

UPS CampusShip: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.
2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.
3. **GETTING YOUR SHIPMENT TO UPS**
Customers with a Daily Pickup
Your driver will pickup your shipment(s) as usual.

Customers without a Daily Pickup

Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.

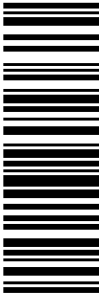
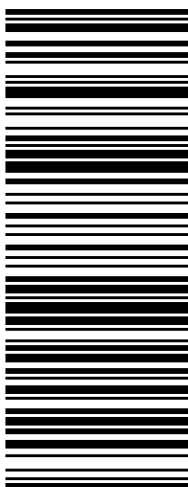

Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
Hand the package to any UPS driver in your area.

UPS Access Point™
CVS STORE # 972
555 WASHINGTON ST
SOUTH EASTON ,MA 02375

UPS Access Point™
CVS STORE # 7232
689 DEPOT ST
NORTH EASTON ,MA 02356

UPS Access Point™
TOWN LINE GENERAL STORE
450 E CENTER ST
WEST BRIDGEWATER ,MA 02379

FOLD HERE

<p>1 OF 1</p> <p>3 LBS</p> <p>PATRICIA NOWAK 508-265-5599 CENTERLINE COMMUNICATIONS, LLC 750 WEST CENTER STREET WEST BRIDGEWATER MA 02379</p> <p>SHIP TO: MELANIE A. BACHMAN 18608272935 CONNECTICUT SITING COUNCIL EXECUTIVE DIRECTOR TEN FRANKLIN SQUARE NEW BRITAIN CT 06051-2655</p>	<p>CT 067 9-06</p> 	<p>UPS GROUND</p> <p>TRACKING #: 1Z 9Y4 503 03 0477 6179</p> 	<p>BILLING: P/P</p> <p>Reference # 1: CT1016 - CSC</p> <p>CS 22.0.12. WNTNV50 34.0A 10/2020*</p> 
--	---	---	---

UPS CampusShip: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.
2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.
3. **GETTING YOUR SHIPMENT TO UPS**
Customers with a Daily Pickup
Your driver will pickup your shipment(s) as usual.

Customers without a Daily Pickup

Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.


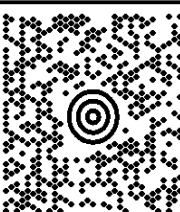
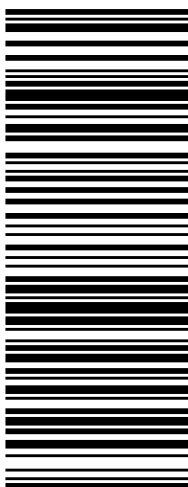

Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages. Hand the package to any UPS driver in your area.

UPS Access Point™
CVS STORE # 972
555 WASHINGTON ST
SOUTH EASTON ,MA 02375

UPS Access Point™
CVS STORE # 7232
689 DEPOT ST
NORTH EASTON ,MA 02356

UPS Access Point™
TOWN LINE GENERAL STORE
450 E CENTER ST
WEST BRIDGEWATER ,MA 02379

FOLD HERE

<p>1 OF 1</p> <p>3 LBS</p> <p>PATRICIA NOWAK 508-265-5599 CENTERLINE COMMUNICATIONS, LLC 750 WEST CENTER STREET WEST BRIDGEWATER MA 02379</p> <p>SHIP TO: EDWARD P. BAILEY TOWN OF MIDDLEFIELD FIRST SELECTMAN'S OFFICE 393 JACKSON HILL ROAD MIDDLEFIELD CT 06455-1240</p>	<p>CT 061 9-01</p>  	<p>UPS GROUND</p> <p>TRACKING #: 1Z 9Y4 503 03 0265 2190</p> 	<p>BILLING: P/P</p> <p>Reference # 1: CT1016 - Selectman</p> <p>CS 22.0.12. WNTNV50 34.0A 10/2020*</p> 
---	---	---	---

UPS CampusShip: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.
2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.
3. **GETTING YOUR SHIPMENT TO UPS**
Customers with a Daily Pickup
Your driver will pickup your shipment(s) as usual.

Customers without a Daily Pickup

Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.




Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
Hand the package to any UPS driver in your area.

UPS Access Point™
CVS STORE # 972
555 WASHINGTON ST
SOUTH EASTON ,MA 02375

UPS Access Point™
CVS STORE # 7232
689 DEPOT ST
NORTH EASTON ,MA 02356

UPS Access Point™
TOWN LINE GENERAL STORE
450 E CENTER ST
WEST BRIDGEWATER ,MA 02379

FOLD HERE

<p>1 LBS</p> <p>1 OF 1</p> <p>PATRICIA NOWAK 508-265-5599 CENTERLINE COMMUNICATIONS, LLC 750 WEST CENTER STREET WEST BRIDGEWATER MA 02379</p> <p>SHIP TO: JERRY RUSS TOWN OF MIDDLEFIELD ZONING ENFORCEMENT OFFICER 393 JACKSON HILL ROAD MIDDLEFIELD CT 06455-1240</p>	<p>CT 061 9-01</p> 	<p>UPS GROUND</p> <p>TRACKING #: 1Z 9Y4 503 03 1309 3201</p> 	<p>BILLING: P/P</p> <p>Reference # 1: CT1016 - ZEO</p> <p>CS 22.0.12. WNTNV50 34.0A 10/2020*</p> 
--	---	---	---

UPS CampusShip: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.
2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.
3. **GETTING YOUR SHIPMENT TO UPS**
Customers with a Daily Pickup
Your driver will pickup your shipment(s) as usual.

Customers without a Daily Pickup

Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.

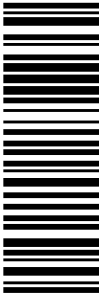
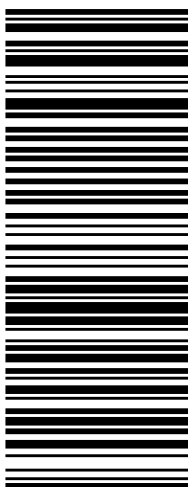

Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages. Hand the package to any UPS driver in your area.

UPS Access Point™
CVS STORE # 972
555 WASHINGTON ST
SOUTH EASTON ,MA 02375

UPS Access Point™
CVS STORE # 7232
689 DEPOT ST
NORTH EASTON ,MA 02356

UPS Access Point™
TOWN LINE GENERAL STORE
450 E CENTER ST
WEST BRIDGEWATER ,MA 02379

FOLD HERE

<p>1 OF 1</p> <p>3 LBS</p> <p>PATRICIA NOWAK 508-265-5599 CENTERLINE COMMUNICATIONS, LLC 750 WEST CENTER STREET WEST BRIDGEWATER MA 02379</p> <p>SHIP TO: LAND MANAGEMENT 7814287250 AMERICAN TOWER CORPORATION 10 PRESIDENTIAL WAY WOBURN MA 01801-1053</p>	<p>MA 018 9-04</p> 	<p>UPS GROUND</p> <p>TRACKING #: 1Z 9Y4 503 03 0001 3188</p> 	<p>BILLING: P/P</p> <p>Reference # 1: CT1016 - ATC</p> <p>CS 22.0.12. WNTNV50 34.0A 10/2020*</p> 
--	---	---	---

November 19, 2020

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

Regarding: Notice of Exempt Modification – AT&T Site CT1016
Address: 134 Kikapoo Road, Middlefield, CT

Dear Ms. Bachman:

New Cingular Wireless, PCS, LLC (hereinafter “AT&T”) currently maintains a wireless telecommunications facility on an existing 75’ monopole tower (the “Tower”) at the above-referenced address, latitude 41.513600, longitude -72.745800. Said Tower is owned by American Tower Corporation.

AT&T desires to modify its existing telecommunications facility on the Tower by swapping (3) antennas, swapping (3) remote radio units, adding (3) remote radio units and adding (1) surge arrestors with accompanying lines, as well as, other related modifications, as more particularly detailed and described in the enclosed Construction Drawings prepared by SMW Engineering Group, Inc., dated June 8, 2020. Please note this modification includes B2, B5, and B12 hardware that is both 4G (LTE) and 5GNR capable through remote software configuration and either or both services may be turned on or off at various times. Enclosed please also find an Antenna Mount Analysis Report prepared by American Tower Corporation dated April 21, 2020. The centerline height of the antennas will be at 78 feet.

The Tower was originally approved by the Connecticut Siting Council on May 15, 1984 under Docket No. 40. Enclosed please find a copy of the Decision.

Please accept this letter as notification pursuant to R.C.S.A §16-50j-73 for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the following individuals: The Honorable Edward P. Bailey, First Selectman of the Town of Middlefield, CT; Jerry Russ, Zoning Enforcement Officer of the Town of Middlefield, CT; and American Tower Corporation, as Tower owner and property owner. Enclosed please find a property card and maps of the property.

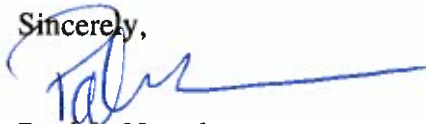
The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2). Specifically:

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 safety standard. *Please see the enclosed Radio Frequency Emissions Report for AT&T's modified facility enclosed herewith.*
5. The proposed modifications will not cause an ineligible 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 Report dated October 21, 2020 and prepared by American Tower Corporation.*

For the foregoing reasons, AT&T respectfully submits that the proposed modifications to the above referenced telecommunications facility constitute an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

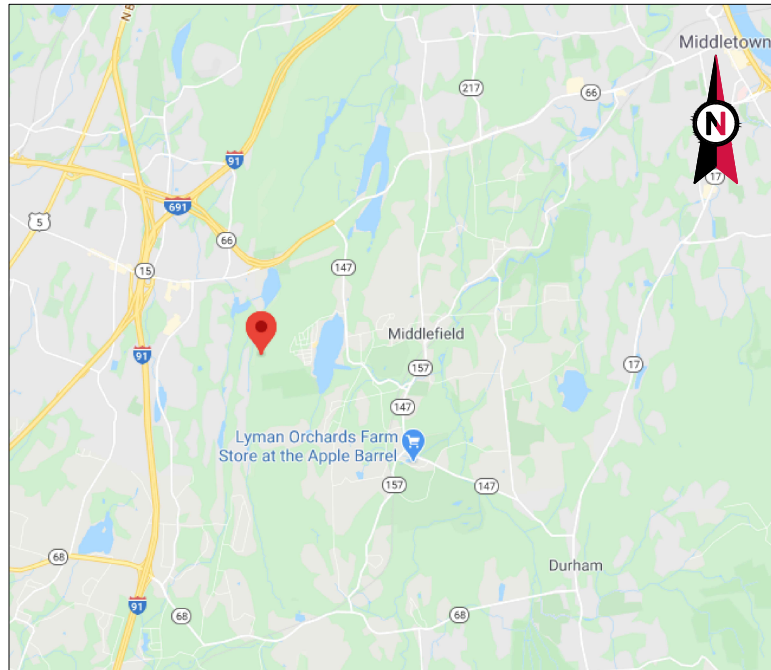


Patricia Nowak
Site Acquisition Consultant
Centerline Communications, LLC
750 West Center Street, Suite 301
West Bridgewater, MA 02379
pnowak@clinellc.com

Enclosures: Exhibit 1 – Construction Drawings
 Exhibit 2 - Mount Analysis
 Exhibit 3 – CSC Decision
 Exhibit 4 – Property Card and Maps
 Exhibit 5 – Radio Frequency Emissions Report
 Exhibit 6 – Structural Analysis

cc: The Honorable Edward P. Bailey, First Selectman of the Town of Middlefield, CT
 Jerry Russ, Zoning Enforcement Officer of the Town of Middlefield, CT
 American Tower Corporation, as Tower owner and property owner.

EXHIBIT 1

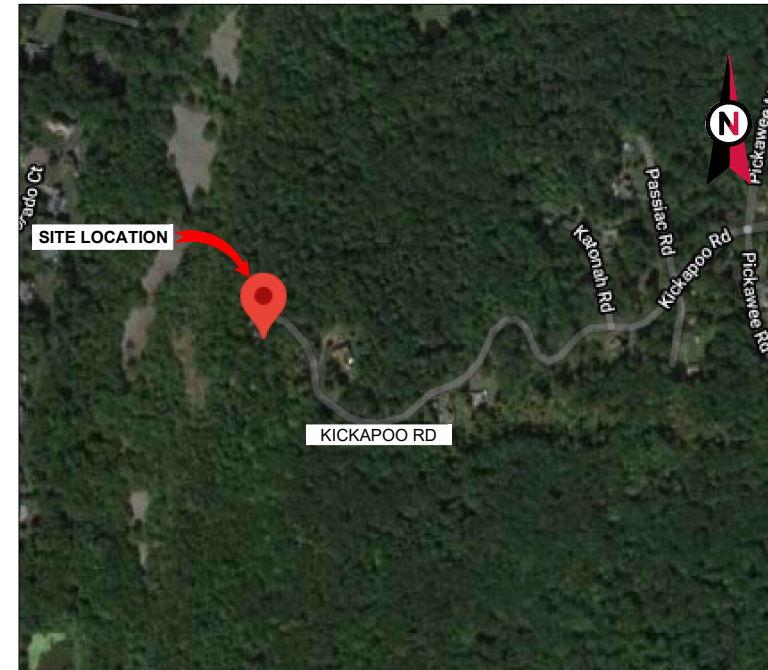


VICINITY MAP



AMERICAN TOWER®

ATC SITE NAME: MDFD - MIDDLEFIELD
 ATC SITE NUMBER: 302485
 AT&T PACE NUMBER: MRCTB045369/ MRCTB045365/
 MRCTB045372
 AT&T SITE ID: CTL01016
 AT&T FA CODE: 10034970
 AT&T SITE NAME: MRCTB045372
 SITE ADDRESS: 134 KICKAPOO ROAD
 MIDDLEFIELD, CT 06455-1334



LOCATION MAP

**AT&T MOBILITY
 ANTENNA AMENDMENT DRAWINGS**

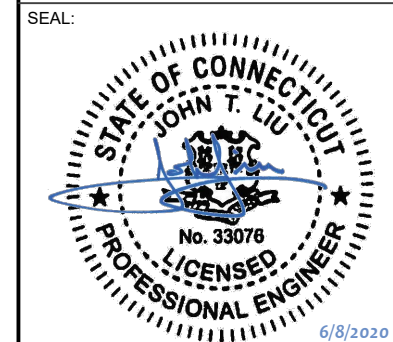


TOGETHER PLANNING A BETTER TOMORROW
 158 BUSINESS CENTER DRIVE
 BIRMINGHAM, AL 35244
 TEL: 205-252-6985 FAX: 205-320-1504

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	ZDS	06/08/20

ATC SITE NUMBER:
302485
 ATC SITE NAME:
MDFD - MIDDLEFIELD

SITE ADDRESS:
 134 KICKAPOO ROAD
 MIDDLEFIELD, CT 06455-1334



DATE DRAWN:	05/01/20
ATC JOB NO:	367078
CUSTOMER ID:	10034970
CUSTOMER #:	MRCTB045372

COVER SHEET

SHEET NUMBER:
G-001
 REVISION:
0

COMPLIANCE CODE	PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX				
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES. 1. INTERNATIONAL BUILDING CODE (IBC) 2. NATIONAL ELECTRIC CODE (NEC) 3. LOCAL BUILDING CODE 4. CITY/COUNTY ORDINANCES	<u>SITE ADDRESS:</u> 134 KICKAPOO ROAD MIDDLEFIELD, CT 06455-1334 COUNTY: MIDDLESEX <u>GEOGRAPHIC COORDINATES:</u> LATITUDE: 41.51361111 LONGITUDE: -72.7458 GROUND ELEVATION: 770' AMSL	THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW: <u>TOWER WORK:</u> REMOVE (3) ANTENNAS AND (3) RRR,S, AND (6) 7/8" COAX CABLES. INSTALL (3) ANTENNAS, (6) RRR,S, (1) DC ONLY SQUID, AND (2) 0.78" 8AWG6 CONTROL CABLES. EXISTING (6) ANTENNAS, (12) RRR'S, (3) SQUIDS, (6) 7/8" COAX CABLES, AND (2) 0.39" FIBER CABLES TO REMAIN. <u>GROUND WORK:</u> INSTALL (1) 6630 AND (1) IDLE CABLE.	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
	<u>PROJECT TEAM</u> <u>TOWER OWNER:</u> AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 01801 <u>ENGINEER:</u> SMW ENGINEERING GROUP INC. 158 BUSINESS CENTER DR. BIRMINGHAM, AL. 35244 JOB# 20-10194 <u>CONSULTING ENGINEER</u> JOHN LIU, PE (423) 541-0561 JOHNLIU@TELECOM.TEAM	<u>PROJECT NOTES</u> 1. THE FACILITY IS UNMANNED. 2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE. 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. HANDICAP ACCESS IS NOT REQUIRED.	G-001 COVER SHEET G-002 GENERAL NOTES C-001 OVERALL SITE PLAN C-101 DETAILED SITE PLAN C-102 SHELTER LAYOUT C-201 TOWER ELEVATION C-401 RF SCHEDULE AND ANTENNA INSTALLATION C-501 CONSTRUCTION DETAILS C-502 EQUIPMENT DETAILS E-501 GROUNDING DETAILS R-601 SUPPLEMENTAL R-602 SUPPLEMENTAL				
<u>UTILITY COMPANIES</u> POWER COMPANY: NOT PROVIDED PHONE: NOT PROVIDED TELEPHONE COMPANY: NOT PROVIDED PHONE: NOT PROVIDED	<u>APPLICANT:</u> AT&T MOBILITY <u>PROPERTY OWNER:</u> SBC TOWER HOLDINGS, LLC 1999 BYANT STREET, STE. 900 DALLAS, TX 75201	<u>PROJECT LOCATION DIRECTIONS</u> FROM HARTFORD TAKE I-91 SOUTH TO RT 66 EAST. ONCE ON RT 66 TAKE RIGHT AT FIRST LIGHT (RT 147). FOLLOW TO LAKE ROAD AND TAKE RIGHT. FOLLOW ROAD AROUND UNTIL YOU GET TO KICKAPOO ROAD AND TURN RIGHT. ACCESS GATE IS AT END OF ROAD ON TOP OF HILL					



Copyright © 2020 ATC IP, LLC. All Rights Reserved.

GENERAL CONSTRUCTION NOTES:

1. OWNER FURNISHED MATERIALS, AT&T MOBILITY "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
 - A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)
 - B. AC/TELCO INTERFACE BOX (PPC)
 - C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)
 - D. TOWERS, MONOPOLES
 - E. TOWER LIGHTING
 - F. GENERATORS & LIQUID PROPANE TANK
 - G. ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING
 - H. ANTENNAS (INSTALLED BY OTHERS)
 - I. TRANSMISSION LINE
 - J. TRANSMISSION LINE JUMPERS
 - K. TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS
 - L. TRANSMISSION LINE GROUND KITS
 - M. HANGERS
 - N. HOISTING GRIPS
 - O. BTS EQUIPMENT
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF AT&T MOBILITY TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED PERMITS.
3. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSIEIA/NTIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE AT&T MOBILITY REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE AT&T MOBILITY REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE AT&T MOBILITY REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE AT&T MOBILITY CONSTRUCTION MANAGER.
15. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE AT&T MOBILITY REP AND ENGINEER OF RECORD IMMEDIATELY.
17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20. CONTRACTOR SHALL FURNISH AT&T MOBILITY AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T MOBILITY REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL

- ALL ITEMS PROVIDED.
22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T MOBILITY REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MOBILITY MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
 23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH AT&T MOBILITY SPECIFICATIONS AND REQUIREMENTS.
 24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO AT&T MOBILITY FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
 25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO AT&T MOBILITY SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
 26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
 27. CONTRACTOR SHALL NOTIFY AT&T MOBILITY REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
 28. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
 29. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLIGENCE ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLIGENCE ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
 30. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE AT&T MOBILITY REP. ANY WORK FOUND BY THE AT&T MOBILITY REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
 31. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
 32. AT&T MOBILITY FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE AT&T MOBILITY WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNGRATED, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.
 33. AT&T MOBILITY OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO AT&T MOBILITY OR THEIR ARCHITECT/ENGINEER.

SPECIAL CONSTRUCTION

ANTENNA INSTALLATION NOTES:

1. WORK INCLUDED:
 - A. ANTENNA AND COAXIAL CABLES ARE FURNISHED BY AT&T MOBILITY UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL AND
 - B. INSTALL ANTENNA AS INDICATE ON DRAWINGS AND AT&T MOBILITY SPECIFICATIONS.
 - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS
 - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE AND PROVIDE PRINTOUT OF THAT TEST.
 - E. CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF SWEEP TESTS USING ANRITZU-PACKARD 8713B RF SCALAR NETWORK ANALYZER. SUBMIT FREQUENCY DOMAIN REFLECTOMETER(FDR) TESTS RESULTS TO THE PROJECT MANAGER. SWEEP TESTS SHALL BE AS PER ATTACHED RFS "MINIMUM FIELD TESTING RECOMMENDED FOR ANTENNA AND HELIAX COAXIAL CABLE SYSTEMS" DATED 10/5/93. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE AND BE BOUND AND SUBMITTED WITHIN ONE WEEK OF WORK COMPLETION.
 - F. INSTALL COAXIAL CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
 - G. ANTENNA AND COAXIAL CABLE GROUNDING:
2. ALL EXTERIOR #6 GREED GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE

WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.

3. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)

ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN. FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR APPROVAL FROM ATC ENGINEERING SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.



