



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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

E-Mail: siting.council@ct.gov

Web Site: portal.ct.gov/csc

VIA ELECTRONIC MAIL

January 7, 2022

Colin Robinson
Project Manager
Network Building + Consulting
100 Apollo Drive, Suite 303
Chelmsford, MA 01824
crobison@nbcllc.com

RE: EM-T-MOBILE-049-211116 – T-Mobile notice of intent to modify an existing telecommunications facility located at 1 Bright Meadow Road, Enfield, Connecticut.

Dear Mr. Robinson:

The Connecticut Siting Council (Council) is in receipt of your correspondence of December 20, 2021 submitted in response to the Council's December 17, 2021 notification of an incomplete request for exempt modification with regard to the above-referenced matter.

The submission renders the request for exempt modification complete and the Council will process the request in accordance with the Federal Communications Commission 60-day timeframe.

Thank you for your attention and cooperation.

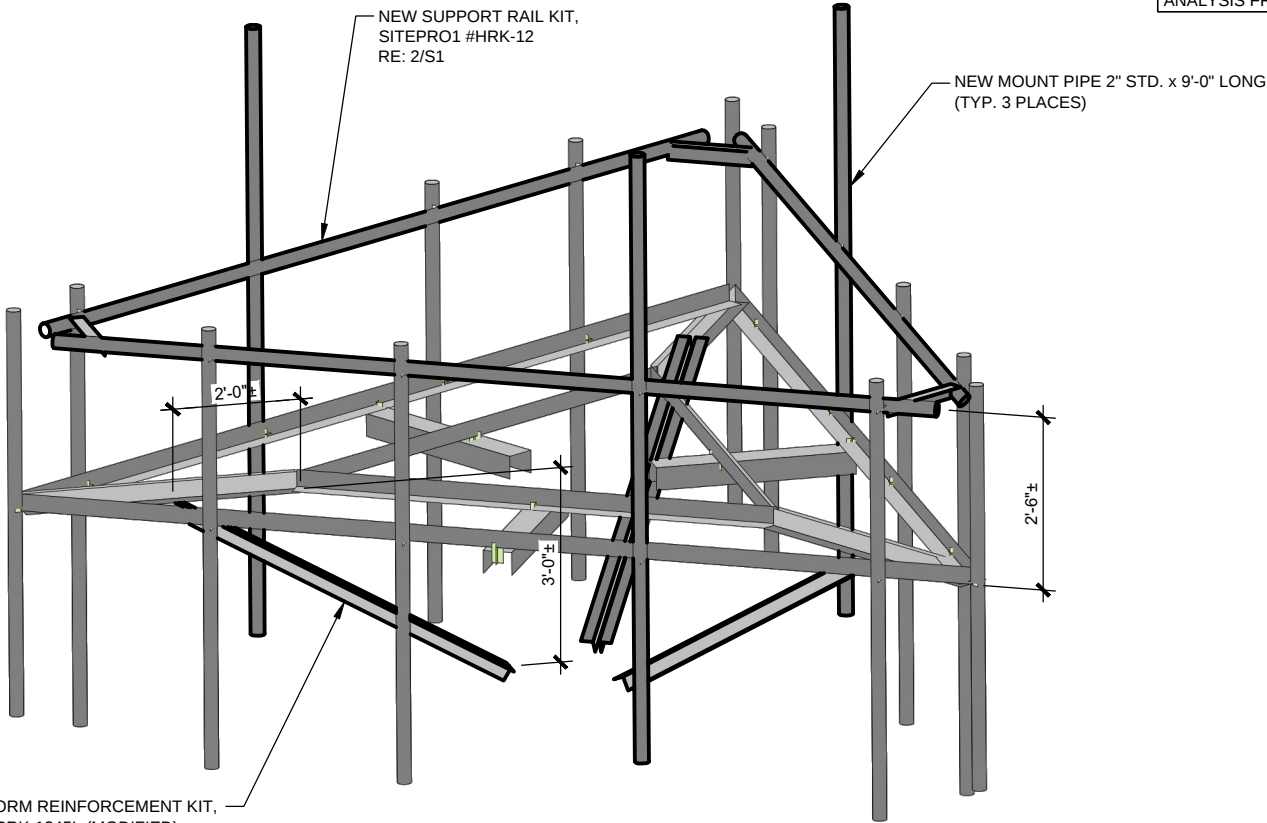
Sincerely,

A handwritten signature in dark ink, appearing to read "Melanie A. Bachman".

Melanie A. Bachman
Executive Director

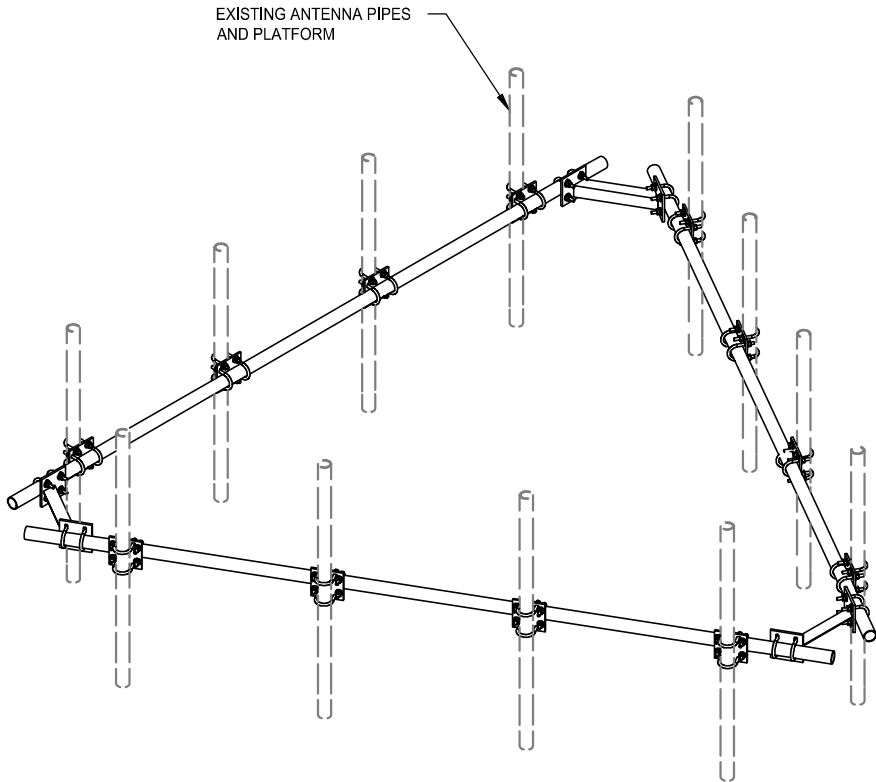
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149864_003_01_Mount MOD Drawing.dwg - Sheet:S1 - User: SUMANTH - Jun 07, 2021 - 4:49pm

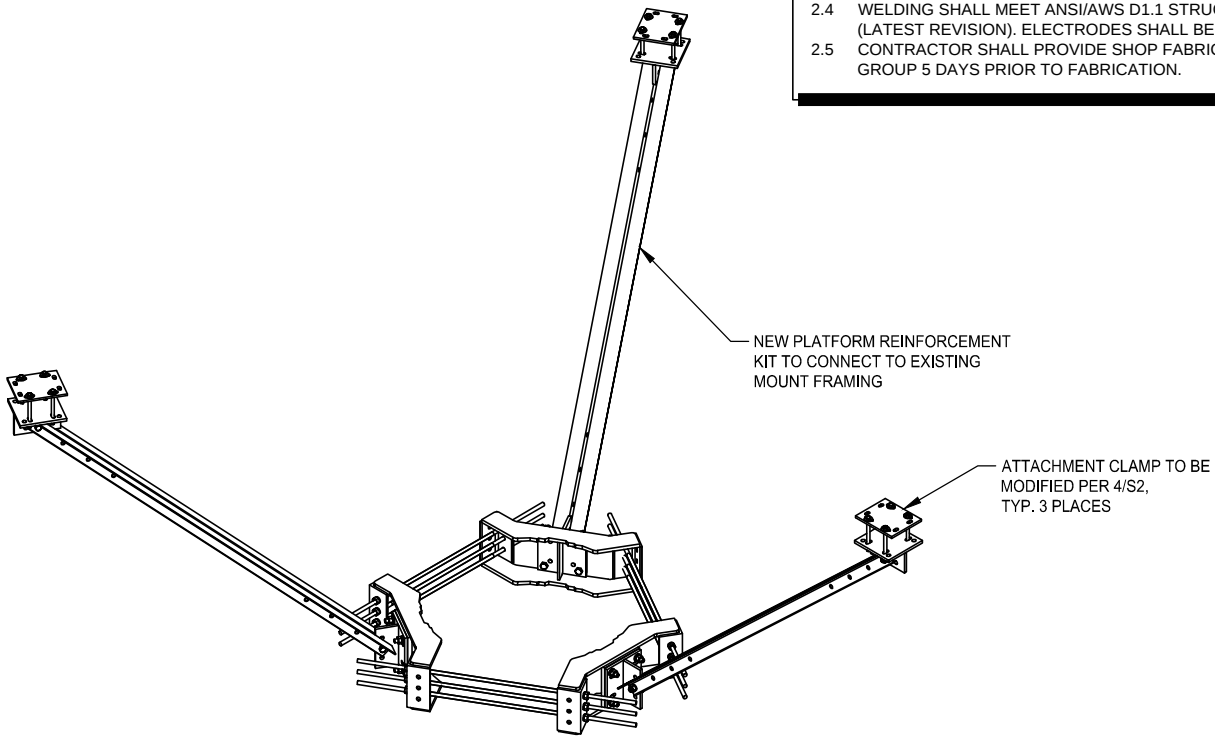


NEW PLATFORM REINFORCEMENT KIT,
SITEPRO1 #PRK-1245L (MODIFIED)
RE: 3/S1

1 MODIFIED PLATFORM
SCALE: N.T.S.



2 SITE PRO1 HRK-12 SUPPORT RAIL KIT
SCALE: N.T.S.



3 SITE PRO1 PRK-1245L PLATFORM REINFORCEMENT KIT
SCALE: N.T.S.

MODIFICATIONS BASED ON THE FAILING
STRUCTURAL ANALYSIS FROM B+T GROUP
DATED 05/17/21 AND ACCOMPANIED BY
ANALYSIS FROM B+T GROUP DATED 06/07/21

GENERAL NOTES

- 1.1 CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO THE MOBILIZING ON THE SITE FOR INSTALLATION OF THE MOUNT MODIFICATION AND SHALL NOTIFY THE ENGINEER OF RECORD IF THE FIELD CONDITIONS VARY FROM WHAT IS SHOWN ON THE DRAWINGS. IN ADDITION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD PRIOR TO MOBILIZING AT THE SITE IF THE MOUNT REINFORCEMENT SHOWN WILL NEED TO BE REVISED TO SATISFY FIELD CONDITIONS
- 1.2 CONTRACTOR SHALL RELOCATE NON-ANTENNA EQUIPMENT ALONG THE EXISTING PIPE MOUNT THAT IT IS MOUNTED TO, TO ALLOW FOR INSTALLATION OF MOUNT REINFORCEMENT. ENGINEER OF RECORD WILL BE NOTIFIED IF NON-ANTENNA EQUIPMENT NEEDS TO BE RELOCATED TO ANY OTHER EXISTING MEMBERS TO ALLOW FOR INSTALLATION OF MOUNT MODIFICATION.
- 1.3 MODIFICATION SHALL BE COMPLETED PRIOR TO ADDING THE PROPOSED APPURTENANCES.
- 1.4 ALL WORK SHALL COMPLY WITH THE TIA-222-H STANDARD, ANSI/TIA-322 AND ANSI/ASSE A10.48, AS WELL AS ANY OTHER GOVERNING BUILDING CODES.
- 1.5 FIELD WORK WILL BE DONE AROUND EXISTING COAXIAL CABLE AND EQUIPMENT. ALL WORK SHALL BE DONE IN A MANNER SUCH THAT NO DAMAGE OCCURS TO THE EXISTING EQUIPMENT OR THE STRUCTURE. A MINIMUM OF TWO COATS OF ZINGA COLD GALVANIZING COMPOUND (OR APPROVED EQUIVALENT) SHALL BE APPLIED TO ANY FIELD CUTS OR FIELD DRILLED HOLES.
- 1.7 THE USE OF A GAS TORCH OR WELDER WILL NOT BE PERMITTED ON THE TOWER WITHOUT THE CONSENT OF THE OWNER.
- 1.8 ALL FIELD CONNECTIONS SHALL BE MADE WITH A325N BOLTS, U.N.O.
- 1.9 IN LIEU OF TEMPORARY BRACING, CONTRACTOR MAY HAVE A STABILITY ANALYSIS PERFORMED BY AN ENGINEER LICENSED IN THE STATE THE TOWER IS LOCATED. THE ANALYSIS SHALL USE A MINIMUM WIND SPEED OF 45 mph (3-SEC) PER ANSI/TIA-322 and ANSI/ASSE A10.48
- 1.10 ALL CUTTING AND WELDING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH CCUSA POLICY "CUTTING AND WELDING PLAN" (DOC #ENG-PLN-10015) ON AN ONGOING BASIS THROUGHOUT THE ENTIRE LIFE OF THE PROJECT.
- 1.11 DIMENSIONS WITH "±" MUST BE WITHIN 3" OF THE INDICATED DIMENSION.

FABRICATION

- 2.1 ALL WORK SHALL BE DONE IN ACCORDANCE WITH A.I.S.C. "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
- 2.2 STRUCTURAL STEEL SHALL MEET THE FOLLOWING SPECIFICATIONS:

	YIELD	ASTM SPECS
STEEL PIPE, U.N.O.	35ksi	A53 GR.B
- 2.3 ALL NEW MATERIAL INCLUDING STRUCTURAL STEEL AND FASTENERS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 AND A153.
- 2.4 WELDING SHALL MEET ANSI/AWS D1.1 STRUCTURAL WELDING CODE (LATEST REVISION). ELECTRODES SHALL BE E80 SERIES.
- 2.5 CONTRACTOR SHALL PROVIDE SHOP FABRICATION DRAWINGS TO B+T GROUP 5 DAYS PRIOR TO FABRICATION.



