3M12-125F	125 ft
	MN: HB114-08U3M12-150F	150 ft
	MN: HB114-08U3M12-175F	175 ft
	MN: HB114-08U3M12-200F	200 ft
6 AWG Power	Hybrid cable MN: HB114-13U3M12-225F 3x 6 AWG power pair, 12x multi-mode fiber pairs, Outdoor rated connectors & LC Connectors, 1 1/4 cable, 225 ft	225 ft
	MN: HB114-13U3M12-250F	250 ft
	MN: HB114-13U3M12-275F	275 ft
	MN: HB114-13U3M12-300F	300 ft
4 AWG Power	Hybrid cable MN: HB114-21U3M12-325F 3x 4 AWG power pair, 12x multi-mode fiber pairs, Outdoor rated connectors & LC Connectors, 1 1/4 cable, 325 ft	325 ft
	MN: HB114-21U3M12-350F	350 ft *
	MN: HB114-21U3M12-375F	375 ft

RFS HYBRIFLEX JUMPER CABLE SCHEDULE

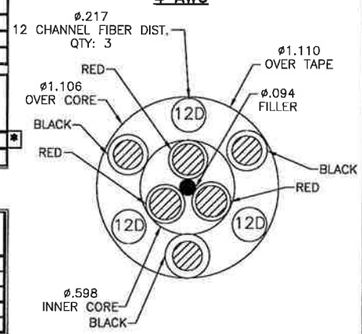
Fiber Only	Hybrid Jumper cable MN: HBF012-M3-5F1 5 ft, 3x multi-mode fiber pairs, Outdoor & LC connectors, 1/2 cable	5 ft
	MN: HBF012-M3-10F1	10 ft
	MN: HBF012-M3-15F1	15 ft
	MN: HBF012-M3-20F1	20 ft
	MN: HBF012-M3-25F1	25 ft
	MN: HBF012-M3-30F1	30 ft
8 AWG Power	Hybrid Jumper cable MN: HBF058-08U1M3-5F1 5 ft, 1x 8 AWG power pair, 3x multi-mode fiber pairs, Outdoor & LC Connectors, 5/8 cable	5 ft
	MN: HBF058-08U1M3-10F1	10 ft
	MN: HBF058-08U1M3-15F1	15 ft
	MN: HBF058-08U1M3-20F1	20 ft
	MN: HBF058-08U1M3-25F1	25 ft
	MN: HBF058-08U1M3-30F1	30 ft
6 AWG Power	Hybrid Jumper cable MN: HBF058-13U1M3-5F1 5 ft, 1x 6 AWG power pair, 3x multi-mode fiber pairs, Outdoor & LC Connectors, 5/8 cable	5 ft
	MN: HBF058-13U1M3-10F1	10 ft
	MN: HBF058-13U1M3-15F1	15 ft
	MN: HBF058-13U1M3-20F1	20 ft
	MN: HBF058-13U1M3-25F1	25 ft
	MN: HBF058-13U1M3-30F1	30 ft
4 AWG Power	Hybrid Jumper cable MN: HBF078-21U1M3-5F1 5 ft, 1x 4 AWG power pair, 3x multi-mode fiber pairs, Outdoor & LC Connectors, 7/8 cable	5 ft
	MN: HBF078-21U1M3-10F1	10 ft
	MN: HBF078-21U1M3-15F1	15 ft
	MN: HBF078-21U1M3-20F1	20 ft
	MN: HBF078-21U1M3-25F1	25 ft
	MN: HBF078-21U1M3-30F1	30 ft *

NOTE:
SPRINT CM TO CONFIRM HYBRID OR FIBER RISER CABLE AND HYBRID OR FIBER JUMPER CABLE MODEL NUMBERS IF HYBRID CABLES ARE REQUIRED BEFORE PREPARING BOM.

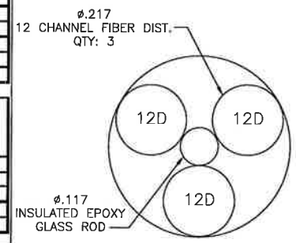
CABLE LENGTH NOTE:
APPROXIMATE LENGTH OF NEW CABLE IS ±379 LINEAR FEET. LENGTH INCLUDES APPROXIMATE HORIZONTAL DISTANCE AT GRADE, PLUS 15% BUFFER. CONTRACTOR TO CONFIRM EXACT CABLE LENGTH REQUIRED PRIOR TO ORDERING MATERIALS.