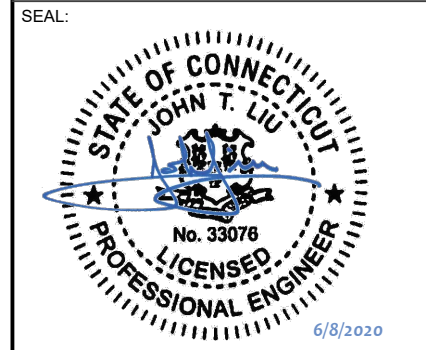
TOGETHER PLANNING A BETTER TOMORROW
 158 BUSINESS CENTER DRIVE
 BIRMINGHAM, AL 35244
 TEL: 205-252-6985 FAX: 205-320-1504

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	ZDS	06/08/20

ATC SITE NUMBER:
302485

ATC SITE NAME:
MDFD - MIDDLEFIELD

SITE ADDRESS:
 134 KICKAPOO ROAD
 MIDDLEFIELD, CT 06455-1334



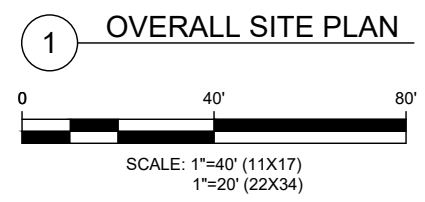
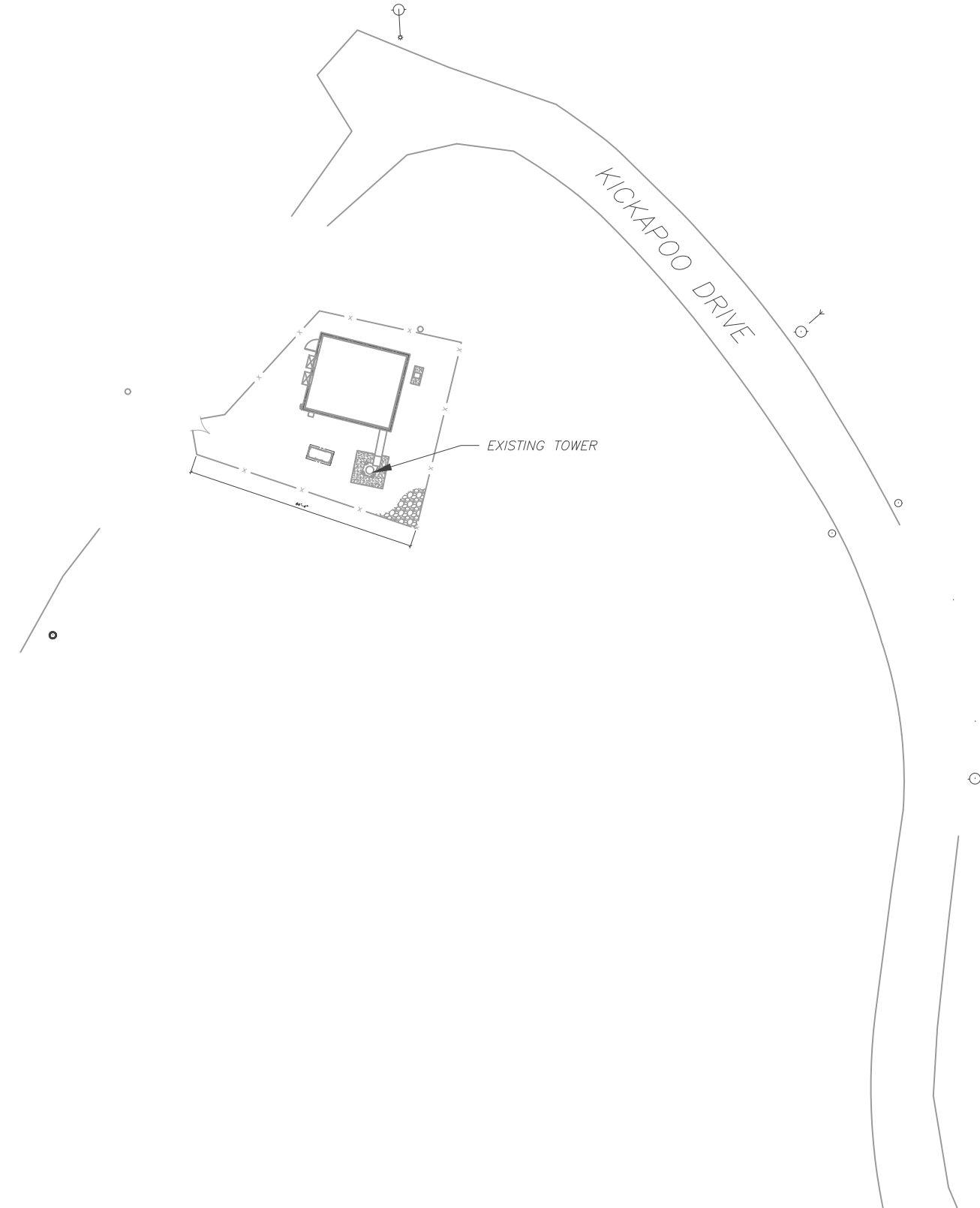
DATE DRAWN:	05/01/20
ATC JOB NO:	367078
CUSTOMER ID:	10034970
CUSTOMER #:	MRCTB045372

GENERAL NOTES

SHEET NUMBER: G-002	REVISION: 0
-------------------------------	-----------------------

Copyright © 2020 ATC IP, LLC. All Rights Reserved.

- NOTES:
1. BOUNDARY LINES OBTAINED FROM JURISDICTION ONLINE GIS.
 2. ZONING INFORMATION OBTAINED FROM JURISDICTION ZONING ORDINANCE.



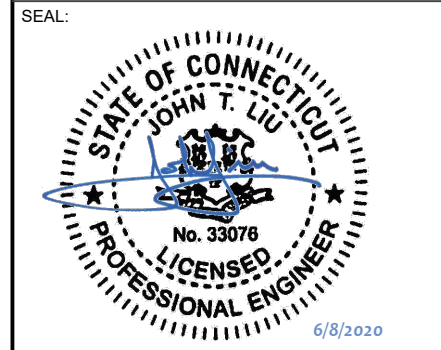
SMW
ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW
158 BUSINESS CENTER DRIVE
BIRMINGHAM, AL 35244
TEL: 205-252-6985 FAX: 205-320-1504

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	ZDS	06/08/20

ATC SITE NUMBER:
302485

ATC SITE NAME:
MDFD - MIDDLEFIELD

SITE ADDRESS:
134 KICKAPOO ROAD
MIDDLEFIELD, CT 06455-1334



DATE DRAWN:	05/01/20
ATC JOB NO:	367078
CUSTOMER ID:	10034970
CUSTOMER #:	MRCTB045372

OVERALL SITE PLAN

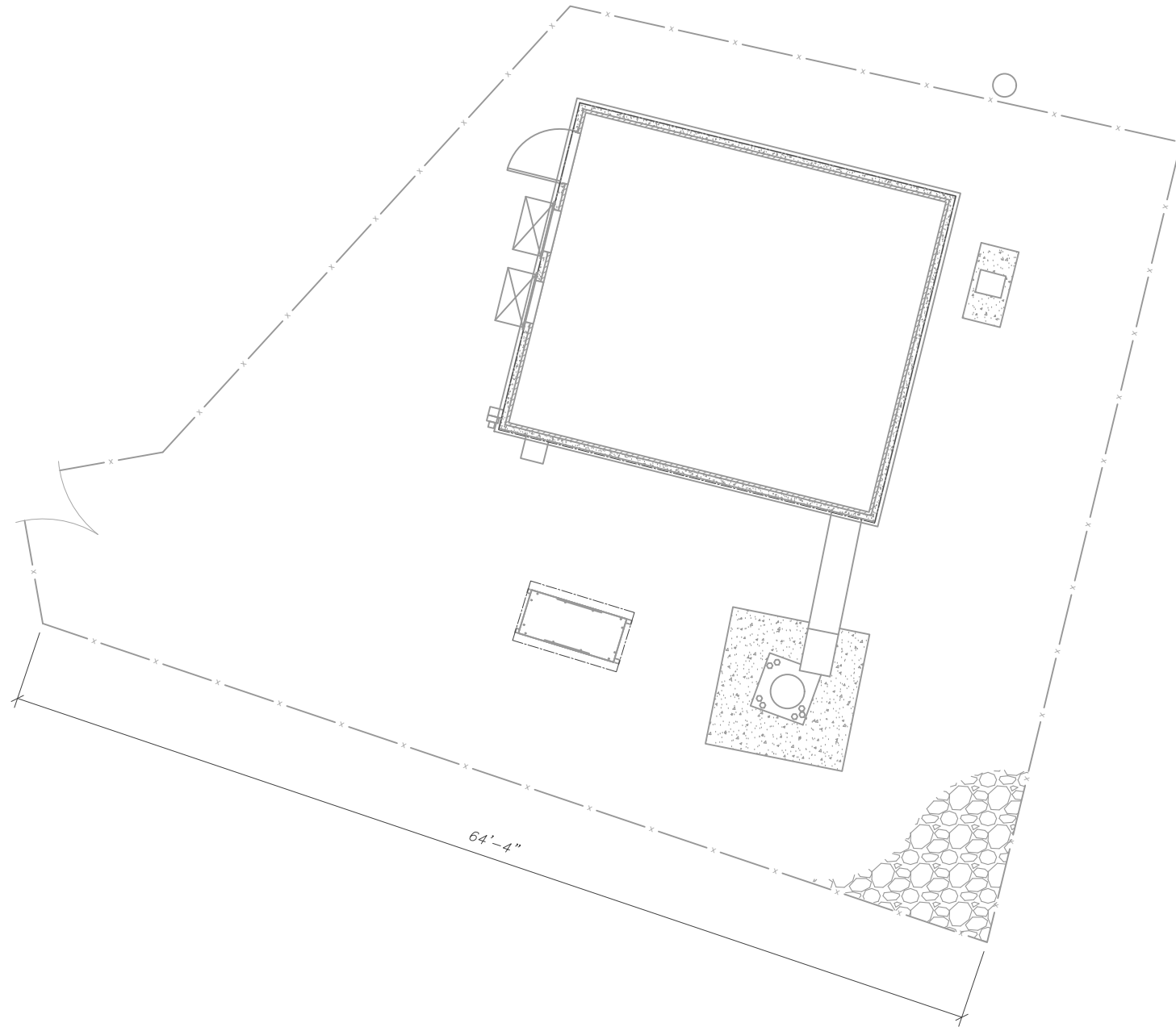
SHEET NUMBER: C-001	REVISION: 0
-------------------------------	-----------------------

Copyright © 2020 ATC IP, LLC. All Rights Reserved.

SITE PLAN NOTES:

1. 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.
2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED 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.
3. THIS PROJECT INCLUDES NO INSTALL OR MODIFICATION AT GRADE.

LEGEND	
⊗	GROUNDING TEST WELL
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACAL
HH, V	HAND HOLE, VAULT
IB	ICE BRIDGE
K	KENTROX BOX
LC	LIGHTING CONTROL
M	METER
PB	PULL BOX
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
— x —	CHAINLINK FENCE



PROPOSED CABLE LENGTH:

1. ESTIMATED LENGTH OF PROPOSED CABLE IS 87'. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES), CDS DEFER TO GREATEST CABLE LENGTH.
2. ROUTE PROPOSED 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 EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.




AMERICAN TOWER®



SMW
ENGINEERING GROUP, INC.

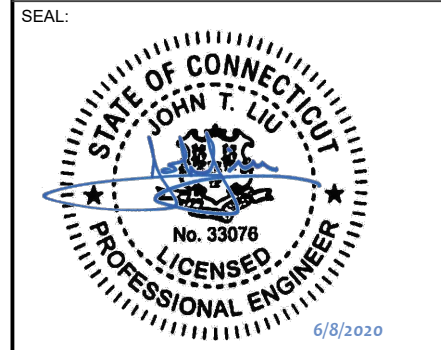
TOGETHER PLANNING A BETTER TOMORROW
158 BUSINESS CENTER DRIVE
BIRMINGHAM, AL 35244
TEL: 205-252-6985 FAX: 205-320-1504

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	ZDS	06/08/20

ATC SITE NUMBER:
302485

ATC SITE NAME:
MDFD - MIDDLEFIELD

SITE ADDRESS:
134 KICKAPOO ROAD
MIDDLEFIELD, CT 06455-1334



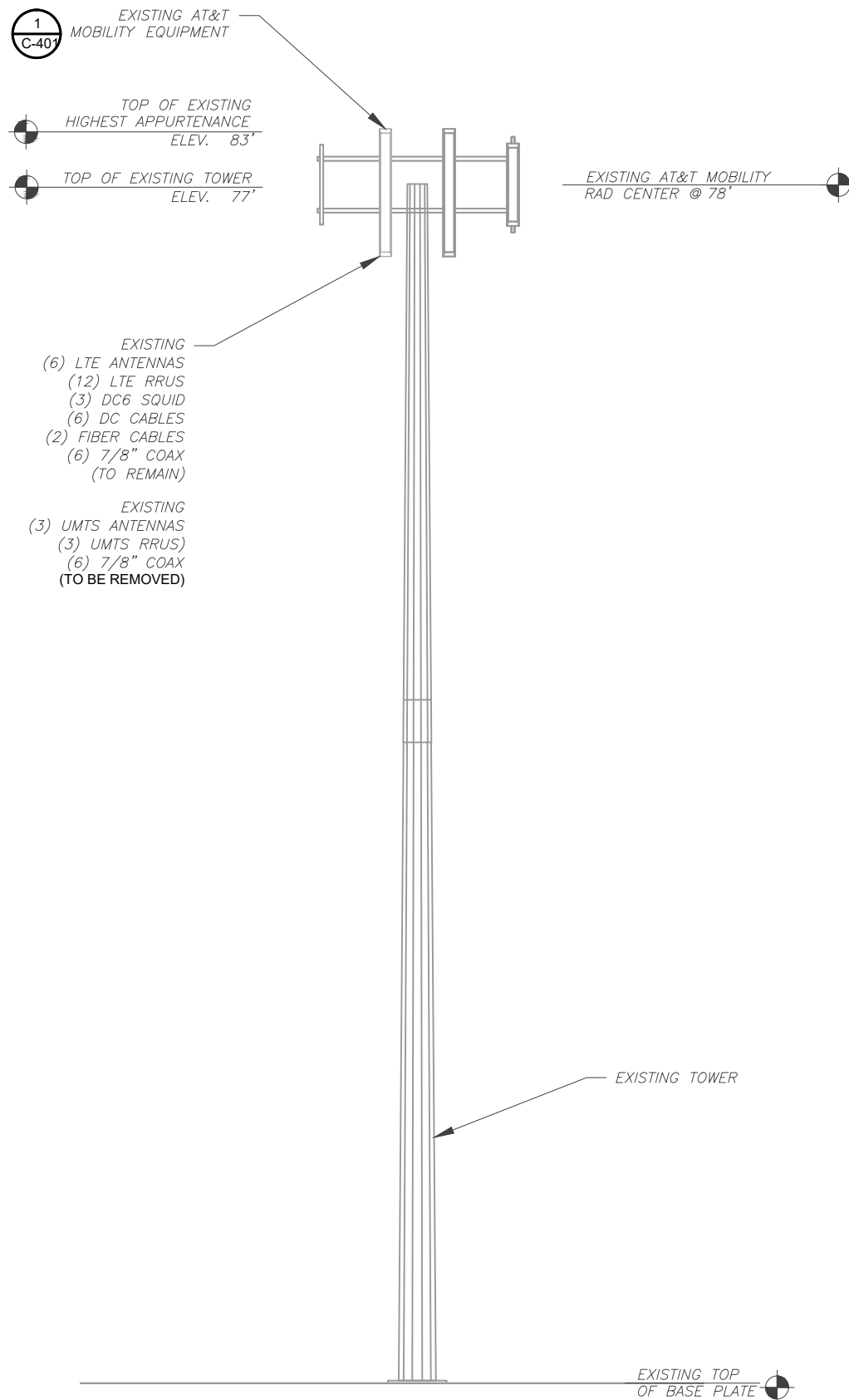
DATE DRAWN:	05/01/20
ATC JOB NO:	367078
CUSTOMER ID:	10034970
CUSTOMER #:	MRCTB045372

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	0

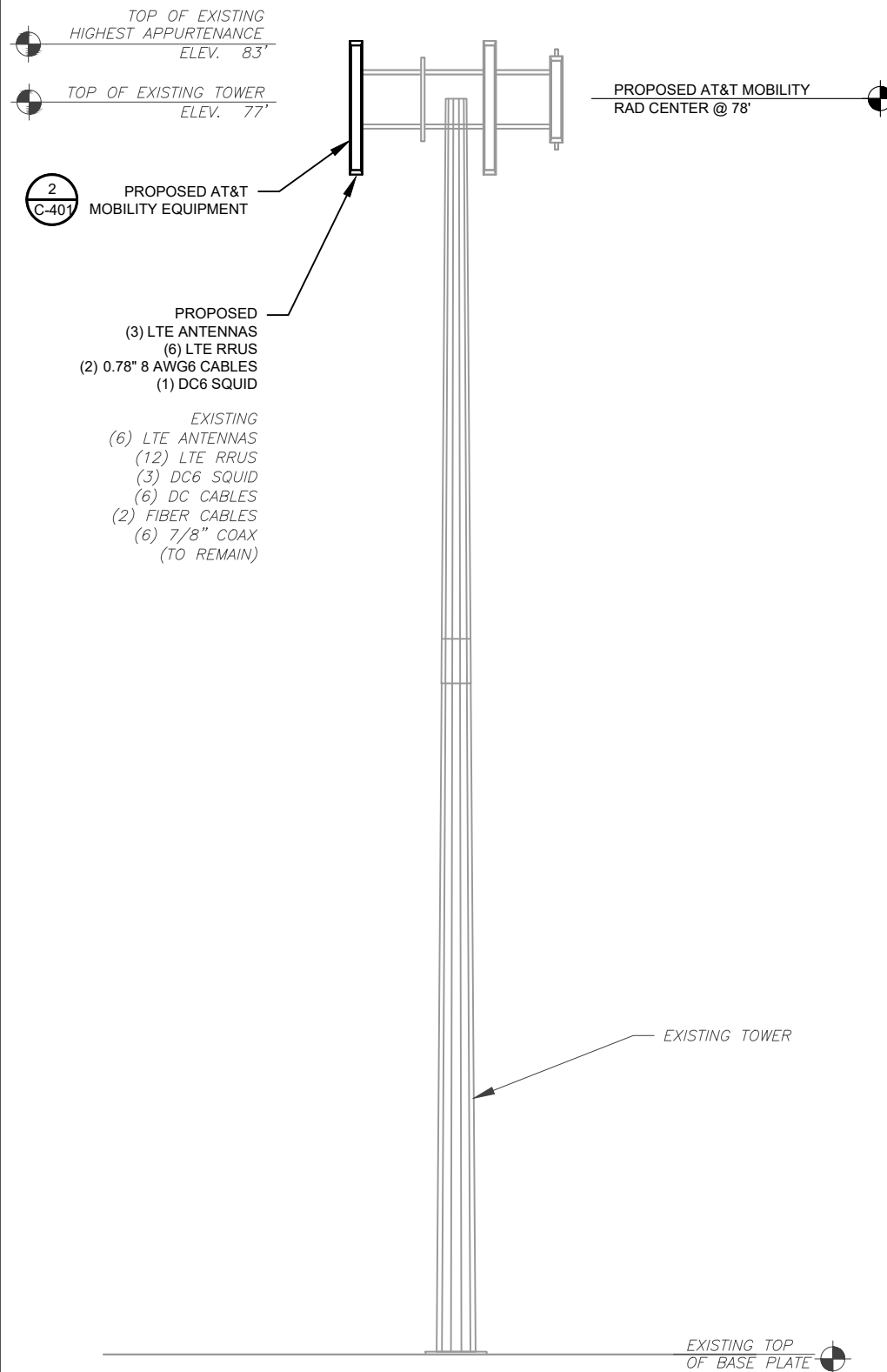
Copyright © 2020 ATC IP, LLC. All Rights Reserved.

EXISTING AND FINAL CONFIGURATIONS ARE BASED ON RFDS. CONTRACTOR TO VERIFY EXISTING CONDITIONS.



1 EXISTING TOWER ELEVATION
SCALE: 1"=10'

PER MOUNT ANALYSIS COMPLETED BY AMERICAN TOWER CORPORATION, DATED 04/21/20, THE EXISTING MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING



2 FINAL TOWER ELEVATION
SCALE: 1"=10'

TOWER NOTE:

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE AMERICAN TOWER CONSTRUCTION MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
- TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)

SCOPE OF WORK:

- WHEN STACKING CABLES 3 OR MORE DEEP, USE STACKABLE SNAP-INS, TALLEY PART NUMBER SSH-158-3 (OR ENGINEER APPROVED EQUAL).
- CONTRACTOR SHALL CONFIRM THE FINAL CABLE ROUTING PLAN WITH THE STRUCTURAL ANALYSIS.

COAXIAL CABLE NOTES:

- CONTRACTOR SHALL CONFIRM COAX COLOR CODING PRIOR TO CONSTRUCTION. REFER TO "ANTENNA SYSTEM LABELING STANDARD" ND-00027 LATEST VERISON.
- CONTRACTOR SHALL WEATHERPROOF ALL ANTENNA CONNECTORS WITH SELF AMALGAMATING TAPE. WEATHERPROOFING SHALL BE COMPLETED IN STRICT ACCODRANCE WITH AT&T STANDARDS.
- CONTRACTOR SHALL GROUND ALL EQUIPMENT. INCLUDING ANTENNAS, RET MOTORS, TMA'S, COAX CABLES, AND RET CONTROL CBALES AS A COMPLETE SYTEM. GROUNDING SHALL BE EXECUTED BY QUALIFIED WIREMEN IN COMPLIANCE WITH MANUFACTURER'S SPECIFICATION AND RECOMMENDATION.
- CONTRACTOR TO VERIFY THAT EXISTING COAX HANGERS ARE STACKABLE SNAP IN HANGERS. IF EXISTING HANGERS ARE NOT STACKABLE SNAP IN HANGERS THE CONTRACTOR SHALL REPLACE EXISTING HANGERS WITH NEW SNAP IN HANGERS IF APPLICABLE.