B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

T-Mobile

CROWN
CASTLE

ENFIELD

BRIGHT MEADOW BLVD.
ENFIELD, CT 06082
HARTFORD

EXISTING PLATFORM
AT 147'-00"

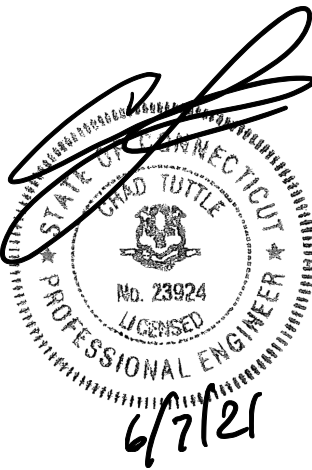
PROJECT NO: 149864.003.01

CHECKED BY: KSC

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	06/07/21	PMS	CONSTRUCTION

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/22



IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

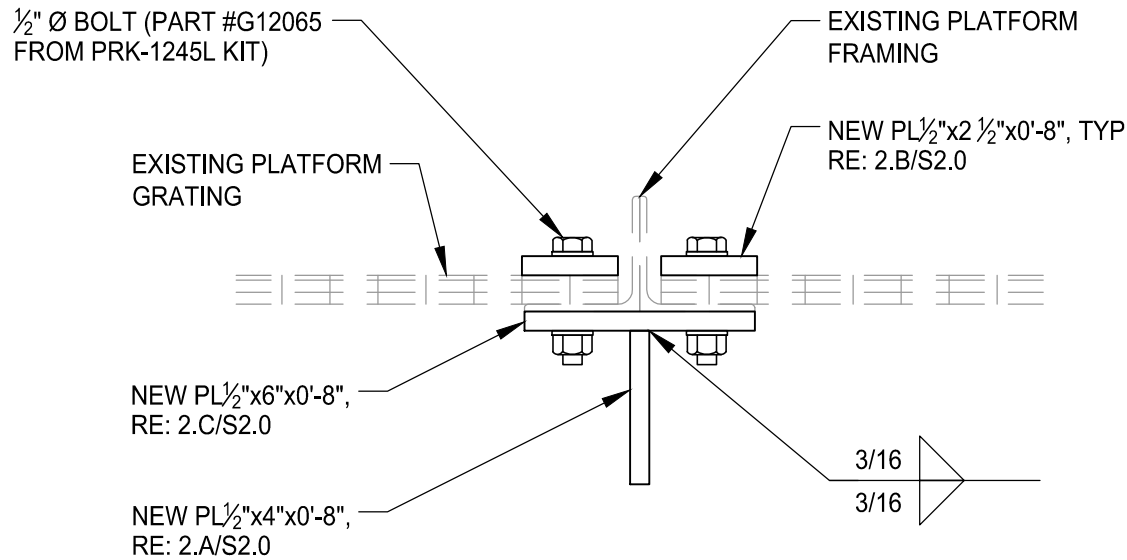
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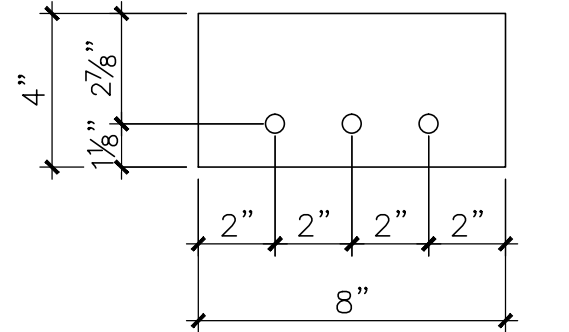
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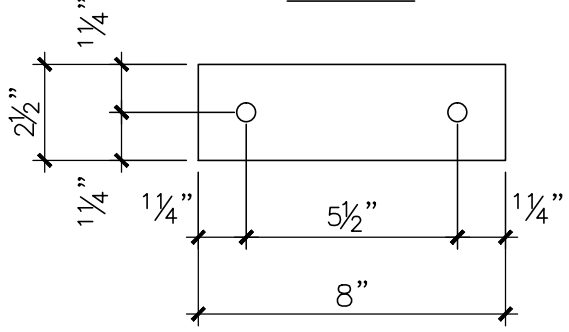
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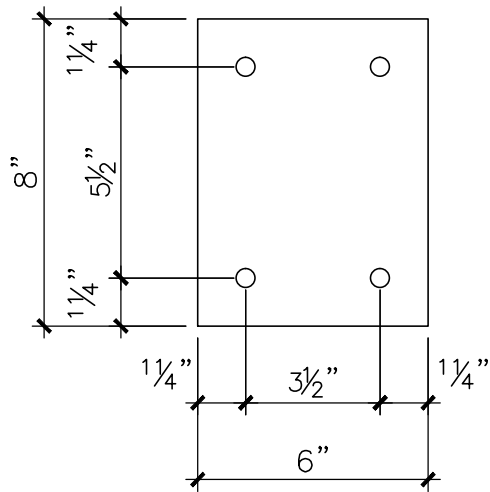
MODIFICATIONS BASED ON THE FAILING
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DETAIL 2.A



DETAIL 2.B



DETAIL 2.C

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www.btgrp.com





ENFIELD

BRIGHT MEADOW BLVD.
ENFIELD, CT 06082
HARTFORD

EXISTING PLATFORM
AT 147'-00"

PROJECT NO:

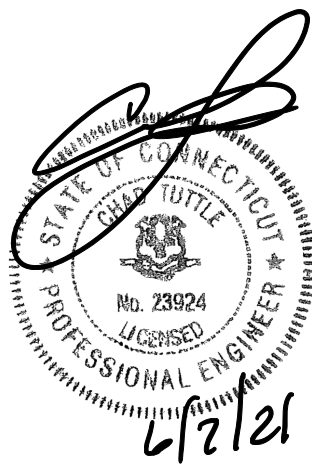
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CHECKED BY:

KSC

ISSUED FOR:			
REV	DATE	DRWN	DESCRIPTION
0	06/07/21	PMS	CONSTRUCTION

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/22



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TO ALTER THIS DOCUMENT.

SHEET NUMBER:

S2

REVISION:

0

4 SITE PRO1 ATTACHMENT CLAMP MODIFICATION
SCALE: N.T.S.

Date: September 8, 2021



B+T Group
1717 S. Boulder, Suite 300
Tulsa, OK 74119
(918) 587-4630
towersupport@btgrp.com

Subject: Mount Analysis - Conditional Passing Report

Carrier Designation: T-Mobile Equipment Change-Out
Carrier Site Number: CTHA667A
Carrier Site Name: ctha667a_crown_876348_enfiled

Crown Castle Designation: BU Number: 876348
Site Name: ENFIELD
JDE Job Number: 650690
Order Number: 557903, Rev. 1

Engineering Firm Designation: B+T Group Report Designation: 149864.004.01

Site Data: Bright Meadow Blvd. Enfield, CT, Hartford County, 06082
Latitude 42° 1' 14.91" Longitude -72° 35' 6.59"

Structure Information: Tower Height & Type: 147.5 ft. Monopole
Mount Elevation: 147 ft.
Mount Type: 14 ft. Platform Mount

B+T Group is pleased to submit this "Mount Analysis - Conditional Passing Report" to determine the structural integrity of T-Mobile's antenna mounting system with the proposed appurtenance and equipment addition on the abovementioned supporting tower structure. Analysis of the existing supporting tower structure is to be completed by others and therefore is not part of this analysis. Analysis of the antenna mounting system as a tie-off point for fall protection or rigging is not part of this document.

The purpose of the analysis is to determine acceptability of the mount's stress level. Based on our analysis we have determined the stress level to be:

Platform

*See Section 4.1 of this report for the structural modifications required in order for the mount to support the loading listed in Table 1.

Sufficient

"This analysis utilizes an ultimate 3-second gust wind speed of 116 mph as required by the 2015 International Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria."

Mount structural analysis prepared by: Anne Delice

Respectfully submitted by: B&T Engineering, Inc.
COA: PEC.0001564 Expires: 02/10/2022

Chad E. Tuttle, P.E.

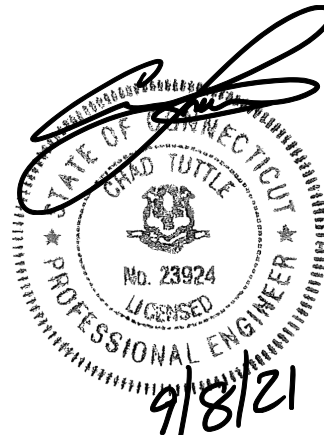


TABLE OF CONTENTS

1) INTRODUCTION

2) ANALYSIS CRITERIA

Table 1 - Proposed Equipment Configuration

Table 2 - Documents Provided

3) ANALYSIS PROCEDURE

3.1) Analysis Method

3.2) Assumptions

4) ANALYSIS RESULTS

Table 3 - Mount Component Stresses vs. Capacity

4.1) Recommendations

5) APPENDIX A

Wire Frame and Rendered Models

6) APPENDIX B

Software Input Calculations

7) APPENDIX C

Software Analysis Output

8) APPENDIX D

Additional Calculations

1) INTRODUCTION

This is an existing 3 – sector 14' Platform Mount, mapped by B+T Group and analyzed by B+T Group.

2) ANALYSIS CRITERIA

Building Code:	2015 IBC
TIA-222 Revision:	TIA-222-H
Risk Category:	II
Ultimate Wind Speed:	116 mph
Exposure Category:	B
Topographic Factor at Base:	1
Topographic Factor at Mount:	1
Ice Thickness:	1.5 in
Wind Speed with Ice:	50 mph
Seismic S_s:	0.171
Seismic S_1:	0.055
Live Loading Wind Speed:	30 mph
Man Live Load at Mid/End-Points:	250 lb
Man Live Load at Mount Pipes:	500 lb

Table 1 - Proposed Equipment Configuration

Mount Centerline (ft)	Antenna Centerline (ft)	Qty.	Manufacturer	Model / Type	Mount / Modification Details
147	147	3	Ericsson	AIR6449 B41 T-MOBILE	14 ft. Platform Mount
		3	RFS	APXVAALL24_43-UNA20_TMO	
		3	Ericsson	RADIO 4460 B2/B25 B66_TMO	
		3	Ericsson	Radio 4480 TMOV2	

Table 2 - Documents Provided

Document	Remarks	Reference	Source
CCI Order	Proposed Loading and Existing Loading	Date: 04/21/2021	Crown Castle
RFDS		Date: 07/09/2021	
Mount Mapping	B+T Group	Date: 05/05/2021	On File
Mount Analysis		Date: 05/16/2021	
Mount Modification Report		Date: 06/06/2021	

3) ANALYSIS PROCEDURE

3.1) Analysis Method

RISA-3D (Version 19.0.4), a commercially available analysis software package, was used to create a three-dimensional model of the antenna mounting system and calculate member stresses for various loading cases.

A tool internally developed by B+T Group, was used to calculate wind loading on all appurtenances, dishes and mount members for various loading cases. Selected output from the analysis is included in Appendix B "Software Input Calculations".

This analysis was performed in accordance with Crown Castle's ENG-SOW-10208 *Tower Mount Analysis* (Revision D).

3.2) Assumptions

1. The antenna mounting system was properly fabricated, installed and maintained in good condition in accordance with its original design, TIA Standards, and/or manufacturer's specifications.
2. The configuration of antennas, mounts, and other appurtenances are as specified in Table-1.
3. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected members unless otherwise specified in this report.
4. Mount areas and weights are determined from field measurements, standard material properties, and/or manufacturer product data.

The following assumptions have been included in the analysis of the mount

Component	Section	Length	Note
Proposed Mount Pipes	2" Std. Pipe	9'-0"	In Pos. 2, All Sectors

5. Serviceability with respect to antenna twist, tilt, roll or lateral translation is not checked and is left to the carrier or tower owner to ensure conformance.
6. All prior structural modifications, if any are assumed to be correctly installed and fully effective.
7. The analysis will be required to be revised if the existing conditions in the field differ from those shown in the above-referenced documents or assumed in this analysis. No allowance was made for any damaged, missing, or rusted members.
8. The following material grades were assumed (Unless Noted Otherwise):
 - (a) Connection Bolts : ASTM A325
 - (b) Steel Pipe : ASTM A53 (GR. 35)
 - (c) HSS (Round) : ASTM 500 (GR. B-42)
 - (d) HSS (Rectangular) : ASTM 500 (GR. B-46)
 - (e) Channel : ASTM A36 (GR. 36)
 - (f) Steel Solid Rod : ASTM A36 (GR. 36)
 - (g) Steel Plate : ASTM A36 (GR. 36)
 - (h) Steel Angle : ASTM A36 (GR. 36)
 - (i) UNISTRUT : ASTM A570 (GR. 33)

This analysis may be affected if any assumptions are not valid or have been made in error. B+T Group should be notified to determine the effect on the structural integrity of the antenna mounting system.

4) ANALYSIS RESULTS

Table 3 - Mount Component Stresses vs. Capacity (Platform Mount)

Notes	Component	Centerline (ft)	Critical Member	% Capacity	Pass / Fail
1,2	Main Horizontals	147	1	63.2	Pass
	Support Rails	147	22	55.3	Pass
	Mount Pipes	147	37	51.4	Pass
	Support Channels	147	10	37.2	Pass
	Support Angles	147	6	32.5	Pass
	Connection Angles	147	21	35.3	Pass
	Kickers	147	69	9.6	Pass
3	Connection Bolts	147	-	45.9	Pass

Structure Rating (max from all components) =	63.2%
---	--------------

Notes:

- 1) See additional documentation in "Appendix C - Software Analysis Output" for calculations supporting the % capacity consumed.
- 2) All sectors are typical
- 3) See additional documentation in "Appendix D - Additional Calculations" for calculations supporting the % capacity reported.

4.1) Recommendations

The SitePro1 platform mount, Part# RMPQ has sufficient capacity to carry the proposed loading configuration. In order for the results of the analysis to be considered valid, the structural modification listed below must be completed.

1. Kicker support, SitePro# PRK1245-L.
2. Top-rail kit, SitePro# HRK-12.

No further structural modifications are required at this time, provided that the above-listed changes are implemented

APPENDIX A

WIRE FRAME AND RENDERED MODELS



Envelope Only Solution

B+T Group

SV

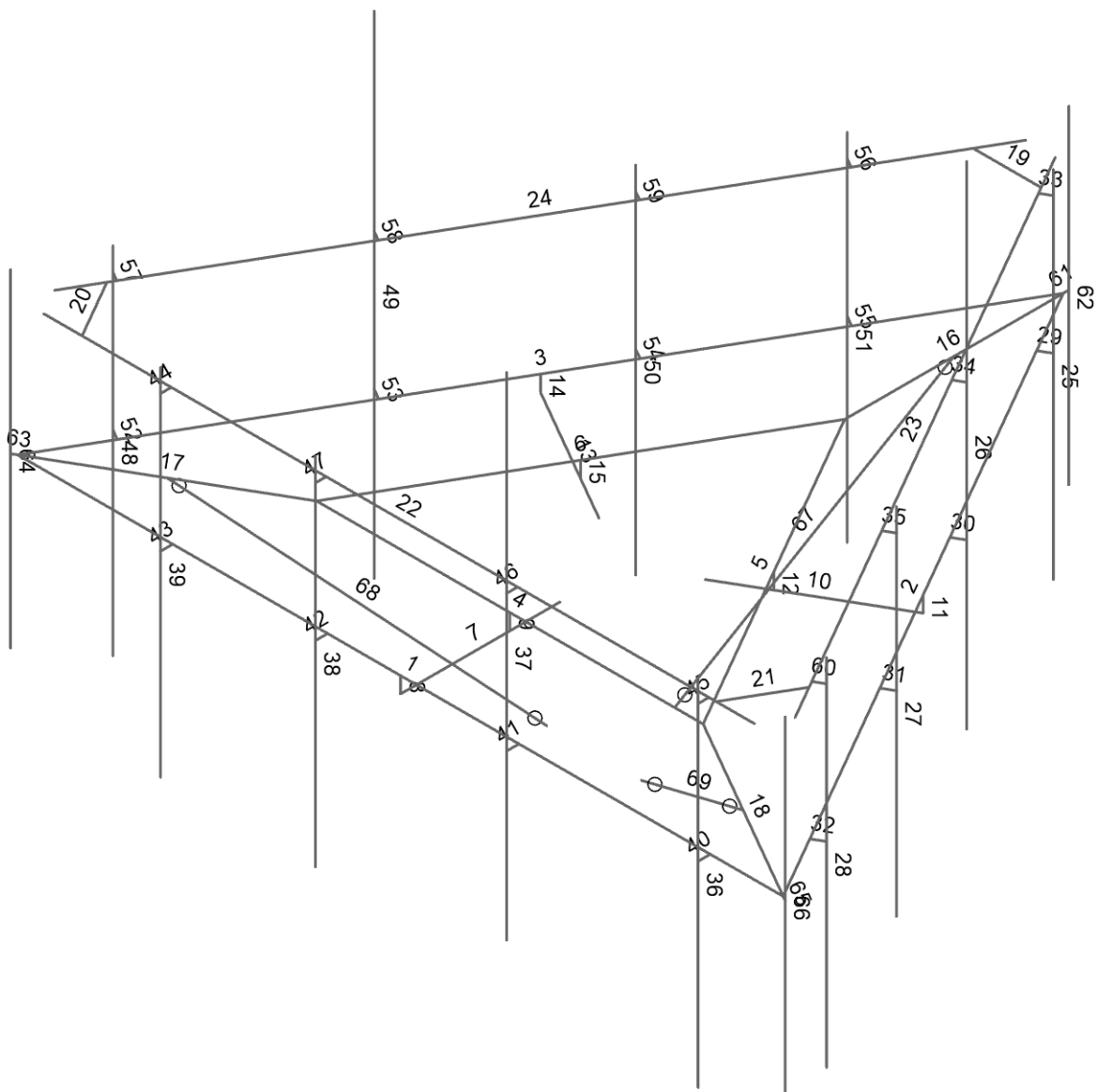
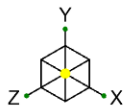
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876348 - Enfield

