

October 18, 2021

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

**Re: Tower Share Application – AT&T Site S1175
AT&T Telecommunications Facility @ 32 Norfolk Road, Winsted, CT 06098**

Dear Ms. Bachman,

New Cingular Wireless PCS, LLC (“AT&T”) is proposing a wireless telecommunications facility on an existing +/- 150 foot monopine tower at the above referenced address (Latitude = 41.94019, Longitude = - 73.0959) and within the existing 50’ x 75’ fenced compound. Said monopine tower is owned and operated by American Tower Corporation.

AT&T proposes to install a WIC (Walk-In Cabinet) and a Generator on proposed concrete pads inside a 20’ x 10’ ground space within the existing compound and install (6) antennas, (9) RRUS Radios, (1) Squid and mounts/cabling on the existing tower at 137’ as more particularly detailed and described on the enclosed Construction Drawings prepared by Dewberry Engineers, Inc., dated October 13, 2021. The overall height of the existing tower is and will remain at 155 feet and no changes will be made to the compound dimensions.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies 16-50aa, of AT&T 's intent to share a telecommunications facility pursuant to R.C.S.A. 16-50j-88. In accordance with R.C.S.A §16-50j-73, a copy of this letter is being sent to the following individuals: American Tower Corporation as Tower Operator/Owner; WIN 21 LLC as Property Owner; Joshua Kelly as Town Manager of the Town of Winchester and Pamela Colombie as ZEO for the Town of Winchester.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. §16-50j-89. Specifically:

1. The proposed modifications will NOT result in an increase in the height of the existing structure.
2. The proposed modifications will NOT require an extension of the site boundary.

3. The proposed modifications will NOT increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the modified facility will NOT increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. *Please see the RF emissions calculation for AT&T's modified facility enclosed herewith.*
5. The proposed modifications will NOT cause an ineligibile change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading. Please see the structural analysis dated April 6, 2021 prepared by American Tower Corporation enclosed herewith.

Connecticut General Statute 16-50aa indicates that the Council must approve the shared use of a telecommunications facility provided it finds the shared use is technically, legally, environmentally, and economically feasible and meets public safety concerns. As demonstrated in this letter, AT&T respectfully indicates that the shared use of this facility satisfies these criteria:

- A. **Technical Feasibility.** The existing monopine has been deemed structurally capable of supporting AT&T's proposed loading (see attached Structural Analysis).
- B. **Legal Feasibility.** As referenced above, C.G.S. 16-50aa has been authorized to issue orders approving the shared use of an existing tower. Under the authority granted to the Council, an order of the Council approving the requested shared use would permit AT&T to obtain a building permit for the proposed installation. Further, a Letter of Authorization is attached, authorizing AT&T to file this application for shared use.
- C. **Environmental Feasibility.** The proposed shared use of this facility would have a minimal environmental impact. The installation of AT&T equipment at the 137-foot level of the existing 150-foot tower would have an insignificant visual impact on the area around the tower. AT&T ground equipment would be installed within the existing facility compound. AT&T shared use would therefore not cause any significant alteration in the physical or environmental characteristics of the existing site. Additionally, as evidenced by the attached NIER study, the proposed antennas would not increase radio frequency emissions to a level at or above the Federal Communications Commission safety standard.
- D. **Economic Feasibility.** AT&T will be entering into an agreement with the owner of this facility to mutually agreeable terms. As previously mentioned, the Letter of Authorization has been provided by the owner to assist AT&T with this tower sharing application.
- E. **Public Safety Concerns.** As discussed above, the tower is structurally capable of supporting AT&T proposed loading. AT&T is not aware of any public safety concerns relative to the proposed sharing of the existing tower. AT&T's intentions of providing new and improved wireless service

through the shared use of this facility is expected to enhance the safety and welfare of local residents and individuals traveling through Winstead.

For the foregoing reasons, AT&T respectfully requests that the Council approve this request for the shared use of this tower located at 32 Norfolk Road, Winsted, CT 06098.

If you have any questions, please feel free to contact me.

Sincerely,

Kimberly Revak
Site Acquisition Consultant – Agent for AT&T
Centerline Communications, LLC
38 Treeline Court
Fishkill, NY 12524
Phone: (845) 242-6152
krevak@clinellc.com

Enclosures: **Exhibit 1 – Letter of Authorization from Tower Owner**
 Exhibit 2 – Property Card and GIS
 Exhibit 3 – Construction Drawings
 Exhibit 4 – Structural Analysis Report
 Exhibit 5 – Antenna Mount Analysis Report
 Exhibit 6 – NIER Study Report
 Exhibit 7 – Original Tower Approval
 Exhibit 8 – (4) Notice Confirmations

Cc: **American Tower Corporation – Tower Operator/Owner**
 WIN 21 LLC – Property Owner
 Joshua Kelly – Town Manager of the Town of Winchester
 Pamela Colombie – ZEO for the Town of Winchester

Exhibit 1

Letter of Authorization from Tower Owner



LETTER OF AUTHORIZATION

ATC Site No./Name/Project: 413849 / Winchester PCS CT / 13626831
Site Address: Address: 32 Norfolk Road, Winsted, CT 06098
Licensee: New Cingular Wireless PCS, LLC dba AT&T Mobility

I, Margaret Robinson, Senior Counsel for American Tower*, operator of the tower facility located at the address identified above (the "Tower Facility"), do hereby authorize **New Cingular Wireless PCS, LLC dba AT&T Mobility**, its successors and assigns, and/or its agent, (collectively, the "Licensee") to act as American Tower's non-exclusive agent for the sole purpose of filing and consummating any land-use or building permit application(s) as may be required by the applicable permitting authorities for Licensee's telecommunications' installation.

We understand that this application may be denied, modified or approved with conditions. The above authorization is limited to the acceptance by Licensee only of conditions related to Licensee's installation and any such conditions of approval or modifications will be Licensee's sole responsibility.

Signature:

A handwritten signature in blue ink, appearing to read 'Margaret Robinson', written over a horizontal line.

Print Name: Margaret Robinson
Senior Counsel
American Tower*

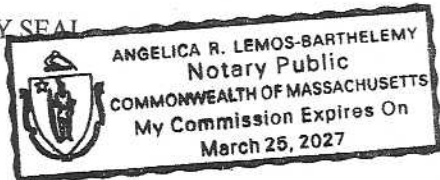
NOTARY BLOCK

Commonwealth of MASSACHUSETTS
County of Middlesex

This instrument was acknowledged before me by Margaret Robinson, Senior Counsel for American Tower*, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

WITNESS my hand and official seal, this 16th of April 2021.

NOTARY SEAL



Notary Public 
My Commission Expires: March 25, 2027

*American Tower includes all affiliates and subsidiaries of American Tower Corporation.

Exhibit 2

Property Card and GIS



32 NORFOLK RD

Property Detail

Current Owner

Name: WIN 21 LLC

Mailing Address: 156 ROOSEVELT DR
SEYMOUR, CT 6483

Physical Address: 32 NORFOLK RD

Property ID #: 016 152 026-1

Total Acres: 56

Zoning: RR

Deed Book No: 417

Deed Book Page: 888

Valuation and Sales

Land	Building	Total Value
\$116,210	\$13,790	\$130,000
Sale Price	Sale Date	
N/A	04/07/2014	

Building

Year Built: 2009

House Style: Warehse Prefab

Residential Area: 360

Story Height: 1

Number of Rooms: 0

Building Area: 720

32 NORFOLK RD

Location 32 NORFOLK RD

Mblu 016/ 152/ 026-1/ /

Acct# 005370

Owner WIN 21 LLC

Assessment \$130,000

Appraisal \$497,900

PID 4218

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$19,700	\$478,200	\$497,900

Assessment			
Valuation Year	Improvements	Land	Total
2018	\$13,790	\$116,210	\$130,000

Owner of Record

Owner WIN 21 LLC

Sale Price \$0

Co-Owner

Certificate

Address 156 ROOSEVELT DR
SEYMOUR, CT 06483

Book & Page 0417/0888

Sale Date 04/07/2014

Instrument 03

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
WIN 21 LLC	\$0		0417/0888	03	04/07/2014
WIN 21 LLC	\$85,000		00324/0277	00	06/06/2003
HORNE JONATHAN A	\$0		00216/0006		06/29/1989

Building Information

Building 1 : Section 1

Year Built: 2009
Living Area: 360
Replacement Cost
Less Depreciation: \$19,700

Building Attributes

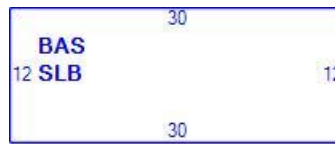
Field	Description
Style:	Warehse Prefab
Model	Comm/Ind
Grade	Good
Stories:	1
Occupancy	1.00
Exterior Wall 1	Pre-cast Concr
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Metal/Tin
Interior Wall 1	Minimum
Interior Wall 2	
Interior Floor 1	Concrete Slab
Interior Floor 2	
Heating Fuel	Gas/Oil
Heating Type	Hot Air-no Duc
AC Type	None
Struct Class	
Bldg Use	Tele Tower
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	
Heat/AC	NONE
Frame Type	MASONRY
Baths/Plumbing	NONE
Ceiling/Wall	NONE
Rooms/Prtns	LIGHT
Wall Height	12.00
% Comn Wall	

Building Photo



(<http://images.vgsi.com/photos/WinchesterCTPhotos//default.jpg>)

Building Layout



(ParcelSketch.ashx?)

pid=4218&bid=5192)

Building Sub-Areas (sq ft)			<u>Legend</u>
Code	Description	Gross Area	Living Area
BAS	First Floor	360	360
SLB	Slab	360	0
		720	360

Extra Features

Extra Features	<u>Legend</u>
No Data for Extra Features	

Land

Land Use

Use Code 4310

Land Line Valuation

Size (Acres) 56

Description Tele Tower
Zone RR
Alt Land Appr No
Category

Depth
Assessed Value \$116,210
Appraised Value \$478,200

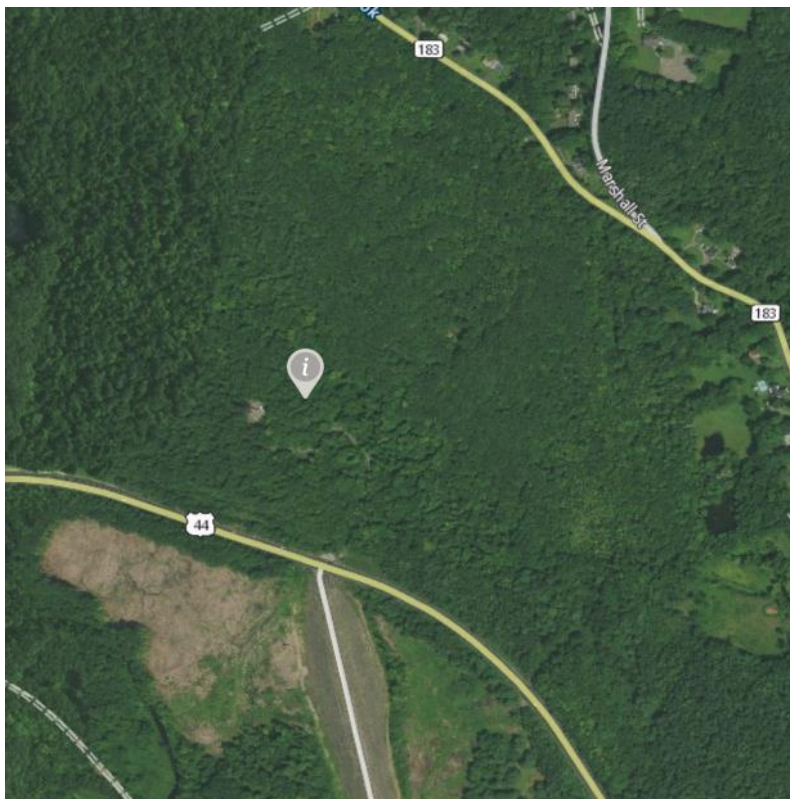
Outbuildings

Outbuildings	<u>Legend</u>
No Data for Outbuildings	

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2020	\$19,700	\$478,200	\$497,900
2017	\$19,700	\$478,200	\$497,900
2016	\$19,800	\$408,700	\$428,500

Assessment			
Valuation Year	Improvements	Land	Total
2020	\$13,790	\$116,210	\$130,000
2017	\$13,790	\$116,210	\$130,000
2016	\$13,860	\$63,380	\$77,240



32 Norfolk Road, Winsted, Connecticut 06098, United States

Overview Range Radius

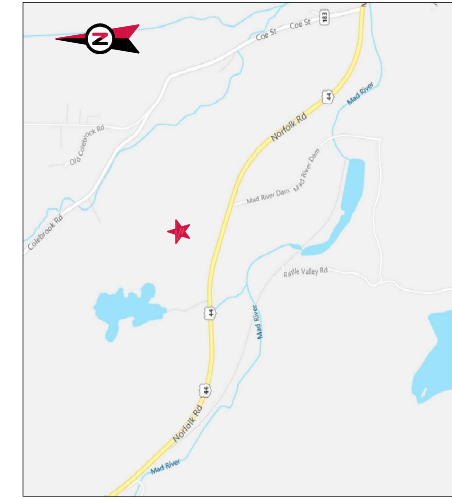
 **Lat/Long** 41.94036, -73.09510

Copy

 **Elevation** 1121 ft

Exhibit 3

Construction Drawings



VICINITY MAP

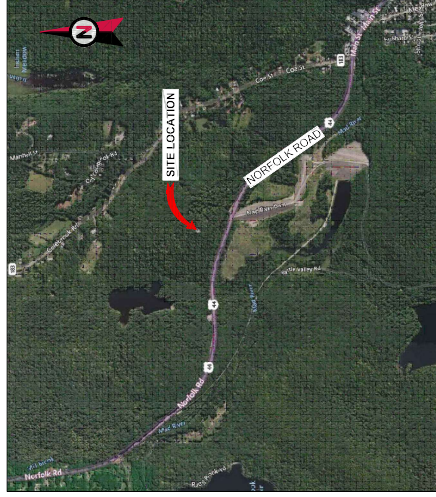


AMERICAN TOWER®

ATC SITE NAME: WINCHESTER PCS CT
 ATC SITE NUMBER: 413849
 AT&T PACE NUMBER: MRCTB050163
 AT&T SITE ID: S1175
 AT&T FA CODE: 10577780
 AT&T SITE NAME: S1175

SITE ADDRESS: 32 NORFOLK ROAD
 WINSTED, CT 06098

AT&T MOBILITY 13626831 COLOCATION PLAN
 5G NR RADIO/5G NR 1DR-1 CONFIGURATION



LOCATION MAP

COMPLIANCE CODE
 ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AND ORDINANCES. NOTHING IN THESE PLANS IS TO BE CONSIDERED TO PERMIT WORK NOT CONFORMING TO THESE CODES.
 1. 2018 CONNECTICUT STATE BUILDING CODE-AMENDMENTS TO IBC 2015
 2. INTERNATIONAL BUILDING CODE 2015, INTERNATIONAL CODE COUNCIL
 3. TIA-222-G4, STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS
 4. ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, AMERICAN SOCIETY OF CIVIL ENGINEERS
 5. STEEL CONSTRUCTION MANUAL, 14TH EDITION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION
 6. CITY/COUNTY ORDINANCES

UTILITY COMPANIES
 POWER COMPANY: XXXXXXXX
 PHONE: (XXX) XXX-XXXX
 TELEPHONE COMPANY: NA
 PHONE: N/A



Know what's below.
 Call before you dig.

PROJECT SUMMARY
 SITE ADDRESS:
 32 NORFOLK ROAD
 WINSTED, CT 06098
 COUNTY: LITCHFIELD
 GEOGRAPHIC COORDINATES:
 LATITUDE: 41.54019
 LONGITUDE: -73.0959
 GROUND ELEVATION: 1143 ANSL

PROJECT TEAM

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

ENGINEER:
 DEWBERRY ENGINEERS INC.
 89 SUMMER STREET
 SUITE 700
 BOSTON, MA 02170
 PHONE: 617.695.3400
 FAX: 617.695.3310

PROPERTY OWNER:
 WIN 21 LLC
 166 ROOSEVELT DR.
 SEYMOUR, CT 06483

APPLICANT:
 AT&T MOBILITY
 550 COCHITUATE ROAD
 SUITES 13 & 14
 FRAMMINGHAM, MA 01701

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES INSTALLING A W/C (WALK-IN CABINET) AND A GENERATOR ON PROPOSED CONCRETE PADS INSIDE A 20' X 10' GROUND SPACE WITHIN THE EXISTING COMPOUND, AND INSTALLING NEW EQUIPMENT AND MOUNTS ON THE EXISTING TOWER.

PROJECT NOTES

1. THE FACILITY IS UNMANNED.
2. THE PROPOSED PROJECT IS APPROXIMATELY 500 FEET NORTH AND HEAD TO THE END. TAKE THE EXIT TOWARDS U.S. ROUTE 44 AND FOLLOW IT TO THE RIGHT FOR APPROXIMATELY 7.4 MILES. YOU WILL SEE A TALL TREE POLE ON THE RIGHT. DRIVEWAY IS RIGHT AFTER RIGHT LANE ENDS 700 FT. YELLOW SIGN METAL GATE TO ACCESS ROAD. FOLLOW DRIVEWAY UP THE HILL GATE COMBO IS 4467.
3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE.
4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED.
5. THE PROJECT DEFICIT IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. 1452(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR 1.81000(B)(7).

PROJECT LOCATION DIRECTIONS

FROM EAST HARTFORD TAKE Rt WEST. MERGE ONTO ROUTE 8 NORTH AND HEAD TO THE END. TAKE THE EXIT TOWARDS U.S. ROUTE 44 AND FOLLOW IT TO THE RIGHT FOR APPROXIMATELY 7.4 MILES. YOU WILL SEE A TALL TREE POLE ON THE RIGHT. DRIVEWAY IS RIGHT AFTER RIGHT LANE ENDS 700 FT. YELLOW SIGN METAL GATE TO ACCESS ROAD. FOLLOW DRIVEWAY UP THE HILL GATE COMBO IS 4467.

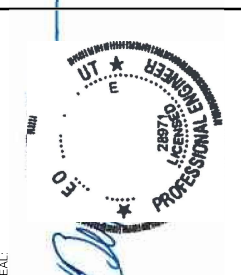
SHEET INDEX

SHEET NO	DESCRIPTION	REV	DATE	BY
G-001	TITLE SHEET	3	10/13/21	MR
C-002	GENERAL NOTES	3	10/13/21	MR
C-001	OVERALL SITE PLAN	3	10/13/21	MR
C-101	DETAILED SITE PLAN	3	10/13/21	MR
C-201	TOWER ELEVATION	3	10/13/21	MR
C-401	ANTENNA INFORMATION & SCHEDULE	3	10/13/21	MR
C-501	MOUNT DETAILS	3	10/13/21	MR
C-502	CONSTRUCTION DETAILS	3	10/13/21	MR
C-503	CONSTRUCTION DETAILS	3	10/13/21	MR
E-101	GROUNDING DETAILS & ELECTRICAL SCHEMATIC	3	10/13/21	MR
E-501	GROUNDING DETAILS	3	10/13/21	MR
E-502	GROUNDING DETAILS	3	10/13/21	MR
R-601	SUPPLEMENTAL			
R-602	SUPPLEMENTAL			
R-603	SUPPLEMENTAL			
R-604	SUPPLEMENTAL			

Dewberry®
 Dewberry Engineers Inc.
 89 SUMMER STREET
 SUITE 700
 BOSTON, MA 02170
 PHONE: 617.695.3400
 FAX: 617.695.3310

REV	DESCRIPTION	BY	DATE
Δ	PRELIM	MR	08/27/22
Δ	FINAL	MR	08/01/22
Δ	FINAL	MR	08/05/22
Δ	FINAL	MR	10/13/22
Δ	FINAL	MR	10/13/22

ATC SITE NUMBER:
 413849
 ATC SITE NAME:
 WINCHESTER PCS CT
 AT&T MOBILITY SITE NAME:
 MRCTB050163
 SITE ADDRESS:
 32 NORFOLK ROAD
 WINSTED, CT 06098



DATE DRAWN: 08/23/21
 ATC JOB NO: 13626831
 CUSTOMER ID: MRCTB050163
 CUSTOMER #: S1175

TITLE SHEET

SHEET NUMBER:
G-001

REVISION:
3

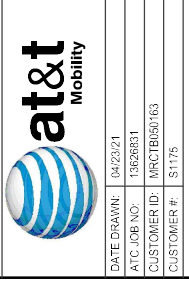
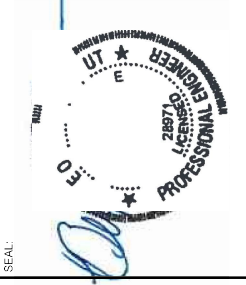
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A	FINAL	MR. DEZIZZ	08/01/12
A	FINAL	MR. DEZIZZ	08/05/12
A	FINAL	MR. DEZIZZ	10/13/12
A	FINAL	MR. DEZIZZ	10/13/12

ATC SITE NUMBER:
413849

ATC SITE NAME:
WINCHESTER PCS CT

AT&T MOBILITY SITE NAME:
MRCTB050163

SITE ADDRESS:
 32 NORFOLK ROAD
 WINSTED, CT 06098

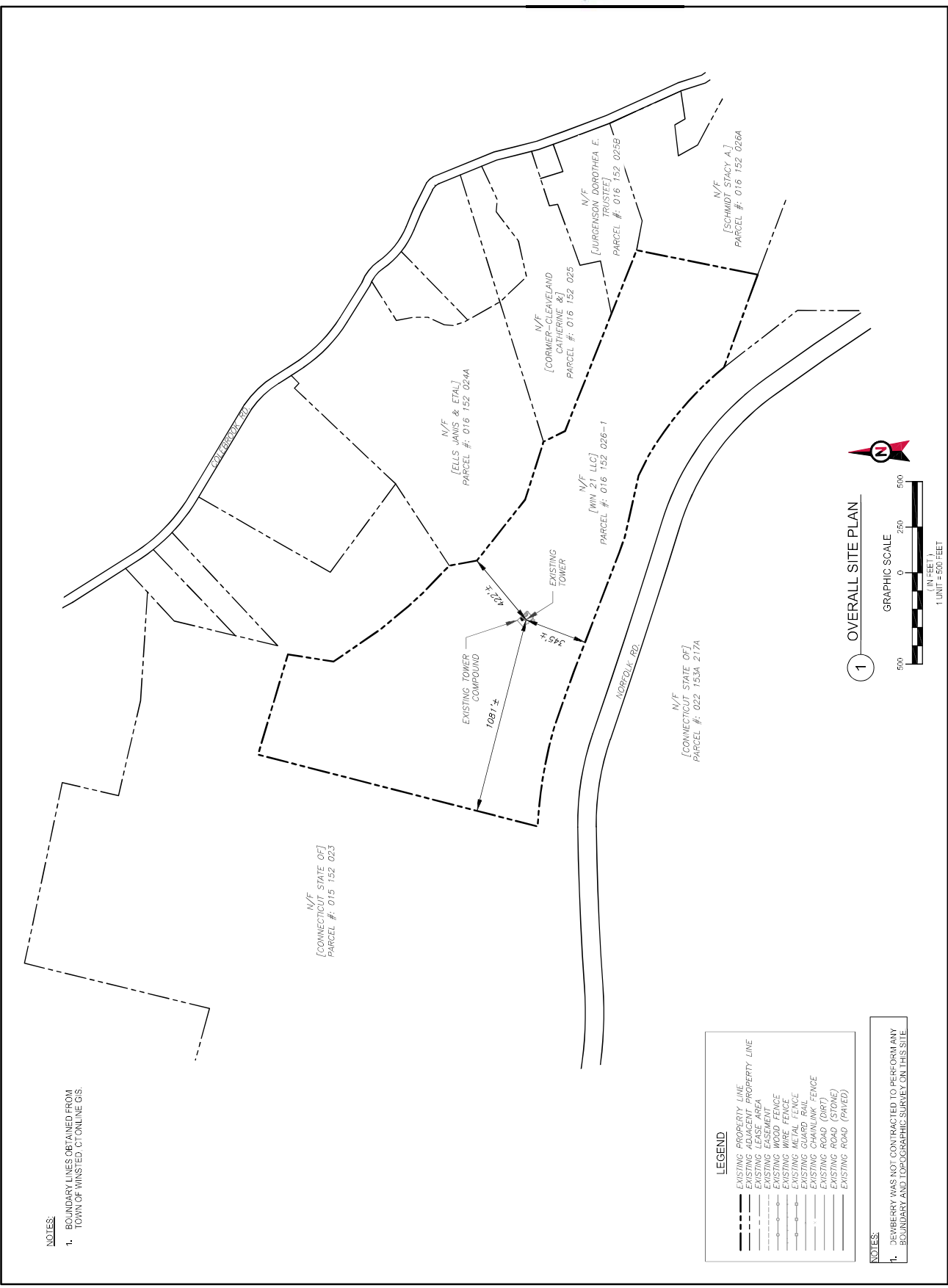


DATE DRAWN: 04/23/21
 ATC JOB NO: 1362631
 CUSTOMER ID: MRCTB050163
 CUSTOMER #: S1175

OVERALL SITE PLAN

SHEET NUMBER: **C-001**

REVISION: **3**



NOTES:
 1. BOUNDARY LINES OBTAINED FROM TOWN OF WINSTED CT ONLINE GIS.

LEGEND

- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING EASEMENT AREA
- EXISTING EASEMENT
- EXISTING WOOD FENCE
- EXISTING WIRE FENCE
- EXISTING METAL FENCE
- EXISTING CHAIN LINK FENCE
- EXISTING ROAD (DIRT)
- EXISTING ROAD (STONE)
- EXISTING ROAD (PAVED)

NOTES:
 1. DEWBERRY WAS NOT CONTRACTED TO PERFORM ANY BOUNDARY AND TOPOGRAPHIC SURVEY ON THIS SITE.



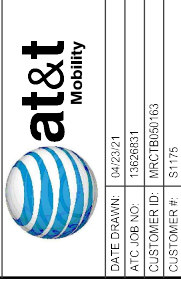
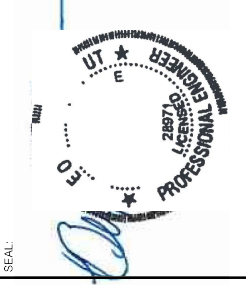
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B	FINAL	MR. 08/01/22	MR. 08/01/22
A	FINAL	MR. 08/05/22	MR. 08/05/22
A	FINAL	MR. 10/12/22	MR. 10/12/22
A	FINAL	MR. 10/13/22	MR. 10/13/22

ATC SITE NUMBER:
413849

ATC SITE NAME:
WINCHESTER PCS CT

AT&T MOBILITY SITE NAME:
MRCTB050163

SITE ADDRESS:
32 NORFOLK ROAD
WINSTED, CT 06898

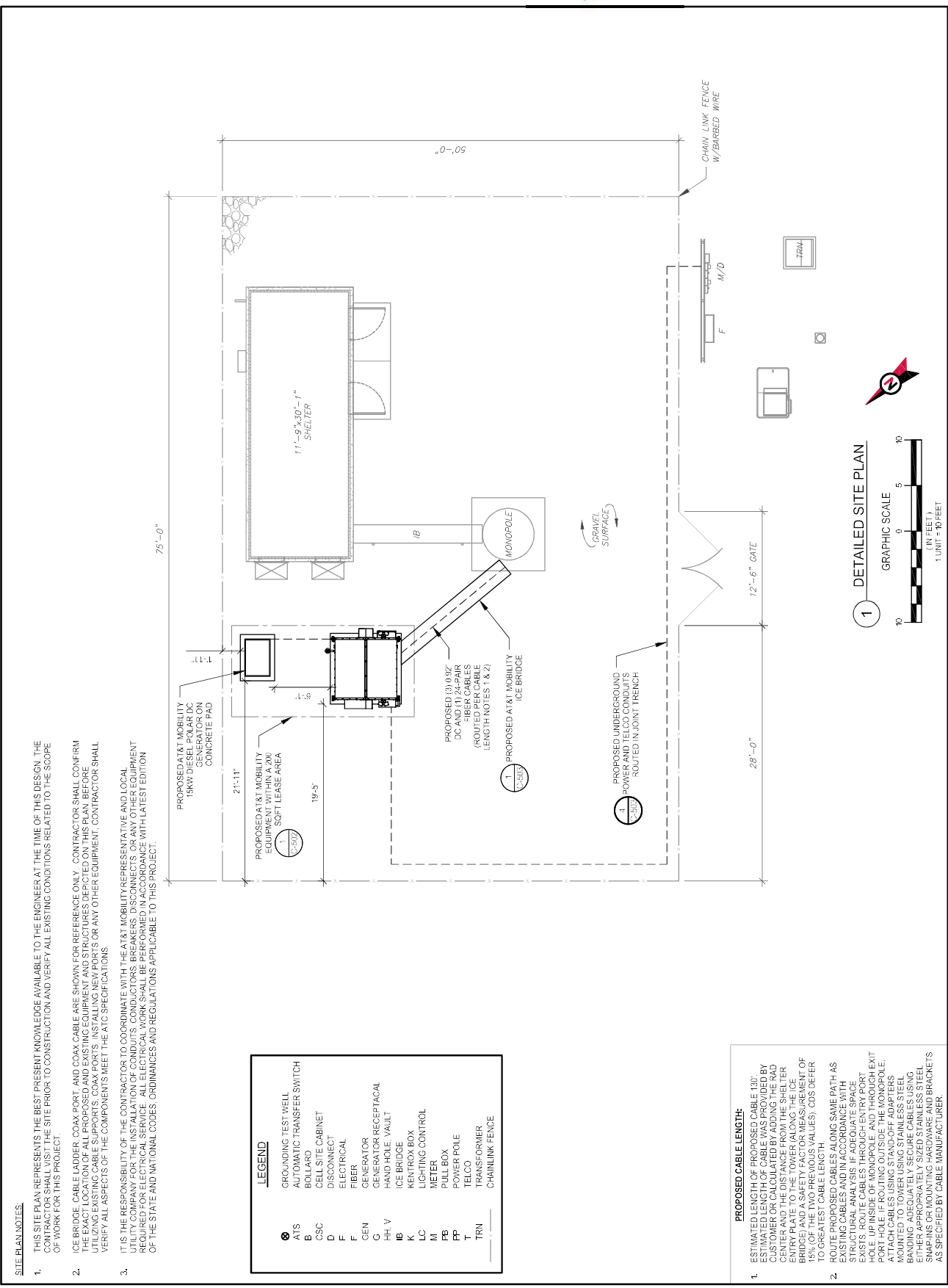


DATE DRAWN:	04/23/21
ATC JOB NO.:	1362831
CUSTOMER ID.:	MRCTB050163
CUSTOMER #.:	S1175

DETAILED SITE PLAN

SHEET NUMBER:
C-101

REVISION:
3



- SITE PLAN NOTES:**
- THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
 - ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE USE SHOULD BE REFERENCED ONLY. CONTRACTORS SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DESCRIBED ON THIS PLAN BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT. CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE AT&T MOBILITY REPRESENTATIVE AND LOCAL UTILITIES COMPANIES FOR THE INSTALLATION OF CONDUITS, POLES, PEGS, AND CONNECTIONS ON ANY EXISTING EQUIPMENT REQUIRED FOR ELECTRICAL SERVICE. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE STATE AND NATIONAL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS PROJECT.

LEGEND

⊕	GROUNDING TEST WELL
A	ATS
B	AUTOMATIC TRANSFER SWITCH
C	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
F	ELECTRICAL
F	FIBER
F	GENERATOR
G	GENERATOR RECEPTACLE
H	HH-V
H	HAND-HOLE VAULT
I	ICE BRIDGE
K	KENTROX BOX
LC	LIGHTING CONTROL
M	METER
PB	PULL BOX
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
---	CHAINLINK FENCE

- PROPOSED CABLE LENGTH:**
- ESTIMATED LENGTH OF PROPOSED CABLE 130'. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER CENTER TO THE MONOPOLE AND THROUGH THE ICE BRIDGE AND A SAFETY FACTOR (MEASUREMENT OF 15% OF THE TWO PREVIOUS VALUES). CDS DEFER TO GREATEST CABLE LENGTH.
 - ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS IF ADEQUATE SPACE AVAILABLE. CABLES SHALL BE RIGIDLY FASTENED TO HOLE UP INSIDE OF MONOPOLE AND THROUGH EXIT PORT HOLE IF ROUTING OUTSIDE THE MONOPOLE. ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BRACKETS. BRACKETS SHALL BE STAINLESS STEEL EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAPS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.

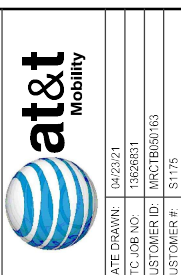
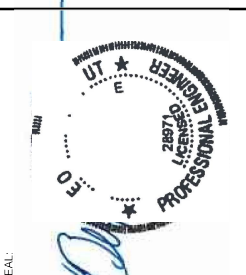
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2	FINAL	MR. DEW01Z	
3	FINAL	MR. DEW05Z	
4	FINAL	MR. DEW12Z	
5	FINAL	MR. DEW13Z	

ATC SITE NUMBER:
413849

ATC SITE NAME:
WINCHESTER PCS CT

AT&T MOBILITY SITE NAME:
MRCTB050163

SITE ADDRESS:
 32 NORFOLK ROAD
 WINSTED, CT 06898

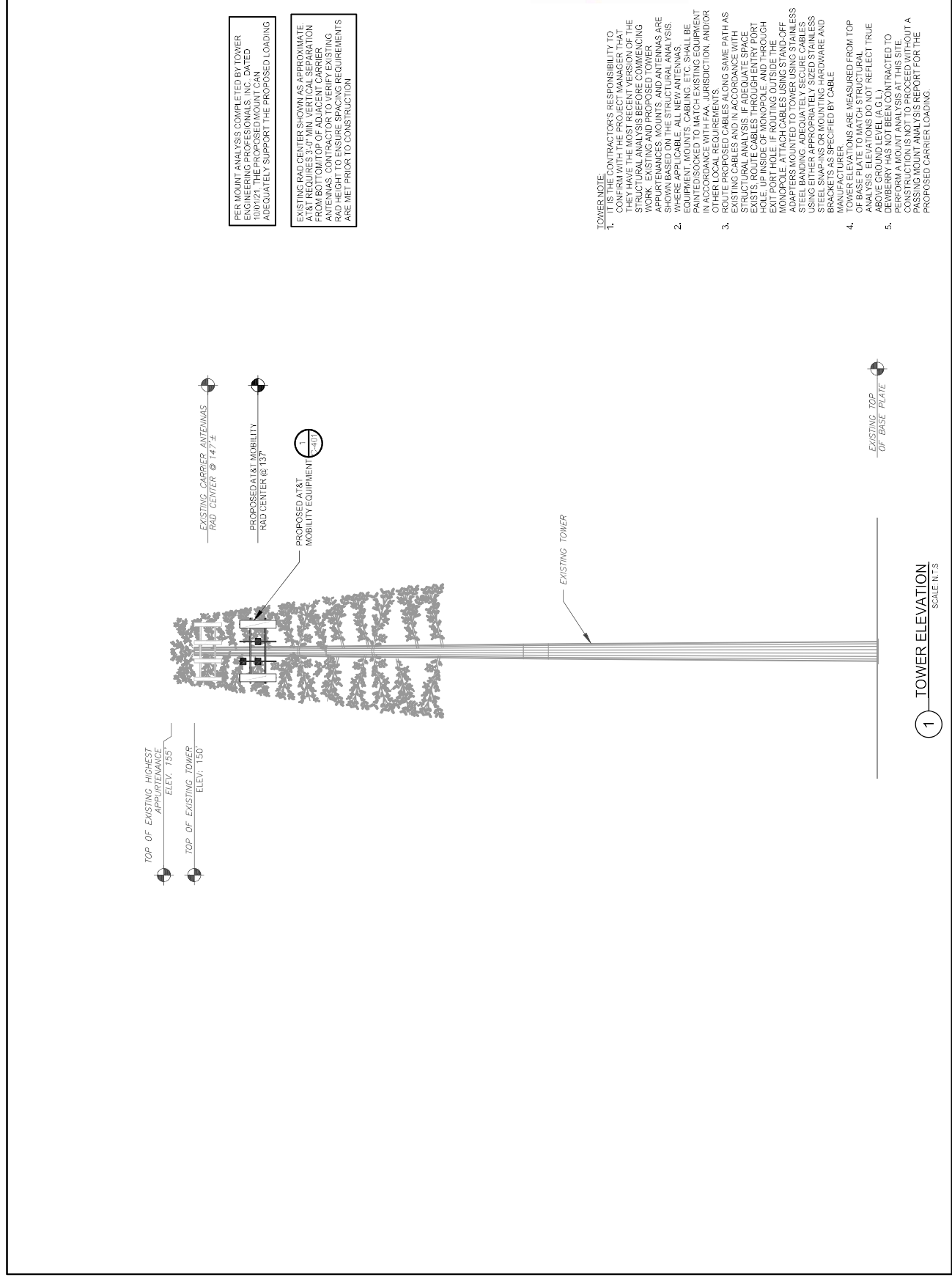


DATE DRAWN:	04/23/21
ATC JOB NO.:	1362831
CUSTOMER ID:	MRCTB050163
CUSTOMER #:	S1175

TOWER ELEVATION

SHEET NUMBER:
C-201

REVISION:
3



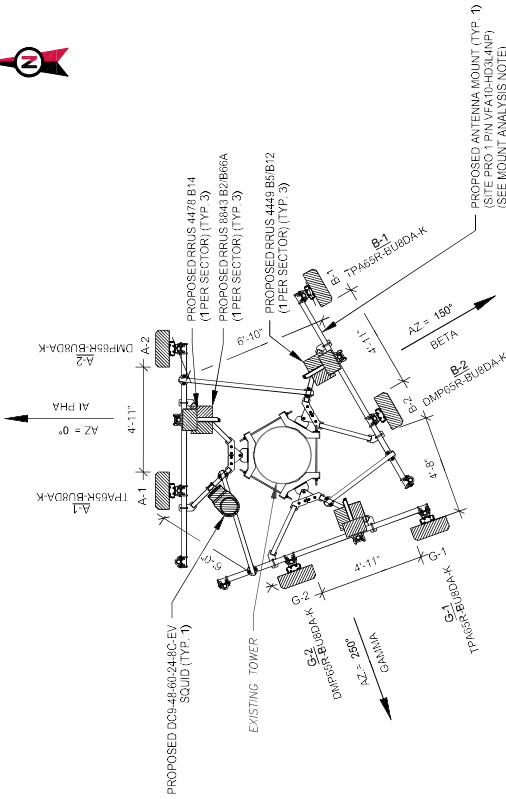
PER MOUNT ANALYSIS COMPLETED BY TOWER ENGINEERING PROFESSIONALS, INC., DATED 04/23/21, THE PROPOSED EQUIPMENT IS FOUND TO ADEQUATELY SUPPORT THE PROPOSED LOADING.

EXISTING RAD CENTER SHOWN AS APPROXIMATE AT&T REQUIRES 3'-0" MIN. VERTICAL SEPARATION FROM BOTTOM OF ADJACENT CARRIER ANTENNAS. CONSIDER VERTICAL EXISTING ANTENNAS TO ENSURE SEPARATION REQUIREMENTS ARE MET PRIOR TO CONSTRUCTION.

- TOWER NOTE:**
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE PROPOSED ELEVATIONS THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN ON THIS DRAWING. STRUCTURAL ANALYSIS WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA JURISDICTION, AND/OR OTHER LOCAL REGULATIONS. ALL CABLES SHALL BE PROTECTED BY CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH MONOPOLE. ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL BANDING OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.
 - TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE HEIGHTS OF TOWER. THE CONTRACTOR SHALL PERFORM A MOUNT ANALYSIS AT THIS SITE. CONSTRUCTION IS NOT TO PROCEED WITHOUT A PASSING MOUNT ANALYSIS REPORT FOR THE PROPOSED CARRIER LOADING.

1 TOWER ELEVATION
 SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY TOWER
 ENGINEER, THE PROPOSED MOUNT CAN BE
 100% UTI, THE PROPOSED MOUNT CAN
 ADEQUATELY SUPPORT THE PROPOSED LOADING



1 FINAL ANTENNA PLAN
 SCALE: N.T.S.

LOCATION			ANTENNA SUMMARY			NON-ANTENNA SUMMARY		
SECTOR	RAD	AZ	ANTENNA	BAND	MICHELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	137°	0°	A1	TPA45R-BURDA-K	AW5WCS	0/2	RRUS 4478 B14	ADD
			A2	DMP45R-BURDA-K	700/850/PCS	0/2	RRUS 4449 B5/B12	ADD
BETA	137°	150°	B1	TPA45R-BURDA-K	AW5WCS	0/2	RRUS 8843 B2/B66A	ADD
			B2	DMP45R-BURDA-K	700/850/PCS	0/2	RRUS 4478 B14	ADD
GAMMA	137°	250°	C1	TPA45R-BURDA-K	AW5WCS	0/2	RRUS 8843 B2/B66A	ADD
			C2	DMP45R-BURDA-K	700/850/PCS	0/2	RRUS 4478 B14	ADD

1. CONFIRM WITH AT&T MOBILITY REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG).
 2. CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.

2 ANTENNA SCHEDULE

CABLE LENGTHS FOR LUMBER
 FIBER DISTRIBUTION/VP TO RRU: 15'
 RRU TO ANTENNA: 10'

PROPOSED FIBER DISTRIBUTION/VP BOX		PROPOSED CABLING SUMMARY	
MODEL NUMBER	STATUS	DC	FIBER
(1) DC8-48-60-24-8C-EV	ADD	(3) 0.92'	(1) 24-PAIR

American Tower
 Dewberry Engineers Inc.
 89 SUMMER STREET
 SUITE 700
 BOSTON, MA 02110
 PHONE: 617.685.3100
 FAX: 617.685.3310

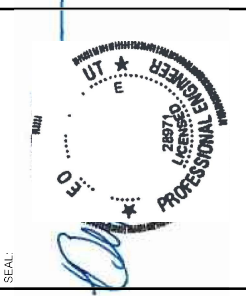
REV.	DESCRIPTION	BY	DATE
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2	FINAL	MR. DMZ72Z	08/01/21
3	FINAL	MR. DMZ72Z	08/01/21
4	FINAL	MR. DMZ72Z	08/01/21
5	FINAL	MR. DMZ72Z	08/01/21

ATC SITE NUMBER:
413849

ATC SITE NAME:
WINCHESTER PCS CT

AT&T MOBILITY SITE NAME:
MRCTB050163

SITE ADDRESS:
 32 NORFOLK ROAD
 WINSTED, CT 06098



DATE DRAWN: 08/23/21
 ATC JOB NO: 1362831
 CUSTOMER ID: MRCTB050163
 CUSTOMER #: S1175

ANTENNA INFORMATION & SCHEDULE

SHEET NUMBER:	C-401	REVISION:	3
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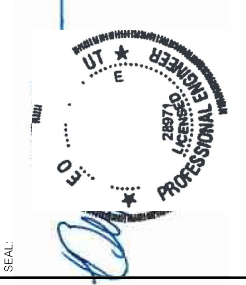
REV.	DESCRIPTION	BY	DATE
A	PRELIM	MR. DEZIZZ	
A	FINAL	MR. DEBOST	
A	FINAL	MR. DEBOST	
A	FINAL	MR. DEBOST	
A	FINAL	MR. DEBOST	

ATC SITE NUMBER:
413849

ATC SITE NAME:
WINCHESTER PCS CT

AT&T MOBILITY SITE NAME:
MRCTB050163

SITE ADDRESS:
 32 NORFOLK ROAD
 WINSTED, CT 06098

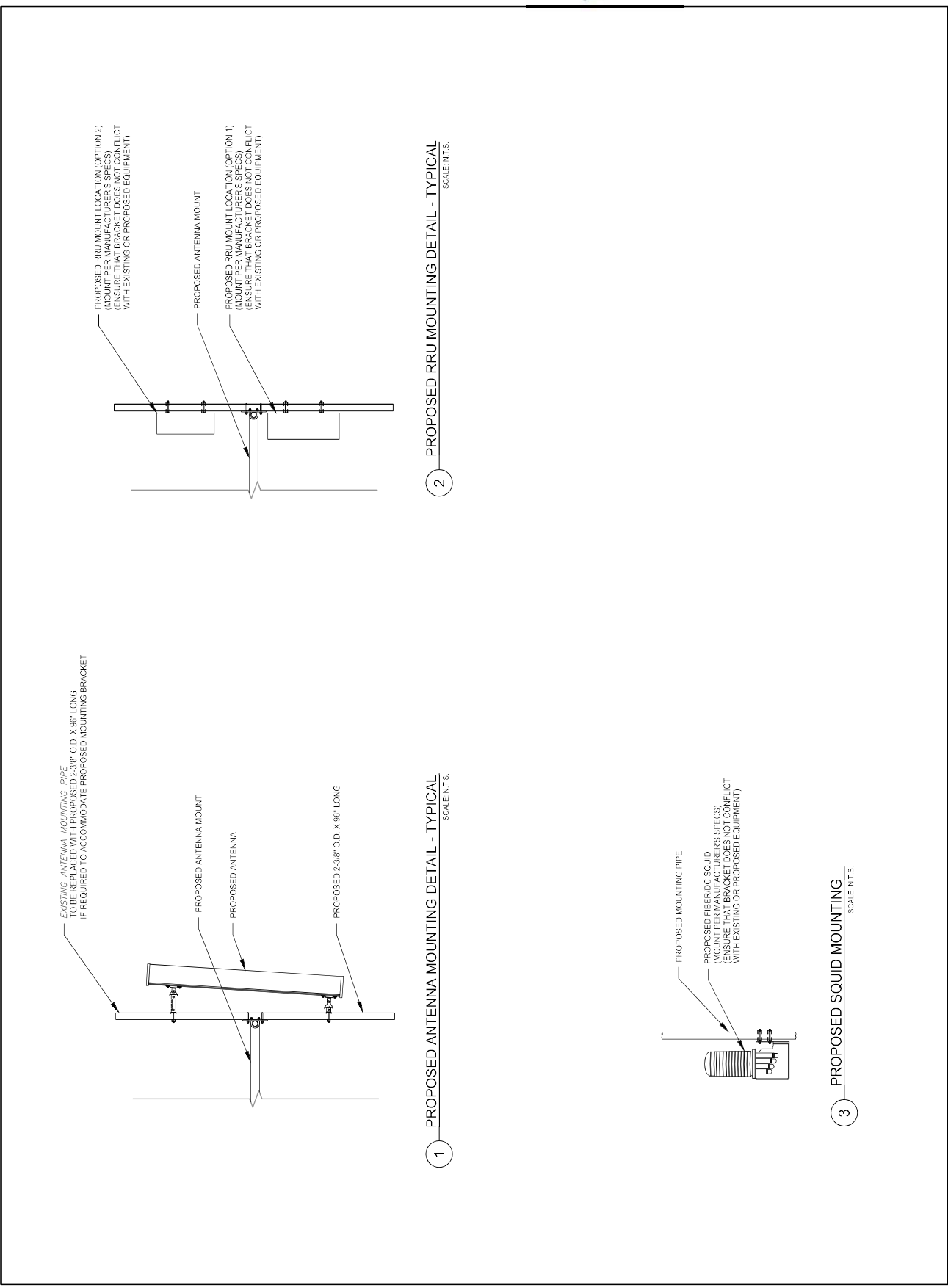


at&t
 Mobility

DATE DRAWN: 04/23/21
 ATC JOB NO: 1362831
 CUSTOMER ID: MRCTB050163
 CUSTOMER #: S1175

MOUNT DETAILS

SHEET NUMBER: **C-501**
 REVISION: **3**



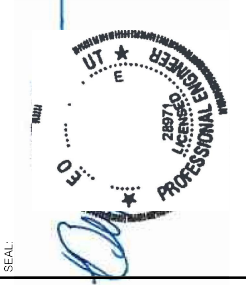
REV.	DESCRIPTION	BY	DATE
1	PRELIM	MR	04/27/22
2	FINAL	MR	08/01/22
3	FINAL	MR	08/05/22
4	FINAL	MR	10/13/22
5	FINAL	MR	10/13/22

ATC SITE NUMBER:
413849

ATC SITE NAME:
WINCHESTER PCS CT

AT&T MOBILITY SITE NAME:
MRCTB050163

SITE ADDRESS:
 32 NORFOLK ROAD
 WINSTED, CT 06098



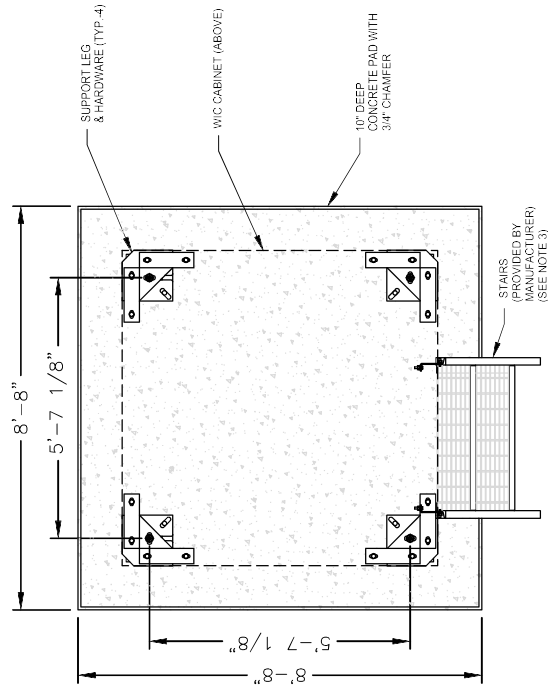
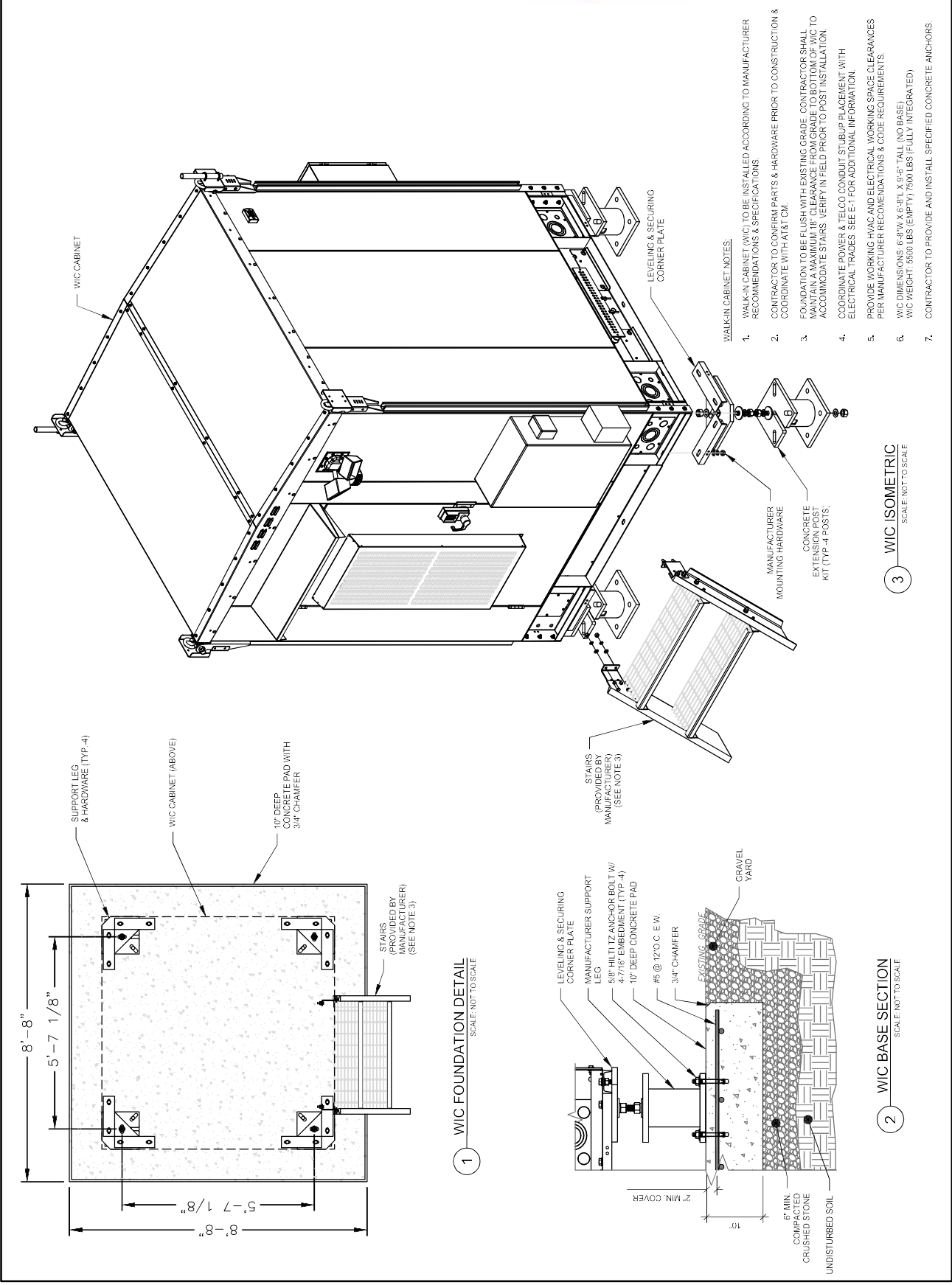
at&t
 Mobility

DATE DRAWN: 04/23/21
 ATC JOB NO: 1362831
 CUSTOMER ID: MRCTB050163
 CUSTOMER #: S1175

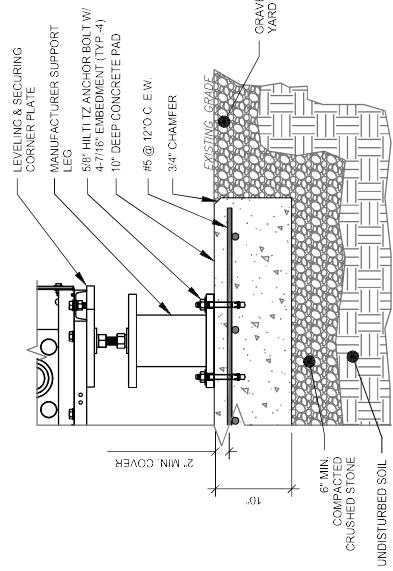
CONSTRUCTION DETAILS

SHEET NUMBER: **C-502**

REVISION: **3**



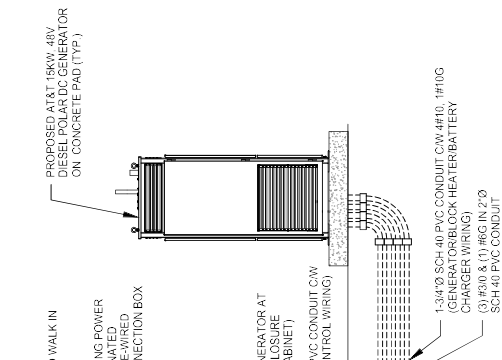
1 WIC FOUNDATION DETAIL
 SCALE: NOT TO SCALE



2 WIC BASE SECTION
 SCALE: NOT TO SCALE

- WALK-IN CABINET NOTES:**
1. WALK-IN CABINET (WIC) TO BE INSTALLED ACCORDING TO MANUFACTURER RECOMMENDATIONS & SPECIFICATIONS.
 2. CONTRACTOR TO CONFIRM PARTS & HARDWARE PRIOR TO CONSTRUCTION & COORDINATE WITH AT&T C/I.
 3. FOUNDATION TO BE FLUSH WITH EXISTING GRADE. CONTRACTOR SHALL MAINTAIN A MAXIMUM 18" CLEARANCE FROM GRADE TO BOTTOM OF WIC TO ACCOMMODATE STAIRS. VERIFY IN FIELD PRIOR TO POST INSTALLATION.
 4. COORDINATE POWER & TELCO CONDUIT STUB-UP PLACEMENT WITH ELECTRICAL TRADES. SEE E-1 FOR ADDITIONAL INFORMATION.
 5. PROVIDE WORKING HVAC AND ELECTRICAL WORKING SPACE CLEARANCES PER MANUFACTURER RECOMMENDATIONS & CODE REQUIREMENTS.
 6. WIC DIMENSIONS: 6'-0" W X 6'-0" X 9'-6" TALL (NO BASE). WIC WEIGHT: 5500 LBS (EMPTY) 7000 LBS (FULLY INTEGRATED).
 7. CONTRACTOR TO PROVIDE AND INSTALL SPECIFIED CONCRETE ANCHORS.