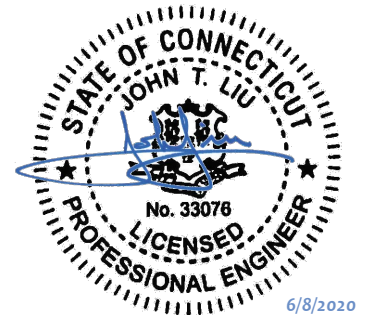
TOGETHER PLANNING A BETTER TOMORROW
158 BUSINESS CENTER DRIVE
BIRMINGHAM, AL 35244
TEL: 205-252-6985 FAX: 205-320-1504

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	ZDS	06/08/20

ATC SITE NUMBER:
302485
ATC SITE NAME:
MDFD - MIDDLEFIELD

SITE ADDRESS:
134 KICKAPOO ROAD
MIDDLEFIELD, CT 06455-1334

SEAL:

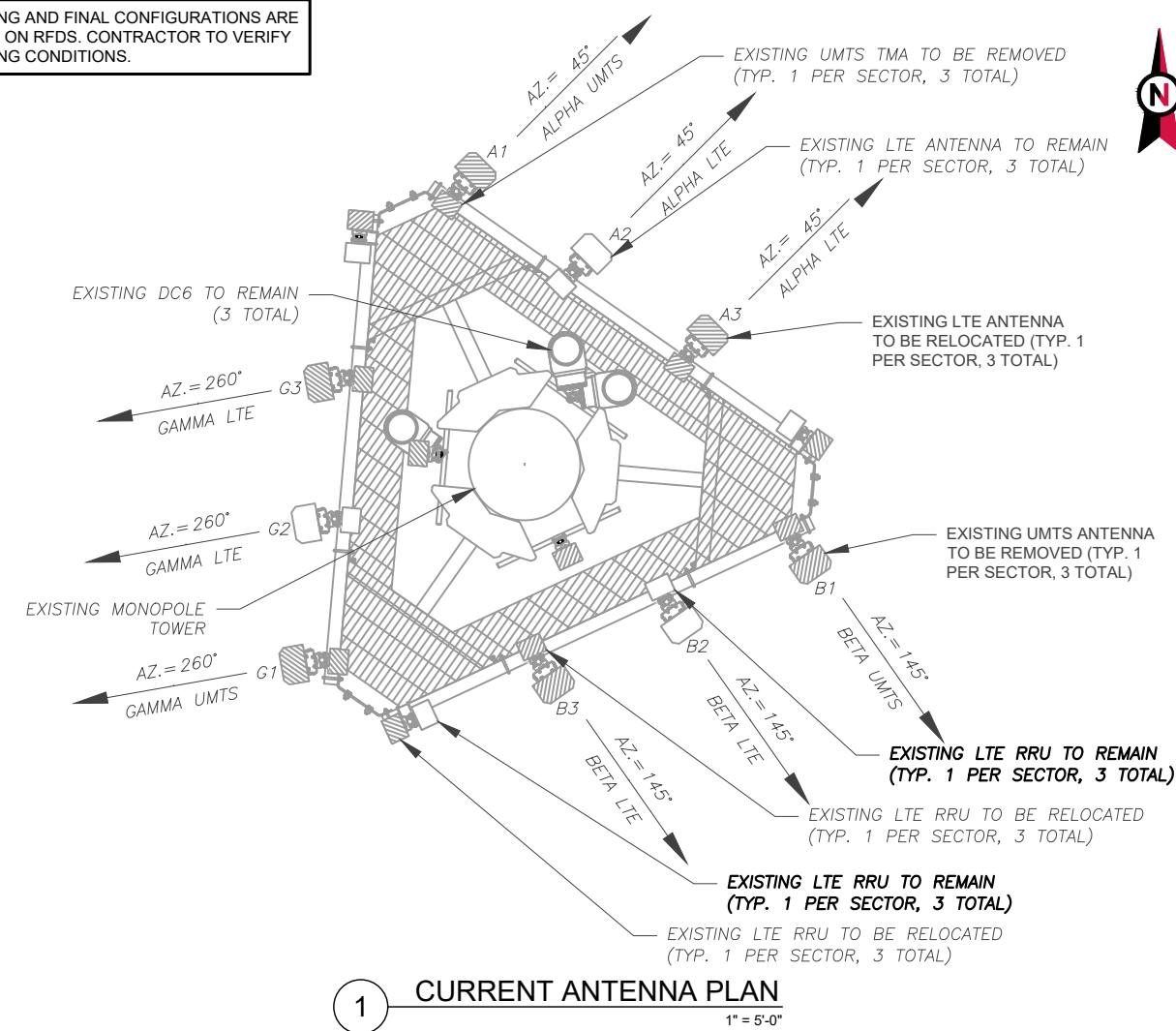


DATE DRAWN:	05/01/20
ATC JOB NO:	367078
CUSTOMER ID:	10034970
CUSTOMER #:	MRCTB045372

TOWER ELEVATION

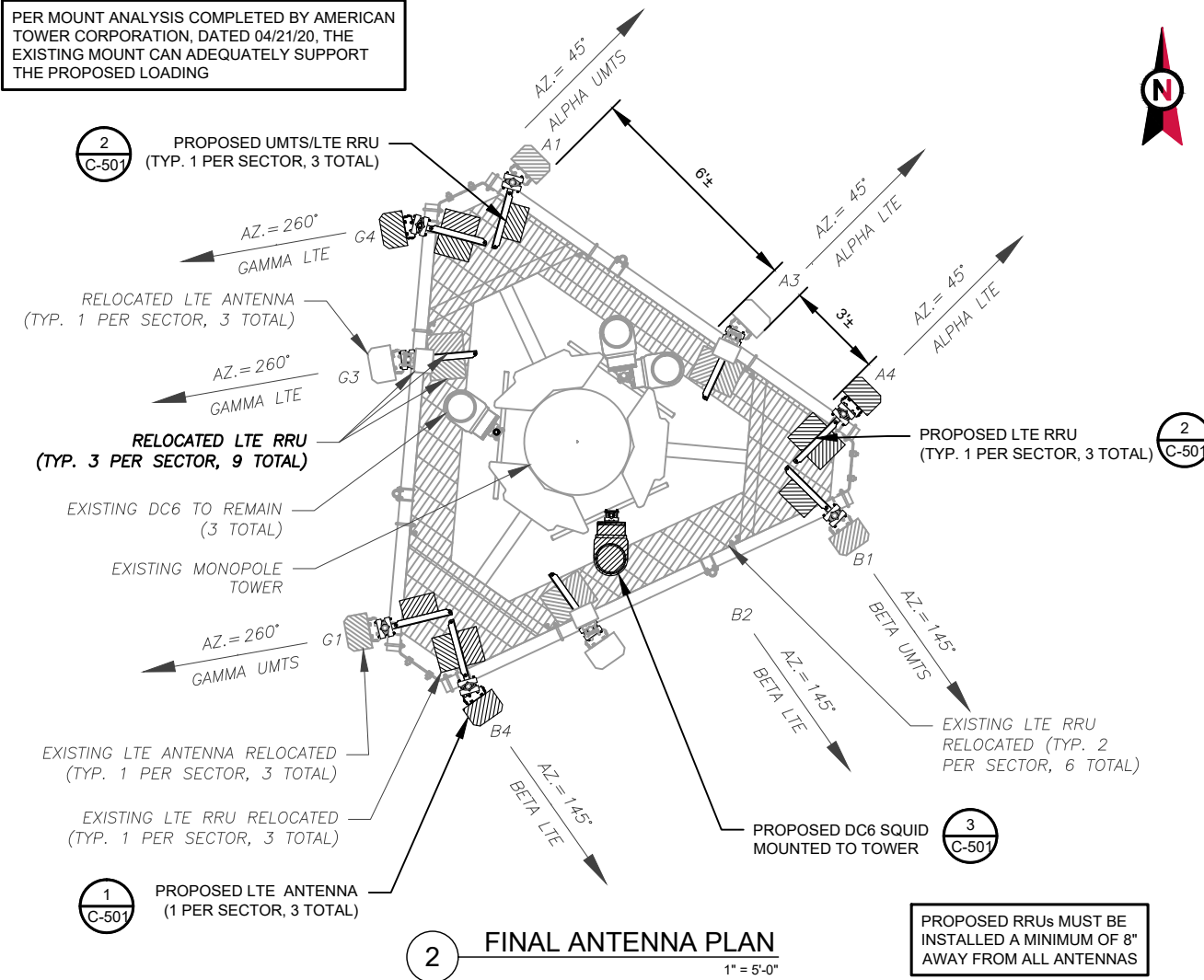
SHEET NUMBER:	REVISION:
C-201	0

EXISTING AND FINAL CONFIGURATIONS ARE BASED ON RFDS. CONTRACTOR TO VERIFY EXISTING CONDITIONS.



1 CURRENT ANTENNA PLAN
1" = 5'-0"

PER MOUNT ANALYSIS COMPLETED BY AMERICAN TOWER CORPORATION, DATED 04/21/20, THE EXISTING MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING



2 FINAL ANTENNA PLAN
1" = 5'-0"

PROPOSED RRUs MUST BE INSTALLED A MINIMUM OF 8" AWAY FROM ALL ANTENNAS

FINAL ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	77'	45°	A1	POWERWAVE 7770	UMTS	RMV	LGP21401 TMA	RMV
			A2	CCI TPA-65R-LCUUUU-H8	LTE	RMN	RRUS-32 B66A	RMN
			A3	CCI HPA-65R-BUU-H8	LTE	REL	RRUS-32 B30	REL
			A4	-	-	-	RRUS-32 B2	RMN
BETA	77'	145°	B1	POWERWAVE 7770	UMTS	RMV	LGP21401 TMA	RMV
			B2	CCI TPA-65R-LCUUUU-H8	LTE	RMN	RRUS-32 B66A	RMN
			B3	CCI HPA-65R-BUU-H8	LTE	REL	RRUS-32 B30	REL
			B4	-	-	-	RRUS-32 B2	RMN
GAMMA	77'	260°	C1	POWERWAVE 7770	UMTS	RMV	LGP21401 TMA	RMV
			C2	CCI TPA-65R-LCUUUU-H8	LTE	RMN	RRUS-32 B66A	RMN
			C3	CCI HPA-65R-BUU-H8	LTE	REL	RRUS-32 B30	REL
			C4	-	-	-	RRUS-32 B2	RMN

- NOTES
- BASED ON APPROVED ATC APPLICATION 367078, DATED 04/16/20. CONFIRM WITH AT&T MOBILITY REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.
 - ATC HAS NOT YET VERIFIED ANY EXISTING ANTENNA CONFIG OR MOUNT CONFIG. CONTRACTOR TO VERIFY MOUNT CONFIG HAS SUFFICIENT SPACE FOR PROPOSED LESSEE EQUIPMENT (EQUIP) (I.E. CLEARANCES, MOUNT PIPE, SUFFICIENT LENGTH, ETC.) ATC DID NOT ANALYZE ANTENNA MOUNT TO DETERMINE ADEQUATE STRUCTURAL CAPACITY FOR ANY LESSEE LOADING.
 - ALL PROPOSED EQUIP INCLUDING ANTENNAS, COAX, ETC. SHALL BE MOUNTED IN ACCORDANCE WITH THE TOWER STRUCTURAL ANALYSIS ON FILE WITH ATC'S CM.
 - CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.
 - POSITIONS START WITH FIRST PIPE ON THE LEFT SIDE (AS VIEWED FROM BEHIND THE MOUNT).

FINAL ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	77'	45°	A1	CCI HPA-65R-BUU-H8	LTE	REL	RRUS-32 B2	REL
			A2	-	-	-	-	-
			A3	CCI TPA-65R-LCUUUU-H8	LTE	REL	RRUS-32 B66A	REL
			A4	CCI DMP65R-BU8D	LTE	ADD	RRUS-32 B30	REL
BETA	77'	145°	B1	CCI HPA-65R-BUU-H8	LTE	REL	RRUS-32 B2	REL
			B2	-	-	-	-	-
			B3	CCI TPA-65R-LCUUUU-H8	LTE	REL	RRUS-32 B66A	REL
			B4	CCI DMP65R-BU8D	LTE	ADD	RRUS-32 B30	REL
GAMMA	77'	260°	C1	CCI HPA-65R-BUU-H8	LTE	REL	RRUS-32 B2	REL
			C2	-	-	-	-	-
			C3	CCI TPA-65R-LCUUUU-H8	LTE	REL	RRUS-32 B66A	REL
			C4	CCI DMP65R-BU8D	LTE	ADD	RRUS-32 B30	REL

EXISTING FIBER DISTRIBUTION/SQUID						EXISTING CABLING SUMMARY					
MODEL NUMBER	STATUS	COAX	DC	FIBER	STATUS	MODEL NUMBER	STATUS	COAX	DC	FIBER	STATUS
DC6-48-60-18-8F	RMN	6	6	2	RMN						
-	-	6	-	-	RMV						

STATUS ABBREVIATIONS

RMV: TO BE REMOVED
 RMN: TO REMAIN
 REL: TO BE RELOCATED
 DSC: TO BE DISCONNECTED & REMAIN
 ADD: TO BE ADDED

3 EQUIPMENT SCHEDULES

CABLE LENGTHS FOR JUMPERS
 FIBER DISTRIBUTION/SQUID TO RRU: 15'
 RRU TO ANTENNA: 10'

FINAL FIBER DISTRIBUTION/SQUID						FINAL CABLING SUMMARY					
MODEL NUMBER	STATUS	COAX	DC	FIBER	STATUS	MODEL NUMBER	STATUS	COAX	DC	FIBER	STATUS
DC6-48-60-18-8F	RMN	6	6	2	RMN						
DC6-48-60-0-8C	ADD	-	2	-	ADD						



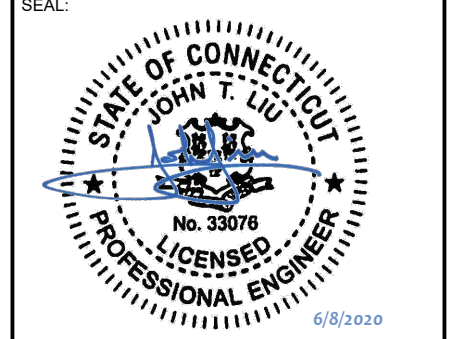
SMW
 ENGINEERING GROUP, INC.
 TOGETHER PLANNING A BETTER TOMORROW
 158 BUSINESS CENTER DRIVE
 BIRMINGHAM, AL 35244
 TEL: 205-252-6985 FAX: 205-320-1504

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	ZDS	06/08/20

ATC SITE NUMBER:
302485

ATC SITE NAME:
MDFD - MIDDLEFIELD

SITE ADDRESS:
 134 KICKAPOO ROAD
 MIDDLEFIELD, CT 06455-1334

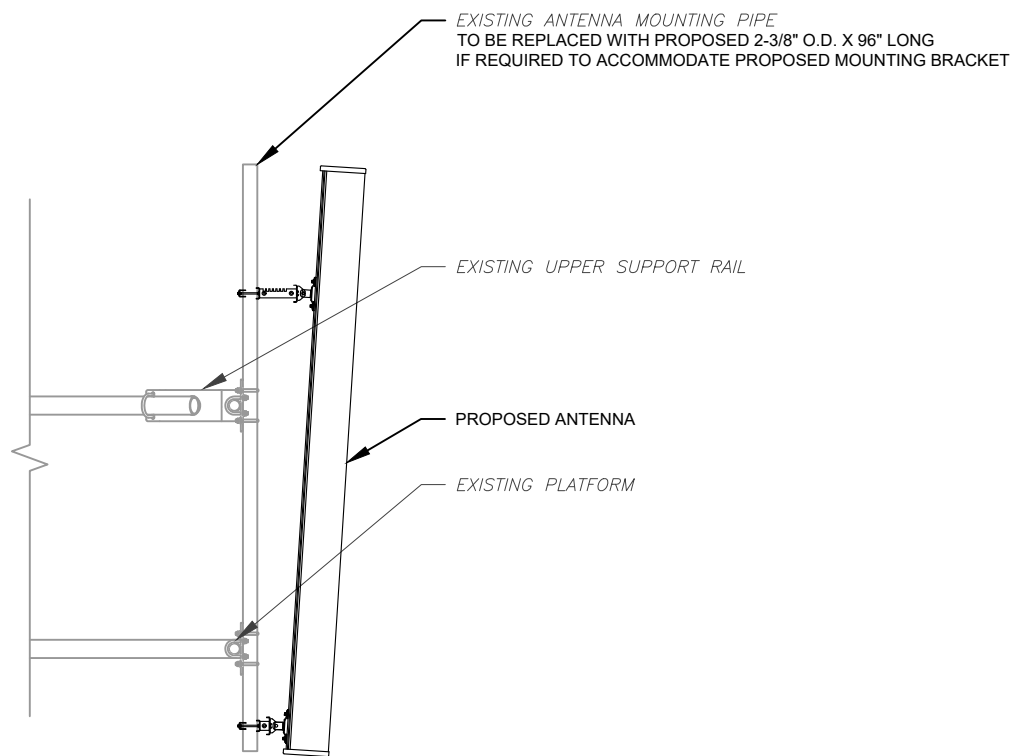


DATE DRAWN:	05/01/20
ATC JOB NO:	367078
CUSTOMER ID:	10034970
CUSTOMER #:	MRCTB045372

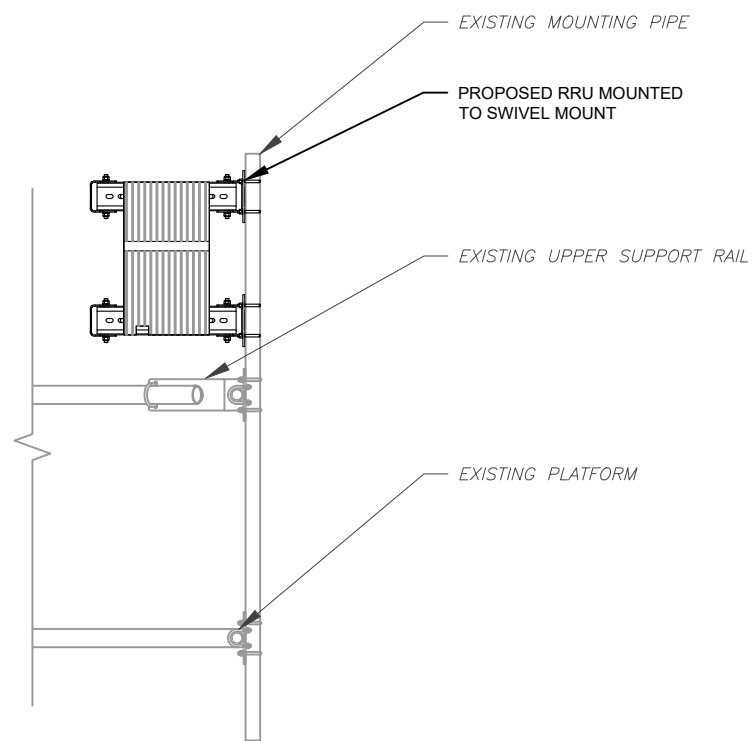
RF SCHEDULE AND ANTENNA INSTALLATION

SHEET NUMBER:
C-401

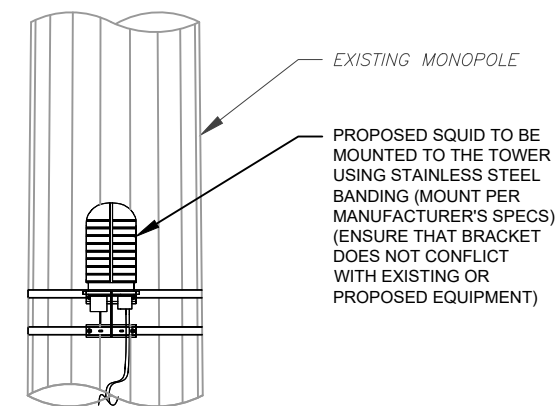
REVISION:
0



1 ANTENNA DETAIL
SCALE: N.T.S.



2 RRU DETAIL
SCALE: N.T.S.



3 PROPOSED SQUID MOUNTING
SCALE: NOT TO SCALE



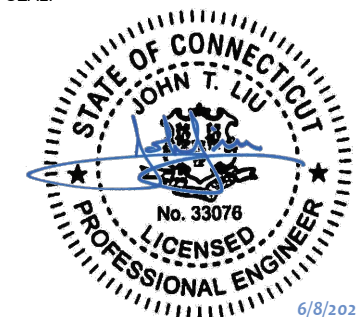
TOGETHER PLANNING A BETTER TOMORROW
158 BUSINESS CENTER DRIVE
BIRMINGHAM, AL 35244
TEL: 205-252-6985 FAX: 205-320-1504

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	ZDS	06/08/20

ATC SITE NUMBER:
302485
ATC SITE NAME:
MDFD - MIDDLEFIELD

SITE ADDRESS:
134 KICKAPOO ROAD
MIDDLEFIELD, CT 06455-1334

SEAL:



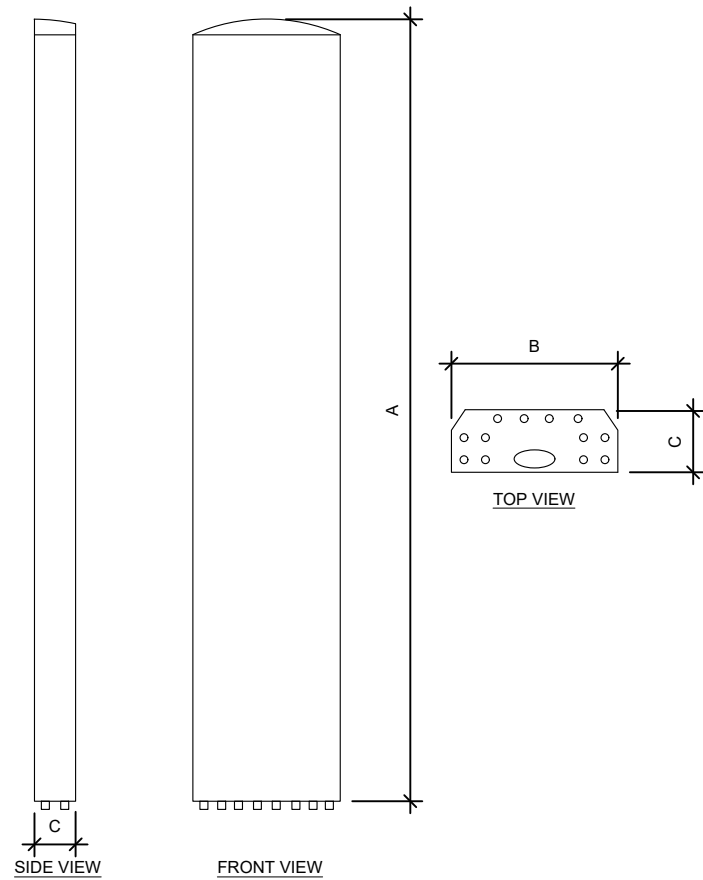
DATE DRAWN:	05/01/20
ATC JOB NO:	367078
CUSTOMER ID:	10034970
CUSTOMER #:	MRCTB045372

CONSTRUCTION
DETAILS

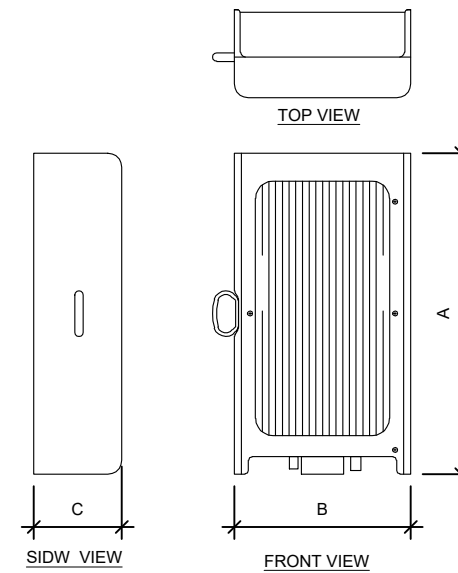
SHEET NUMBER:
C-501

REVISION:
0

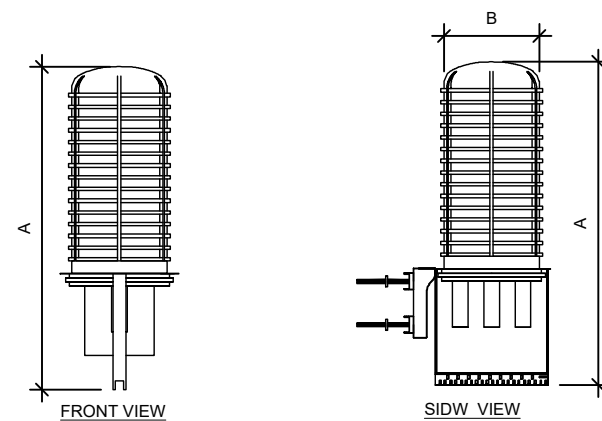
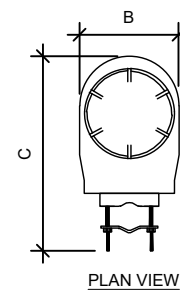
Copyright © 2020 ATC IP, LLC. All Rights Reserved.