SK-1

Sep 08, 2021

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Envelope Only Solution

B+T Group

SV

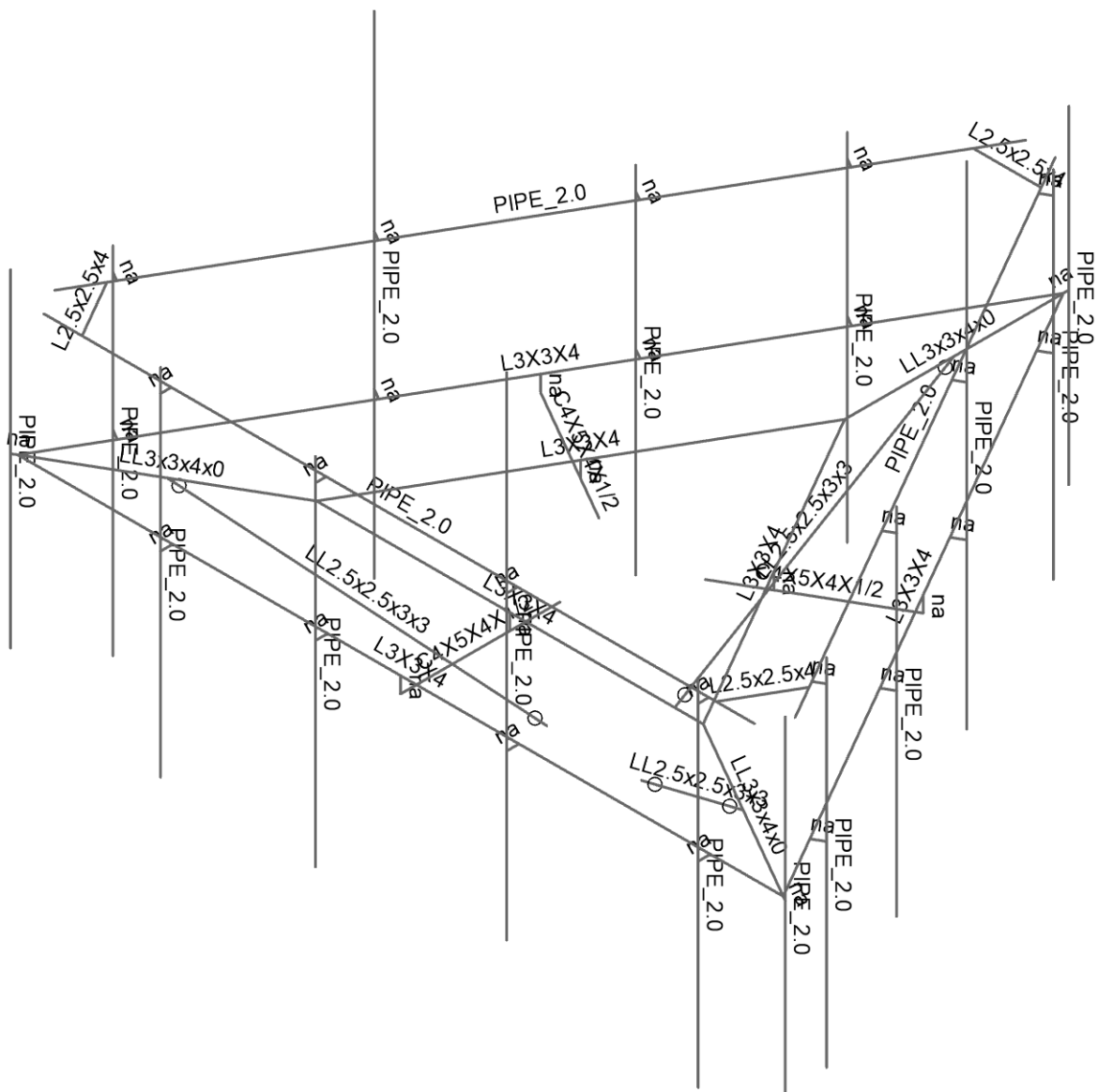
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876348 - Enfield

SK-2

Sep 08, 2021

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Envelope Only Solution

B+T Group

SV

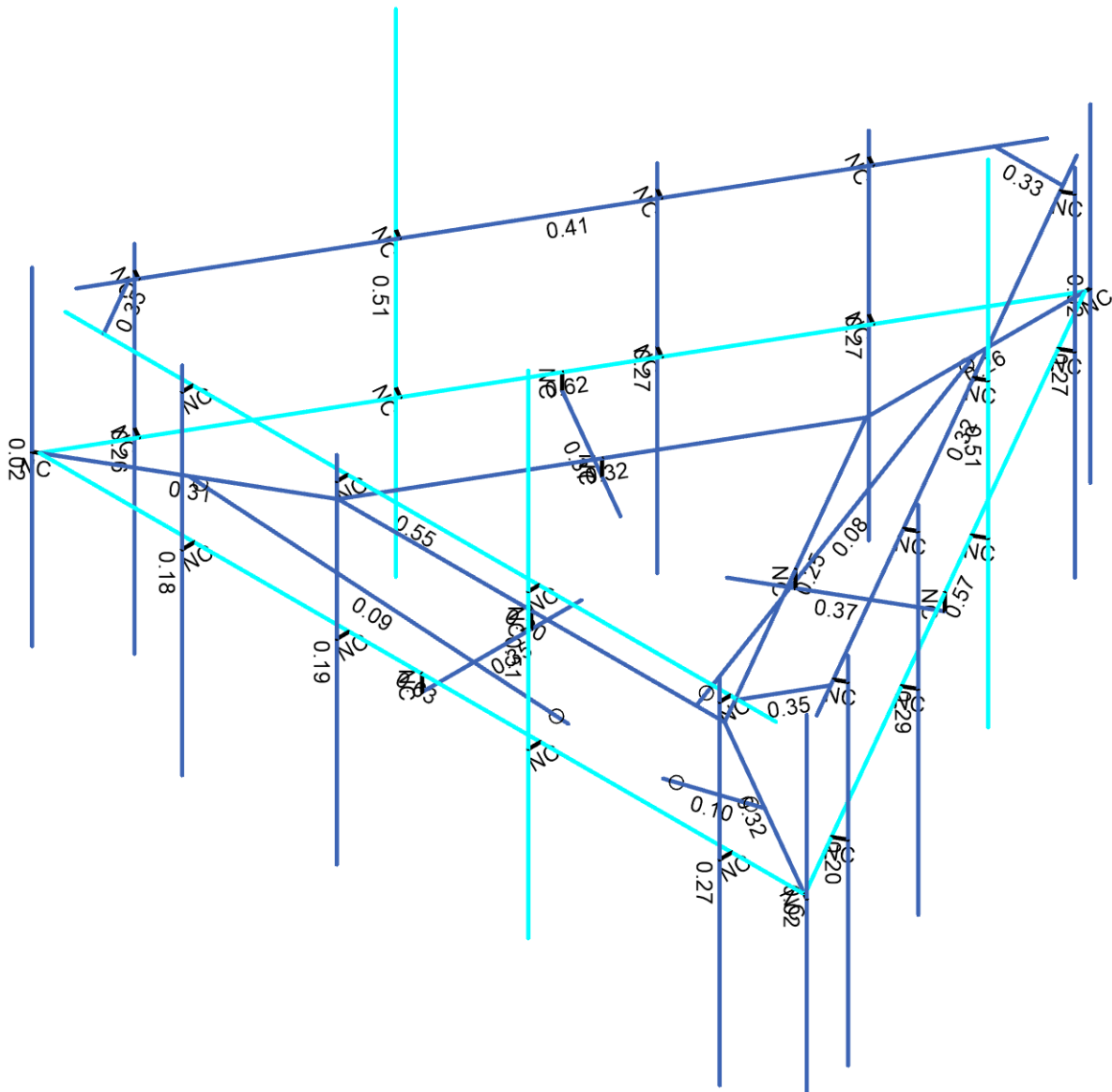
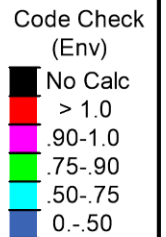
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876348 - Enfield

SK-3

Sep 08, 2021

149864_004_01_Enfield_CT (With...



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

B+T Group

SV

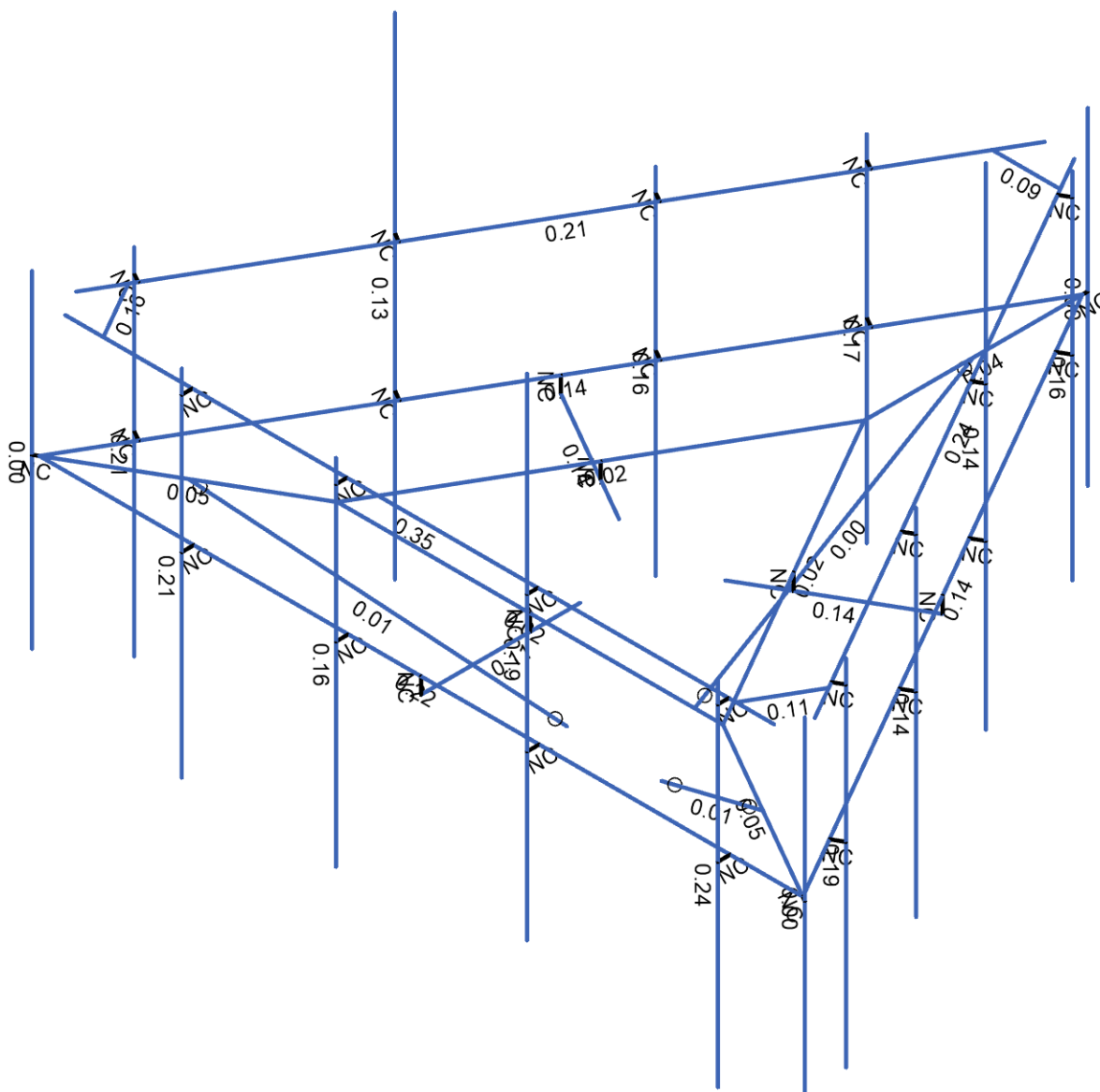
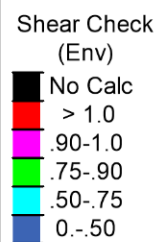
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876348 - Enfield

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Sep 08, 2021

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APPENDIX B
SOFTWARE INPUT CALCULATIONS

ASCE 7 Hazards Report

Address:

No Address at This
Location

Standard:

ASCE/SEI 7-16

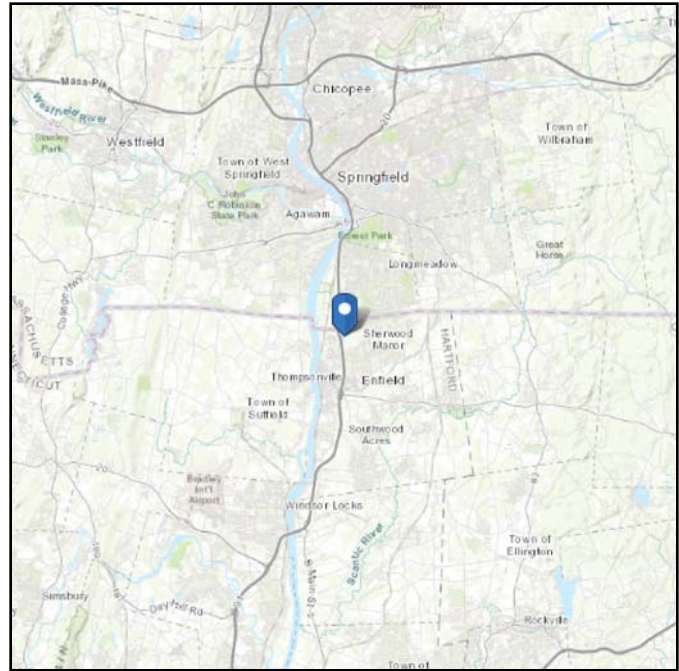
Risk Category: II**Soil Class:**

D - Default (see
Section 11.4.3)