3 WIC ISOMETRIC
 SCALE: NOT TO SCALE



GENERAL ELECTRICAL NOTES

- ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY & LOCAL CODES, O.S.H.A., N.E.C., NFPA #70, AT&T MOBILITY SPECIFICATIONS, & THE SPECIFICATIONS DETAILED IN THESE PLANS.
- SUBMITTAL OF BID INDICATES CONTRACTOR IS COORDINATE ALL JOBS & THE CONDITIONS & WORK TO BE PERFORMED UNDER THIS CONTRACT.
- CONTRACTOR SHALL PERFORM ALL VERIFICATION, OBSERVATION, TESTS & EXAMINATION WORK PRIOR TO THE COMMENCEMENT OF THE ELECTRICAL WORK. CONTRACTOR SHALL ISSUE WRITTEN NOTICE OF ALL PROBLEMS TO THE PROJECT MANAGER LISTING ALL DEFICIENCIES, FAULTY EQUIPMENT & DISCREPANCIES.
- THESE PLANS ARE PRELIMINARY & ONLY FOR GENERAL INFORMATION. CONTRACTOR SHALL SECURE THAT ACCESS TO EQUIPMENT IS MAINTAINED IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS & ALL APPLICABLE CODES.
- EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, J-BOX, SWITCH-BOX, ETC., IN COMPLIANCE WITH OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA).
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION, TOOLS, TRANSPORTATION, ETC., FOR THE JOB. SHOPPING ACTUAL DIMENSIONS, ROUTINGS & VOLTAGES.
- ALL MATERIALS & EQUIPMENT SHALL BE NEW & IN PERFECT CONDITION WHEN INSTALLED & SHALL BE OF THE BEST GRADE & OF THE SAME LABORATORY & SHALL BEAR THE INSPECTION LABEL "Y" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, IEEE, & NFPA.
- ALL CONDUIT INSTALLED MAY BE SURFACE MOUNTED UNLESS OTHERWISE NOTED.
- COMPLETE JOB SHALL BE CURRENTLY DONE FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE DEFECTIVE DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
- ALL "CONDUIT ONLY" (C.O.) INSTALLATIONS SHALL HAVE A 3/8" PULL WIRE OR ROPE.
- CONTRACTOR SHALL PROVIDE AT&T MOBILITY MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB. SHOPPING ACTUAL DIMENSIONS, ROUTINGS & VOLTAGES.
- ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.
- POWER WIRE & CABLE CONDUCTIONS SHALL BE COPPER #12 AWG MINIMUM UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS. CONDUCTIONS #10 AWG & SMALLER SHALL BE SOLID.
- ALL CONDUCTIONS LARGER THAN #10 AWG SHALL BE STRANDED COPPER WITH 100% INSULATION UNLESS NOTED OTHERWISE.
- ALL WATING SURFACES OF GROUND CONNECTIONS SHALL BE CLEANED SMOOTH & COATED WITH AN ANTI-OXIDANT PRIOR TO ATTACHMENT.
- ALL GROUND CONNECTIONS BELOW GRADE MUST BE EXOTHERMICALLY YELDED (CAB YIELD OR APPROVED EQUAL).
- ALL EXTERIOR GROUNDING CONDUCTIONS SHALL BE #2 AWG SOLID TINED BARE COPPER WIRE UNLESS NOTED OTHERWISE.
- ALL CIRCUIT BREAKERS, FUSES & ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THAN THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED & A MINIMUM I.C. COORDINATE SHORT CIRCUIT REDUCTION WITH LOCAL UTILITY COMPANY.
- CONTRACTOR SHALL PATCH, REPAIR, & PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
- ALL UNFINISHED FLOOR SHALL BE CONCRETE OR OTHER PERMANENT FLOORING OR FINISHES THROUGH THE FLOOR OR CONDUIT DAMAGED UNDER ANY C.O. INSTALLATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR FINISHING STEEL THAT IS NOT DAMAGED BY CUT OR DAMAGED UNDER ANY C.O. INSTALLATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR FINISHING STEEL THAT IS NOT DAMAGED BY CUT OR DAMAGED UNDER ANY C.O. INSTALLATIONS.
- LOCATION OF TENDONS AND/OR REINFORCING SHALL BE NOTED IN THE PLAN & THEREFORE, SHALL BE SEARCHED FOR BY APPROPRIATE METHODS & EQUIPMENT VARY FROM OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING AND/OR STEEL TENDONS.
- REINFORCEMENTS IN FIRE RATED WALLS SHALL BE SEALED IN ACCORDANCE WITH ALL APPLICABLE CODES.
- ALL EQUIPMENT'S SHORT-CIRCUIT CURRENT RATING SHALL EXCEED AVAILABLE FAULT CURRENT PER UTILITY.

- RIGID CONDUIT SHALL BE UL LISTED, GALVANIZED, PVC COATED WITH ZINC, INTERIOR & SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE CONTACT WITH EARTH SHALL BE 1/2" LAPPED RAPPED WITH HUNTS WARP PROCESSING 3.
- ELECTRICAL METALLIC TUBING SHALL HAVE UL LABEL. FITTINGS SHALL BE GALD RING COMPRESSION TYPE. FITTING SHALL BE "J" OR "K" OR "S" OR "E" TYPE. SEAL TIGHT FLEXIBLE CONDUIT SHALL HAVE UL LABEL. FITTINGS MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "J" OR "K" OR "S" OR "E" TYPE. SEAL TIGHT FLEXIBLE CONDUIT SHALL HAVE FULL SIZE GROUND WIRE.
- ALL EXPOSED CONDUITS SHALL BE PROTECTED FROM PHYSICAL DAMAGE BY THE USE OF PROTECTIVE DEVICES SUCH AS RIGID OR FLEXIBLE ANGLES TO BEING LOCKED TO BEANS, HEBBY EACH END OF ALL EXPOSED CONDUIT WITH ENGINEER PRIOR TO INSTALLATION.
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS.
- CONTRACTOR SHALL COORDINATE THE ELECTRICAL SERVICE WITH AT&T MOBILITY & LOCAL UTILITY.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY NEC & ALL APPLICABLE CODES.
- GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED 5 OHMS. IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE OWNER FOR FURTHER INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE. CONTRACTOR SHALL SUBMIT TO THE PROJECT MANAGER ALL TEST REPORTS & ONE COMPLETE SET OF PRINTS SHOWING "INSTALLED WORK".
- UPON COMPLETION OF WORK, CONDUIT CONTINUITY & FAIL OF POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAR REPAIRS OF ALL DEFECTS RESULTING FROM WORK & LEAVE WORK IN A COMPLETE & UNDAUNAGED CONDITION.
- ALL EXPOSED GROUND WIRES ROUTED ALONG THE SIDE OF EQUIPMENT SHELTERS OR ROUTED OVER CONCRETE FOUNDATIONS OR OTHER EXISTING STRUCTURES SHALL BE INSTALLED PROPERLY AND PROTECTED 3" TO 4" WITH PVC CONDUIT.
- CONTRACTOR SHALL NOT DISTURB EXISTING GROUNDING SYSTEM. ANY DAMAGE SHALL BE REPAIRED IMMEDIATELY AT NO ADDITIONAL COST.
- ALL ELEMENTS OF CEILING & AT&T MOBILITY UTILITY BACKBOARD MUST BE BUNDLED & LUMPERED TO GROUNDING COMPONENTS OF THESE SYSTEMS.
- ALL INTERIOR CABLES & WIRING SHALL BE NEATLY ROUTED IN OVER-HEAD LADDER BACK & FASTENED TO LADDER BACK.
- ALL GROUNDING CONDUCTORS SHALL BE ROUTED DOWNWARDS FROM POINT OF ORIGIN TO TERMINATION POINT (GROUND BAR, GROUND RING, ETC.)
- GROUNDING CONDUCTORS SHALL NOT REVERSE DIRECTION EXCEPT THROUGH BURIED GROUND RINGS. OTHER EXCEPTIONS NEED TO BE APPROVED BY AT&T MOBILITY CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
- GROUNDING CONDUCTORS SHALL HAVE A MINIMUM BENDING RADIUS OF 8".
- ALL CONNECTIONS TO GROUND PLATES SHALL BE CAP WELDED TO THE CENTER OF THE PLATE. ALL DETAILS SHOWING CONNECTIONS TO GROUND RODS ARE ALSO VALID FOR SIMILAR CONNECTIONS TO GROUND PLATES.
- FOLLOWING COMPLETION OF WORK, PROVIDE OWNER WITH AS-BUILT DRAWINGS SHOWING TELEPHONE & ELECTRIC LOCATIONS.
- WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE.
- COORDINATE WITH UTILITY LOCAL ELECTRICAL INSPECTOR FOR FINAL POWER CONNECTION.
- UTILITY WILL SUPPLY METER. COORDINATE WITH UTILITY FOR METER TYPE & INTERCONNECTION.
- ALL EXISTING UNDERGROUND LINES ON SITE TO BE LOCATED PRIOR TO CONSTRUCTION. CALL DISASSEMBLY 488-DIGSAFE OR 811 PRIOR TO CONSTRUCTION.
- SEAL ALL SERVICE ENTRANCES INTO SHELTER FOLLOWING INSTALLATION.
- COORDINATE WITH LOCAL TELEPHONE COMPANY FOR ALL ROUTING & DESIGNS.
- CONTRACTOR TO VERIFY CONTROL WIRING SIZE WITH GENERATOR MANUFACTURER PRIOR TO CONSTRUCTION.

ELECTRICAL & TELEPHONE CONTACTS	
POWER COMPANY:	UNKNOWN
PHONE NUMBER:	UNKNOWN
TELEPHONE COMPANY:	PENDING AT&T ASSIGNMENT
PHONE NUMBER:	TBD

NOTE:
ALL EQUIPMENT'S SHORT-CIRCUIT CURRENT RATING SHALL EXCEED AVAILABLE FAULT CURRENT PER UTILITY.

REV.	DESCRIPTION	BY	DATE
1	PRELIM	MR. [REDACTED]	08/27/22
2	FINAL	MR. [REDACTED]	08/01/22
3	FINAL	MR. [REDACTED]	08/05/22
4	FINAL	MR. [REDACTED]	08/11/22
5	FINAL	MR. [REDACTED]	08/13/22

AT&T SITE NUMBER:
413849

AT&T SITE NAME:
WINCHESTER PCS CT

AT&T MOBILITY SITE NAME:
MRCITB050163

SITE ADDRESS:
32 NORFOLK ROAD
WINSTED, CT 06098



DATE DRAWN: 08/23/21
AT&T JOB NO.: 1362831
CUSTOMER ID: MRCITB050163
CUSTOMER #: S1175

GROUNDING DETAILS & ELECTRICAL SCHEMATIC

SHEET NUMBER: **E-101**

REVISION: **3**

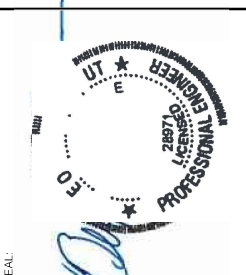
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B	FINAL	MR. DR8012Z	08/01/12
C	FINAL	MR. DR8052Z	08/05/12
D	FINAL	MR. DR122Z	10/11/12
E	FINAL	MR. DR132Z	11/13/12

ATC SITE NUMBER:
413849

ATC SITE NAME:
WINCHESTER PCS CT

AT&T MOBILITY SITE NAME:
MRCITB050163

SITE ADDRESS:
32 NORFOLK ROAD
WINSTED, CT 06098

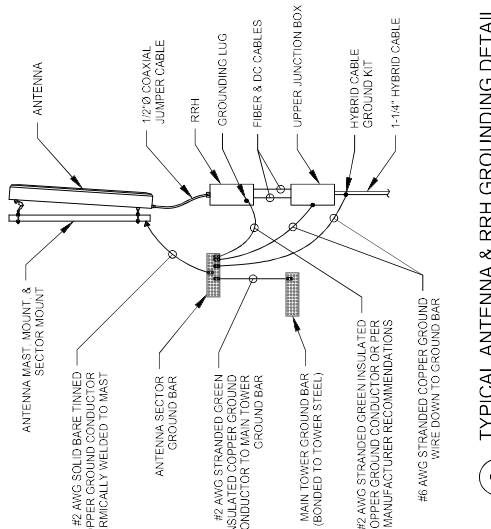


DATE DRAWN:	04/23/21
ATC JOB NO.:	1362831
CUSTOMER ID.:	MRCITB050163
CUSTOMER #:	S1175

GROUNDING DETAILS

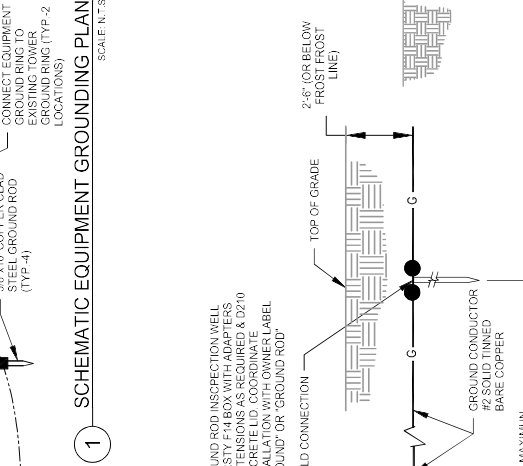
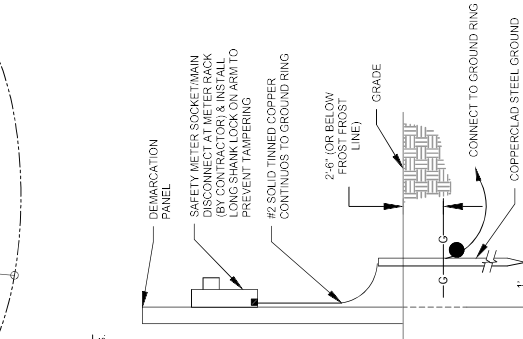
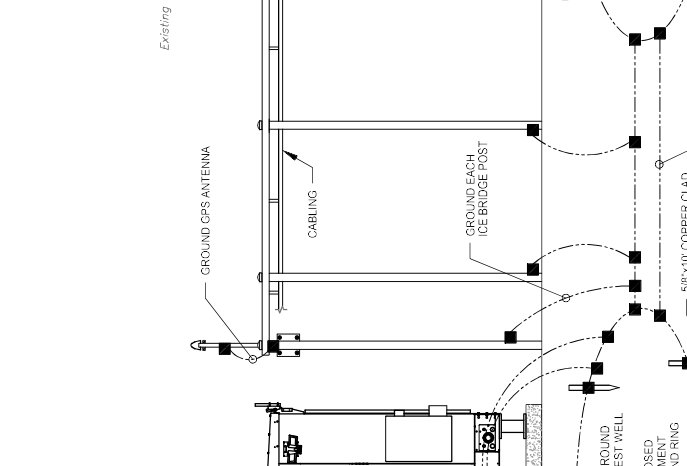
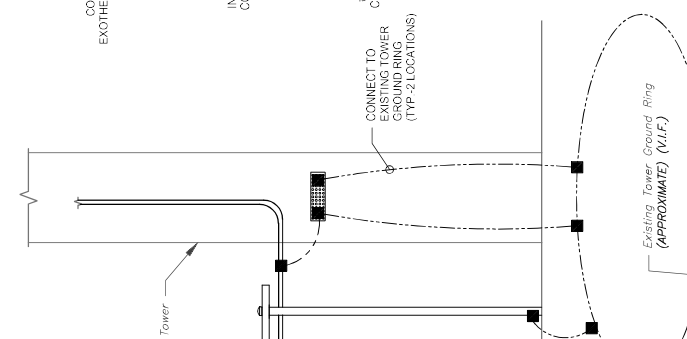
SHEET NUMBER:
E-501

REVISION:
3



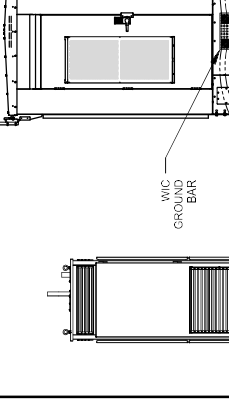
GROUNDING GENERAL NOTES

- ALL DOWN CONDUCTORS & THE GROUNDING ROD CONDUCTOR SHALL BE #2 AWG SOLID BARE TINNED COPPER UNLESS OTHERWISE NOTED. ALL CONNECTIONS TO GROUNDING ROD SHALL BE EXOTHERMICALLY WELDED. CONDUCTOR SHALL BE AT A MINIMUM DEPTH BELOW GRADE OF 3' OR TO LEDE. MINIMUM BEND RADIUS SHALL BE 8 INCHES. CONDUCTOR SHALL BE AT LEAST 24 INCHES FROM ANY FOUNDATION UNLESS OTHERWISE NOTED.
- GROUND RODS SHALL BE 5/8" DIAMETER COPPER CLAD BARBER T&B ER70C OR EQUIVALENT. TOP OF ROD SHALL BE A MINIMUM OF 3" BELOW GRADE. IF LEDGES ENCOUNTERED, INSTALL GROUND ROD AT AN ANGLE. ELECTRICAL METER GROUND ROD EXCEPTED.
- WHERE MECHANICAL CONNECTIONS ARE SPECIFIED, BOLTED COMPRESSION-TYPE CLAMPS OR SPLIT-BOLT TYPE CONNECTORS SHALL BE USED.
- GROUND OFF GALVANIZING IN AFFECTED AREA. EXOTHERMICALLY WELDED CONDUCTOR AT 6" ABOVE GRADE OR FOUNDATION, WHICHEVER IS HIGHER, COLD-GALV AFTER. EXOTHERMICALLY WELDED OTHER END TO GROUND RING.
- INSTALL GROUNDING KITS AT ANTENNA CENTERLINE & TOWER EXIT POINTS. GROUND HYBRID/COAX LINES EXOTHERMICALLY WELDED #2 DOWN CONDUCTOR TO PLATES. RUN DOWN TOWER & TIE INTO GROUNDING SYSTEM.
- ALL GROUNDING WORK SHALL COMPLY WITH U.S. CELLULAR STANDARDS FOLLOWING SECTION OF YORKER GROUND SYSTEM MUST BE TESTED & SHOWN TO HAVE A RESISTANCE OF 5 OHMS OR LESS. SUBMIT AN INDEPENDENT FALL POTENTIAL TESTING REPORT.
- CONTRACTOR SHALL HAND-DIG IN AREAS AROUND EXISTING UTILITIES.
- NOTIFY CONSTRUCTION ENGINEER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SOIL CONDITIONS.
- GROUNDING RING IS SHOWN AS SCHEMATIC ONLY. IT IS DESIGNED WITHOUT BENEFIT OF RESISTIVITY TESTING & DOES NOT NECESSARILY REPRESENT A GROUNDING SYSTEM TO MEET ANY SPECIFIC GROUND RESISTANCE.
- PRIOR TO POURING CONCRETE, ALL REBAR LOCATED NEAR THE BOTTOM OF THE FOUNDATION SHALL BE BONDED TOGETHER TO FORM A SINGLE GROUNDING ELECTRODE. BY STEEL TIES OF OTHER EFFECTIVE MEANS APPROVED BY N.E.C. & STRUCTURAL ENGINEER & BONDED TO THE GROUND RING AS DETAILED IN THESE PLANS (INSPECTION MAY BE REQUIRED PRIOR TO POURING CONCRETE & MUST BE COORDINATED BY CONTRACTOR).
- IN ACCORDANCE WITH N.E.C. REQUIREMENTS, ALL GROUNDING ELECTRODES PRESENT ON SITE SHALL BE BONDED TOGETHER (REFERENCE N.E.C. ARTICLE 250.50).



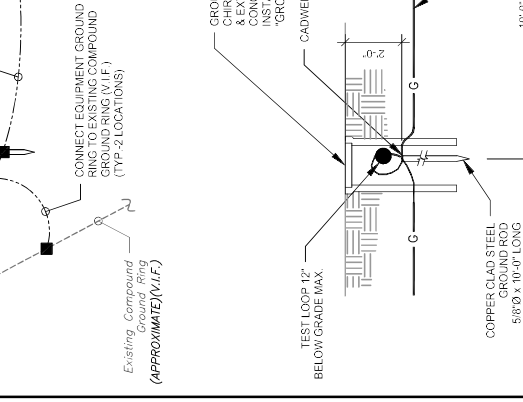
GROUNDING LEGEND

- GROUND BAR
- GROUND COPPER WIRE SIZE AS NOTED
- MECHANICAL GROUND CONNECTION
- 5/8"x10" COPPER CLAD STEEL GROUND ROD
- EXOTHERMIC (CADWELDED) CONNECTION
- GROUND TEST WELL
- Existing Ground Ring (V.I.F.)



GROUNDING GENERAL NOTES

- ALL DOWN CONDUCTORS & THE GROUNDING ROD CONDUCTOR SHALL BE #2 AWG SOLID BARE TINNED COPPER UNLESS OTHERWISE NOTED. ALL CONNECTIONS TO GROUNDING ROD SHALL BE EXOTHERMICALLY WELDED. CONDUCTOR SHALL BE AT A MINIMUM DEPTH BELOW GRADE OF 3' OR TO LEDE. MINIMUM BEND RADIUS SHALL BE 8 INCHES. CONDUCTOR SHALL BE AT LEAST 24 INCHES FROM ANY FOUNDATION UNLESS OTHERWISE NOTED.
- GROUND RODS SHALL BE 5/8" DIAMETER COPPER CLAD BARBER T&B ER70C OR EQUIVALENT. TOP OF ROD SHALL BE A MINIMUM OF 3" BELOW GRADE. IF LEDGES ENCOUNTERED, INSTALL GROUND ROD AT AN ANGLE. ELECTRICAL METER GROUND ROD EXCEPTED.
- WHERE MECHANICAL CONNECTIONS ARE SPECIFIED, BOLTED COMPRESSION-TYPE CLAMPS OR SPLIT-BOLT TYPE CONNECTORS SHALL BE USED.
- GROUND OFF GALVANIZING IN AFFECTED AREA. EXOTHERMICALLY WELDED CONDUCTOR AT 6" ABOVE GRADE OR FOUNDATION, WHICHEVER IS HIGHER, COLD-GALV AFTER. EXOTHERMICALLY WELDED OTHER END TO GROUND RING.
- INSTALL GROUNDING KITS AT ANTENNA CENTERLINE & TOWER EXIT POINTS. GROUND HYBRID/COAX LINES EXOTHERMICALLY WELDED #2 DOWN CONDUCTOR TO PLATES. RUN DOWN TOWER & TIE INTO GROUNDING SYSTEM.
- ALL GROUNDING WORK SHALL COMPLY WITH U.S. CELLULAR STANDARDS FOLLOWING SECTION OF YORKER GROUND SYSTEM MUST BE TESTED & SHOWN TO HAVE A RESISTANCE OF 5 OHMS OR LESS. SUBMIT AN INDEPENDENT FALL POTENTIAL TESTING REPORT.
- CONTRACTOR SHALL HAND-DIG IN AREAS AROUND EXISTING UTILITIES.
- NOTIFY CONSTRUCTION ENGINEER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SOIL CONDITIONS.
- GROUNDING RING IS SHOWN AS SCHEMATIC ONLY. IT IS DESIGNED WITHOUT BENEFIT OF RESISTIVITY TESTING & DOES NOT NECESSARILY REPRESENT A GROUNDING SYSTEM TO MEET ANY SPECIFIC GROUND RESISTANCE.
- PRIOR TO POURING CONCRETE, ALL REBAR LOCATED NEAR THE BOTTOM OF THE FOUNDATION SHALL BE BONDED TOGETHER TO FORM A SINGLE GROUNDING ELECTRODE. BY STEEL TIES OF OTHER EFFECTIVE MEANS APPROVED BY N.E.C. & STRUCTURAL ENGINEER & BONDED TO THE GROUND RING AS DETAILED IN THESE PLANS (INSPECTION MAY BE REQUIRED PRIOR TO POURING CONCRETE & MUST BE COORDINATED BY CONTRACTOR).
- IN ACCORDANCE WITH N.E.C. REQUIREMENTS, ALL GROUNDING ELECTRODES PRESENT ON SITE SHALL BE BONDED TOGETHER (REFERENCE N.E.C. ARTICLE 250.50).

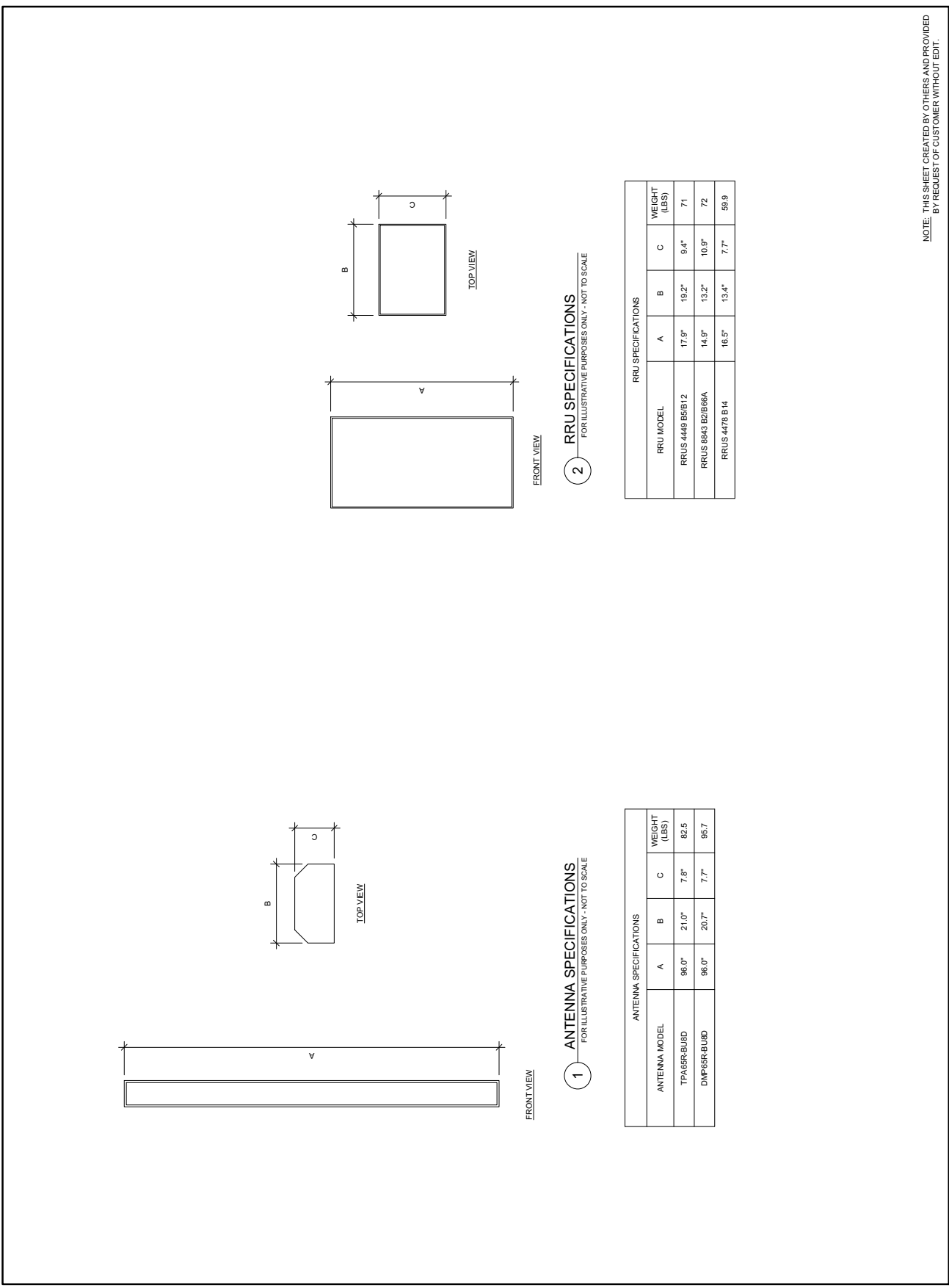




DATE DRAWN:	04/23/21
ATC JOB NO:	13626801
CUSTOMER ID:	MRCTB050163
CUSTOMER #:	S1175

SUPPLEMENTAL

SHEET NUMBER:
R-601



1 ANTENNA SPECIFICATIONS
 FOR ILLUSTRATIVE PURPOSES ONLY - NOT TO SCALE

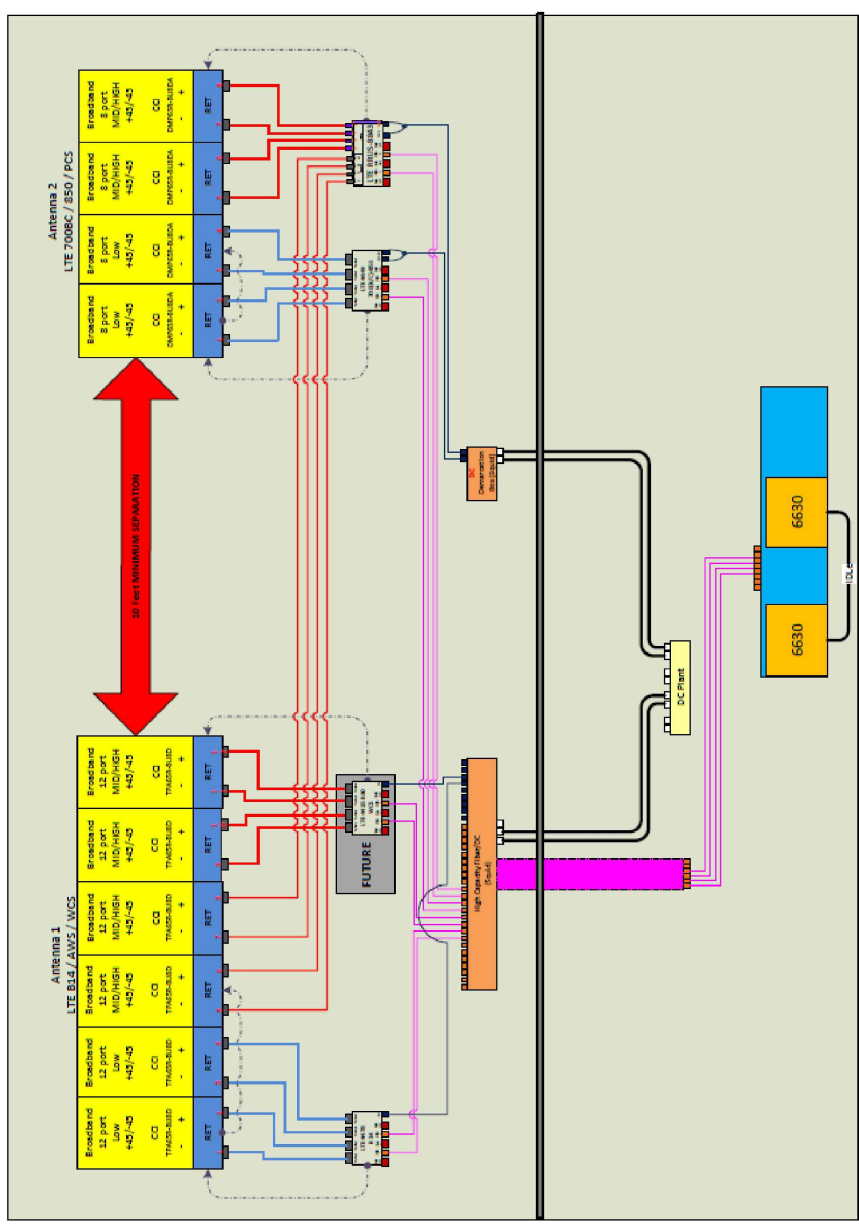
ANTENNA SPECIFICATIONS				
ANTENNA MODEL	A	B	C	WEIGHT (LBS)
TPA6SR-BUBD	96.0"	21.0"	7.8"	82.5
DMP6SR-BUBD	96.0"	20.7"	7.7"	95.7

2 RRU SPECIFICATIONS
 FOR ILLUSTRATIVE PURPOSES ONLY - NOT TO SCALE

RRU SPECIFICATIONS				
RRU MODEL	A	B	C	WEIGHT (LBS)
RRUS 4449 B5/B12	17.9"	19.2"	9.4"	71
RRUS 8843 B2/B66A	14.9"	13.2"	10.9"	72
RRUS 4478 B 14	16.5"	13.4"	7.7"	59.9

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

Diagram - Sector
 A01 Site Name - CT1238
 Diagram File Name - CT1238 SC.rxd
 Location Name - S1175
 Market - CONNECTICUT
 Market Cluster - NEW ENGLAND



1 PLUMBING DIAGRAM

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

8220-603 series

Reliability through Simplicity



8220-603 series

Founded in 1979 Polar Power specialized in solar photovoltaic systems, solar air conditioning and refrigeration. We developed and provided photovoltaic charging controls for telecommunications in the 1980s along with DC generators for the military. In 1994 we were first to provide DC generators with remote control and monitoring to the telecommunications industry.

Polar's success is based on engineering generators to meet the very specific needs of each application. Telecom site optimization is best met with the DC generator technology as the loads and batteries are DC. It makes no sense to install an AC generator and convert the output to DC. The AC generators are designed for a wide range of applications and they are not specifically produced for telecom applications so there are issues with reliability, space, and fuel efficiency.

Polar can save you considerable time and cost in permitting, installing, purchasing, and maintaining a backup generator. We reduce CAPEX and OPEX costs while improving backup reliability.

- Intertek-4003706
- Conforms to UL STD 2200
- Certified to CSA STD C22.2 No. 100
- Fuel tank is UL 142 Listed
- Meets EPA Emission Regulations
- CA/MA Emissions Compliant

2 year standard warranty, extended 5-10 year warranty available



8220-603-D-15-03 Diesel 15 kW -48 VDC

THE CONCEPTS AND FEATURES BEHIND POLAR'S BACKUP GENERATOR FOR TELECOMMUNICATIONS INCLUDE:

- SMALL FOOTPRINT.** Polar's DC generator is considerably smaller in size than an AC generator. You can now backup sites that could not accommodate an AC generator. Smaller also means less cost for space leasing.
- LONG RESERVE.** 48 to 72 hour reserve. Polar's DC generator can provide long reserve times because of very low fuel consumption. This generator should be the first choice for sites exposed to natural disasters requiring backup for weeks or months at a time (fuel consumption 1.02 gallon per hour).
- LOW ACOUSTIC NOISE.** -66dBA@7 meters and low vibration so as not to disturb the local residents or building landlords. Quieter than other generators with lower noise ratings.
- LIGHTWEIGHT.** Up to 1/3 the weight of a comparable AC generator. Facilitates roof top installations.
- CORROSION RESISTANT.** All-aluminum enclosure with stainless hardware for low maintenance, and long service life.
- RODENT RESISTANT.** Small animals can quickly destroy a generator set by gnawing on wires, fuel lines, radiator hoses, etc. Cooling air inlets and outlets have perforated aluminum screens to keep small rodents and large insects out. Stainless steel wire braid is placed over fuel and radiator lines for increased reliability and safety.
- SUPERCAPACITOR STARTER.** Failure to start is the number one problem plaguing generator reliability. Polar's unique design has replaced the starting battery with a Super Capacitor. Capacitors are more reliable and last longer than batteries (10-15 year life).
- LONG LIFE.** Controls and wire harnesses are designed to exceed a 20 year life. Higher grade, longer life electrical wire (UL 3175), weather tight connectors, gold plated connector pins on signal circuits. Controls and wire harness are easily replaceable.
- ADVANCED MONITORING.** Remote diagnostics, control, and monitoring. Ethernet and RS232 standard, with optional SNMP.
- SIMPLICITY.** Transfer switch, rectifier, and starting battery are not required.

249 E. Gardena Blvd, Gardena CA, 90248 | 310.830.9153 | www.polarpower.com | info@polarpowerinc.com

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Dewberry
Dewberry Engineers Inc.
SUITE 700
89 SUMMER STREET
BOSTON, MA 02110
PHONE: 617.685.3400
FAX: 617.685.3310

ATC SITE NUMBER:
413849

ATC SITE NAME:
WINCHESTER PCS CT

AT&T MOBILITY SITE NAME:
MRCTB050163

SITE ADDRESS:
32 NORFOLK ROAD
WINSTED, CT 06098



DATE DRAWN: 04/23/21
ATC JOB NO: 1362881
CUSTOMER ID: MRCTB050163
CUSTOMER #: S1175

SUPPLEMENTAL

SHEET NUMBER:
R-603



Introduction

The purpose of this report is to summarize results of the antenna mount analysis performed for AT&T Mobility at 137 ft.

Supporting Documents

Spec. Sheet	Spec. Sheet for SitePro VFA10-HB3L4NP, CONMATH ANT.15996
RFDS	RFDS dated March 5, 2021
Photos	Site photos from 2020

Analysis

This antenna mount was analyzed using NISA-3D v17 analysis software.

Basic Wind Speed:	120 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1.00 in. radial ice
Codes:	ANSI/TIA-222-H
Risk Category:	II
Exposure Category:	C
Topographic Factor Procedure:	Method 2
K _t :	1.000
Spectral Response:	S _s = 0.167, S _l = 0.054
Site Class:	D - Default
Live Loads:	L _m = 500 lbs, L _v = 250 lbs

Conclusion

Based on the analysis results, the antenna mount meets the requirements per the applicable codes listed above. The mount can support the equipment as described in this report.

Analysis is based on new SitePro VFA10-HB3L4NP sector mounts. (CONMATH ANT.15996)

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.



This report was prepared for American Tower Corporation by



Antenna Mount Analysis Report

- ATC Site Name : Winchester PCS CT
- ATC Site Number : 413849
- Engineering Number : 13626831_C8_08
- Mount Elevation : 137 ft
- Carrier : AT&T Mobility
- Carrier Site Name : MRCTB050163
- Carrier Site Number : 51175
- Site Location : 32 Norfolk Road
Winsted, CT 06098
41.9401940, -73.0659030
- County : Litchfield
- Date : October 1, 2021
- Max Usage : 56%
- Result : Pass

Prepared By:
 Austin J. Wilson
 TEP No. 193882.606038

Reviewed By:
 10/01/2021



NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT. PLEASE REFERENCE THE MOUNT ANALYSIS REPORT FOR COMPLETE MOUNT ANALYSIS. CONSTRUCTION DRAWINGS ARE FOR REFERENCE ONLY. GENERAL CONTRACTOR IS TO VERIFY THEY HAVE THE MOST RECENT MOUNT ANALYSIS PRIOR TO CONSTRUCTION.



DATE DRAWN:	04/23/21
ATC JOB NO.:	13626831
CUSTOMER ID.:	MRCTB050163
CUSTOMER #.:	S1175

SUPPLEMENTAL

SHEET NUMBER:	R-604
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Exhibit 4

Structural Analysis Report



AMERICAN TOWER®
CORPORATION

This report was prepared for American Tower Corporation by

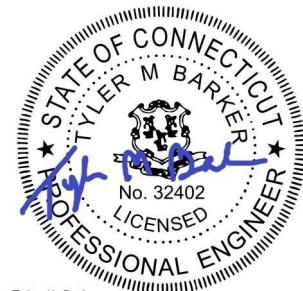
CLSENGINEERING
PLLC

Structural Analysis Report

Structure : 150 ft Monopole
ATC Site Name : Winchester PCS CT, CT
ATC Asset Number : 413849
Engineering Number : 13626831_C3_03
Proposed Carrier : AT&T MOBILITY
Carrier Site Name : MRCTB050163
Carrier Site Number : S1175
Site Location : 32 Norfolk Road
WINSTED, CT 06098-2227
41.940200,-73.095900
County : Litchfield
Date : April 6, 2021
Max Usage : 55%
Result : Pass

Prepared By:
Tyler M. Barker
CLS

Reviewed By:



Tyler M. Barker
CLS Engineering PLLC 04/07/2021
PE # 32402 Exp. 1/31/2021
COA # PEC.001833 Exp. 8/14/2022



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Supporting Documents 1

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Equipment to be Removed..... 2

Proposed Equipment 2

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Foundations 3

Deflection, Twist, and Sway..... 3

Standard Conditions 4

Calculations Attached

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 150 ft monopole to reflect the change in loading by AT&T MOBILITY.

Supporting Documents

Tower Drawings	EI Project #15692, dated November 19, 2008
Foundation Drawing	EI Project #15692, dated November 19, 2008
Geotechnical Report	Terracon Project #J2085192, dated October 31, 2008

Analysis

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

Basic Wind Speed:	114 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Code:	ANSI/TIA-222-H / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 2
Feature:	Flat
Crest Height (H):	0 ft
Crest Length (L):	0 ft
Spectral Response:	$S_s = 0.17, S_1 = 0.05$
Site Class:	D - Stiff Soil

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

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
147.0	6	Amphenol Antel LPA-171063-12CF-EDIN-X	T-Arm	(18) 1 5/8" Coax	VERIZON WIRELESS
	2	Antel LPA-80063/6CF			
	4	Antel LPA-80080/6CF			
	3	Antel BXA-70063/6CF			

Equipment to be Removed

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
No loading was considered as removed as part of this analysis.					

Proposed Equipment

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
137.0	3	Ericsson RRUS 8843 B2, B66A	SitePro 1 ULP12-4	(1) 0.39" (10mm) Fiber Trunk (3) 0.92" (23.4mm) Cable (2) 2 1/2" conduit	AT&T MOBILITY
	3	Ericsson RRUS 4478 B14			
	3	Ericsson RRUS 4449 B5, B12			
	1	Raycap DC9-48-60-24-8C-EV			
	3	CCI DMP65R-BU8D			
	3	CCI TPA65R-BU8D			

¹ Contracted elevations are shown for appurtenances within contracted installation tolerances. Appurtenances outside of contract limits are shown at installed elevations.

Install proposed lines inside the pole shaft.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	34%	Pass
Shaft	47%	Pass
Base Plate	18%	Pass

Foundations

Reaction Component	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Moment (Kips-Ft)	9,136.4	9,136.4	4,956.5	54%
Shear (Kips)	82.1	82.1	45.2	55%

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

Deflection and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
137.0	Ericsson RRUS 8843 B2, B66A	AT&T MOBILITY	0.867	0.706
	Ericsson RRUS 4478 B14			
	Ericsson RRUS 4449 B5, B12			
	Raycap DC9-48-60-24-8C-EV			
	CCI DMP65R-BU8D			
	CCI TPA65R-BU8D			

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



Standard Conditions

All engineering services performed by A.T. Engineering Service, PLLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

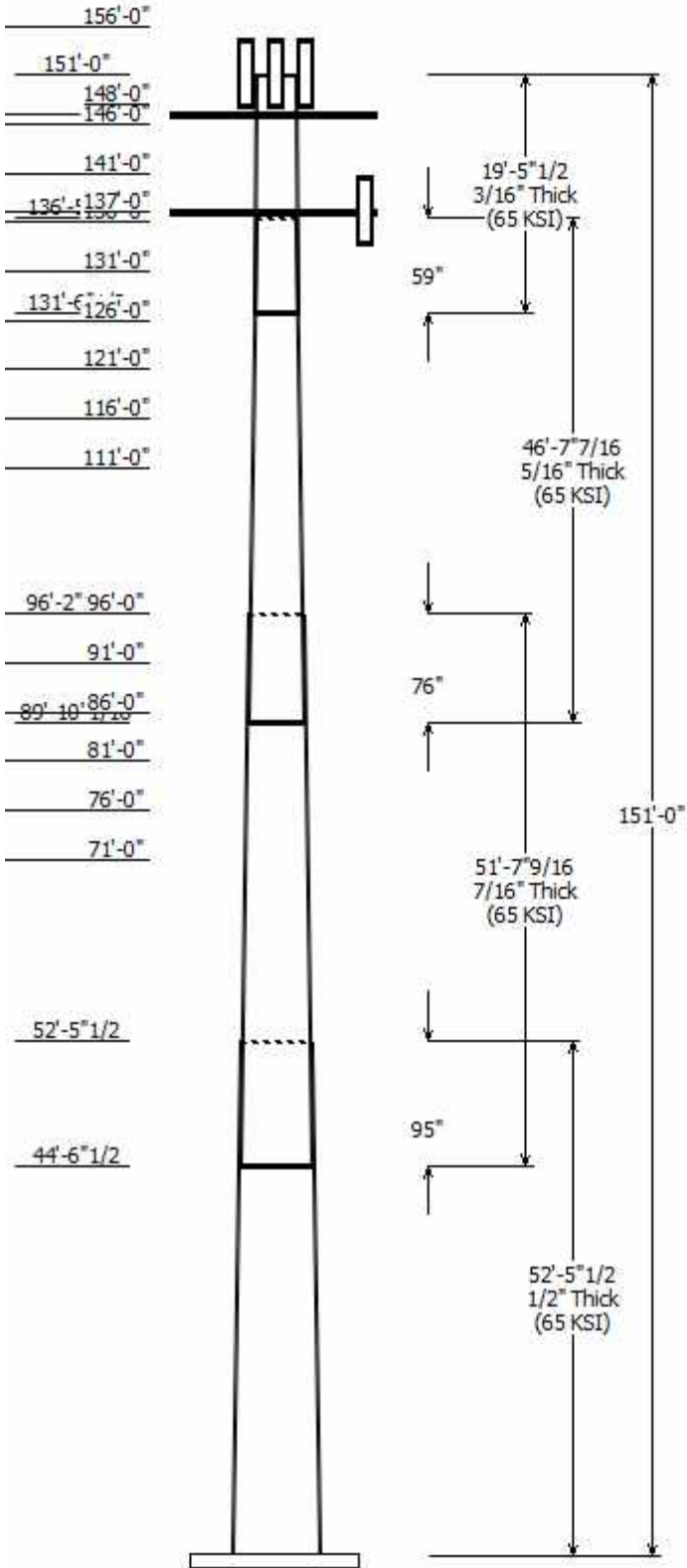
- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and A.T. Engineering Service, PLLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.