4 AWG



8 & 6 AWG

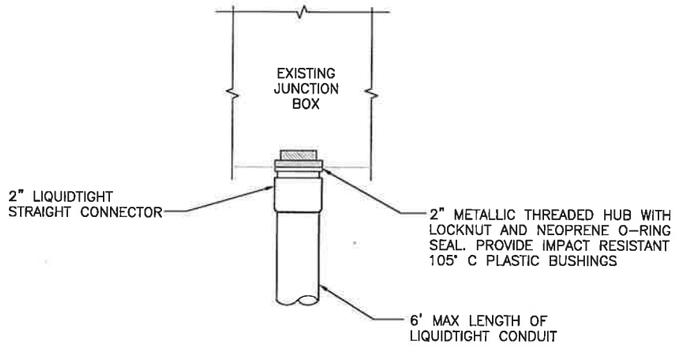


FIBER ONLY

Riser Cable Length Estimate		
		Units
At Grade	16	Feet
Vertical Rise	240	Feet
At Sprint Centerline	30	Feet
15% Buffer	43	Feet
Total	329	Feet

ABOVE LENGTH IS AN ESTIMATE AND SHOULD BE VERIFIED IN FIELD PRIOR TO ORDERING MATERIALS.

2.5 CABLE CROSS SECTION DATA | NO SCALE | 1



FIBER JUNCTION BOX PENETRATION | NO SCALE | 2

DETAIL NOT USED | NO SCALE | 3

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Sprint
6580 Sprint Parkway
Overland Park, Kansas 66251

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INFINIGY Design. Build. Deliver.
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793
JOB NUMBER 340-000

MLA PARTNER:
AMERICAN TOWER CORPORATION
10 PRESIDENTIAL WAY
WOBURN, MA 01801

ENGINEERING LICENSE:
STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER

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SITE ADDRESS:
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SHEET DESCRIPTION:
CIVIL DETAILS