Elevation: 110.38 ft (NAVD 88)

Latitude: 42.020808

Longitude: -72.585164



Wind

Results:

Wind Speed:	116 Vmph
10-year MRI	75 Vmph
25-year MRI	83 Vmph
50-year MRI	90 Vmph
100-year MRI	96 Vmph

Data Source:

ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2

Date Accessed:

Sat Sep 04 2021

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

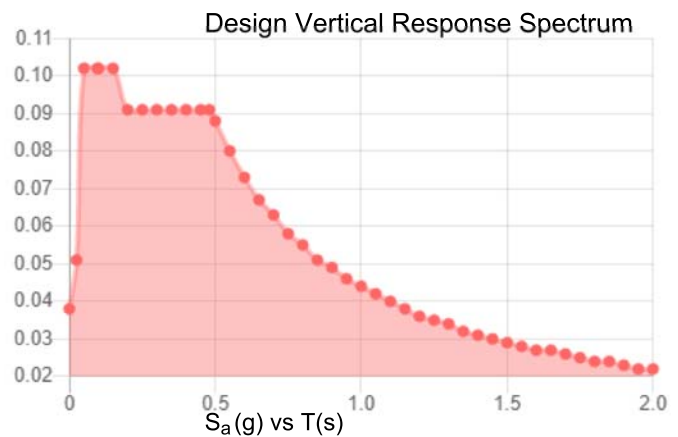
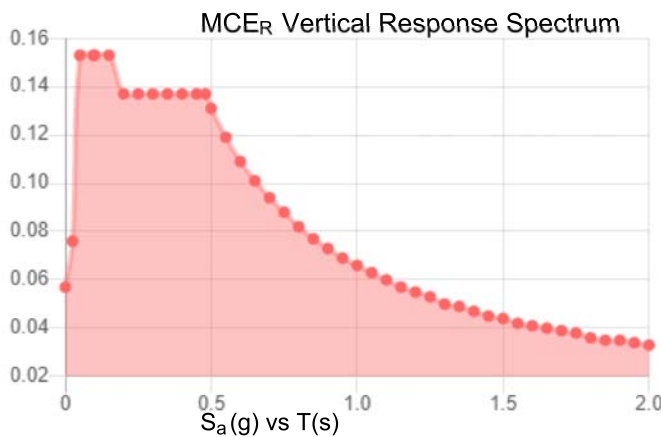
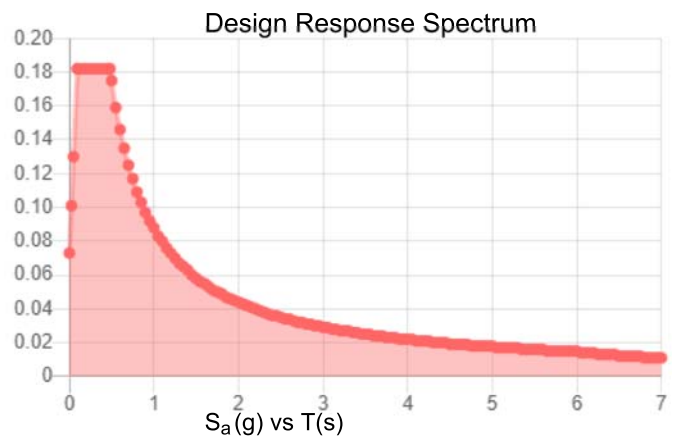
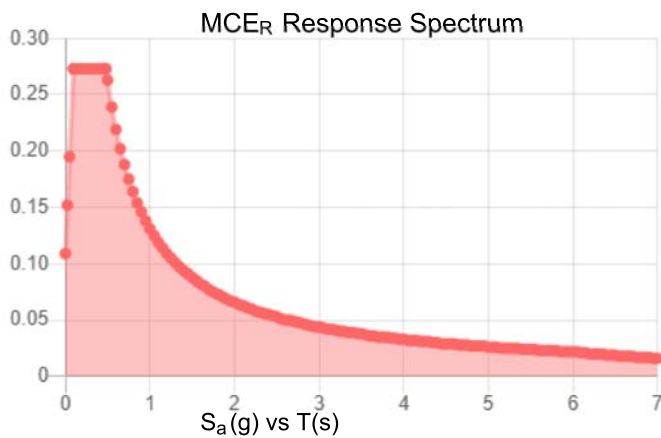
Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

Site Soil Class: D - Default (see Section 11.4.3)

Results:

S_S :	0.171	S_{D1} :	0.088
S_1 :	0.055	T_L :	6
F_a :	1.6	PGA :	0.089
F_v :	2.4	PGA _M :	0.143
S_{MS} :	0.273	F_{PGA} :	1.6
S_{M1} :	0.131	I_e :	1
S_{DS} :	0.182	C_v :	0.7

Seismic Design Category B



Data Accessed:

Sat Sep 04 2021

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness: 1.50 in.

Concurrent Temperature: 5 F

Gust Speed: 50 mph

Data Source: Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8

Date Accessed: Sat Sep 04 2021

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 500-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

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PROJECT	149864.004.01 - Enfield, CT		KSC
SUBJECT	Platform Mount Analysis		
DATE	09/08/21	PAGE	OF



B+T GRP
 1717 S. Boulder, Suite 300
 Tulsa, OK 74159
 (918) 587-4630

Tower Type	:	Monopole	
Ground Elevation	Z_s	110 ft	[ASCE7 Hazard Tool]
Tower Height	:	147.50 ft	
Mount Elevation	:	147.00 ft	
Antenna Elevation	:	147.00 ft	
Crest Height	:	0 ft	
Risk Category	:	II	[Table 2-1]
Exposure Category	:	B	[Sec. 2.6.5.1.2]
Topography Category	:	1.00	[Sec. 2.6.6.2]
Wind Velocity	V	116 mph	[ASCE7 Hazard Tool]
Ice wind Velocity	V_i	50 mph	[ASCE7 Hazard Tool]
Service Velocity	V_s	30 mph	[ASCE7 Hazard Tool]
Base Ice thickness	t_i	1.50 in	[ASCE7 Hazard Tool]
Seismic Design Cat.	:	B	[ASCE7 Hazard Tool]
	S_s	0.17	
	S_1	0.06	
	S_{DS}	0.18	
	S_{D1}	0.09	
Gust Factor	G_h	1.00	[Sec. 16.6]
Pressure Coefficient	K_z	1.10	[Sec. 2.6.5.2]
Topography Factor	K_{zt}	1.00	[Sec. 2.6.6]
Elevation Factor	K_e	1.00	[Sec. 2.6.8]
Directionality Factor	K_d	0.95	[Sec. 16.6]
Shielding Factor	K_a	0.90	[Sec. 16.6]
Design Ice Thickness	t_{iz}	1.74 in	[Sec. 2.6.10]
Importance Factor	I_e	1	[Table 2-3]
Response Coefficient	C_s	0.091	[Sec. 2.7.7.1]
Amplification	A_s	2.986441	[Sec. 16.7]
	q_z	35.96 psf	

PROJECT	149864.004.01 - Enfield, CT		KSC
SUBJECT	Platform Mount Analysis		
DATE	09/08/21	PAGE	OF



Manufacturer	Model	Qty	Aspect Ratio	C _a flat/round	EPA _N (ft ²)	EPA _T (ft ²)	EPA _{N-Ice} (ft ²)	EPA _{T-Ice} (ft ²)	F _A No Ice (N)	F _A No Ice (T)	F _A Ice (N)	F _A Ice (T)
RFS/CELWAVE	APXVAALL24_43-U-NA20_TMO	0.5	4.00	1.27	7.34	2.66	8.51	3.69	0.26	0.10	0.06	0.02
RFS/CELWAVE	APXVAALL24_43-U-NA20_TMO	0.5	4.00	1.27	7.34	2.66	8.51	3.69	0.26	0.10	0.06	0.02
ERICSSON	RADIO 4460 B2/B25 B66_TMO	1	1.13	1.20	1.78	1.40	2.64	2.19	0.07	0.05	0.01	0.01
ERICSSON	Radio 4480_TMOV2	1	1.40	1.20	2.40	1.15	3.39	1.94	0.09	0.04	0.02	0.01
ERICSSON	AIR6449 B41_T-MOBILE	0.5	1.61	1.20	2.64	1.02	3.30	1.53	0.09	0.04	0.02	0.01
ERICSSON	AIR6449 B41_T-MOBILE	0.5	1.61	1.20	2.64	1.02	3.30	1.53	0.09	0.04	0.02	0.01
RFS/CELWAVE	APXVAALL24_43-U-NA20_TMO	0.5	4.00	1.27	7.34	2.66	8.51	3.69	0.26	0.10	0.06	0.02
RFS/CELWAVE	APXVAALL24_43-U-NA20_TMO	0.5	4.00	1.27	7.34	2.66	8.51	3.69	0.26	0.10	0.06	0.02
ERICSSON	RADIO 4460 B2/B25 B66_TMO	1	1.13	1.20	1.78	1.40	2.64	2.19	0.07	0.05	0.01	0.01
ERICSSON	Radio 4480_TMOV2	1	1.40	1.20	2.40	1.15	3.39	1.94	0.09	0.04	0.02	0.01
ERICSSON	AIR6449 B41_T-MOBILE	0.5	1.61	1.20	2.64	1.02	3.30	1.53	0.09	0.04	0.02	0.01
ERICSSON	AIR6449 B41_T-MOBILE	0.5	1.61	1.20	2.64	1.02	3.30	1.53	0.09	0.04	0.02	0.01
RFS/CELWAVE	APXVAALL24_43-U-NA20_TMO	0.5	4.00	1.27	7.34	2.66	8.51	3.69	0.26	0.10	0.06	0.02
RFS/CELWAVE	APXVAALL24_43-U-NA20_TMO	0.5	4.00	1.27	7.34	2.66	8.51	3.69	0.26	0.10	0.06	0.02
ERICSSON	RADIO 4460 B2/B25 B66_TMO	1	1.13	1.20	1.78	1.40	2.64	2.19	0.07	0.05	0.01	0.01
ERICSSON	Radio 4480_TMOV2	1	1.40	1.20	2.40	1.15	3.39	1.94	0.09	0.04	0.02	0.01
ERICSSON	AIR6449 B41_T-MOBILE	0.5	1.61	1.20	2.64	1.02	3.30	1.53	0.09	0.04	0.02	0.01
ERICSSON	AIR6449 B41_T-MOBILE	0.5	1.61	1.20	2.64	1.02	3.30	1.53	0.09	0.04	0.02	0.01

APPENDIX C
SOFTWARE ANALYSIS OUTPUT

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in ²]	Iyy [in ⁴]	Izz [in ⁴]	J [in ⁴]
1	MF-H1	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	0.031
2	MF-H2	PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	0.627	0.627	1.25
3	MF-P1	PIPE 2.0	Column	Pipe	A53 Gr.B	Typical	1.02	0.627	0.627	1.25
4	S-CH1	C4X5X4X1/2	Beam	Channel	A36 Gr.36	Typical	6	9.458	23	0.461
5	S-A1	LL3x3x4x0	Beam	Double Angle (No Gap)	A36 Gr.36	Typical	2.88	4.5	2.46	0.063
6	S-A2	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	0.031
7	C-A1	L2.5x2.5x4	Beam	Single Angle	A36 Gr.36	Typical	1.19	0.692	0.692	0.026
8	Kicker	LL2.5x2.5x3x3	VBrace	Double Angle (3/8 Gap)	A36 Gr.36	Typical	1.8	2.46	1.07	0.023

Cold Formed Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in ²]	Iyy [in ⁴]	Izz [in ⁴]	J [in ⁴]
1	CF1	8CU1.25X057	Beam	None	A653 SS Gr33	Typical	0.581	0.057	4.41	0.00063

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	1	102	106	270	MF-H1	Beam	Single Angle	A36 Gr.36	Typical
2	2	106	98	270	MF-H1	Beam	Single Angle	A36 Gr.36	Typical
3	3	98	102	270	MF-H1	Beam	Single Angle	A36 Gr.36	Typical
4	4	19	18	270	S-A2	Beam	Single Angle	A36 Gr.36	Typical
5	5	17	19	270	S-A2	Beam	Single Angle	A36 Gr.36	Typical
6	6	18	17	270	S-A2	Beam	Single Angle	A36 Gr.36	Typical
7	7	4	2	90	S-CH1	Beam	Channel	A36 Gr.36	Typical
8	8	3	4		RIGID	None	None	RIGID	Typical
9	9	5	6		RIGID	None	None	RIGID	Typical
10	10	9	7	90	S-CH1	Beam	Channel	A36 Gr.36	Typical
11	11	8	9		RIGID	None	None	RIGID	Typical
12	12	10	11		RIGID	None	None	RIGID	Typical
13	13	14	12	90	S-CH1	Beam	Channel	A36 Gr.36	Typical
14	14	13	14		RIGID	None	None	RIGID	Typical
15	15	15	16		RIGID	None	None	RIGID	Typical
16	16	98	17	180	S-A1	Beam	Double Angle (No Gap)	A36 Gr.36	Typical
17	17	102	18	180	S-A1	Beam	Double Angle (No Gap)	A36 Gr.36	Typical
18	18	106	19	180	S-A1	Beam	Double Angle (No Gap)	A36 Gr.36	Typical
19	19	21	20	90	C-A1	Beam	Single Angle	A36 Gr.36	Typical
20	20	23	22	90	C-A1	Beam	Single Angle	A36 Gr.36	Typical
21	21	25	24	90	C-A1	Beam	Single Angle	A36 Gr.36	Typical
22	22	26	27		MF-H2	Beam	Pipe	A53 Gr.B	Typical
23	23	28	29		MF-H2	Beam	Pipe	A53 Gr.B	Typical
24	24	30	31		MF-H2	Beam	Pipe	A53 Gr.B	Typical
25	25	32	33		MF-P1	Column	Pipe	A53 Gr.B	Typical
26	26	114	115		MF-P1	Column	Pipe	A53 Gr.B	Typical
27	27	34	35		MF-P1	Column	Pipe	A53 Gr.B	Typical
28	28	36	37		MF-P1	Column	Pipe	A53 Gr.B	Typical
29	29	38	39		RIGID	None	None	RIGID	Typical
30	30	40	41		RIGID	None	None	RIGID	Typical
31	31	42	43		RIGID	None	None	RIGID	Typical
32	32	44	45		RIGID	None	None	RIGID	Typical
33	33	46	47		RIGID	None	None	RIGID	Typical
34	34	48	49		RIGID	None	None	RIGID	Typical
35	35	50	51		RIGID	None	None	RIGID	Typical
36	36	52	53		MF-P1	Column	Pipe	A53 Gr.B	Typical
37	37	110	111		MF-P1	Column	Pipe	A53 Gr.B	Typical
38	38	54	55		MF-P1	Column	Pipe	A53 Gr.B	Typical
39	39	56	57		MF-P1	Column	Pipe	A53 Gr.B	Typical
40	40	58	59		RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
41	41	60	61		RIGID	None	None	RIGID	Typical
42	42	62	63		RIGID	None	None	RIGID	Typical
43	43	64	65		RIGID	None	None	RIGID	Typical
44	44	66	67		RIGID	None	None	RIGID	Typical
45	45	68	69		RIGID	None	None	RIGID	Typical
46	46	70	71		RIGID	None	None	RIGID	Typical
47	47	72	73		RIGID	None	None	RIGID	Typical
48	48	74	75		MF-P1	Column	Pipe	A53 Gr.B	Typical
49	49	112	113		MF-P1	Column	Pipe	A53 Gr.B	Typical
50	50	76	77		MF-P1	Column	Pipe	A53 Gr.B	Typical
51	51	78	79		MF-P1	Column	Pipe	A53 Gr.B	Typical
52	52	80	81		RIGID	None	None	RIGID	Typical
53	53	82	83		RIGID	None	None	RIGID	Typical
54	54	84	85		RIGID	None	None	RIGID	Typical
55	55	86	87		RIGID	None	None	RIGID	Typical
56	56	88	89		RIGID	None	None	RIGID	Typical
57	57	90	91		RIGID	None	None	RIGID	Typical
58	58	92	93		RIGID	None	None	RIGID	Typical
59	59	94	95		RIGID	None	None	RIGID	Typical
60	60	96	97		RIGID	None	None	RIGID	Typical
61	61	98	99		RIGID	None	None	RIGID	Typical
62	62	100	101		MF-P1	Column	Pipe	A53 Gr.B	Typical
63	63	102	103		RIGID	None	None	RIGID	Typical
64	64	104	105		MF-P1	Column	Pipe	A53 Gr.B	Typical
65	65	106	107		RIGID	None	None	RIGID	Typical
66	66	108	109		MF-P1	Column	Pipe	A53 Gr.B	Typical
67	67	117	118		Kicker	VBrace	Double Angle (3/8 Gap)	A36 Gr.36	Typical
68	68	119	120		Kicker	VBrace	Double Angle (3/8 Gap)	A36 Gr.36	Typical
69	69	121	122		Kicker	VBrace	Double Angle (3/8 Gap)	A36 Gr.36	Typical