Job Information	
Client : AT&T MOBILITY	Code: ANSI/TIA-222-H
Pole : 413849	
Location : Winchester PCS CT, CT	
Description : 150 ft EEI Monopine	Risk Category : II
Shape : 18 Sides	Exposure : B
Height : 151.00 (ft)	Topo Method : Method 2
Base Elev (ft): 0.00	Topographic Feature : Flat
Taper: 0.290564in/ft)	

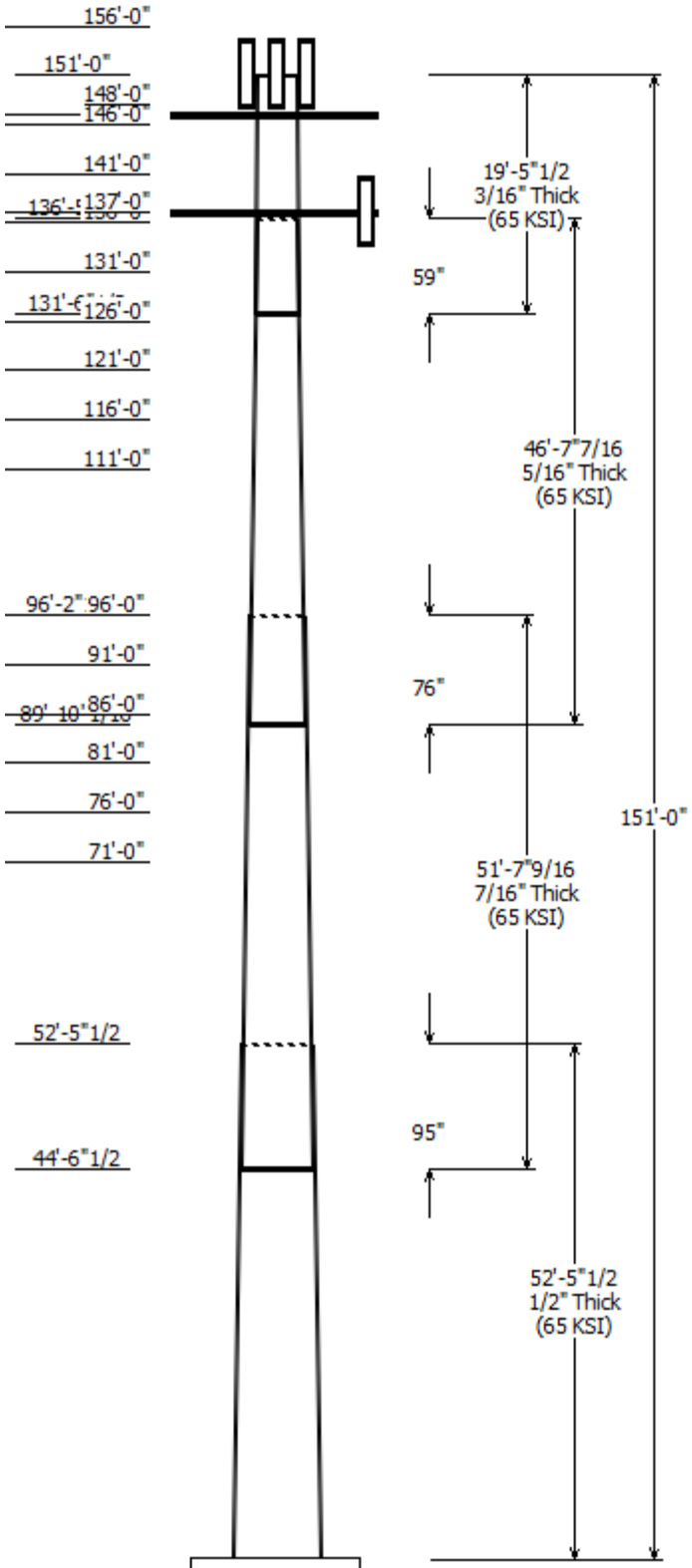
Sections Properties							
Shaft Section	Length (ft)	Diameter (in)		Thick (in)	Joint Type	Overlap Length (in)	Steel Grade
		Top	Bottom				
1	52.460	55.75	71.00	0.500		0.000	18 Sides 65
2	51.630	43.93	58.93	0.438	Slip Joint	95.000	18 Sides 65
3	46.620	32.85	46.39	0.313	Slip Joint	76.000	18 Sides 65
4	19.457	29.00	34.65	0.188	Slip Joint	59.000	18 Sides 65

Discrete Appurtenance			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
156.000	156.000	1	Pine Branches
151.000	151.000	1	Pine Branches
148.000	149.000	2	Antel LPA-80063/6CF
148.000	149.000	4	Antel LPA-80080/6CF
148.000	149.000	3	Antel BXA-70063/6CF
148.000	149.000	6	Amphenol Antel LPA-171063-
147.000	147.000	3	Flat T-Arm
146.000	146.000	1	Pine Branches
141.000	141.000	1	Pine Branches
137.000	137.000	3	Generic Round T-Arm
137.000	137.000	3	CCI TPA65R-BU8D
137.000	137.000	3	CCI DMP65R-BU8D
137.000	137.000	1	Raycap DC9-48-60-24-8C-EV
137.000	137.000	3	Ericsson RRUS 4449 B5, B12
137.000	137.000	3	Ericsson RRUS 4478 B14
137.000	137.000	3	Ericsson RRUS 8843 B2, B66A
136.000	136.000	1	Pine Branches
131.000	131.000	1	Pine Branches
126.000	126.000	1	Pine Branches
121.000	121.000	1	Pine Branches
116.000	116.000	1	Pine Branches
111.000	111.000	1	Pine Branches
96.000	96.000	1	Pine Branches
91.000	91.000	1	Pine Branches
86.000	86.000	1	Pine Branches
81.000	81.000	1	Pine Branches
76.000	76.000	1	Pine Branches
71.000	71.000	1	Pine Branches

Linear Appurtenance			
Elev (ft) From	To	Description	Exposed To Wind
0.000	137.0	0.39" (10mm)	No
0.000	137.0	0.92" (23.4mm)	No
0.000	137.0	2 1/2" conduit	No
0.000	148.0	1 5/8" Coax	No

Load Cases	
1.2D + 1.0W	114 mph with No Ice
0.9D + 1.0W	114 mph with No Ice (Reduced DL)

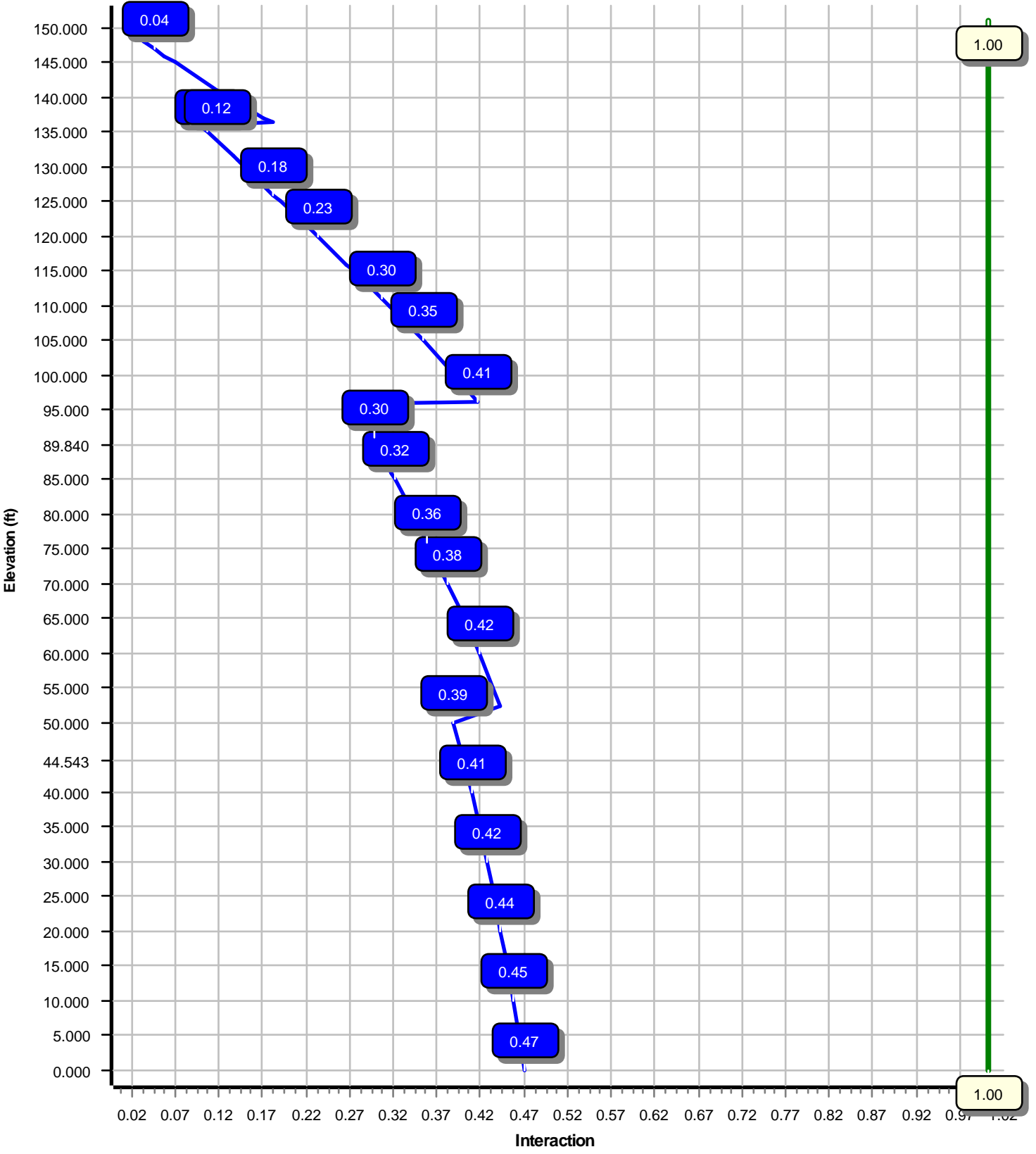
1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 in Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	Serviceability 60 mph



Reactions			
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.0W	4956.54	45.20	65.40
0.9D + 1.0W	4933.29	45.19	49.04
1.2D + 1.0Di + 1.0Wi	1623.46	14.74	95.15
1.2D + 1.0Ev + 1.0Eh	304.06	2.79	64.88
0.9D - 1.0Ev + 1.0Eh	302.42	2.79	45.38
1.0D + 1.0W	1224.85	11.20	54.53

Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
	0.00	0.000	0.000

Load Case : 1.2D + 1.0W
Max Ratio 46.74% at 0.0 ft



Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number:13626831_C3_03

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Customer: AT&T MOBILITY

Analysis Parameters

Location :	Litchfield County, CT	Height (ft) :	151
Code :	ANSI/TIA-222-H	Base Diameter (in) :	71.00
Shape :	18 Sides	Top Diameter (in) :	29.00
Pole Type :	Taper	Taper (in/ft) :	0.291
Pole Manufacturer :	EEL	Rotation (deg) :	0.00
Kd (non-service) :	0.95	Ke :	0.96

Ice & Wind Parameters

Exposure Category:	B	Design Wind Speed Without Ice:	114 mph
Risk Category:	II	Design Wind Speed With Ice:	50 mph
Topographic Factor Procedure:	Method 2	Operational Wind Speed:	60 mph
Feature:	Flat	Design Ice Thickness:	1.00 in
Crest Height (H):	0 ft	HMSL:	1143.00 ft
Crest Length (L):	0 ft		
Distance from Apex (x):	0 ft		
Upwind / Downwind			

Seismic Parameters

Analysis Method:	Equivalent Lateral Force Method		
Site Class:	D - Stiff Soil		
Period Based on Rayleigh Method (sec):	1.47		
T _L (sec):	6	p:	1.3
S _s :	0.167	S ₁ :	0.054
F _a :	1.600	F _v :	2.400
S _{ds} :	0.178	S _{d1} :	0.086
		C _s :	0.039
		C _s Max:	0.039
		C _s Min:	0.030

Load Cases

1.2D + 1.0W	114 mph with No Ice
0.9D + 1.0W	114 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 in Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	Serviceability 60 mph

Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number:13626831_C3_03

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Customer: AT&T MOBILITY

Shaft Section Properties

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Joint Len (in)	Weight (lb)	Bottom						Top						
							Dia (in)	Elev (ft)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Taper (in/ft)
1-18	52.460	0.5000	65		0.00	17,813	71.00	0.00	111.88	70255.7	23.28	142.00	55.75	52.46	87.69	33828.1	17.90	111.51	0.290563
2-18	51.630	0.4375	65	Slip	95.00	12,440	58.93	44.54	81.22	35113.6	21.99	134.70	43.93	96.17	60.39	14433.9	15.94	100.41	0.290563
3-18	46.620	0.3125	65	Slip	76.00	6,185	46.39	89.84	45.71	12263.8	24.42	148.47	32.85	136.46	32.27	4316.6	16.77	105.12	0.290563
4-18	19.457	0.1875	65	Slip	59.00	1,247	34.65	131.54	20.51	3078.3	30.83	184.82	29.00	151.00	17.15	1798.4	25.51	154.67	0.290563
Shaft Weight						37,684													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	Weight (lb)	No Ice EPAa (sf)	Orientation Factor	Weight (lb)	Ice EPAa (sf)	Orientation Factor
156.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	1,018.99	86.018	1.00
151.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	1,018.99	86.018	1.00
148.00	Amphenol Antel LPA-171063-	6	0.80	1.000	11.50	6.050	1.00	111.55	7.689	1.00
148.00	Antel BXA-70063/6CF	3	0.80	1.000	17.00	7.569	0.74	111.31	9.408	0.74
148.00	Antel LPA-80080/6CF	4	0.80	1.000	21.00	8.628	0.74	142.35	5.087	0.74
148.00	Antel LPA-80063/6CF	2	0.80	1.000	27.00	9.593	0.95	209.50	10.480	0.95
147.00	Flat T-Arm	3	0.75	0.000	250.00	12.900	0.67	389.29	18.350	0.67
146.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	1,017.58	85.885	1.00
141.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	1,016.12	85.749	1.00
137.00	Ericsson RRUS 8843 B2, B66A	3	0.80	0.000	72.00	1.639	0.50	112.57	2.198	0.50
137.00	Ericsson RRUS 4478 B14	3	0.80	0.000	59.90	1.842	0.50	96.50	2.436	0.50
137.00	Ericsson RRUS 4449 B5, B12	3	0.80	0.000	71.00	1.969	0.50	113.66	2.586	0.50
137.00	Raycap DC9-48-60-24-8C-EV	1	0.80	0.000	16.00	4.788	1.00	101.45	5.762	1.00
137.00	Generic Round T-Arm	3	0.75	0.000	312.50	9.700	0.75	485.41	15.157	0.75
137.00	CCI DMP65R-BU8D	3	0.80	0.000	95.70	17.871	0.63	320.66	20.310	0.63
137.00	CCI TPA65R-BU8D	3	0.80	0.000	82.50	18.089	0.63	310.71	20.533	0.63
136.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	1,014.61	85.608	1.00
131.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	1,013.06	85.462	1.00
126.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	1,011.45	85.312	1.00
121.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	1,009.78	85.155	1.00
116.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	1,008.05	84.993	1.00
111.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	1,006.24	84.824	1.00
96.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	1,000.36	84.274	1.00
91.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	998.21	84.073	1.00
86.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	995.96	83.862	1.00
81.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	993.58	83.639	1.00
76.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	991.06	83.403	1.00
71.00	Pine Branches	1	1.00	0.000	600.00	46.800	1.00	988.39	83.153	1.00
Totals	Num Loadings:28	53			12,704.80			23,681.94		

Linear Appurtenance Properties

Load Case Azimuth (deg) :

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Dia (in)	Coax Wt (lb/ft)	Max Coax / Flat	Dist Between Rows (in)	Dist Between Cols (in)	Azimuth (deg)	Dist From Face (in)	Exposed To Wind Carrier
0.00	148.00	18	1 5/8" Coax	1.98	0.82	N	0	0.00	0.00	0	N VERIZON WIRELESS
0.00	137.00	1	0.39" (10mm) Fiber	0.39	0.06	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	137.00	3	0.92" (23.4mm) Cable	0.92	0.89	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	137.00	2	2 1/2" conduit	2.88	5.79	N	0	0.00	0.00	0	N AT&T MOBILITY

Segment Properties (Max Len : 5.ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in ³)	Z (in ³)	Weight (lb)
0.00		0.5000	71.000	111.879	70,255.7	23.28	142.00	74.0	1949.	0.0	0.0
5.00		0.5000	69.547	109.574	66,001.3	22.76	139.09	74.6	1869.	0.0	1,883.9
10.00		0.5000	68.094	107.268	61,922.1	22.25	136.19	75.2	1791.	0.0	1,844.7
15.00		0.5000	66.642	104.963	58,014.6	21.74	133.28	75.8	1714.	0.0	1,805.4
20.00		0.5000	65.189	102.657	54,275.1	21.23	130.38	76.4	1639.	0.0	1,766.2
25.00		0.5000	63.736	100.352	50,699.8	20.71	127.47	77.0	1566.	0.0	1,727.0
30.00		0.5000	62.283	98.046	47,285.0	20.20	124.57	77.6	1495.	0.0	1,687.8
35.00		0.5000	60.830	95.741	44,027.2	19.69	121.66	78.2	1425.	0.0	1,648.5
40.00		0.5000	59.377	93.435	40,922.5	19.18	118.75	78.8	1357.	0.0	1,609.3
44.54	Bot - Section 2	0.5000	58.057	91.340	38,231.1	18.71	116.11	79.4	1297.	0.0	1,428.3
45.00		0.5000	57.925	91.130	37,967.3	18.66	115.85	79.4	1291.	0.0	267.8
50.00		0.5000	56.472	88.824	35,157.9	18.15	112.94	80.1	1226.	0.0	2,892.5
52.46	Top - Section 1	0.4375	56.632	78.030	31,131.9	21.06	129.44	76.6	1082.	0.0	1,396.1
55.00		0.4375	55.894	77.006	29,921.3	20.76	127.76	77.0	1054.	0.0	670.0
60.00		0.4375	54.441	74.988	27,630.8	20.18	124.44	77.7	999.6	0.0	1,293.0
65.00		0.4375	52.988	72.971	25,460.3	19.59	121.12	78.4	946.4	0.0	1,258.7
70.00		0.4375	51.536	70.954	23,406.5	19.01	117.80	79.0	894.6	0.0	1,224.4
71.00		0.4375	51.245	70.550	23,009.5	18.89	117.13	79.2	884.4	0.0	240.8
75.00		0.4375	50.083	68.936	21,466.3	18.42	114.47	79.7	844.2	0.0	949.3
76.00		0.4375	49.792	68.533	21,091.6	18.30	113.81	79.9	834.3	0.0	233.9
80.00		0.4375	48.630	66.919	19,636.3	17.84	111.15	80.4	795.3	0.0	921.8
81.00		0.4375	48.339	66.515	19,283.3	17.72	110.49	80.6	785.7	0.0	227.0
85.00		0.4375	47.177	64.902	17,913.4	17.25	107.83	81.1	747.9	0.0	894.4
86.00		0.4375	46.887	64.498	17,581.4	17.13	107.17	81.2	738.6	0.0	220.2
89.84	Bot - Section 3	0.4375	45.771	62.949	16,344.6	16.68	104.62	81.8	703.3	0.0	832.7
90.00		0.4375	45.724	62.884	16,294.4	16.67	104.51	81.8	701.9	0.0	59.1
91.00		0.4375	45.434	62.481	15,982.8	16.55	103.85	81.9	692.9	0.0	368.2
95.00		0.4375	44.272	60.867	14,776.0	16.08	101.19	82.5	657.4	0.0	1,449.2
96.00		0.4375	43.981	60.463	14,484.1	15.96	100.53	82.6	648.6	0.0	356.4
96.17	Top - Section 2	0.3125	44.556	43.882	10,852.5	23.38	142.58	73.9	479.7	0.0	61.5
100.0		0.3125	43.444	42.779	10,054.7	22.75	139.02	74.6	455.9	0.0	564.2
105.0		0.3125	41.991	41.338	9,072.5	21.93	134.37	75.6	425.6	0.0	715.6
110.0		0.3125	40.538	39.897	8,156.5	21.11	129.72	76.6	396.3	0.0	691.1
111.0		0.3125	40.248	39.609	7,981.0	20.95	128.79	76.8	390.6	0.0	135.3
115.0		0.3125	39.085	38.456	7,304.2	20.29	125.07	77.5	368.1	0.0	531.3
116.0		0.3125	38.795	38.168	7,141.2	20.13	124.14	77.7	362.6	0.0	130.4
120.0		0.3125	37.632	37.015	6,513.5	19.47	120.42	78.5	340.9	0.0	511.7
121.0		0.3125	37.342	36.727	6,362.6	19.31	119.49	78.7	335.6	0.0	125.5
125.0		0.3125	36.180	35.574	5,782.1	18.65	115.77	79.5	314.8	0.0	492.1
126.0		0.3125	35.889	35.286	5,642.7	18.49	114.85	79.7	309.7	0.0	120.6
130.0		0.3125	34.727	34.133	5,107.5	17.83	111.13	80.4	289.7	0.0	472.4
131.0		0.3125	34.436	33.845	4,979.3	17.67	110.20	80.6	284.8	0.0	115.7
131.5	Bot - Section 4	0.3125	34.278	33.689	4,910.5	17.58	109.69	80.7	282.2	0.0	62.4
135.0		0.3125	33.274	32.693	4,487.6	17.01	106.48	81.4	265.6	0.0	628.1
136.0		0.3125	32.983	32.404	4,370.0	16.85	105.55	81.6	261.0	0.0	178.2
136.4	Top - Section 3	0.1875	33.225	19.661	2,711.2	29.48	177.20	66.7	160.7	0.0	81.5
137.0		0.1875	33.068	19.567	2,672.7	29.33	176.36	66.9	159.2	0.0	36.0
140.0		0.1875	32.196	19.048	2,465.8	28.51	171.71	67.9	150.8	0.0	197.1
141.0		0.1875	31.906	18.876	2,399.2	28.24	170.16	68.2	148.1	0.0	64.5
145.0		0.1875	30.743	18.184	2,145.0	27.15	163.96	69.5	137.4	0.0	252.2
146.0		0.1875	30.453	18.011	2,084.4	26.87	162.42	69.8	134.8	0.0	61.6
147.0		0.1875	30.162	17.838	2,024.9	26.60	160.87	70.1	132.2	0.0	61.0
148.0		0.1875	29.872	17.665	1,966.6	26.33	159.32	70.4	129.7	0.0	60.4
150.0		0.1875	29.291	17.319	1,853.4	25.78	156.22	71.1	124.6	0.0	119.0
151.0		0.1875	29.000	17.146	1,798.4	25.51	154.67	71.4	122.1	0.0	58.6
37,684.4											

Load Case: 1.2D + 1.0W	114 mph with No Ice	21 Iterations
Gust Response Factor :1.10		
Dead Load Factor :1.20		
Wind Load Factor :1.00		

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		253.4	0.0					0.0	0.0	253.4	0.0	0.0	0.0
5.00		501.6	2,260.7					0.0	174.4	501.6	2,435.1	0.0	0.0
10.00		491.1	2,213.6					0.0	174.4	491.1	2,388.0	0.0	0.0
15.00		480.6	2,166.5					0.0	174.4	480.6	2,340.9	0.0	0.0
20.00		470.1	2,119.5					0.0	174.4	470.1	2,293.9	0.0	0.0
25.00		459.7	2,072.4					0.0	174.4	459.7	2,246.8	0.0	0.0
30.00		454.5	2,025.3					0.0	174.4	454.5	2,199.7	0.0	0.0
35.00		458.5	1,978.2					0.0	174.4	458.5	2,152.7	0.0	0.0
40.00		443.6	1,931.2					0.0	174.4	443.6	2,105.6	0.0	0.0
44.54	Bot - Section 2	234.1	1,714.0					0.0	158.5	234.1	1,872.5	0.0	0.0
45.00		260.8	321.4					0.0	15.9	260.8	337.3	0.0	0.0
50.00		356.9	3,471.0					0.0	174.4	356.9	3,645.4	0.0	0.0
52.46	Top - Section 1	239.8	1,675.3					0.0	85.8	239.8	1,761.2	0.0	0.0
55.00		361.6	804.0					0.0	88.6	361.6	892.6	0.0	0.0
60.00		478.9	1,551.6					0.0	174.4	478.9	1,726.0	0.0	0.0
65.00		476.9	1,510.4					0.0	174.4	476.9	1,684.8	0.0	0.0
70.00		285.1	1,469.2					0.0	174.4	285.1	1,643.6	0.0	0.0
71.00	Appurtenance(s)	235.9	288.9	1,399.0	0.0	0.0	720.0	0.0	34.9	1,634.9	1,043.8	0.0	0.0
75.00		235.5	1,139.1					0.0	139.5	235.5	1,278.7	0.0	0.0
76.00	Appurtenance(s)	233.6	280.7	1,426.4	0.0	0.0	720.0	0.0	34.9	1,660.0	1,035.5	0.0	0.0
80.00		233.1	1,106.2					0.0	139.5	233.1	1,245.7	0.0	0.0
81.00	Appurtenance(s)	230.8	272.4	1,452.6	0.0	0.0	720.0	0.0	34.9	1,683.4	1,027.3	0.0	0.0
85.00		230.2	1,073.2					0.0	139.5	230.2	1,212.8	0.0	0.0
86.00	Appurtenance(s)	220.4	264.2	1,477.7	0.0	0.0	720.0	0.0	34.9	1,698.1	1,019.1	0.0	0.0
89.84	Bot - Section 3	181.9	999.2					0.0	134.0	181.9	1,133.1	0.0	0.0
90.00		53.0	71.0					0.0	5.6	53.0	76.5	0.0	0.0
91.00	Appurtenance(s)	227.1	441.8	1,501.8	0.0	0.0	720.0	0.0	34.9	1,728.9	1,196.7	0.0	0.0
95.00		226.4	1,739.0					0.0	139.5	226.4	1,878.6	0.0	0.0
96.00	Appurtenance(s)	52.7	427.7	1,524.9	0.0	0.0	720.0	0.0	34.9	1,577.6	1,182.6	0.0	0.0
96.17	Top - Section 2	178.3	73.8					0.0	6.0	178.3	79.9	0.0	0.0
100.00		389.5	677.1					0.0	133.5	389.5	810.6	0.0	0.0
105.00		433.5	858.7					0.0	174.4	433.5	1,033.1	0.0	0.0
110.00		256.8	829.3					0.0	174.4	256.8	1,003.7	0.0	0.0
111.00	Appurtenance(s)	209.6	162.3	1,589.5	0.0	0.0	720.0	0.0	34.9	1,799.1	917.2	0.0	0.0
115.00		208.6	637.5					0.0	139.5	208.6	777.1	0.0	0.0
116.00	Appurtenance(s)	204.5	156.4	1,609.6	0.0	0.0	720.0	0.0	34.9	1,814.1	911.3	0.0	0.0
120.00		203.4	614.0					0.0	139.5	203.4	753.5	0.0	0.0
121.00	Appurtenance(s)	199.1	150.6	1,629.1	0.0	0.0	720.0	0.0	34.9	1,828.2	905.4	0.0	0.0
125.00		198.0	590.5					0.0	139.5	198.0	730.0	0.0	0.0
126.00	Appurtenance(s)	193.5	144.7	1,648.1	0.0	0.0	720.0	0.0	34.9	1,841.5	899.6	0.0	0.0
130.00		192.3	566.9					0.0	139.5	192.3	706.5	0.0	0.0
131.00	Appurtenance(s)	58.5	138.8	1,666.5	0.0	0.0	720.0	0.0	34.9	1,725.0	893.7	0.0	0.0
131.54	Bot - Section 4	151.0	74.9					0.0	19.0	151.0	93.9	0.0	0.0
135.00		167.7	753.8					0.0	120.6	167.7	874.3	0.0	0.0
136.00	Appurtenance(s)	54.2	213.9	1,684.4	0.0	0.0	720.0	0.0	34.9	1,738.7	968.7	0.0	0.0
136.46	Top - Section 3	37.0	97.7					0.0	16.0	37.0	113.8	0.0	0.0
137.00	Appurtenance(s)	129.3	43.2	2,925.5	0.0	0.0	2,516.2	0.0	18.8	3,054.8	2,578.2	0.0	0.0
140.00		145.4	236.5					0.0	53.1	145.4	289.7	0.0	0.0

Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number:13626831_C3_03

4/6/2021 10:35:04 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0W

114 mph with No Ice

21 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.20

Wind Load Factor :1.00

141.00	Appurtenance(s)	177.3	77.4	1,701.9	0.0	0.0	720.0	0.0	17.7	1,879.2	815.1	0.0	0.0
145.00		176.0	302.7					0.0	70.8	176.0	373.5	0.0	0.0
146.00	Appurtenance(s)	69.1	73.9	1,718.9	0.0	0.0	720.0	0.0	17.7	1,788.0	811.6	0.0	0.0
147.00	Appurtenance(s)	68.6	73.2	715.7	0.0	0.0	900.0	0.0	17.7	784.2	990.9	0.0	0.0
148.00	Appurtenance(s)	92.4	72.5	2,862.9	0.0	2,862.9	309.6	0.0	17.7	2,955.3	399.8	0.0	0.0
150.00		87.0	142.9					0.0	0.0	87.0	142.9	0.0	0.0
151.00	Appurtenance(s)	28.8	70.4	1,735.5	0.0	0.0	720.0	0.0	0.0	1,764.3	790.4	0.0	0.0
Totals:										43,647.0	64,720.9	0.00	0.00

Load Case: 1.2D + 1.0W

114 mph with No Ice

21 Iterations

Gust Response Factor :1.10
 Dead Load Factor :1.20
 Wind Load Factor :1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-65.40	-45.20	0.00	-4,956.54	0.00	4,956.54	7,453.69	1,963.48	12,502.6	10,820.4	0.00	0.00	0.467
5.00	-62.89	-44.81	0.00	-4,730.54	0.00	4,730.54	7,359.51	1,923.02	11,992.7	10,462.0	0.05	-0.10	0.461
10.00	-60.42	-44.41	0.00	-4,506.51	0.00	4,506.51	7,262.84	1,882.56	11,493.4	10,105.7	0.21	-0.20	0.455
15.00	-58.01	-44.03	0.00	-4,284.44	0.00	4,284.44	7,163.66	1,842.10	11,004.7	9,751.96	0.47	-0.30	0.448
20.00	-55.64	-43.64	0.00	-4,064.31	0.00	4,064.31	7,061.98	1,801.64	10,526.6	9,400.80	0.84	-0.40	0.441
25.00	-53.32	-43.26	0.00	-3,846.10	0.00	3,846.10	6,957.80	1,761.17	10,059.1	9,052.51	1.32	-0.50	0.433
30.00	-51.04	-42.88	0.00	-3,629.79	0.00	3,629.79	6,851.13	1,720.71	9,602.35	8,707.32	1.90	-0.61	0.425
35.00	-48.82	-42.49	0.00	-3,415.39	0.00	3,415.39	6,741.95	1,680.25	9,156.12	8,365.46	2.60	-0.72	0.416
40.00	-46.64	-42.10	0.00	-3,202.96	0.00	3,202.96	6,630.27	1,639.79	8,720.51	8,027.14	3.41	-0.82	0.407
44.54	-44.73	-41.88	0.00	-3,011.69	0.00	3,011.69	6,526.62	1,603.02	8,333.89	7,723.00	4.24	-0.92	0.398
45.00	-44.36	-41.66	0.00	-2,992.56	0.00	2,992.56	6,516.08	1,599.33	8,295.51	7,692.61	4.33	-0.93	0.397
50.00	-40.66	-41.30	0.00	-2,784.27	0.00	2,784.27	6,399.40	1,558.86	7,881.13	7,362.07	5.36	-1.04	0.385
52.46	-38.86	-41.06	0.00	-2,682.68	0.00	2,682.68	5,381.44	1,369.43	6,950.73	6,222.68	5.91	-1.09	0.439
55.00	-37.92	-40.74	0.00	-2,578.39	0.00	2,578.39	5,335.00	1,351.45	6,769.38	6,087.35	6.51	-1.15	0.432
60.00	-36.12	-40.30	0.00	-2,374.69	0.00	2,374.69	5,241.72	1,316.04	6,419.39	5,823.00	7.78	-1.27	0.416
65.00	-34.36	-39.85	0.00	-2,173.19	0.00	2,173.19	5,145.93	1,280.64	6,078.68	5,561.57	9.17	-1.38	0.398
70.00	-32.68	-39.57	0.00	-1,973.92	0.00	1,973.92	5,047.65	1,245.23	5,747.27	5,303.28	10.68	-1.50	0.380
71.00	-31.64	-37.94	0.00	-1,934.36	0.00	1,934.36	5,027.69	1,238.15	5,682.10	5,252.02	11.00	-1.52	0.376
75.00	-30.33	-37.70	0.00	-1,782.61	0.00	1,782.61	4,946.86	1,209.83	5,425.15	5,048.36	12.32	-1.62	0.360
76.00	-29.31	-36.04	0.00	-1,744.91	0.00	1,744.91	4,926.40	1,202.75	5,361.84	4,997.80	12.66	-1.64	0.356
80.00	-28.04	-35.80	0.00	-1,600.76	0.00	1,600.76	4,843.57	1,174.43	5,112.31	4,797.04	14.07	-1.73	0.340
81.00	-27.03	-34.11	0.00	-1,564.97	0.00	1,564.97	4,822.61	1,167.34	5,050.86	4,747.23	14.44	-1.75	0.336
85.00	-25.79	-33.86	0.00	-1,428.54	0.00	1,428.54	4,737.78	1,139.02	4,808.77	4,549.54	15.94	-1.84	0.320
86.00	-24.80	-32.16	0.00	-1,394.67	0.00	1,394.67	4,716.33	1,131.94	4,749.17	4,500.52	16.33	-1.86	0.316
89.84	-23.65	-31.96	0.00	-1,271.19	0.00	1,271.19	4,633.00	1,104.75	4,523.78	4,313.82	17.86	-1.95	0.301
90.00	-23.56	-31.91	0.00	-1,266.08	0.00	1,266.08	4,629.49	1,103.62	4,514.51	4,306.09	17.93	-1.95	0.300
91.00	-22.40	-30.16	0.00	-1,234.17	0.00	1,234.17	4,607.54	1,096.54	4,456.77	4,257.91	18.34	-1.97	0.295
95.00	-20.50	-29.88	0.00	-1,113.55	0.00	1,113.55	4,518.70	1,068.21	4,229.54	4,066.92	20.03	-2.05	0.279
96.00	-19.37	-28.27	0.00	-1,083.66	0.00	1,083.66	4,492.13	1,061.13	4,173.67	4,015.93	20.46	-2.08	0.275
96.17	-19.28	-28.10	0.00	-1,078.76	0.00	1,078.76	2,918.80	770.13	3,077.48	2,659.17	20.54	-2.08	0.414
100.00	-18.43	-27.72	0.00	-971.23	0.00	971.23	2,873.85	750.78	2,924.76	2,551.96	22.24	-2.16	0.388
105.00	-17.36	-27.28	0.00	-832.65	0.00	832.65	2,812.92	725.49	2,731.07	2,413.11	24.57	-2.28	0.353
110.00	-16.33	-27.00	0.00	-696.26	0.00	696.26	2,749.49	700.20	2,544.01	2,275.87	27.03	-2.40	0.313
111.00	-15.47	-25.18	0.00	-669.25	0.00	669.25	2,736.50	695.14	2,507.39	2,248.63	27.53	-2.43	0.305
115.00	-14.68	-24.95	0.00	-568.53	0.00	568.53	2,683.56	674.91	2,363.58	2,140.45	29.61	-2.52	0.272
116.00	-13.82	-23.11	0.00	-543.58	0.00	543.58	2,670.07	669.85	2,328.30	2,113.60	30.14	-2.54	0.264
120.00	-13.06	-22.89	0.00	-451.12	0.00	451.12	2,615.12	649.62	2,189.80	2,007.08	32.30	-2.62	0.231
121.00	-12.22	-21.03	0.00	-428.24	0.00	428.24	2,601.14	644.56	2,155.84	1,980.68	32.85	-2.64	0.222
125.00	-11.49	-20.81	0.00	-344.12	0.00	344.12	2,544.19	624.33	2,022.64	1,876.00	35.09	-2.71	0.189
126.00	-10.67	-18.93	0.00	-323.31	0.00	323.31	2,529.70	619.27	1,990.01	1,850.07	35.66	-2.72	0.180
130.00	-9.96	-18.71	0.00	-247.59	0.00	247.59	2,470.75	599.04	1,862.13	1,747.42	37.96	-2.78	0.147
131.00	-9.15	-16.95	0.00	-228.88	0.00	228.88	2,455.77	593.98	1,830.82	1,722.02	38.55	-2.79	0.137
131.54	-9.05	-16.79	0.00	-219.67	0.00	219.67	2,447.58	591.24	1,813.92	1,708.27	38.87	-2.80	0.133

Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number:13626831_C3_03

4/6/2021 10:35:04 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0W

114 mph with No Ice

21 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.20

Wind Load Factor :1.00

135.00	-8.18	-16.59	0.00	-161.62	0.00	161.62	2,394.82	573.75	1,708.25	1,621.57	40.91	-2.84	0.104
136.00	-7.30	-14.80	0.00	-145.03	0.00	145.03	2,379.33	568.70	1,678.27	1,596.75	41.50	-2.85	0.095
136.46	-7.19	-14.76	0.00	-138.23	0.00	138.23	1,180.67	345.04	1,029.55	804.32	41.78	-2.85	0.180
137.00	-4.76	-11.58	0.00	-130.25	0.00	130.25	1,178.12	343.40	1,019.79	798.75	42.10	-2.86	0.168
140.00	-4.47	-11.43	0.00	-95.50	0.00	95.50	1,163.42	334.30	966.44	767.75	43.91	-2.89	0.129
141.00	-3.75	-9.51	0.00	-84.08	0.00	84.08	1,158.32	331.27	948.98	757.40	44.52	-2.90	0.115
145.00	-3.38	-9.32	0.00	-46.04	0.00	46.04	1,136.91	319.13	880.71	716.01	46.96	-2.93	0.068
146.00	-2.66	-7.49	0.00	-36.72	0.00	36.72	1,131.31	316.09	864.04	705.66	47.58	-2.94	0.055
147.00	-1.71	-6.66	0.00	-29.23	0.00	29.23	1,125.61	313.06	847.53	695.32	48.19	-2.94	0.044
148.00	-1.47	-3.68	0.00	-19.71	0.00	19.71	1,119.80	310.02	831.18	684.99	48.81	-2.95	0.030
150.00	-1.33	-3.59	0.00	-12.35	0.00	12.35	1,107.90	303.95	798.96	664.36	50.05	-2.95	0.020
151.00	0.00	-3.52	0.00	-8.76	0.00	8.76	1,101.80	300.92	783.09	654.06	50.67	-2.95	0.014

Load Case: 0.9D + 1.0W	114 mph with No Ice (Reduced DL)	21 Iterations
Gust Response Factor :1.10		
Dead Load Factor :0.90		
Wind Load Factor :1.00		

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		253.4	0.0					0.0	0.0	253.4	0.0	0.0	0.0
5.00		501.6	1,695.5					0.0	130.8	501.6	1,826.3	0.0	0.0
10.00		491.1	1,660.2					0.0	130.8	491.1	1,791.0	0.0	0.0
15.00		480.6	1,624.9					0.0	130.8	480.6	1,755.7	0.0	0.0
20.00		470.1	1,589.6					0.0	130.8	470.1	1,720.4	0.0	0.0
25.00		459.7	1,554.3					0.0	130.8	459.7	1,685.1	0.0	0.0
30.00		454.5	1,519.0					0.0	130.8	454.5	1,649.8	0.0	0.0
35.00		458.5	1,483.7					0.0	130.8	458.5	1,614.5	0.0	0.0
40.00		443.6	1,448.4					0.0	130.8	443.6	1,579.2	0.0	0.0
44.54	Bot - Section 2	234.1	1,285.5					0.0	118.9	234.1	1,404.3	0.0	0.0
45.00		260.8	241.1					0.0	11.9	260.8	253.0	0.0	0.0
50.00		356.9	2,603.3					0.0	130.8	356.9	2,734.1	0.0	0.0
52.46	Top - Section 1	239.8	1,256.5					0.0	64.4	239.8	1,320.9	0.0	0.0
55.00		361.6	603.0					0.0	66.5	361.6	669.4	0.0	0.0
60.00		478.9	1,163.7					0.0	130.8	478.9	1,294.5	0.0	0.0
65.00		476.9	1,132.8					0.0	130.8	476.9	1,263.6	0.0	0.0
70.00		285.1	1,101.9					0.0	130.8	285.1	1,232.7	0.0	0.0
71.00	Appurtenance(s)	235.9	216.7	1,399.0	0.0	0.0	540.0	0.0	26.2	1,634.9	782.8	0.0	0.0
75.00		235.5	854.4					0.0	104.7	235.5	959.0	0.0	0.0
76.00	Appurtenance(s)	233.6	210.5	1,426.4	0.0	0.0	540.0	0.0	26.2	1,660.0	776.7	0.0	0.0
80.00		233.1	829.6					0.0	104.7	233.1	934.3	0.0	0.0
81.00	Appurtenance(s)	230.8	204.3	1,452.6	0.0	0.0	540.0	0.0	26.2	1,683.4	770.5	0.0	0.0
85.00		230.2	804.9					0.0	104.7	230.2	909.6	0.0	0.0
86.00	Appurtenance(s)	220.4	198.1	1,477.7	0.0	0.0	540.0	0.0	26.2	1,698.1	764.3	0.0	0.0
89.84	Bot - Section 3	181.9	749.4					0.0	100.5	181.9	849.9	0.0	0.0
90.00		53.0	53.2					0.0	4.2	53.0	57.4	0.0	0.0
91.00	Appurtenance(s)	227.1	331.4	1,501.8	0.0	0.0	540.0	0.0	26.2	1,728.9	897.5	0.0	0.0
95.00		226.4	1,304.3					0.0	104.7	226.4	1,408.9	0.0	0.0
96.00	Appurtenance(s)	52.7	320.8	1,524.9	0.0	0.0	540.0	0.0	26.2	1,577.6	886.9	0.0	0.0
96.17	Top - Section 2	178.3	55.4					0.0	4.5	178.3	59.9	0.0	0.0
100.00		389.5	507.8					0.0	100.1	389.5	607.9	0.0	0.0
105.00		433.5	644.0					0.0	130.8	433.5	774.8	0.0	0.0
110.00		256.8	622.0					0.0	130.8	256.8	752.8	0.0	0.0
111.00	Appurtenance(s)	209.6	121.7	1,589.5	0.0	0.0	540.0	0.0	26.2	1,799.1	687.9	0.0	0.0
115.00		208.6	478.2					0.0	104.7	208.6	582.8	0.0	0.0
116.00	Appurtenance(s)	204.5	117.3	1,609.6	0.0	0.0	540.0	0.0	26.2	1,814.1	683.5	0.0	0.0
120.00		203.4	460.5					0.0	104.7	203.4	565.2	0.0	0.0
121.00	Appurtenance(s)	199.1	112.9	1,629.1	0.0	0.0	540.0	0.0	26.2	1,828.2	679.1	0.0	0.0
125.00		198.0	442.8					0.0	104.7	198.0	547.5	0.0	0.0
126.00	Appurtenance(s)	193.5	108.5	1,648.1	0.0	0.0	540.0	0.0	26.2	1,841.5	674.7	0.0	0.0
130.00		192.3	425.2					0.0	104.7	192.3	529.8	0.0	0.0
131.00	Appurtenance(s)	58.5	104.1	1,666.5	0.0	0.0	540.0	0.0	26.2	1,725.0	670.3	0.0	0.0
131.54	Bot - Section 4	151.0	56.2					0.0	14.2	151.0	70.4	0.0	0.0
135.00		167.7	565.3					0.0	90.4	167.7	655.8	0.0	0.0
136.00	Appurtenance(s)	54.2	160.4	1,684.4	0.0	0.0	540.0	0.0	26.2	1,738.7	726.6	0.0	0.0
136.46	Top - Section 3	37.0	73.3					0.0	12.0	37.0	85.3	0.0	0.0
137.00	Appurtenance(s)	129.3	32.4	2,925.5	0.0	0.0	1,887.1	0.0	14.1	3,054.8	1,933.7	0.0	0.0
140.00		145.4	177.4					0.0	39.9	145.4	217.2	0.0	0.0

Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number:13626831_C3_03

4/6/2021 10:35:06 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.0W

114 mph with No Ice (Reduced DL)

21 Iterations

Gust Response Factor :1.10

Dead Load Factor :0.90

Wind Load Factor :1.00

141.00	Appurtenance(s)	177.3	58.1	1,701.9	0.0	0.0	540.0	0.0	13.3	1,879.2	611.4	0.0	0.0
145.00		176.0	227.0					0.0	53.1	176.0	280.1	0.0	0.0
146.00	Appurtenance(s)	69.1	55.4	1,718.9	0.0	0.0	540.0	0.0	13.3	1,788.0	608.7	0.0	0.0
147.00	Appurtenance(s)	68.6	54.9	715.7	0.0	0.0	675.0	0.0	13.3	784.2	743.2	0.0	0.0
148.00	Appurtenance(s)	92.4	54.4	2,862.9	0.0	2,862.9	232.2	0.0	13.3	2,955.3	299.8	0.0	0.0
150.00		87.0	107.1					0.0	0.0	87.0	107.1	0.0	0.0
151.00	Appurtenance(s)	28.8	52.8	1,735.5	0.0	0.0	540.0	0.0	0.0	1,764.3	592.8	0.0	0.0
Totals:										43,647.0	48,540.7	0.00	0.00

Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number:13626831_C3_03

4/6/2021 10:35:06 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.0W

114 mph with No Ice (Reduced DL)

21 Iterations

Gust Response Factor :1.10

Dead Load Factor :0.90

Wind Load Factor :1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-49.04	-45.19	0.00	-4,933.29	0.00	4,933.29	7,453.69	1,963.48	12,502.6	10,820.4	0.00	0.00	0.463
5.00	-47.14	-44.76	0.00	-4,707.36	0.00	4,707.36	7,359.51	1,923.02	11,992.7	10,462.0	0.05	-0.10	0.457
10.00	-45.27	-44.35	0.00	-4,483.54	0.00	4,483.54	7,262.84	1,882.56	11,493.4	10,105.7	0.21	-0.20	0.450
15.00	-43.44	-43.94	0.00	-4,261.81	0.00	4,261.81	7,163.66	1,842.10	11,004.7	9,751.96	0.47	-0.30	0.444
20.00	-41.64	-43.53	0.00	-4,042.13	0.00	4,042.13	7,061.98	1,801.64	10,526.6	9,400.80	0.84	-0.40	0.436
25.00	-39.89	-43.13	0.00	-3,824.48	0.00	3,824.48	6,957.80	1,761.17	10,059.1	9,052.51	1.31	-0.50	0.429
30.00	-38.16	-42.73	0.00	-3,608.84	0.00	3,608.84	6,851.13	1,720.71	9,602.35	8,707.32	1.89	-0.61	0.421
35.00	-36.47	-42.32	0.00	-3,395.20	0.00	3,395.20	6,741.95	1,680.25	9,156.12	8,365.46	2.59	-0.71	0.412
40.00	-34.83	-41.92	0.00	-3,183.60	0.00	3,183.60	6,630.27	1,639.79	8,720.51	8,027.14	3.39	-0.82	0.403
44.54	-33.39	-41.69	0.00	-2,993.16	0.00	2,993.16	6,526.62	1,603.02	8,333.89	7,723.00	4.22	-0.92	0.393
45.00	-33.10	-41.46	0.00	-2,974.13	0.00	2,974.13	6,516.08	1,599.33	8,295.51	7,692.61	4.30	-0.93	0.392
50.00	-30.31	-41.10	0.00	-2,766.82	0.00	2,766.82	6,399.40	1,558.86	7,881.13	7,362.07	5.33	-1.03	0.381
52.46	-28.96	-40.86	0.00	-2,665.71	0.00	2,665.71	5,381.44	1,369.43	6,950.73	6,222.68	5.88	-1.09	0.435
55.00	-28.23	-40.53	0.00	-2,561.92	0.00	2,561.92	5,335.00	1,351.45	6,769.38	6,087.35	6.47	-1.14	0.427
60.00	-26.87	-40.08	0.00	-2,359.26	0.00	2,359.26	5,241.72	1,316.04	6,419.39	5,823.00	7.73	-1.26	0.411
65.00	-25.53	-39.63	0.00	-2,158.85	0.00	2,158.85	5,145.93	1,280.64	6,078.68	5,561.57	9.12	-1.38	0.394
70.00	-24.26	-39.34	0.00	-1,960.71	0.00	1,960.71	5,047.65	1,245.23	5,747.27	5,303.28	10.62	-1.49	0.376
71.00	-23.48	-37.71	0.00	-1,921.37	0.00	1,921.37	5,027.69	1,238.15	5,682.10	5,252.02	10.94	-1.52	0.371
75.00	-22.49	-37.47	0.00	-1,770.54	0.00	1,770.54	4,946.86	1,209.83	5,425.15	5,048.36	12.25	-1.61	0.356
76.00	-21.73	-35.81	0.00	-1,733.07	0.00	1,733.07	4,926.40	1,202.75	5,361.84	4,997.80	12.59	-1.63	0.352
80.00	-20.77	-35.57	0.00	-1,589.83	0.00	1,589.83	4,843.57	1,174.43	5,112.31	4,797.04	13.99	-1.72	0.337
81.00	-20.02	-33.88	0.00	-1,554.26	0.00	1,554.26	4,822.61	1,167.34	5,050.86	4,747.23	14.35	-1.74	0.332
85.00	-19.08	-33.64	0.00	-1,418.72	0.00	1,418.72	4,737.78	1,139.02	4,808.77	4,549.54	15.85	-1.83	0.317
86.00	-18.34	-31.94	0.00	-1,385.08	0.00	1,385.08	4,716.33	1,131.94	4,749.17	4,500.52	16.24	-1.85	0.312
89.84	-17.48	-31.74	0.00	-1,262.44	0.00	1,262.44	4,633.00	1,104.75	4,523.78	4,313.82	17.76	-1.93	0.297
90.00	-17.41	-31.69	0.00	-1,257.36	0.00	1,257.36	4,629.49	1,103.62	4,514.51	4,306.09	17.83	-1.94	0.297
91.00	-16.55	-29.95	0.00	-1,225.67	0.00	1,225.67	4,607.54	1,096.54	4,456.77	4,257.91	18.24	-1.96	0.292
95.00	-15.12	-29.69	0.00	-1,105.88	0.00	1,105.88	4,518.70	1,068.21	4,229.54	4,066.92	19.91	-2.04	0.276
96.00	-14.28	-28.08	0.00	-1,076.19	0.00	1,076.19	4,492.13	1,061.13	4,173.67	4,015.93	20.34	-2.06	0.272
96.17	-14.21	-27.91	0.00	-1,071.33	0.00	1,071.33	2,918.80	770.13	3,077.48	2,659.17	20.42	-2.07	0.409
100.00	-13.57	-27.52	0.00	-964.52	0.00	964.52	2,873.85	750.78	2,924.76	2,551.96	22.11	-2.14	0.384
105.00	-12.75	-27.09	0.00	-826.91	0.00	826.91	2,812.92	725.49	2,731.07	2,413.11	24.42	-2.27	0.349
110.00	-11.98	-26.82	0.00	-691.47	0.00	691.47	2,749.49	700.20	2,544.01	2,275.87	26.87	-2.39	0.310
111.00	-11.34	-25.00	0.00	-664.66	0.00	664.66	2,736.50	695.14	2,507.39	2,248.63	27.37	-2.41	0.301
115.00	-10.75	-24.78	0.00	-564.66	0.00	564.66	2,683.56	674.91	2,363.58	2,140.45	29.43	-2.50	0.269
116.00	-10.12	-22.94	0.00	-539.88	0.00	539.88	2,670.07	669.85	2,328.30	2,113.60	29.96	-2.52	0.260
120.00	-9.55	-22.72	0.00	-448.11	0.00	448.11	2,615.12	649.62	2,189.80	2,007.08	32.11	-2.60	0.228
121.00	-8.94	-20.87	0.00	-425.39	0.00	425.39	2,601.14	644.56	2,155.84	1,980.68	32.65	-2.62	0.219
125.00	-8.38	-20.66	0.00	-341.90	0.00	341.90	2,544.19	624.33	2,022.64	1,876.00	34.88	-2.69	0.187
126.00	-7.78	-18.79	0.00	-321.24	0.00	321.24	2,529.70	619.27	1,990.01	1,850.07	35.44	-2.71	0.178
130.00	-7.25	-18.58	0.00	-246.08	0.00	246.08	2,470.75	599.04	1,862.13	1,747.42	37.74	-2.76	0.145
131.00	-6.66	-16.82	0.00	-227.51	0.00	227.51	2,455.77	593.98	1,830.82	1,722.02	38.32	-2.78	0.136
131.54	-6.59	-16.67	0.00	-218.37	0.00	218.37	2,447.58	591.24	1,813.92	1,708.27	38.63	-2.78	0.131

Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number:13626831_C3_03

4/6/2021 10:35:06 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.0W

114 mph with No Ice (Reduced DL)

21 Iterations

Gust Response Factor :1.10

Dead Load Factor :0.90

Wind Load Factor :1.00

135.00	-5.94	-16.47	0.00	-160.74	0.00	160.74	2,394.82	573.75	1,708.25	1,621.57	40.66	-2.82	0.102
136.00	-5.30	-14.70	0.00	-144.27	0.00	144.27	2,379.33	568.70	1,678.27	1,596.75	41.25	-2.83	0.093
136.46	-5.21	-14.66	0.00	-137.50	0.00	137.50	1,180.67	345.04	1,029.55	804.32	41.53	-2.83	0.177
137.00	-3.43	-11.52	0.00	-129.59	0.00	129.59	1,178.12	343.40	1,019.79	798.75	41.85	-2.84	0.166
140.00	-3.22	-11.36	0.00	-95.04	0.00	95.04	1,163.42	334.30	966.44	767.75	43.64	-2.87	0.128
141.00	-2.70	-9.45	0.00	-83.68	0.00	83.68	1,158.32	331.27	948.98	757.40	44.25	-2.89	0.114
145.00	-2.42	-9.27	0.00	-45.86	0.00	45.86	1,136.91	319.13	880.71	716.01	46.68	-2.92	0.067
146.00	-1.91	-7.45	0.00	-36.59	0.00	36.59	1,131.31	316.09	864.04	705.66	47.29	-2.92	0.054
147.00	-1.20	-6.63	0.00	-29.14	0.00	29.14	1,125.61	313.06	847.53	695.32	47.90	-2.93	0.043
148.00	-1.05	-3.66	0.00	-19.65	0.00	19.65	1,119.80	310.02	831.18	684.99	48.52	-2.93	0.030
150.00	-0.95	-3.57	0.00	-12.33	0.00	12.33	1,107.90	303.95	798.96	664.36	49.75	-2.93	0.020
151.00	0.00	-3.52	0.00	-8.76	0.00	8.76	1,101.80	300.92	783.09	654.06	50.36	-2.94	0.014