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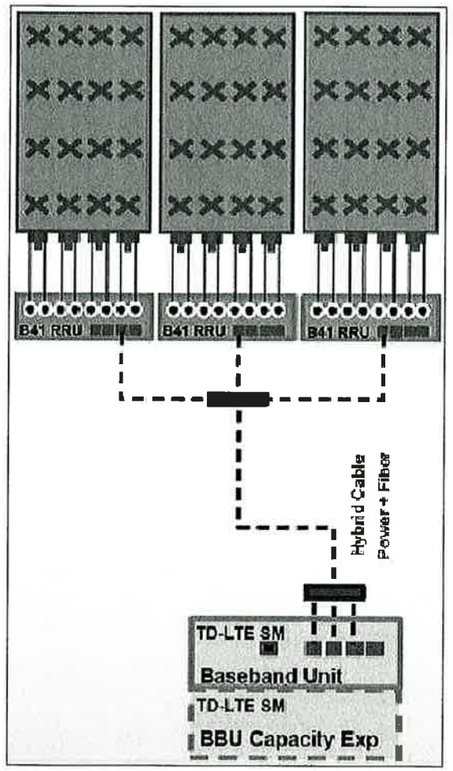
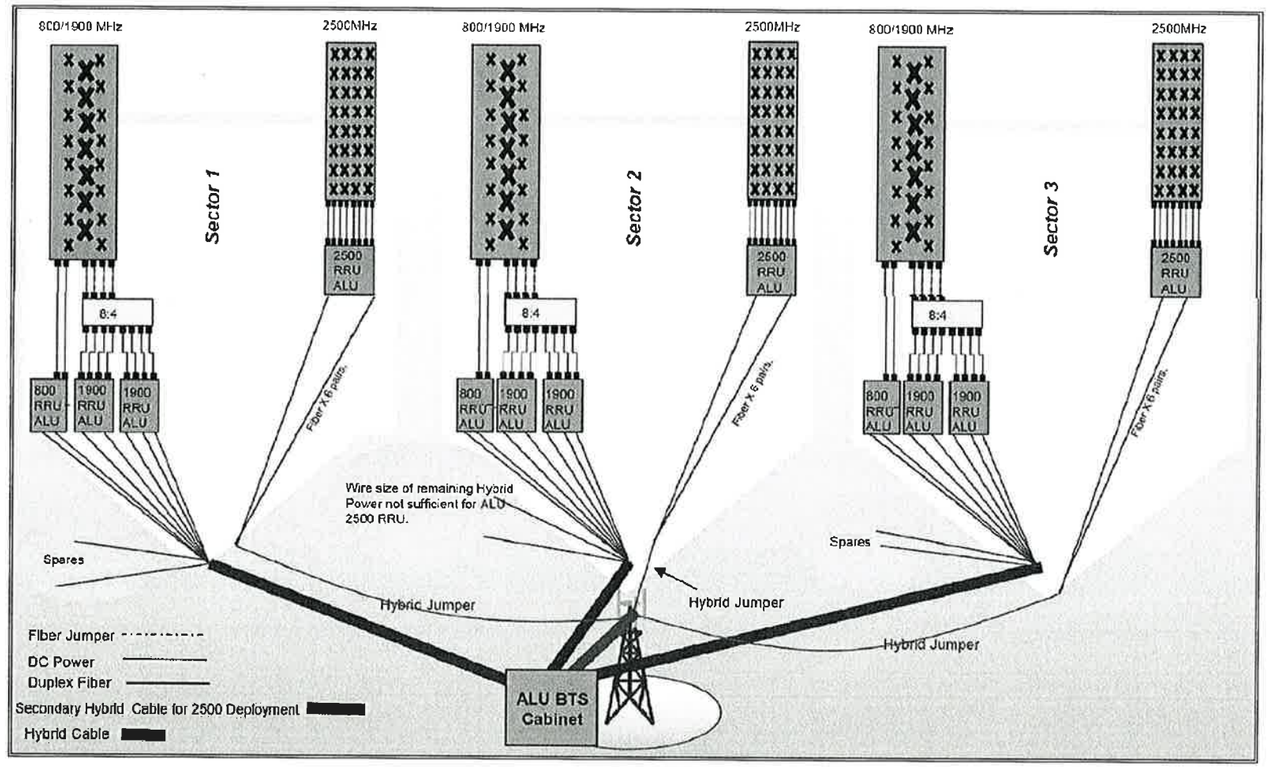
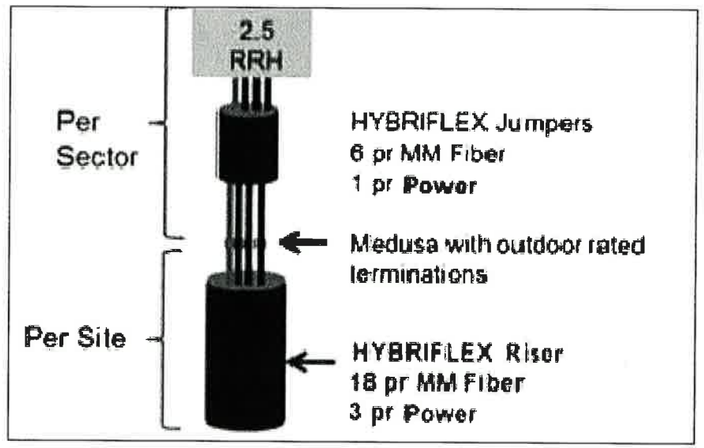
A-6



ALU 2.5 ALU SCENARIO 1



RAN WIRING DIAGRAM



RF 2.5 ALU SCENARIO 1

PLUMBING DIAGRAM | NO SCALE | 1

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SHEET DESCRIPTION:

PLUMBING DIAGRAM

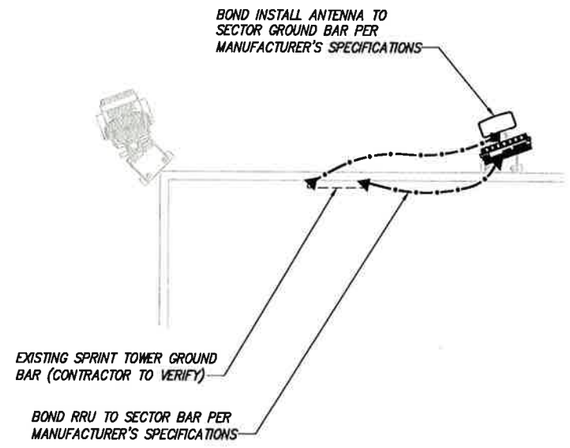
SHEET NUMBER:

A-7

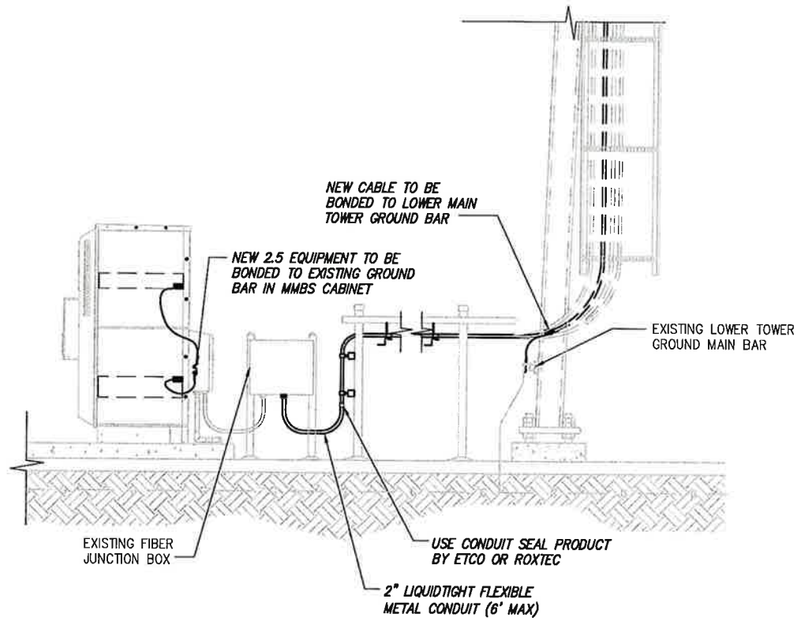
PLAN NOT USED | NO SCALE | 1

LEGEND:

- EXISTING GROUND RING
- CADWELD CONNECTION (EXOTHERMIC WELD)
- MECHANICAL CONNECTION
- GROUND ROD
- CABLE GROUND KIT



TYPICAL ANTENNA GROUNDING PLAN | NO SCALE | 2



TYPICAL EQUIPMENT GROUNDING PLAN (ELEVATION) | NO SCALE | 3

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Sprint

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PLANS PREPARED BY:

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BETHANY CT

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CT03XC043

SITE ADDRESS:

93 OLD AMITY ROAD
BETHANY, CT 06524

SHEET DESCRIPTION:

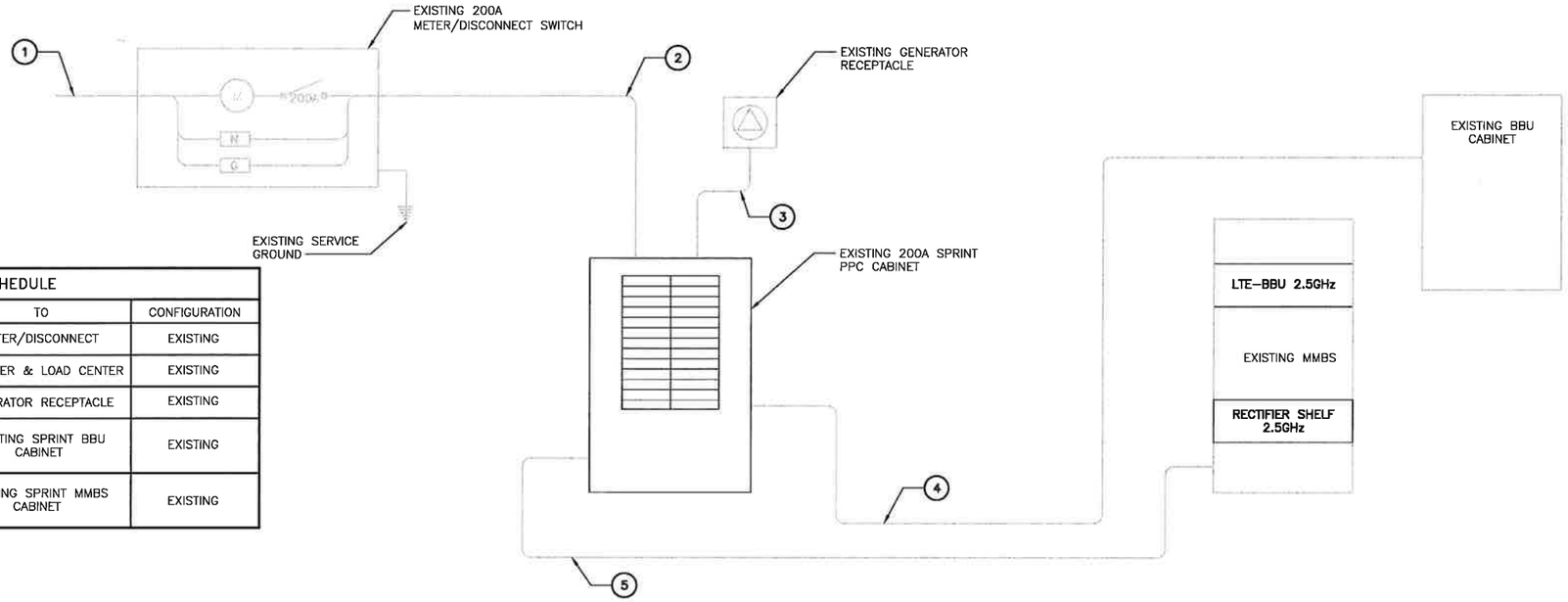
ELECTRICAL & GROUNDING PLAN

SHEET NUMBER:

E-1

NOTES

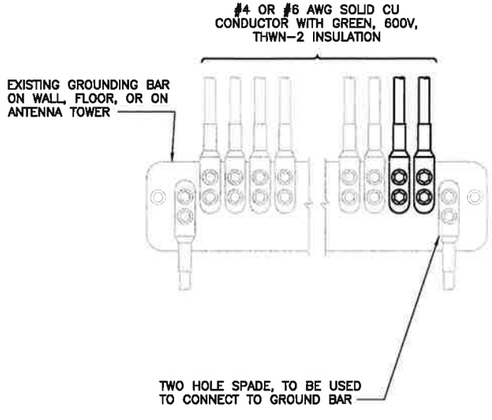
CG SHALL REFERENCE ALL SPECS FOR "CONNECTING THE POWER SUPPLY" OF THE NEW INSTALLATION DOCUMENTS, FOR ALL CONNECTION SPECIFICATIONS.



CIRCUIT SCHEDULE

NO	FROM	TO	CONFIGURATION
1	UTILITY SOURCE	METER/DISCONNECT	EXISTING
2	METER/DISCONNECT	TRANSFER & LOAD CENTER	EXISTING
3	TRANSFER & LOAD CENTER	GENERATOR RECEPTACLE	EXISTING
4	TRANSFER & LOAD CENTER	EXISTING SPRINT BBU CABINET	EXISTING
5	TRANSFER & LOAD CENTER	EXISTING SPRINT MMBS CABINET	EXISTING

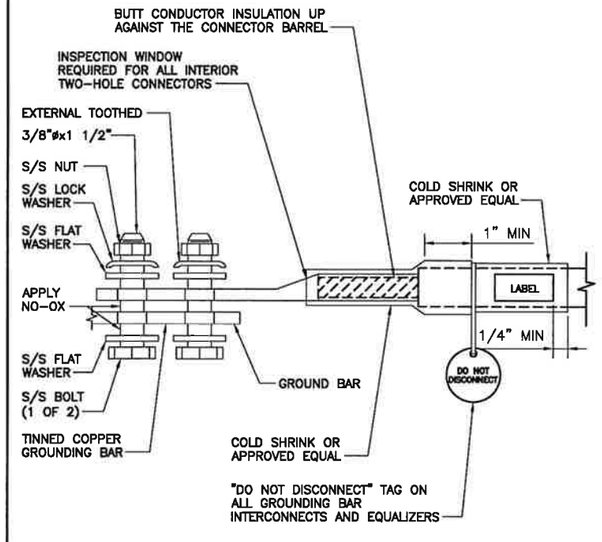
ELECTRICAL ONE–LINE DIAGRAM — NO SCALE — 1