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]	Y Rot [k-ft/rad]	Z Rot [k-ft/rad]
1	2	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	7	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	12	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
4	117	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
5	119	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
6	121	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	37	Y	-0.075	%5
2	37	Y	-0.075	%90
3	37	Y	-0.109	%25
4	37	Y	-0.081	%50
5	37	Y	0	0
6	38	Y	-0.057	%5
7	38	Y	-0.057	%45
8	38	Y	0	0
9	38	Y	0	0
10	38	Y	0	0
11	49	Y	-0.075	%5
12	49	Y	-0.075	%90
13	49	Y	-0.109	%25
14	49	Y	-0.081	%50
15	49	Y	0	0

Member Point Loads (BLC 1 : Dead) (Continued)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
16	50	Y	-0.057	%5
17	50	Y	-0.057	%45
18	50	Y	0	0
19	50	Y	0	0
20	50	Y	0	0
21	26	Y	-0.075	%5
22	26	Y	-0.075	%90
23	26	Y	-0.109	%25
24	26	Y	-0.081	%50
25	26	Y	0	0
26	27	Y	-0.057	%5
27	27	Y	-0.057	%45
28	27	Y	0	0
29	27	Y	0	0
30	27	Y	0	0

Member Point Loads (BLC 2 : 0 Wind - No Ice)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	37	Z	-0.264	%5
2	37	Z	-0.264	%90
3	37	Z	-0.069	%25
4	37	Z	-0.093	%50
5	37	Z	0	0
6	38	Z	-0.095	%5
7	38	Z	-0.095	%45
8	38	Z	0	0
9	38	Z	0	0
10	38	Z	0	0
11	49	Z	-0.264	%5
12	49	Z	-0.264	%90
13	49	Z	-0.069	%25
14	49	Z	-0.093	%50
15	49	Z	0	0
16	50	Z	-0.095	%5
17	50	Z	-0.095	%45
18	50	Z	0	0
19	50	Z	0	0
20	50	Z	0	0
21	26	Z	-0.264	%5
22	26	Z	-0.264	%90
23	26	Z	-0.069	%25
24	26	Z	-0.093	%50
25	26	Z	0	0
26	27	Z	-0.095	%5
27	27	Z	-0.095	%45
28	27	Z	0	0
29	27	Z	0	0
30	27	Z	0	0

Member Point Loads (BLC 3 : 90 Wind - No Ice)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	37	X	-0.096	%5
2	37	X	-0.096	%90
3	37	X	-0.055	%25
4	37	X	-0.045	%50
5	37	X	0	0

Member Point Loads (BLC 3 : 90 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
6	38	X	-0.037	%5
7	38	X	-0.037	%45
8	38	X	0	0
9	38	X	0	0
10	38	X	0	0
11	49	X	-0.096	%5
12	49	X	-0.096	%90
13	49	X	-0.055	%25
14	49	X	-0.045	%50
15	49	X	0	0
16	50	X	-0.037	%5
17	50	X	-0.037	%45
18	50	X	0	0
19	50	X	0	0
20	50	X	0	0
21	26	X	-0.096	%5
22	26	X	-0.096	%90
23	26	X	-0.055	%25
24	26	X	-0.045	%50
25	26	X	0	0
26	27	X	-0.037	%5
27	27	X	-0.037	%45
28	27	X	0	0
29	27	X	0	0
30	27	X	0	0

Member Point Loads (BLC 4 : 0 Wind - Ice)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	37	Z	-0.057	%5
2	37	Z	-0.057	%90
3	37	Z	-0.013	%25
4	37	Z	-0.017	%50
5	37	Z	0	0
6	38	Z	-0.022	%5
7	38	Z	-0.022	%45
8	38	Z	0	0
9	38	Z	0	0
10	38	Z	0	0
11	49	Z	-0.057	%5
12	49	Z	-0.057	%90
13	49	Z	-0.013	%25
14	49	Z	-0.017	%50
15	49	Z	0	0
16	50	Z	-0.022	%5
17	50	Z	-0.022	%45
18	50	Z	0	0
19	50	Z	0	0
20	50	Z	0	0
21	26	Z	-0.057	%5
22	26	Z	-0.057	%90
23	26	Z	-0.013	%25
24	26	Z	-0.017	%50
25	26	Z	0	0
26	27	Z	-0.022	%5
27	27	Z	-0.022	%45
28	27	Z	0	0
29	27	Z	0	0
30	27	Z	0	0



Company : B+T Group
Designer : SV
Job Number : 149864.004.01
Model Name : 876348 - Enfield

9/8/2021
12:06:57 PM
Checked By : KSC

Member Point Loads (BLC 4 : 0 Wind - Ice) (Continued)

Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
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Member Point Loads (BLC 5 : 90 Wind - Ice)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	37	X	-0.025	%5
2	37	X	-0.025	%90
3	37	X	-0.01	%25
4	37	X	-0.008	%50
5	37	X	0	0
6	38	X	-0.01	%5
7	38	X	-0.01	%45
8	38	X	0	0
9	38	X	0	0
10	38	X	0	0
11	49	X	-0.025	%5
12	49	X	-0.025	%90
13	49	X	-0.01	%25
14	49	X	-0.008	%50
15	49	X	0	0
16	50	X	-0.01	%5
17	50	X	-0.01	%45
18	50	X	0	0
19	50	X	0	0
20	50	X	0	0
21	26	X	-0.025	%5
22	26	X	-0.025	%90
23	26	X	-0.01	%25
24	26	X	-0.008	%50
25	26	X	0	0
26	27	X	-0.01	%5
27	27	X	-0.01	%45
28	27	X	0	0
29	27	X	0	0
30	27	X	0	0

Member Point Loads (BLC 6 : 0 Wind - Service)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	37	Z	-0.018	%5
2	37	Z	-0.018	%90
3	37	Z	-0.005	%25
4	37	Z	-0.006	%50
5	37	Z	0	0
6	38	Z	-0.006	%5
7	38	Z	-0.006	%45
8	38	Z	0	0
9	38	Z	0	0
10	38	Z	0	0
11	49	Z	-0.018	%5
12	49	Z	-0.018	%90
13	49	Z	-0.005	%25
14	49	Z	-0.006	%50
15	49	Z	0	0
16	50	Z	-0.006	%5
17	50	Z	-0.006	%45
18	50	Z	0	0
19	50	Z	0	0
20	50	Z	0	0
21	26	Z	-0.018	%5
22	26	Z	-0.018	%90
23	26	Z	-0.005	%25
24	26	Z	-0.006	%50

Member Point Loads (BLC 6 : 0 Wind - Service) (Continued)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
25	26	Z	0	0
26	27	Z	-0.006	%5
27	27	Z	-0.006	%45
28	27	Z	0	0
29	27	Z	0	0
30	27	Z	0	0

Member Point Loads (BLC 7 : 90 Wind - Service)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	37	X	-0.006	%5
2	37	X	-0.006	%90
3	37	X	-0.004	%25
4	37	X	-0.003	%50
5	37	X	0	0
6	38	X	-0.002	%5
7	38	X	-0.002	%45
8	38	X	0	0
9	38	X	0	0
10	38	X	0	0
11	49	X	-0.006	%5
12	49	X	-0.006	%90
13	49	X	-0.004	%25
14	49	X	-0.003	%50
15	49	X	0	0
16	50	X	-0.002	%5
17	50	X	-0.002	%45
18	50	X	0	0
19	50	X	0	0
20	50	X	0	0
21	26	X	-0.006	%5
22	26	X	-0.006	%90
23	26	X	-0.004	%25
24	26	X	-0.003	%50
25	26	X	0	0
26	27	X	-0.002	%5
27	27	X	-0.002	%45
28	27	X	0	0
29	27	X	0	0
30	27	X	0	0

Member Point Loads (BLC 8 : Ice)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	37	Y	-0.258	%5
2	37	Y	-0.258	%90
3	37	Y	-0.063	%25
4	37	Y	-0.075	%50
5	37	Y	0	0
6	38	Y	-0.123	%5
7	38	Y	-0.123	%45
8	38	Y	0	0
9	38	Y	0	0
10	38	Y	0	0
11	49	Y	-0.258	%5
12	49	Y	-0.258	%90
13	49	Y	-0.063	%25
14	49	Y	-0.075	%50

Member Point Loads (BLC 8 : Ice) (Continued)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
15	49	Y	0	0
16	50	Y	-0.123	%5
17	50	Y	-0.123	%45
18	50	Y	0	0
19	50	Y	0	0
20	50	Y	0	0
21	26	Y	-0.258	%5
22	26	Y	-0.258	%90
23	26	Y	-0.063	%25
24	26	Y	-0.075	%50
25	26	Y	0	0
26	27	Y	-0.123	%5
27	27	Y	-0.123	%45
28	27	Y	0	0
29	27	Y	0	0
30	27	Y	0	0

Member Point Loads (BLC 9 : 0 Seismic)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	37	Z	-0.041	%5
2	37	Z	-0.041	%90
3	37	Z	-0.03	%25
4	37	Z	-0.022	%50
5	37	Z	0	0
6	38	Z	-0.031	%5
7	38	Z	-0.031	%45
8	38	Z	0	0
9	38	Z	0	0
10	38	Z	0	0
11	49	Z	-0.041	%5
12	49	Z	-0.041	%90
13	49	Z	-0.03	%25
14	49	Z	-0.022	%50
15	49	Z	0	0
16	50	Z	-0.031	%5
17	50	Z	-0.031	%45
18	50	Z	0	0
19	50	Z	0	0
20	50	Z	0	0
21	26	Z	-0.041	%5
22	26	Z	-0.041	%90
23	26	Z	-0.03	%25
24	26	Z	-0.022	%50
25	26	Z	0	0
26	27	Z	-0.031	%5
27	27	Z	-0.031	%45
28	27	Z	0	0
29	27	Z	0	0
30	27	Z	0	0

Member Point Loads (BLC 10 : 90 Seismic)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	37	X	-0.041	%5
2	37	X	-0.041	%90
3	37	X	-0.03	%25
4	37	X	-0.022	%50

Member Point Loads (BLC 10 : 90 Seismic) (Continued)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
5	37	X	0	0
6	38	X	-0.031	%5
7	38	X	-0.031	%45
8	38	X	0	0
9	38	X	0	0
10	38	X	0	0
11	49	X	-0.041	%5
12	49	X	-0.041	%90
13	49	X	-0.03	%25
14	49	X	-0.022	%50
15	49	X	0	0
16	50	X	-0.031	%5
17	50	X	-0.031	%45
18	50	X	0	0
19	50	X	0	0
20	50	X	0	0
21	26	X	-0.041	%5
22	26	X	-0.041	%90
23	26	X	-0.03	%25
24	26	X	-0.022	%50
25	26	X	0	0
26	27	X	-0.031	%5
27	27	X	-0.031	%45
28	27	X	0	0
29	27	X	0	0
30	27	X	0	0

Member Point Loads (BLC 15 : Maint LL 1)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	22	Y	-0.25	%5

Member Point Loads (BLC 16 : Maint LL 2)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	1	Y	-0.25	%5

Member Point Loads (BLC 17 : Maint LL 3)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	23	Y	-0.25	%5

Member Point Loads (BLC 18 : Maint LL 4)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	2	Y	-0.25	%5

Member Point Loads (BLC 19 : Maint LL 5)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	24	Y	-0.25	%5

Member Point Loads (BLC 20 : Maint LL 6)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	3	Y	-0.25	%5

Member Point Loads (BLC 21 : Maint LL 7)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	22	Y	-0.25	%95

Member Point Loads (BLC 22 : Maint LL 8)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	1	Y	-0.25	%95

Member Point Loads (BLC 23 : Maint LL 9)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	23	Y	-0.25	%95

Member Point Loads (BLC 24 : Maint LL 10)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	2	Y	-0.25	%95

Member Point Loads (BLC 25 : Maint LL 11)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	24	Y	-0.25	%95

Member Point Loads (BLC 26 : Maint LL 12)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	3	Y	-0.25	%95

Member Point Loads (BLC 27 : Maint LL 13)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	7	Y	-0.25	%5

Member Point Loads (BLC 28 : Maint LL 14)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	10	Y	-0.25	%5

Member Point Loads (BLC 29 : Maint LL 15)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	13	Y	-0.25	%5

Member Distributed Loads (BLC 2 : 0 Wind - No Ice)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Z	-0.016	-0.016	0	%100
2	2	Z	-0.016	-0.016	0	%100
3	3	Z	-0.016	-0.016	0	%100

Member Distributed Loads (BLC 2 : 0 Wind - No Ice) (Continued)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
4	4	Z	-0.016	-0.016	0	%100
5	5	Z	-0.016	-0.016	0	%100
6	6	Z	-0.016	-0.016	0	%100
7	7	Z	-0.015	-0.015	0	%100
8	10	Z	-0.015	-0.015	0	%100
9	13	Z	-0.015	-0.015	0	%100
10	16	Z	-0.014	-0.014	0	%100
11	17	Z	-0.014	-0.014	0	%100
12	18	Z	-0.014	-0.014	0	%100
13	19	Z	-0.009	-0.009	0	%100
14	20	Z	-0.009	-0.009	0	%100
15	21	Z	-0.009	-0.009	0	%100
16	22	Z	-0.008	-0.008	0	%100
17	23	Z	-0.008	-0.008	0	%100
18	24	Z	-0.008	-0.008	0	%100
19	25	Z	-0.008	-0.008	0	%100
20	26	Z	-0.008	-0.008	0	%100
21	27	Z	-0.008	-0.008	0	%100
22	28	Z	-0.008	-0.008	0	%100
23	36	Z	-0.008	-0.008	0	%100
24	37	Z	-0.008	-0.008	0	%100
25	38	Z	-0.008	-0.008	0	%100
26	39	Z	-0.008	-0.008	0	%100
27	48	Z	-0.008	-0.008	0	%100
28	49	Z	-0.008	-0.008	0	%100
29	50	Z	-0.008	-0.008	0	%100
30	51	Z	-0.008	-0.008	0	%100
31	62	Z	-0.008	-0.008	0	%100
32	64	Z	-0.008	-0.008	0	%100
33	66	Z	-0.008	-0.008	0	%100
34	67	Z	-0.022	-0.022	0	%100
35	68	Z	-0.022	-0.022	0	%100
36	69	Z	-0.022	-0.022	0	%100