ANTENNA SPECIFICATIONS				
ANTENNA MODEL	A	B	C	WEIGHT (LBS)
DMP65R-BU8D	96.0"	20.7"	7.7"	95.7



RRU SPECIFICATIONS				
RRU MODEL	A	B	C	WEIGHT (LBS)
4449 B5, B12	17.9"	13.2"	9.4"	71.0
RRUS 32 B2	27.2"	12.0"	7.0"	50.7"



RAYCAP SPECIFICATIONS				
RAYCAP MODEL	A	B	C	WEIGHT (LBS)
DC6-48-60-0-8C	23.5"	9.7"	9.7"	20.0

1 EQUIPMENT SPECIFICATIONS
SCALE: NOT TO SCALE

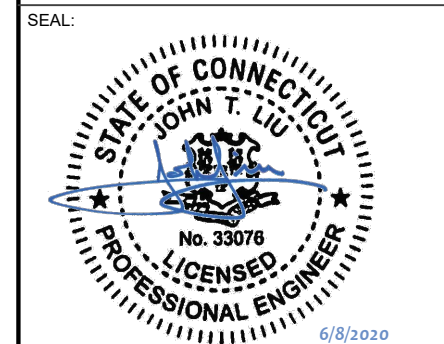


TOGETHER PLANNING A BETTER TOMORROW
158 BUSINESS CENTER DRIVE
BIRMINGHAM, AL 35244
TEL: 205-252-6985 FAX: 205-320-1504

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	ZDS	06/08/20

ATC SITE NUMBER:
302485
ATC SITE NAME:
MDFD - MIDDLEFIELD

SITE ADDRESS:
134 KICKAPOO ROAD
MIDDLEFIELD, CT 06455-1334

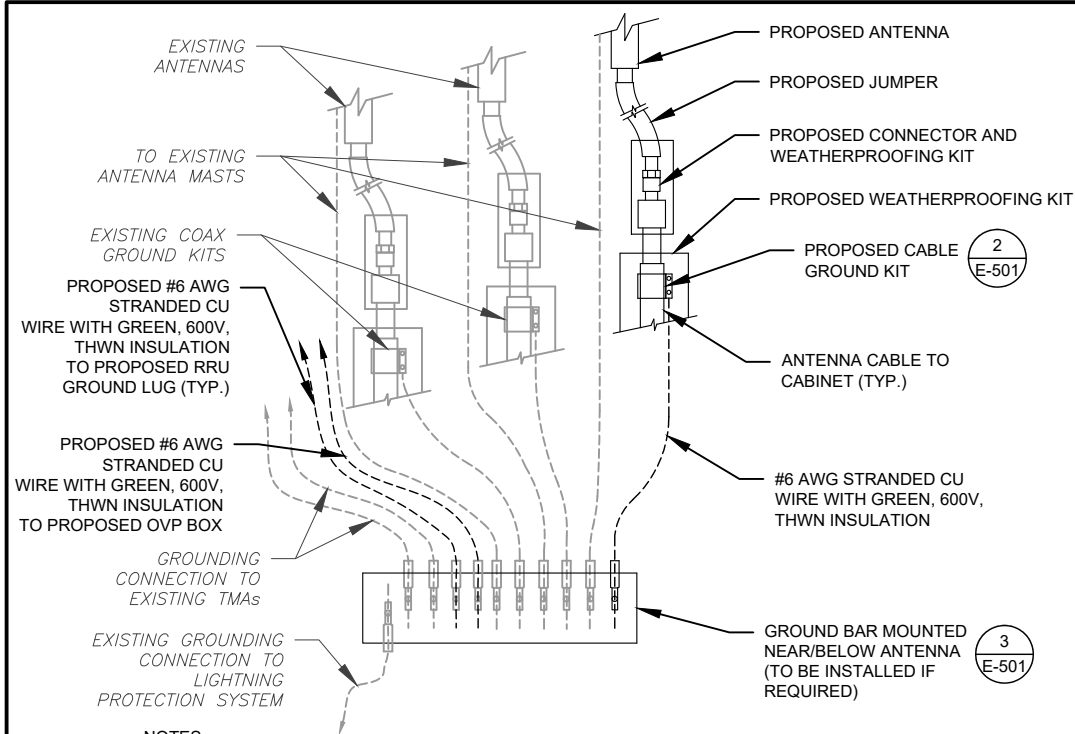


DATE DRAWN:	05/01/20
ATC JOB NO:	367078
CUSTOMER ID:	10034970
CUSTOMER #:	MRCTB045372

EQUIPMENT SPECIFICATIONS

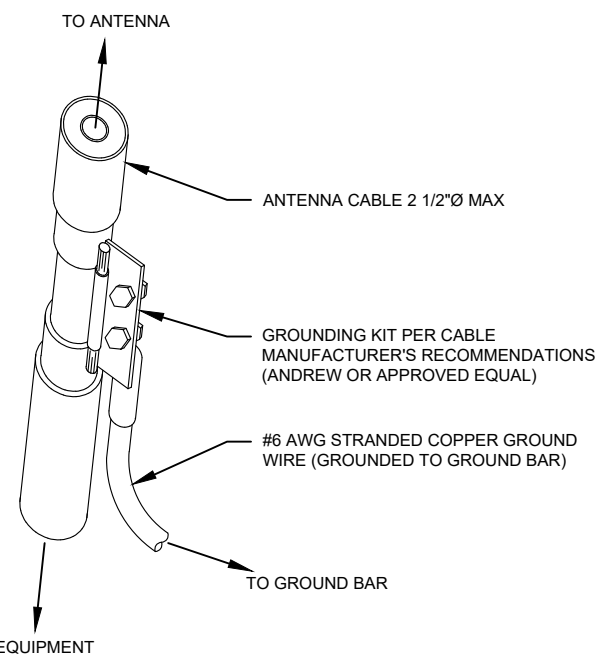
SHEET NUMBER:
C-502
REVISION:
0

Copyright © 2020 ATC IP, LLC. All Rights Reserved.



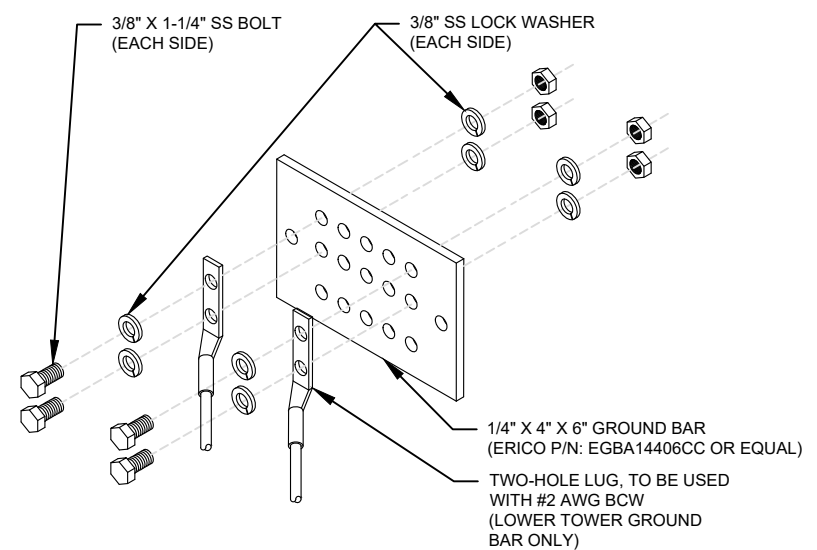
- NOTES:**
1. THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
 2. SITE GROUNDING SHALL COMPLY WITH AT&T MOBILITY GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH AT&T MOBILITY GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

1 TYPICAL ANTENNA GROUNDING DIAGRAM
SCALE: N.T.S.



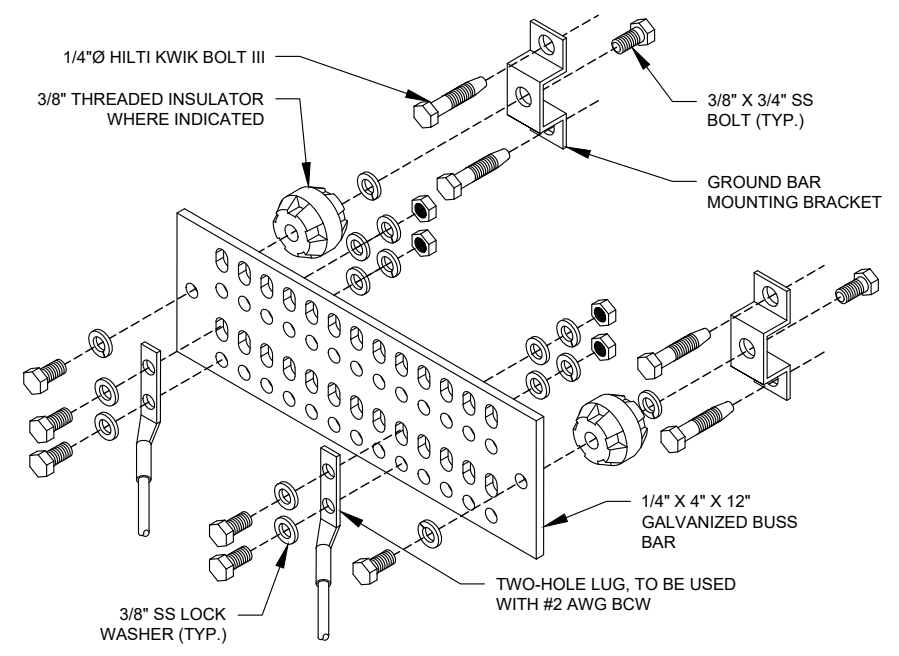
- GROUND KIT NOTES:**
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
 2. CONTRACTOR SHALL PROVIDE WEATHERPROOFING KIT (ANDREW PART NUMBER 221213) AND INSTALL/TAPE PER MANUFACTURER'S SPECIFICATIONS.

2 CABLE GROUND KIT CONNECTION DETAIL
SCALE: N.T.S.



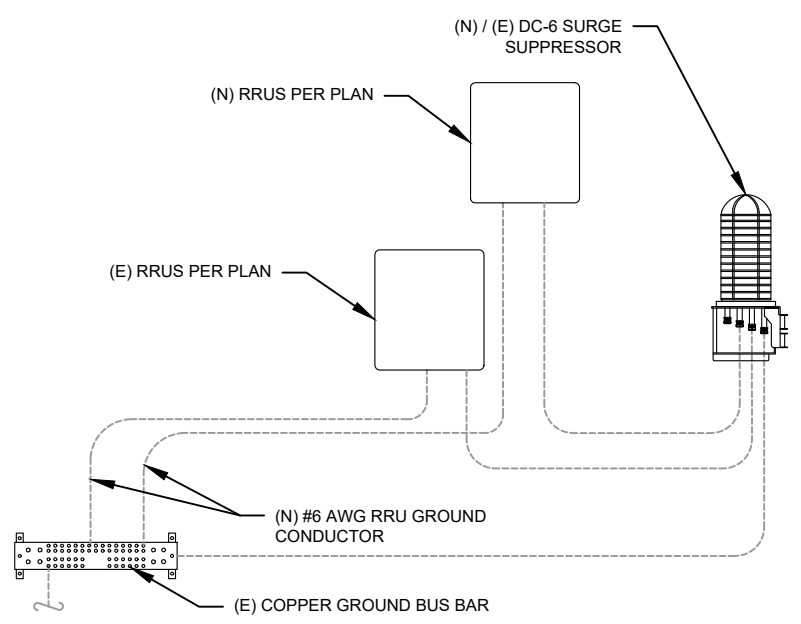
- GROUND BAR NOTES:**
1. GROUND BAR KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
 2. GROUND BAR TO BE BONDED DIRECTLY TO TOWER.

3 TOWER GROUND BAR DETAIL
SCALE: N.T.S.

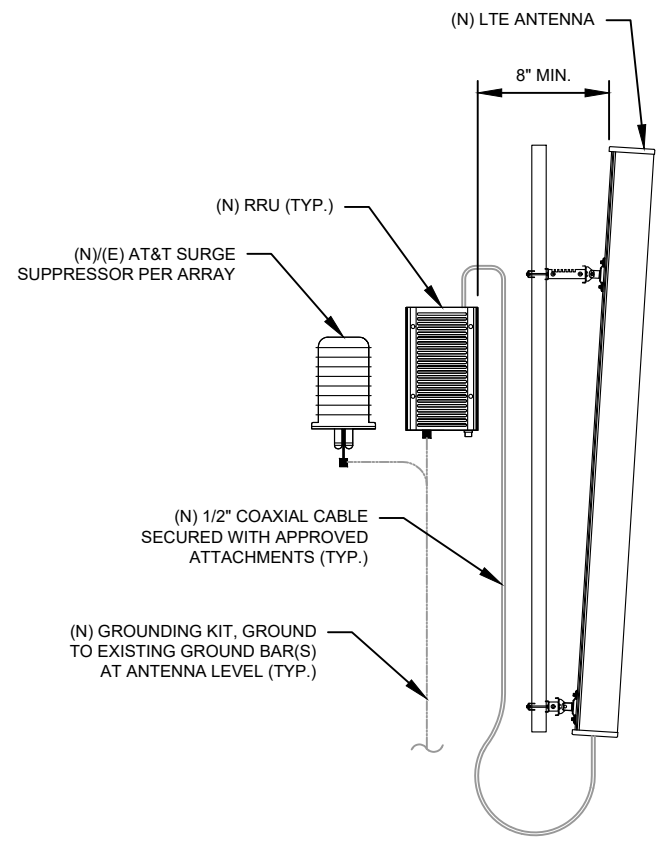


- GROUND BAR NOTES**
1. GROUND KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
 2. GROUND BAR SHALL BE BOLTED TO STRUCTURAL MEMBER OR ANCHORED TO CONCRETE SLAB W/ HILTI KWIK BOLT III.

4 MAIN GROUND BAR DETAIL
SCALE: N.T.S.



5 RRU GROUNDING
SCALE: N.T.S.



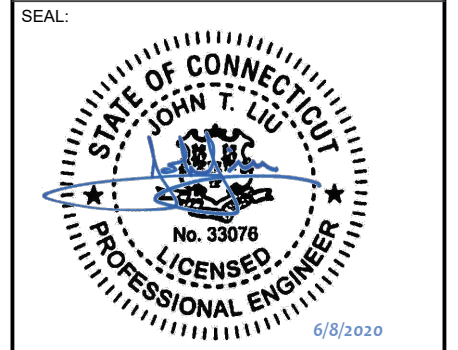
6 ANTENNA/RRU GROUNDING
SCALE: N.T.S.



TOGETHER PLANNING A BETTER TOMORROW
158 BUSINESS CENTER DRIVE
BIRMINGHAM, AL 35244
TEL: 205-252-6985 FAX: 205-320-1504

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	ZDS	06/08/20

ATC SITE NUMBER:
302485
ATC SITE NAME:
MDFD - MIDDLEFIELD
SITE ADDRESS:
134 KICKAPOO ROAD
MIDDLEFIELD, CT 06455-1334



DATE DRAWN:	05/01/20
ATC JOB NO:	367078
CUSTOMER ID:	10034970
CUSTOMER #:	MRCTB045372

GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-501	0

Copyright © 2020 ATC IP, LLC. All Rights Reserved.



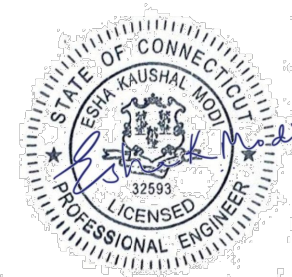
Eng. Number 13193668_C8_01
 April 21, 2020
 Page 1

Antenna Mount Analysis Report

ATC Site Name : Mdfd - Middlefield, CT
ATC Site Number : 302485
Engineering Number : 13193668_C8_01
Mount Elevation : 72 ft
Carrier : AT&T Mobility
Carrier Site Name : MRCTB045372
Carrier Site Number : CTL01016
Site Location : 134 Kikapoo Road
 Middlefield, CT 06455-1334
 41.51361111 , -72.7458
County : Middlesex
Date : April 21, 2020
Max Usage : 79%
Result : Pass

Prepared By:
 Rohith Koduru
 Structural Engineer

Reviewed By:



Authorized by "EOR"
 22 Apr 2020 06:57:39



COA: PEC.0001553

Introduction

The purpose of this report is to summarize results of the antenna mount analysis performed for AT&T Mobility at 72 ft.

Supporting Documents

Specifications Sheet	Site Pro 1 F3P-12-WLL, dated October 26, 2017
Radio Frequency Data Sheet	RFDS ID #10034970, dated November 29, 2019
Reference Photos	Site photos from 2019

Analysis

This antenna mount was analyzed using American Tower Corporation's Mount Analysis Program and RISA-3D

Basic Wind Speed:	119 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Codes:	ANSI/TIA-222-H
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:	Ss = 0.207, S1 = 0.055
Site Class:	D - Stiff Soil
Live Loads: *	Lm = 500 lbs

* Based on experience it has been determined that the maintenance load cases do not control over rigging load cases in platform mount analyses. Therefore, these load cases have been excluded from this analysis.

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.

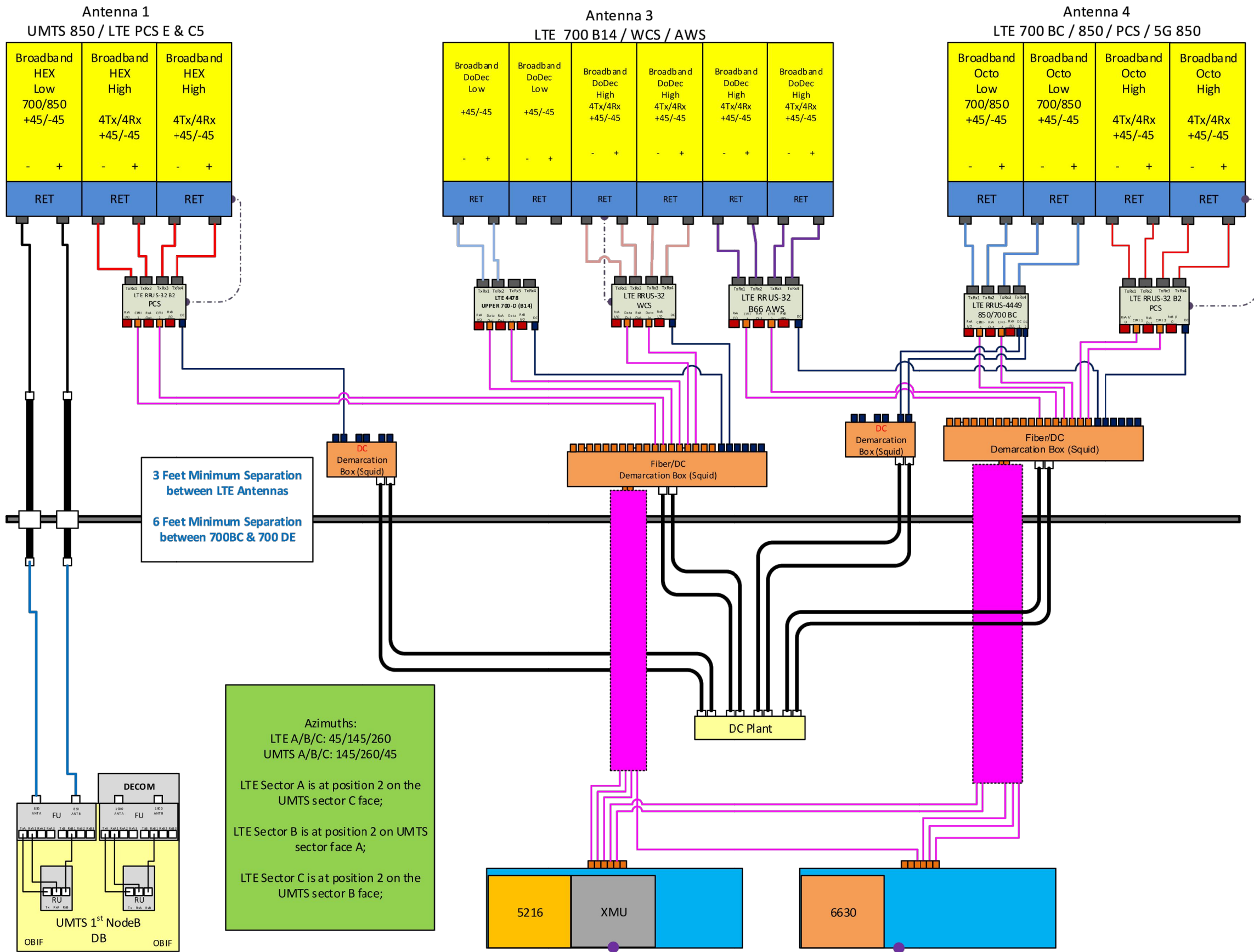
If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

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 CALCULATIONS AND DETAILS. SUPPLEMENTAL PAGES INCLUDED IN THE CONSTRUCTION DRAWINGS ARE FOR REFERENCE ONLY. GENERAL CONTRACTOR IS TO VERIFY THEY HAVE THE MOST RECENT MOUNT ANALYSIS PRIOR TO CONSTRUCTION.

SUPPLEMENTAL

SHEET NUMBER:
R-601

REVISION:
0



1 PLUMBING DIAGRAM
SCALE: NOT TO SCALE

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

SUPPLEMENTAL	
SHEET NUMBER: R-602	REVISION: 0

EXHIBIT 2



AMERICAN TOWER®
CORPORATION

Antenna Mount Analysis Report

ATC Site Name : Mdfd - Middlefield, CT
ATC Site Number : 302485
Engineering Number : 13193668_C8_01
Mount Elevation : 72 ft
Carrier : AT&T Mobility
Carrier Site Name : MRCTB045372
Carrier Site Number : CTL01016
Site Location : 134 Kikapoo Road
Middlefield, CT 06455-1334
41.51361111 , -72.7458
County : Middlesex
Date : April 21, 2020
Max Usage : 79%
Result : Pass

Prepared By:
Rohith Koduru
Structural Engineer

Reviewed By:



COA: PEC.0001553



Table of Contents

Introduction 1

Supporting Documents..... 1

Analysis..... 1

Conclusion..... 1

Antenna Loading..... 2

Structure Usages..... 2

Mount Layout 3

Equipment Layout 4

Standard Conditions8

Calculations Attached



Introduction

The purpose of this report is to summarize results of the antenna mount analysis performed for AT&T Mobility at 72 ft.

Supporting Documents

Specifications Sheet	Site Pro 1 F3P-12-WLL, dated October 26, 2017
Radio Frequency Data Sheet	RFDS ID #10034970, dated November 29, 2019
Reference Photos	Site photos from 2019

Analysis

This antenna mount was analyzed using American Tower Corporation's Mount Analysis Program and RISA-3D

Basic Wind Speed:	119 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Codes:	ANSI/TIA-222-H
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:	$S_s = 0.207$, $S_1 = 0.055$
Site Class:	D - Stiff Soil
Live Loads: *	$L_m = 500$ lbs

* Based on experience it has been determined that the maintenance load cases do not control over rigging load cases in platform mount analyses. Therefore, these load cases have been excluded from this analysis.

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 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.