Load Case: 1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 in Radial Ice	21 Iterations
Gust Response Factor :1.10	Ice Dead Load Factor :1.00	Ice Importance Factor :1.00
Dead Load Factor :1.20		
Wind Load Factor :1.00		

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		81.9	0.0					0.0	0.0	81.9	0.0	0.0	0.0
5.00		162.3	2,601.1					0.0	174.4	162.3	2,775.5	0.0	0.0
10.00		159.3	2,586.1					0.0	174.4	159.3	2,760.6	0.0	0.0
15.00		156.1	2,550.6					0.0	174.4	156.1	2,725.0	0.0	0.0
20.00		152.9	2,508.3					0.0	174.4	152.9	2,682.7	0.0	0.0
25.00		149.7	2,462.5					0.0	174.4	149.7	2,636.9	0.0	0.0
30.00		148.2	2,414.5					0.0	174.4	148.2	2,588.9	0.0	0.0
35.00		149.7	2,365.0					0.0	174.4	149.7	2,539.4	0.0	0.0
40.00		145.0	2,314.4					0.0	174.4	145.0	2,488.8	0.0	0.0
44.54	Bot - Section 2	76.6	2,058.7					0.0	158.5	76.6	2,217.2	0.0	0.0
45.00		85.3	356.7					0.0	15.9	85.3	372.6	0.0	0.0
50.00		116.9	3,850.3					0.0	174.4	116.9	4,024.8	0.0	0.0
52.46	Top - Section 1	78.6	1,861.1					0.0	85.8	78.6	1,946.9	0.0	0.0
55.00		118.6	994.3					0.0	88.6	118.6	1,082.9	0.0	0.0
60.00		157.2	1,919.1					0.0	174.4	157.2	2,093.6	0.0	0.0
65.00		156.8	1,871.4					0.0	174.4	156.8	2,045.8	0.0	0.0
70.00		93.8	1,823.3					0.0	174.4	93.8	1,997.7	0.0	0.0
71.00	Appurtenance(s)	77.7	359.6	478.2	0.0	0.0	1,708.4	0.0	34.9	555.9	2,102.9	0.0	0.0
75.00		77.6	1,416.8					0.0	139.5	77.6	1,556.3	0.0	0.0
76.00	Appurtenance(s)	77.1	349.9	489.0	0.0	0.0	1,711.1	0.0	34.9	566.1	2,095.9	0.0	0.0
80.00		76.9	1,377.7					0.0	139.5	76.9	1,517.3	0.0	0.0
81.00	Appurtenance(s)	76.3	340.1	499.4	0.0	0.0	1,713.6	0.0	34.9	575.7	2,088.6	0.0	0.0
85.00		76.1	1,338.5					0.0	139.5	76.1	1,478.1	0.0	0.0
86.00	Appurtenance(s)	72.9	330.3	509.4	0.0	0.0	1,716.0	0.0	34.9	582.3	2,081.2	0.0	0.0
89.84	Bot - Section 3	60.2	1,247.9					0.0	134.0	60.2	1,381.9	0.0	0.0
90.00		17.6	81.5					0.0	5.6	17.6	87.1	0.0	0.0
91.00	Appurtenance(s)	75.3	507.2	519.0	0.0	0.0	1,718.2	0.0	34.9	594.2	2,260.3	0.0	0.0
95.00		75.0	1,994.7					0.0	139.5	75.0	2,134.3	0.0	0.0
96.00	Appurtenance(s)	17.5	491.4	528.2	0.0	0.0	1,720.4	0.0	34.9	545.7	2,246.6	0.0	0.0
96.17	Top - Section 2	59.2	84.9					0.0	6.0	59.2	90.9	0.0	0.0
100.00		129.4	915.3					0.0	133.5	129.4	1,048.8	0.0	0.0
105.00		144.3	1,161.2					0.0	174.4	144.3	1,335.6	0.0	0.0
110.00		85.6	1,123.0					0.0	174.4	85.6	1,297.4	0.0	0.0
111.00	Appurtenance(s)	70.0	220.8	554.2	0.0	0.0	1,726.2	0.0	34.9	624.2	1,981.9	0.0	0.0
115.00		69.7	865.5					0.0	139.5	69.7	1,005.0	0.0	0.0
116.00	Appurtenance(s)	68.4	213.1	562.3	0.0	0.0	1,728.0	0.0	34.9	630.8	1,976.1	0.0	0.0
120.00		68.1	834.7					0.0	139.5	68.1	974.2	0.0	0.0
121.00	Appurtenance(s)	66.8	205.4	570.2	0.0	0.0	1,729.8	0.0	34.9	637.0	1,970.1	0.0	0.0
125.00		66.4	803.8					0.0	139.5	66.4	943.3	0.0	0.0
126.00	Appurtenance(s)	65.1	197.7	577.9	0.0	0.0	1,731.4	0.0	34.9	643.0	1,964.0	0.0	0.0
130.00		64.7	772.8					0.0	139.5	64.7	912.3	0.0	0.0
131.00	Appurtenance(s)	19.7	189.9	585.4	0.0	0.0	1,733.1	0.0	34.9	605.1	1,957.9	0.0	0.0
131.54	Bot - Section 4	50.9	102.6					0.0	19.0	50.9	121.5	0.0	0.0
135.00		56.6	927.0					0.0	120.6	56.6	1,047.6	0.0	0.0
136.00	Appurtenance(s)	18.3	263.7	592.7	0.0	0.0	1,734.6	0.0	34.9	611.0	2,033.2	0.0	0.0
136.46	Top - Section 3	12.5	120.6					0.0	16.0	12.5	136.6	0.0	0.0
137.00	Appurtenance(s)	43.7	69.9	698.0	0.0	0.0	4,335.5	0.0	18.8	741.8	4,424.3	0.0	0.0
140.00		49.2	381.2					0.0	53.1	49.2	434.3	0.0	0.0

Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number: 13626831_C3_03

4/6/2021 10:35:08 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 in Radial Ice	21 Iterations
Gust Response Factor :1.10	Ice Dead Load Factor :1.00	
Dead Load Factor :1.20		Ice Importance Factor :1.00
Wind Load Factor :1.00		

141.00	Appurtenance(s)	60.1	125.3	599.9	0.0	0.0	1,736.1	0.0	17.7	660.0	1,879.1	0.0	0.0
145.00		59.7	487.7					0.0	70.8	59.7	558.6	0.0	0.0
146.00	Appurtenance(s)	23.5	119.8	606.8	0.0	0.0	1,737.6	0.0	17.7	630.3	1,875.1	0.0	0.0
147.00	Appurtenance(s)	23.3	118.7	195.8	0.0	0.0	1,227.9	0.0	17.7	219.2	1,364.3	0.0	0.0
148.00	Appurtenance(s)	32.7	117.6	579.8	0.0	579.8	1,853.2	0.0	17.7	612.5	1,988.5	0.0	0.0
150.00		31.5	231.6					0.0	0.0	31.5	231.6	0.0	0.0
151.00	Appurtenance(s)	10.4	114.3	613.6	0.0	0.0	1,739.0	0.0	0.0	624.1	1,853.3	0.0	0.0
Totals:										14,179.1	93,415.2	0.00	0.00

Load Case: 1.2D + 1.0Di + 1.0Wi		50 mph with 1.00 in Radial Ice		21 Iterations	
Gust Response Factor :1.10		Ice Dead Load Factor :1.00		Ice Importance Factor :1.00	
Dead Load Factor :1.20					
Wind Load Factor :1.00					

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-95.15	-14.74	0.00	-1,623.46	0.00	1,623.46	7,453.69	1,963.48	12,502.6	10,820.4	0.00	0.00	0.163
5.00	-92.37	-14.63	0.00	-1,549.74	0.00	1,549.74	7,359.51	1,923.02	11,992.7	10,462.0	0.02	-0.03	0.161
10.00	-89.60	-14.52	0.00	-1,476.58	0.00	1,476.58	7,262.84	1,882.56	11,493.4	10,105.7	0.07	-0.06	0.159
15.00	-86.86	-14.41	0.00	-1,403.97	0.00	1,403.97	7,163.66	1,842.10	11,004.7	9,751.96	0.15	-0.10	0.156
20.00	-84.17	-14.30	0.00	-1,331.91	0.00	1,331.91	7,061.98	1,801.64	10,526.6	9,400.80	0.28	-0.13	0.154
25.00	-81.53	-14.20	0.00	-1,260.39	0.00	1,260.39	6,957.80	1,761.17	10,059.1	9,052.51	0.43	-0.17	0.151
30.00	-78.93	-14.09	0.00	-1,189.41	0.00	1,189.41	6,851.13	1,720.71	9,602.35	8,707.32	0.62	-0.20	0.148
35.00	-76.38	-13.97	0.00	-1,118.97	0.00	1,118.97	6,741.95	1,680.25	9,156.12	8,365.46	0.85	-0.23	0.145
40.00	-73.89	-13.86	0.00	-1,049.10	0.00	1,049.10	6,630.27	1,639.79	8,720.51	8,027.14	1.12	-0.27	0.142
44.54	-71.67	-13.80	0.00	-986.12	0.00	986.12	6,526.62	1,603.02	8,333.89	7,723.00	1.39	-0.30	0.139
45.00	-71.29	-13.73	0.00	-979.82	0.00	979.82	6,516.08	1,599.33	8,295.51	7,692.61	1.42	-0.30	0.138
50.00	-67.26	-13.62	0.00	-911.16	0.00	911.16	6,399.40	1,558.86	7,881.13	7,362.07	1.76	-0.34	0.134
52.46	-65.31	-13.55	0.00	-877.64	0.00	877.64	5,381.44	1,369.43	6,950.73	6,222.68	1.94	-0.36	0.153
55.00	-64.22	-13.46	0.00	-843.21	0.00	843.21	5,335.00	1,351.45	6,769.38	6,087.35	2.13	-0.38	0.151
60.00	-62.12	-13.33	0.00	-775.91	0.00	775.91	5,241.72	1,316.04	6,419.39	5,823.00	2.55	-0.42	0.145
65.00	-60.07	-13.20	0.00	-709.25	0.00	709.25	5,145.93	1,280.64	6,078.68	5,561.57	3.00	-0.45	0.139
70.00	-58.06	-13.11	0.00	-643.26	0.00	643.26	5,047.65	1,245.23	5,747.27	5,303.28	3.50	-0.49	0.133
71.00	-55.96	-12.56	0.00	-630.15	0.00	630.15	5,027.69	1,238.15	5,682.10	5,252.02	3.60	-0.50	0.131
75.00	-54.40	-12.48	0.00	-579.93	0.00	579.93	4,946.86	1,209.83	5,425.15	5,048.36	4.03	-0.53	0.126
76.00	-52.31	-11.91	0.00	-567.44	0.00	567.44	4,926.40	1,202.75	5,361.84	4,997.80	4.15	-0.54	0.124
80.00	-50.79	-11.84	0.00	-519.79	0.00	519.79	4,843.57	1,174.43	5,112.31	4,797.04	4.61	-0.57	0.119
81.00	-48.70	-11.26	0.00	-507.95	0.00	507.95	4,822.61	1,167.34	5,050.86	4,747.23	4.73	-0.57	0.117
85.00	-47.22	-11.18	0.00	-462.93	0.00	462.93	4,737.78	1,139.02	4,808.77	4,549.54	5.22	-0.60	0.112
86.00	-45.14	-10.59	0.00	-451.75	0.00	451.75	4,716.33	1,131.94	4,749.17	4,500.52	5.35	-0.61	0.110
89.84	-43.76	-10.53	0.00	-411.08	0.00	411.08	4,633.00	1,104.75	4,523.78	4,313.82	5.85	-0.64	0.105
90.00	-43.67	-10.51	0.00	-409.40	0.00	409.40	4,629.49	1,103.62	4,514.51	4,306.09	5.87	-0.64	0.105
91.00	-41.41	-9.90	0.00	-398.89	0.00	398.89	4,607.54	1,096.54	4,456.77	4,257.91	6.00	-0.64	0.103
95.00	-39.28	-9.81	0.00	-359.28	0.00	359.28	4,518.70	1,068.21	4,229.54	4,066.92	6.56	-0.67	0.097
96.00	-37.04	-9.25	0.00	-349.46	0.00	349.46	4,492.13	1,061.13	4,173.67	4,015.93	6.70	-0.68	0.095
96.17	-36.95	-9.19	0.00	-347.86	0.00	347.86	2,918.80	770.13	3,077.48	2,659.17	6.72	-0.68	0.144
100.00	-35.89	-9.07	0.00	-312.68	0.00	312.68	2,873.85	750.78	2,924.76	2,551.96	7.28	-0.70	0.135
105.00	-34.55	-8.94	0.00	-267.32	0.00	267.32	2,812.92	725.49	2,731.07	2,413.11	8.04	-0.74	0.123
110.00	-33.25	-8.85	0.00	-222.65	0.00	222.65	2,749.49	700.20	2,544.01	2,275.87	8.84	-0.78	0.110
111.00	-31.28	-8.20	0.00	-213.80	0.00	213.80	2,736.50	695.14	2,507.39	2,248.63	9.00	-0.79	0.107
115.00	-30.27	-8.13	0.00	-180.99	0.00	180.99	2,683.56	674.91	2,363.58	2,140.45	9.68	-0.82	0.096
116.00	-28.30	-7.48	0.00	-172.86	0.00	172.86	2,670.07	669.85	2,328.30	2,113.60	9.85	-0.83	0.093
120.00	-27.33	-7.40	0.00	-142.95	0.00	142.95	2,615.12	649.62	2,189.80	2,007.08	10.55	-0.85	0.082
121.00	-25.37	-6.74	0.00	-135.55	0.00	135.55	2,601.14	644.56	2,155.84	1,980.68	10.73	-0.86	0.078
125.00	-24.42	-6.67	0.00	-108.58	0.00	108.58	2,544.19	624.33	2,022.64	1,876.00	11.46	-0.88	0.068
126.00	-22.47	-6.00	0.00	-101.91	0.00	101.91	2,529.70	619.27	1,990.01	1,850.07	11.65	-0.88	0.064
130.00	-21.55	-5.92	0.00	-77.91	0.00	77.91	2,470.75	599.04	1,862.13	1,747.42	12.40	-0.90	0.053
131.00	-19.61	-5.29	0.00	-71.99	0.00	71.99	2,455.77	593.98	1,830.82	1,722.02	12.59	-0.91	0.050
131.54	-19.48	-5.24	0.00	-69.11	0.00	69.11	2,447.58	591.24	1,813.92	1,708.27	12.69	-0.91	0.048

Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number: 13626831_C3_03

4/6/2021 10:35:08 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0Di + 1.0Wi				50 mph with 1.00 in Radial Ice				21 Iterations					
Gust Response Factor :1.10		Ice Dead Load Factor :1.00				Ice Importance Factor :1.00							
Dead Load Factor :1.20													
Wind Load Factor :1.00													
135.00	-18.44	-5.17	0.00	-51.00	0.00	51.00	2,394.82	573.75	1,708.25	1,621.57	13.35	-0.92	0.039
136.00	-16.41	-4.53	0.00	-45.83	0.00	45.83	2,379.33	568.70	1,678.27	1,596.75	13.54	-0.92	0.036
136.46	-16.28	-4.51	0.00	-43.75	0.00	43.75	1,180.67	345.04	1,029.55	804.32	13.63	-0.93	0.068
137.00	-11.87	-3.70	0.00	-41.32	0.00	41.32	1,178.12	343.40	1,019.79	798.75	13.74	-0.93	0.062
140.00	-11.43	-3.64	0.00	-30.22	0.00	30.22	1,163.42	334.30	966.44	767.75	14.33	-0.94	0.049
141.00	-9.56	-2.96	0.00	-26.57	0.00	26.57	1,158.32	331.27	948.98	757.40	14.52	-0.94	0.043
145.00	-9.01	-2.89	0.00	-14.75	0.00	14.75	1,136.91	319.13	880.71	716.01	15.32	-0.95	0.029
146.00	-7.14	-2.23	0.00	-11.87	0.00	11.87	1,131.31	316.09	864.04	705.66	15.52	-0.95	0.023
147.00	-5.78	-1.98	0.00	-9.64	0.00	9.64	1,125.61	313.06	847.53	695.32	15.72	-0.95	0.019
148.00	-3.80	-1.34	0.00	-7.08	0.00	7.08	1,119.80	310.02	831.18	684.99	15.92	-0.96	0.014
150.00	-3.57	-1.30	0.00	-4.40	0.00	4.40	1,107.90	303.95	798.96	664.36	16.32	-0.96	0.010
151.00	0.00	-1.24	0.00	-3.10	0.00	3.10	1,101.80	300.92	783.09	654.06	16.52	-0.96	0.005

Load Case: 1.0D + 1.0W	Serviceability 60 mph	20 Iterations
Gust Response Factor :1.10		
Dead Load Factor :1.00		
Wind Load Factor :1.00		

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		62.8	0.0					0.0	0.0	62.8	0.0	0.0	0.0
5.00		124.3	1,883.9					0.0	145.4	124.3	2,029.2	0.0	0.0
10.00		121.7	1,844.7					0.0	145.4	121.7	1,990.0	0.0	0.0
15.00		119.1	1,805.4					0.0	145.4	119.1	1,950.8	0.0	0.0
20.00		116.5	1,766.2					0.0	145.4	116.5	1,911.6	0.0	0.0
25.00		113.9	1,727.0					0.0	145.4	113.9	1,872.3	0.0	0.0
30.00		112.7	1,687.8					0.0	145.4	112.7	1,833.1	0.0	0.0
35.00		113.6	1,648.5					0.0	145.4	113.6	1,793.9	0.0	0.0
40.00		109.9	1,609.3					0.0	145.4	109.9	1,754.7	0.0	0.0
44.54	Bot - Section 2	58.0	1,428.3					0.0	132.1	58.0	1,560.4	0.0	0.0
45.00		64.6	267.8					0.0	13.3	64.6	281.1	0.0	0.0
50.00		88.5	2,892.5					0.0	145.4	88.5	3,037.9	0.0	0.0
52.46	Top - Section 1	59.4	1,396.1					0.0	71.5	59.4	1,467.6	0.0	0.0
55.00		89.6	670.0					0.0	73.8	89.6	743.8	0.0	0.0
60.00		118.7	1,293.0					0.0	145.4	118.7	1,438.4	0.0	0.0
65.00		118.2	1,258.7					0.0	145.4	118.2	1,404.0	0.0	0.0
70.00		70.7	1,224.4					0.0	145.4	70.7	1,369.7	0.0	0.0
71.00	Appurtenance(s)	58.5	240.8	346.7	0.0	0.0	600.0	0.0	29.1	405.2	869.8	0.0	0.0
75.00		58.4	949.3					0.0	116.3	58.4	1,065.6	0.0	0.0
76.00	Appurtenance(s)	57.9	233.9	353.5	0.0	0.0	600.0	0.0	29.1	411.4	863.0	0.0	0.0
80.00		57.8	921.8					0.0	116.3	57.8	1,038.1	0.0	0.0
81.00	Appurtenance(s)	57.2	227.0	360.0	0.0	0.0	600.0	0.0	29.1	417.2	856.1	0.0	0.0
85.00		57.1	894.4					0.0	116.3	57.1	1,010.6	0.0	0.0
86.00	Appurtenance(s)	54.6	220.2	366.2	0.0	0.0	600.0	0.0	29.1	420.9	849.2	0.0	0.0
89.84	Bot - Section 3	45.1	832.7					0.0	111.6	45.1	944.3	0.0	0.0
90.00		13.1	59.1					0.0	4.7	13.1	63.8	0.0	0.0
91.00	Appurtenance(s)	56.3	368.2	372.2	0.0	0.0	600.0	0.0	29.1	428.5	997.2	0.0	0.0
95.00		56.1	1,449.2					0.0	116.3	56.1	1,565.5	0.0	0.0
96.00	Appurtenance(s)	13.1	356.4	377.9	0.0	0.0	600.0	0.0	29.1	391.0	985.5	0.0	0.0
96.17	Top - Section 2	44.2	61.5					0.0	5.0	44.2	66.6	0.0	0.0
100.00		96.5	564.2					0.0	111.2	96.5	675.5	0.0	0.0
105.00		107.4	715.6					0.0	145.4	107.4	860.9	0.0	0.0
110.00		63.6	691.1					0.0	145.4	63.6	836.4	0.0	0.0
111.00	Appurtenance(s)	52.0	135.3	393.9	0.0	0.0	600.0	0.0	29.1	445.9	764.3	0.0	0.0
115.00		51.7	531.3					0.0	116.3	51.7	647.6	0.0	0.0
116.00	Appurtenance(s)	50.7	130.4	398.9	0.0	0.0	600.0	0.0	29.1	449.6	759.4	0.0	0.0
120.00		50.4	511.7					0.0	116.3	50.4	627.9	0.0	0.0
121.00	Appurtenance(s)	49.3	125.5	403.8	0.0	0.0	600.0	0.0	29.1	453.1	754.5	0.0	0.0
125.00		49.1	492.1					0.0	116.3	49.1	608.3	0.0	0.0
126.00	Appurtenance(s)	47.9	120.6	408.5	0.0	0.0	600.0	0.0	29.1	456.4	749.6	0.0	0.0
130.00		47.7	472.4					0.0	116.3	47.7	588.7	0.0	0.0
131.00	Appurtenance(s)	14.5	115.7	413.0	0.0	0.0	600.0	0.0	29.1	427.6	744.7	0.0	0.0
131.54	Bot - Section 4	37.4	62.4					0.0	15.8	37.4	78.2	0.0	0.0
135.00		41.6	628.1					0.0	100.5	41.6	728.6	0.0	0.0
136.00	Appurtenance(s)	13.4	178.2	417.5	0.0	0.0	600.0	0.0	29.1	430.9	807.3	0.0	0.0
136.46	Top - Section 3	9.2	81.5					0.0	13.4	9.2	94.8	0.0	0.0
137.00	Appurtenance(s)	32.1	36.0	725.1	0.0	0.0	2,096.8	0.0	15.7	757.1	2,148.5	0.0	0.0
140.00		36.0	197.1					0.0	44.3	36.0	241.4	0.0	0.0

Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number: 13626831_C3_03

4/6/2021 10:35:10 PM

Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W Serviceability 60 mph 20 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.00

Wind Load Factor :1.00

141.00	Appurtenance(s)	43.9	64.5	421.8	0.0	0.0	600.0	0.0	14.8	465.8	679.3	0.0	0.0
145.00		43.6	252.2					0.0	59.0	43.6	311.3	0.0	0.0
146.00	Appurtenance(s)	17.1	61.6	426.0	0.0	0.0	600.0	0.0	14.8	443.2	676.3	0.0	0.0
147.00	Appurtenance(s)	17.0	61.0	177.4	0.0	0.0	750.0	0.0	14.8	194.4	825.8	0.0	0.0
148.00	Appurtenance(s)	22.9	60.4	709.6	0.0	709.6	258.0	0.0	14.8	732.5	333.2	0.0	0.0
150.00		21.6	119.0					0.0	0.0	21.6	119.0	0.0	0.0
151.00	Appurtenance(s)	7.1	58.6	430.2	0.0	0.0	600.0	0.0	0.0	437.3	658.6	0.0	0.0
Totals:										10,817.9	53,934.1	0.00	0.00

Load Case: 1.0D + 1.0W

Serviceability 60 mph

20 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.00

Wind Load Factor :1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-54.53	-11.20	0.00	-1,224.85	0.00	1,224.85	7,453.69	1,963.48	12,502.6	10,820.4	0.00	0.00	0.121
5.00	-52.50	-11.10	0.00	-1,168.86	0.00	1,168.86	7,359.51	1,923.02	11,992.7	10,462.0	0.01	-0.02	0.119
10.00	-50.50	-11.00	0.00	-1,113.37	0.00	1,113.37	7,262.84	1,882.56	11,493.4	10,105.7	0.05	-0.05	0.117
15.00	-48.55	-10.90	0.00	-1,058.40	0.00	1,058.40	7,163.66	1,842.10	11,004.7	9,751.96	0.12	-0.07	0.115
20.00	-46.63	-10.80	0.00	-1,003.92	0.00	1,003.92	7,061.98	1,801.64	10,526.6	9,400.80	0.21	-0.10	0.113
25.00	-44.75	-10.70	0.00	-949.93	0.00	949.93	6,957.80	1,761.17	10,059.1	9,052.51	0.33	-0.12	0.111
30.00	-42.92	-10.60	0.00	-896.44	0.00	896.44	6,851.13	1,720.71	9,602.35	8,707.32	0.47	-0.15	0.109
35.00	-41.12	-10.50	0.00	-843.43	0.00	843.43	6,741.95	1,680.25	9,156.12	8,365.46	0.64	-0.18	0.107
40.00	-39.36	-10.40	0.00	-790.92	0.00	790.92	6,630.27	1,639.79	8,720.51	8,027.14	0.84	-0.20	0.105
44.54	-37.80	-10.35	0.00	-743.65	0.00	743.65	6,526.62	1,603.02	8,333.89	7,723.00	1.05	-0.23	0.102
45.00	-37.51	-10.29	0.00	-738.93	0.00	738.93	6,516.08	1,599.33	8,295.51	7,692.61	1.07	-0.23	0.102
50.00	-34.47	-10.20	0.00	-687.47	0.00	687.47	6,399.40	1,558.86	7,881.13	7,362.07	1.32	-0.26	0.099
52.46	-33.00	-10.14	0.00	-662.37	0.00	662.37	5,381.44	1,369.43	6,950.73	6,222.68	1.46	-0.27	0.113
55.00	-32.26	-10.06	0.00	-636.60	0.00	636.60	5,335.00	1,351.45	6,769.38	6,087.35	1.61	-0.28	0.111
60.00	-30.81	-9.95	0.00	-586.28	0.00	586.28	5,241.72	1,316.04	6,419.39	5,823.00	1.92	-0.31	0.107
65.00	-29.40	-9.84	0.00	-536.52	0.00	536.52	5,145.93	1,280.64	6,078.68	5,561.57	2.26	-0.34	0.102
70.00	-28.03	-9.77	0.00	-487.31	0.00	487.31	5,047.65	1,245.23	5,747.27	5,303.28	2.64	-0.37	0.098
71.00	-27.16	-9.37	0.00	-477.54	0.00	477.54	5,027.69	1,238.15	5,682.10	5,252.02	2.72	-0.38	0.096
75.00	-26.10	-9.31	0.00	-440.07	0.00	440.07	4,946.86	1,209.83	5,425.15	5,048.36	3.04	-0.40	0.093
76.00	-25.23	-8.90	0.00	-430.76	0.00	430.76	4,926.40	1,202.75	5,361.84	4,997.80	3.13	-0.40	0.091
80.00	-24.19	-8.84	0.00	-395.18	0.00	395.18	4,843.57	1,174.43	5,112.31	4,797.04	3.48	-0.43	0.087
81.00	-23.34	-8.42	0.00	-386.34	0.00	386.34	4,822.61	1,167.34	5,050.86	4,747.23	3.57	-0.43	0.086
85.00	-22.33	-8.36	0.00	-352.66	0.00	352.66	4,737.78	1,139.02	4,808.77	4,549.54	3.94	-0.45	0.082
86.00	-21.48	-7.94	0.00	-344.31	0.00	344.31	4,716.33	1,131.94	4,749.17	4,500.52	4.03	-0.46	0.081
89.84	-20.53	-7.89	0.00	-313.83	0.00	313.83	4,633.00	1,104.75	4,523.78	4,313.82	4.41	-0.48	0.077
90.00	-20.47	-7.88	0.00	-312.57	0.00	312.57	4,629.49	1,103.62	4,514.51	4,306.09	4.43	-0.48	0.077
91.00	-19.47	-7.44	0.00	-304.69	0.00	304.69	4,607.54	1,096.54	4,456.77	4,257.91	4.53	-0.49	0.076
95.00	-17.91	-7.38	0.00	-274.92	0.00	274.92	4,518.70	1,068.21	4,229.54	4,066.92	4.95	-0.51	0.072
96.00	-16.93	-6.98	0.00	-267.54	0.00	267.54	4,492.13	1,061.13	4,173.67	4,015.93	5.05	-0.51	0.070
96.17	-16.86	-6.94	0.00	-266.33	0.00	266.33	2,918.80	770.13	3,077.48	2,659.17	5.07	-0.51	0.106
100.00	-16.18	-6.84	0.00	-239.79	0.00	239.79	2,873.85	750.78	2,924.76	2,551.96	5.49	-0.53	0.100
105.00	-15.32	-6.73	0.00	-205.59	0.00	205.59	2,812.92	725.49	2,731.07	2,413.11	6.07	-0.56	0.091
110.00	-14.48	-6.67	0.00	-171.92	0.00	171.92	2,749.49	700.20	2,544.01	2,275.87	6.68	-0.59	0.081
111.00	-13.72	-6.22	0.00	-165.25	0.00	165.25	2,736.50	695.14	2,507.39	2,248.63	6.80	-0.60	0.079
115.00	-13.07	-6.16	0.00	-140.39	0.00	140.39	2,683.56	674.91	2,363.58	2,140.45	7.31	-0.62	0.071
116.00	-12.31	-5.70	0.00	-134.23	0.00	134.23	2,670.07	669.85	2,328.30	2,113.60	7.44	-0.63	0.068
120.00	-11.68	-5.65	0.00	-111.41	0.00	111.41	2,615.12	649.62	2,189.80	2,007.08	7.98	-0.65	0.060
121.00	-10.93	-5.19	0.00	-105.76	0.00	105.76	2,601.14	644.56	2,155.84	1,980.68	8.11	-0.65	0.058
125.00	-10.33	-5.14	0.00	-85.00	0.00	85.00	2,544.19	624.33	2,022.64	1,876.00	8.67	-0.67	0.049
126.00	-9.58	-4.67	0.00	-79.86	0.00	79.86	2,529.70	619.27	1,990.01	1,850.07	8.81	-0.67	0.047
130.00	-8.99	-4.62	0.00	-61.17	0.00	61.17	2,470.75	599.04	1,862.13	1,747.42	9.38	-0.69	0.039
131.00	-8.25	-4.18	0.00	-56.55	0.00	56.55	2,455.77	593.98	1,830.82	1,722.02	9.52	-0.69	0.036
131.54	-8.17	-4.15	0.00	-54.28	0.00	54.28	2,447.58	591.24	1,813.92	1,708.27	9.60	-0.69	0.035

Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number: 13626831_C3_03

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Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W				Serviceability 60 mph				20 Iterations					
Gust Response Factor :1.10													
Dead Load Factor :1.00													
Wind Load Factor :1.00													
135.00	-7.45	-4.10	0.00	-39.95	0.00	39.95	2,394.82	573.75	1,708.25	1,621.57	10.10	-0.70	0.028
136.00	-6.64	-3.66	0.00	-35.85	0.00	35.85	2,379.33	568.70	1,678.27	1,596.75	10.25	-0.70	0.025
136.46	-6.55	-3.65	0.00	-34.17	0.00	34.17	1,180.67	345.04	1,029.55	804.32	10.32	-0.70	0.048
137.00	-4.41	-2.86	0.00	-32.20	0.00	32.20	1,178.12	343.40	1,019.79	798.75	10.40	-0.71	0.044
140.00	-4.17	-2.82	0.00	-23.62	0.00	23.62	1,163.42	334.30	966.44	767.75	10.85	-0.71	0.034
141.00	-3.49	-2.35	0.00	-20.79	0.00	20.79	1,158.32	331.27	948.98	757.40	11.00	-0.72	0.031
145.00	-3.18	-2.30	0.00	-11.39	0.00	11.39	1,136.91	319.13	880.71	716.01	11.60	-0.72	0.019
146.00	-2.51	-1.85	0.00	-9.09	0.00	9.09	1,131.31	316.09	864.04	705.66	11.75	-0.73	0.015
147.00	-1.69	-1.65	0.00	-7.24	0.00	7.24	1,125.61	313.06	847.53	695.32	11.90	-0.73	0.012
148.00	-1.37	-0.91	0.00	-4.88	0.00	4.88	1,119.80	310.02	831.18	684.99	12.06	-0.73	0.008
150.00	-1.25	-0.89	0.00	-3.06	0.00	3.06	1,107.90	303.95	798.96	664.36	12.36	-0.73	0.006
151.00	0.00	-0.87	0.00	-2.17	0.00	2.17	1,101.80	300.92	783.09	654.06	12.52	-0.73	0.003

Equivalent Lateral Forces Method Analysis

Spectral Response Acceleration for Short Period (S_s):	0.17
Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.05
Long-Period Transition Period (T_L):	6
Importance Factor (I_E):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	1.50
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.18
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.09
Seismic Response Coefficient (C_s):	0.04
Upper Limit C_s	0.04
Lower Limit C_s	0.03
Period based on Rayleigh Method (sec):	1.47
Redundancy Factor (ρ):	1.30
Seismic Force Distribution Exponent (k):	1.48
Total Unfactored Dead Load:	54.53 k
Seismic Base Shear (E):	2.79 k

Load Case 1.2D + 1.0Ev + 1.0Eh

Seismic

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
54	150.50	59	99	0.003	8	72
53	149.00	119	199	0.005	15	147
52	147.50	75	124	0.003	9	93
51	146.50	76	123	0.003	9	94
50	145.50	76	123	0.003	9	94
49	143.00	311	489	0.013	38	385
48	140.50	79	121	0.003	9	98
47	138.50	241	362	0.010	28	298
46	136.73	52	76	0.002	6	64
45	136.23	95	139	0.004	11	117
44	135.50	207	301	0.008	23	256
43	133.27	729	1,032	0.028	79	900
42	131.27	78	108	0.003	8	97
41	130.50	145	199	0.005	15	179
40	128.00	589	785	0.022	60	727
39	125.50	150	194	0.005	15	185
38	123.00	608	765	0.021	59	752
37	120.50	155	188	0.005	14	191
36	118.00	628	742	0.020	57	776
35	115.50	159	183	0.005	14	197
34	113.00	648	718	0.020	55	800
33	110.50	164	176	0.005	14	203
32	107.50	836	861	0.024	66	1,033
31	102.50	861	826	0.023	63	1,064
30	98.09	675	607	0.017	47	835

29	96.09	67	58	0.002	4	82
28	95.50	385	333	0.009	26	476
27	93.00	1,565	1,300	0.036	100	1,934
26	90.50	397	317	0.009	24	491
25	89.92	64	50	0.001	4	79
24	87.92	944	722	0.020	55	1,167
23	85.50	249	183	0.005	14	308
22	83.00	1,011	709	0.020	54	1,249
21	80.50	256	172	0.005	13	316
20	78.00	1,038	664	0.018	51	1,283
19	75.50	263	160	0.004	12	325
18	73.00	1,066	618	0.017	47	1,317
17	70.50	270	149	0.004	11	333
16	67.50	1,370	707	0.019	54	1,692
15	62.50	1,404	647	0.018	50	1,735
14	57.50	1,438	585	0.016	45	1,777
13	53.73	744	274	0.008	21	919
12	51.23	1,468	503	0.014	39	1,813
11	47.50	3,038	931	0.026	71	3,754
10	44.77	281	79	0.002	6	347
9	42.27	1,560	402	0.011	31	1,928
8	37.50	1,755	379	0.010	29	2,168
7	32.50	1,794	313	0.009	24	2,217
6	27.50	1,833	250	0.007	19	2,265
5	22.50	1,872	190	0.005	15	2,314
4	17.50	1,912	133	0.004	10	2,362
3	12.50	1,951	83	0.002	6	2,410
2	7.50	1,990	40	0.001	3	2,459
1	2.50	2,029	8	0.000	1	2,507
Pine Branches	151.00	600	1,022	0.028	78	741
Pine Branches	151.00	600	1,022	0.028	78	741
Amphenol Antel LPA-1	148.00	69	114	0.003	9	85
Antel BXA-70063/6CF_	148.00	51	84	0.002	6	63
Antel LPA-80080/6CF	148.00	84	139	0.004	11	104
Antel LPA-80063/6CF	148.00	54	89	0.002	7	67
Flat T-Arm	147.00	750	1,228	0.034	94	927
Pine Branches	146.00	600	973	0.027	75	741
Pine Branches	141.00	600	924	0.025	71	741
Ericsson RRUS 8843 B	137.00	216	319	0.009	24	267
Ericsson RRUS 4478 B	137.00	180	265	0.007	20	222
Ericsson RRUS 4449 B	137.00	213	314	0.009	24	263
Raycap DC9-48-60-24-	137.00	16	24	0.001	2	20
Generic Round T-Arm	137.00	938	1,383	0.038	106	1,158
CCI DMP65R-BU8D	137.00	287	424	0.012	32	355
CCI TPA65R-BU8D	137.00	248	365	0.010	28	306
Pine Branches	136.00	600	876	0.024	67	741
Pine Branches	131.00	600	828	0.023	64	741
Pine Branches	126.00	600	782	0.022	60	741
Pine Branches	121.00	600	736	0.020	56	741
Pine Branches	116.00	600	692	0.019	53	741
Pine Branches	111.00	600	648	0.018	50	741
Pine Branches	96.00	600	522	0.014	40	741
Pine Branches	91.00	600	482	0.013	37	741
Pine Branches	86.00	600	444	0.012	34	741
Pine Branches	81.00	600	406	0.011	31	741
Pine Branches	76.00	600	369	0.010	28	741
Pine Branches	71.00	600	334	0.009	26	741
		54,534	36,307	1.000	2,785	67,384

Load Case 0.9D - 1.0Ev + 1.0Eh

Seismic (Reduced DL)

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
54	150.50	59	99	0.003	8	51
53	149.00	119	199	0.005	15	103
52	147.50	75	124	0.003	9	65
51	146.50	76	123	0.003	9	65
50	145.50	76	123	0.003	9	66
49	143.00	311	489	0.013	38	269
48	140.50	79	121	0.003	9	69
47	138.50	241	362	0.010	28	209
46	136.73	52	76	0.002	6	45
45	136.23	95	139	0.004	11	82
44	135.50	207	301	0.008	23	179
43	133.27	729	1,032	0.028	79	630
42	131.27	78	108	0.003	8	68
41	130.50	145	199	0.005	15	125
40	128.00	589	785	0.022	60	509
39	125.50	150	194	0.005	15	129
38	123.00	608	765	0.021	59	526
37	120.50	155	188	0.005	14	134
36	118.00	628	742	0.020	57	543
35	115.50	159	183	0.005	14	138
34	113.00	648	718	0.020	55	560
33	110.50	164	176	0.005	14	142
32	107.50	836	861	0.024	66	723
31	102.50	861	826	0.023	63	744
30	98.09	675	607	0.017	47	584
29	96.09	67	58	0.002	4	58
28	95.50	385	333	0.009	26	333
27	93.00	1,565	1,300	0.036	100	1,353
26	90.50	397	317	0.009	24	343
25	89.92	64	50	0.001	4	55
24	87.92	944	722	0.020	55	816
23	85.50	249	183	0.005	14	215
22	83.00	1,011	709	0.020	54	874
21	80.50	256	172	0.005	13	221
20	78.00	1,038	664	0.018	51	897
19	75.50	263	160	0.004	12	227
18	73.00	1,066	618	0.017	47	921
17	70.50	270	149	0.004	11	233
16	67.50	1,370	707	0.019	54	1,184
15	62.50	1,404	647	0.018	50	1,214
14	57.50	1,438	585	0.016	45	1,243
13	53.73	744	274	0.008	21	643
12	51.23	1,468	503	0.014	39	1,269
11	47.50	3,038	931	0.026	71	2,626
10	44.77	281	79	0.002	6	243
9	42.27	1,560	402	0.011	31	1,349
8	37.50	1,755	379	0.010	29	1,517
7	32.50	1,794	313	0.009	24	1,551
6	27.50	1,833	250	0.007	19	1,584
5	22.50	1,872	190	0.005	15	1,618
4	17.50	1,912	133	0.004	10	1,652
3	12.50	1,951	83	0.002	6	1,686
2	7.50	1,990	40	0.001	3	1,720
1	2.50	2,029	8	0.000	1	1,754
Pine Branches	151.00	600	1,022	0.028	78	519
Pine Branches	151.00	600	1,022	0.028	78	519
Amphenol Antel LPA-1	148.00	69	114	0.003	9	60

Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number: 13626831_C3_03

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Customer: AT&T MOBILITY

Antel BXA-70063/6CF_	148.00	51	84	0.002	6	44
Antel LPA-80080/6CF	148.00	84	139	0.004	11	73
Antel LPA-80063/6CF	148.00	54	89	0.002	7	47
Flat T-Arm	147.00	750	1,228	0.034	94	648
Pine Branches	146.00	600	973	0.027	75	519
Pine Branches	141.00	600	924	0.025	71	519
Ericsson RRUS 8843 B	137.00	216	319	0.009	24	187
Ericsson RRUS 4478 B	137.00	180	265	0.007	20	155
Ericsson RRUS 4449 B	137.00	213	314	0.009	24	184
Raycap DC9-48-60-24-	137.00	16	24	0.001	2	14
Generic Round T-Arm	137.00	938	1,383	0.038	106	810
CCI DMP65R-BU8D	137.00	287	424	0.012	32	248
CCI TPA65R-BU8D	137.00	248	365	0.010	28	214
Pine Branches	136.00	600	876	0.024	67	519
Pine Branches	131.00	600	828	0.023	64	519
Pine Branches	126.00	600	782	0.022	60	519
Pine Branches	121.00	600	736	0.020	56	519
Pine Branches	116.00	600	692	0.019	53	519
Pine Branches	111.00	600	648	0.018	50	519
Pine Branches	96.00	600	522	0.014	40	519
Pine Branches	91.00	600	482	0.013	37	519
Pine Branches	86.00	600	444	0.012	34	519
Pine Branches	81.00	600	406	0.011	31	519
Pine Branches	76.00	600	369	0.010	28	519
Pine Branches	71.00	600	334	0.009	26	519
		54,534	36,307	1.000	2,785	47,138

Load Case 1.2D + 1.0Ev + 1.0Eh

Seismic

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-64.88	-2.79	0.00	-304.06	0.00	304.06	7,453.69	1,963.48	12,502.6	10,820.4	0.00	0.00	0.037
5.00	-62.42	-2.79	0.00	-290.13	0.00	290.13	7,359.51	1,923.02	11,992.7	10,462.0	0.00	-0.01	0.036
10.00	-60.01	-2.79	0.00	-276.18	0.00	276.18	7,262.84	1,882.56	11,493.4	10,105.7	0.01	-0.01	0.036
15.00	-57.64	-2.79	0.00	-262.23	0.00	262.23	7,163.66	1,842.10	11,004.7	9,751.96	0.03	-0.02	0.035
20.00	-55.33	-2.78	0.00	-248.31	0.00	248.31	7,061.98	1,801.64	10,526.6	9,400.80	0.05	-0.02	0.034
25.00	-53.06	-2.76	0.00	-234.43	0.00	234.43	6,957.80	1,761.17	10,059.1	9,052.51	0.08	-0.03	0.034
30.00	-50.85	-2.74	0.00	-220.63	0.00	220.63	6,851.13	1,720.71	9,602.35	8,707.32	0.12	-0.04	0.033
35.00	-48.68	-2.72	0.00	-206.92	0.00	206.92	6,741.95	1,680.25	9,156.12	8,365.46	0.16	-0.04	0.032
40.00	-46.75	-2.69	0.00	-193.33	0.00	193.33	6,630.27	1,639.79	8,720.51	8,027.14	0.21	-0.05	0.031
44.54	-46.40	-2.69	0.00	-181.12	0.00	181.12	6,526.62	1,603.02	8,333.89	7,723.00	0.26	-0.06	0.031
45.00	-42.65	-2.61	0.00	-179.89	0.00	179.89	6,516.08	1,599.33	8,295.51	7,692.61	0.26	-0.06	0.030
50.00	-40.84	-2.58	0.00	-166.83	0.00	166.83	6,399.40	1,558.86	7,881.13	7,362.07	0.33	-0.06	0.029
52.46	-39.92	-2.56	0.00	-160.49	0.00	160.49	5,381.44	1,369.43	6,950.73	6,222.68	0.36	-0.07	0.033
55.00	-38.14	-2.51	0.00	-154.00	0.00	154.00	5,335.00	1,351.45	6,769.38	6,087.35	0.40	-0.07	0.032
60.00	-36.40	-2.47	0.00	-141.44	0.00	141.44	5,241.72	1,316.04	6,419.39	5,823.00	0.47	-0.08	0.031
65.00	-34.71	-2.41	0.00	-129.11	0.00	129.11	5,145.93	1,280.64	6,078.68	5,561.57	0.56	-0.08	0.030
70.00	-34.38	-2.40	0.00	-117.05	0.00	117.05	5,047.65	1,245.23	5,747.27	5,303.28	0.65	-0.09	0.029
71.00	-32.32	-2.33	0.00	-114.64	0.00	114.64	5,027.69	1,238.15	5,682.10	5,252.02	0.67	-0.09	0.028
75.00	-32.00	-2.32	0.00	-105.33	0.00	105.33	4,946.86	1,209.83	5,425.15	5,048.36	0.75	-0.10	0.027
76.00	-29.97	-2.24	0.00	-103.01	0.00	103.01	4,926.40	1,202.75	5,361.84	4,997.80	0.77	-0.10	0.027
80.00	-29.65	-2.23	0.00	-94.06	0.00	94.06	4,843.57	1,174.43	5,112.31	4,797.04	0.85	-0.10	0.026
81.00	-27.66	-2.14	0.00	-91.84	0.00	91.84	4,822.61	1,167.34	5,050.86	4,747.23	0.88	-0.11	0.025
85.00	-27.36	-2.12	0.00	-83.29	0.00	83.29	4,737.78	1,139.02	4,808.77	4,549.54	0.97	-0.11	0.024
86.00	-25.45	-2.03	0.00	-81.16	0.00	81.16	4,716.33	1,131.94	4,749.17	4,500.52	0.99	-0.11	0.023
89.84	-25.37	-2.03	0.00	-73.36	0.00	73.36	4,633.00	1,104.75	4,523.78	4,313.82	1.08	-0.12	0.022
90.00	-24.88	-2.00	0.00	-73.03	0.00	73.03	4,629.49	1,103.62	4,514.51	4,306.09	1.09	-0.12	0.022
91.00	-22.20	-1.86	0.00	-71.03	0.00	71.03	4,607.54	1,096.54	4,456.77	4,257.91	1.11	-0.12	0.022
95.00	-21.73	-1.84	0.00	-63.57	0.00	63.57	4,518.70	1,068.21	4,229.54	4,066.92	1.21	-0.12	0.020
96.00	-20.90	-1.79	0.00	-61.73	0.00	61.73	4,492.13	1,061.13	4,173.67	4,015.93	1.24	-0.12	0.020
96.17	-20.07	-1.74	0.00	-61.42	0.00	61.42	2,918.80	770.13	3,077.48	2,659.17	1.24	-0.12	0.030
100.00	-19.01	-1.68	0.00	-54.75	0.00	54.75	2,873.85	750.78	2,924.76	2,551.96	1.34	-0.13	0.028
105.00	-17.97	-1.61	0.00	-46.34	0.00	46.34	2,812.92	725.49	2,731.07	2,413.11	1.48	-0.14	0.026
110.00	-17.77	-1.60	0.00	-38.27	0.00	38.27	2,749.49	700.20	2,544.01	2,275.87	1.63	-0.14	0.023
111.00	-16.23	-1.49	0.00	-36.66	0.00	36.66	2,736.50	695.14	2,507.39	2,248.63	1.66	-0.14	0.022
115.00	-16.03	-1.48	0.00	-30.69	0.00	30.69	2,683.56	674.91	2,363.58	2,140.45	1.78	-0.15	0.020
116.00	-14.51	-1.37	0.00	-29.21	0.00	29.21	2,670.07	669.85	2,328.30	2,113.60	1.81	-0.15	0.019
120.00	-14.32	-1.35	0.00	-23.74	0.00	23.74	2,615.12	649.62	2,189.80	2,007.08	1.94	-0.15	0.017
121.00	-12.83	-1.23	0.00	-22.38	0.00	22.38	2,601.14	644.56	2,155.84	1,980.68	1.97	-0.16	0.016
125.00	-12.64	-1.22	0.00	-17.44	0.00	17.44	2,544.19	624.33	2,022.64	1,876.00	2.11	-0.16	0.014
126.00	-11.18	-1.10	0.00	-16.22	0.00	16.22	2,529.70	619.27	1,990.01	1,850.07	2.14	-0.16	0.013
130.00	-11.00	-1.08	0.00	-11.84	0.00	11.84	2,470.75	599.04	1,862.13	1,747.42	2.27	-0.16	0.011
131.00	-10.16	-1.01	0.00	-10.76	0.00	10.76	2,455.77	593.98	1,830.82	1,722.02	2.31	-0.16	0.010
131.54	-9.26	-0.92	0.00	-10.21	0.00	10.21	2,447.58	591.24	1,813.92	1,708.27	2.33	-0.16	0.010
135.00	-9.00	-0.90	0.00	-7.02	0.00	7.02	2,394.82	573.75	1,708.25	1,621.57	2.45	-0.17	0.008
136.00	-8.14	-0.82	0.00	-6.11	0.00	6.11	2,379.33	568.70	1,678.27	1,596.75	2.48	-0.17	0.007
136.46	-8.08	-0.82	0.00	-5.74	0.00	5.74	1,180.67	345.04	1,029.55	804.32	2.50	-0.17	0.014
137.00	-5.19	-0.54	0.00	-5.30	0.00	5.30	1,178.12	343.40	1,019.79	798.75	2.52	-0.17	0.011

Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number: 13626831_C3_03

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Customer: AT&T MOBILITY

140.00	-5.09	-0.53	0.00	-3.67	0.00	3.67	1,163.42	334.30	966.44	767.75	2.62	-0.17	0.009
141.00	-3.97	-0.42	0.00	-3.14	0.00	3.14	1,158.32	331.27	948.98	757.40	2.66	-0.17	0.008
145.00	-3.87	-0.41	0.00	-1.45	0.00	1.45	1,136.91	319.13	880.71	716.01	2.80	-0.17	0.005
146.00	-3.04	-0.32	0.00	-1.04	0.00	1.04	1,131.31	316.09	864.04	705.66	2.83	-0.17	0.004
147.00	-2.02	-0.22	0.00	-0.72	0.00	0.72	1,125.61	313.06	847.53	695.32	2.87	-0.17	0.003
148.00	-1.55	-0.17	0.00	-0.50	0.00	0.50	1,119.80	310.02	831.18	684.99	2.90	-0.17	0.002
150.00	-1.48	-0.16	0.00	-0.16	0.00	0.16	1,107.90	303.95	798.96	664.36	2.97	-0.17	0.002
151.00	0.00	-0.16	0.00	0.00	0.00	0.00	1,101.80	300.92	783.09	654.06	3.01	-0.17	0.000

Load Case 0.9D - 1.0Ev + 1.0Eh

Seismic (Reduced DL)