Member Distributed Loads (BLC 3 : 90 Wind - No Ice)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	X	-0.016	-0.016	0	%100
2	2	X	-0.016	-0.016	0	%100
3	3	X	-0.016	-0.016	0	%100
4	4	X	-0.016	-0.016	0	%100
5	5	X	-0.016	-0.016	0	%100
6	6	X	-0.016	-0.016	0	%100
7	7	X	-0.015	-0.015	0	%100
8	10	X	-0.015	-0.015	0	%100
9	13	X	-0.015	-0.015	0	%100
10	16	X	-0.014	-0.014	0	%100
11	17	X	-0.014	-0.014	0	%100
12	18	X	-0.014	-0.014	0	%100
13	19	X	-0.009	-0.009	0	%100
14	20	X	-0.009	-0.009	0	%100
15	21	X	-0.009	-0.009	0	%100
16	22	X	-0.008	-0.008	0	%100
17	23	X	-0.008	-0.008	0	%100
18	24	X	-0.008	-0.008	0	%100
19	25	X	-0.008	-0.008	0	%100
20	26	X	-0.008	-0.008	0	%100
21	27	X	-0.008	-0.008	0	%100
22	28	X	-0.008	-0.008	0	%100

Member Distributed Loads (BLC 3 : 90 Wind - No Ice) (Continued)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
23	36	X	-0.008	-0.008	0	%100
24	37	X	-0.008	-0.008	0	%100
25	38	X	-0.008	-0.008	0	%100
26	39	X	-0.008	-0.008	0	%100
27	48	X	-0.008	-0.008	0	%100
28	49	X	-0.008	-0.008	0	%100
29	50	X	-0.008	-0.008	0	%100
30	51	X	-0.008	-0.008	0	%100
31	62	X	-0.008	-0.008	0	%100
32	64	X	-0.008	-0.008	0	%100
33	66	X	-0.008	-0.008	0	%100
34	67	X	-0.022	-0.022	0	%100
35	68	X	-0.022	-0.022	0	%100
36	69	X	-0.022	-0.022	0	%100

Member Distributed Loads (BLC 4 : 0 Wind - Ice)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Z	-0.007	-0.007	0	%100
2	2	Z	-0.007	-0.007	0	%100
3	3	Z	-0.007	-0.007	0	%100
4	4	Z	-0.007	-0.007	0	%100
5	5	Z	-0.007	-0.007	0	%100
6	6	Z	-0.007	-0.007	0	%100
7	7	Z	-0.006	-0.006	0	%100
8	10	Z	-0.006	-0.006	0	%100
9	13	Z	-0.006	-0.006	0	%100
10	16	Z	-0.006	-0.006	0	%100
11	17	Z	-0.006	-0.006	0	%100
12	18	Z	-0.006	-0.006	0	%100
13	19	Z	-0.005	-0.005	0	%100
14	20	Z	-0.005	-0.005	0	%100
15	21	Z	-0.005	-0.005	0	%100
16	22	Z	-0.002	-0.002	0	%100
17	23	Z	-0.002	-0.002	0	%100
18	24	Z	-0.002	-0.002	0	%100
19	25	Z	-0.002	-0.002	0	%100
20	26	Z	-0.002	-0.002	0	%100
21	27	Z	-0.002	-0.002	0	%100
22	28	Z	-0.002	-0.002	0	%100
23	36	Z	-0.002	-0.002	0	%100
24	37	Z	-0.002	-0.002	0	%100
25	38	Z	-0.002	-0.002	0	%100
26	39	Z	-0.002	-0.002	0	%100
27	48	Z	-0.002	-0.002	0	%100
28	49	Z	-0.002	-0.002	0	%100
29	50	Z	-0.002	-0.002	0	%100
30	51	Z	-0.002	-0.002	0	%100
31	62	Z	-0.002	-0.002	0	%100
32	64	Z	-0.002	-0.002	0	%100
33	66	Z	-0.002	-0.002	0	%100
34	67	Z	-0.007	-0.007	0	%100
35	68	Z	-0.007	-0.007	0	%100
36	69	Z	-0.007	-0.007	0	%100

Member Distributed Loads (BLC 5 : 90 Wind - Ice)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	X	-0.007	-0.007	0	%100
2	2	X	-0.007	-0.007	0	%100
3	3	X	-0.007	-0.007	0	%100
4	4	X	-0.007	-0.007	0	%100
5	5	X	-0.007	-0.007	0	%100
6	6	X	-0.007	-0.007	0	%100
7	7	X	-0.006	-0.006	0	%100
8	10	X	-0.006	-0.006	0	%100
9	13	X	-0.006	-0.006	0	%100
10	16	X	-0.006	-0.006	0	%100
11	17	X	-0.006	-0.006	0	%100
12	18	X	-0.006	-0.006	0	%100
13	19	X	-0.005	-0.005	0	%100
14	20	X	-0.005	-0.005	0	%100
15	21	X	-0.005	-0.005	0	%100
16	22	X	-0.002	-0.002	0	%100
17	23	X	-0.002	-0.002	0	%100
18	24	X	-0.002	-0.002	0	%100
19	25	X	-0.002	-0.002	0	%100
20	26	X	-0.002	-0.002	0	%100
21	27	X	-0.002	-0.002	0	%100
22	28	X	-0.002	-0.002	0	%100
23	36	X	-0.002	-0.002	0	%100
24	37	X	-0.002	-0.002	0	%100
25	38	X	-0.002	-0.002	0	%100
26	39	X	-0.002	-0.002	0	%100
27	48	X	-0.002	-0.002	0	%100
28	49	X	-0.002	-0.002	0	%100
29	50	X	-0.002	-0.002	0	%100
30	51	X	-0.002	-0.002	0	%100
31	62	X	-0.002	-0.002	0	%100
32	64	X	-0.002	-0.002	0	%100
33	66	X	-0.002	-0.002	0	%100
34	67	X	-0.007	-0.007	0	%100
35	68	X	-0.007	-0.007	0	%100
36	69	X	-0.007	-0.007	0	%100

Member Distributed Loads (BLC 6 : 0 Wind - Service)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Z	-0.001	-0.001	0	%100
2	2	Z	-0.001	-0.001	0	%100
3	3	Z	-0.001	-0.001	0	%100
4	4	Z	-0.001	-0.001	0	%100
5	5	Z	-0.001	-0.001	0	%100
6	6	Z	-0.001	-0.001	0	%100
7	7	Z	-0.001	-0.001	0	%100
8	10	Z	-0.001	-0.001	0	%100
9	13	Z	-0.001	-0.001	0	%100
10	16	Z	-0.0009	-0.0009	0	%100
11	17	Z	-0.0009	-0.0009	0	%100
12	18	Z	-0.0009	-0.0009	0	%100
13	19	Z	-0.0006	-0.0006	0	%100
14	20	Z	-0.0006	-0.0006	0	%100
15	21	Z	-0.0006	-0.0006	0	%100
16	22	Z	-0.0003	-0.0003	0	%100
17	23	Z	-0.0003	-0.0003	0	%100
18	24	Z	-0.0003	-0.0003	0	%100

Member Distributed Loads (BLC 6 : 0 Wind - Service) (Continued)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
19	25	Z	-0.0003	-0.0003	0	%100
20	26	Z	-0.0003	-0.0003	0	%100
21	27	Z	-0.0003	-0.0003	0	%100
22	28	Z	-0.0003	-0.0003	0	%100
23	36	Z	-0.0003	-0.0003	0	%100
24	37	Z	-0.0003	-0.0003	0	%100
25	38	Z	-0.0003	-0.0003	0	%100
26	39	Z	-0.0003	-0.0003	0	%100
27	48	Z	-0.0003	-0.0003	0	%100
28	49	Z	-0.0003	-0.0003	0	%100
29	50	Z	-0.0003	-0.0003	0	%100
30	51	Z	-0.0003	-0.0003	0	%100
31	62	Z	-0.0003	-0.0003	0	%100
32	64	Z	-0.0003	-0.0003	0	%100
33	66	Z	-0.0003	-0.0003	0	%100
34	67	Z	-0.002	-0.002	0	%100
35	68	Z	-0.002	-0.002	0	%100
36	69	Z	-0.002	-0.002	0	%100

Member Distributed Loads (BLC 7 : 90 Wind - Service)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	X	-0.001	-0.001	0	%100
2	2	X	-0.001	-0.001	0	%100
3	3	X	-0.001	-0.001	0	%100
4	4	X	-0.001	-0.001	0	%100
5	5	X	-0.001	-0.001	0	%100
6	6	X	-0.001	-0.001	0	%100
7	7	X	-0.001	-0.001	0	%100
8	10	X	-0.001	-0.001	0	%100
9	13	X	-0.001	-0.001	0	%100
10	16	X	-0.0009	-0.0009	0	%100
11	17	X	-0.0009	-0.0009	0	%100
12	18	X	-0.0009	-0.0009	0	%100
13	19	X	-0.0006	-0.0006	0	%100
14	20	X	-0.0006	-0.0006	0	%100
15	21	X	-0.0006	-0.0006	0	%100
16	22	X	-0.0003	-0.0003	0	%100
17	23	X	-0.0003	-0.0003	0	%100
18	24	X	-0.0003	-0.0003	0	%100
19	25	X	-0.0003	-0.0003	0	%100
20	26	X	-0.0003	-0.0003	0	%100
21	27	X	-0.0003	-0.0003	0	%100
22	28	X	-0.0003	-0.0003	0	%100
23	36	X	-0.0003	-0.0003	0	%100
24	37	X	-0.0003	-0.0003	0	%100
25	38	X	-0.0003	-0.0003	0	%100
26	39	X	-0.0003	-0.0003	0	%100
27	48	X	-0.0003	-0.0003	0	%100
28	49	X	-0.0003	-0.0003	0	%100
29	50	X	-0.0003	-0.0003	0	%100
30	51	X	-0.0003	-0.0003	0	%100
31	62	X	-0.0003	-0.0003	0	%100
32	64	X	-0.0003	-0.0003	0	%100
33	66	X	-0.0003	-0.0003	0	%100
34	67	X	-0.002	-0.002	0	%100
35	68	X	-0.002	-0.002	0	%100
36	69	X	-0.002	-0.002	0	%100

Member Distributed Loads (BLC 8 : Ice)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Y	-0.013	-0.013	0	%100
2	2	Y	-0.013	-0.013	0	%100
3	3	Y	-0.013	-0.013	0	%100
4	4	Y	-0.013	-0.013	0	%100
5	5	Y	-0.013	-0.013	0	%100
6	6	Y	-0.013	-0.013	0	%100
7	7	Y	-0.017	-0.017	0	%100
8	10	Y	-0.017	-0.017	0	%100
9	13	Y	-0.017	-0.017	0	%100
10	16	Y	-0.018	-0.018	0	%100
11	17	Y	-0.018	-0.018	0	%100
12	18	Y	-0.018	-0.018	0	%100
13	19	Y	-0.011	-0.011	0	%100
14	20	Y	-0.011	-0.011	0	%100
15	21	Y	-0.011	-0.011	0	%100
16	22	Y	-0.009	-0.009	0	%100
17	23	Y	-0.009	-0.009	0	%100
18	24	Y	-0.009	-0.009	0	%100
19	25	Y	-0.009	-0.009	0	%100
20	26	Y	-0.009	-0.009	0	%100
21	27	Y	-0.009	-0.009	0	%100
22	28	Y	-0.009	-0.009	0	%100
23	36	Y	-0.009	-0.009	0	%100
24	37	Y	-0.009	-0.009	0	%100
25	38	Y	-0.009	-0.009	0	%100
26	39	Y	-0.009	-0.009	0	%100
27	48	Y	-0.009	-0.009	0	%100
28	49	Y	-0.009	-0.009	0	%100
29	50	Y	-0.009	-0.009	0	%100
30	51	Y	-0.009	-0.009	0	%100
31	62	Y	-0.009	-0.009	0	%100
32	64	Y	-0.009	-0.009	0	%100
33	66	Y	-0.009	-0.009	0	%100
34	67	Y	-0.016	-0.016	0	%100
35	68	Y	-0.016	-0.016	0	%100
36	69	Y	-0.016	-0.016	0	%100

Member Distributed Loads (BLC 9 : 0 Seismic)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Z	-0.001	-0.001	0	%100
2	2	Z	-0.001	-0.001	0	%100
3	3	Z	-0.001	-0.001	0	%100
4	4	Z	-0.001	-0.001	0	%100
5	5	Z	-0.001	-0.001	0	%100
6	6	Z	-0.001	-0.001	0	%100
7	7	Z	-0.006	-0.006	0	%100
8	10	Z	-0.006	-0.006	0	%100
9	13	Z	-0.006	-0.006	0	%100
10	16	Z	-0.003	-0.003	0	%100
11	17	Z	-0.003	-0.003	0	%100
12	18	Z	-0.003	-0.003	0	%100
13	19	Z	-0.001	-0.001	0	%100
14	20	Z	-0.001	-0.001	0	%100
15	21	Z	-0.001	-0.001	0	%100
16	22	Z	-0.001	-0.001	0	%100
17	23	Z	-0.001	-0.001	0	%100
18	24	Z	-0.001	-0.001	0	%100

Member Distributed Loads (BLC 9 : 0 Seismic) (Continued)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
19	25	Z	-0.001	-0.001	0	%100
20	26	Z	-0.001	-0.001	0	%100
21	27	Z	-0.001	-0.001	0	%100
22	28	Z	-0.001	-0.001	0	%100
23	36	Z	-0.001	-0.001	0	%100
24	37	Z	-0.001	-0.001	0	%100
25	38	Z	-0.001	-0.001	0	%100
26	39	Z	-0.001	-0.001	0	%100
27	48	Z	-0.001	-0.001	0	%100
28	49	Z	-0.001	-0.001	0	%100
29	50	Z	-0.001	-0.001	0	%100
30	51	Z	-0.001	-0.001	0	%100
31	62	Z	-0.001	-0.001	0	%100
32	64	Z	-0.001	-0.001	0	%100
33	66	Z	-0.001	-0.001	0	%100
34	67	Z	-0.002	-0.002	0	%100
35	68	Z	-0.002	-0.002	0	%100
36	69	Z	-0.002	-0.002	0	%100