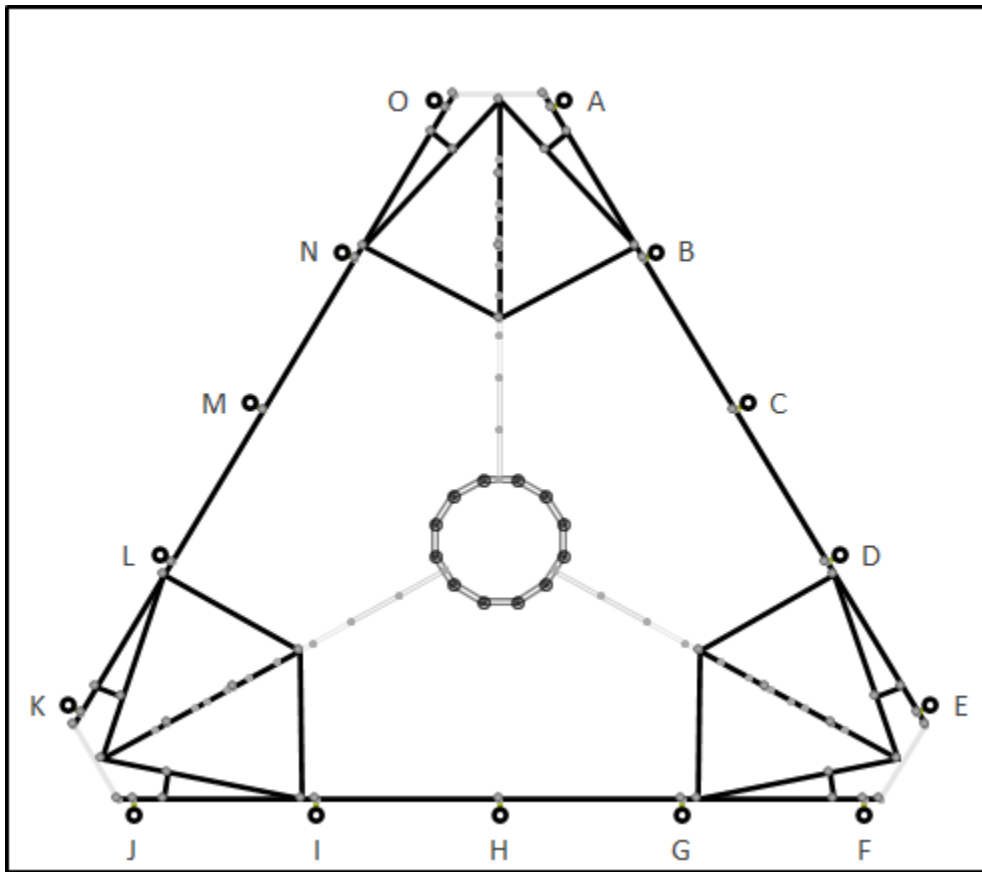
Application Loading

Mount Centerline (ft)	Antenna Centerline (ft)	Qty	Antenna Model
72.0	77.0	3	CCI DMP65R-BU8D
		3	CCI TPA-65R-LCUUUU-H8
		3	CCI HPA-65R-BUU-H8
		2	Raycap DC6-48-60-18-8F (23.5" Height)
		2	Raycap DC6-48-60-18-8F (23.5" Height)
		3	Ericsson RRUS 32 B30
		3	Ericsson RRUS 4449 B5, B12
		3	Ericsson RRUS 32 B66A
		6	Ericsson RRUS 32 B2
		3	Ericsson 4478 Band 14 (15" Height)

Structure Usages

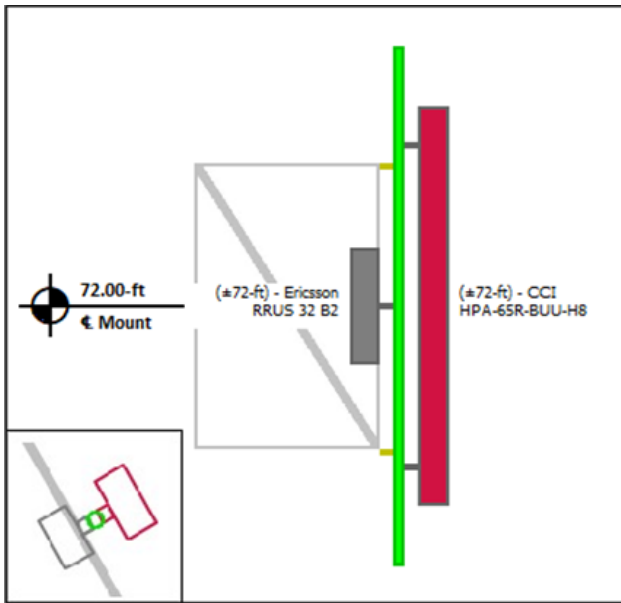
Structural Component	Controlling Usage	Pass/Fail
Horizontals	79%	Pass
Verticals	38%	Pass
Diagonals	28%	Pass
Mount Pipes	69%	Pass

Mount Layout

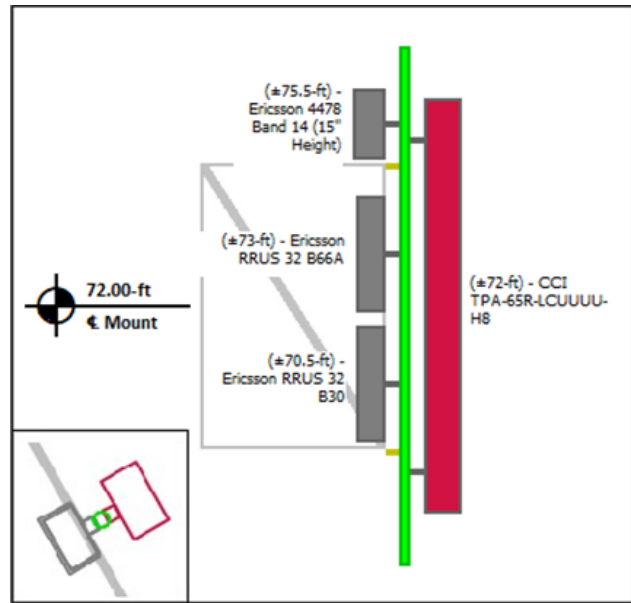


Equipment Layout

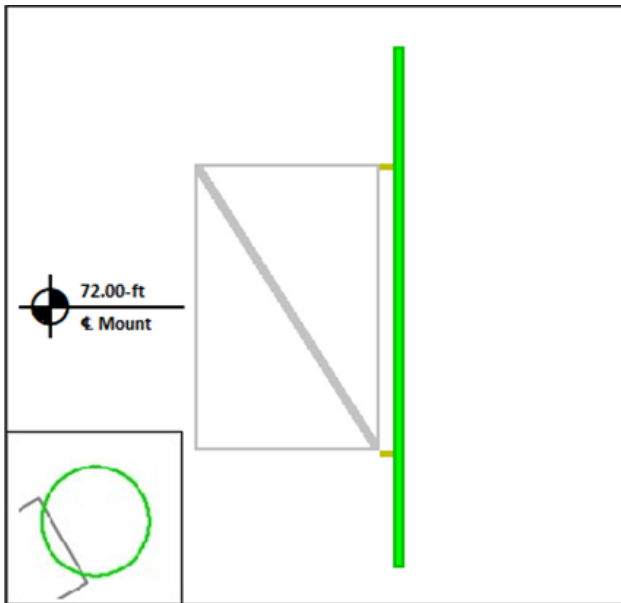
Mount Pipe A



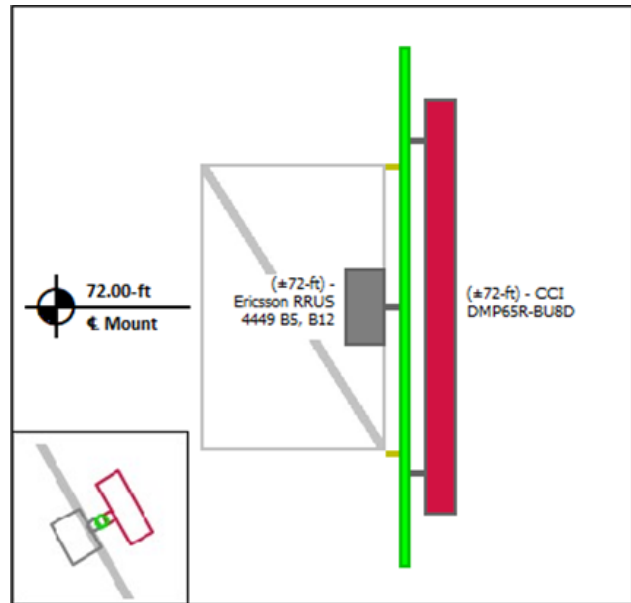
Mount Pipe B



Mount Pipe C

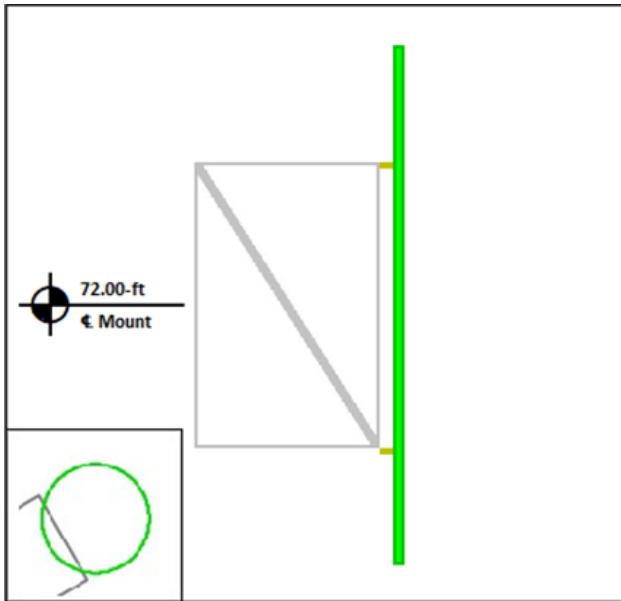


Mount Pipe D

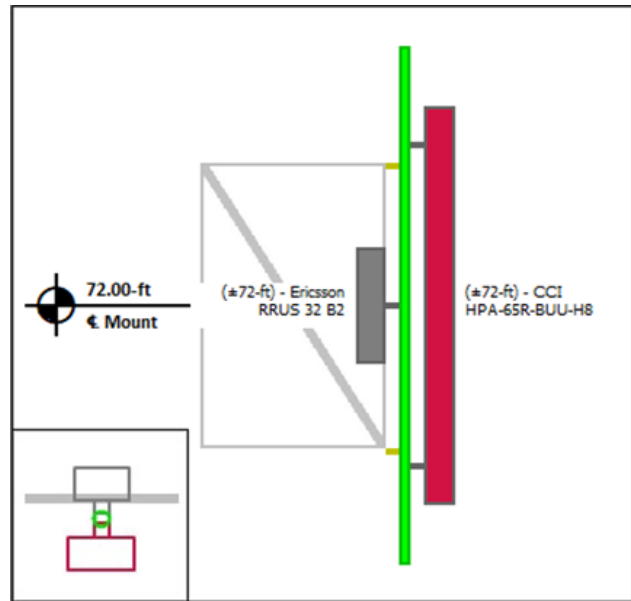


Equipment Layout Cont'd.

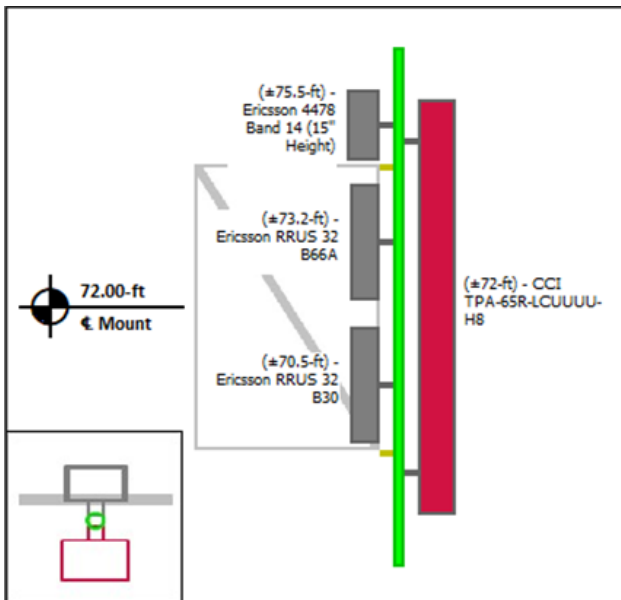
Mount Pipe E



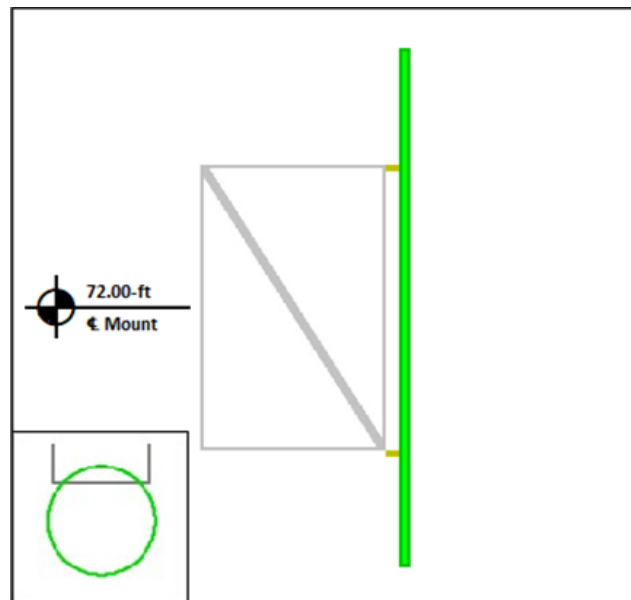
Mount Pipe F



Mount Pipe G

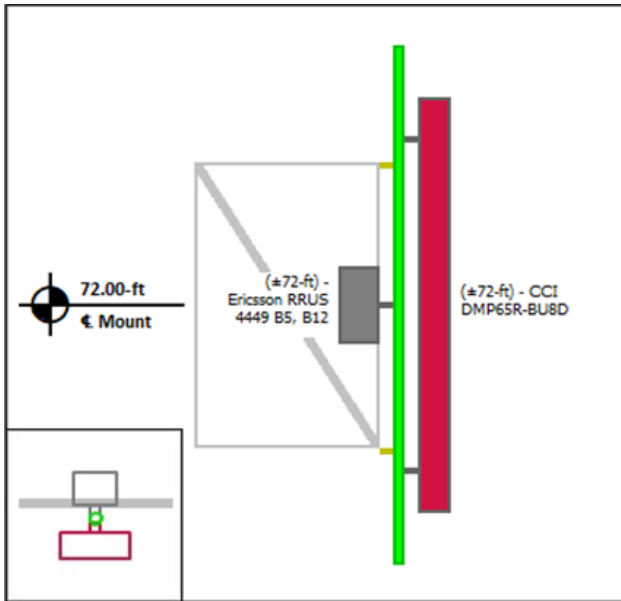


Mount Pipe H

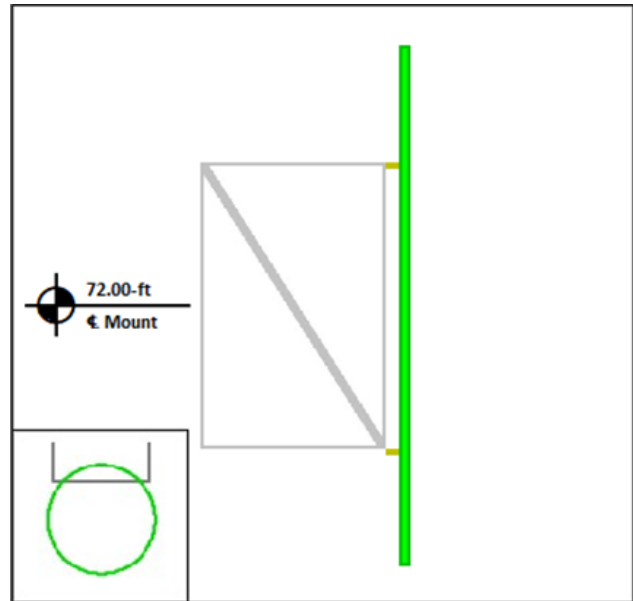


Equipment Layout Cont'd.

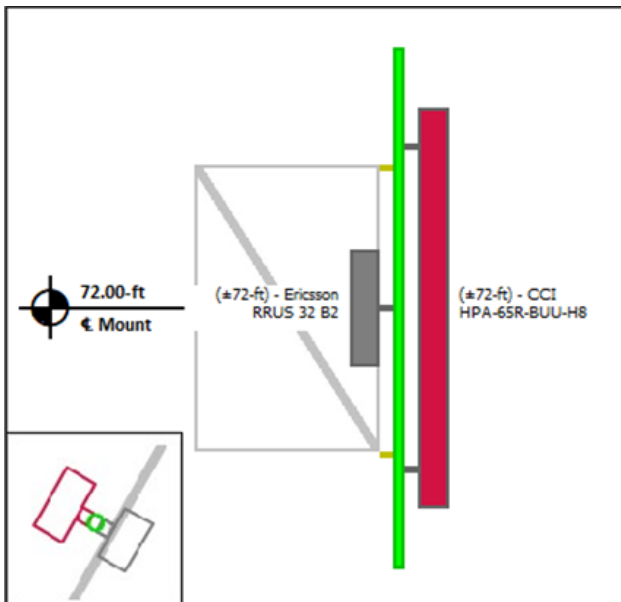
Mount Pipe I



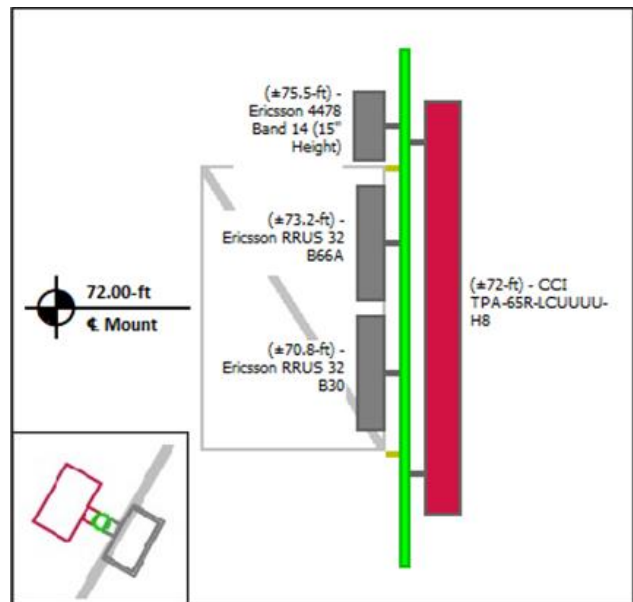
Mount Pipe J



Mount Pipe K

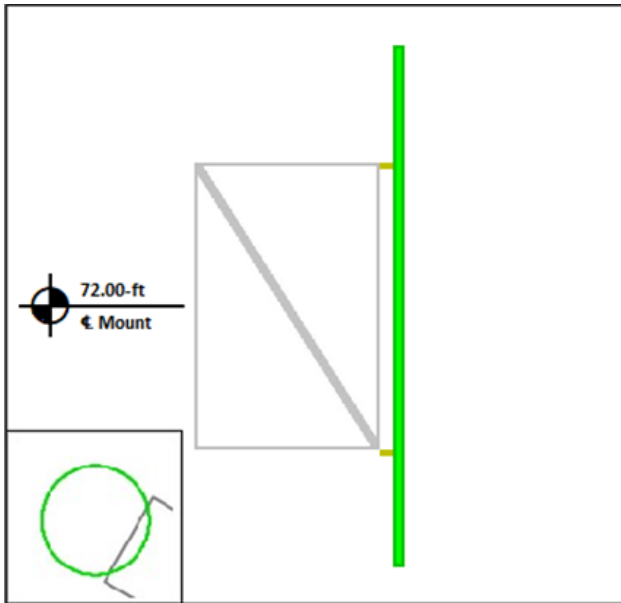


Mount Pipe L

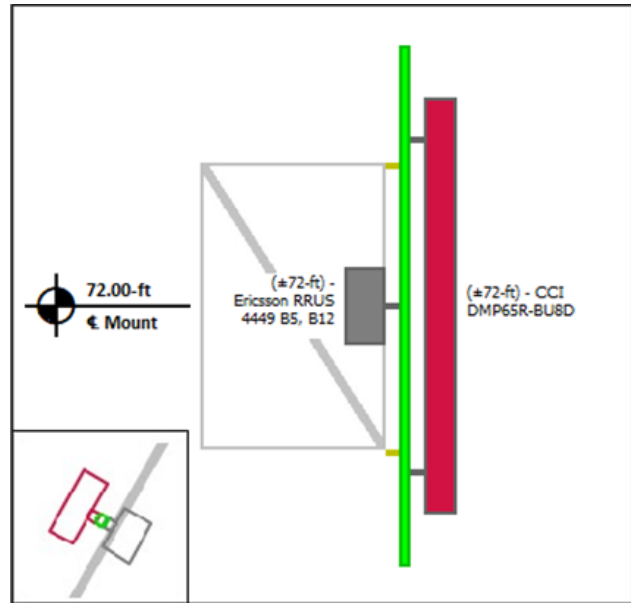


Equipment Layout Cont'd.

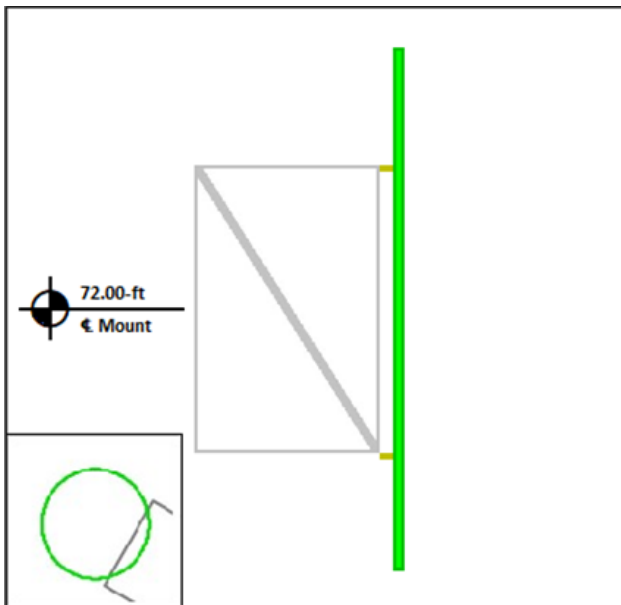
Mount Pipe M



Mount Pipe N



Mount Pipe O



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.

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 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.