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-45.38	-2.79	0.00	-302.42	0.00	302.42	7,453.69	1,963.48	12,502.6	10,820.4	0.00	0.00	0.034
5.00	-43.66	-2.79	0.00	-288.49	0.00	288.49	7,359.51	1,923.02	11,992.7	10,462.0	0.00	-0.01	0.034
10.00	-41.98	-2.78	0.00	-274.56	0.00	274.56	7,262.84	1,882.56	11,493.4	10,105.7	0.01	-0.01	0.033
15.00	-40.32	-2.78	0.00	-260.64	0.00	260.64	7,163.66	1,842.10	11,004.7	9,751.96	0.03	-0.02	0.032
20.00	-38.71	-2.77	0.00	-246.74	0.00	246.74	7,061.98	1,801.64	10,526.6	9,400.80	0.05	-0.02	0.032
25.00	-37.12	-2.75	0.00	-232.91	0.00	232.91	6,957.80	1,761.17	10,059.1	9,052.51	0.08	-0.03	0.031
30.00	-35.57	-2.73	0.00	-219.15	0.00	219.15	6,851.13	1,720.71	9,602.35	8,707.32	0.12	-0.04	0.030
35.00	-34.05	-2.70	0.00	-205.49	0.00	205.49	6,741.95	1,680.25	9,156.12	8,365.46	0.16	-0.04	0.030
40.00	-32.70	-2.68	0.00	-191.97	0.00	191.97	6,630.27	1,639.79	8,720.51	8,027.14	0.21	-0.05	0.029
44.54	-32.46	-2.67	0.00	-179.81	0.00	179.81	6,526.62	1,603.02	8,333.89	7,723.00	0.26	-0.06	0.028
45.00	-29.83	-2.60	0.00	-178.59	0.00	178.59	6,516.08	1,599.33	8,295.51	7,692.61	0.26	-0.06	0.028
50.00	-28.57	-2.56	0.00	-165.60	0.00	165.60	6,399.40	1,558.86	7,881.13	7,362.07	0.33	-0.06	0.027
52.46	-27.92	-2.54	0.00	-159.30	0.00	159.30	5,381.44	1,369.43	6,950.73	6,222.68	0.36	-0.07	0.031
55.00	-26.68	-2.50	0.00	-152.84	0.00	152.84	5,335.00	1,351.45	6,769.38	6,087.35	0.39	-0.07	0.030
60.00	-25.47	-2.45	0.00	-140.35	0.00	140.35	5,241.72	1,316.04	6,419.39	5,823.00	0.47	-0.08	0.029
65.00	-24.28	-2.40	0.00	-128.10	0.00	128.10	5,145.93	1,280.64	6,078.68	5,561.57	0.55	-0.08	0.028
70.00	-24.05	-2.39	0.00	-116.12	0.00	116.12	5,047.65	1,245.23	5,747.27	5,303.28	0.65	-0.09	0.027
71.00	-22.61	-2.31	0.00	-113.73	0.00	113.73	5,027.69	1,238.15	5,682.10	5,252.02	0.66	-0.09	0.026
75.00	-22.38	-2.30	0.00	-104.48	0.00	104.48	4,946.86	1,209.83	5,425.15	5,048.36	0.74	-0.10	0.025
76.00	-20.97	-2.22	0.00	-102.18	0.00	102.18	4,926.40	1,202.75	5,361.84	4,997.80	0.76	-0.10	0.025
80.00	-20.74	-2.21	0.00	-93.30	0.00	93.30	4,843.57	1,174.43	5,112.31	4,797.04	0.85	-0.10	0.024
81.00	-19.35	-2.12	0.00	-91.09	0.00	91.09	4,822.61	1,167.34	5,050.86	4,747.23	0.87	-0.10	0.023
85.00	-19.14	-2.11	0.00	-82.60	0.00	82.60	4,737.78	1,139.02	4,808.77	4,549.54	0.96	-0.11	0.022
86.00	-17.80	-2.02	0.00	-80.50	0.00	80.50	4,716.33	1,131.94	4,749.17	4,500.52	0.98	-0.11	0.022
89.84	-17.75	-2.01	0.00	-72.75	0.00	72.75	4,633.00	1,104.75	4,523.78	4,313.82	1.08	-0.12	0.021
90.00	-17.40	-1.99	0.00	-72.43	0.00	72.43	4,629.49	1,103.62	4,514.51	4,306.09	1.08	-0.12	0.021
91.00	-15.53	-1.85	0.00	-70.44	0.00	70.44	4,607.54	1,096.54	4,456.77	4,257.91	1.10	-0.12	0.020
95.00	-15.20	-1.82	0.00	-63.04	0.00	63.04	4,518.70	1,068.21	4,229.54	4,066.92	1.20	-0.12	0.019
96.00	-14.62	-1.78	0.00	-61.22	0.00	61.22	4,492.13	1,061.13	4,173.67	4,015.93	1.23	-0.12	0.019
96.17	-14.04	-1.73	0.00	-60.91	0.00	60.91	2,918.80	770.13	3,077.48	2,659.17	1.23	-0.12	0.028
100.00	-13.29	-1.67	0.00	-54.28	0.00	54.28	2,873.85	750.78	2,924.76	2,551.96	1.34	-0.13	0.026
105.00	-12.57	-1.60	0.00	-45.94	0.00	45.94	2,812.92	725.49	2,731.07	2,413.11	1.47	-0.14	0.024
110.00	-12.43	-1.59	0.00	-37.94	0.00	37.94	2,749.49	700.20	2,544.01	2,275.87	1.62	-0.14	0.021
111.00	-11.35	-1.48	0.00	-36.35	0.00	36.35	2,736.50	695.14	2,507.39	2,248.63	1.65	-0.14	0.020
115.00	-11.21	-1.47	0.00	-30.42	0.00	30.42	2,683.56	674.91	2,363.58	2,140.45	1.77	-0.15	0.018
116.00	-10.15	-1.36	0.00	-28.95	0.00	28.95	2,670.07	669.85	2,328.30	2,113.60	1.80	-0.15	0.018
120.00	-10.02	-1.34	0.00	-23.53	0.00	23.53	2,615.12	649.62	2,189.80	2,007.08	1.93	-0.15	0.016
121.00	-8.97	-1.22	0.00	-22.19	0.00	22.19	2,601.14	644.56	2,155.84	1,980.68	1.96	-0.15	0.015
125.00	-8.84	-1.21	0.00	-17.29	0.00	17.29	2,544.19	624.33	2,022.64	1,876.00	2.09	-0.16	0.013
126.00	-7.82	-1.09	0.00	-16.08	0.00	16.08	2,529.70	619.27	1,990.01	1,850.07	2.12	-0.16	0.012
130.00	-7.69	-1.07	0.00	-11.74	0.00	11.74	2,470.75	599.04	1,862.13	1,747.42	2.26	-0.16	0.010
131.00	-7.11	-1.00	0.00	-10.67	0.00	10.67	2,455.77	593.98	1,830.82	1,722.02	2.29	-0.16	0.009
131.54	-6.48	-0.92	0.00	-10.12	0.00	10.12	2,447.58	591.24	1,813.92	1,708.27	2.31	-0.16	0.009
135.00	-6.30	-0.89	0.00	-6.96	0.00	6.96	2,394.82	573.75	1,708.25	1,621.57	2.43	-0.16	0.007
136.00	-5.70	-0.81	0.00	-6.06	0.00	6.06	2,379.33	568.70	1,678.27	1,596.75	2.46	-0.16	0.006
136.46	-5.65	-0.81	0.00	-5.69	0.00	5.69	1,180.67	345.04	1,029.55	804.32	2.48	-0.16	0.012
137.00	-3.63	-0.54	0.00	-5.25	0.00	5.25	1,178.12	343.40	1,019.79	798.75	2.50	-0.16	0.010

Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number: 13626831_C3_03

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Customer: AT&T MOBILITY

140.00	-3.56	-0.53	0.00	-3.64	0.00	3.64	1,163.42	334.30	966.44	767.75	2.60	-0.17	0.008
141.00	-2.78	-0.42	0.00	-3.11	0.00	3.11	1,158.32	331.27	948.98	757.40	2.64	-0.17	0.007
145.00	-2.71	-0.41	0.00	-1.44	0.00	1.44	1,136.91	319.13	880.71	716.01	2.78	-0.17	0.004
146.00	-2.13	-0.32	0.00	-1.03	0.00	1.03	1,131.31	316.09	864.04	705.66	2.81	-0.17	0.003
147.00	-1.41	-0.22	0.00	-0.71	0.00	0.71	1,125.61	313.06	847.53	695.32	2.85	-0.17	0.002
148.00	-1.09	-0.17	0.00	-0.49	0.00	0.49	1,119.80	310.02	831.18	684.99	2.88	-0.17	0.002
150.00	-1.04	-0.16	0.00	-0.16	0.00	0.16	1,107.90	303.95	798.96	664.36	2.95	-0.17	0.001
151.00	0.00	-0.16	0.00	0.00	0.00	0.00	1,101.80	300.92	783.09	654.06	2.99	-0.17	0.000

Site Number: 413849

Code: ANSI/TIA-222-H

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Site Name: Winchester PCS CT, CT

Engineering Number: 13626831_C3_03

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Customer: AT&T MOBILITY

Analysis Summary

Load Case	Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.0W	45.20	0.00	65.40	0.00	0.00	4956.54	0.00	0.47
0.9D + 1.0W	45.19	0.00	49.04	0.00	0.00	4933.29	0.00	0.46
1.2D + 1.0Di + 1.0Wi	14.74	0.00	95.15	0.00	0.00	1623.46	0.00	0.16
1.2D + 1.0Ev + 1.0Eh	2.79	0.00	64.88	0.00	0.00	304.06	0.00	0.04
0.9D - 1.0Ev + 1.0Eh	2.79	0.00	45.38	0.00	0.00	302.42	0.00	0.03
1.0D + 1.0W	11.20	0.00	54.53	0.00	0.00	1224.85	0.00	0.12



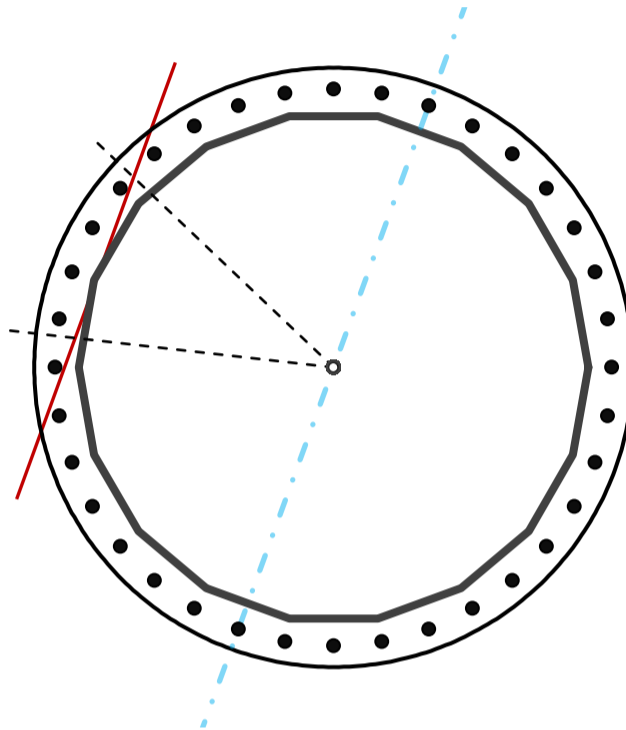
Base Plate & Anchor Rod Analysis

Pole Dimensions		
Number of Sides	18	-
Diameter	71	in
Thickness	1/2	in
Orientation Offset		°

Base Reactions		
Moment, Mu	4,956.5	k-ft
Axial, Pu	65.4	k
Shear, Vu	45.2	k
Neutral Axis	70	°

Report Capacities		
Component	Capacity	Result
Base Plate	18%	Pass
Anchor Rods	34%	Pass
Dwyidag	-	-

Base Plate		
Shape	Round	-
Diameter, ϕ	85	in
Thickness	3 1/4	in
Grade	A572-50	
Yield Strength, Fy	50	ksi
Tensile Strength, Fu	65	ksi
Clip	N/A	in
Orientation Offset		°
Anchor Rod Detail	d	$\eta=0.5$
Clear Distance	3	in
Applied Moment, Mu	601.8	k
Bending Stress, ϕMn	3436.6	k



Original Anchor Rods		
Arrangement	Radial	-
Quantity	36	-
Diameter, ϕ	2 1/4	in
Bolt Circle	79	in
Grade	A615-75	
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Spacing	6.9	in
Orientation Offset		°
Applied Force, Pu	88.0	k
Anchor Rods, ϕPn	259.8	k

Calculations for Monopole Base Plate & Anchor Rod Analysis

Reaction Distribution

Reaction	Shear Vu	Moment Mu	Factor
-	k	k-ft	-
Base Forces	45.2	4956.5	1.00
Anchor Rod Forces	45.2	4956.5	1.00
Additional Bolt (Grp1) Forces	0.0	0.0	0.00
Additional Bolt (Grp2) Forces	0.0	0.0	0.00
Dywidag Forces	0.0	0.0	0.00
Stiffener Forces	0.0	0.0	0.00

Geometric Properties

Section	Gross Area	Net Area	Individual Inertia	Threads per Inch	Moment of Inertia
-	in ²	in ²	in ⁴	#	in ⁴
Pole	110.1798	6.1211	0.5119		68461.84
Bolt	3.9761	3.2477	0.8393	4.5	85838.26
Bolt1	0.0000	0.0000	0.0000	0	0.00
Bolt2	0.0000	0.0000	0.0000	0	0.00
Dywidag	0.0000	0.0000	0.0000		0.00
Stiffener	0.0000	0.0000	0.0000		0.00

Base Plate

Shape	Round	-
Diameter, D	85	in
Thickness, t	3.25	in
Yield Strength, Fy	50	ksi
Tensile Strength, Fu	65	ksi
Base Plate Chord	46.733	in
Detail Type	d	-
Detail Factor	0.50	-
Clear Distance	3	-

Anchor Rods

Anchor Rod Quantity, N	36	-
Rod Diameter, d	2.25	in
Bolt Circle, BC	79	in
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	88.0	k
Applied Shear, Vu	0.3	k
Compressive Capacity, ϕP_n	259.8	k
Tensile Capacity, ϕR_n	0.339	OK
Interaction Capacity	0.341	OK

External Base Plate

Chord Length AA	39.569	in
Additional AA	6.000	in
Section Modulus, Z	120.330	in ³
Applied Moment, Mu	664.2	k-ft
Bending Capacity, ϕM_n	5414.9	k-ft
Capacity, Mu/ ϕM_n	0.123	OK

Chord Length AB	37.521	in
Additional AB	6.000	in
Section Modulus, Z	114.924	in ³
Applied Moment, Mu	458.1	k-ft
Bending Capacity, ϕM_n	5171.6	k-ft
Capacity, Mu/ ϕM_n	0.089	OK

Bend Line Length	28.921	in
Additional Bend Line	0.000	in
Section Modulus, Z	76.369	in ³
Applied Moment, Mu	601.8	k-ft
Bending Capacity, ϕM_n	3436.6	k-ft
Capacity, Mu/ ϕM_n	0.175	OK

Internal Base Plate

Arc Length	0.000	in
Section Modulus, Z	0.000	in ³
Moment Arm	0.000	in
Applied Moment, Mu	0.0	k-ft
Bending Capacity, ϕM_n	0.0	k-ft
Capacity, Mu/ ϕM_n		

Exhibit 5

Antenna Mount Analysis Report



AMERICAN TOWER®
CORPORATION

This report was prepared for American Tower Corporation by



**TOWER
ENGINEERING
PROFESSIONALS**

Antenna Mount Analysis Report

ATC Site Name : Winchester PCS CT
ATC Site Number : 413849
Engineering Number : 13326507_C8_01
Mount Elevation : 137 ft
Carrier : AT&T Mobility
Carrier Site Name : MRCTB050163
Carrier Site Number : S1175
Site Location : 32 Norfolk Road
Winsted, CT 06098
41.9401940, -73.0659030
County : Litchfield
Date : March 30, 2021
Max Usage : 63.0%
Result : Pass

Prepared By:
W. Harrison Welch, E.I.
TEP# 199882.515361

Reviewed By:



03/30/2021



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Standard Conditions5

Calculations..... Attached



Introduction

The purpose of this report is to summarize results of the antenna mount analysis performed for AT&T Mobility at 137 ft.

Supporting Documents

Spec. Sheet	Spec. Sheet for SitePro 1 ULP12-4xx
RFDS	RFDS dated March 5, 2021
Photos	Site photos from 2020

Analysis

This antenna mount was analyzed using RISA-3D v17 analysis software

Basic Wind Speed:	120 mph (Ultimate)
Basic Wind Speed w/ Ice:	50 mph (3-second gust) w/ 1" Ice Thickness
Codes:	ANSI/TIA-222-H
Risk Category:	II
Exposure Category:	C
Topographic Category:	Method 2
Kzt:	1.000
Spectral Response:	$S_s = 0.167, S_1 = 0.054$
Site Class:	D – Default (Section 11.4.3)
Live Loads:	$L_m = 500 \text{ lbs}, L_v = 250 \text{ lbs}$

Conclusion

Based on the analysis results, the antenna mount meets the requirements per the applicable codes listed above. The mount can support the equipment as described in this report. If the load differs from that described in this report or the provisions of this analysis are found to be invalid, another structural analysis should be performed.

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.



Antenna Loading

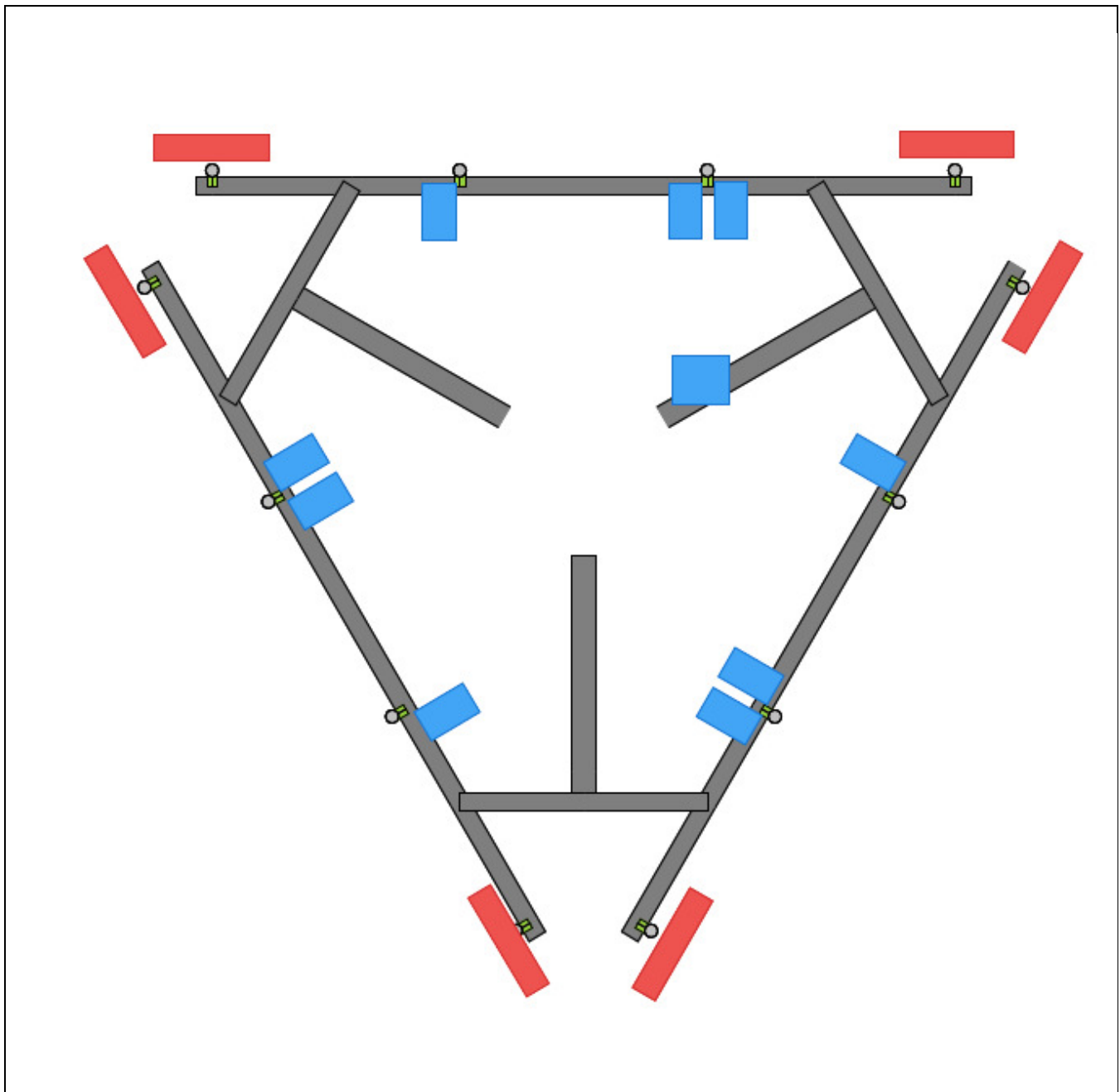
Mount Centerline (ft)	Antenna Centerline (ft)	Qty	Antenna Model
137	137	3	CCI TPA65R-BU8D
		3	CCI DMP65R-BU8D
		3	Ericsson RRUS 4478 B14
		3	Ericsson RRUS 4449 B5, B12
		3	Ericsson RRUS 8843 B2, B66A
		1	Raycap DC9-48-60-24-8C-EV

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Face Horizontal	35.1%	Pass
Support Horizontals	63.0%	Pass
Support Bracing	38.0%	Pass
Mount Pipes	43.9%	Pass
Connection Bolts	35.5%	Pass
Connection Plate	46.7%	Pass

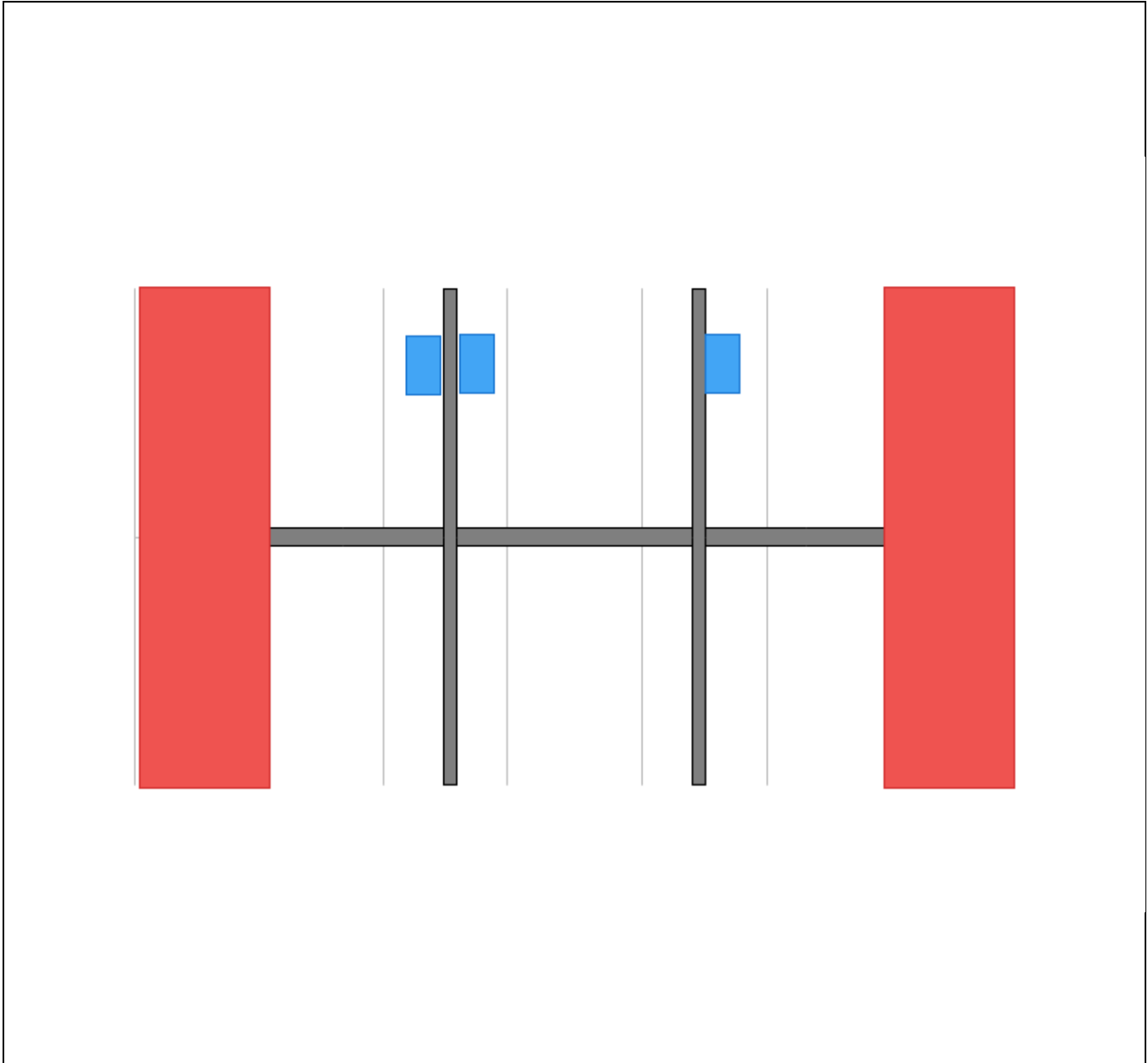


Mount Layout





Equipment Layout





Standard Conditions

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

- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of TEP

It is the responsibility of the client to ensure that the information provided to TEP and used in the performance of our engineering services is correct and complete.

TEP assumes that all structures were constructed in accordance with the drawings and specifications.

TEP assumes that the mount has been maintained in accordance with the manufacturer's specification.

TEP assumes that all mount components are in sufficient condition to carry their full design capacity for this analysis.

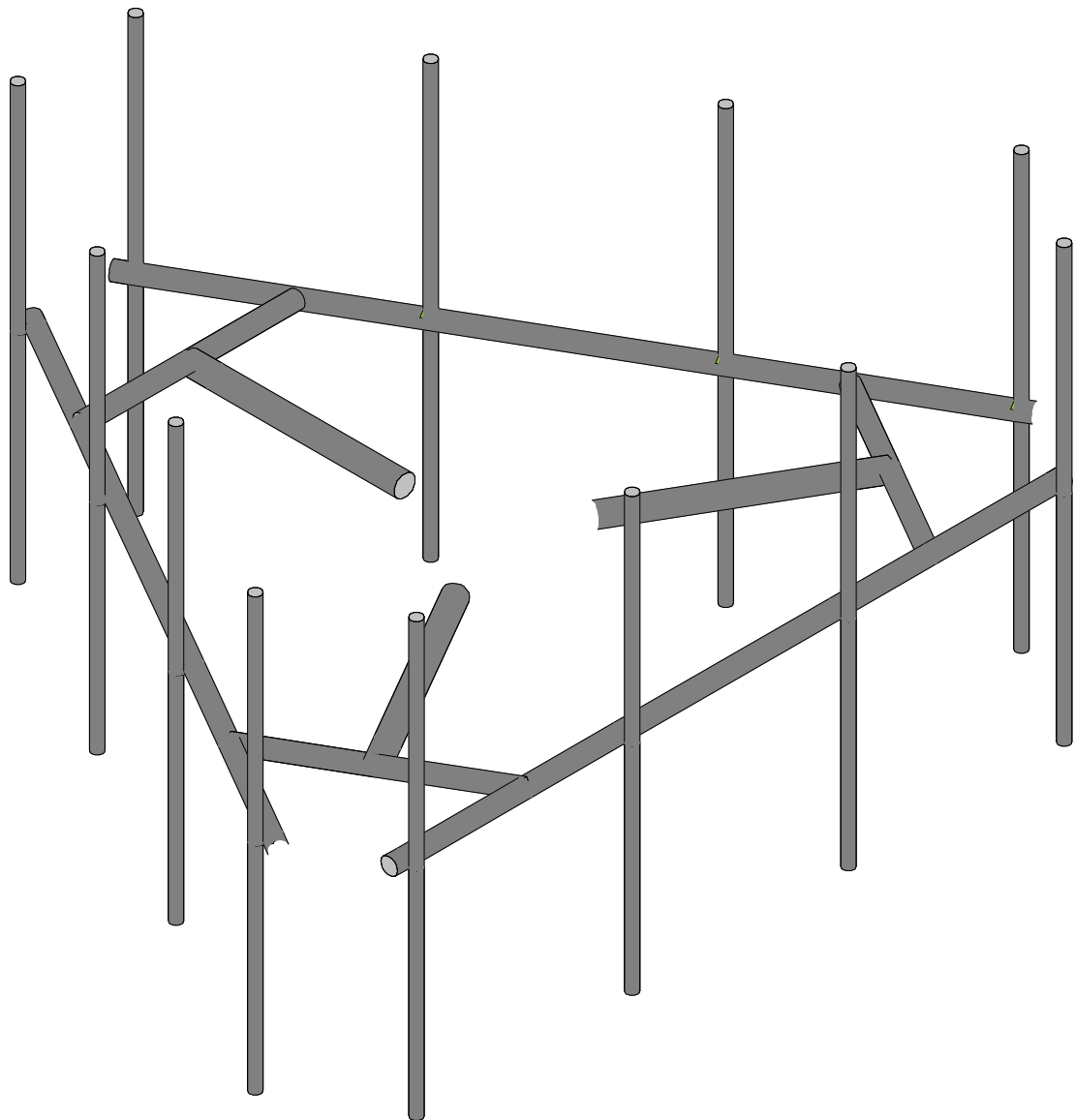
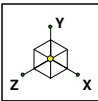
Serviceability with respect to antenna twist, tilt, roll, or lateral translation, is not checked and is left to the carrier or tower owner to ensure conformance.

All material grades used for this analysis, unless verified by mount manufacturer design, were assumed per AISC Table 2-4, 15th Edition. See RISA 3-D output for confirmation on grades used in this analysis.

All connections are to be verified for condition and tightness by the installation contractor preceding any changes to the appurtenance mounting system and/or equipment attached to it.

Unless explicitly agreed by both the client and TEP, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. TEP is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.



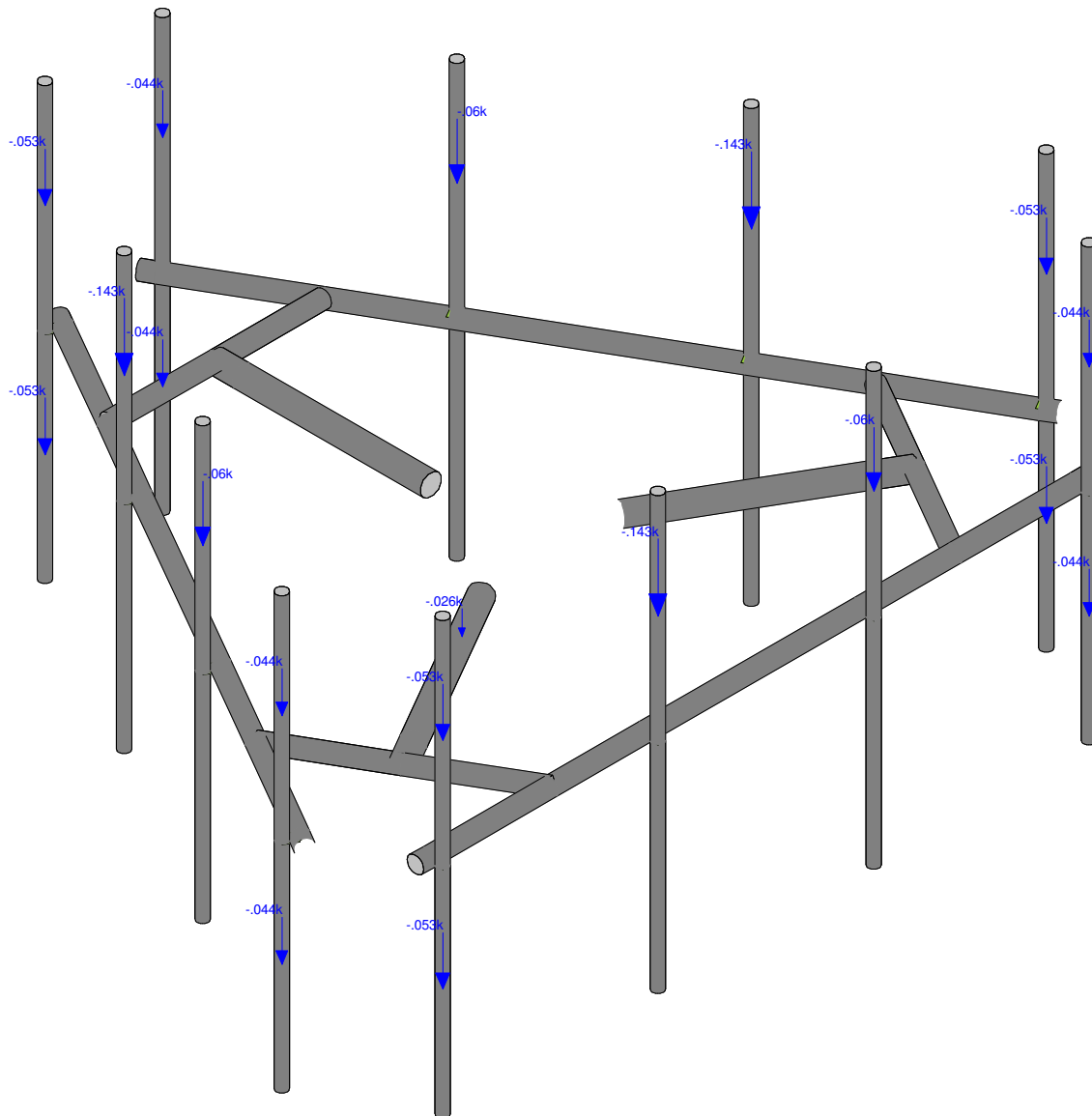
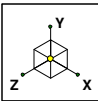
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WHW
TEP# 199882.515361

413849_Winchester PCS CT_AT&T

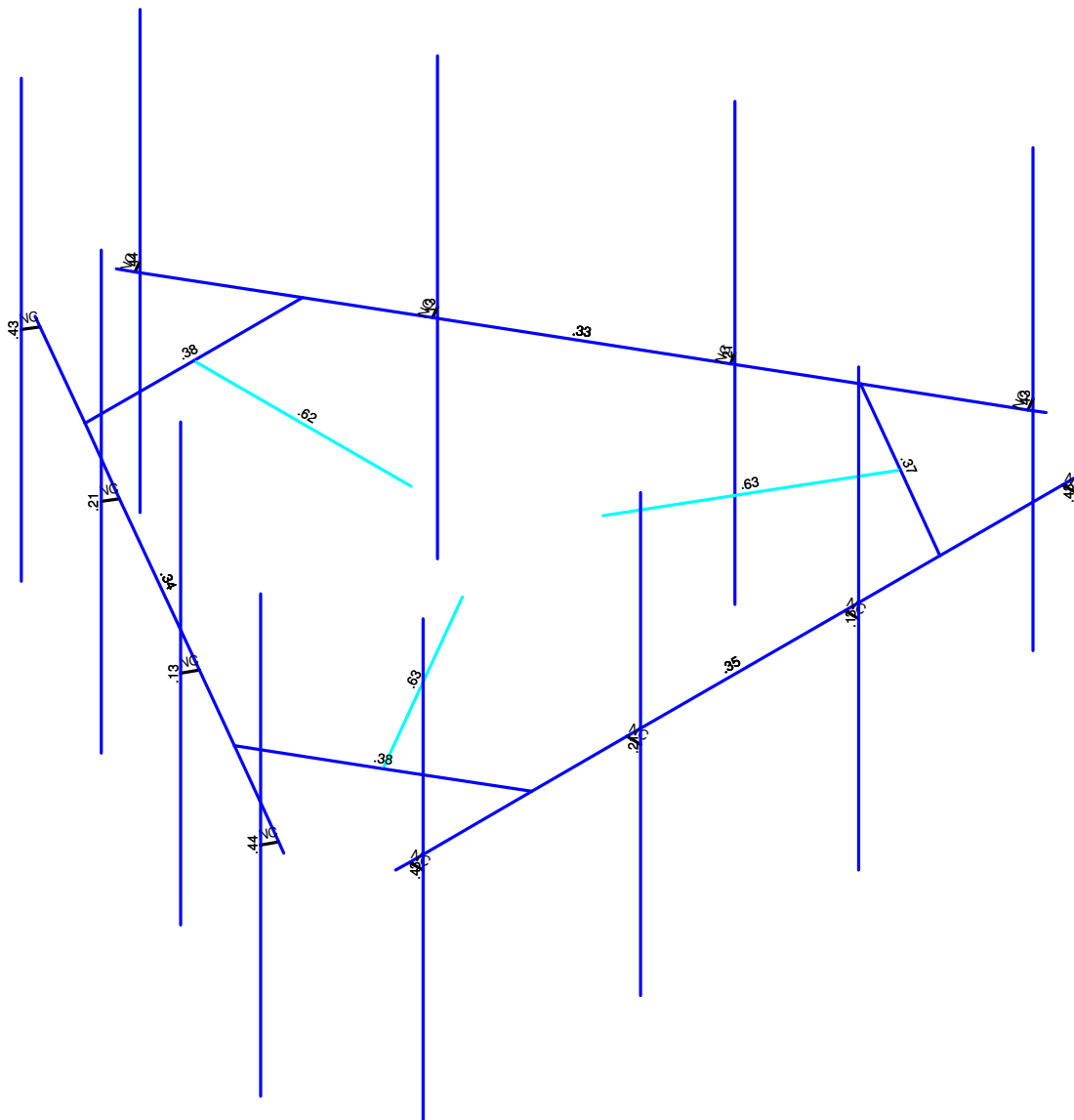
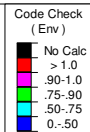
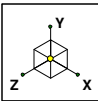
SK - 1

Mar 30, 2021 at 1:59 PM
413849_Winchester PCS CT_AT&T...



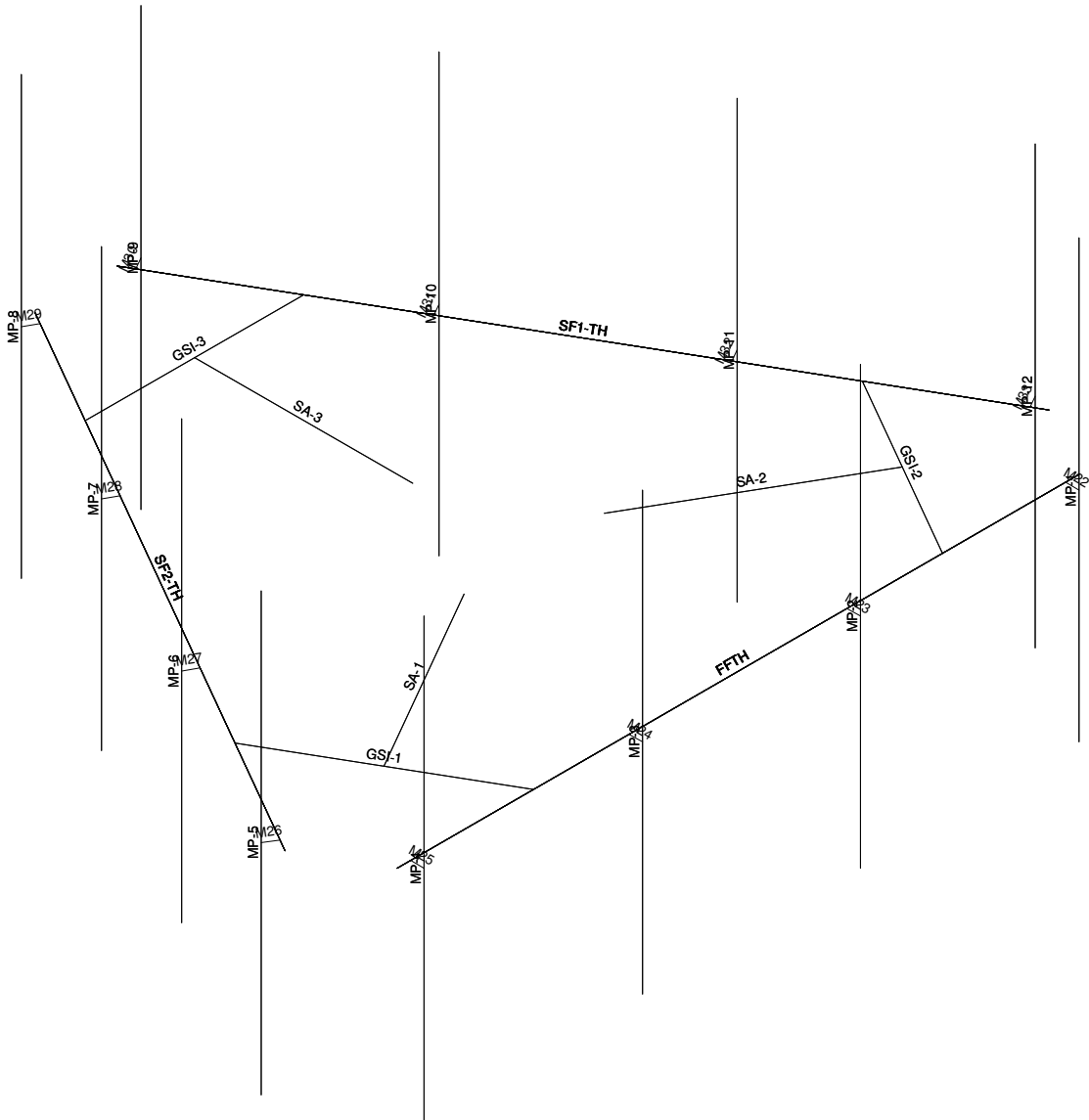
Loads: BLC 1, Dead
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WHW		Mar 30, 2021 at 1:59 PM
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Member Code Checks Displayed (Enveloped)
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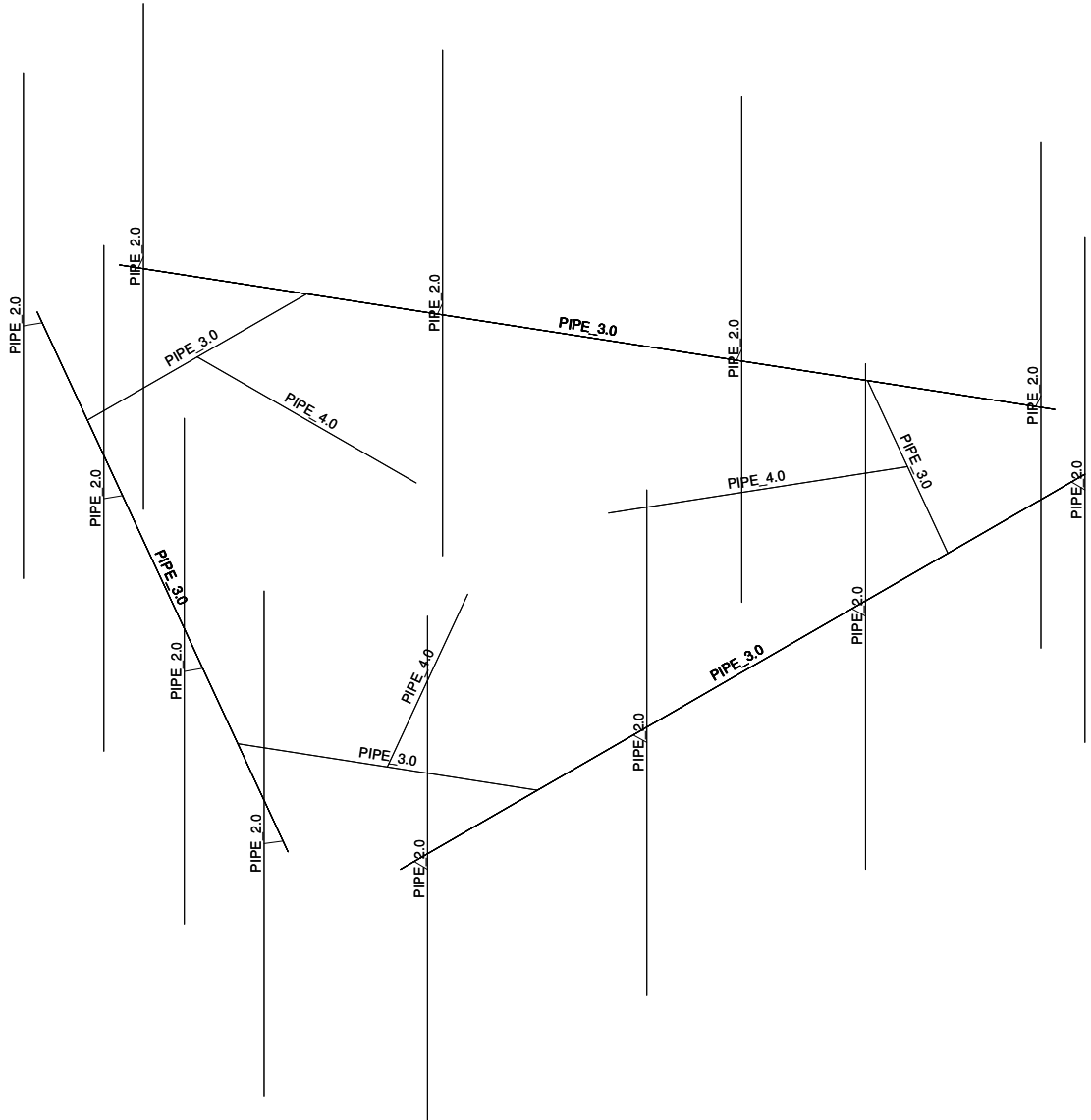
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SK - 6

Mar 30, 2021 at 2:00 PM

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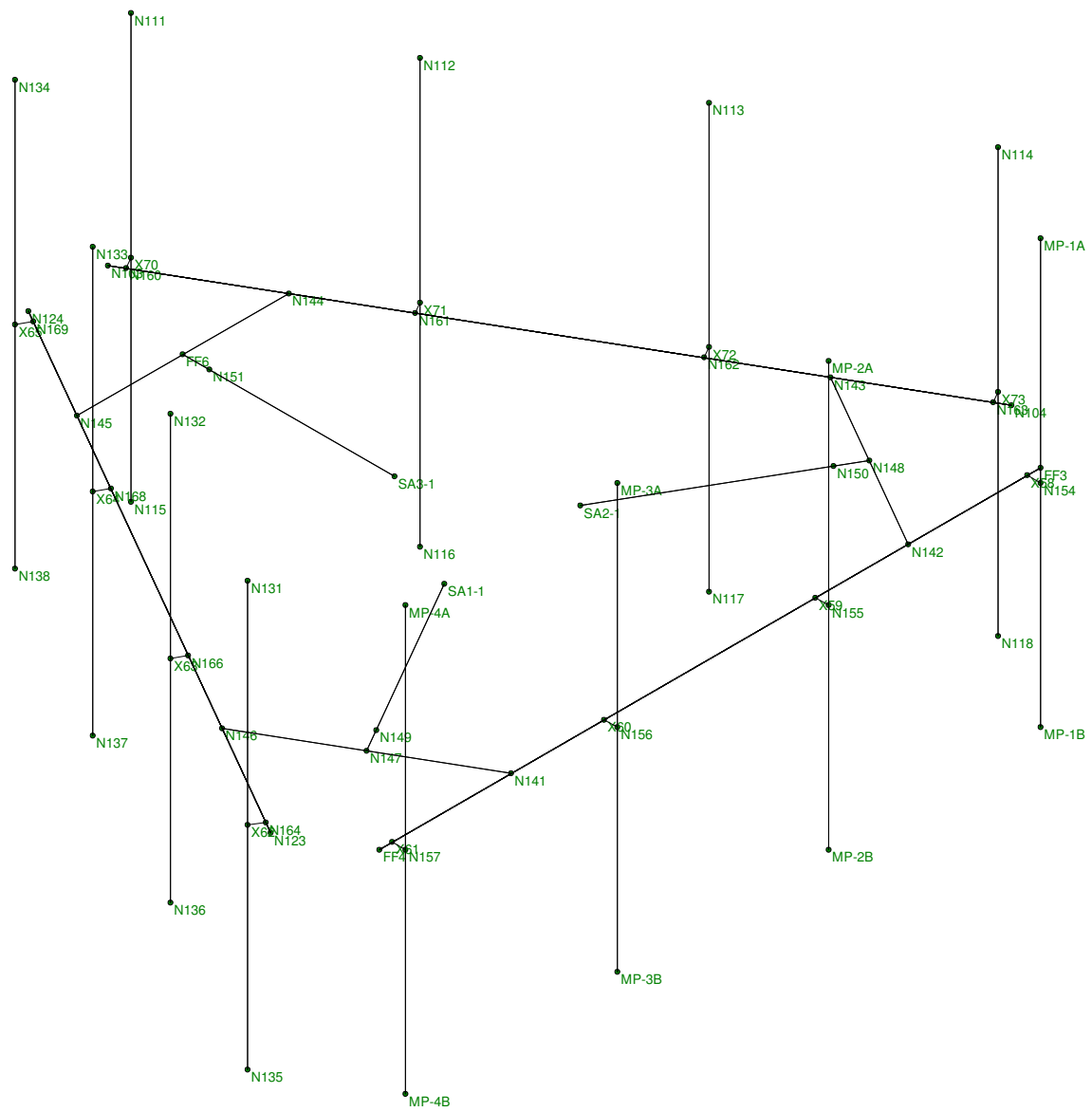
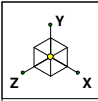
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SK - 7

Mar 30, 2021 at 2:00 PM

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WHW		Mar 30, 2021 at 2:00 PM
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 Designer : WHW
 Job Number : TEP# 199882.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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(Global) Model Settings

Display Sections for Member Calcs	5
Max Internal Sections for Member Calcs	97
Include Shear Deformation?	Yes
Increase Nailing Capacity for Wind?	Yes
Include Warping?	Yes
Trans Load Btwn Intersecting Wood Wall?	Yes
Area Load Mesh (in^2)	144
Merge Tolerance (in)	.12
P-Delta Analysis Tolerance	0.50%
Include P-Delta for Walls?	Yes
Automatically Iterate Stiffness for Walls?	Yes
Max Iterations for Wall Stiffness	3
Gravity Acceleration (ft/sec^2)	32.2
Wall Mesh Size (in)	12
Eigensolution Convergence Tol. (1.E-)	4
Vertical Axis	Y
Global Member Orientation Plane	XZ
Static Solver	Sparse Accelerated
Dynamic Solver	Accelerated Solver

Hot Rolled Steel Code	AISC 15th(360-16): LRFD
Adjust Stiffness?	No
RISACONNECTION CODE	AISC 13th(360-05): ASD
Cold Formed Steel Code	AISI S100-07: ASD
Wood Code	AF&PA NDS-05/08: ASD
Wood Temperature	< 100F
Concrete Code	ACI 318-08
Masonry Code	ACI 530-05: ASD
Aluminum Code	AA ADM1-05: ASD - Building
Stainless Steel Code	AISC 14th(360-10): ASD
Adjust Stiffness?	Yes(Iterative)

Number of Shear Regions	4
Region Spacing Increment (in)	4
Biaxial Column Method	Exact Integration
Parame Beta Factor (PCA)	.65
Concrete Stress Block	Rectangular
Use Cracked Sections?	Yes
Use Cracked Sections Slab?	Yes
Bad Framing Warnings?	No
Unused Force Warnings?	Yes
Min 1 Bar Diam. Spacing?	No
Concrete Rebar Set	REBAR_SET_ASTMA615
Min % Steel for Column	1
Max % Steel for Column	8



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 Model Name : 413849_Winchester PCS CT_AT&T

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(Global) Model Settings, Continued

Seismic Code	ASCE 7-05
Seismic Base Elevation (ft)	Not Entered
Add Base Weight?	Yes
Ct X	.02
Ct Z	.02
T X (sec)	Not Entered
T Z (sec)	Not Entered
R X	3
R Z	3
Ct Exp. X	.75
Ct Exp. Z	.75
SD1	1
SDS	1
S1	1
TL (sec)	5
Occupancy Cat	I or II
Drift Cat	Other
Om Z	1
Om X	1
Cd Z	1
Cd X	1
Rho Z	1
Rho X	1

Hot Rolled Steel Properties

	Label	E [ksj]	G [ksj]	Nu	Therm (1E5 F)	Density[k/ft^3]	Yield[ksj]	Ry	Fu[ksj]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
3	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.42	29000	11154	.3	.65	.49	42	1.4	58	1.3
5	A500 Gr.46	29000	11154	.3	.65	.49	46	1.4	58	1.3
6	A53-B-35	29000	11154	.3	.65	.49	35	1.5	60	1.2
7	Grating	29000	11154	.3	.65	0	36	1.5	58	1.2