Member Distributed Loads (BLC 10 : 90 Seismic)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	X	-0.001	-0.001	0	%100
2	2	X	-0.001	-0.001	0	%100
3	3	X	-0.001	-0.001	0	%100
4	4	X	-0.001	-0.001	0	%100
5	5	X	-0.001	-0.001	0	%100
6	6	X	-0.001	-0.001	0	%100
7	7	X	-0.006	-0.006	0	%100
8	10	X	-0.006	-0.006	0	%100
9	13	X	-0.006	-0.006	0	%100
10	16	X	-0.003	-0.003	0	%100
11	17	X	-0.003	-0.003	0	%100
12	18	X	-0.003	-0.003	0	%100
13	19	X	-0.001	-0.001	0	%100
14	20	X	-0.001	-0.001	0	%100
15	21	X	-0.001	-0.001	0	%100
16	22	X	-0.001	-0.001	0	%100
17	23	X	-0.001	-0.001	0	%100
18	24	X	-0.001	-0.001	0	%100
19	25	X	-0.001	-0.001	0	%100
20	26	X	-0.001	-0.001	0	%100
21	27	X	-0.001	-0.001	0	%100
22	28	X	-0.001	-0.001	0	%100
23	36	X	-0.001	-0.001	0	%100
24	37	X	-0.001	-0.001	0	%100
25	38	X	-0.001	-0.001	0	%100
26	39	X	-0.001	-0.001	0	%100
27	48	X	-0.001	-0.001	0	%100
28	49	X	-0.001	-0.001	0	%100
29	50	X	-0.001	-0.001	0	%100
30	51	X	-0.001	-0.001	0	%100
31	62	X	-0.001	-0.001	0	%100
32	64	X	-0.001	-0.001	0	%100
33	66	X	-0.001	-0.001	0	%100
34	67	X	-0.002	-0.002	0	%100
35	68	X	-0.002	-0.002	0	%100
36	69	X	-0.002	-0.002	0	%100

Member Distributed Loads (BLC 39 : BLC 1 Transient Area Loads)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Y	-0.002	-0.006	0	2
2	1	Y	-0.006	-0.009	2	4
3	1	Y	-0.009	-0.012	4	6
4	1	Y	-0.012	-0.012	6	8
5	1	Y	-0.012	-0.009	8	10
6	1	Y	-0.009	-0.006	10	12
7	1	Y	-0.006	-0.002	12	14
8	4	Y	-0.012	-0.009	0	1.768
9	4	Y	-0.009	-0.007	1.768	3.536
10	4	Y	-0.007	-0.009	3.536	5.304
11	4	Y	-0.009	-0.012	5.304	7.072
12	17	Y	-0.006	-0.017	0.8	4
13	18	Y	-0.006	-0.017	0.8	4
14	3	Y	-0.0004841	-0.007	0	2.333
15	3	Y	-0.007	-0.01	2.333	4.667
16	3	Y	-0.01	-0.011	4.667	7
17	3	Y	-0.011	-0.012	7	9.333
18	3	Y	-0.012	-0.007	9.333	11.667
19	3	Y	-0.007	-0.0004841	11.667	14
20	6	Y	-0.012	-0.009	0	1.768
21	6	Y	-0.009	-0.007	1.768	3.536
22	6	Y	-0.007	-0.009	3.536	5.304
23	6	Y	-0.009	-0.012	5.304	7.072
24	16	Y	-0.006	-0.017	0.8	4
25	2	Y	-0.0004841	-0.007	0	2.333
26	2	Y	-0.007	-0.01	2.333	4.667
27	2	Y	-0.01	-0.011	4.667	7
28	2	Y	-0.011	-0.012	7	9.333
29	2	Y	-0.012	-0.007	9.333	11.667
30	2	Y	-0.007	-0.0004841	11.667	14
31	5	Y	-0.012	-0.009	0	1.768
32	5	Y	-0.009	-0.007	1.768	3.536
33	5	Y	-0.007	-0.009	3.536	5.304
34	5	Y	-0.009	-0.012	5.304	7.072

Member Distributed Loads (BLC 40 : BLC 8 Transient Area Loads)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Y	-0.001	-0.005	0	2
2	1	Y	-0.005	-0.007	2	4
3	1	Y	-0.007	-0.01	4	6
4	1	Y	-0.01	-0.01	6	8
5	1	Y	-0.01	-0.007	8	10
6	1	Y	-0.007	-0.005	10	12
7	1	Y	-0.005	-0.001	12	14
8	4	Y	-0.01	-0.007	0	1.768
9	4	Y	-0.007	-0.006	1.768	3.536
10	4	Y	-0.006	-0.007	3.536	5.304
11	4	Y	-0.007	-0.01	5.304	7.072
12	17	Y	-0.005	-0.014	0.8	4
13	18	Y	-0.005	-0.014	0.8	4
14	3	Y	-0.0003873	-0.006	0	2.333
15	3	Y	-0.006	-0.008	2.333	4.667
16	3	Y	-0.008	-0.009	4.667	7
17	3	Y	-0.009	-0.009	7	9.333
18	3	Y	-0.009	-0.006	9.333	11.667
19	3	Y	-0.006	-0.0003873	11.667	14
20	6	Y	-0.009	-0.007	0	1.768

Member Distributed Loads (BLC 40 : BLC 8 Transient Area Loads) (Continued)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
21	6	Y	-0.007	-0.006	1.768	3.536
22	6	Y	-0.006	-0.007	3.536	5.304
23	6	Y	-0.007	-0.009	5.304	7.072
24	16	Y	-0.005	-0.014	0.8	4
25	2	Y	-0.0003873	-0.006	0	2.333
26	2	Y	-0.006	-0.008	2.333	4.667
27	2	Y	-0.008	-0.009	4.667	7
28	2	Y	-0.009	-0.009	7	9.333
29	2	Y	-0.009	-0.006	9.333	11.667
30	2	Y	-0.006	-0.0003873	11.667	14
31	5	Y	-0.009	-0.007	0	1.768
32	5	Y	-0.007	-0.006	1.768	3.536
33	5	Y	-0.006	-0.007	3.536	5.304
34	5	Y	-0.007	-0.009	5.304	7.072

Member Area Loads (BLC 1 : Dead)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	102	18	19	106	Y	Two Way	-0.01
2	98	17	18	102	Y	Two Way	-0.01
3	106	19	17	98	Y	Two Way	-0.01

Member Area Loads (BLC 8 : Ice)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	102	18	19	106	Y	Two Way	-0.008
2	98	17	18	102	Y	Two Way	-0.008
3	106	19	17	98	Y	Two Way	-0.008

Basic Load Cases

	BLC Description	Category	Y Gravity	Nodal	Point	Distributed	Area(Member)
1	Dead	DL	-1		30		3
2	0 Wind - No Ice	WLZ			30	36	
3	90 Wind - No Ice	WLX			30	36	
4	0 Wind - Ice	WLZ			30	36	
5	90 Wind - Ice	WLX			30	36	
6	0 Wind - Service	WLZ			30	36	
7	90 Wind - Service	WLX			30	36	
8	Ice	OL1			30	36	3
9	0 Seismic	ELZ			30	36	
10	90 Seismic	ELX			30	36	
11	Live Load a	LL		3			
12	Live Load b	LL		3			
13	Live Load c	LL		3			
14	Live Load d	LL		3			
15	Maint LL 1	LL			1		
16	Maint LL 2	LL			1		
17	Maint LL 3	LL			1		
18	Maint LL 4	LL			1		
19	Maint LL 5	LL			1		
20	Maint LL 6	LL			1		
21	Maint LL 7	LL			1		
22	Maint LL 8	LL			1		
23	Maint LL 9	LL			1		
24	Maint LL 10	LL			1		
25	Maint LL 11	LL			1		
26	Maint LL 12	LL			1		

Basic Load Cases (Continued)

	BLC Description	Category	Y Gravity	Nodal	Point	Distributed	Area(Member)
27	Maint LL 13	LL			1		
28	Maint LL 14	LL			1		
29	Maint LL 15	LL			1		
30	Maint LL 16	LL					
31	Maint LL 17	LL					
32	Maint LL 18	LL					
33	Maint LL 19	LL					
34	Maint LL 20	LL					
35	Maint LL 21	LL					
36	Maint LL 22	LL					
37	Maint LL 23	LL					
38	Maint LL 24	LL					
39	BLC 1 Transient Area Loads	None				34	
40	BLC 8 Transient Area Loads	None				34	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	1.4 Dead	Yes	Y	1	1.4						
2	1.2 D + 1.0 - 0 W	Yes	Y	1	1.2	2	1				
3	1.2 D + 1.0 - 30 W	Yes	Y	1	1.2	2	0.866	3	0.5		
4	1.2 D + 1.0 - 60 W	Yes	Y	1	1.2	3	0.866	2	0.5		
5	1.2 D + 1.0 - 90 W	Yes	Y	1	1.2	3	1				
6	1.2 D + 1.0 - 120 W	Yes	Y	1	1.2	3	0.866	2	-0.5		
7	1.2 D + 1.0 - 150 W	Yes	Y	1	1.2	2	-0.866	3	0.5		
8	1.2 D + 1.0 - 180 W	Yes	Y	1	1.2	2	-1				
9	1.2 D + 1.0 - 210 W	Yes	Y	1	1.2	2	-0.866	3	-0.5		
10	1.2 D + 1.0 - 240 W	Yes	Y	1	1.2	3	-0.866	2	-0.5		
11	1.2 D + 1.0 - 270 W	Yes	Y	1	1.2	3	-1				
12	1.2 D + 1.0 - 300 W	Yes	Y	1	1.2	3	-0.866	2	0.5		
13	1.2 D + 1.0 - 330 W	Yes	Y	1	1.2	2	0.866	3	-0.5		
14	1.2 D + 1.0 - 0 W/Ice	Yes	Y	1	1.2	4	1			8	1
15	1.2 D + 1.0 - 30 W/Ice	Yes	Y	1	1.2	4	0.866	5	0.5	8	1
16	1.2 D + 1.0 - 60 W/Ice	Yes	Y	1	1.2	5	0.866	4	0.5	8	1
17	1.2 D + 1.0 - 90 W/Ice	Yes	Y	1	1.2	5	1			8	1
18	1.2 D + 1.0 - 120 W/Ice	Yes	Y	1	1.2	5	0.866	4	-0.5	8	1
19	1.2 D + 1.0 - 150 W/Ice	Yes	Y	1	1.2	4	-0.866	5	0.5	8	1
20	1.2 D + 1.0 - 180 W/Ice	Yes	Y	1	1.2	4	-1			8	1
21	1.2 D + 1.0 - 210 W/Ice	Yes	Y	1	1.2	4	-0.866	5	-0.5	8	1
22	1.2 D + 1.0 - 240 W/Ice	Yes	Y	1	1.2	5	-0.866	4	-0.5	8	1
23	1.2 D + 1.0 - 270 W/Ice	Yes	Y	1	1.2	5	-1			8	1
24	1.2 D + 1.0 - 300 W/Ice	Yes	Y	1	1.2	5	-0.866	4	0.5	8	1
25	1.2 D + 1.0 - 330 W/Ice	Yes	Y	1	1.2	4	0.866	5	-0.5	8	1
26	1.2 D + 1.0 E - 0	Yes	Y	1	1.2	9	1				
27	1.2 D + 1.0 E - 30	Yes	Y	1	1.2	9	0.866	10	0.5		
28	1.2 D + 1.0 E - 60	Yes	Y	1	1.2	10	0.866	9	0.5		
29	1.2 D + 1.0 E - 90	Yes	Y	1	1.2	10	1				
30	1.2 D + 1.0 E - 120	Yes	Y	1	1.2	10	0.866	9	-0.5		
31	1.2 D + 1.0 E - 150	Yes	Y	1	1.2	9	-0.866	10	0.5		
32	1.2 D + 1.0 E - 180	Yes	Y	1	1.2	9	-1				
33	1.2 D + 1.0 E - 210	Yes	Y	1	1.2	9	-0.866	10	-0.5		
34	1.2 D + 1.0 E - 240	Yes	Y	1	1.2	10	-0.866	9	-0.5		
35	1.2 D + 1.0 E - 270	Yes	Y	1	1.2	10	-1				
36	1.2 D + 1.0 E - 300	Yes	Y	1	1.2	10	-0.866	9	0.5		
37	1.2 D + 1.0 E - 330	Yes	Y	1	1.2	9	0.866	10	-0.5		
38	1.2 D + 1.5 LL a + Service - 0 W	Yes	Y	1	1.2	6	1			11	1.5
39	1.2 D + 1.5 LL a + Service - 30 W	Yes	Y	1	1.2	6	0.866	7	0.5	11	1.5
40	1.2 D + 1.5 LL a + Service - 60 W	Yes	Y	1	1.2	7	0.866	6	0.5	11	1.5
41	1.2 D + 1.5 LL a + Service - 90 W	Yes	Y	1	1.2	7	1			11	1.5