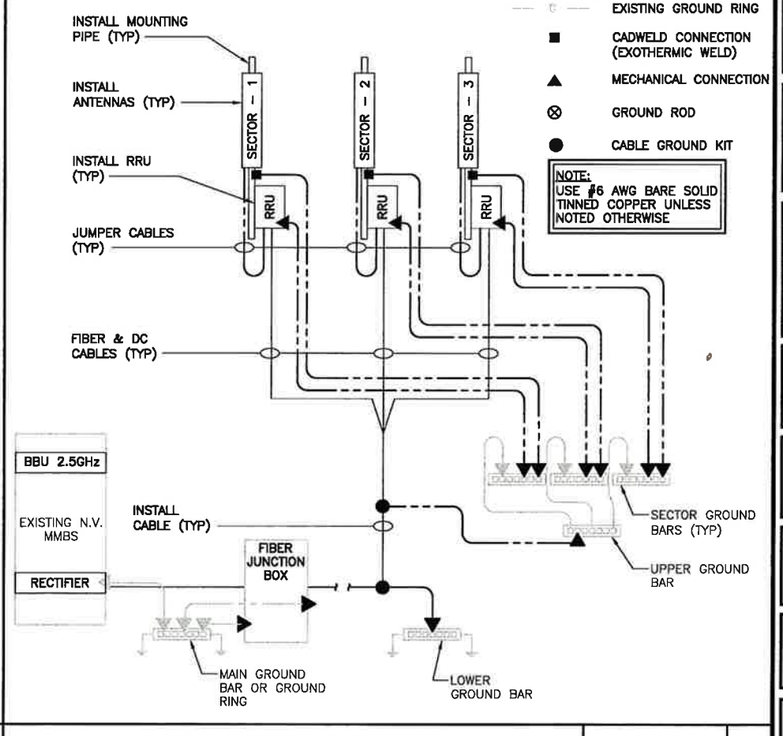
NOTES

1. APPLY NO–OX TO LUG AND BAR CONTACT SURFACE. DO NOT COAT INLINE LUG.
2. IF STOLEN GROUND BARS ARE ENCOUNTERED, CONTACT SPRINT CM FOR REPLACEMENT THREADED ROD KIT.

INSTALLATION OF GROUNDING CONDUCTOR TO GROUNDING BAR — NO SCALE — 2



TWO HOLE LUG — NO SCALE — 3



GROUNDING RISER DIAGRAM — NO SCALE — 4

PLANS PREPARED FOR:

Sprint

6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:

INFINIGY Design. Build. Deliver.

1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

JOB NUMBER 340–000

MLA PARTNER:

AMERICAN TOWER CORPORATION

10 PRESIDENTIAL WAY
WOBURN, MA 01801

ENGINEERING LICENSE:

STATE OF CONNECTICUT · JOHN S. STEVENS · No. 24705 · LICENSED PROFESSIONAL ENGINEER

DRAWING NOTICE:

REVISIONS:

DESCRIPTION	DATE	BY	REV
REVISED PER COMMENTS	7/9/14	AHS	2
REVISED PER COMMENTS	06/19/14	AHS	1
ISSUED FOR PERMIT	8/5/2014	MPS	0
ISSUED FOR REVIEW	05/28/14	MAP	A

SITE NAME:

BETHANY CT

SITE CASCADE:

CT03XC043

SITE ADDRESS:

93 OLD AMITY ROAD
BETHANY, CT 06524

SHEET DESCRIPTION:

ELECTRICAL & GROUNDING DETAILS

SHEET NUMBER:

E-2