Hot Rolled Steel Section Sets

	Label	Shape	Type	Desig...	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Face Horiz	PIPE 3.0	None	None	A53-B-35	Typical	2.07	2.85	2.85	5.69
2	Mount Pipes	PIPE 2.0	None	None	A53-B-35	Typical	1.02	.627	.627	1.25
3	Support Arm	PIPE 4.0	None	None	A53-B-35	Typical	2.96	6.82	6.82	13.6
4	Internal	PIPE 3.0	None	None	A53-B-35	Typical	2.07	2.85	2.85	5.69
5	Grating	PL12x1.5	None	None	Grating	Typical	18	3.375	216	12.437
6	Kicker	LL2.5x2.5x3x3	None	None	A36 Gr.36	Typical	1.8	2.46	1.07	.023
7	Support Vert	PIPE 2.0	None	None	A53-B-35	Typical	1.02	.627	.627	1.25

Material Takeoff

	Material	Size	Pieces	Length[ft]	Weight[K]
1	General				
2	RIGID		12	3	0



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Material Takeoff (Continued)

	Material	Size	Pieces	Length[ft]	Weight[K]
3	Total General		12	3	0
4					
5	Hot Rolled Steel				
6	A53-B-35	PIPE 2.0	12	96	.3
7	A53-B-35	PIPE 3.0	6	49.5	.3
8	A53-B-35	PIPE 4.0	3	12	.1
9	Total HR Steel		21	157.5	.8

Joint Boundary Conditions

	Joint 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	SA1-1	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	SA2-1	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	SA3-1	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Member Primary Data

	Label	I Joint	J Joint	K J...	Rotat[e]...	Section/Shape	Type	Desig...	Material	Design ...
1	FFTH	FF3	FF4			Face Horiz	None	None	A53-B-35	Typical
2	MP-1	MP-1A	MP-1B			Mount Pipes	None	None	A53-B-35	Typical
3	MP-2	MP-2A	MP-2B			Mount Pipes	None	None	A53-B-35	Typical
4	MP-3	MP-3A	MP-3B			Mount Pipes	None	None	A53-B-35	Typical
5	MP-4	MP-4A	MP-4B			Mount Pipes	None	None	A53-B-35	Typical
6	SF1-TH	N103	N104			Face Horiz	None	None	A53-B-35	Typical
7	MP-5	N131	N135			Mount Pipes	None	None	A53-B-35	Typical
8	MP-6	N132	N136			Mount Pipes	None	None	A53-B-35	Typical
9	MP-7	N133	N137			Mount Pipes	None	None	A53-B-35	Typical
10	MP-8	N134	N138			Mount Pipes	None	None	A53-B-35	Typical
11	SF2-TH	N123	N124			Face Horiz	None	None	A53-B-35	Typical
12	MP-9	N111	N115			Mount Pipes	None	None	A53-B-35	Typical
13	MP-10	N112	N116			Mount Pipes	None	None	A53-B-35	Typical
14	MP-11	N113	N117			Mount Pipes	None	None	A53-B-35	Typical
15	MP-12	N114	N118			Mount Pipes	None	None	A53-B-35	Typical
16	SA-1	SA1-1	N147			Support Arm	None	None	A53-B-35	Typical
17	SA-2	SA2-1	N148			Support Arm	None	None	A53-B-35	Typical
18	SA-3	SA3-1	FF6			Support Arm	None	None	A53-B-35	Typical
19	GSI-1	N146	N141			Internal	None	None	A53-B-35	Typical
20	GSI-2	N142	N143			Internal	None	None	A53-B-35	Typical
21	GSI-3	N144	N145			Internal	None	None	A53-B-35	Typical
22	M22	X58	N154			RIGID	None	None	RIGID	Typical
23	M23	X59	N155			RIGID	None	None	RIGID	Typical
24	M24	X60	N156			RIGID	None	None	RIGID	Typical
25	M25	X61	N157			RIGID	None	None	RIGID	Typical
26	M26	N164	X62			RIGID	None	None	RIGID	Typical
27	M27	N166	X63			RIGID	None	None	RIGID	Typical
28	M28	N168	X64			RIGID	None	None	RIGID	Typical
29	M29	N169	X65			RIGID	None	None	RIGID	Typical
30	M30	N160	X70			RIGID	None	None	RIGID	Typical
31	M31	N161	X71			RIGID	None	None	RIGID	Typical
32	M32	N162	X72			RIGID	None	None	RIGID	Typical
33	M33	N163	X73			RIGID	None	None	RIGID	Typical



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 Job Number : TEP# 199882.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	FFTH						Yes	** NA **			None
2	MP-1						Yes	** NA **			None
3	MP-2						Yes	** NA **			None
4	MP-3						Yes	** NA **			None
5	MP-4						Yes	** NA **			None
6	SF1-TH						Yes	** NA **			None
7	MP-5						Yes	** NA **			None
8	MP-6						Yes	** NA **			None
9	MP-7						Yes	** NA **			None
10	MP-8						Yes	** NA **			None
11	SF2-TH						Yes	** NA **			None
12	MP-9						Yes	** NA **			None
13	MP-10						Yes	** NA **			None
14	MP-11						Yes	** NA **			None
15	MP-12						Yes	** NA **			None
16	SA-1						Yes	** NA **			None
17	SA-2						Yes	** NA **			None
18	SA-3						Yes	** NA **			None
19	GSI-1						Yes	** NA **			None
20	GSI-2						Yes	** NA **			None
21	GSI-3						Yes	** NA **			None
22	M22						Yes	** NA **			None
23	M23						Yes	** NA **			None
24	M24						Yes	** NA **			None
25	M25						Yes	** NA **			None
26	M26						Yes	** NA **			None
27	M27						Yes	** NA **			None
28	M28						Yes	** NA **			None
29	M29						Yes	** NA **			None
30	M30						Yes	** NA **			None
31	M31						Yes	** NA **			None
32	M32						Yes	** NA **			None
33	M33						Yes	** NA **			None

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lby[ft]	Lbzz[ft]	Lcomp top[...]	Lcomp bot[...]	L-torg...	Kyy	Kzz	Cb	Functi...
1	FFTH	Face Horiz	12.5	7.5					2.1	2.1		Lateral
2	MP-1	Mount Pipes	8		Segment	Segment			2.1	2.1		Lateral
3	MP-2	Mount Pipes	8		Segment	Segment			2.1	2.1		Lateral
4	MP-3	Mount Pipes	8		Segment	Segment			2.1	2.1		Lateral
5	MP-4	Mount Pipes	8		Segment	Segment			2.1	2.1		Lateral
6	SF1-TH	Face Horiz	12.5	7.5					2.1	2.1		Lateral
7	MP-5	Mount Pipes	8		Segment	Segment			2.1	2.1		Lateral
8	MP-6	Mount Pipes	8		Segment	Segment			2.1	2.1		Lateral
9	MP-7	Mount Pipes	8		Segment	Segment			2.1	2.1		Lateral
10	MP-8	Mount Pipes	8		Segment	Segment			2.1	2.1		Lateral
11	SF2-TH	Face Horiz	12.5	7.5					2.1	2.1		Lateral
12	MP-9	Mount Pipes	8		Segment	Segment			2.1	2.1		Lateral
13	MP-10	Mount Pipes	8		Segment	Segment			2.1	2.1		Lateral



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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
16	SA-1	X	-.112	1
17	MP-1	X	-.364	6
18	MP-4	X	-.359	6
19	MP-5	X	-.286	6
20	MP-8	X	-.283	6
21	MP-9	X	-.218	6
22	MP-12	X	-.216	6

Member Point Loads (BLC 3 : 30 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.3	2
2	MP-4	X	-.296	2
3	MP-2	X	-.044	2
4	MP-3	X	-.055	2
5	MP-3	X	-.05	2
6	MP-5	X	-.166	2
7	MP-8	X	-.164	2
8	MP-6	X	-.065	2
9	MP-7	X	-.07	2
10	MP-7	X	-.058	2
11	MP-9	X	-.277	2
12	MP-12	X	-.273	2
13	MP-10	X	-.044	2
14	MP-11	X	-.055	2
15	MP-11	X	-.05	2
16	SA-1	X	-.115	1
17	MP-1	X	-.3	6
18	MP-4	X	-.296	6
19	MP-5	X	-.166	6
20	MP-8	X	-.164	6
21	MP-9	X	-.277	6
22	MP-12	X	-.273	6
23	MP-1	Z	-.173	2
24	MP-4	Z	-.171	2
25	MP-2	Z	-.026	2
26	MP-3	Z	-.032	2
27	MP-3	Z	-.029	2
28	MP-5	Z	-.096	2
29	MP-8	Z	-.095	2
30	MP-6	Z	-.038	2
31	MP-7	Z	-.04	2
32	MP-7	Z	-.034	2
33	MP-9	Z	-.16	2
34	MP-12	Z	-.158	2
35	MP-10	Z	-.026	2
36	MP-11	Z	-.032	2
37	MP-11	Z	-.029	2
38	SA-1	Z	-.066	1
39	MP-1	Z	-.173	6
40	MP-4	Z	-.171	6
41	MP-5	Z	-.096	6



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Member Point Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
42	MP-8	Z	-.095	6
43	MP-9	Z	-.16	6
44	MP-12	Z	-.158	6

Member Point Loads (BLC 4 : 45 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.214	2
2	MP-4	X	-.212	2
3	MP-2	X	-.042	2
4	MP-3	X	-.049	2
5	MP-3	X	-.043	2
6	MP-5	X	-.12	2
7	MP-8	X	-.118	2
8	MP-6	X	-.052	2
9	MP-7	X	-.056	2
10	MP-7	X	-.047	2
11	MP-9	X	-.252	2
12	MP-12	X	-.249	2
13	MP-10	X	-.032	2
14	MP-11	X	-.042	2
15	MP-11	X	-.04	2
16	SA-1	X	-.109	1
17	MP-1	X	-.214	6
18	MP-4	X	-.212	6
19	MP-5	X	-.12	6
20	MP-8	X	-.118	6
21	MP-9	X	-.252	6
22	MP-12	X	-.249	6
23	MP-1	Z	-.214	2
24	MP-4	Z	-.212	2
25	MP-2	Z	-.042	2
26	MP-3	Z	-.049	2
27	MP-3	Z	-.043	2
28	MP-5	Z	-.12	2
29	MP-8	Z	-.118	2
30	MP-6	Z	-.052	2
31	MP-7	Z	-.056	2
32	MP-7	Z	-.047	2
33	MP-9	Z	-.252	2
34	MP-12	Z	-.249	2
35	MP-10	Z	-.032	2
36	MP-11	Z	-.042	2
37	MP-11	Z	-.04	2
38	SA-1	Z	-.109	1
39	MP-1	Z	-.214	6
40	MP-4	Z	-.212	6
41	MP-5	Z	-.12	6
42	MP-8	Z	-.118	6
43	MP-9	Z	-.252	6
44	MP-12	Z	-.249	6



Company : Tower Engineering Professionals
 Designer : WHW
 Job Number : TEP# 199892.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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Member Point Loads (BLC 5 : 60 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.126	2
2	MP-4	X	-.124	2
3	MP-2	X	-.034	2
4	MP-3	X	-.037	2
5	MP-3	X	-.032	2
6	MP-5	X	-.087	2
7	MP-8	X	-.086	2
8	MP-6	X	-.034	2
9	MP-7	X	-.037	2
10	MP-7	X	-.032	2
11	MP-9	X	-.185	2
12	MP-12	X	-.183	2
13	MP-10	X	-.022	2
14	MP-11	X	-.029	2
15	MP-11	X	-.028	2
16	SA-1	X	-.087	1
17	MP-1	X	-.126	6
18	MP-4	X	-.124	6
19	MP-5	X	-.087	6
20	MP-8	X	-.086	6
21	MP-9	X	-.185	6
22	MP-12	X	-.183	6
23	MP-1	Z	-.218	2
24	MP-4	Z	-.215	2
25	MP-2	Z	-.058	2
26	MP-3	Z	-.065	2
27	MP-3	Z	-.056	2
28	MP-5	Z	-.15	2
29	MP-8	Z	-.149	2
30	MP-6	Z	-.058	2
31	MP-7	Z	-.065	2
32	MP-7	Z	-.056	2
33	MP-9	Z	-.32	2
34	MP-12	Z	-.316	2
35	MP-10	Z	-.037	2
36	MP-11	Z	-.05	2
37	MP-11	Z	-.048	2
38	SA-1	Z	-.151	1
39	MP-1	Z	-.218	6
40	MP-4	Z	-.215	6
41	MP-5	Z	-.15	6
42	MP-8	Z	-.149	6
43	MP-9	Z	-.32	6
44	MP-12	Z	-.316	6

Member Point Loads (BLC 6 : 90 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.174	2
2	MP-4	Z	-.172	2
3	MP-2	Z	-.075	2
4	MP-3	Z	-.08	2



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Member Point Loads (BLC 6 : 90 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
5	MP-3	Z	-.067	2
6	MP-5	Z	-.251	2
7	MP-8	Z	-.248	2
8	MP-6	Z	-.051	2
9	MP-7	Z	-.063	2
10	MP-7	Z	-.058	2
11	MP-9	Z	-.319	2
12	MP-12	Z	-.316	2
13	MP-10	Z	-.051	2
14	MP-11	Z	-.063	2
15	MP-11	Z	-.058	2
16	SA-1	Z	-.196	1
17	MP-1	Z	-.174	6
18	MP-4	Z	-.172	6
19	MP-5	Z	-.251	6
20	MP-8	Z	-.248	6
21	MP-9	Z	-.319	6
22	MP-12	Z	-.316	6

Member Point Loads (BLC 7 : 120 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.096	2
2	MP-4	X	.095	2
3	MP-2	X	.034	2
4	MP-3	X	.037	2
5	MP-3	X	.032	2
6	MP-5	X	.173	2
7	MP-8	X	.171	2
8	MP-6	X	.022	2
9	MP-7	X	.029	2
10	MP-7	X	.028	2
11	MP-9	X	.109	2
12	MP-12	X	.108	2
13	MP-10	X	.034	2
14	MP-11	X	.037	2
15	MP-11	X	.032	2
16	SA-1	X	.087	1
17	MP-1	X	.096	6
18	MP-4	X	.095	6
19	MP-5	X	.173	6
20	MP-8	X	.171	6
21	MP-9	X	.109	6
22	MP-12	X	.108	6
23	MP-1	Z	-.166	2
24	MP-4	Z	-.164	2
25	MP-2	Z	-.058	2
26	MP-3	Z	-.065	2
27	MP-3	Z	-.056	2
28	MP-5	Z	-.3	2
29	MP-8	Z	-.296	2
30	MP-6	Z	-.037	2



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Member Point Loads (BLC 7 : 120 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
31	MP-7	Z	-.05	2
32	MP-7	Z	-.048	2
33	MP-9	Z	-.189	2
34	MP-12	Z	-.187	2
35	MP-10	Z	-.058	2
36	MP-11	Z	-.065	2
37	MP-11	Z	-.056	2
38	SA-1	Z	-.151	1
39	MP-1	Z	-.166	6
40	MP-4	Z	-.164	6
41	MP-5	Z	-.3	6
42	MP-8	Z	-.296	6
43	MP-9	Z	-.189	6
44	MP-12	Z	-.187	6

Member Point Loads (BLC 8 : 135 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.166	2
2	MP-4	X	.164	2
3	MP-2	X	.042	2
4	MP-3	X	.049	2
5	MP-3	X	.043	2
6	MP-5	X	.26	2
7	MP-8	X	.257	2
8	MP-6	X	.032	2
9	MP-7	X	.042	2
10	MP-7	X	.04	2
11	MP-9	X	.128	2
12	MP-12	X	.127	2
13	MP-10	X	.052	2
14	MP-11	X	.056	2
15	MP-11	X	.047	2
16	SA-1	X	.109	1
17	MP-1	X	.166	6
18	MP-4	X	.164	6
19	MP-5	X	.26	6
20	MP-8	X	.257	6
21	MP-9	X	.128	6
22	MP-12	X	.127	6
23	MP-1	Z	-.166	2
24	MP-4	Z	-.164	2
25	MP-2	Z	-.042	2
26	MP-3	Z	-.049	2
27	MP-3	Z	-.043	2
28	MP-5	Z	-.26	2
29	MP-8	Z	-.257	2
30	MP-6	Z	-.032	2
31	MP-7	Z	-.042	2
32	MP-7	Z	-.04	2
33	MP-9	Z	-.128	2
34	MP-12	Z	-.127	2



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Member Point Loads (BLC 8 : 135 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
35	MP-10	Z	-.052	2
36	MP-11	Z	-.056	2
37	MP-11	Z	-.047	2
38	SA-1	Z	-.109	1
39	MP-1	Z	-.166	6
40	MP-4	Z	-.164	6
41	MP-5	Z	-.26	6
42	MP-8	Z	-.257	6
43	MP-9	Z	-.128	6
44	MP-12	Z	-.127	6

Member Point Loads (BLC 9 : 150 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.248	2
2	MP-4	X	.245	2
3	MP-2	X	.044	2
4	MP-3	X	.055	2
5	MP-3	X	.05	2
6	MP-5	X	.315	2
7	MP-8	X	.311	2
8	MP-6	X	.044	2
9	MP-7	X	.055	2
10	MP-7	X	.05	2
11	MP-9	X	.145	2
12	MP-12	X	.144	2
13	MP-10	X	.065	2
14	MP-11	X	.07	2
15	MP-11	X	.058	2
16	SA-1	X	.115	1
17	MP-1	X	.248	6
18	MP-4	X	.245	6
19	MP-5	X	.315	6
20	MP-8	X	.311	6
21	MP-9	X	.145	6
22	MP-12	X	.144	6
23	MP-1	Z	-.143	2
24	MP-4	Z	-.142	2
25	MP-2	Z	-.026	2
26	MP-3	Z	-.032	2
27	MP-3	Z	-.029	2
28	MP-5	Z	-.182	2
29	MP-8	Z	-.18	2
30	MP-6	Z	-.026	2
31	MP-7	Z	-.032	2
32	MP-7	Z	-.029	2
33	MP-9	Z	-.084	2
34	MP-12	Z	-.083	2
35	MP-10	Z	-.038	2
36	MP-11	Z	-.04	2
37	MP-11	Z	-.034	2
38	SA-1	Z	-.066	1



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Member Point Loads (BLC 9 : 150 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
39	MP-1	Z	-.143	6
40	MP-4	Z	-.142	6
41	MP-5	Z	-.182	6
42	MP-8	Z	-.18	6
43	MP-9	Z	-.084	6
44	MP-12	Z	-.083	6

Member Point Loads (BLC 10 : 180 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.364	2
2	MP-4	X	.359	2
3	MP-2	X	.043	2
4	MP-3	X	.058	2
5	MP-3	X	.055	2
6	MP-5	X	.286	2
7	MP-8	X	.283	2
8	MP-6	X	.067	2
9	MP-7	X	.075	2
10	MP-7	X	.064	2
11	MP-9	X	.218	2
12	MP-12	X	.216	2
13	MP-10	X	.067	2
14	MP-11	X	.075	2
15	MP-11	X	.064	2
16	SA-1	X	.112	1
17	MP-1	X	.364	6
18	MP-4	X	.359	6
19	MP-5	X	.286	6
20	MP-8	X	.283	6
21	MP-9	X	.218	6
22	MP-12	X	.216	6

Member Point Loads (BLC 11 : 210 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.3	2
2	MP-4	X	.296	2
3	MP-2	X	.044	2
4	MP-3	X	.055	2
5	MP-3	X	.05	2
6	MP-5	X	.166	2
7	MP-8	X	.164	2
8	MP-6	X	.065	2
9	MP-7	X	.07	2
10	MP-7	X	.058	2
11	MP-9	X	.277	2
12	MP-12	X	.273	2
13	MP-10	X	.044	2
14	MP-11	X	.055	2
15	MP-11	X	.05	2
16	SA-1	X	.115	1
17	MP-1	X	.3	6



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Member Point Loads (BLC 11 : 210 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
18	MP-4	X	.296	6
19	MP-5	X	.166	6
20	MP-8	X	.164	6
21	MP-9	X	.277	6
22	MP-12	X	.273	6
23	MP-1	Z	.173	2
24	MP-4	Z	.171	2
25	MP-2	Z	.026	2
26	MP-3	Z	.032	2
27	MP-3	Z	.029	2
28	MP-5	Z	.096	2
29	MP-8	Z	.095	2
30	MP-6	Z	.038	2
31	MP-7	Z	.04	2
32	MP-7	Z	.034	2
33	MP-9	Z	.16	2
34	MP-12	Z	.158	2
35	MP-10	Z	.026	2
36	MP-11	Z	.032	2
37	MP-11	Z	.029	2
38	SA-1	Z	.066	1
39	MP-1	Z	.173	6
40	MP-4	Z	.171	6
41	MP-5	Z	.096	6
42	MP-8	Z	.095	6
43	MP-9	Z	.16	6
44	MP-12	Z	.158	6

Member Point Loads (BLC 12 : 225 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.214	2
2	MP-4	X	.212	2
3	MP-2	X	.042	2
4	MP-3	X	.049	2
5	MP-3	X	.043	2
6	MP-5	X	.12	2
7	MP-8	X	.118	2
8	MP-6	X	.052	2
9	MP-7	X	.056	2
10	MP-7	X	.047	2
11	MP-9	X	.252	2
12	MP-12	X	.249	2
13	MP-10	X	.032	2
14	MP-11	X	.042	2
15	MP-11	X	.04	2
16	SA-1	X	.109	1
17	MP-1	X	.214	6
18	MP-4	X	.212	6
19	MP-5	X	.12	6
20	MP-8	X	.118	6
21	MP-9	X	.252	6



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Member Point Loads (BLC 12 : 225 Wind - No Ice) (Continued)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]	
22	MP-12	X	.249	6
23	MP-1	Z	.214	2
24	MP-4	Z	.212	2
25	MP-2	Z	.042	2
26	MP-3	Z	.049	2
27	MP-3	Z	.043	2
28	MP-5	Z	.12	2
29	MP-8	Z	.118	2
30	MP-6	Z	.052	2
31	MP-7	Z	.056	2
32	MP-7	Z	.047	2
33	MP-9	Z	.252	2
34	MP-12	Z	.249	2
35	MP-10	Z	.032	2
36	MP-11	Z	.042	2
37	MP-11	Z	.04	2
38	SA-1	Z	.109	1
39	MP-1	Z	.214	6
40	MP-4	Z	.212	6
41	MP-5	Z	.12	6
42	MP-8	Z	.118	6
43	MP-9	Z	.252	6
44	MP-12	Z	.249	6

Member Point Loads (BLC 13 : 240 Wind - No Ice)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]	
1	MP-1	X	.126	2
2	MP-4	X	.124	2
3	MP-2	X	.034	2
4	MP-3	X	.037	2
5	MP-3	X	.032	2
6	MP-5	X	.087	2
7	MP-8	X	.086	2
8	MP-6	X	.034	2
9	MP-7	X	.037	2
10	MP-7	X	.032	2
11	MP-9	X	.185	2
12	MP-12	X	.183	2
13	MP-10	X	.022	2
14	MP-11	X	.029	2
15	MP-11	X	.028	2
16	SA-1	X	.087	1
17	MP-1	X	.126	6
18	MP-4	X	.124	6
19	MP-5	X	.087	6
20	MP-8	X	.086	6
21	MP-9	X	.185	6
22	MP-12	X	.183	6
23	MP-1	Z	.218	2
24	MP-4	Z	.215	2
25	MP-2	Z	.058	2



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Member Point Loads (BLC 13 : 240 Wind - No Ice) (Continued)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]	
26	MP-3	Z	.065	2
27	MP-3	Z	.056	2
28	MP-5	Z	.15	2
29	MP-8	Z	.149	2
30	MP-6	Z	.058	2
31	MP-7	Z	.065	2
32	MP-7	Z	.056	2
33	MP-9	Z	.32	2
34	MP-12	Z	.316	2
35	MP-10	Z	.037	2
36	MP-11	Z	.05	2
37	MP-11	Z	.048	2
38	SA-1	Z	.151	1
39	MP-1	Z	.218	6
40	MP-4	Z	.215	6
41	MP-5	Z	.15	6
42	MP-8	Z	.149	6
43	MP-9	Z	.32	6
44	MP-12	Z	.316	6

Member Point Loads (BLC 14 : 270 Wind - No Ice)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]	
1	MP-1	Z	.174	2
2	MP-4	Z	.172	2
3	MP-2	Z	.075	2
4	MP-3	Z	.08	2
5	MP-3	Z	.067	2
6	MP-5	Z	.251	2
7	MP-8	Z	.248	2
8	MP-6	Z	.051	2
9	MP-7	Z	.063	2
10	MP-7	Z	.058	2
11	MP-9	Z	.319	2
12	MP-12	Z	.316	2
13	MP-10	Z	.051	2
14	MP-11	Z	.063	2
15	MP-11	Z	.058	2
16	SA-1	Z	.196	1
17	MP-1	Z	.174	6
18	MP-4	Z	.172	6
19	MP-5	Z	.251	6
20	MP-8	Z	.248	6
21	MP-9	Z	.319	6
22	MP-12	Z	.316	6

Member Point Loads (BLC 15 : 300 Wind - No Ice)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]	
1	MP-1	X	-.096	2
2	MP-4	X	-.095	2
3	MP-2	X	-.034	2
4	MP-3	X	-.037	2



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Member Point Loads (BLC 15 : 300 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft, %]
5	MP-3	X	-.032	2
6	MP-5	X	-.173	2
7	MP-8	X	-.171	2
8	MP-6	X	-.022	2
9	MP-7	X	-.029	2
10	MP-7	X	-.028	2
11	MP-9	X	-.109	2
12	MP-12	X	-.108	2
13	MP-10	X	-.034	2
14	MP-11	X	-.037	2
15	MP-11	X	-.032	2
16	SA-1	X	-.087	1
17	MP-1	X	-.096	6
18	MP-4	X	-.095	6
19	MP-5	X	-.173	6
20	MP-8	X	-.171	6
21	MP-9	X	-.109	6
22	MP-12	X	-.108	6
23	MP-1	Z	.166	2
24	MP-4	Z	.164	2
25	MP-2	Z	.058	2
26	MP-3	Z	.065	2
27	MP-3	Z	.056	2
28	MP-5	Z	.3	2
29	MP-8	Z	.296	2
30	MP-6	Z	.037	2
31	MP-7	Z	.05	2
32	MP-7	Z	.048	2
33	MP-9	Z	.189	2
34	MP-12	Z	.187	2
35	MP-10	Z	.058	2
36	MP-11	Z	.065	2
37	MP-11	Z	.056	2
38	SA-1	Z	.151	1
39	MP-1	Z	.166	6
40	MP-4	Z	.164	6
41	MP-5	Z	.3	6
42	MP-8	Z	.296	6
43	MP-9	Z	.189	6
44	MP-12	Z	.187	6

Member Point Loads (BLC 16 : 315 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft, %]
1	MP-1	X	-.166	2
2	MP-4	X	-.164	2
3	MP-2	X	-.042	2
4	MP-3	X	-.049	2
5	MP-3	X	-.043	2
6	MP-5	X	-.26	2
7	MP-8	X	-.257	2
8	MP-6	X	-.032	2



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Member Point Loads (BLC 16 : 315 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft, %]
9	MP-7	X	-.042	2
10	MP-7	X	-.04	2
11	MP-9	X	-.128	2
12	MP-12	X	-.127	2
13	MP-10	X	-.052	2
14	MP-11	X	-.056	2
15	MP-11	X	-.047	2
16	SA-1	X	-.109	1
17	MP-1	X	-.166	6
18	MP-4	X	-.164	6
19	MP-5	X	-.26	6
20	MP-8	X	-.257	6
21	MP-9	X	-.128	6
22	MP-12	X	-.127	6
23	MP-1	Z	.166	2
24	MP-4	Z	.164	2
25	MP-2	Z	.042	2
26	MP-3	Z	.049	2
27	MP-3	Z	.043	2
28	MP-5	Z	.26	2
29	MP-8	Z	.257	2
30	MP-6	Z	.032	2
31	MP-7	Z	.042	2
32	MP-7	Z	.04	2
33	MP-9	Z	.128	2
34	MP-12	Z	.127	2
35	MP-10	Z	.052	2
36	MP-11	Z	.056	2
37	MP-11	Z	.047	2
38	SA-1	Z	.109	1
39	MP-1	Z	.166	6
40	MP-4	Z	.164	6
41	MP-5	Z	.26	6
42	MP-8	Z	.257	6
43	MP-9	Z	.128	6
44	MP-12	Z	.127	6

Member Point Loads (BLC 17 : 330 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft, %]
1	MP-1	X	-.248	2
2	MP-4	X	-.245	2
3	MP-2	X	-.044	2
4	MP-3	X	-.055	2
5	MP-3	X	-.05	2
6	MP-5	X	-.315	2
7	MP-8	X	-.311	2
8	MP-6	X	-.044	2
9	MP-7	X	-.055	2
10	MP-7	X	-.05	2
11	MP-9	X	-.145	2
12	MP-12	X	-.144	2



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Member Point Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
13	MP-10	X	-.065	2
14	MP-11	X	-.07	2
15	MP-11	X	-.058	2
16	SA-1	X	-.115	1
17	MP-1	X	-.248	6
18	MP-4	X	-.245	6
19	MP-5	X	-.315	6
20	MP-8	X	-.311	6
21	MP-9	X	-.145	6
22	MP-12	X	-.144	6
23	MP-1	Z	.143	2
24	MP-4	Z	.142	2
25	MP-2	Z	.026	2
26	MP-3	Z	.032	2
27	MP-3	Z	.029	2
28	MP-5	Z	.182	2
29	MP-8	Z	.18	2
30	MP-6	Z	.026	2
31	MP-7	Z	.032	2
32	MP-7	Z	.029	2
33	MP-9	Z	.084	2
34	MP-12	Z	.083	2
35	MP-10	Z	.038	2
36	MP-11	Z	.04	2
37	MP-11	Z	.034	2
38	SA-1	Z	.066	1
39	MP-1	Z	.143	6
40	MP-4	Z	.142	6
41	MP-5	Z	.182	6
42	MP-8	Z	.18	6
43	MP-9	Z	.084	6
44	MP-12	Z	.083	6

Member Point Loads (BLC 18 : Ice Weight)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Y	-.12	2
2	MP-4	Y	-.119	2
3	MP-2	Y	-.041	2
4	MP-3	Y	-.047	2
5	MP-3	Y	-.045	2
6	MP-5	Y	-.12	2
7	MP-8	Y	-.119	2
8	MP-6	Y	-.041	2
9	MP-7	Y	-.047	2
10	MP-7	Y	-.045	2
11	MP-9	Y	-.12	2
12	MP-12	Y	-.119	2
13	MP-10	Y	-.041	2
14	MP-11	Y	-.047	2
15	MP-11	Y	-.045	2
16	SA-1	Y	-.092	1



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Member Point Loads (BLC 18 : Ice Weight) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
17	MP-1	Y	-.12	6
18	MP-4	Y	-.119	6
19	MP-5	Y	-.12	6
20	MP-8	Y	-.119	6
21	MP-9	Y	-.12	6
22	MP-12	Y	-.119	6

Member Point Loads (BLC 19 : 0 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.072	2
2	MP-4	X	-.071	2
3	MP-2	X	-.017	2
4	MP-3	X	-.019	2
5	MP-3	X	-.016	2
6	MP-5	X	-.072	2
7	MP-8	X	-.071	2
8	MP-6	X	-.017	2
9	MP-7	X	-.019	2
10	MP-7	X	-.016	2
11	MP-9	X	-.072	2
12	MP-12	X	-.071	2
13	MP-10	X	-.017	2
14	MP-11	X	-.019	2
15	MP-11	X	-.016	2
16	SA-1	X	-.025	1
17	MP-1	X	-.072	6
18	MP-4	X	-.071	6
19	MP-5	X	-.072	6
20	MP-8	X	-.071	6
21	MP-9	X	-.072	6
22	MP-12	X	-.071	6

Member Point Loads (BLC 20 : 30 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.059	2
2	MP-4	X	-.058	2
3	MP-2	X	-.011	2
4	MP-3	X	-.013	2
5	MP-3	X	-.012	2
6	MP-5	X	-.035	2
7	MP-8	X	-.035	2
8	MP-6	X	-.015	2
9	MP-7	X	-.016	2
10	MP-7	X	-.014	2
11	MP-9	X	-.055	2
12	MP-12	X	-.054	2
13	MP-10	X	-.011	2
14	MP-11	X	-.013	2
15	MP-11	X	-.012	2
16	SA-1	X	-.025	1
17	MP-1	X	-.059	6



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Member Point Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft, %]
18	MP-4	X	-0.58	6
19	MP-5	X	-0.35	6
20	MP-8	X	-0.35	6
21	MP-9	X	-0.55	6
22	MP-12	X	-0.54	6
23	MP-1	Z	-0.34	2
24	MP-4	Z	-0.34	2
25	MP-2	Z	-0.06	2
26	MP-3	Z	-0.08	2
27	MP-3	Z	-0.07	2
28	MP-5	Z	-0.02	2
29	MP-8	Z	-0.02	2
30	MP-6	Z	-0.09	2
31	MP-7	Z	-0.09	2
32	MP-7	Z	-0.08	2
33	MP-9	Z	-0.32	2
34	MP-12	Z	-0.31	2
35	MP-10	Z	-0.06	2
36	MP-11	Z	-0.08	2
37	MP-11	Z	-0.07	2
38	SA-1	Z	-0.15	1
39	MP-1	Z	-0.34	6
40	MP-4	Z	-0.34	6
41	MP-5	Z	-0.02	6
42	MP-8	Z	-0.02	6
43	MP-9	Z	-0.32	6
44	MP-12	Z	-0.31	6

Member Point Loads (BLC 21 : 45 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft, %]
1	MP-1	X	-0.43	2
2	MP-4	X	-0.42	2
3	MP-2	X	-0.01	2
4	MP-3	X	-0.12	2
5	MP-3	X	-0.01	2
6	MP-5	X	-0.26	2
7	MP-8	X	-0.26	2
8	MP-6	X	-0.12	2
9	MP-7	X	-0.13	2
10	MP-7	X	-0.11	2
11	MP-9	X	-0.49	2
12	MP-12	X	-0.49	2
13	MP-10	X	-0.08	2
14	MP-11	X	-0.01	2
15	MP-11	X	-0.01	2
16	SA-1	X	-0.23	1
17	MP-1	X	-0.43	6
18	MP-4	X	-0.42	6
19	MP-5	X	-0.26	6
20	MP-8	X	-0.26	6
21	MP-9	X	-0.49	6



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Member Point Loads (BLC 21 : 45 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft, %]
22	MP-12	X	-0.49	6
23	MP-1	Z	-0.43	2
24	MP-4	Z	-0.42	2
25	MP-2	Z	-0.01	2
26	MP-3	Z	-0.12	2
27	MP-3	Z	-0.01	2
28	MP-5	Z	-0.26	2
29	MP-8	Z	-0.26	2
30	MP-6	Z	-0.12	2
31	MP-7	Z	-0.13	2
32	MP-7	Z	-0.11	2
33	MP-9	Z	-0.49	2
34	MP-12	Z	-0.49	2
35	MP-10	Z	-0.08	2
36	MP-11	Z	-0.01	2
37	MP-11	Z	-0.01	2
38	SA-1	Z	-0.23	1
39	MP-1	Z	-0.43	6
40	MP-4	Z	-0.42	6
41	MP-5	Z	-0.26	6
42	MP-8	Z	-0.26	6
43	MP-9	Z	-0.49	6
44	MP-12	Z	-0.49	6

Member Point Loads (BLC 22 : 60 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft, %]
1	MP-1	X	-0.26	2
2	MP-4	X	-0.25	2
3	MP-2	X	-0.08	2
4	MP-3	X	-0.09	2
5	MP-3	X	-0.08	2
6	MP-5	X	-0.19	2
7	MP-8	X	-0.19	2
8	MP-6	X	-0.08	2
9	MP-7	X	-0.09	2
10	MP-7	X	-0.08	2
11	MP-9	X	-0.36	2
12	MP-12	X	-0.36	2
13	MP-10	X	-0.06	2
14	MP-11	X	-0.07	2
15	MP-11	X	-0.07	2
16	SA-1	X	-0.19	1
17	MP-1	X	-0.26	6
18	MP-4	X	-0.25	6
19	MP-5	X	-0.19	6
20	MP-8	X	-0.19	6
21	MP-9	X	-0.36	6
22	MP-12	X	-0.36	6
23	MP-1	Z	-0.44	2
24	MP-4	Z	-0.44	2
25	MP-2	Z	-0.14	2



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Member Point Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
26	MP-3	Z	-0.15	2
27	MP-3	Z	-0.13	2
28	MP-5	Z	-0.33	2
29	MP-8	Z	-0.32	2
30	MP-6	Z	-0.14	2
31	MP-7	Z	-0.15	2
32	MP-7	Z	-0.13	2
33	MP-9	Z	-0.62	2
34	MP-12	Z	-0.62	2
35	MP-10	Z	-0.01	2
36	MP-11	Z	-0.12	2
37	MP-11	Z	-0.12	2
38	SA-1	Z	-0.32	1
39	MP-1	Z	-0.44	6
40	MP-4	Z	-0.44	6
41	MP-5	Z	-0.33	6
42	MP-8	Z	-0.32	6
43	MP-9	Z	-0.62	6
44	MP-12	Z	-0.62	6

Member Point Loads (BLC 23 : 90 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-0.37	2
2	MP-4	Z	-0.36	2
3	MP-2	Z	-0.11	2
4	MP-3	Z	-0.14	2
5	MP-3	Z	-0.13	2
6	MP-5	Z	-0.37	2
7	MP-8	Z	-0.36	2
8	MP-6	Z	-0.11	2
9	MP-7	Z	-0.14	2
10	MP-7	Z	-0.13	2
11	MP-9	Z	-0.37	2
12	MP-12	Z	-0.36	2
13	MP-10	Z	-0.11	2
14	MP-11	Z	-0.14	2
15	MP-11	Z	-0.13	2
16	SA-1	Z	-0.41	1
17	MP-1	Z	-0.37	6
18	MP-4	Z	-0.36	6
19	MP-5	Z	-0.37	6
20	MP-8	Z	-0.36	6
21	MP-9	Z	-0.37	6
22	MP-12	Z	-0.36	6

Member Point Loads (BLC 24 : 120 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.02	2
2	MP-4	X	.02	2
3	MP-2	X	.008	2
4	MP-3	X	.009	2



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Member Point Loads (BLC 24 : 120 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
5	MP-3	X	.008	2
6	MP-5	X	.034	2
7	MP-8	X	.034	2
8	MP-6	X	.006	2
9	MP-7	X	.007	2
10	MP-7	X	.007	2
11	MP-9	X	.023	2
12	MP-12	X	.022	2
13	MP-10	X	.008	2
14	MP-11	X	.009	2
15	MP-11	X	.008	2
16	SA-1	X	.019	1
17	MP-1	X	.02	6
18	MP-4	X	.02	6
19	MP-5	X	.034	6
20	MP-8	X	.034	6
21	MP-9	X	.023	6
22	MP-12	X	.022	6
23	MP-1	Z	-0.35	2
24	MP-4	Z	-0.35	2
25	MP-2	Z	-0.14	2
26	MP-3	Z	-0.15	2
27	MP-3	Z	-0.13	2
28	MP-5	Z	-0.59	2
29	MP-8	Z	-0.58	2
30	MP-6	Z	-.01	2
31	MP-7	Z	-0.12	2
32	MP-7	Z	-0.12	2
33	MP-9	Z	-0.39	2
34	MP-12	Z	-0.39	2
35	MP-10	Z	-0.14	2
36	MP-11	Z	-0.15	2
37	MP-11	Z	-0.13	2
38	SA-1	Z	-0.32	1
39	MP-1	Z	-0.35	6
40	MP-4	Z	-0.35	6
41	MP-5	Z	-0.59	6
42	MP-8	Z	-0.58	6
43	MP-9	Z	-0.39	6
44	MP-12	Z	-0.39	6

Member Point Loads (BLC 25 : 135 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.034	2
2	MP-4	X	.034	2
3	MP-2	X	.01	2
4	MP-3	X	.012	2
5	MP-3	X	.01	2
6	MP-5	X	.051	2
7	MP-8	X	.05	2
8	MP-6	X	.008	2



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Member Point Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
9	MP-7	X	.01	2
10	MP-7	X	.01	2
11	MP-9	X	.028	2
12	MP-12	X	.027	2
13	MP-10	X	.012	2
14	MP-11	X	.013	2
15	MP-11	X	.011	2
16	SA-1	X	.023	1
17	MP-1	X	.034	6
18	MP-4	X	.034	6
19	MP-5	X	.051	6
20	MP-8	X	.05	6
21	MP-9	X	.028	6
22	MP-12	X	.027	6
23	MP-1	Z	-.034	2
24	MP-4	Z	-.034	2
25	MP-2	Z	-.01	2
26	MP-3	Z	-.012	2
27	MP-3	Z	-.01	2
28	MP-5	Z	-.051	2
29	MP-8	Z	-.05	2
30	MP-6	Z	-.008	2
31	MP-7	Z	-.01	2
32	MP-7	Z	-.01	2
33	MP-9	Z	-.028	2
34	MP-12	Z	-.027	2
35	MP-10	Z	-.012	2
36	MP-11	Z	-.013	2
37	MP-11	Z	-.011	2
38	SA-1	Z	-.023	1
39	MP-1	Z	-.034	6
40	MP-4	Z	-.034	6
41	MP-5	Z	-.051	6
42	MP-8	Z	-.05	6
43	MP-9	Z	-.028	6
44	MP-12	Z	-.027	6

Member Point Loads (BLC 26 : 150 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.05	2
2	MP-4	X	.049	2
3	MP-2	X	.011	2
4	MP-3	X	.013	2
5	MP-3	X	.012	2
6	MP-5	X	.061	2
7	MP-8	X	.061	2
8	MP-6	X	.011	2
9	MP-7	X	.013	2
10	MP-7	X	.012	2
11	MP-9	X	.032	2
12	MP-12	X	.031	2



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Member Point Loads (BLC 26 : 150 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
13	MP-10	X	.015	2
14	MP-11	X	.016	2
15	MP-11	X	.014	2
16	SA-1	X	.025	1
17	MP-1	X	.05	6
18	MP-4	X	.049	6
19	MP-5	X	.061	6
20	MP-8	X	.061	6
21	MP-9	X	.032	6
22	MP-12	X	.031	6
23	MP-1	Z	-.029	2
24	MP-4	Z	-.028	2
25	MP-2	Z	-.006	2
26	MP-3	Z	-.008	2
27	MP-3	Z	-.007	2
28	MP-5	Z	-.036	2
29	MP-8	Z	-.035	2
30	MP-6	Z	-.006	2
31	MP-7	Z	-.008	2
32	MP-7	Z	-.007	2
33	MP-9	Z	-.018	2
34	MP-12	Z	-.018	2
35	MP-10	Z	-.009	2
36	MP-11	Z	-.009	2
37	MP-11	Z	-.008	2
38	SA-1	Z	-.015	1
39	MP-1	Z	-.029	6
40	MP-4	Z	-.028	6
41	MP-5	Z	-.036	6
42	MP-8	Z	-.035	6
43	MP-9	Z	-.018	6
44	MP-12	Z	-.018	6

Member Point Loads (BLC 27 : 180 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.072	2
2	MP-4	X	.071	2
3	MP-2	X	.017	2
4	MP-3	X	.019	2
5	MP-3	X	.016	2
6	MP-5	X	.072	2
7	MP-8	X	.071	2
8	MP-6	X	.017	2
9	MP-7	X	.019	2
10	MP-7	X	.016	2
11	MP-9	X	.072	2
12	MP-12	X	.071	2
13	MP-10	X	.017	2
14	MP-11	X	.019	2
15	MP-11	X	.016	2
16	SA-1	X	.025	1



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Member Point Loads (BLC 27 : 180 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
17	MP-1	X	.072	6
18	MP-4	X	.071	6
19	MP-5	X	.072	6
20	MP-8	X	.071	6
21	MP-9	X	.072	6
22	MP-12	X	.071	6

Member Point Loads (BLC 28 : 210 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.059	2
2	MP-4	X	.058	2
3	MP-2	X	.011	2
4	MP-3	X	.013	2
5	MP-3	X	.012	2
6	MP-5	X	.035	2
7	MP-8	X	.035	2
8	MP-6	X	.015	2
9	MP-7	X	.016	2
10	MP-7	X	.014	2
11	MP-9	X	.055	2
12	MP-12	X	.054	2
13	MP-10	X	.011	2
14	MP-11	X	.013	2
15	MP-11	X	.012	2
16	SA-1	X	.025	1
17	MP-1	X	.059	6
18	MP-4	X	.058	6
19	MP-5	X	.035	6
20	MP-8	X	.035	6
21	MP-9	X	.055	6
22	MP-12	X	.054	6
23	MP-1	Z	.034	2
24	MP-4	Z	.034	2
25	MP-2	Z	.006	2
26	MP-3	Z	.008	2
27	MP-3	Z	.007	2
28	MP-5	Z	.02	2
29	MP-8	Z	.02	2
30	MP-6	Z	.009	2
31	MP-7	Z	.009	2
32	MP-7	Z	.008	2
33	MP-9	Z	.032	2
34	MP-12	Z	.031	2
35	MP-10	Z	.006	2
36	MP-11	Z	.008	2
37	MP-11	Z	.007	2
38	SA-1	Z	.015	1
39	MP-1	Z	.034	6
40	MP-4	Z	.034	6
41	MP-5	Z	.02	6
42	MP-8	Z	.02	6



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Member Point Loads (BLC 28 : 210 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
43	MP-9	Z	.032	6
44	MP-12	Z	.031	6

Member Point Loads (BLC 29 : 225 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.043	2
2	MP-4	X	.042	2
3	MP-2	X	.01	2
4	MP-3	X	.012	2
5	MP-3	X	.01	2
6	MP-5	X	.026	2
7	MP-8	X	.026	2
8	MP-6	X	.012	2
9	MP-7	X	.013	2
10	MP-7	X	.011	2
11	MP-9	X	.049	2
12	MP-12	X	.049	2
13	MP-10	X	.008	2
14	MP-11	X	.01	2
15	MP-11	X	.01	2
16	SA-1	X	.023	1
17	MP-1	X	.043	6
18	MP-4	X	.042	6
19	MP-5	X	.026	6
20	MP-8	X	.026	6
21	MP-9	X	.049	6
22	MP-12	X	.049	6
23	MP-1	Z	.043	2
24	MP-4	Z	.042	2
25	MP-2	Z	.01	2
26	MP-3	Z	.012	2
27	MP-3	Z	.01	2
28	MP-5	Z	.026	2
29	MP-8	Z	.026	2
30	MP-6	Z	.012	2
31	MP-7	Z	.013	2
32	MP-7	Z	.011	2
33	MP-9	Z	.049	2
34	MP-12	Z	.049	2
35	MP-10	Z	.008	2
36	MP-11	Z	.01	2
37	MP-11	Z	.01	2
38	SA-1	Z	.023	1
39	MP-1	Z	.043	6
40	MP-4	Z	.042	6
41	MP-5	Z	.026	6
42	MP-8	Z	.026	6
43	MP-9	Z	.049	6
44	MP-12	Z	.049	6



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Member Point Loads (BLC 30 : 240 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.026	2
2	MP-4	X	.025	2
3	MP-2	X	.008	2
4	MP-3	X	.009	2
5	MP-3	X	.008	2
6	MP-5	X	.019	2
7	MP-8	X	.019	2
8	MP-6	X	.008	2
9	MP-7	X	.009	2
10	MP-7	X	.008	2
11	MP-9	X	.036	2
12	MP-12	X	.036	2
13	MP-10	X	.006	2
14	MP-11	X	.007	2
15	MP-11	X	.007	2
16	SA-1	X	.019	1
17	MP-1	X	.026	6
18	MP-4	X	.025	6
19	MP-5	X	.019	6
20	MP-8	X	.019	6
21	MP-9	X	.036	6
22	MP-12	X	.036	6
23	MP-1	Z	.044	2
24	MP-4	Z	.044	2
25	MP-2	Z	.014	2
26	MP-3	Z	.015	2
27	MP-3	Z	.013	2
28	MP-5	Z	.033	2
29	MP-8	Z	.032	2
30	MP-6	Z	.014	2
31	MP-7	Z	.015	2
32	MP-7	Z	.013	2
33	MP-9	Z	.062	2
34	MP-12	Z	.062	2
35	MP-10	Z	.01	2
36	MP-11	Z	.012	2
37	MP-11	Z	.012	2
38	SA-1	Z	.032	1
39	MP-1	Z	.044	6
40	MP-4	Z	.044	6
41	MP-5	Z	.033	6
42	MP-8	Z	.032	6
43	MP-9	Z	.062	6
44	MP-12	Z	.062	6

Member Point Loads (BLC 31 : 270 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.037	2
2	MP-4	Z	.036	2
3	MP-2	Z	.011	2
4	MP-3	Z	.014	2



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Member Point Loads (BLC 31 : 270 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
5	MP-3	Z	.013	2
6	MP-5	Z	.037	2
7	MP-8	Z	.036	2
8	MP-6	Z	.011	2
9	MP-7	Z	.014	2
10	MP-7	Z	.013	2
11	MP-9	Z	.037	2
12	MP-12	Z	.036	2
13	MP-10	Z	.011	2
14	MP-11	Z	.014	2
15	MP-11	Z	.013	2
16	SA-1	Z	.041	1
17	MP-1	Z	.037	6
18	MP-4	Z	.036	6
19	MP-5	Z	.037	6
20	MP-8	Z	.036	6
21	MP-9	Z	.037	6
22	MP-12	Z	.036	6

Member Point Loads (BLC 32 : 300 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.02	2
2	MP-4	X	-.02	2
3	MP-2	X	-.008	2
4	MP-3	X	-.009	2
5	MP-3	X	-.008	2
6	MP-5	X	-.034	2
7	MP-8	X	-.034	2
8	MP-6	X	-.006	2
9	MP-7	X	-.007	2
10	MP-7	X	-.007	2
11	MP-9	X	-.023	2
12	MP-12	X	-.022	2
13	MP-10	X	-.008	2
14	MP-11	X	-.009	2
15	MP-11	X	-.008	2
16	SA-1	X	-.019	1
17	MP-1	X	-.02	6
18	MP-4	X	-.02	6
19	MP-5	X	-.034	6
20	MP-8	X	-.034	6
21	MP-9	X	-.023	6
22	MP-12	X	-.022	6
23	MP-1	Z	.035	2
24	MP-4	Z	.035	2
25	MP-2	Z	.014	2
26	MP-3	Z	.015	2
27	MP-3	Z	.013	2
28	MP-5	Z	.059	2
29	MP-8	Z	.058	2
30	MP-6	Z	.01	2



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Member Point Loads (BLC 32 : 300 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
31	MP-7	Z	.012	2
32	MP-7	Z	.012	2
33	MP-9	Z	.039	2
34	MP-12	Z	.039	2
35	MP-10	Z	.014	2
36	MP-11	Z	.015	2
37	MP-11	Z	.013	2
38	SA-1	Z	.032	1
39	MP-1	Z	.035	6
40	MP-4	Z	.035	6
41	MP-5	Z	.059	6
42	MP-8	Z	.058	6
43	MP-9	Z	.039	6
44	MP-12	Z	.039	6

Member Point Loads (BLC 33 : 315 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.034	2
2	MP-4	X	-.034	2
3	MP-2	X	-.01	2
4	MP-3	X	-.012	2
5	MP-3	X	-.01	2
6	MP-5	X	-.051	2
7	MP-8	X	-.05	2
8	MP-6	X	-.008	2
9	MP-7	X	-.01	2
10	MP-7	X	-.01	2
11	MP-9	X	-.028	2
12	MP-12	X	-.027	2
13	MP-10	X	-.012	2
14	MP-11	X	-.013	2
15	MP-11	X	-.011	2
16	SA-1	X	-.023	1
17	MP-1	X	-.034	6
18	MP-4	X	-.034	6
19	MP-5	X	-.051	6
20	MP-8	X	-.05	6
21	MP-9	X	-.028	6
22	MP-12	X	-.027	6
23	MP-1	Z	.034	2
24	MP-4	Z	.034	2
25	MP-2	Z	.01	2
26	MP-3	Z	.012	2
27	MP-3	Z	.01	2
28	MP-5	Z	.051	2
29	MP-8	Z	.05	2
30	MP-6	Z	.008	2
31	MP-7	Z	.01	2
32	MP-7	Z	.01	2
33	MP-9	Z	.028	2
34	MP-12	Z	.027	2