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
42	1.2 D + 1.5 LL a + Service - 120 W	Yes	Y	1	1.2	7	0.866	6	-0.5	11	1.5
43	1.2 D + 1.5 LL a + Service - 150 W	Yes	Y	1	1.2	6	-0.866	7	0.5	11	1.5
44	1.2 D + 1.5 LL a + Service - 180 W	Yes	Y	1	1.2	6	-1			11	1.5
45	1.2 D + 1.5 LL a + Service - 210 W	Yes	Y	1	1.2	6	-0.866	7	-0.5	11	1.5
46	1.2 D + 1.5 LL a + Service - 240 W	Yes	Y	1	1.2	7	-0.866	6	-0.5	11	1.5
47	1.2 D + 1.5 LL a + Service - 270 W	Yes	Y	1	1.2	7	-1			11	1.5
48	1.2 D + 1.5 LL a + Service - 300 W	Yes	Y	1	1.2	7	-0.866	6	0.5	11	1.5
49	1.2 D + 1.5 LL a + Service - 330 W	Yes	Y	1	1.2	6	0.866	7	-0.5	11	1.5
50	1.2 D + 1.5 LL b + Service - 0 W	Yes	Y	1	1.2	6	1			12	1.5
51	1.2 D + 1.5 LL b + Service - 30 W	Yes	Y	1	1.2	6	0.866	7	0.5	12	1.5
52	1.2 D + 1.5 LL b + Service - 60 W	Yes	Y	1	1.2	7	0.866	6	0.5	12	1.5
53	1.2 D + 1.5 LL b + Service - 90 W	Yes	Y	1	1.2	7	1			12	1.5
54	1.2 D + 1.5 LL b + Service - 120 W	Yes	Y	1	1.2	7	0.866	6	-0.5	12	1.5
55	1.2 D + 1.5 LL b + Service - 150 W	Yes	Y	1	1.2	6	-0.866	7	0.5	12	1.5
56	1.2 D + 1.5 LL b + Service - 180 W	Yes	Y	1	1.2	6	-1			12	1.5
57	1.2 D + 1.5 LL b + Service - 210 W	Yes	Y	1	1.2	6	-0.866	7	-0.5	12	1.5
58	1.2 D + 1.5 LL b + Service - 240 W	Yes	Y	1	1.2	7	-0.866	6	-0.5	12	1.5
59	1.2 D + 1.5 LL b + Service - 270 W	Yes	Y	1	1.2	7	-1			12	1.5
60	1.2 D + 1.5 LL b + Service - 300 W	Yes	Y	1	1.2	7	-0.866	6	0.5	12	1.5
61	1.2 D + 1.5 LL b + Service - 330 W	Yes	Y	1	1.2	6	0.866	7	-0.5	12	1.5
62	1.2 D + 1.5 LL c + Service - 0 W	Yes	Y	1	1.2	6	1			13	1.5
63	1.2 D + 1.5 LL c + Service - 30 W	Yes	Y	1	1.2	6	0.866	7	0.5	13	1.5
64	1.2 D + 1.5 LL c + Service - 60 W	Yes	Y	1	1.2	7	0.866	6	0.5	13	1.5
65	1.2 D + 1.5 LL c + Service - 90 W	Yes	Y	1	1.2	7	1			13	1.5
66	1.2 D + 1.5 LL c + Service - 120 W	Yes	Y	1	1.2	7	0.866	6	-0.5	13	1.5
67	1.2 D + 1.5 LL c + Service - 150 W	Yes	Y	1	1.2	6	-0.866	7	0.5	13	1.5
68	1.2 D + 1.5 LL c + Service - 180 W	Yes	Y	1	1.2	6	-1			13	1.5
69	1.2 D + 1.5 LL c + Service - 210 W	Yes	Y	1	1.2	6	-0.866	7	-0.5	13	1.5
70	1.2 D + 1.5 LL c + Service - 240 W	Yes	Y	1	1.2	7	-0.866	6	-0.5	13	1.5
71	1.2 D + 1.5 LL c + Service - 270 W	Yes	Y	1	1.2	7	-1			13	1.5
72	1.2 D + 1.5 LL c + Service - 300 W	Yes	Y	1	1.2	7	-0.866	6	0.5	13	1.5
73	1.2 D + 1.5 LL c + Service - 330 W	Yes	Y	1	1.2	6	0.866	7	-0.5	13	1.5
74	1.2 D + 1.5 LL d + Service - 0 W	Yes	Y	1	1.2	6	1			14	1.5
75	1.2 D + 1.5 LL d + Service - 30 W	Yes	Y	1	1.2	6	0.866	7	0.5	14	1.5
76	1.2 D + 1.5 LL d + Service - 60 W	Yes	Y	1	1.2	7	0.866	6	0.5	14	1.5
77	1.2 D + 1.5 LL d + Service - 90 W	Yes	Y	1	1.2	7	1			14	1.5
78	1.2 D + 1.5 LL d + Service - 120 W	Yes	Y	1	1.2	7	0.866	6	-0.5	14	1.5
79	1.2 D + 1.5 LL d + Service - 150 W	Yes	Y	1	1.2	6	-0.866	7	0.5	14	1.5
80	1.2 D + 1.5 LL d + Service - 180 W	Yes	Y	1	1.2	6	-1			14	1.5
81	1.2 D + 1.5 LL d + Service - 210 W	Yes	Y	1	1.2	6	-0.866	7	-0.5	14	1.5
82	1.2 D + 1.5 LL d + Service - 240 W	Yes	Y	1	1.2	7	-0.866	6	-0.5	14	1.5
83	1.2 D + 1.5 LL d + Service - 270 W	Yes	Y	1	1.2	7	-1			14	1.5
84	1.2 D + 1.5 LL d + Service - 300 W	Yes	Y	1	1.2	7	-0.866	6	0.5	14	1.5
85	1.2 D + 1.5 LL d + Service - 330 W	Yes	Y	1	1.2	6	0.866	7	-0.5	14	1.5
86	1.2 D + 1.5 LL Maint (1)	Yes	Y	1	1.2					15	1.5
87	1.2 D + 1.5 LL Maint (2)	Yes	Y	1	1.2					16	1.5
88	1.2 D + 1.5 LL Maint (3)	Yes	Y	1	1.2					17	1.5
89	1.2 D + 1.5 LL Maint (4)	Yes	Y	1	1.2					18	1.5
90	1.2 D + 1.5 LL Maint (5)	Yes	Y	1	1.2					19	1.5
91	1.2 D + 1.5 LL Maint (6)	Yes	Y	1	1.2					20	1.5
92	1.2 D + 1.5 LL Maint (7)	Yes	Y	1	1.2					21	1.5
93	1.2 D + 1.5 LL Maint (8)	Yes	Y	1	1.2					22	1.5
94	1.2 D + 1.5 LL Maint (9)	Yes	Y	1	1.2					23	1.5
95	1.2 D + 1.5 LL Maint (10)	Yes	Y	1	1.2					24	1.5
96	1.2 D + 1.5 LL Maint (11)	Yes	Y	1	1.2					25	1.5
97	1.2 D + 1.5 LL Maint (12)	Yes	Y	1	1.2					26	1.5
98	1.2 D + 1.5 LL Maint (13)	Yes	Y	1	1.2					27	1.5
99	1.2 D + 1.5 LL Maint (14)	Yes	Y	1	1.2					28	1.5

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
100	1.2 D + 1.5 LL Maint (15)	Yes	Y	1	1.2					29	1.5
101	1.2 D + 1.5 LL Maint (16)	Yes	Y	1	1.2					30	1.5
102	1.2 D + 1.5 LL Maint (17)	Yes	Y	1	1.2					31	1.5
103	1.2 D + 1.5 LL Maint (18)	Yes	Y	1	1.2					32	1.5
104	1.2 D + 1.5 LL Maint (19)	Yes	Y	1	1.2					33	1.5
105	1.2 D + 1.5 LL Maint (20)	Yes	Y	1	1.2					34	1.5
106	1.2 D + 1.5 LL Maint (21)	Yes	Y	1	1.2					35	1.5
107	1.2 D + 1.5 LL Maint (22)	Yes	Y	1	1.2					36	1.5
108	1.2 D + 1.5 LL Maint (23)	Yes	Y	1	1.2					37	1.5
109	1.2 D + 1.5 LL Maint (24)	Yes	Y	1	1.2					38	1.5

Envelope Node Reactions

Node Label	X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1 2 max	2.545	5	1.651	20	1.037	2	-1.176	2	2.614	5	0.212	11
2 min	-2.618	11	0.562	2	-0.933	8	-4.718	20	-2.66	11	-0.195	5
3 7 max	1.568	3	1.756	14	3.007	2	2.54	14	3.572	9	4.277	25
4 min	-1.574	9	0.599	8	-3.247	8	0.497	8	-3.348	3	1.304	7
5 12 max	1.529	7	1.668	17	2.812	13	2.354	14	3.203	13	-1.268	11
6 min	-1.538	13	0.626	12	-3.022	7	0.6	8	-3.333	7	-4.085	17
7 117 max	0.064	5	1.592	14	0.211	8	0	109	0	40	0	82
8 min	-0.064	11	-0.141	8	-2.56	14	0	1	0	82	0	40
9 119 max	-0.287	12	1.774	18	1.435	18	0	74	0	44	0	44
10 min	-2.484	18	0.179	12	0.166	12	0	44	0	74	0	74
11 121 max	2.641	21	1.876	22	1.521	22	0	2	0	2	0	2
12 min	0.223	3	0.152	3	0.149	4	0	8	0	8	0	8
13 Totals: max	3.928	5	9.869	18	5.476	2						
14 min	-3.928	11	3.864	12	-5.476	8						

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks

Member	Shape	Code	Check	Loc[ft]	LC	Shear	Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
1	1	L3X3X4	0.632	7	20	0.219	7	y	2	3.945	46.656	1.688	2.646	1.5	H2-1	
2	2	L3X3X4	0.57	7	25	0.137	7	y	6	3.945	46.656	1.688	2.646	1.5	H2-1	
3	3	L3X3X4	0.622	7	15	0.143	7	y	10	3.945	46.656	1.688	2.646	1.5	H2-1	
4	4	L3X3X4	0.195	3.536	11	0.019	0	z	22	15.459	46.656	1.688	3.219	1.402	H2-1	
5	5	L3X3X4	0.254	3.462	8	0.019	7.072	z	21	15.459	46.656	1.688	3.262	1.481	H2-1	
6	6	L3X3X4	0.325	3.536	8	0.018	0	z	19	15.459	46.656	1.688	3.235	1.431	H2-1	
7	7	C4X5X4X1/2	0.351	2.917	23	0.11	2.005	y	11	174.435	194.4	15.817	29.7	3	H1-1b	
8	10	C4X5X4X1/2	0.372	2.917	21	0.144	2.005	y	9	174.435	194.4	15.817	29.7	3	H1-1b	
9	13	C4X5X4X1/2	0.369	2.917	19	0.144	2.005	y	7	174.435	194.4	15.817	29.7	3	H1-1b	
10	16	LL3x3x4x0	0.262	0	25	0.044	2	y	85	76.288	93.312	6.48	4.357	1.135	H1-1b	
11	17	LL3x3x4x0	0.309	0	17	0.048	2	y	17	76.288	93.312	6.48	4.357	1.39	H1-1b	
12	18	LL3x3x4x0	0.324	0	20	0.05	2	y	20	76.288	93.312	6.48	4.357	1.3	H1-1b	
13	19	L2.5x2.5x4	0.329	0	3	0.092	1.245	y	5	36.654	38.556	1.114	2.537	1.105	H2-1	
14	20	L2.5x2.5x4	0.345	0	8	0.159	1.245	y	9	36.654	38.556	1.114	2.537	1.5	H2-1	
15	21	L2.5x2.5x4	0.353	1.245	9	0.112	1.245	z	2	36.654	38.556	1.114	2.537	1.5	H2-1	
16	22	PIPE 2.0	0.553	8.667	8	0.347	12.052	8	5.82	32.13	1.872	1.872	3	H3-6		
17	23	PIPE 2.0	0.325	7.854	13	0.236	12.052	13	5.82	32.13	1.872	1.872	2.624	H1-1b		
18	24	PIPE 2.0	0.414	8.667	2	0.208	12.052	4	5.82	32.13	1.872	1.872	3	H1-1b		
19	25	PIPE 2.0	0.275	2.911	2	0.157	0.474	12	19.36	32.13	1.872	1.872	3	H1-1b		
20	26	PIPE 2.0	0.51	3.469	8	0.138	5.906	2	12.144	32.13	1.872	1.872	2.329	H1-1b		
21	27	PIPE 2.0	0.294	2.911	2	0.144	2.911	13	19.36	32.13	1.872	1.872	3	H1-1b		
22	28	PIPE 2.0	0.199	0.474	8	0.187	2.911	7	19.36	32.13	1.872	1.872	3	H1-1b		
23	36	PIPE 2.0	0.269	2.911	8	0.236	0.474	8	19.36	32.13	1.872	1.872	3	H3-6		
24	37	PIPE 2.0	0.514	3.469	8	0.194	5.906	8	12.144	32.13	1.872	1.872	3	H1-1b		
25	38	PIPE 2.0	0.187	0.474	5	0.155	2.911	7	19.36	32.13	1.872	1.872	3	H1-1b		
26	39	PIPE 2.0	0.184	2.911	6	0.214	0.474	8	19.36	32.13	1.872	1.872	3	H1-1b		

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

Member	Shape	Code Check	Loc[ft]	LC Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
27 48	PIPE 2.0	0.257	2.911	18	0.21	2.911	9	19.36	32.13	1.872	1.872	3	H1-1b
28 49	PIPE 2.0	0.51	3.469	2	0.127	5.906	4	12.144	32.13	1.872	1.872	3	H1-1b
29 50	PIPE 2.0	0.266	0.474	2	0.163	2.911	3	19.36	32.13	1.872	1.872	3	H1-1b
30 51	PIPE 2.0	0.269	2.911	2	0.17	2.911	3	19.36	32.13	1.872	1.872	3	H1-1b
31 62	PIPE 2.0	0.02	2.938	2	0.002	2.938	2	20.867	32.13	1.872	1.872	1	H1-1b
32 64	PIPE 2.0	0.02	2.938	3	0.002	2.938	3	20.867	32.13	1.872	1.872	1.606	H1-1b
33 66	PIPE 2.0	0.02	2.938	8	0.002	2.938	8	20.867	32.13	1.872	1.872	1.347	H1-1b
34 67	LL2.5x2.5x3x3	0.084	2.951	25	0.005	5.902	y 14	37.401	58.32	3.954	2.531	1.136	H1-1b
35 68	LL2.5x2.5x3x3	0.09	0	18	0.005	5.902	y 18	37.401	58.32	3.954	2.531	1	H1-1b*
36 69	LL2.5x2.5x3x3	0.096	0	22	0.006	5.902	z 7	37.401	58.32	3.954	2.531	1	H1-1b*

Envelope NONE Member Cold Formed Steel Code Checks

No Data to Print...

APPENDIX D
ADDITIONAL CALCUATIONS

PROJECT	149864.004.01 - Enfield, CT	AD
SUBJECT	Platform Mount Analysis	
DATE	09/08/21	PAGE 1 OF 1



B+T Group
 1717 S. Boulder, Suite 300
 Tulsa, OK 74119
 (918) 587-4630

[REF: AISC 360-05]

Reactions at Bolted Connection

Tension	:	1.037	k
Vertical Shear	:	1.651	k
Horizontal Shear	:	2.545	k
Torsion	:	0.212	k.ft
Moment from Horizontal Forces	:	2.614	k.ft
Moment from Vertical Forces	:	-1.176	k.ft

Bolt Parameters

Bolt Grade	:	A307	
Bolt Diameter	:	0.625	in
Nominal Bolt Area	:	0.307	in ²
Bolt spacing, Horizontal	:	6	in
Bolt spacing, Vertical	:	6	in
Bolt edge distance, plate height	:	1.5	in
Bolt edge distance, plate width	:	1.5	in
Total Number of Bolts	:	4	bolts

Summary of Forces

Shear Resultant Force	:	3.03	k
Force from Horz. Moment	:	4.73	k
Force from Vert. Moment	:	-2.13	k
Shear Load / Bolt	:	0.76	k
Tension Load / Bolt	:	0.26	k
Resultant from Moments / Bolt	:	2.60	k

Bolt Checks

Nominal Tensile Stress, F_{nt}	:	45.00	ksi	[AISC Table J3.2]
Available Tensile Stress, ΦR_{nt}	:	10.36	k/bolt	[Eq. J3-1]
Unity Check, Bolt Tension	:	27.56%		OKAY
Nominal Shear Stress, F_{nv}	:	24.00	ksi	[AISC Table J3.2]
Available Shear Stress, ΦR_{nv}	:	5.53	k/bolt	[Eq. J3-1]
Unity Check, Bolt Shear	:	18.42%		OKAY
Unity Check, Combined	:	45.97%		OKAY
Available Bearing Strength, ΦR_n	:	34.66	k/bolt	
Unity Check, Bolt Bearing	:	2.19%		OKAY

PROJECT	149864.004.01 - Enfield, CT			AD
SUBJECT	Platform Mount Analysis			
DATE	09/08/21	PAGE	1	OF 1



B+T Group
 1717 S. Boulder, Suite 300
 Tulsa, OK 74119
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[REF: AISC 360-05]

Connecting Member Parameters

Plate Yield Strength, F_y	:	36.00	ksi	[AISC Table 2-5]
Plate Tensile Strength, F_u	:	58.00	ksi	[AISC Table 2-5]
Plate Height	:	9.00	in	
Plate Width	:	9.00	in	
Plate Thickness	:	0.50	in	
Edge Distance	:	1.06	in	
Gross Tension Area, A_{gt}	:	4.50	in ²	
Gross Shear Area, A_{gv}	:	0.75	in ²	
Net Area for tension, A_{nt}	:	4.16	in ²	
Net Area for shear, A_{nt}	:	3.00	in ²	

Plate Check

Available Tensile Yield	:	145.80	k	[Eq. J4-1]
Available Tensile Rupture	:	180.80	k	[Eq. J4-2]
Unity Check, Plate Tension	:	1.96%		OKAY
Available Shear Yield	:	16.20	k	[Eq. J4-3]
Available Shear Rupture	:	104.40	k	[Eq. J4-4]
Unity Check, Plate Shear	:	18.73%		OKAY
Available Block Shear, ΦR_n	:	77.40	k	[Eq. J4-5]
Unity Check, Block Shear	:	3.92%		OKAY