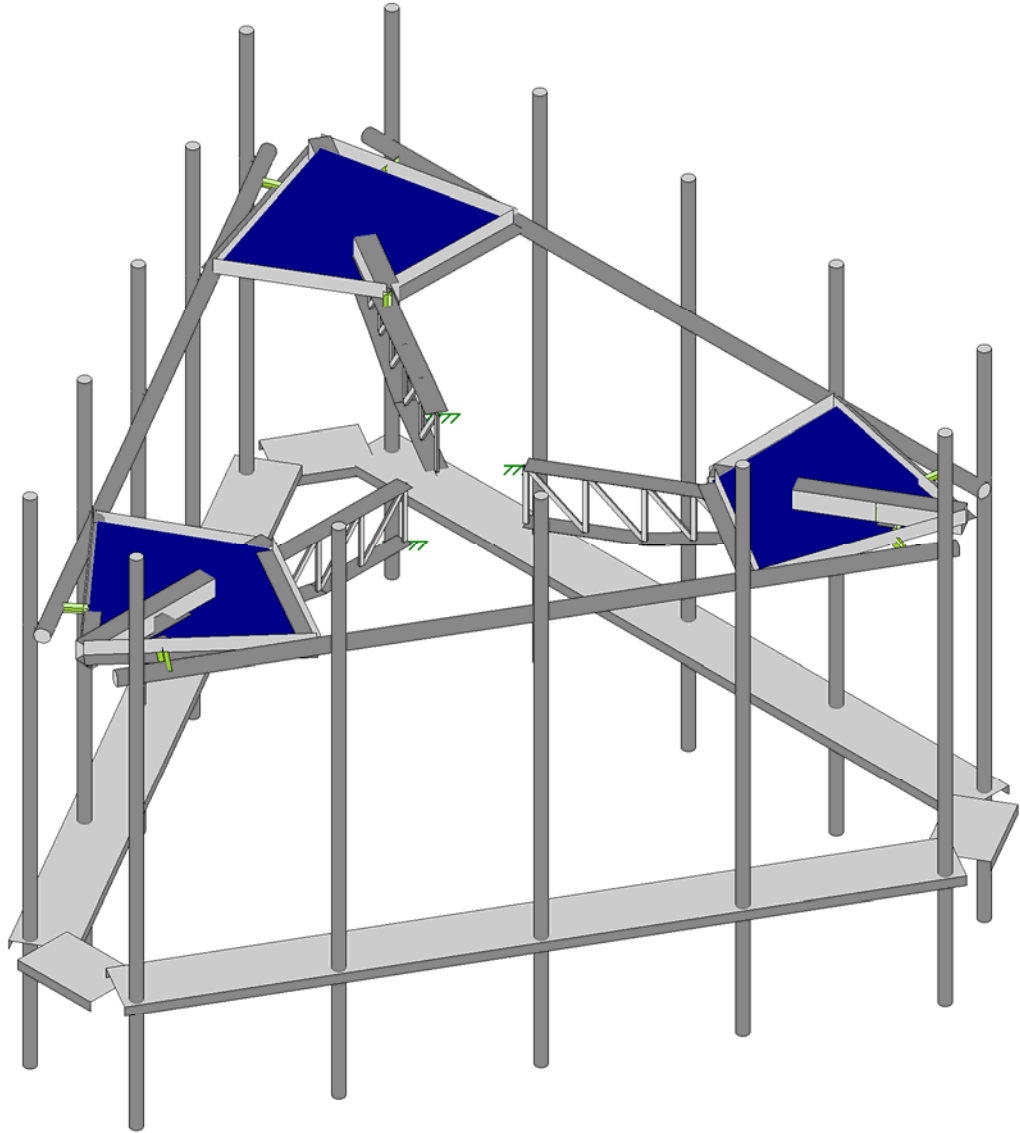
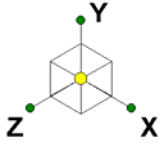
Site Number: 302485
Project Number: 13193668_C8_01
Carrier: AT&T Mobility
Mount Elevation: 72 ft
Date: 4/21/2020

Mount Analysis Force Calculations

Wind & Ice Load Calculations			
Velocity Pressure Coefficient	K_z	0.90	
Topographic Factor	K_{zt}	1.00	
Rooftop Wind Speed-up Factor	K_s	1.00	
Shielding Factor	K_a	0.90	
Ground Elevation Factor	K_e	0.97	
Wind Direction Probability Factor	K_d	0.95	
Basic Wind Speed	V	119	mph
Velocity Pressure	q_z	30.1	psf
Height Escalation Factor	K_{iz}	1.08	
Thickness of Radial Glaze Ice	T_{iz}	1.08	in

Seismic Load Calculations			
Short Period DSRAP	S_{DS}	0.221	
1 Second DSRAP	S_{D1}	0.088	
Importance Factor	I	1.0	
Response Modification Coefficient	R	2.0	
Seismic Response Coefficient	C_s	0.110	
Amplification Factor	A	1.0	
Total Weight	W	3374.3	lbs
Total Shear Force	V_s	372.5	lbs
Horizontal Seismic Load	E_h	372.5	lbs
Vertical Seismic Load	E_v	149.0	lbs

Antenna Calculations								
Equipment	Height	Width	Depth	Weight	EPA_N	EPA_T	EPA_{Ni}	EPA_{Ti}
Model #	in	in	in	lbs	sqft	sqft	sqft	sqft
CCI DMP65R-BU8D	96.0	20.7	7.7	95.7	17.87	3.23	20.18	4.23
CCI TPA-65R-LCUUUU-H8	96.0	14.4	8.6	81.6	13.30	3.44	15.64	4.40
CCI HPA-65R-BUU-H8	92.4	14.8	7.4	68.0	12.98	3.06	15.22	4.04
Raycap DC6-48-60-18-8F (23.5" Height)	23.5	9.7	9.7	20.0	1.90	1.90	2.54	2.54
Raycap DC6-48-60-18-8F (23.5" Height)	23.5	9.7	9.7	20.0	1.90	1.90	2.54	2.54
Ericsson RRUS 32 B30	27.2	12.1	7.0	60.0	2.74	1.67	3.49	2.36
Ericsson RRUS 4449 B5, B12	17.9	13.2	9.4	71.0	1.97	1.40	2.57	1.93
Ericsson RRUS 32 B66A	27.2	12.0	7.0	50.7	2.72	1.67	3.47	2.36
Ericsson RRUS 32 B2	27.2	12.1	7.0	53.0	2.74	1.67	3.49	2.36
Ericsson 4478 Band 14 (15" Height)	16.5	13.4	7.7	59.9	1.84	1.06	2.42	1.53



American Tower Corp.

Rohith.Koduru

13193668_C8_01

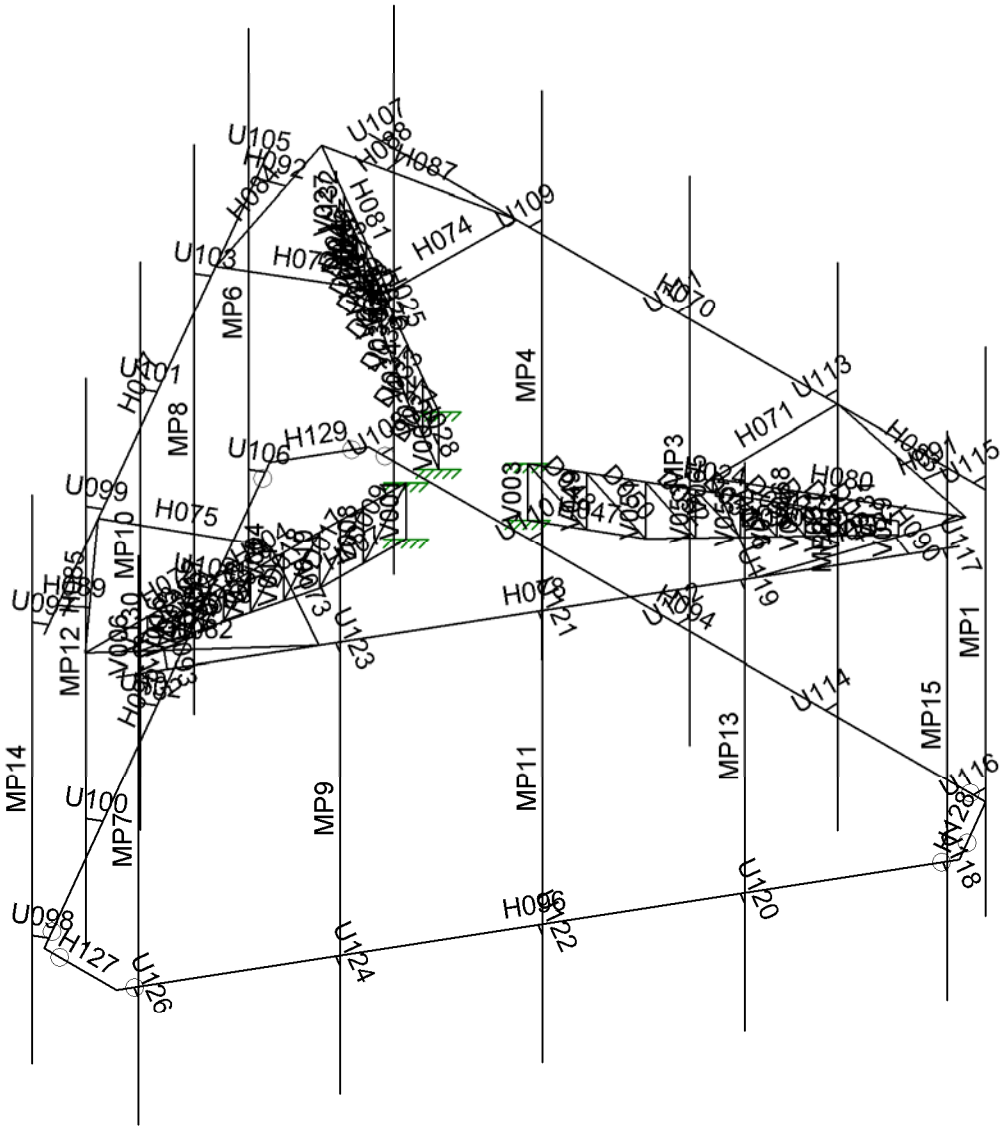
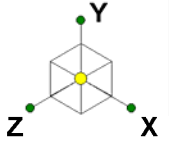
302485, Mdfd - Middlefield

3D Rendering

SK - 1

Apr 21, 2020 at 11:26 PM

R3D. AT&T MOBILITY @ 302485, ...



American Tower Corp.

Rohith.Koduru

13193668_C8_01

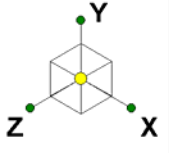
302485, Mdfd - Middlefield

Member Labels

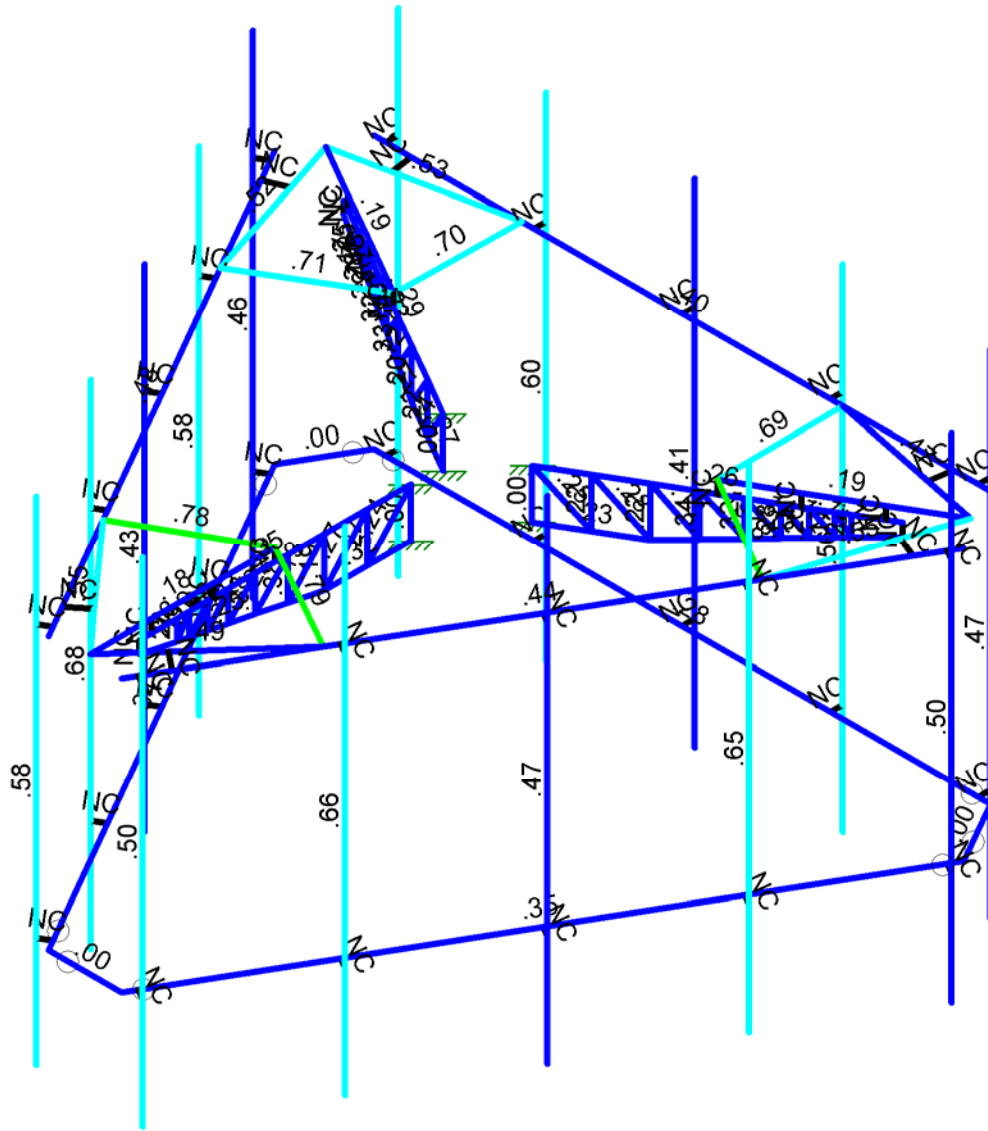
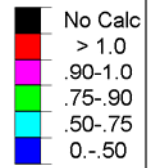
SK - 2

Apr 21, 2020 at 11:26 PM

R3D. AT&T MOBILITY @ 302485, ...

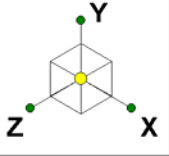


Code Check
(Env)

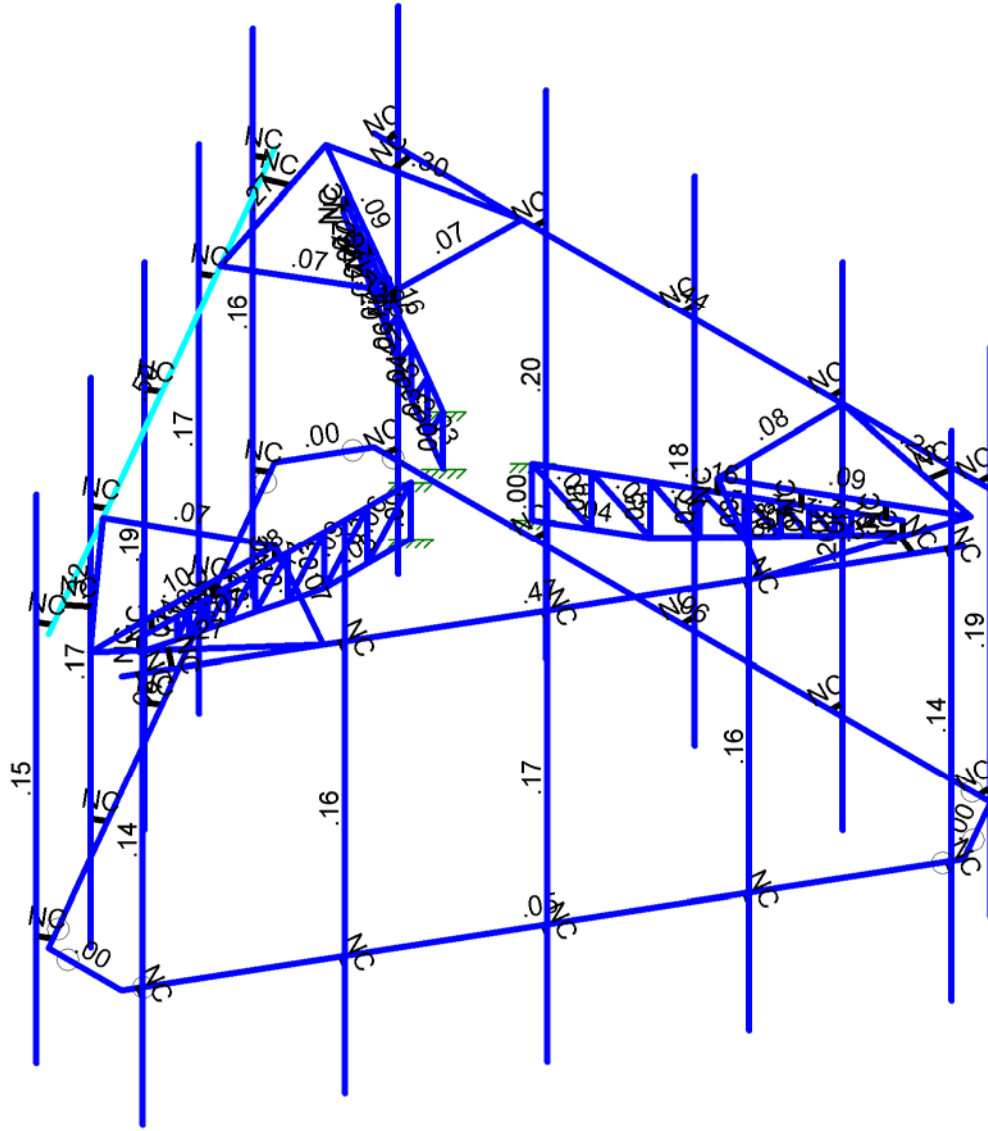
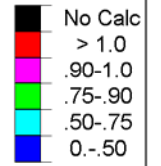


Member Code Checks Displayed (Enveloped)
Results for LC 1, 1.4D

American Tower Corp.		SK - 4
Rohith.Koduru	302485, Mdfd - Middlefield	Apr 21, 2020 at 11:26 PM
13193668_C8_01	Unity Bending Checks	R3D. AT&T MOBILITY @ 302485, ...



Shear Check
(Env)



Member Shear Checks Displayed (Enveloped)
Results for LC 1, 1.4D

American Tower Corp.	302485, Mdfd - Middlefield	SK - 5
Rohith.Koduru		Apr 21, 2020 at 11:27 PM
13193668_C8_01		R3D. AT&T MOBILITY @ 302485, ...

Shear Checks



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Joint Coordinates and Temperatures

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
1	N001	108	108	108	0	
2	N002	118.825318	108	89.25	0	
3	N003	97.174682	108	89.25	0	
4	N004	108	96	108	0	
5	N005	118.825318	96	89.25	0	
6	N006	97.174682	96	89.25	0	
7	N007	108	108	174	0	
8	N008	108	96	108	0	
9	N009	108	96	108	0	
10	N010	108	96	129	0	
11	N011	108	105	174	0	
12	N012	108	96	118.5	0	
13	N013	108	108	118.5	0	
14	N014	108	108	129	0	
15	N015	108	97.765	137.825	0	
16	N016	108	108	137.825	0	
17	N017	108	108	145.824997	0	
18	N018	108	108	152.324997	0	
19	N019	108	108	157.324997	0	
20	N020	108	108	161.824997	0	
21	N021	108	108	164.824997	0	
22	N022	108	99.365	145.824997	0	
23	N023	108	100.665	152.324997	0	
24	N024	108	101.665	157.324997	0	
25	N025	108	102.565	161.824997	0	
26	N026	108	103.165	164.824997	0	
27	N027	175.982994	108	56.25	0	
28	N028	40.017006	108	56.25	0	
29	N029	127.918584	108	84	0	
30	N030	88.081416	108	84	0	
31	N031	137.011851	108	78.75	0	
32	N032	78.988149	108	78.75	0	
33	N033	144.654525	108	74.3375	0	
34	N034	71.345475	108	74.3375	0	
35	N035	151.582726	108	70.337502	0	
36	N036	64.417274	108	70.337502	0	
37	N037	157.211891	108	67.087502	0	
38	N038	58.788109	108	67.087502	0	
39	N039	161.542018	108	64.587502	0	
40	N040	54.457982	108	64.587502	0	
41	N041	165.439132	108	62.337502	0	
42	N042	50.560868	108	62.337502	0	
43	N043	168.037208	108	60.837502	0	
44	N044	47.962792	108	60.837502	0	
45	N045	118.825318	96	89.25	0	
46	N046	97.174682	96	89.25	0	
47	N047	127.918584	96	84	0	
48	N048	88.081416	96	84	0	
49	N049	137.011851	96	78.75	0	
50	N050	78.988149	96	78.75	0	
51	N051	175.982994	105	56.25	0	



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Joint Coordinates and Temperatures (Continued)

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
52	N052	40.017006	105	56.25	0	
53	N053	151.582726	99.365	70.337502	0	
54	N054	64.417274	99.365	70.337502	0	
55	N055	157.211891	100.665	67.087502	0	
56	N056	58.788109	100.665	67.087502	0	
57	N057	161.542018	101.665	64.587502	0	
58	N058	54.457982	101.665	64.587502	0	
59	N059	165.439132	102.565	62.337502	0	
60	N060	50.560868	102.565	62.337502	0	
61	N061	168.037208	103.165	60.837502	0	
62	N062	47.962792	103.165	60.837502	0	
63	N063	144.654525	97.765	74.3375	0	
64	N064	71.345475	97.765	74.3375	0	
65	N065	108	108	141	0	
66	N066	147.404156	108	72.75	0	
67	N067	68.595844	108	72.75	0	
68	N068	108	108	156	0	
69	N069	160.394537	108	65.25	0	
70	N070	55.605463	108	65.25	0	
71	N071	108	111	141	0	
72	N072	108	111	156	0	
73	N073	147.404156	111	72.75	0	
74	N074	68.595844	111	72.75	0	
75	N075	160.394537	111	65.25	0	
76	N076	55.605463	111	65.25	0	
77	N077	147	111	42	0	
78	N078	183	111	42	0	
79	N079	33	111	42	0	
80	N080	69	111	42	0	
81	N081	42.167641	111	88.475009	0	
82	N082	134.832359	111	156.024991	0	
83	N083	81.167641	111	156.024991	0	
84	N084	173.832359	111	88.475009	0	
85	N085	24.167641	111	57.298095	0	
86	N086	116.832359	111	187.201905	0	
87	N087	99.167641	111	187.201905	0	
88	N088	191.832359	111	57.298095	0	
89	N089	108	111	186	0	
90	N090	186.375299	111	50.25	0	
91	N091	29.624701	111	50.25	0	
92	N092	42	111	42	0	
93	N093	42.837792	111	47.481564	0	
94	N094	174	111	42	0	
95	N095	173.162208	111	47.481564	0	
96	N096	28.667641	111	65.092323	0	
97	N097	121.332359	111	179.407677	0	
98	N098	94.667641	111	179.407677	0	
99	N099	187.332359	111	65.092323	0	
100	N100	98.995919	111	175.941346	0	
101	N101	182.16629	111	63.07709	0	
102	N102	33.83371	111	63.07709	0	
103	N103	117.004081	111	175.941346	0	
104	N104	183	45	42	0	
105	N105	24.167641	45	57.298095	0	
106	N106	116.832359	45	187.201905	0	
107	N107	33	45	42	0	
108	N108	99.167641	45	187.201905	0	



Company : American Tower Corp.
Designer : Rohith.Koduru
Job Number : 13193668_C8_01
Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
11:27 PM
Checked By: -

Joint Coordinates and Temperatures (Continued)

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
109	N109	191.832359	45	57.298095	0	
110	N110	180	111	39	0	
111	N111	144	111	39	0	
112	N112	108	111	39	0	
113	N113	72	111	39	0	
114	N114	36	111	39	0	
115	N115	23.069565	111	61.396171	0	
116	N116	120.930435	111	186.103829	0	
117	N117	41.069565	111	92.573085	0	
118	N118	138.930435	111	154.926915	0	
119	N119	59.069565	111	123.75	0	
120	N120	156.930435	111	123.75	0	
121	N121	77.069565	111	154.926915	0	
122	N122	174.930435	111	92.573085	0	
123	N123	95.069565	111	186.103829	0	
124	N124	192.930435	111	61.396171	0	
125	N125	97.667641	111	184.603829	0	
126	N126	95.069565	45	186.103829	0	
127	N127	97.667641	45	184.603829	0	
128	N128	79.667641	111	153.426915	0	
129	N129	77.069565	45	154.926915	0	
130	N130	79.667641	45	153.426915	0	
131	N131	61.667641	111	122.25	0	
132	N132	59.069565	45	123.75	0	
133	N133	61.667641	45	122.25	0	
134	N134	43.667641	111	91.073085	0	
135	N135	41.069565	45	92.573085	0	
136	N136	43.667641	45	91.073085	0	
137	N137	25.667641	111	59.896171	0	
138	N138	23.069565	45	61.396171	0	
139	N139	25.667641	45	59.896171	0	
140	N140	36	111	42	0	
141	N141	36	45	39	0	
142	N142	36	45	42	0	
143	N143	72	111	42	0	
144	N144	72	45	39	0	
145	N145	72	45	42	0	
146	N146	108	111	42	0	
147	N147	108	45	39	0	
148	N148	108	45	42	0	
149	N149	144	111	42	0	
150	N150	144	45	39	0	
151	N151	144	45	42	0	
152	N152	180	111	42	0	
153	N153	180	45	39	0	
154	N154	180	45	42	0	
155	N155	190.332359	111	59.896171	0	
156	N156	192.930435	45	61.396171	0	
157	N157	190.332359	45	59.896171	0	
158	N158	172.332359	111	91.073085	0	
159	N159	174.930435	45	92.573085	0	
160	N160	172.332359	45	91.073085	0	
161	N161	154.332359	111	122.25	0	
162	N162	156.930435	45	123.75	0	
163	N163	154.332359	45	122.25	0	
164	N164	136.332359	111	153.426915	0	
165	N165	138.930435	45	154.926915	0	