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Member Point Loads (BLC 33 : 315 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
35	MP-10	Z	.012	2
36	MP-11	Z	.013	2
37	MP-11	Z	.011	2
38	SA-1	Z	.023	1
39	MP-1	Z	.034	6
40	MP-4	Z	.034	6
41	MP-5	Z	.051	6
42	MP-8	Z	.05	6
43	MP-9	Z	.028	6
44	MP-12	Z	.027	6

Member Point Loads (BLC 34 : 330 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.05	2
2	MP-4	X	-.049	2
3	MP-2	X	-.011	2
4	MP-3	X	-.013	2
5	MP-3	X	-.012	2
6	MP-5	X	-.061	2
7	MP-8	X	-.061	2
8	MP-6	X	-.011	2
9	MP-7	X	-.013	2
10	MP-7	X	-.012	2
11	MP-9	X	-.032	2
12	MP-12	X	-.031	2
13	MP-10	X	-.015	2
14	MP-11	X	-.016	2
15	MP-11	X	-.014	2
16	SA-1	X	-.025	1
17	MP-1	X	-.05	6
18	MP-4	X	-.049	6
19	MP-5	X	-.061	6
20	MP-8	X	-.061	6
21	MP-9	X	-.032	6
22	MP-12	X	-.031	6
23	MP-1	Z	.029	2
24	MP-4	Z	.028	2
25	MP-2	Z	.006	2
26	MP-3	Z	.008	2
27	MP-3	Z	.007	2
28	MP-5	Z	.036	2
29	MP-8	Z	.035	2
30	MP-6	Z	.006	2
31	MP-7	Z	.008	2
32	MP-7	Z	.007	2
33	MP-9	Z	.018	2
34	MP-12	Z	.018	2
35	MP-10	Z	.009	2
36	MP-11	Z	.009	2
37	MP-11	Z	.008	2
38	SA-1	Z	.015	1



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Member Point Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
39	MP-1	Z	.029	6
40	MP-4	Z	.028	6
41	MP-5	Z	.036	6
42	MP-8	Z	.035	6
43	MP-9	Z	.018	6
44	MP-12	Z	.018	6

Member Point Loads (BLC 37 : Seismic Load X)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.044	2
2	MP-4	X	-.053	2
3	MP-2	X	-.06	2
4	MP-3	X	-.071	2
5	MP-3	X	-.072	2
6	MP-5	X	-.044	2
7	MP-8	X	-.053	2
8	MP-6	X	-.06	2
9	MP-7	X	-.071	2
10	MP-7	X	-.072	2
11	MP-9	X	-.044	2
12	MP-12	X	-.053	2
13	MP-10	X	-.06	2
14	MP-11	X	-.071	2
15	MP-11	X	-.072	2
16	SA-1	X	-.026	1
17	MP-1	X	-.044	6
18	MP-4	X	-.053	6
19	MP-5	X	-.044	6
20	MP-8	X	-.053	6
21	MP-9	X	-.044	6
22	MP-12	X	-.053	6

Member Point Loads (BLC 38 : Seismic Load Z)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.044	2
2	MP-4	Z	-.053	2
3	MP-2	Z	-.06	2
4	MP-3	Z	-.071	2
5	MP-3	Z	-.072	2
6	MP-5	Z	-.044	2
7	MP-8	Z	-.053	2
8	MP-6	Z	-.06	2
9	MP-7	Z	-.071	2
10	MP-7	Z	-.072	2
11	MP-9	Z	-.044	2
12	MP-12	Z	-.053	2
13	MP-10	Z	-.06	2
14	MP-11	Z	-.071	2
15	MP-11	Z	-.072	2
16	SA-1	Z	-.026	1
17	MP-1	Z	-.044	6



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Member Point Loads (BLC 38 : Seismic Load Z) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
18	MP-4	Z	-.053	6
19	MP-5	Z	-.044	6
20	MP-8	Z	-.053	6
21	MP-9	Z	-.044	6
22	MP-12	Z	-.053	6

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

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...]	End Location[ft,...]
1	FFTH	X	-.011	-.011	0	%100
2	MP-1	X	-.01	-.01	0	%100
3	MP-2	X	-.01	-.01	0	%100
4	MP-3	X	-.01	-.01	0	%100
5	MP-4	X	-.01	-.01	0	%100
6	SF1-TH	X	-.005	-.005	0	%100
7	MP-5	X	-.01	-.01	0	%100
8	MP-6	X	-.01	-.01	0	%100
9	MP-7	X	-.01	-.01	0	%100
10	MP-8	X	-.01	-.01	0	%100
11	SF2-TH	X	-.005	-.005	0	%100
12	MP-9	X	-.01	-.01	0	%100
13	MP-10	X	-.01	-.01	0	%100
14	MP-11	X	-.01	-.01	0	%100
15	MP-12	X	-.01	-.01	0	%100
16	SA-1	X	-.007	-.007	0	%100
17	SA-2	X	-.007	-.007	0	%100
18	SA-3	X	0	0	0	%100
19	GSI-1	X	-.003	-.003	0	%100
20	GSI-2	X	-.003	-.003	0	%100
21	GSI-3	X	-.008	-.008	0	%100

Member Distributed Loads (BLC 3 : 30 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...]	End Location[ft,...]
1	FFTH	X	-.008	-.008	0	%100
2	MP-1	X	-.008	-.008	0	%100
3	MP-2	X	-.008	-.008	0	%100
4	MP-3	X	-.008	-.008	0	%100
5	MP-4	X	-.008	-.008	0	%100
6	SF1-TH	X	-.008	-.008	0	%100
7	MP-5	X	-.008	-.008	0	%100
8	MP-6	X	-.008	-.008	0	%100
9	MP-7	X	-.008	-.008	0	%100
10	MP-8	X	-.008	-.008	0	%100
11	SF2-TH	X	0	0	0	%100
12	MP-9	X	-.008	-.008	0	%100
13	MP-10	X	-.008	-.008	0	%100
14	MP-11	X	-.008	-.008	0	%100
15	MP-12	X	-.008	-.008	0	%100
16	SA-1	X	-.003	-.003	0	%100
17	SA-2	X	-.007	-.007	0	%100
18	SA-3	X	-.004	-.004	0	%100



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Member Distributed Loads (BLC 3 : 30 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft....End Location[ft....
19	GSI-1	X	-0.005	-0.005 0 0 %100
20	GSI-2	X	0	0 0 0 %100
21	GSI-3	X	-0.006	-0.006 0 0 %100
22	FFTH	Z	-0.005	-0.005 0 0 %100
23	MP-1	Z	-0.005	-0.005 0 0 %100
24	MP-2	Z	-0.005	-0.005 0 0 %100
25	MP-3	Z	-0.005	-0.005 0 0 %100
26	MP-4	Z	-0.005	-0.005 0 0 %100
27	SF1-TH	Z	-0.005	-0.005 0 0 %100
28	MP-5	Z	-0.005	-0.005 0 0 %100
29	MP-6	Z	-0.005	-0.005 0 0 %100
30	MP-7	Z	-0.005	-0.005 0 0 %100
31	MP-8	Z	-0.005	-0.005 0 0 %100
32	SF2-TH	Z	0	0 0 0 %100
33	MP-9	Z	-0.005	-0.005 0 0 %100
34	MP-10	Z	-0.005	-0.005 0 0 %100
35	MP-11	Z	-0.005	-0.005 0 0 %100
36	MP-12	Z	-0.005	-0.005 0 0 %100
37	SA-1	Z	-0.002	-0.002 0 0 %100
38	SA-2	Z	-0.004	-0.004 0 0 %100
39	SA-3	Z	-0.002	-0.002 0 0 %100
40	GSI-1	Z	-0.003	-0.003 0 0 %100
41	GSI-2	Z	0	0 0 0 %100
42	GSI-3	Z	-0.004	-0.004 0 0 %100

Member Distributed Loads (BLC 4 : 45 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft....End Location[ft....
1	FFTH	X	-0.006	-0.006 0 0 %100
2	MP-1	X	-0.007	-0.007 0 0 %100
3	MP-2	X	-0.007	-0.007 0 0 %100
4	MP-3	X	-0.007	-0.007 0 0 %100
5	MP-4	X	-0.007	-0.007 0 0 %100
6	SF1-TH	X	-0.007	-0.007 0 0 %100
7	MP-5	X	-0.007	-0.007 0 0 %100
8	MP-6	X	-0.007	-0.007 0 0 %100
9	MP-7	X	-0.007	-0.007 0 0 %100
10	MP-8	X	-0.007	-0.007 0 0 %100
11	SF2-TH	X	-0.002	-0.002 0 0 %100
12	MP-9	X	-0.007	-0.007 0 0 %100
13	MP-10	X	-0.007	-0.007 0 0 %100
14	MP-11	X	-0.007	-0.007 0 0 %100
15	MP-12	X	-0.007	-0.007 0 0 %100
16	SA-1	X	-0.001	-0.001 0 0 %100
17	SA-2	X	-0.005	-0.005 0 0 %100
18	SA-3	X	-0.004	-0.004 0 0 %100
19	GSI-1	X	-0.005	-0.005 0 0 %100
20	GSI-2	X	-0.001	-0.001 0 0 %100
21	GSI-3	X	-0.004	-0.004 0 0 %100
22	FFTH	Z	-0.006	-0.006 0 0 %100
23	MP-1	Z	-0.007	-0.007 0 0 %100
24	MP-2	Z	-0.007	-0.007 0 0 %100



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Member Distributed Loads (BLC 4 : 45 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft....End Location[ft....
25	MP-3	Z	-0.007	-0.007 0 0 %100
26	MP-4	Z	-0.007	-0.007 0 0 %100
27	SF1-TH	Z	-0.008	-0.008 0 0 %100
28	MP-5	Z	-0.007	-0.007 0 0 %100
29	MP-6	Z	-0.007	-0.007 0 0 %100
30	MP-7	Z	-0.007	-0.007 0 0 %100
31	MP-8	Z	-0.007	-0.007 0 0 %100
32	SF2-TH	Z	-0.002	-0.002 0 0 %100
33	MP-9	Z	-0.007	-0.007 0 0 %100
34	MP-10	Z	-0.007	-0.007 0 0 %100
35	MP-11	Z	-0.007	-0.007 0 0 %100
36	MP-12	Z	-0.007	-0.007 0 0 %100
37	SA-1	Z	-0.001	-0.001 0 0 %100
38	SA-2	Z	-0.005	-0.005 0 0 %100
39	SA-3	Z	-0.004	-0.004 0 0 %100
40	GSI-1	Z	-0.005	-0.005 0 0 %100
41	GSI-2	Z	-0.001	-0.001 0 0 %100
42	GSI-3	Z	-0.004	-0.004 0 0 %100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft....End Location[ft....
1	FFTH	X	-0.003	-0.003 0 0 %100
2	MP-1	X	-0.005	-0.005 0 0 %100
3	MP-2	X	-0.005	-0.005 0 0 %100
4	MP-3	X	-0.005	-0.005 0 0 %100
5	MP-4	X	-0.005	-0.005 0 0 %100
6	SF1-TH	X	-0.005	-0.005 0 0 %100
7	MP-5	X	-0.005	-0.005 0 0 %100
8	MP-6	X	-0.005	-0.005 0 0 %100
9	MP-7	X	-0.005	-0.005 0 0 %100
10	MP-8	X	-0.005	-0.005 0 0 %100
11	SF2-TH	X	-0.003	-0.003 0 0 %100
12	MP-9	X	-0.005	-0.005 0 0 %100
13	MP-10	X	-0.005	-0.005 0 0 %100
14	MP-11	X	-0.005	-0.005 0 0 %100
15	MP-12	X	-0.005	-0.005 0 0 %100
16	SA-1	X	0	0 0 0 %100
17	SA-2	X	-0.003	-0.003 0 0 %100
18	SA-3	X	-0.004	-0.004 0 0 %100
19	GSI-1	X	-0.003	-0.003 0 0 %100
20	GSI-2	X	-0.002	-0.002 0 0 %100
21	GSI-3	X	-0.002	-0.002 0 0 %100
22	FFTH	Z	-0.005	-0.005 0 0 %100
23	MP-1	Z	-0.008	-0.008 0 0 %100
24	MP-2	Z	-0.008	-0.008 0 0 %100
25	MP-3	Z	-0.008	-0.008 0 0 %100
26	MP-4	Z	-0.008	-0.008 0 0 %100
27	SF1-TH	Z	-0.01	-0.01 0 0 %100
28	MP-5	Z	-0.008	-0.008 0 0 %100
29	MP-6	Z	-0.008	-0.008 0 0 %100
30	MP-7	Z	-0.008	-0.008 0 0 %100



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Member Distributed Loads (BLC 5 : 60 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...]	End Location[ft,...]
31	MP-8	Z	-0.08	0	%100
32	SF2-TH	Z	-0.05	0	%100
33	MP-9	Z	-0.08	0	%100
34	MP-10	Z	-0.08	0	%100
35	MP-11	Z	-0.08	0	%100
36	MP-12	Z	-0.08	0	%100
37	SA-1	Z	0	0	%100
38	SA-2	Z	-0.06	0	%100
39	SA-3	Z	-0.06	0	%100
40	GSI-1	Z	-0.07	0	%100
41	GSI-2	Z	-0.03	0	%100
42	GSI-3	Z	-0.04	0	%100

Member Distributed Loads (BLC 6 : 90 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...]	End Location[ft,...]
1	FFTH	Z	0	0	%100
2	MP-1	Z	-0.1	0	%100
3	MP-2	Z	-0.1	0	%100
4	MP-3	Z	-0.1	0	%100
5	MP-4	Z	-0.1	0	%100
6	SF1-TH	Z	-0.1	0	%100
7	MP-5	Z	-0.1	0	%100
8	MP-6	Z	-0.1	0	%100
9	MP-7	Z	-0.1	0	%100
10	MP-8	Z	-0.1	0	%100
11	SF2-TH	Z	-0.1	0	%100
12	MP-9	Z	-0.1	0	%100
13	MP-10	Z	-0.1	0	%100
14	MP-11	Z	-0.1	0	%100
15	MP-12	Z	-0.1	0	%100
16	SA-1	Z	-0.04	0	%100
17	SA-2	Z	-0.04	0	%100
18	SA-3	Z	-0.08	0	%100
19	GSI-1	Z	-0.07	0	%100
20	GSI-2	Z	-0.07	0	%100
21	GSI-3	Z	0	0	%100

Member Distributed Loads (BLC 7 : 120 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...]	End Location[ft,...]
1	FFTH	X	.003	0	%100
2	MP-1	X	.005	0	%100
3	MP-2	X	.005	0	%100
4	MP-3	X	.005	0	%100
5	MP-4	X	.005	0	%100
6	SF1-TH	X	.003	0	%100
7	MP-5	X	.005	0	%100
8	MP-6	X	.005	0	%100
9	MP-7	X	.005	0	%100
10	MP-8	X	.005	0	%100
11	SF2-TH	X	.005	0	%100
12	MP-9	X	.005	0	%100



Company : Tower Engineering Professionals
 Designer : WHW
 Job Number : TEP# 199892.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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Member Distributed Loads (BLC 7 : 120 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...]	End Location[ft,...]
13	MP-10	X	.005	0	%100
14	MP-11	X	.005	0	%100
15	MP-12	X	.005	0	%100
16	SA-1	X	.003	0	%100
17	SA-2	X	0	0	%100
18	SA-3	X	.004	0	%100
19	GSI-1	X	.002	0	%100
20	GSI-2	X	.003	0	%100
21	GSI-3	X	.002	0	%100
22	FFTH	Z	-0.05	0	%100
23	MP-1	Z	-0.08	0	%100
24	MP-2	Z	-0.08	0	%100
25	MP-3	Z	-0.08	0	%100
26	MP-4	Z	-0.08	0	%100
27	SF1-TH	Z	-0.05	0	%100
28	MP-5	Z	-0.08	0	%100
29	MP-6	Z	-0.08	0	%100
30	MP-7	Z	-0.08	0	%100
31	MP-8	Z	-0.08	0	%100
32	SF2-TH	Z	-0.1	0	%100
33	MP-9	Z	-0.08	0	%100
34	MP-10	Z	-0.08	0	%100
35	MP-11	Z	-0.08	0	%100
36	MP-12	Z	-0.08	0	%100
37	SA-1	Z	-0.06	0	%100
38	SA-2	Z	0	0	%100
39	SA-3	Z	-0.06	0	%100
40	GSI-1	Z	-0.03	0	%100
41	GSI-2	Z	-0.07	0	%100
42	GSI-3	Z	-0.04	0	%100

Member Distributed Loads (BLC 8 : 135 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...]	End Location[ft,...]
1	FFTH	X	.006	0	%100
2	MP-1	X	.007	0	%100
3	MP-2	X	.007	0	%100
4	MP-3	X	.007	0	%100
5	MP-4	X	.007	0	%100
6	SF1-TH	X	.002	0	%100
7	MP-5	X	.007	0	%100
8	MP-6	X	.007	0	%100
9	MP-7	X	.007	0	%100
10	MP-8	X	.007	0	%100
11	SF2-TH	X	.007	0	%100
12	MP-9	X	.007	0	%100
13	MP-10	X	.007	0	%100
14	MP-11	X	.007	0	%100
15	MP-12	X	.007	0	%100
16	SA-1	X	.005	0	%100
17	SA-2	X	.001	0	%100
18	SA-3	X	.004	0	%100



Company : Tower Engineering Professionals
 Designer : WHW
 Job Number : TEP# 199882.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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Member Distributed Loads (BLC 8 : 135 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
19	GSI-1	X	.001	.001 0 %100
20	GSI-2	X	.005	.005 0 %100
21	GSI-3	X	.004	.004 0 %100
22	FFTH	Z	-.006	-.006 0 %100
23	MP-1	Z	-.007	-.007 0 %100
24	MP-2	Z	-.007	-.007 0 %100
25	MP-3	Z	-.007	-.007 0 %100
26	MP-4	Z	-.007	-.007 0 %100
27	SF1-TH	Z	-.002	-.002 0 %100
28	MP-5	Z	-.007	-.007 0 %100
29	MP-6	Z	-.007	-.007 0 %100
30	MP-7	Z	-.007	-.007 0 %100
31	MP-8	Z	-.007	-.007 0 %100
32	SF2-TH	Z	-.008	-.008 0 %100
33	MP-9	Z	-.007	-.007 0 %100
34	MP-10	Z	-.007	-.007 0 %100
35	MP-11	Z	-.007	-.007 0 %100
36	MP-12	Z	-.007	-.007 0 %100
37	SA-1	Z	-.005	-.005 0 %100
38	SA-2	Z	-.001	-.001 0 %100
39	SA-3	Z	-.004	-.004 0 %100
40	GSI-1	Z	-.001	-.001 0 %100
41	GSI-2	Z	-.005	-.005 0 %100
42	GSI-3	Z	-.004	-.004 0 %100

Member Distributed Loads (BLC 9 : 150 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
1	FFTH	X	.008	.008 0 %100
2	MP-1	X	.008	.008 0 %100
3	MP-2	X	.008	.008 0 %100
4	MP-3	X	.008	.008 0 %100
5	MP-4	X	.008	.008 0 %100
6	SF1-TH	X	0	0 0 %100
7	MP-5	X	.008	.008 0 %100
8	MP-6	X	.008	.008 0 %100
9	MP-7	X	.008	.008 0 %100
10	MP-8	X	.008	.008 0 %100
11	SF2-TH	X	.008	.008 0 %100
12	MP-9	X	.008	.008 0 %100
13	MP-10	X	.008	.008 0 %100
14	MP-11	X	.008	.008 0 %100
15	MP-12	X	.008	.008 0 %100
16	SA-1	X	.007	.007 0 %100
17	SA-2	X	.003	.003 0 %100
18	SA-3	X	.004	.004 0 %100
19	GSI-1	X	0	0 0 %100
20	GSI-2	X	.005	.005 0 %100
21	GSI-3	X	.006	.006 0 %100
22	FFTH	Z	-.005	-.005 0 %100
23	MP-1	Z	-.005	-.005 0 %100
24	MP-2	Z	-.005	-.005 0 %100



Company : Tower Engineering Professionals
 Designer : WHW
 Job Number : TEP# 199882.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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Member Distributed Loads (BLC 9 : 150 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
25	MP-3	Z	-.005	-.005 0 %100
26	MP-4	Z	-.005	-.005 0 %100
27	SF1-TH	Z	0	0 0 %100
28	MP-5	Z	-.005	-.005 0 %100
29	MP-6	Z	-.005	-.005 0 %100
30	MP-7	Z	-.005	-.005 0 %100
31	MP-8	Z	-.005	-.005 0 %100
32	SF2-TH	Z	-.005	-.005 0 %100
33	MP-9	Z	-.005	-.005 0 %100
34	MP-10	Z	-.005	-.005 0 %100
35	MP-11	Z	-.005	-.005 0 %100
36	MP-12	Z	-.005	-.005 0 %100
37	SA-1	Z	-.004	-.004 0 %100
38	SA-2	Z	-.002	-.002 0 %100
39	SA-3	Z	-.002	-.002 0 %100
40	GSI-1	Z	0	0 0 %100
41	GSI-2	Z	-.003	-.003 0 %100
42	GSI-3	Z	-.004	-.004 0 %100

Member Distributed Loads (BLC 10 : 180 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
1	FFTH	X	.011	.011 0 %100
2	MP-1	X	.01	.01 0 %100
3	MP-2	X	.01	.01 0 %100
4	MP-3	X	.01	.01 0 %100
5	MP-4	X	.01	.01 0 %100
6	SF1-TH	X	.005	.005 0 %100
7	MP-5	X	.01	.01 0 %100
8	MP-6	X	.01	.01 0 %100
9	MP-7	X	.01	.01 0 %100
10	MP-8	X	.01	.01 0 %100
11	SF2-TH	X	.005	.005 0 %100
12	MP-9	X	.01	.01 0 %100
13	MP-10	X	.01	.01 0 %100
14	MP-11	X	.01	.01 0 %100
15	MP-12	X	.01	.01 0 %100
16	SA-1	X	.007	.007 0 %100
17	SA-2	X	.007	.007 0 %100
18	SA-3	X	0	0 0 %100
19	GSI-1	X	.003	.003 0 %100
20	GSI-2	X	.003	.003 0 %100
21	GSI-3	X	.008	.008 0 %100

Member Distributed Loads (BLC 11 : 210 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
1	FFTH	X	.008	.008 0 %100
2	MP-1	X	.008	.008 0 %100
3	MP-2	X	.008	.008 0 %100
4	MP-3	X	.008	.008 0 %100
5	MP-4	X	.008	.008 0 %100
6	SF1-TH	X	.008	.008 0 %100



Company : Tower Engineering Professionals
 Designer : WHW
 Job Number : TEP# 199882.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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Member Distributed Loads (BLC 11 : 210 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
7	MP-5	X	.008	.008 0 %100
8	MP-6	X	.008	.008 0 %100
9	MP-7	X	.008	.008 0 %100
10	MP-8	X	.008	.008 0 %100
11	SF2-TH	X	0	0 0 %100
12	MP-9	X	.008	.008 0 %100
13	MP-10	X	.008	.008 0 %100
14	MP-11	X	.008	.008 0 %100
15	MP-12	X	.008	.008 0 %100
16	SA-1	X	.003	.003 0 %100
17	SA-2	X	.007	.007 0 %100
18	SA-3	X	.004	.004 0 %100
19	GSI-1	X	.005	.005 0 %100
20	GSI-2	X	0	0 0 %100
21	GSI-3	X	.006	.006 0 %100
22	FFTH	Z	.005	.005 0 %100
23	MP-1	Z	.005	.005 0 %100
24	MP-2	Z	.005	.005 0 %100
25	MP-3	Z	.005	.005 0 %100
26	MP-4	Z	.005	.005 0 %100
27	SF1-TH	Z	.005	.005 0 %100
28	MP-5	Z	.005	.005 0 %100
29	MP-6	Z	.005	.005 0 %100
30	MP-7	Z	.005	.005 0 %100
31	MP-8	Z	.005	.005 0 %100
32	SF2-TH	Z	0	0 0 %100
33	MP-9	Z	.005	.005 0 %100
34	MP-10	Z	.005	.005 0 %100
35	MP-11	Z	.005	.005 0 %100
36	MP-12	Z	.005	.005 0 %100
37	SA-1	Z	.002	.002 0 %100
38	SA-2	Z	.004	.004 0 %100
39	SA-3	Z	.002	.002 0 %100
40	GSI-1	Z	.003	.003 0 %100
41	GSI-2	Z	0	0 0 %100
42	GSI-3	Z	.004	.004 0 %100

Member Distributed Loads (BLC 12 : 225 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
1	FFTH	X	.006	.006 0 %100
2	MP-1	X	.007	.007 0 %100
3	MP-2	X	.007	.007 0 %100
4	MP-3	X	.007	.007 0 %100
5	MP-4	X	.007	.007 0 %100
6	SF1-TH	X	.007	.007 0 %100
7	MP-5	X	.007	.007 0 %100
8	MP-6	X	.007	.007 0 %100
9	MP-7	X	.007	.007 0 %100
10	MP-8	X	.007	.007 0 %100
11	SF2-TH	X	.002	.002 0 %100
12	MP-9	X	.007	.007 0 %100



Company : Tower Engineering Professionals
 Designer : WHW
 Job Number : TEP# 199882.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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Member Distributed Loads (BLC 12 : 225 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
13	MP-10	X	.007	.007 0 %100
14	MP-11	X	.007	.007 0 %100
15	MP-12	X	.007	.007 0 %100
16	SA-1	X	.001	.001 0 %100
17	SA-2	X	.005	.005 0 %100
18	SA-3	X	.004	.004 0 %100
19	GSI-1	X	.005	.005 0 %100
20	GSI-2	X	.001	.001 0 %100
21	GSI-3	X	.004	.004 0 %100
22	FFTH	Z	.006	.006 0 %100
23	MP-1	Z	.007	.007 0 %100
24	MP-2	Z	.007	.007 0 %100
25	MP-3	Z	.007	.007 0 %100
26	MP-4	Z	.007	.007 0 %100
27	SF1-TH	Z	.008	.008 0 %100
28	MP-5	Z	.007	.007 0 %100
29	MP-6	Z	.007	.007 0 %100
30	MP-7	Z	.007	.007 0 %100
31	MP-8	Z	.007	.007 0 %100
32	SF2-TH	Z	.002	.002 0 %100
33	MP-9	Z	.007	.007 0 %100
34	MP-10	Z	.007	.007 0 %100
35	MP-11	Z	.007	.007 0 %100
36	MP-12	Z	.007	.007 0 %100
37	SA-1	Z	.001	.001 0 %100
38	SA-2	Z	.005	.005 0 %100
39	SA-3	Z	.004	.004 0 %100
40	GSI-1	Z	.005	.005 0 %100
41	GSI-2	Z	.001	.001 0 %100
42	GSI-3	Z	.004	.004 0 %100

Member Distributed Loads (BLC 13 : 240 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
1	FFTH	X	.003	.003 0 %100
2	MP-1	X	.005	.005 0 %100
3	MP-2	X	.005	.005 0 %100
4	MP-3	X	.005	.005 0 %100
5	MP-4	X	.005	.005 0 %100
6	SF1-TH	X	.005	.005 0 %100
7	MP-5	X	.005	.005 0 %100
8	MP-6	X	.005	.005 0 %100
9	MP-7	X	.005	.005 0 %100
10	MP-8	X	.005	.005 0 %100
11	SF2-TH	X	.003	.003 0 %100
12	MP-9	X	.005	.005 0 %100
13	MP-10	X	.005	.005 0 %100
14	MP-11	X	.005	.005 0 %100
15	MP-12	X	.005	.005 0 %100
16	SA-1	X	0	0 0 %100
17	SA-2	X	.003	.003 0 %100
18	SA-3	X	.004	.004 0 %100



Company : Tower Engineering Professionals
 Designer : WHW
 Job Number : TEP# 199882.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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Member Distributed Loads (BLC 13 : 240 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
19	GSI-1	X	.003	.003 0 %100
20	GSI-2	X	.002	.002 0 %100
21	GSI-3	X	.002	.002 0 %100
22	FFTH	Z	.005	.005 0 %100
23	MP-1	Z	.008	.008 0 %100
24	MP-2	Z	.008	.008 0 %100
25	MP-3	Z	.008	.008 0 %100
26	MP-4	Z	.008	.008 0 %100
27	SF1-TH	Z	.01	.01 0 %100
28	MP-5	Z	.008	.008 0 %100
29	MP-6	Z	.008	.008 0 %100
30	MP-7	Z	.008	.008 0 %100
31	MP-8	Z	.008	.008 0 %100
32	SF2-TH	Z	.005	.005 0 %100
33	MP-9	Z	.008	.008 0 %100
34	MP-10	Z	.008	.008 0 %100
35	MP-11	Z	.008	.008 0 %100
36	MP-12	Z	.008	.008 0 %100
37	SA-1	Z	0	0 0 %100
38	SA-2	Z	.006	.006 0 %100
39	SA-3	Z	.006	.006 0 %100
40	GSI-1	Z	.007	.007 0 %100
41	GSI-2	Z	.003	.003 0 %100
42	GSI-3	Z	.004	.004 0 %100

Member Distributed Loads (BLC 14 : 270 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
1	FFTH	Z	0	0 0 %100
2	MP-1	Z	.01	.01 0 %100
3	MP-2	Z	.01	.01 0 %100
4	MP-3	Z	.01	.01 0 %100
5	MP-4	Z	.01	.01 0 %100
6	SF1-TH	Z	.01	.01 0 %100
7	MP-5	Z	.01	.01 0 %100
8	MP-6	Z	.01	.01 0 %100
9	MP-7	Z	.01	.01 0 %100
10	MP-8	Z	.01	.01 0 %100
11	SF2-TH	Z	.01	.01 0 %100
12	MP-9	Z	.01	.01 0 %100
13	MP-10	Z	.01	.01 0 %100
14	MP-11	Z	.01	.01 0 %100
15	MP-12	Z	.01	.01 0 %100
16	SA-1	Z	.004	.004 0 %100
17	SA-2	Z	.004	.004 0 %100
18	SA-3	Z	.008	.008 0 %100
19	GSI-1	Z	.007	.007 0 %100
20	GSI-2	Z	.007	.007 0 %100
21	GSI-3	Z	0	0 0 %100

Member Distributed Loads (BLC 15 : 300 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
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Company : Tower Engineering Professionals
 Designer : WHW
 Job Number : TEP# 199882.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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Member Distributed Loads (BLC 15 : 300 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
1	FFTH	X	-.003	-.003 0 %100
2	MP-1	X	-.005	-.005 0 %100
3	MP-2	X	-.005	-.005 0 %100
4	MP-3	X	-.005	-.005 0 %100
5	MP-4	X	-.005	-.005 0 %100
6	SF1-TH	X	-.003	-.003 0 %100
7	MP-5	X	-.005	-.005 0 %100
8	MP-6	X	-.005	-.005 0 %100
9	MP-7	X	-.005	-.005 0 %100
10	MP-8	X	-.005	-.005 0 %100
11	SF2-TH	X	-.005	-.005 0 %100
12	MP-9	X	-.005	-.005 0 %100
13	MP-10	X	-.005	-.005 0 %100
14	MP-11	X	-.005	-.005 0 %100
15	MP-12	X	-.005	-.005 0 %100
16	SA-1	X	-.003	-.003 0 %100
17	SA-2	X	0	0 0 %100
18	SA-3	X	-.004	-.004 0 %100
19	GSI-1	X	-.002	-.002 0 %100
20	GSI-2	X	-.003	-.003 0 %100
21	GSI-3	X	-.002	-.002 0 %100
22	FFTH	Z	.005	.005 0 %100
23	MP-1	Z	.008	.008 0 %100
24	MP-2	Z	.008	.008 0 %100
25	MP-3	Z	.008	.008 0 %100
26	MP-4	Z	.008	.008 0 %100
27	SF1-TH	Z	.005	.005 0 %100
28	MP-5	Z	.008	.008 0 %100
29	MP-6	Z	.008	.008 0 %100
30	MP-7	Z	.008	.008 0 %100
31	MP-8	Z	.008	.008 0 %100
32	SF2-TH	Z	.01	.01 0 %100
33	MP-9	Z	.008	.008 0 %100
34	MP-10	Z	.008	.008 0 %100
35	MP-11	Z	.008	.008 0 %100
36	MP-12	Z	.008	.008 0 %100
37	SA-1	Z	.006	.006 0 %100
38	SA-2	Z	0	0 0 %100
39	SA-3	Z	.006	.006 0 %100
40	GSI-1	Z	.003	.003 0 %100
41	GSI-2	Z	.007	.007 0 %100
42	GSI-3	Z	.004	.004 0 %100

Member Distributed Loads (BLC 16 : 315 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
1	FFTH	X	-.006	-.006 0 %100
2	MP-1	X	-.007	-.007 0 %100
3	MP-2	X	-.007	-.007 0 %100
4	MP-3	X	-.007	-.007 0 %100
5	MP-4	X	-.007	-.007 0 %100
6	SF1-TH	X	-.002	-.002 0 %100



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Member Distributed Loads (BLC 16 : 315 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...	
7	MP-5	X	-0.07	0	%100
8	MP-6	X	-0.07	0	%100
9	MP-7	X	-0.07	0	%100
10	MP-8	X	-0.07	0	%100
11	SF2-TH	X	-0.07	0	%100
12	MP-9	X	-0.07	0	%100
13	MP-10	X	-0.07	0	%100
14	MP-11	X	-0.07	0	%100
15	MP-12	X	-0.07	0	%100
16	SA-1	X	-0.05	0	%100
17	SA-2	X	-0.01	0	%100
18	SA-3	X	-0.04	0	%100
19	GSI-1	X	-0.01	0	%100
20	GSI-2	X	-0.05	0	%100
21	GSI-3	X	-0.04	0	%100
22	FFTH	Z	.006	0	%100
23	MP-1	Z	.007	0	%100
24	MP-2	Z	.007	0	%100
25	MP-3	Z	.007	0	%100
26	MP-4	Z	.007	0	%100
27	SF1-TH	Z	.002	0	%100
28	MP-5	Z	.007	0	%100
29	MP-6	Z	.007	0	%100
30	MP-7	Z	.007	0	%100
31	MP-8	Z	.007	0	%100
32	SF2-TH	Z	.008	0	%100
33	MP-9	Z	.007	0	%100
34	MP-10	Z	.007	0	%100
35	MP-11	Z	.007	0	%100
36	MP-12	Z	.007	0	%100
37	SA-1	Z	.005	0	%100
38	SA-2	Z	.001	0	%100
39	SA-3	Z	.004	0	%100
40	GSI-1	Z	.001	0	%100
41	GSI-2	Z	.005	0	%100
42	GSI-3	Z	.004	0	%100

Member Distributed Loads (BLC 17 : 330 Wind - No Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...	
1	FFTH	X	-0.08	0	%100
2	MP-1	X	-0.08	0	%100
3	MP-2	X	-0.08	0	%100
4	MP-3	X	-0.08	0	%100
5	MP-4	X	-0.08	0	%100
6	SF1-TH	X	0	0	%100
7	MP-5	X	-0.08	0	%100
8	MP-6	X	-0.08	0	%100
9	MP-7	X	-0.08	0	%100
10	MP-8	X	-0.08	0	%100
11	SF2-TH	X	-0.08	0	%100
12	MP-9	X	-0.08	0	%100



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Member Distributed Loads (BLC 17 : 330 Wind - No Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...	
13	MP-10	X	-0.08	0	%100
14	MP-11	X	-0.08	0	%100
15	MP-12	X	-0.08	0	%100
16	SA-1	X	-0.07	0	%100
17	SA-2	X	-0.03	0	%100
18	SA-3	X	-0.04	0	%100
19	GSI-1	X	0	0	%100
20	GSI-2	X	-0.05	0	%100
21	GSI-3	X	-0.06	0	%100
22	FFTH	Z	.005	0	%100
23	MP-1	Z	.005	0	%100
24	MP-2	Z	.005	0	%100
25	MP-3	Z	.005	0	%100
26	MP-4	Z	.005	0	%100
27	SF1-TH	Z	0	0	%100
28	MP-5	Z	.005	0	%100
29	MP-6	Z	.005	0	%100
30	MP-7	Z	.005	0	%100
31	MP-8	Z	.005	0	%100
32	SF2-TH	Z	.005	0	%100
33	MP-9	Z	.005	0	%100
34	MP-10	Z	.005	0	%100
35	MP-11	Z	.005	0	%100
36	MP-12	Z	.005	0	%100
37	SA-1	Z	.004	0	%100
38	SA-2	Z	.002	0	%100
39	SA-3	Z	.002	0	%100
40	GSI-1	Z	0	0	%100
41	GSI-2	Z	.003	0	%100
42	GSI-3	Z	.004	0	%100

Member Distributed Loads (BLC 18 : Ice Weight)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...	
1	FFTH	Y	-0.07	0	%100
2	MP-1	Y	-0.05	0	%100
3	MP-2	Y	-0.05	0	%100
4	MP-3	Y	-0.05	0	%100
5	MP-4	Y	-0.05	0	%100
6	SF1-TH	Y	-0.07	0	%100
7	MP-5	Y	-0.05	0	%100
8	MP-6	Y	-0.05	0	%100
9	MP-7	Y	-0.05	0	%100
10	MP-8	Y	-0.05	0	%100
11	SF2-TH	Y	-0.07	0	%100
12	MP-9	Y	-0.05	0	%100
13	MP-10	Y	-0.05	0	%100
14	MP-11	Y	-0.05	0	%100
15	MP-12	Y	-0.05	0	%100
16	SA-1	Y	-0.08	0	%100
17	SA-2	Y	-0.08	0	%100
18	SA-3	Y	-0.08	0	%100



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Member Distributed Loads (BLC 18 : Ice Weight) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
19	GSI-1	Y	-0.007	-0.007 0 %100
20	GSI-2	Y	-0.007	-0.007 0 %100
21	GSI-3	Y	-0.007	-0.007 0 %100

Member Distributed Loads (BLC 19 : 0 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
1	FFTH	X	-0.004	-0.004 0 %100
2	MP-1	X	-0.003	-0.003 0 %100
3	MP-2	X	-0.003	-0.003 0 %100
4	MP-3	X	-0.003	-0.003 0 %100
5	MP-4	X	-0.003	-0.003 0 %100
6	SF1-TH	X	-0.003	-0.003 0 %100
7	MP-5	X	-0.003	-0.003 0 %100
8	MP-6	X	-0.003	-0.003 0 %100
9	MP-7	X	-0.003	-0.003 0 %100
10	MP-8	X	-0.003	-0.003 0 %100
11	SF2-TH	X	-0.003	-0.003 0 %100
12	MP-9	X	-0.003	-0.003 0 %100
13	MP-10	X	-0.003	-0.003 0 %100
14	MP-11	X	-0.003	-0.003 0 %100
15	MP-12	X	-0.003	-0.003 0 %100
16	SA-1	X	-0.003	-0.003 0 %100
17	SA-2	X	-0.003	-0.003 0 %100
18	SA-3	X	-0.003	-0.003 0 %100
19	GSI-1	X	-0.003	-0.003 0 %100
20	GSI-2	X	-0.003	-0.003 0 %100
21	GSI-3	X	-0.003	-0.003 0 %100

Member Distributed Loads (BLC 20 : 30 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
1	FFTH	X	-0.003	-0.003 0 %100
2	MP-1	X	-0.002	-0.002 0 %100
3	MP-2	X	-0.002	-0.002 0 %100
4	MP-3	X	-0.002	-0.002 0 %100
5	MP-4	X	-0.002	-0.002 0 %100
6	SF1-TH	X	-0.002	-0.002 0 %100
7	MP-5	X	-0.002	-0.002 0 %100
8	MP-6	X	-0.002	-0.002 0 %100
9	MP-7	X	-0.002	-0.002 0 %100
10	MP-8	X	-0.002	-0.002 0 %100
11	SF2-TH	X	0	0 0 %100
12	MP-9	X	-0.002	-0.002 0 %100
13	MP-10	X	-0.002	-0.002 0 %100
14	MP-11	X	-0.002	-0.002 0 %100
15	MP-12	X	-0.002	-0.002 0 %100
16	SA-1	X	-0.001	-0.001 0 %100
17	SA-2	X	-0.003	-0.003 0 %100
18	SA-3	X	-0.001	-0.001 0 %100
19	GSI-1	X	-0.002	-0.002 0 %100
20	GSI-2	X	0	0 0 %100
21	GSI-3	X	-0.002	-0.002 0 %100



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Member Distributed Loads (BLC 20 : 30 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
22	FFTH	Z	-0.002	-0.002 0 %100
23	MP-1	Z	-0.002	-0.002 0 %100
24	MP-2	Z	-0.002	-0.002 0 %100
25	MP-3	Z	-0.002	-0.002 0 %100
26	MP-4	Z	-0.002	-0.002 0 %100
27	SF1-TH	Z	-0.002	-0.002 0 %100
28	MP-5	Z	-0.002	-0.002 0 %100
29	MP-6	Z	-0.002	-0.002 0 %100
30	MP-7	Z	-0.002	-0.002 0 %100
31	MP-8	Z	-0.002	-0.002 0 %100
32	SF2-TH	Z	0	0 0 %100
33	MP-9	Z	-0.002	-0.002 0 %100
34	MP-10	Z	-0.002	-0.002 0 %100
35	MP-11	Z	-0.002	-0.002 0 %100
36	MP-12	Z	-0.002	-0.002 0 %100
37	SA-1	Z	-0.00077	-0.00077 0 %100
38	SA-2	Z	-0.002	-0.002 0 %100
39	SA-3	Z	-0.000853	-0.000853 0 %100
40	GSI-1	Z	-0.001	-0.001 0 %100
41	GSI-2	Z	0	0 0 %100
42	GSI-3	Z	-0.001	-0.001 0 %100

Member Distributed Loads (BLC 21 : 45 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...End Location[ft,...
1	FFTH	X	-0.002	-0.002 0 %100
2	MP-1	X	-0.002	-0.002 0 %100
3	MP-2	X	-0.002	-0.002 0 %100
4	MP-3	X	-0.002	-0.002 0 %100
5	MP-4	X	-0.002	-0.002 0 %100
6	SF1-TH	X	-0.002	-0.002 0 %100
7	MP-5	X	-0.002	-0.002 0 %100
8	MP-6	X	-0.002	-0.002 0 %100
9	MP-7	X	-0.002	-0.002 0 %100
10	MP-8	X	-0.002	-0.002 0 %100
11	SF2-TH	X	-0.0006	-0.0006 0 %100
12	MP-9	X	-0.002	-0.002 0 %100
13	MP-10	X	-0.002	-0.002 0 %100
14	MP-11	X	-0.002	-0.002 0 %100
15	MP-12	X	-0.002	-0.002 0 %100
16	SA-1	X	-0.000608	-0.000608 0 %100
17	SA-2	X	-0.002	-0.002 0 %100
18	SA-3	X	-0.001	-0.001 0 %100
19	GSI-1	X	-0.002	-0.002 0 %100
20	GSI-2	X	-0.000491	-0.000491 0 %100
21	GSI-3	X	-0.002	-0.002 0 %100
22	FFTH	Z	-0.002	-0.002 0 %100
23	MP-1	Z	-0.002	-0.002 0 %100
24	MP-2	Z	-0.002	-0.002 0 %100
25	MP-3	Z	-0.002	-0.002 0 %100
26	MP-4	Z	-0.002	-0.002 0 %100
27	SF1-TH	Z	-0.003	-0.003 0 %100



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Member Distributed Loads (BLC 21 : 45 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft]...	End Location[ft]...
28	MP-5	Z	-0.002	0	%100
29	MP-6	Z	-0.002	0	%100
30	MP-7	Z	-0.002	0	%100
31	MP-8	Z	-0.002	0	%100
32	SF2-TH	Z	-0.000734	0	%100
33	MP-9	Z	-0.002	0	%100
34	MP-10	Z	-0.002	0	%100
35	MP-11	Z	-0.002	0	%100
36	MP-12	Z	-0.002	0	%100
37	SA-1	Z	-0.000564	0	%100
38	SA-2	Z	-0.002	0	%100
39	SA-3	Z	-0.002	0	%100
40	GSI-1	Z	-0.002	0	%100
41	GSI-2	Z	-0.000535	0	%100
42	GSI-3	Z	-0.001	0	%100

Member Distributed Loads (BLC 22 : 60 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft]...	End Location[ft]...
1	FFTH	X	-0.001	0	%100
2	MP-1	X	-0.001	0	%100
3	MP-2	X	-0.001	0	%100
4	MP-3	X	-0.001	0	%100
5	MP-4	X	-0.001	0	%100
6	SF1-TH	X	-0.002	0	%100
7	MP-5	X	-0.001	0	%100
8	MP-6	X	-0.001	0	%100
9	MP-7	X	-0.001	0	%100
10	MP-8	X	-0.001	0	%100
11	SF2-TH	X	-0.00082	0	%100
12	MP-9	X	-0.001	0	%100
13	MP-10	X	-0.001	0	%100
14	MP-11	X	-0.001	0	%100
15	MP-12	X	-0.001	0	%100
16	SA-1	X	0	0	%100
17	SA-2	X	-0.001	0	%100
18	SA-3	X	-0.001	0	%100
19	GSI-1	X	-0.001	0	%100
20	GSI-2	X	-0.000671	0	%100
21	GSI-3	X	-0.000753	0	%100
22	FFTH	Z	-0.002	0	%100
23	MP-1	Z	-0.003	0	%100
24	MP-2	Z	-0.003	0	%100
25	MP-3	Z	-0.003	0	%100
26	MP-4	Z	-0.003	0	%100
27	SF1-TH	Z	-0.003	0	%100
28	MP-5	Z	-0.003	0	%100
29	MP-6	Z	-0.003	0	%100
30	MP-7	Z	-0.003	0	%100
31	MP-8	Z	-0.003	0	%100
32	SF2-TH	Z	-0.002	0	%100
33	MP-9	Z	-0.003	0	%100



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Member Distributed Loads (BLC 22 : 60 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft]...	End Location[ft]...
34	MP-10	Z	-0.003	0	%100
35	MP-11	Z	-0.003	0	%100
36	MP-12	Z	-0.003	0	%100
37	SA-1	Z	0	0	%100
38	SA-2	Z	-0.002	0	%100
39	SA-3	Z	-0.003	0	%100
40	GSI-1	Z	-0.003	0	%100
41	GSI-2	Z	-0.001	0	%100
42	GSI-3	Z	-0.001	0	%100

Member Distributed Loads (BLC 23 : 90 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft]...	End Location[ft]...
1	FFTH	Z	0	0	%100
2	MP-1	Z	-0.003	0	%100
3	MP-2	Z	-0.003	0	%100
4	MP-3	Z	-0.003	0	%100
5	MP-4	Z	-0.003	0	%100
6	SF1-TH	Z	-0.003	0	%100
7	MP-5	Z	-0.003	0	%100
8	MP-6	Z	-0.003	0	%100
9	MP-7	Z	-0.003	0	%100
10	MP-8	Z	-0.003	0	%100
11	SF2-TH	Z	-0.003	0	%100
12	MP-9	Z	-0.003	0	%100
13	MP-10	Z	-0.003	0	%100
14	MP-11	Z	-0.003	0	%100
15	MP-12	Z	-0.003	0	%100
16	SA-1	Z	-0.002	0	%100
17	SA-2	Z	-0.002	0	%100
18	SA-3	Z	-0.003	0	%100
19	GSI-1	Z	-0.003	0	%100
20	GSI-2	Z	-0.003	0	%100
21	GSI-3	Z	0	0	%100

Member Distributed Loads (BLC 24 : 120 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft]...	End Location[ft]...
1	FFTH	X	.001	0	%100
2	MP-1	X	.001	0	%100
3	MP-2	X	.001	0	%100
4	MP-3	X	.001	0	%100
5	MP-4	X	.001	0	%100
6	SF1-TH	X	.00082	0	%100
7	MP-5	X	.001	0	%100
8	MP-6	X	.001	0	%100
9	MP-7	X	.001	0	%100
10	MP-8	X	.001	0	%100
11	SF2-TH	X	.002	0	%100
12	MP-9	X	.001	0	%100
13	MP-10	X	.001	0	%100
14	MP-11	X	.001	0	%100
15	MP-12	X	.001	0	%100



Company : Tower Engineering Professionals
 Designer : WHW
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Member Distributed Loads (BLC 24 : 120 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft....End Location[ft....
16	SA-1	X	.001	.001 0 %100
17	SA-2	X	0	0 0 %100
18	SA-3	X	.001	.001 0 %100
19	GSI-1	X	.000671	.000671 0 %100
20	GSI-2	X	.001	.001 0 %100
21	GSI-3	X	.000753	.000753 0 %100
22	FFTH	Z	-.002	-.002 0 %100
23	MP-1	Z	-.003	-.003 0 %100
24	MP-2	Z	-.003	-.003 0 %100
25	MP-3	Z	-.003	-.003 0 %100
26	MP-4	Z	-.003	-.003 0 %100
27	SF1-TH	Z	-.002	-.002 0 %100
28	MP-5	Z	-.003	-.003 0 %100
29	MP-6	Z	-.003	-.003 0 %100
30	MP-7	Z	-.003	-.003 0 %100
31	MP-8	Z	-.003	-.003 0 %100
32	SF2-TH	Z	-.003	-.003 0 %100
33	MP-9	Z	-.003	-.003 0 %100
34	MP-10	Z	-.003	-.003 0 %100
35	MP-11	Z	-.003	-.003 0 %100
36	MP-12	Z	-.003	-.003 0 %100
37	SA-1	Z	-.002	-.002 0 %100
38	SA-2	Z	0	0 0 %100
39	SA-3	Z	-.003	-.003 0 %100
40	GSI-1	Z	-.001	-.001 0 %100
41	GSI-2	Z	-.003	-.003 0 %100
42	GSI-3	Z	-.001	-.001 0 %100

Member Distributed Loads (BLC 25 : 135 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft....End Location[ft....
1	FFTH	X	.002	.002 0 %100
2	MP-1	X	.002	.002 0 %100
3	MP-2	X	.002	.002 0 %100
4	MP-3	X	.002	.002 0 %100
5	MP-4	X	.002	.002 0 %100
6	SF1-TH	X	.0006	.0006 0 %100
7	MP-5	X	.002	.002 0 %100
8	MP-6	X	.002	.002 0 %100
9	MP-7	X	.002	.002 0 %100
10	MP-8	X	.002	.002 0 %100
11	SF2-TH	X	.002	.002 0 %100
12	MP-9	X	.002	.002 0 %100
13	MP-10	X	.002	.002 0 %100
14	MP-11	X	.002	.002 0 %100
15	MP-12	X	.002	.002 0 %100
16	SA-1	X	.002	.002 0 %100
17	SA-2	X	.000608	.000608 0 %100
18	SA-3	X	.001	.001 0 %100
19	GSI-1	X	.000491	.000491 0 %100
20	GSI-2	X	.002	.002 0 %100
21	GSI-3	X	.002	.002 0 %100



Company : Tower Engineering Professionals
 Designer : WHW
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 Model Name : 413849_Winchester PCS CT_AT&T

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Member Distributed Loads (BLC 25 : 135 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft....End Location[ft....
22	FFTH	Z	-.002	-.002 0 %100
23	MP-1	Z	-.002	-.002 0 %100
24	MP-2	Z	-.002	-.002 0 %100
25	MP-3	Z	-.002	-.002 0 %100
26	MP-4	Z	-.002	-.002 0 %100
27	SF1-TH	Z	-.000734	-.000734 0 %100
28	MP-5	Z	-.002	-.002 0 %100
29	MP-6	Z	-.002	-.002 0 %100
30	MP-7	Z	-.002	-.002 0 %100
31	MP-8	Z	-.002	-.002 0 %100
32	SF2-TH	Z	-.003	-.003 0 %100
33	MP-9	Z	-.002	-.002 0 %100
34	MP-10	Z	-.002	-.002 0 %100
35	MP-11	Z	-.002	-.002 0 %100
36	MP-12	Z	-.002	-.002 0 %100
37	SA-1	Z	-.002	-.002 0 %100
38	SA-2	Z	-.000564	-.000564 0 %100
39	SA-3	Z	-.002	-.002 0 %100
40	GSI-1	Z	-.000535	-.000535 0 %100
41	GSI-2	Z	-.002	-.002 0 %100
42	GSI-3	Z	-.001	-.001 0 %100