Joint Coordinates and Temperatures (Continued)

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
166	N166	136.332359	45	153.426915	0	
167	N167	118.332359	111	184.603829	0	
168	N168	120.930435	45	186.103829	0	
169	N169	118.332359	45	184.603829	0	
170	N170	108	108	171	0	
171	N171	173.384918	108	57.75	0	
172	N172	42.615082	108	57.75	0	
173	N173	108	111	171	0	
174	N174	173.384918	111	57.75	0	
175	N175	42.615082	111	57.75	0	
176	MP1t	180	138	39	0	
177	MP1b	180	18	39	0	
178	MP2t	144	138	39	0	
179	MP2b	144	18	39	0	
180	MP3t	108	138	39	0	
181	MP3b	108	18	39	0	
182	MP4t	72	138	39	0	
183	MP4b	72	18	39	0	
184	MP5t	36	138	39	0	
185	MP5b	36	18	39	0	
186	MP6t	23.069565	138	61.396171	0	
187	MP6b	23.069565	18	61.396171	0	
188	MP7t	120.930435	138	186.103829	0	
189	MP7b	120.930435	18	186.103829	0	
190	MP8t	41.069565	138	92.573085	0	
191	MP8b	41.069565	18	92.573085	0	
192	MP9t	138.930435	138	154.926915	0	
193	MP9b	138.930435	18	154.926915	0	
194	MP10t	59.069565	138	123.75	0	
195	MP10b	59.069565	18	123.75	0	
196	MP11t	156.930435	138	123.75	0	
197	MP11b	156.930435	18	123.75	0	
198	MP12t	77.069565	138	154.926915	0	
199	MP12b	77.069565	18	154.926915	0	
200	MP13t	174.930435	138	92.573085	0	
201	MP13b	174.930435	18	92.573085	0	
202	MP14t	95.069565	138	186.103829	0	
203	MP14b	95.069565	18	186.103829	0	
204	MP15t	192.930435	138	61.396171	0	
205	MP15b	192.930435	18	61.396171	0	
206	NAL1	17.069565	162	211.201905	0	
207	NAL2	17.069565	12	211.201905	0	
208	NAL3	198.930435	162	211.201905	0	
209	NAL4	198.930435	12	211.201905	0	
210	NAL5	198.930435	162	15	0	
211	NAL6	198.930435	12	15	0	

Joint Boundary Conditions

	Joint Label	X [lb/in]	Y [lb/in]	Z [lb/in]	X Rot.[k-in/rad]	Y Rot.[k-in/rad]	Z Rot.[k-in/rad]
1	N001	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N002	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N003	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
4	N004	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
5	N005	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
6	N006	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Joint Boundary Conditions (Continued)

	Joint Label	X [lb/in]	Y [lb/in]	Z [lb/in]	X Rot.[k-in/rad]	Y Rot.[k-in/rad]	Z Rot.[k-in/rad]
7	N008	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
8	N009	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
9	N045	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
10	N046	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(de...)	Section/Shape	Type	Design List	Material	Design Rules
1	V001	N001	N004		90	PL1x0.5	Column	None	A572-50	Typical
2	V002	N006	N003		150	PL1x0.5	Column	None	A572-50	Typical
3	V003	N005	N002		30	PL1x0.5	Column	None	A572-50	Typical
4	H004	N001	N007			T4x1.5x.5	Beam	None	A992	Typical
5	D005	N010	N011			T4x1.5x.5	Column	None	A992	Typical
6	V006	N007	N011			RIGID	None	None	RIGID	Typical
7	H007	N004	N010			T4x1.5x.5	Beam	None	A992	Typical
8	V008	N013	N012		90	PL1x0.5	Column	None	A36	Typical
9	D009	N001	N012			PL1x0.5	Column	None	A36	Typical
10	V010	N014	N010		90	PL1x0.5	Column	None	A36	Typical
11	V011	N016	N015		90	PL1x0.5	Column	None	A36	Typical
12	V012	N017	N022		90	PL1x0.5	Column	None	A36	Typical
13	V013	N018	N023		90	PL1x0.5	Column	None	A36	Typical
14	V014	N019	N024		90	PL1x0.5	Column	None	A36	Typical
15	V015	N020	N025		90	PL1x0.5	Column	None	A36	Typical
16	V016	N021	N026		90	PL1x0.5	Column	None	A36	Typical
17	D017	N013	N010			PL1x0.5	Column	None	A36	Typical
18	D018	N014	N015			PL1x0.5	Column	None	A36	Typical
19	D019	N016	N022			PL1x0.5	Column	None	A36	Typical
20	D020	N017	N023			PL1x0.5	Column	None	A36	Typical
21	D021	N018	N024			PL1x0.5	Column	None	A36	Typical
22	D022	N019	N025			PL1x0.5	Column	None	A36	Typical
23	D023	N020	N026			PL1x0.5	Column	None	A36	Typical
24	H024	N027	N002			T4x1.5x.5	Beam	None	A992	Typical
25	H025	N028	N003			T4x1.5x.5	Beam	None	A992	Typical
26	D026	N050	N052			T4x1.5x.5	Column	None	A992	Typical
27	V027	N028	N052			RIGID	None	None	RIGID	Typical
28	H028	N006	N050			T4x1.5x.5	Beam	None	A992	Typical
29	V029	N051	N027			RIGID	None	None	RIGID	Typical
30	D030	N049	N051			T4x1.5x.5	Column	None	A992	Typical
31	D031	N003	N048			PL1x0.5	Column	None	A36	Typical
32	V032	N030	N048		210	PL1x0.5	Column	None	A36	Typical
33	D033	N030	N050			PL1x0.5	Column	None	A36	Typical
34	V034	N032	N050		210	PL1x0.5	Column	None	A36	Typical
35	D035	N032	N064			PL1x0.5	Column	None	A36	Typical
36	V036	N034	N064		210	PL1x0.5	Column	None	A36	Typical
37	D037	N034	N054			PL1x0.5	Column	None	A36	Typical
38	V038	N036	N054		210	PL1x0.5	Column	None	A36	Typical
39	D039	N036	N056			PL1x0.5	Column	None	A36	Typical
40	V040	N038	N056		210	PL1x0.5	Column	None	A36	Typical
41	D041	N038	N058			PL1x0.5	Column	None	A36	Typical
42	V042	N040	N058		210	PL1x0.5	Column	None	A36	Typical
43	D043	N040	N060			PL1x0.5	Column	None	A36	Typical
44	V044	N042	N060		210	PL1x0.5	Column	None	A36	Typical
45	D045	N042	N062			PL1x0.5	Column	None	A36	Typical
46	V046	N044	N062		210	PL1x0.5	Column	None	A36	Typical
47	H047	N005	N049			T4x1.5x.5	Beam	None	A992	Typical
48	D048	N002	N047			PL1x0.5	Column	None	A36	Typical



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(de...)	Section/Shape	Type	Design List	Material	Design Rules
49	V049	N029	N047		330	PL1x0.5	Column	None	A36	Typical
50	D050	N029	N049			PL1x0.5	Column	None	A36	Typical
51	V051	N031	N049		330	PL1x0.5	Column	None	A36	Typical
52	D052	N031	N063			PL1x0.5	Column	None	A36	Typical
53	V053	N033	N063		330	PL1x0.5	Column	None	A36	Typical
54	D054	N033	N053			PL1x0.5	Column	None	A36	Typical
55	V055	N035	N053		330	PL1x0.5	Column	None	A36	Typical
56	D056	N035	N055			PL1x0.5	Column	None	A36	Typical
57	V057	N037	N055		330	PL1x0.5	Column	None	A36	Typical
58	D058	N037	N057			PL1x0.5	Column	None	A36	Typical
59	V059	N039	N057		330	PL1x0.5	Column	None	A36	Typical
60	D060	N039	N059			PL1x0.5	Column	None	A36	Typical
61	V061	N041	N059		330	PL1x0.5	Column	None	A36	Typical
62	D062	N041	N061			PL1x0.5	Column	None	A36	Typical
63	V063	N043	N061		330	PL1x0.5	Column	None	A36	Typical
64	V064	N071	N065			RIGID	None	None	RIGID	Typical
65	V065	N073	N066			RIGID	None	None	RIGID	Typical
66	V066	N074	N067			RIGID	None	None	RIGID	Typical
67	V067	N072	N068			RIGID	None	None	RIGID	Typical
68	V068	N075	N069			RIGID	None	None	RIGID	Typical
69	V069	N076	N070			RIGID	None	None	RIGID	Typical
70	H070	N078	N079			PIPE_2.5	Beam	None	A53 Gr. B	Typical
71	H071	N073	N077			L3x3x6	Beam	None	A36	Typical
72	H072	N074	N081			L3x3x6	Beam	None	A36	Typical
73	H073	N071	N082			L3x3x6	Beam	None	A36	Typical
74	H074	N074	N080			L3x3x6	Beam	None	A36	Typical
75	H075	N071	N083			L3x3x6	Beam	None	A36	Typical
76	H076	N073	N084			L3x3x6	Beam	None	A36	Typical
77	H077	N085	N087			PIPE_2.5	Beam	None	A53 Gr. B	Typical
78	H078	N086	N088			PIPE_2.5	Beam	None	A53 Gr. B	Typical
79	H079	N089	N071			HSS4x4x4	Beam	None	A500 Gr. B [SQR]	Typical
80	H080	N090	N073			HSS4x4x4	Beam	None	A500 Gr. B [SQR]	Typical
81	H081	N091	N074			HSS4x4x4	Beam	None	A500 Gr. B [SQR]	Typical
82	H082	N089	N082			L3x3x6	Beam	None	A36	Typical
83	H083	N090	N077			L3x3x6	Beam	None	A36	Typical
84	H084	N091	N081			L3x3x6	Beam	None	A36	Typical
85	H085	N089	N083			L3x3x6	Beam	None	A36	Typical
86	H086	N090	N084			L3x3x6	Beam	None	A36	Typical
87	H087	N091	N080			L3x3x6	Beam	None	A36	Typical
88	H088	N093	N092			RIGID	None	None	RIGID	Typical
89	H089	N100	N098			RIGID	None	None	RIGID	Typical
90	H090	N101	N099			RIGID	None	None	RIGID	Typical
91	H091	N095	N094			RIGID	None	None	RIGID	Typical
92	H092	N102	N096			RIGID	None	None	RIGID	Typical
93	H093	N103	N097			RIGID	None	None	RIGID	Typical
94	H094	N104	N107		90	Platform	Beam	None	A36	Typical
95	H095	N105	N108		90	Platform	Beam	None	A36	Typical
96	H096	N106	N109		90	Platform	Beam	None	A36	Typical
97	U097	N123	N125			(2) 1/2 U-Bolts	Beam	None	A36	Typical
98	U098	N126	N127			(2) 1/2 U-Bolts	Beam	None	A36	Typical
99	U099	N121	N128			(2) 1/2 U-Bolts	Beam	None	A36	Typical
100	U100	N129	N130			(2) 1/2 U-Bolts	Beam	None	A36	Typical
101	U101	N119	N131			(2) 1/2 U-Bolts	Beam	None	A36	Typical
102	U102	N132	N133			(2) 1/2 U-Bolts	Beam	None	A36	Typical
103	U103	N117	N134			(2) 1/2 U-Bolts	Beam	None	A36	Typical
104	U104	N135	N136			(2) 1/2 U-Bolts	Beam	None	A36	Typical
105	U105	N115	N137			(2) 1/2 U-Bolts	Beam	None	A36	Typical



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(de...)	Section/Shape	Type	Design List	Material	Design Rules
106	U106	N138	N139			(2) 1/2 U-Bolts	Beam	None	A36	Typical
107	U107	N114	N140			(2) 1/2 U-Bolts	Beam	None	A36	Typical
108	U108	N141	N142			(2) 1/2 U-Bolts	Beam	None	A36	Typical
109	U109	N113	N143			(2) 1/2 U-Bolts	Beam	None	A36	Typical
110	U110	N144	N145			(2) 1/2 U-Bolts	Beam	None	A36	Typical
111	U111	N112	N146			(2) 1/2 U-Bolts	Beam	None	A36	Typical
112	U112	N147	N148			(2) 1/2 U-Bolts	Beam	None	A36	Typical
113	U113	N111	N149			(2) 1/2 U-Bolts	Beam	None	A36	Typical
114	U114	N150	N151			(2) 1/2 U-Bolts	Beam	None	A36	Typical
115	U115	N110	N152			(2) 1/2 U-Bolts	Beam	None	A36	Typical
116	U116	N153	N154			(2) 1/2 U-Bolts	Beam	None	A36	Typical
117	U117	N124	N155			(2) 1/2 U-Bolts	Beam	None	A36	Typical
118	U118	N156	N157			(2) 1/2 U-Bolts	Beam	None	A36	Typical
119	U119	N122	N158			(2) 1/2 U-Bolts	Beam	None	A36	Typical
120	U120	N159	N160			(2) 1/2 U-Bolts	Beam	None	A36	Typical
121	U121	N120	N161			(2) 1/2 U-Bolts	Beam	None	A36	Typical
122	U122	N162	N163			(2) 1/2 U-Bolts	Beam	None	A36	Typical
123	U123	N118	N164			(2) 1/2 U-Bolts	Beam	None	A36	Typical
124	U124	N165	N166			(2) 1/2 U-Bolts	Beam	None	A36	Typical
125	U125	N116	N167			(2) 1/2 U-Bolts	Beam	None	A36	Typical
126	U126	N168	N169			(2) 1/2 U-Bolts	Beam	None	A36	Typical
127	H127	N106	N108		90	Platform	Beam	None	A36	Typical
128	H128	N104	N109		90	Platform	Beam	None	A36	Typical
129	H129	N105	N107		90	Platform	Beam	None	A36	Typical
130	V130	N173	N170			RIGID	None	None	RIGID	Typical
131	V131	N174	N171			RIGID	None	None	RIGID	Typical
132	V132	N175	N172			RIGID	None	None	RIGID	Typical
133	MP1	MP1t	MP1b			PIPE 2.0	Column	None	A53 Gr. B	Typical
134	MP2	MP2t	MP2b			PIPE 2.0	Column	None	A53 Gr. B	Typical
135	MP3	MP3t	MP3b			PIPE 2.0	Column	None	A53 Gr. B	Typical
136	MP4	MP4t	MP4b			PIPE 2.0	Column	None	A53 Gr. B	Typical
137	MP5	MP5t	MP5b			PIPE 2.0	Column	None	A53 Gr. B	Typical
138	MP6	MP6t	MP6b			PIPE 2.0	Column	None	A53 Gr. B	Typical
139	MP7	MP7t	MP7b			PIPE 2.0	Column	None	A53 Gr. B	Typical
140	MP8	MP8t	MP8b			PIPE 2.0	Column	None	A53 Gr. B	Typical
141	MP9	MP9t	MP9b			PIPE 2.0	Column	None	A53 Gr. B	Typical
142	MP10	MP10t	MP10b			PIPE 2.0	Column	None	A53 Gr. B	Typical
143	MP11	MP11t	MP11b			PIPE 2.0	Column	None	A53 Gr. B	Typical
144	MP12	MP12t	MP12b			PIPE 2.0	Column	None	A53 Gr. B	Typical
145	MP13	MP13t	MP13b			PIPE 2.0	Column	None	A53 Gr. B	Typical
146	MP14	MP14t	MP14b			PIPE 2.0	Column	None	A53 Gr. B	Typical
147	MP15	MP15t	MP15b			PIPE 2.0	Column	None	A53 Gr. B	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	V001						Yes	** NA **			None
2	V002						Yes	** NA **			None
3	V003						Yes	** NA **			None
4	H004						Yes				None
5	D005						Yes	** NA **			None
6	V006						Yes	** NA **			None
7	H007						Yes				None
8	V008						Yes	** NA **			None
9	D009						Yes	** NA **			None
10	V010						Yes	** NA **			None



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
11	V011						Yes	** NA **			None
12	V012						Yes	** NA **			None
13	V013						Yes	** NA **			None
14	V014						Yes	** NA **			None
15	V015						Yes	** NA **			None
16	V016						Yes	** NA **			None
17	D017						Yes	** NA **			None
18	D018						Yes	** NA **			None
19	D019						Yes	** NA **			None
20	D020						Yes	** NA **			None
21	D021						Yes	** NA **			None
22	D022						Yes	** NA **			None
23	D023						Yes	** NA **			None
24	H024						Yes				None
25	H025						Yes				None
26	D026						Yes	** NA **			None
27	V027						Yes	** NA **			None
28	H028						Yes				None
29	V029						Yes	** NA **			None
30	D030						Yes	** NA **			None
31	D031						Yes	** NA **			None
32	V032						Yes	** NA **			None
33	D033						Yes	** NA **			None
34	V034						Yes	** NA **			None
35	D035						Yes	** NA **			None
36	V036						Yes	** NA **			None
37	D037						Yes	** NA **			None
38	V038						Yes	** NA **			None
39	D039						Yes	** NA **			None
40	V040						Yes	** NA **			None
41	D041						Yes	** NA **			None
42	V042						Yes	** NA **			None
43	D043						Yes	** NA **			None
44	V044						Yes	** NA **			None
45	D045						Yes	** NA **			None
46	V046						Yes	** NA **			None
47	H047						Yes				None
48	D048						Yes	** NA **			None
49	V049						Yes	** NA **			None
50	D050						Yes	** NA **			None
51	V051						Yes	** NA **			None
52	D052						Yes	** NA **			None
53	V053						Yes	** NA **			None
54	D054						Yes	** NA **			None
55	V055						Yes	** NA **			None
56	D056						Yes	** NA **			None
57	V057						Yes	** NA **			None
58	D058						Yes	** NA **			None
59	V059						Yes	** NA **			None
60	D060						Yes	** NA **			None
61	V061						Yes	** NA **			None
62	D062						Yes	** NA **			None
63	V063						Yes	** NA **			None
64	V064						Yes	** NA **			None
65	V065						Yes	** NA **			None
66	V066						Yes	** NA **			None
67	V067						Yes	** NA **			None



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
68	V068						Yes	** NA **			None
69	V069						Yes	** NA **			None
70	H070						Yes				None
71	H071						Yes				None
72	H072						Yes				None
73	H073						Yes				None
74	H074						Yes				None
75	H075						Yes				None
76	H076						Yes				None
77	H077						Yes				None
78	H078						Yes				None
79	H079						Yes				None
80	H080						Yes				None
81	H081						Yes				None
82	H082						Yes				None
83	H083						Yes				None
84	H084						Yes				None
85	H085						Yes				None
86	H086						Yes				None
87	H087						Yes				None
88	H088						Yes	** NA **			None
89	H089						Yes	** NA **			None
90	H090						Yes	** NA **			None
91	H091						Yes	** NA **			None
92	H092						Yes	** NA **			None
93	H093						Yes	** NA **			None
94	H094	BenPIN	BenPIN				Yes				None
95	H095	BenPIN	BenPIN				Yes				None
96	H096	BenPIN	BenPIN				Yes				None
97	U097						Yes			Exclude	None
98	U098						Yes			Exclude	None
99	U099						Yes			Exclude	None
100	U100						Yes			Exclude	None
101	U101						Yes			Exclude	None
102	U102						Yes			Exclude	None
103	U103						Yes			Exclude	None
104	U104						Yes			Exclude	None
105	U105						Yes			Exclude	None
106	U106						Yes			Exclude	None
107	U107						Yes			Exclude	None
108	U108						Yes			Exclude	None
109	U109						Yes			Exclude	None
110	U110						Yes			Exclude	None
111	U111						Yes			Exclude	None
112	U112						Yes			Exclude	None
113	U113						Yes			Exclude	None
114	U114						Yes			Exclude	None
115	U115						Yes			Exclude	None
116	U116						Yes			Exclude	None
117	U117						Yes			Exclude	None
118	U118						Yes			Exclude	None
119	U119						Yes			Exclude	None
120	U120						Yes			Exclude	None
121	U121						Yes			Exclude	None
122	U122						Yes			Exclude	None
123	U123						Yes			Exclude	None
124	U124						Yes			Exclude	None



Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
125	U125						Yes			Exclude	None
126	U126						Yes			Exclude	None
127	H127		BenPIN				Yes				None
128	H128		BenPIN				Yes				None
129	H129		BenPIN				Yes				None
130	V130						Yes	** NA **			None
131	V131						Yes	** NA **			None
132	V132						Yes	** NA **			None
133	MP1						Yes	** NA **			None
134	MP2						Yes	** NA **			None
135	MP3						Yes	** NA **			None
136	MP4						Yes	** NA **			None
137	MP5						Yes	** NA **			None
138	MP6						Yes	** NA **			None
139	MP7						Yes	** NA **			None
140	MP8						Yes	** NA **			None
141	MP9						Yes	** NA **			None
142	MP10						Yes	** NA **			None
143	MP11						Yes	** NA **			None
144	MP12						Yes	** NA **			None
145	MP13						Yes	** NA **			None
146	MP14						Yes	** NA **			None
147	MP15						Yes	** NA **			None

Hot Rolled Steel Design Parameters

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torq...	Kyy	Kzz	Cb	Function
1	V001	PL1x0.5	12						.65	.65		Lateral
2	V002	PL1x0.5	12						.65	.65		Lateral
3	V003	PL1x0.5	12						.65	.65		Lateral
4	H004	T4x1.5x.5	66						.65	.65		Lateral
5	D005	T4x1.5x.5	45.891						.65	.65		Lateral
6	H007	T4x1.5x.5	21						.65	.65		Lateral
7	V008	PL1x0.5	12						.65	.65		Lateral
8	D009	PL1x0.5	15.945						.65	.65		Lateral
9	V010	PL1x0.5	12						.65	.65		Lateral
10	V011	PL1x0.5	10.235						.65	.65		Lateral
11	V012	PL1x0.5	8.635						.65	.65		Lateral
12	V013	PL1x0.5	7.335						.65	.65		Lateral
13	V014	PL1x0.5	6.335						.65	.65		Lateral
14	V015	PL1x0.5	5.435						.65	.65		Lateral
15	V016	PL1x0.5	4.835						.65	.65		Lateral
16	D017	PL1x0.5	15.945						.65	.65		Lateral
17	D018	PL1x0.5	13.514						.65	.65		Lateral
18	D019	PL1x0.5	11.771						.65	.65		Lateral
19	D020	PL1x0.5	9.801						.65	.65		Lateral
20	D021	PL1x0.5	8.07						.65	.65		Lateral
21	D022	PL1x0.5	7.056						.65	.65		Lateral
22	D023	PL1x0.5	5.69						.65	.65		Lateral
23	H024	T4x1.5x.5	66						.65	.65		Lateral
24	H025	T4x1.5x.5	66						.65	.65		Lateral
25	D026	T4x1.5x.5	45.891						.65	.65		Lateral
26	H028	T4x1.5x.5	21						.65	.65		Lateral
27	D030	T4x1.5x.5	45.891						.65	.65		Lateral
28	D031	PL1x0.5	15.945						.65	.65		Lateral
29	V032	PL1x0.5	12						.65	.65		Lateral