Member Distributed Loads (BLC 26 : 150 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft....End Location[ft....
1	FFTH	X	.003	.003 0 %100
2	MP-1	X	.002	.002 0 %100
3	MP-2	X	.002	.002 0 %100
4	MP-3	X	.002	.002 0 %100
5	MP-4	X	.002	.002 0 %100
6	SF1-TH	X	0	0 0 %100
7	MP-5	X	.002	.002 0 %100
8	MP-6	X	.002	.002 0 %100
9	MP-7	X	.002	.002 0 %100
10	MP-8	X	.002	.002 0 %100
11	SF2-TH	X	.002	.002 0 %100
12	MP-9	X	.002	.002 0 %100
13	MP-10	X	.002	.002 0 %100
14	MP-11	X	.002	.002 0 %100
15	MP-12	X	.002	.002 0 %100
16	SA-1	X	.003	.003 0 %100
17	SA-2	X	.001	.001 0 %100
18	SA-3	X	.001	.001 0 %100
19	GSI-1	X	0	0 0 %100
20	GSI-2	X	.002	.002 0 %100
21	GSI-3	X	.002	.002 0 %100
22	FFTH	Z	-.002	-.002 0 %100
23	MP-1	Z	-.002	-.002 0 %100
24	MP-2	Z	-.002	-.002 0 %100
25	MP-3	Z	-.002	-.002 0 %100
26	MP-4	Z	-.002	-.002 0 %100
27	SF1-TH	Z	0	0 0 %100



Company : Tower Engineering Professionals
 Designer : WHW
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Member Distributed Loads (BLC 26 : 150 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft]...	End Location[ft]...
28	MP-5	Z	-0.002	-0.002	0 %100
29	MP-6	Z	-0.002	-0.002	0 %100
30	MP-7	Z	-0.002	-0.002	0 %100
31	MP-8	Z	-0.002	-0.002	0 %100
32	SF2-TH	Z	-0.002	-0.002	0 %100
33	MP-9	Z	-0.002	-0.002	0 %100
34	MP-10	Z	-0.002	-0.002	0 %100
35	MP-11	Z	-0.002	-0.002	0 %100
36	MP-12	Z	-0.002	-0.002	0 %100
37	SA-1	Z	-0.002	-0.002	0 %100
38	SA-2	Z	-0.0077	-0.0077	0 %100
39	SA-3	Z	-0.00853	-0.00853	0 %100
40	GSI-1	Z	0	0	0 %100
41	GSI-2	Z	-0.001	-0.001	0 %100
42	GSI-3	Z	-0.001	-0.001	0 %100

Member Distributed Loads (BLC 27 : 180 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft]...	End Location[ft]...
1	FFTH	X	.004	.004	0 %100
2	MP-1	X	.003	.003	0 %100
3	MP-2	X	.003	.003	0 %100
4	MP-3	X	.003	.003	0 %100
5	MP-4	X	.003	.003	0 %100
6	SF1-TH	X	.003	.003	0 %100
7	MP-5	X	.003	.003	0 %100
8	MP-6	X	.003	.003	0 %100
9	MP-7	X	.003	.003	0 %100
10	MP-8	X	.003	.003	0 %100
11	SF2-TH	X	.003	.003	0 %100
12	MP-9	X	.003	.003	0 %100
13	MP-10	X	.003	.003	0 %100
14	MP-11	X	.003	.003	0 %100
15	MP-12	X	.003	.003	0 %100
16	SA-1	X	.003	.003	0 %100
17	SA-2	X	.003	.003	0 %100
18	SA-3	X	.003	.003	0 %100
19	GSI-1	X	.003	.003	0 %100
20	GSI-2	X	.003	.003	0 %100
21	GSI-3	X	.003	.003	0 %100

Member Distributed Loads (BLC 28 : 210 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft]...	End Location[ft]...
1	FFTH	X	.003	.003	0 %100
2	MP-1	X	.002	.002	0 %100
3	MP-2	X	.002	.002	0 %100
4	MP-3	X	.002	.002	0 %100
5	MP-4	X	.002	.002	0 %100
6	SF1-TH	X	.002	.002	0 %100
7	MP-5	X	.002	.002	0 %100
8	MP-6	X	.002	.002	0 %100
9	MP-7	X	.002	.002	0 %100



Company : Tower Engineering Professionals
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 Job Number : TEP# 199892.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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Member Distributed Loads (BLC 28 : 210 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft]...	End Location[ft]...
10	MP-8	X	.002	.002	0 %100
11	SF2-TH	X	0	0	0 %100
12	MP-9	X	.002	.002	0 %100
13	MP-10	X	.002	.002	0 %100
14	MP-11	X	.002	.002	0 %100
15	MP-12	X	.002	.002	0 %100
16	SA-1	X	.001	.001	0 %100
17	SA-2	X	.003	.003	0 %100
18	SA-3	X	.001	.001	0 %100
19	GSI-1	X	.002	.002	0 %100
20	GSI-2	X	0	0	0 %100
21	GSI-3	X	.002	.002	0 %100
22	FFTH	Z	.002	.002	0 %100
23	MP-1	Z	.002	.002	0 %100
24	MP-2	Z	.002	.002	0 %100
25	MP-3	Z	.002	.002	0 %100
26	MP-4	Z	.002	.002	0 %100
27	SF1-TH	Z	.002	.002	0 %100
28	MP-5	Z	.002	.002	0 %100
29	MP-6	Z	.002	.002	0 %100
30	MP-7	Z	.002	.002	0 %100
31	MP-8	Z	.002	.002	0 %100
32	SF2-TH	Z	0	0	0 %100
33	MP-9	Z	.002	.002	0 %100
34	MP-10	Z	.002	.002	0 %100
35	MP-11	Z	.002	.002	0 %100
36	MP-12	Z	.002	.002	0 %100
37	SA-1	Z	.00077	.00077	0 %100
38	SA-2	Z	.002	.002	0 %100
39	SA-3	Z	.000853	.000853	0 %100
40	GSI-1	Z	.001	.001	0 %100
41	GSI-2	Z	0	0	0 %100
42	GSI-3	Z	.001	.001	0 %100

Member Distributed Loads (BLC 29 : 225 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft]...	End Location[ft]...
1	FFTH	X	.002	.002	0 %100
2	MP-1	X	.002	.002	0 %100
3	MP-2	X	.002	.002	0 %100
4	MP-3	X	.002	.002	0 %100
5	MP-4	X	.002	.002	0 %100
6	SF1-TH	X	.002	.002	0 %100
7	MP-5	X	.002	.002	0 %100
8	MP-6	X	.002	.002	0 %100
9	MP-7	X	.002	.002	0 %100
10	MP-8	X	.002	.002	0 %100
11	SF2-TH	X	.0006	.0006	0 %100
12	MP-9	X	.002	.002	0 %100
13	MP-10	X	.002	.002	0 %100
14	MP-11	X	.002	.002	0 %100
15	MP-12	X	.002	.002	0 %100



Company : Tower Engineering Professionals
 Designer : WHW
 Job Number : TEP# 199882.515361
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Member Distributed Loads (BLC 29 : 225 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft....End Location[ft....
16	SA-1	X	.000608	.000608 0 %100
17	SA-2	X	.002	.002 0 %100
18	SA-3	X	.001	.001 0 %100
19	GSI-1	X	.002	.002 0 %100
20	GSI-2	X	.000491	.000491 0 %100
21	GSI-3	X	.002	.002 0 %100
22	FFTH	Z	.002	.002 0 %100
23	MP-1	Z	.002	.002 0 %100
24	MP-2	Z	.002	.002 0 %100
25	MP-3	Z	.002	.002 0 %100
26	MP-4	Z	.002	.002 0 %100
27	SF1-TH	Z	.003	.003 0 %100
28	MP-5	Z	.002	.002 0 %100
29	MP-6	Z	.002	.002 0 %100
30	MP-7	Z	.002	.002 0 %100
31	MP-8	Z	.002	.002 0 %100
32	SF2-TH	Z	.000734	.000734 0 %100
33	MP-9	Z	.002	.002 0 %100
34	MP-10	Z	.002	.002 0 %100
35	MP-11	Z	.002	.002 0 %100
36	MP-12	Z	.002	.002 0 %100
37	SA-1	Z	.000564	.000564 0 %100
38	SA-2	Z	.002	.002 0 %100
39	SA-3	Z	.002	.002 0 %100
40	GSI-1	Z	.002	.002 0 %100
41	GSI-2	Z	.000535	.000535 0 %100
42	GSI-3	Z	.001	.001 0 %100

Member Distributed Loads (BLC 30 : 240 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft....End Location[ft....
1	FFTH	X	.001	.001 0 %100
2	MP-1	X	.001	.001 0 %100
3	MP-2	X	.001	.001 0 %100
4	MP-3	X	.001	.001 0 %100
5	MP-4	X	.001	.001 0 %100
6	SF1-TH	X	.002	.002 0 %100
7	MP-5	X	.001	.001 0 %100
8	MP-6	X	.001	.001 0 %100
9	MP-7	X	.001	.001 0 %100
10	MP-8	X	.001	.001 0 %100
11	SF2-TH	X	.00082	.00082 0 %100
12	MP-9	X	.001	.001 0 %100
13	MP-10	X	.001	.001 0 %100
14	MP-11	X	.001	.001 0 %100
15	MP-12	X	.001	.001 0 %100
16	SA-1	X	0	0 0 %100
17	SA-2	X	.001	.001 0 %100
18	SA-3	X	.001	.001 0 %100
19	GSI-1	X	.001	.001 0 %100
20	GSI-2	X	.000671	.000671 0 %100
21	GSI-3	X	.000753	.000753 0 %100



Company : Tower Engineering Professionals
 Designer : WHW
 Job Number : TEP# 199882.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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Member Distributed Loads (BLC 30 : 240 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft....End Location[ft....
22	FFTH	Z	.002	.002 0 %100
23	MP-1	Z	.003	.003 0 %100
24	MP-2	Z	.003	.003 0 %100
25	MP-3	Z	.003	.003 0 %100
26	MP-4	Z	.003	.003 0 %100
27	SF1-TH	Z	.003	.003 0 %100
28	MP-5	Z	.003	.003 0 %100
29	MP-6	Z	.003	.003 0 %100
30	MP-7	Z	.003	.003 0 %100
31	MP-8	Z	.003	.003 0 %100
32	SF2-TH	Z	.002	.002 0 %100
33	MP-9	Z	.003	.003 0 %100
34	MP-10	Z	.003	.003 0 %100
35	MP-11	Z	.003	.003 0 %100
36	MP-12	Z	.003	.003 0 %100
37	SA-1	Z	0	0 0 %100
38	SA-2	Z	.002	.002 0 %100
39	SA-3	Z	.003	.003 0 %100
40	GSI-1	Z	.003	.003 0 %100
41	GSI-2	Z	.001	.001 0 %100
42	GSI-3	Z	.001	.001 0 %100

Member Distributed Loads (BLC 31 : 270 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft....End Location[ft....
1	FFTH	Z	0	0 0 %100
2	MP-1	Z	.003	.003 0 %100
3	MP-2	Z	.003	.003 0 %100
4	MP-3	Z	.003	.003 0 %100
5	MP-4	Z	.003	.003 0 %100
6	SF1-TH	Z	.003	.003 0 %100
7	MP-5	Z	.003	.003 0 %100
8	MP-6	Z	.003	.003 0 %100
9	MP-7	Z	.003	.003 0 %100
10	MP-8	Z	.003	.003 0 %100
11	SF2-TH	Z	.003	.003 0 %100
12	MP-9	Z	.003	.003 0 %100
13	MP-10	Z	.003	.003 0 %100
14	MP-11	Z	.003	.003 0 %100
15	MP-12	Z	.003	.003 0 %100
16	SA-1	Z	.002	.002 0 %100
17	SA-2	Z	.002	.002 0 %100
18	SA-3	Z	.003	.003 0 %100
19	GSI-1	Z	.003	.003 0 %100
20	GSI-2	Z	.003	.003 0 %100
21	GSI-3	Z	0	0 0 %100

Member Distributed Loads (BLC 32 : 300 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft....End Location[ft....
1	FFTH	X	-.001	-.001 0 %100
2	MP-1	X	-.001	-.001 0 %100
3	MP-2	X	-.001	-.001 0 %100



Company : Tower Engineering Professionals
 Designer : WHW
 Job Number : TEP# 199882.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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Member Distributed Loads (BLC 32 : 300 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...]	End Location[ft,...]
4	MP-3	X	-0.001	-0.001	0 %100
5	MP-4	X	-0.001	-0.001	0 %100
6	SF1-TH	X	-0.00082	-0.00082	0 %100
7	MP-5	X	-0.001	-0.001	0 %100
8	MP-6	X	-0.001	-0.001	0 %100
9	MP-7	X	-0.001	-0.001	0 %100
10	MP-8	X	-0.001	-0.001	0 %100
11	SF2-TH	X	-0.002	-0.002	0 %100
12	MP-9	X	-0.001	-0.001	0 %100
13	MP-10	X	-0.001	-0.001	0 %100
14	MP-11	X	-0.001	-0.001	0 %100
15	MP-12	X	-0.001	-0.001	0 %100
16	SA-1	X	-0.001	-0.001	0 %100
17	SA-2	X	0	0	0 %100
18	SA-3	X	-0.001	-0.001	0 %100
19	GSI-1	X	-0.000671	-0.000671	0 %100
20	GSI-2	X	-0.001	-0.001	0 %100
21	GSI-3	X	-0.000753	-0.000753	0 %100
22	FFTH	Z	.002	.002	0 %100
23	MP-1	Z	.003	.003	0 %100
24	MP-2	Z	.003	.003	0 %100
25	MP-3	Z	.003	.003	0 %100
26	MP-4	Z	.003	.003	0 %100
27	SF1-TH	Z	.002	.002	0 %100
28	MP-5	Z	.003	.003	0 %100
29	MP-6	Z	.003	.003	0 %100
30	MP-7	Z	.003	.003	0 %100
31	MP-8	Z	.003	.003	0 %100
32	SF2-TH	Z	.003	.003	0 %100
33	MP-9	Z	.003	.003	0 %100
34	MP-10	Z	.003	.003	0 %100
35	MP-11	Z	.003	.003	0 %100
36	MP-12	Z	.003	.003	0 %100
37	SA-1	Z	.002	.002	0 %100
38	SA-2	Z	0	0	0 %100
39	SA-3	Z	.003	.003	0 %100
40	GSI-1	Z	.001	.001	0 %100
41	GSI-2	Z	.003	.003	0 %100
42	GSI-3	Z	.001	.001	0 %100

Member Distributed Loads (BLC 33 : 315 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...]	End Location[ft,...]
1	FFTH	X	-0.002	-0.002	0 %100
2	MP-1	X	-0.002	-0.002	0 %100
3	MP-2	X	-0.002	-0.002	0 %100
4	MP-3	X	-0.002	-0.002	0 %100
5	MP-4	X	-0.002	-0.002	0 %100
6	SF1-TH	X	-0.0006	-0.0006	0 %100
7	MP-5	X	-0.002	-0.002	0 %100
8	MP-6	X	-0.002	-0.002	0 %100
9	MP-7	X	-0.002	-0.002	0 %100



Company : Tower Engineering Professionals
 Designer : WHW
 Job Number : TEP# 199882.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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Member Distributed Loads (BLC 33 : 315 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...]	End Location[ft,...]
10	MP-8	X	-0.002	-0.002	0 %100
11	SF2-TH	X	-0.002	-0.002	0 %100
12	MP-9	X	-0.002	-0.002	0 %100
13	MP-10	X	-0.002	-0.002	0 %100
14	MP-11	X	-0.002	-0.002	0 %100
15	MP-12	X	-0.002	-0.002	0 %100
16	SA-1	X	-0.002	-0.002	0 %100
17	SA-2	X	-0.000608	-0.000608	0 %100
18	SA-3	X	-0.001	-0.001	0 %100
19	GSI-1	X	-0.000491	-0.000491	0 %100
20	GSI-2	X	-0.002	-0.002	0 %100
21	GSI-3	X	-0.002	-0.002	0 %100
22	FFTH	Z	.002	.002	0 %100
23	MP-1	Z	.002	.002	0 %100
24	MP-2	Z	.002	.002	0 %100
25	MP-3	Z	.002	.002	0 %100
26	MP-4	Z	.002	.002	0 %100
27	SF1-TH	Z	.000734	.000734	0 %100
28	MP-5	Z	.002	.002	0 %100
29	MP-6	Z	.002	.002	0 %100
30	MP-7	Z	.002	.002	0 %100
31	MP-8	Z	.002	.002	0 %100
32	SF2-TH	Z	.003	.003	0 %100
33	MP-9	Z	.002	.002	0 %100
34	MP-10	Z	.002	.002	0 %100
35	MP-11	Z	.002	.002	0 %100
36	MP-12	Z	.002	.002	0 %100
37	SA-1	Z	.002	.002	0 %100
38	SA-2	Z	.000564	.000564	0 %100
39	SA-3	Z	.002	.002	0 %100
40	GSI-1	Z	.000535	.000535	0 %100
41	GSI-2	Z	.002	.002	0 %100
42	GSI-3	Z	.001	.001	0 %100

Member Distributed Loads (BLC 34 : 330 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...]	End Location[ft,...]
1	FFTH	X	-0.003	-0.003	0 %100
2	MP-1	X	-0.002	-0.002	0 %100
3	MP-2	X	-0.002	-0.002	0 %100
4	MP-3	X	-0.002	-0.002	0 %100
5	MP-4	X	-0.002	-0.002	0 %100
6	SF1-TH	X	0	0	0 %100
7	MP-5	X	-0.002	-0.002	0 %100
8	MP-6	X	-0.002	-0.002	0 %100
9	MP-7	X	-0.002	-0.002	0 %100
10	MP-8	X	-0.002	-0.002	0 %100
11	SF2-TH	X	-0.002	-0.002	0 %100
12	MP-9	X	-0.002	-0.002	0 %100
13	MP-10	X	-0.002	-0.002	0 %100
14	MP-11	X	-0.002	-0.002	0 %100
15	MP-12	X	-0.002	-0.002	0 %100



Company : Tower Engineering Professionals
 Designer : WHW
 Job Number : TEP# 199882.515361
 Model Name : 413849_Winchester PCS CT_AT&T

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Member Distributed Loads (BLC 34 : 330 Wind - Ice) (Continued)

Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,...]	End Location[ft,...]	
16	SA-1	X	-.003	-.003	0	%100
17	SA-2	X	-.001	-.001	0	%100
18	SA-3	X	-.001	-.001	0	%100
19	GSI-1	X	0	0	0	%100
20	GSI-2	X	-.002	-.002	0	%100
21	GSI-3	X	-.002	-.002	0	%100
22	FFTH	Z	.002	.002	0	%100
23	MP-1	Z	.002	.002	0	%100
24	MP-2	Z	.002	.002	0	%100
25	MP-3	Z	.002	.002	0	%100
26	MP-4	Z	.002	.002	0	%100
27	SF1-TH	Z	0	0	0	%100
28	MP-5	Z	.002	.002	0	%100
29	MP-6	Z	.002	.002	0	%100
30	MP-7	Z	.002	.002	0	%100
31	MP-8	Z	.002	.002	0	%100
32	SF2-TH	Z	.002	.002	0	%100
33	MP-9	Z	.002	.002	0	%100
34	MP-10	Z	.002	.002	0	%100
35	MP-11	Z	.002	.002	0	%100
36	MP-12	Z	.002	.002	0	%100
37	SA-1	Z	.002	.002	0	%100
38	SA-2	Z	.00077	.00077	0	%100
39	SA-3	Z	.000853	.000853	0	%100
40	GSI-1	Z	0	0	0	%100
41	GSI-2	Z	.001	.001	0	%100
42	GSI-3	Z	.001	.001	0	%100

Member Area Loads

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
No Data to Print ...						

Envelope Joint Reactions

Joint	X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC		
1	SA1-1	max	1.663	18	1.862	45	2.032	21	-1.466	5	2.769	33	3.411	42
2		min	-1.665	10	.512	5	-2.033	13	-5.736	45	-2.77	9	.873	3
3	SA2-1	max	1.394	18	1.739	39	2.016	22	5.708	39	2.615	27	3.809	58
4		min	-1.394	10	.488	15	-2.017	14	1.487	15	-2.615	3	.789	17
5	SA3-1	max	2.395	18	1.742	34	1.027	22	.105	6	2.363	22	-1.695	10
6		min	-2.393	10	.488	10	-1.027	14	-.206	30	-2.363	14	-6.552	34
7	Totals:	max	5.452	18	5.264	34	5.02	22						
8		min	-5.452	10	1.743	88	-5.02	14						

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

Member	Shape	Code Check	Loc[...]	LC Shear Ch...	Loc[ft]...	LC phi*Pnc ...	phi*Pnt...	phi*Mn y...	phi*Mn ...	Cb	Eqn	
1	SA-1	PIPE 4.0	.630	0 45	.079 0	42	74.402	93.24	10.631	10.631	1.7...	H1-...
2	SA-2	PIPE 4.0	.627	0 56	.119 0	60	74.402	93.24	10.631	10.631	1.6...	H1-...



Company : Tower Engineering Professionals
 Designer : WHW
 Job Number : TEP# 199882.515361
 Model Name : 413849_Winchester PCS CT_AT&T

Mar 30, 2021
 2:00 PM
 Checked By: WHW

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

Member	Shape	Code Check	Loc[...]	LC Shear Ch...	Loc[ft]...	LC phi*Pnc ...	phi*Pnt...	phi*Mn y...	phi*Mn ...	Cb	Eqn		
3	SA-3	PIPE 4.0	.620	0 34	.073 0	47	74.402	93.24	10.631	10.631	1.72	H1-...	
4	MP-9	PIPE 2.0	.439	4 21	.042 4	21	13.788	32.13	1.872	1.872	1.8...	H1-...	
5	MP-5	PIPE 2.0	.437	4 32	.042 4	32	13.788	32.13	1.872	1.872	1.8...	H1-...	
6	MP-12	PIPE 2.0	.434	4 21	.042 4	21	13.788	32.13	1.872	1.872	1.8...	H1-...	
7	MP-8	PIPE 2.0	.433	4 32	.042 4	32	13.788	32.13	1.872	1.872	1.88	H1-...	
8	MP-1	PIPE 2.0	.432	4 26	.042 4	26	13.788	32.13	1.872	1.872	1.8...	H1-...	
9	MP-4	PIPE 2.0	.428	4 26	.041 4	26	13.788	32.13	1.872	1.872	1.88	H1-...	
10	GSI-1	PIPE 3.0	.380	2 27	.130 2	26	59.853	65.205	5.749	5.749	1.2...	H1-...	
11	GSI-3	PIPE 3.0	.378	2 33	.134 2	32	59.853	65.205	5.749	5.749	1.2...	H1-...	
12	GSI-2	PIPE 3.0	.366	2 22	.167 2	60	59.853	65.205	5.749	5.749	1.2...	H1-...	
13	FFTH	PIPE 3.0	.351	2.474	61 .075	9.896	59	6.489	65.205	5.749	5.749	1.9...	H1-...
14	SF2-TH	PIPE 3.0	.341	2.474	32 .056	9.896	30	6.489	65.205	5.749	5.749	1.3...	H1-...
15	SF1-TH	PIPE 3.0	.330	10.0.	20 .057	9.896	20	6.489	65.205	5.749	5.749	1.4...	H1-...
16	MP-11	PIPE 2.0	.207	4 25	.019 4	25	13.788	32.13	1.872	1.872	1.8...	H1-...	
17	MP-3	PIPE 2.0	.207	4 30	.019 4	30	13.788	32.13	1.872	1.872	1.5...	H1-...	
18	MP-7	PIPE 2.0	.207	4 19	.019 4	19	13.788	32.13	1.872	1.872	1.8...	H1-...	
19	MP-6	PIPE 2.0	.125	4 27	.012 4	27	13.788	32.13	1.872	1.872	1.7...	H1-...	
20	MP-10	PIPE 2.0	.125	4 33	.012 4	33	13.788	32.13	1.872	1.872	1.7...	H1-...	
21	MP-2	PIPE 2.0	.125	4 22	.012 4	22	13.788	32.13	1.872	1.872	1.5...	H1-...	



Code Revisions:	TIA-222-H
Tower Type:	Monopole

Wind Inputs:		
Ult. Wind Velocity:	120.0	mph
Live Load Velocity:	30.0	mph
Ice Wind Velocity:	50.0	mph
Base Ice Thickness:	1.00	inches
Mount Centerline:	137.0	ft
Antenna Centerline:	137.0	ft
Exposure Category:	C	
Topo Category:	1	
Risk Category:	II	
Ground Elevation:	1146	ft

Wind Calculations:		
K_{zt} :	1.000	Section 2.6.6
K_d :	0.950	
$K_{z-Mount}$:	1.352	Section 2.6.5.2
$K_{z-Antenna}$:	1.352	Section 2.6.5.2
K_{iz} :	1.153	Section 2.6.10
Ice Thickness:	1.153	inches - Section 2.6.10

Without Ice - (psf)	With Ice - (psf)
$(q_z G_h)_{Mount}$: 45.44	$(q_z G_h)_{Mount}$: 7.89
$(q_z G_h)_{Antenna}$: 45.44	$(q_z G_h)_{Antenna}$: 7.89

Seismic Code Revisions:	TIA-222-H
Seismic Risk Category:	II

Seismic Input		
S_{DS} :	0.179	Design Short Period Spectral Accel.
I_p :	1.0	Importance Factor
R_p :	2.0	Response Modification Factor
ρ :	1.0	
A_5 :	1.0	Application Factor - TIA-222-H Section 2.7.8.1
S_1 :	0.054	Spectral Acceleration at a Period of 1 Second

Seismic Design Force			
Cs:	0.090	kips/kip	TIA-H Sec 2.7.7.1.1
Cs-min:	0.030	kips/kip	TIA-H Sec 2.7.7.1.1



Antenna Loads are Calculated in Accordance with TIA-222-H

Azimuth is the absolute angle measured clockwise from RISA-3D global X-axis.

MFR	Model	Height (in)	Width (in)	Depth (in)	Wt. (lbs)	Azimuth°	Qty	Shape	Member Label	Distance from start node of the member		
										Location #1 (ft,%)	Location #2 (ft,%)	Location #3 (ft,%)
Alpha Sector												
CCI Antennas	TPA65R-BU8D	96.00	21.00	7.80	87.50	10.00	1	Flat	MP-1	2.00	6.00	
CCI Antennas	DMP65R-BU8D	96.00	20.70	7.70	105.60	10.00	1	Flat	MP-4	2.00	6.00	
Ericsson	RRUS 4478 B14	16.50	13.40	7.70	59.90	90.00	1	Flat	MP-2	2.00		
Ericsson	RRUS 4449 B5/B12	17.90	13.19	9.44	71.00	90.00	1	Flat	MP-3	2.00		
Ericsson	RRUS 8843 B2/B66A	14.90	13.20	10.90	72.00	90.00	1	Flat	MP-3	2.00		
Beta Sector												
CCI Antennas	TPA65R-BU8D	96.00	21.00	7.80	87.50	140.00	1	Flat	MP-5	2.00	6.00	
CCI Antennas	DMP65R-BU8D	96.00	20.70	7.70	105.60	140.00	1	Flat	MP-8	2.00	6.00	
Ericsson	RRUS 4478 B14	16.50	13.40	7.70	59.90	210.00	1	Flat	MP-6	2.00		
Ericsson	RRUS 4449 B5/B12	17.90	13.19	9.44	71.00	210.00	1	Flat	MP-7	2.00		
Ericsson	RRUS 8843 B2/B66A	14.90	13.20	10.90	72.00	210.00	1	Flat	MP-7	2.00		
Gamma Sector												
CCI Antennas	TPA65R-BU8D	96.00	21.00	7.80	87.50	240.00	1	Flat	MP-9	2.00	6.00	
CCI Antennas	DMP65R-BU8D	96.00	20.70	7.70	105.60	240.00	1	Flat	MP-12	2.00	6.00	
Ericsson	RRUS 4478 B14	16.50	13.40	7.70	59.90	330.00	1	Flat	MP-10	2.00		
Ericsson	RRUS 4449 B5/B12	17.90	13.19	9.44	71.00	330.00	1	Flat	MP-11	2.00		
Ericsson	RRUS 8843 B2/B66A	14.90	13.20	10.90	72.00	330.00	1	Flat	MP-11	2.00		
Raycap												
Raycap	DC9-48-60-24-8C-EV	31.41	10.24	18.28	26.20	0.00	1	Flat	SA-1	1.00		



413849_Winchester PCS CT_AT&T

TEP No. 199882.515361

Analysis By: WHW 3/30/2021

Checked By: - 3/30/2021

Member Forces are Calculated in Accordance with TIA-222-H

Member Name	Wind Proj. (in)	Length (in)	Shape	θ (°)	Perimeter (in)
FFTH	3.500	150.00	Round	90.00	11.00
MP-1	2.375	96.00	Round		7.46
MP-2	2.375	96.00	Round		7.46
MP-3	2.375	96.00	Round		7.46
MP-4	2.375	96.00	Round		7.46
SF1-TH	3.500	150.00	Round	30.00	11.00
MP-5	2.375	96.00	Round		7.46
MP-6	2.375	96.00	Round		7.46
MP-7	2.375	96.00	Round		7.46
MP-8	2.375	96.00	Round		7.46
SF2-TH	3.500	150.00	Round	-30.00	11.00
MP-9	2.375	96.00	Round		7.46
MP-10	2.375	96.00	Round		7.46
MP-11	2.375	96.00	Round		7.46
MP-12	2.375	96.00	Round		7.46
SA-1	4.500	48.00	Round	-60.00	14.14
SA-2	4.500	48.00	Round	60.00	14.14
SA-3	4.500	48.00	Round	0.00	14.14
GSI-1	3.500	48.00	Round	30.00	11.00
GSI-2	3.500	48.00	Round	-30.00	11.00
GSI-3	3.500	48.00	Round	90.00	11.00



413849_Winchester PCS CT_AT&T

TEP No. 199882.515361

Analysis By: WHW 3/30/2021

Checked By: - 3/30/2021

Moment Bolt Group - Collar

Code Revisions:	ANSI/TIA-222-H
Bolt Type:	Headed Bolts

Connection Inputs:

Bolt Size:	0.625	in
# Bolts:	4	
Plate Width:	8.000	in
Plate Height:	8.00	in
Bolt H Gap:	6.0000	in
Bolt V Gap:	6.000	in
Plate T:	0.750	in
Slip Member Ø:	N/A	in
Bolt Grade:	A325N	

Capacities:

Bolt Capacity=	35.5%	PASS
Plate Capacity=	46.7%	PASS

Bolt Properties:

$F_{y\text{bolt}}$:	92.0	ksi
$F_{u\text{bolt}}$:	120.0	ksi
r:	4.2	in
J:	72.0	in ⁴ /in ²
A_{bolt} :	0.3	in ²
$A_{\text{bolt, Net Tensile}}$:	0.2	in ²
Pretension:	19.0	kips

Member Properties:

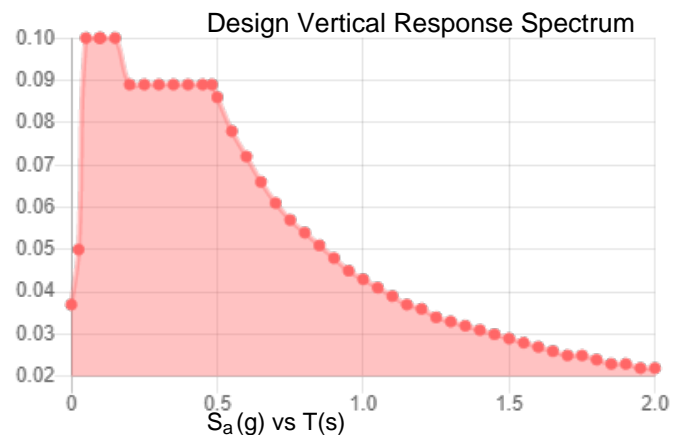
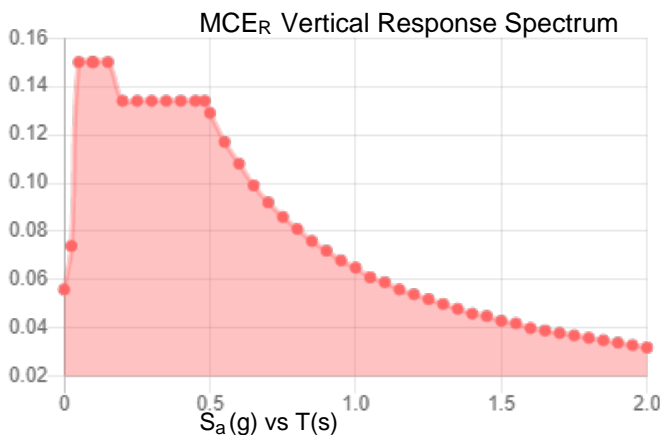
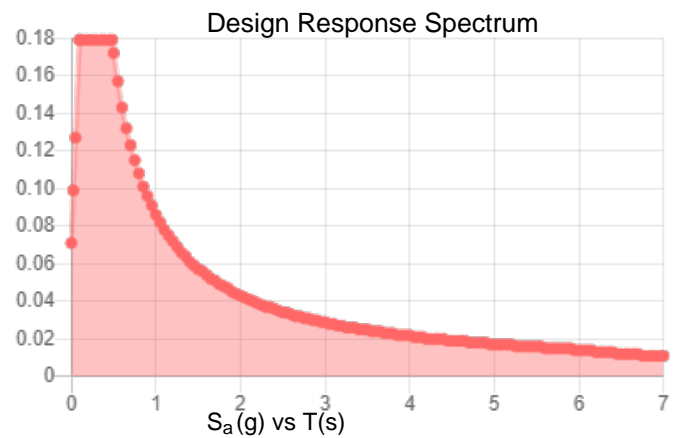
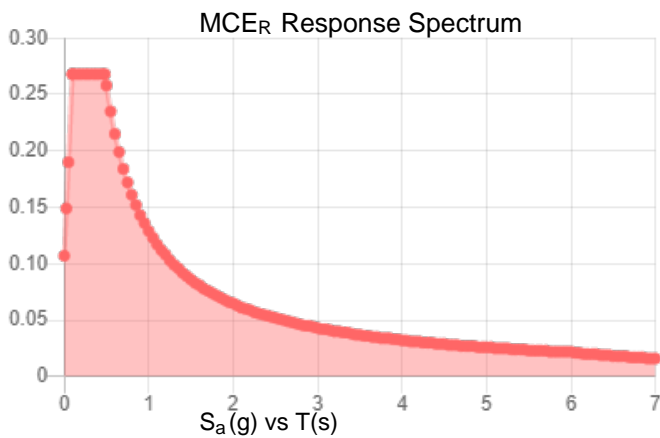
Member Shape:	Round	
Plate F_y :	36.0	ksi
Plate F_u :	58.0	ksi
Member Height:	3.5	in
Member Width:	3.5	in

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

Results:

S_s :	0.167	S_{D1} :	0.086
S_1 :	0.054	T_L :	6
F_a :	1.6	PGA :	0.087
F_v :	2.4	PGA _M :	0.14
S_{MS} :	0.268	F_{PGA} :	1.6
S_{M1} :	0.129	I_e :	1
S_{DS} :	0.179	C_v :	0.7

Seismic Design Category B



Data Accessed:

Tue Mar 30 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: 1.00 in.

Concurrent Temperature: 5 F

Gust Speed: 50 mph

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

Date Accessed: Tue Mar 30 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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Exhibit 6

NIER Study Report



NIER Study Report

SITE NAME:

413849 Winchester PCS CT

LOCATION:

Winsted, Connecticut

COMPANY:

**American Tower
Woburn, Massachusetts**

October 21st, 2021



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TOWER ENGINEERING PROFESSIONALS
KINSTON, NORTH CAROLINA



NIER STUDY REPORT

413849 Winchester PCS CT

Winsted, Connecticut

INTRODUCTION

Tower Engineering Professionals (TEP) has been retained by American Tower (ATC) of Woburn, Massachusetts to evaluate the RF emissions of an existing tower at this location.

SITE AND FACILITY CONSIDERATIONS

Site Winchester PCS CT is located at 32 Norfolk Road in Winsted, CT at coordinates 41.940194, -73.095903. The support structure is a 150' stealth monopine. The installation consists of two antenna levels with radiation centers of 147' & 137' above ground level. All antennae will have a radiation center as described above. All data used in this study was provided by one or more of the following sources:

1. ATC furnished data
2. Compiled from carrier and manufacturer standard configurations
3. Empirical data collected by TEP

A topographic map of the study area is located in Appendix 1. A satellite view of the study area is located in Appendix 2.



POWER DENSITY CALCULATIONS

Graphs of the power density at different distances from the transmitter, compared to FCC MPE general population and occupational limits, may be seen in Appendix 3. These limits are based upon the Information Relating to MPE Standards found in Appendix 5. Study methodology may be seen in Appendix 6, which describes the Non-Ionizing Radiation Prediction Models. Approximate radiation patterns may be found in Appendix 4. This site **IS** in compliance with FCC OET-65 MPE limits.

October 21st, 2021

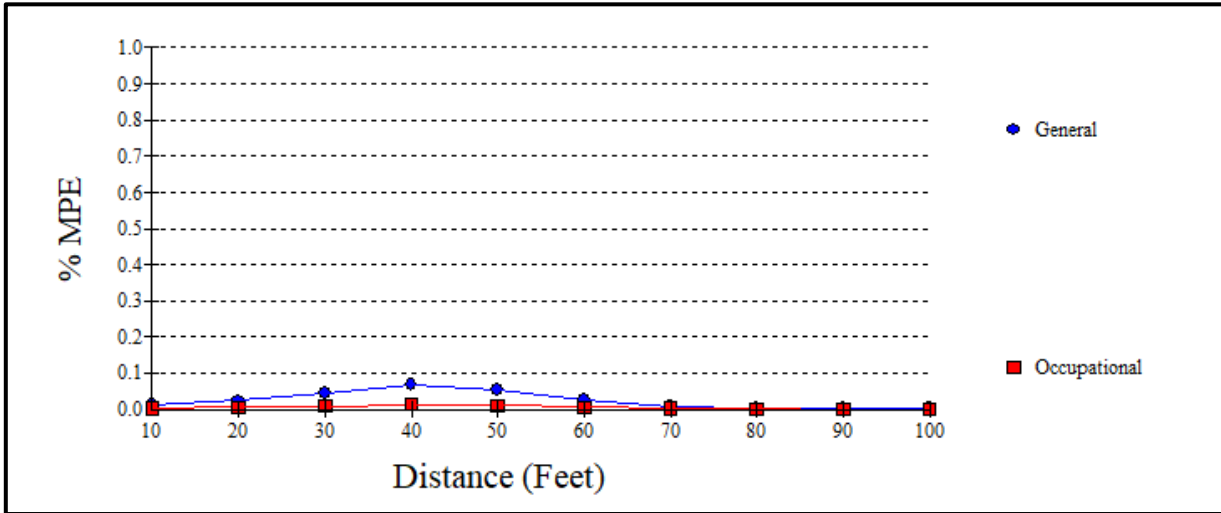
Prepared By:

Adam Carlson CBRS CPI MS
Senior Field Technician
Tower Engineering Professionals

APPENDIX 1 Satellite Photo



APPENDIX 2 FCC OET-65 MPE Limit Study



Maximum Power Density (@40'):	0.0007 mW/cm ²
General Population MPE (@40'):	0.07%
Occupational MPE (@40'):	0.01%



APPENDIX 3 Effective Radiated Power Table

Operator	Frequency Band (MHz)	TPO (max) (Watts)	Antenna Gain (dB)	Total ERP (Watts)
AT&T PCS	1930-1970	250	17.2	8000
AT&T LTE	891-894	300	13.5	4095
AT&T 700	740-746	300	15.5	6490
AT&T AWS	1695-2500	250	15.5	8000
AT&T WCS	740-746	300	13.5	4095



APPENDIX 4 Channel Assignments

EUTRA OPERATING BAND	EARFCNDL	EARFCNUL	Download Channel Bandwidth (MHz)	Upload Channel Bandwidth (MHz)
PCS MHz A3+A4 (10MHz) E-UTRA Band 2	650	18650	10	10
PCS MHz E (5MHz) E-UTRA Band 2	975	18975	5	5
PCS MHz C5 (5MHz) E-UTRA Band 2	1175	19175	5	5
850 MHz B-2586 (5MHz) E-UTRA Band 5	2586	20586	5	5
700 MHz OFFSET LOWER_B+C (10 MHz) E-UTRA BAND 17	5780	23780	10	10
WCS MHz A+B (10 MHz) E-UTRA Band 30	9820	27710	10	10
AWS-3 MHz J (10 MHz) E-UTRA Band 66	67086	132622	10	10
700 MHz UPPER D (10 MHz) E-UTRA BAND 14	5330	23330	10	10
850 MHz B-2586 (5MHz) E-UTRA Band 5 (UMTS)	4413	4188	5	5



APPENDIX 5 Information Pertaining to MPE Studies

In 1985, the FCC first adopted guidelines to be used for evaluating human exposure to RF emissions. The FCC revised and updated these guidelines on August 1, 1996, as a result of a rule-making proceeding initiated in 1993. The new guidelines incorporate limits for Maximum Permissible Exposure (MPE) in terms of electric and magnetic field strength and power density for transmitters operating at frequencies between 300 kHz and 100 GHz.

The FCC's MPE limits are based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits were developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC's limits, and the NCRP and ANSI/IEEE limits on which they are based, are derived from exposure criteria quantified in terms of specific absorption rate (SAR). The basis for these limits is a whole-body averaged SAR threshold level of 4 watts per kilogram (4 W/kg), as averaged over the entire mass of the body, above which expert organizations have determined that potentially hazardous exposures may occur. The MPE limits are derived by incorporating safety factors that lead, in some cases, to limits that are more conservative than the limits originally adopted by the FCC in 1985. Where more conservative limits exist, they do not arise from a fundamental change in the RF safety criteria for whole-body averaged SAR, but from a precautionary desire to protect subgroups of the general population who, potentially, may be more at risk.

The FCC exposure limits are also based on data showing that the human body absorbs RF energy at some frequencies more efficiently than at others. The most restrictive limits occur in the frequency range of 30-300 MHz where whole-body absorption of RF energy by human beings is most efficient. At other frequencies, whole-body absorption is less efficient, and consequently, the MPE limits are less restrictive.



MPE limits are defined in terms of power density (units of milliwatts per centimeter squared: mW/cm^2), electric field strength (units of volts per meter: V/m) and magnetic field strength (units of amperes per meter: A/m). The far-field of a transmitting antenna is where the electric field vector (E), the magnetic field vector (H), and the direction of propagation can be considered to be all mutually orthogonal ("plane-wave" conditions).

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.

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. Additional details can be found in FCC OET 65.



APPENDIX 6 MPE Standards Methodology

This study predicts RF field strength and power density levels that emanate from communications system antennae. It considers all transmitter power levels (less filter and line losses) delivered to each active transmitting antenna at the communications site. Calculations are performed to determine power density and MPE levels for each antenna as well as composite levels from all antennas. The calculated levels are based on where a human (Observer) would be standing at various locations at the site. The point of interest where the MPE level is predicted is based on the height of the Observer.

Compliance with the FCC limits on RF emissions are determined by spatially averaging a person's exposure over the projected area of an adult human body, that is approximately six-feet or two-meters, as defined in the ANSI/IEEE C95.1 standard. The MPE limits are specified as time-averaged exposure limits. This means that exposure is averaged over an identifiable time interval. It is 30 minutes for the general population/uncontrolled RF environment and 6 minutes for the occupational/controlled RF environment. However, in the case of the general public, time averaging should not be applied because the general public is typically not aware of RF exposure and they do not have control of their exposure time. Therefore, it should be assumed that any RF exposure to the general public will be continuous.

The FCC's limits for exposure at different frequencies are shown in the following Tables.

Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time E ², H ² or S (minutes)
0.3 - 3.0	614	1.63	100*	6
3.0 - 30	1842/f	4.89/f	900/F ²	6
30 - 300	61.4	0.163	1.0	6
300 - 1500	--	--	f/300	6
1500 - 100,000	--	--	5	6

f = frequency

* = Plane-wave equivalent power density



Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3 - 1.34	614	1.63	100*	30
1.34 - 30	824/f	2.19/f	180/F ²	30
30 - 300	27.5	0.073	0.2	30
300 - 1500	--	--	f/1500	30
1500 - 100,000	--	--	1.0	30

f = frequency

* = Plane-wave equivalent power density

General population/uncontrolled exposures apply in situations in which the general public may be exposed or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

It is important to understand that these limits apply cumulatively to all sources of RF emissions affecting a given area. For example, if several different communications system antennas occupy a shared facility such as a tower or rooftop, then the total exposure from all systems at the facility must be within compliance of the FCC guidelines.

The field strength emanating from an antenna can be estimated based on the characteristics of an antenna radiating in free space. There are basically two field areas associated with a radiating antenna. When close to the antenna, the region is known as the Near Field. Within this region, the characteristics of the RF fields are very complex and the wave front is extremely curved. As you move further from the antenna, the wave front has less curvature and becomes planar. The wave front still has a curvature but it appears to occupy a flat plane in space (plane-wave radiation). This region is known as the Far Field.



Two models are utilized to predict Near and Far field power densities. They are based on the formulae in FCC OET 65. As this study is concerned only with Near Field calculations, we will only describe the model used for this study. For additional details, refer to FCC OET Bulletin 65.

Cylindrical Model (Near Field Predictions)

Spatially averaged plane-wave equivalent power densities parallel to the antenna may be estimated by dividing the antenna input power by the surface area of an imaginary cylinder surrounding the length of the radiating antenna. While the actual power density will vary along the height of the antenna, the average value along its length will closely follow the relation given by the following equation:

$$S = P \div 2\pi RL$$

Where:

S = Power Density

P = Total Power into antenna

R = Distance from the antenna

L = Antenna aperture length

For directional-type antennas, power densities can be estimated by dividing the input power by that portion of a cylindrical surface area corresponding to the angular beam width of the antenna. For example, for the case of a 120-degree azimuthal beam width, the surface area should correspond to 1/3 that of a full cylinder. This would increase the power density near the antenna by a factor of three over that for a purely omni-directional antenna. Mathematically, this can be represented by the following formula:

$$S = (180 / \theta_{BW}) P \div \pi RL$$

Where:

S = Power Density

θ_{BW} = Beam width of antenna in degrees (3 dB half-power point)

P = Total Power into antenna

R = Distance from the antenna

L = Antenna aperture length

If the antenna is a 360-degree omni-directional antenna, this formula would be equivalent to the previous formula.



Spherical Model (Far Field Predictions)

Spatially averaged plane-wave power densities in the Far Field of an antenna may be estimated by considering the additional factors of antenna gain and reflective waves that would contribute to exposure.

The radiation pattern of an antenna has developed in the Far Field region and the power gain needs to be considered in exposure predictions. Also, if the vertical radiation pattern of the antenna is considered, the exposure predictions would most likely be reduced significantly at ground level, resulting in a more realistic estimate of the actual exposure levels.

Additionally, to model a truly "worst case" prediction of exposure levels at or near a surface, such as at ground-level or on a rooftop, reflection off the surface of antenna radiation power can be assumed, resulting in a potential four-fold increase in power density.

These additional factors are considered and the Far Field prediction model is determined by the following equation:

$$S = EIRP \times Rc \div 4\pi R^2$$

Where:

S = Power Density

EIRP = Effective Radiated Power from antenna

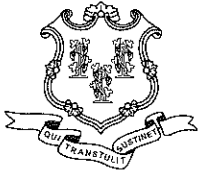
Rc = Reflection Coefficient (2.56)

R = Distance from the antenna

The EIRP includes the antenna gain. If the antenna pattern is considered, the antenna gain is relative based on the horizontal and vertical pattern gain values at that particular location in space, on a rooftop or on the ground. However, it is recommended that the antenna radiation pattern characteristics not be considered to provide a conservative "worst case" prediction. This is the equation is utilized for the Far Field exposure predictions herein.

Exhibit 7

Original Facility Approval



Daniel F. Caruso
Chairman

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

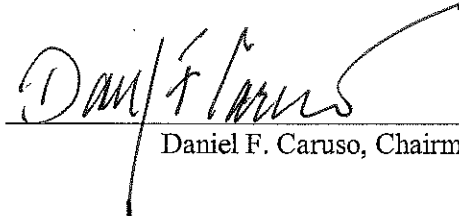
Internet: ct.gov/csc

**CERTIFICATE
OF
ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED
DOCKET NO. 361**

Pursuant to General Statutes § 16-50k, as amended, the Connecticut Siting Council hereby issues a Certificate of Environmental Compatibility and Public Need to Cellco Partnership d/b/a Verizon Wireless for the construction, maintenance and operation of a telecommunications facility located off Norfolk Road (Route 44), Winchester, Connecticut.

This Certificate is issued in accordance with and subject to the terms and conditions set forth in the Decision and Order of the Council on September 11, 2008.

By order of the Council,


Daniel F. Caruso, Chairman

September 11, 2008

Exhibit 8

(4) Notice Confirmations

Kimberly Revak

From: UPS <pkginfo@ups.com>
Sent: Friday, October 22, 2021 9:27 PM
To: Kimberly Revak
Subject: UPS Schedule Delivery Update, Tracking Number 1Z9Y45030331082242



Your scheduled delivery date has changed.

Scheduled Delivery Date: Monday, 10/25/2021

Important Delivery Information

From: CENTERLINE SITE ACQUISITION
Tracking Number: [1Z9Y45030331082242](#)

Shipment Details

Ship To: WIN 21 LLC
156 Roosevelt Drive
SEYMOUR, CT 064832148
US

Number of Packages: 1

Weight: 1.0 LBS

Reference Number 1: Winchester - LL



It's the thought that counts

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Kimberly Revak

From: UPS <pkginfo@ups.com>
Sent: Friday, October 22, 2021 9:27 PM
To: Kimberly Revak
Subject: UPS Schedule Delivery Update, Tracking Number 1Z9Y45030338013858



Your scheduled delivery date has changed.

Scheduled Delivery Date: Tuesday, 10/26/2021

Important Delivery Information

From: CENTERLINE SITE ACQUISITION
Tracking Number: [1Z9Y45030338013858](#)

Shipment Details

Ship To: Gary Waitt – Site Development
American Tower Corporation
10 Presidential Way
WOBURN, MA 018011053
US

Number of Packages: 1
Weight: 1.0 LBS
Reference Number 1: Winchester – ATC



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Kimberly Revak

From: UPS <pkginfo@ups.com>
Sent: Friday, October 22, 2021 9:27 PM
To: Kimberly Revak
Subject: UPS Schedule Delivery Update, Tracking Number 1Z9Y45030326056076



Your scheduled delivery date has changed.

Scheduled Delivery Date: Monday, 10/25/2021

Important Delivery Information

From: CENTERLINE SITE ACQUISITION
Tracking Number: [1Z9Y45030326056076](#)

Shipment Details

Ship To: Pamela Colombie / Planning Dept
Town of Winchester
Town Hall
338 Main Street
WINSTED, CT 060981697
US

Number of Packages: 1
Weight: 1.0 LBS
Reference Number 1: Winchester - Zoning



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Kimberly Revak

From: UPS <pkginfo@ups.com>
Sent: Friday, October 22, 2021 9:27 PM
To: Kimberly Revak
Subject: UPS Schedule Delivery Update, Tracking Number 1Z9Y45030327539123



Your scheduled delivery date has changed.

Scheduled Delivery Date: Monday, 10/25/2021

Important Delivery Information

From: CENTERLINE SITE ACQUISITION
Tracking Number: [1Z9Y45030327539123](#)

Shipment Details

Ship To: Attn: Joshua Kelly – Town Manager
Town of Winchester
Town Hall
338 Main Street
WINSTED, CT 060981697
US

Number of Packages: 1
Weight: 1.0 LBS
Reference Number 1: Winchester – Town



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