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torg...	Kyy	Kzz	Cb	Function
30	D033	PL1x0.5	15.945						.65	.65		Lateral
31	V034	PL1x0.5	12						.65	.65		Lateral
32	D035	PL1x0.5	13.514						.65	.65		Lateral
33	V036	PL1x0.5	10.235						.65	.65		Lateral
34	D037	PL1x0.5	11.771						.65	.65		Lateral
35	V038	PL1x0.5	8.635						.65	.65		Lateral
36	D039	PL1x0.5	9.801						.65	.65		Lateral
37	V040	PL1x0.5	7.335						.65	.65		Lateral
38	D041	PL1x0.5	8.07						.65	.65		Lateral
39	V042	PL1x0.5	6.335						.65	.65		Lateral
40	D043	PL1x0.5	7.056						.65	.65		Lateral
41	V044	PL1x0.5	5.435						.65	.65		Lateral
42	D045	PL1x0.5	5.69						.65	.65		Lateral
43	V046	PL1x0.5	4.835						.65	.65		Lateral
44	H047	T4x1.5x.5	21						.65	.65		Lateral
45	D048	PL1x0.5	15.945						.65	.65		Lateral
46	V049	PL1x0.5	12						.65	.65		Lateral
47	D050	PL1x0.5	15.945						.65	.65		Lateral
48	V051	PL1x0.5	12						.65	.65		Lateral
49	D052	PL1x0.5	13.514						.65	.65		Lateral
50	V053	PL1x0.5	10.235						.65	.65		Lateral
51	D054	PL1x0.5	11.771						.65	.65		Lateral
52	V055	PL1x0.5	8.635						.65	.65		Lateral
53	D056	PL1x0.5	9.801						.65	.65		Lateral
54	V057	PL1x0.5	7.335						.65	.65		Lateral
55	D058	PL1x0.5	8.07						.65	.65		Lateral
56	V059	PL1x0.5	6.335						.65	.65		Lateral
57	D060	PL1x0.5	7.056						.65	.65		Lateral
58	V061	PL1x0.5	5.435						.65	.65		Lateral
59	D062	PL1x0.5	5.69						.65	.65		Lateral
60	V063	PL1x0.5	4.835						.65	.65		Lateral
61	H070	PIPE 2.5	150						1	1		Lateral
62	H071	L3x3x6	30.753						.65	.65		Lateral
63	H072	L3x3x6	30.753						.65	.65		Lateral
64	H073	L3x3x6	30.753						.65	.65		Lateral
65	H074	L3x3x6	30.753						.65	.65		Lateral
66	H075	L3x3x6	30.753						.65	.65		Lateral
67	H076	L3x3x6	30.753						.65	.65		Lateral
68	H077	PIPE 2.5	150						1	1		Lateral
69	H078	PIPE 2.5	150						1	1		Lateral
70	H079	HSS4x4x4	45						.65	.65		Lateral
71	H080	HSS4x4x4	45						.65	.65		Lateral
72	H081	HSS4x4x4	45						.65	.65		Lateral
73	H082	L3x3x6	40.23						.65	.65		Lateral
74	H083	L3x3x6	40.23						.65	.65		Lateral
75	H084	L3x3x6	40.23						.65	.65		Lateral
76	H085	L3x3x6	40.23						.65	.65		Lateral
77	H086	L3x3x6	40.23						.65	.65		Lateral
78	H087	L3x3x6	40.23						.65	.65		Lateral
79	H094	Platform	150						1	1		Lateral
80	H095	Platform	150						1	1		Lateral
81	H096	Platform	150						1	1		Lateral
82	U097	(2) 1/2 U-Bo...	3						.5	.5		Lateral
83	U098	(2) 1/2 U-Bo...	3						.5	.5		Lateral
84	U099	(2) 1/2 U-Bo...	3						.5	.5		Lateral
85	U100	(2) 1/2 U-Bo...	3						.5	.5		Lateral
86	U101	(2) 1/2 U-Bo...	3						.5	.5		Lateral



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Hot Rolled Steel Design Parameters (Continued)

Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torq...	Kyy	Kzz	Cb	Function
87	U102	(2) 1/2 U-Bo...	3					.5	.5		Lateral
88	U103	(2) 1/2 U-Bo...	3					.5	.5		Lateral
89	U104	(2) 1/2 U-Bo...	3					.5	.5		Lateral
90	U105	(2) 1/2 U-Bo...	3					.5	.5		Lateral
91	U106	(2) 1/2 U-Bo...	3					.5	.5		Lateral
92	U107	(2) 1/2 U-Bo...	3					.5	.5		Lateral
93	U108	(2) 1/2 U-Bo...	3					.5	.5		Lateral
94	U109	(2) 1/2 U-Bo...	3					.5	.5		Lateral
95	U110	(2) 1/2 U-Bo...	3					.5	.5		Lateral
96	U111	(2) 1/2 U-Bo...	3					.5	.5		Lateral
97	U112	(2) 1/2 U-Bo...	3					.5	.5		Lateral
98	U113	(2) 1/2 U-Bo...	3					.5	.5		Lateral
99	U114	(2) 1/2 U-Bo...	3					.5	.5		Lateral
100	U115	(2) 1/2 U-Bo...	3					.5	.5		Lateral
101	U116	(2) 1/2 U-Bo...	3					.5	.5		Lateral
102	U117	(2) 1/2 U-Bo...	3					.5	.5		Lateral
103	U118	(2) 1/2 U-Bo...	3					.5	.5		Lateral
104	U119	(2) 1/2 U-Bo...	3					.5	.5		Lateral
105	U120	(2) 1/2 U-Bo...	3					.5	.5		Lateral
106	U121	(2) 1/2 U-Bo...	3					.5	.5		Lateral
107	U122	(2) 1/2 U-Bo...	3					.5	.5		Lateral
108	U123	(2) 1/2 U-Bo...	3					.5	.5		Lateral
109	U124	(2) 1/2 U-Bo...	3					.5	.5		Lateral
110	U125	(2) 1/2 U-Bo...	3					.5	.5		Lateral
111	U126	(2) 1/2 U-Bo...	3					.5	.5		Lateral
112	H127	Platform	17.665					.8	.8		Lateral
113	H128	Platform	17.665					.8	.8		Lateral
114	H129	Platform	17.665					.8	.8		Lateral
115	MP1	PIPE 2.0	120					2.1	2.1		Lateral
116	MP2	PIPE 2.0	120					2.1	2.1		Lateral
117	MP3	PIPE 2.0	120					2.1	2.1		Lateral
118	MP4	PIPE 2.0	120					2.1	2.1		Lateral
119	MP5	PIPE 2.0	120					2.1	2.1		Lateral
120	MP6	PIPE 2.0	120					2.1	2.1		Lateral
121	MP7	PIPE 2.0	120					2.1	2.1		Lateral
122	MP8	PIPE 2.0	120					2.1	2.1		Lateral
123	MP9	PIPE 2.0	120					2.1	2.1		Lateral
124	MP10	PIPE 2.0	120					2.1	2.1		Lateral
125	MP11	PIPE 2.0	120					2.1	2.1		Lateral
126	MP12	PIPE 2.0	120					2.1	2.1		Lateral
127	MP13	PIPE 2.0	120					2.1	2.1		Lateral
128	MP14	PIPE 2.0	120					2.1	2.1		Lateral
129	MP15	PIPE 2.0	120					2.1	2.1		Lateral

Hot Rolled Steel Properties

Label	E [psi]	G [psi]	Nu	Therm (/1E...	Density[lb/f...	Yield[psi]	Ry	Fu[psi]	Rt	
1	A36	2.9e+7	1.115e+7	.3	.65	490	36000	1.5	58000	1.2
2	A572-50	2.9e+7	1.115e+7	.3	.65	490	50000	1.1	65000	1.1
3	A500 Gr. B [RND]	2.9e+7	1.115e+7	.3	.65	527	42000	1.4	58000	1.3
4	A500 Gr. B [SQR]	2.9e+7	1.115e+7	.3	.65	527	46000	1.4	58000	1.3
5	A500 Gr. C	2.9e+7	1.115e+7	.3	.65	190	46000	1.4	62000	1.3
6	A1085	2.9e+7	1.115e+7	.3	.65	490	50000	1.1	65000	1.1
7	A53 Gr. B	2.9e+7	1.115e+7	.3	.65	490	35000	1.6	60000	1.2
8	A992	2.9e+7	1.115e+7	.3	.65	490	50000	1.1	65000	1.1
9	SAE J429 Gr. 2	2.9e+7	1.115e+7	.3	.65	490	57000	1.1	74000	1.1



Joint Loads and Enforced Displacements (BLC 12 : Lm (1))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP1t	L	Y	-500

Joint Loads and Enforced Displacements (BLC 13 : Lm (2))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP2t	L	Y	-500

Joint Loads and Enforced Displacements (BLC 14 : Lm (3))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP3t	L	Y	-500

Joint Loads and Enforced Displacements (BLC 15 : Lm (4))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP4t	L	Y	-500

Joint Loads and Enforced Displacements (BLC 16 : Lm (5))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP5t	L	Y	-500

Joint Loads and Enforced Displacements (BLC 17 : Lm (6))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP6t	L	Y	-500

Joint Loads and Enforced Displacements (BLC 18 : Lm (7))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP7t	L	Y	-500

Joint Loads and Enforced Displacements (BLC 19 : Lm (8))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP8t	L	Y	-500

Joint Loads and Enforced Displacements (BLC 20 : Lm (9))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP9t	L	Y	-500

Joint Loads and Enforced Displacements (BLC 21 : Lm (10))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP10t	L	Y	-500

Joint Loads and Enforced Displacements (BLC 22 : Lm (11))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP11t	L	Y	-500

Joint Loads and Enforced Displacements (BLC 23 : Lm (12))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP12t	L	Y	-500

Joint Loads and Enforced Displacements (BLC 24 : Lm (13))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP13t	L	Y	-500



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Joint Loads and Enforced Displacements (BLC 25 : Lm (14))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP14t	L	Y	-500

Joint Loads and Enforced Displacements (BLC 26 : Lm (15))

	Joint Label	L,D,M	Direction	Magnitude[(lb.lb-ft), (in.rad), (lb*s^...
1	MP15t	L	Y	-500

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP2	Y	-47.85	20.85
2	MP2	Y	-47.85	97.65
3	MP2	Y	-71	59.25
4	MP4	Y	-40.8	20.85
5	MP4	Y	-40.8	97.65
6	MP4	Y	-59.9	17.25
7	MP4	Y	-50.7	44.25
8	MP4	Y	-60	77.25
9	MP5	Y	-34	22.3
10	MP5	Y	-34	96.2
11	MP5	Y	-53	59.25
12	MP8	Y	-47.85	20.85
13	MP8	Y	-47.85	97.65
14	MP8	Y	-71	59.25
15	MP9	Y	-47.85	20.85
16	MP9	Y	-47.85	97.65
17	MP9	Y	-71	59.25
18	MP12	Y	-40.8	20.85
19	MP12	Y	-40.8	97.65
20	MP12	Y	-59.9	17.25
21	MP12	Y	-50.7	47.25
22	MP12	Y	-60	77.25
23	MP13	Y	-40.8	20.85
24	MP13	Y	-40.8	97.65
25	MP13	Y	-59.9	17.25
26	MP13	Y	-50.7	44.25
27	MP13	Y	-60	74.25
28	MP14	Y	-34	22.3
29	MP14	Y	-34	96.2
30	MP14	Y	-53	59.25
31	MP15	Y	-34	22.3
32	MP15	Y	-34	96.2
33	MP15	Y	-53	59.25

Member Point Loads (BLC 2 : Ice)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in,%]
1	MP2	Y	-113.899	20.85
2	MP2	Y	-113.899	97.65
3	MP2	Y	-44.785	59.25
4	MP4	Y	-93.517	20.85
5	MP4	Y	-93.517	97.65
6	MP4	Y	-38.761	17.25
7	MP4	Y	-50.881	44.25
8	MP4	Y	-51.143	77.25
9	MP5	Y	-87.01	22.3
10	MP5	Y	-87.01	96.2



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Point Loads (BLC 2 : Ice) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
11	MP5	Y	-51.143	59.25
12	MP8	Y	-113.899	20.85
13	MP8	Y	-113.899	97.65
14	MP8	Y	-44.785	59.25
15	MP9	Y	-113.899	20.85
16	MP9	Y	-113.899	97.65
17	MP9	Y	-44.785	59.25
18	MP12	Y	-93.517	20.85
19	MP12	Y	-93.517	97.65
20	MP12	Y	-38.761	17.25
21	MP12	Y	-50.881	47.25
22	MP12	Y	-51.143	77.25
23	MP13	Y	-93.517	20.85
24	MP13	Y	-93.517	97.65
25	MP13	Y	-38.761	17.25
26	MP13	Y	-50.881	44.25
27	MP13	Y	-51.143	74.25
28	MP14	Y	-87.01	22.3
29	MP14	Y	-87.01	96.2
30	MP14	Y	-51.143	59.25
31	MP15	Y	-87.01	22.3
32	MP15	Y	-87.01	96.2
33	MP15	Y	-51.143	59.25

Member Point Loads (BLC 3 : Wind -Z)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
1	MP2	Z	-247.027	20.85
2	MP2	Z	-247.027	97.65
3	MP2	Z	-27.217	59.25
4	MP4	Z	-183.811	20.85
5	MP4	Z	-183.811	97.65
6	MP4	Z	-25.468	17.25
7	MP4	Z	-37.598	44.25
8	MP4	Z	-37.911	77.25
9	MP5	Z	-179.362	22.3
10	MP5	Z	-179.362	96.2
11	MP5	Z	-37.911	59.25
12	MP8	Z	-162.154	20.85
13	MP8	Z	-162.154	97.65
14	MP8	Z	-60.787	59.25
15	MP9	Z	-162.154	20.85
16	MP9	Z	-162.154	97.65
17	MP9	Z	-30.394	59.25
18	MP12	Z	-133.085	20.85
19	MP12	Z	-133.085	97.65
20	MP12	Z	-25.408	17.25
21	MP12	Z	-38.767	47.25
22	MP12	Z	-38.924	77.25
23	MP13	Z	-133.085	20.85
24	MP13	Z	-133.085	97.65
25	MP13	Z	-50.817	17.25
26	MP13	Z	-38.767	44.25
27	MP13	Z	-38.924	74.25
28	MP14	Z	-126.289	22.3
29	MP14	Z	-126.289	96.2
30	MP14	Z	-38.924	59.25



Member Point Loads (BLC 3 : Wind -Z) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
31	MP15	Z	-126.289	22.3
32	MP15	Z	-126.289	96.2
33	MP15	Z	-38.924	59.25

Member Point Loads (BLC 4 : Wind -X)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP2	X	-44.618	20.85
2	MP2	X	-44.618	97.65
3	MP2	X	-38.763	59.25
4	MP4	X	-47.55	20.85
5	MP4	X	-47.55	97.65
6	MP4	X	-29.27	17.25
7	MP4	X	-46.115	44.25
8	MP4	X	-46.115	77.25
9	MP5	X	-42.271	22.3
10	MP5	X	-42.271	96.2
11	MP5	X	-46.115	59.25
12	MP8	X	-236.241	20.85
13	MP8	X	-236.241	97.65
14	MP8	X	-66.523	59.25
15	MP9	X	-236.241	20.85
16	MP9	X	-236.241	97.65
17	MP9	X	-66.523	59.25
18	MP12	X	-182.96	20.85
19	MP12	X	-182.96	97.65
20	MP12	X	-58.747	17.25
21	MP12	X	-88.179	47.25
22	MP12	X	-88.722	77.25
23	MP13	X	-182.96	20.85
24	MP13	X	-182.96	97.65
25	MP13	X	-58.747	17.25
26	MP13	X	-88.179	44.25
27	MP13	X	-88.722	74.25
28	MP14	X	-176.468	22.3
29	MP14	X	-176.468	96.2
30	MP14	X	-88.722	59.25
31	MP15	X	-176.468	22.3
32	MP15	X	-176.468	96.2
33	MP15	X	-88.722	59.25

Member Point Loads (BLC 5 : Wind -Z (Ice))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP2	Z	-32.168	20.85
2	MP2	Z	-32.168	97.65
3	MP2	Z	-8.344	59.25
4	MP4	Z	-32.585	20.85
5	MP4	Z	-32.585	97.65
6	MP4	Z	-8.043	17.25
7	MP4	Z	-10.375	44.25
8	MP4	Z	-10.4	77.25
9	MP5	Z	-31.228	22.3
10	MP5	Z	-31.228	96.2
11	MP5	Z	-10.4	59.25
12	MP8	Z	-28.132	20.85
13	MP8	Z	-28.132	97.65
14	MP8	Z	-21.146	59.25



Member Point Loads (BLC 5 : Wind -Z (Ice)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
15	MP9	Z	-28.132	20.85
16	MP9	Z	-28.132	97.65
17	MP9	Z	-10.573	59.25
18	MP12	Z	-27.886	20.85
19	MP12	Z	-27.886	97.65
20	MP12	Z	-9.749	17.25
21	MP12	Z	-13.492	47.25
22	MP12	Z	-13.505	77.25
23	MP13	Z	-27.886	20.85
24	MP13	Z	-27.886	97.65
25	MP13	Z	-19.499	17.25
26	MP13	Z	-13.492	44.25
27	MP13	Z	-13.505	74.25
28	MP14	Z	-27.499	22.3
29	MP14	Z	-27.499	96.2
30	MP14	Z	-13.505	59.25
31	MP15	Z	-27.499	22.3
32	MP15	Z	-27.499	96.2
33	MP15	Z	-13.505	59.25

Member Point Loads (BLC 6 : Wind -X (Ice))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.%]
1	MP2	X	-13.912	20.85
2	MP2	X	-13.912	97.65
3	MP2	X	-14.783	59.25
4	MP4	X	-13.387	20.85
5	MP4	X	-13.387	97.65
6	MP4	X	-13.228	17.25
7	MP4	X	-19.179	44.25
8	MP4	X	-19.179	77.25
9	MP5	X	-13.724	22.3
10	MP5	X	-13.724	96.2
11	MP5	X	-19.179	59.25
12	MP8	X	-34.814	20.85
13	MP8	X	-34.814	97.65
14	MP8	X	-21.844	59.25
15	MP9	X	-34.814	20.85
16	MP9	X	-34.814	97.65
17	MP9	X	-21.844	59.25
18	MP12	X	-34.913	20.85
19	MP12	X	-34.913	97.65
20	MP12	X	-20.545	17.25
21	MP12	X	-27.56	47.25
22	MP12	X	-27.603	77.25
23	MP13	X	-34.913	20.85
24	MP13	X	-34.913	97.65
25	MP13	X	-20.545	17.25
26	MP13	X	-27.56	44.25
27	MP13	X	-27.603	74.25
28	MP14	X	-33.906	22.3
29	MP14	X	-33.906	96.2
30	MP14	X	-27.603	59.25
31	MP15	X	-33.906	22.3
32	MP15	X	-33.906	96.2
33	MP15	X	-27.603	59.25



Member Point Loads (BLC 7 : Wind -Z (Working))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP2	Z	-15.7	20.85
2	MP2	Z	-15.7	97.65
3	MP2	Z	-1.73	59.25
4	MP4	Z	-11.682	20.85
5	MP4	Z	-11.682	97.65
6	MP4	Z	-1.619	17.25
7	MP4	Z	-2.39	44.25
8	MP4	Z	-2.409	77.25
9	MP5	Z	-11.399	22.3
10	MP5	Z	-11.399	96.2
11	MP5	Z	-2.409	59.25
12	MP8	Z	-10.306	20.85
13	MP8	Z	-10.306	97.65
14	MP8	Z	-3.863	59.25
15	MP9	Z	-10.306	20.85
16	MP9	Z	-10.306	97.65
17	MP9	Z	-1.932	59.25
18	MP12	Z	-8.458	20.85
19	MP12	Z	-8.458	97.65
20	MP12	Z	-1.615	17.25
21	MP12	Z	-2.464	47.25
22	MP12	Z	-2.474	77.25
23	MP13	Z	-8.458	20.85
24	MP13	Z	-8.458	97.65
25	MP13	Z	-3.23	17.25
26	MP13	Z	-2.464	44.25
27	MP13	Z	-2.474	74.25
28	MP14	Z	-8.026	22.3
29	MP14	Z	-8.026	96.2
30	MP14	Z	-2.474	59.25
31	MP15	Z	-8.026	22.3
32	MP15	Z	-8.026	96.2
33	MP15	Z	-2.474	59.25

Member Point Loads (BLC 8 : Wind -X (Working))

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
1	MP2	X	-2.836	20.85
2	MP2	X	-2.836	97.65
3	MP2	X	-2.464	59.25
4	MP4	X	-3.022	20.85
5	MP4	X	-3.022	97.65
6	MP4	X	-1.86	17.25
7	MP4	X	-2.931	44.25
8	MP4	X	-2.931	77.25
9	MP5	X	-2.687	22.3
10	MP5	X	-2.687	96.2
11	MP5	X	-2.931	59.25
12	MP8	X	-15.014	20.85
13	MP8	X	-15.014	97.65
14	MP8	X	-4.228	59.25
15	MP9	X	-15.014	20.85
16	MP9	X	-15.014	97.65
17	MP9	X	-4.228	59.25
18	MP12	X	-11.628	20.85
19	MP12	X	-11.628	97.65
20	MP12	X	-3.734	17.25



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Point Loads (BLC 8 : Wind -X (Working)) (Continued)

	Member Label	Direction	Magnitude[lb.lb-ft]	Location[in.-%]
21	MP12	X	-5.604	47.25
22	MP12	X	-5.639	77.25
23	MP13	X	-11.628	20.85
24	MP13	X	-11.628	97.65
25	MP13	X	-3.734	17.25
26	MP13	X	-5.604	44.25
27	MP13	X	-5.639	74.25
28	MP14	X	-11.215	22.3
29	MP14	X	-11.215	96.2
30	MP14	X	-5.639	59.25
31	MP15	X	-11.215	22.3
32	MP15	X	-11.215	96.2
33	MP15	X	-5.639	59.25

Member Distributed Loads (BLC 2 : Ice)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in.-%]	End Location[in.-%]
1	V001	Y	-1.59	-1.59	0	%100
2	V002	Y	-1.59	-1.59	0	%100
3	V003	Y	-1.59	-1.59	0	%100
4	H004	Y	-4.397	-4.397	0	%100
5	D005	Y	-4.397	-4.397	0	%100
6	V006	Y	-1.802	-1.802	0	%100
7	H007	Y	-4.397	-4.397	0	%100
8	V008	Y	-1.59	-1.59	0	%100
9	D009	Y	-1.59	-1.59	0	%100
10	V010	Y	-1.59	-1.59	0	%100
11	V011	Y	-1.59	-1.59	0	%100
12	V012	Y	-1.59	-1.59	0	%100
13	V013	Y	-1.59	-1.59	0	%100
14	V014	Y	-1.59	-1.59	0	%100
15	V015	Y	-1.59	-1.59	0	%100
16	V016	Y	-1.59	-1.59	0	%100
17	D017	Y	-1.59	-1.59	0	%100
18	D018	Y	-1.59	-1.59	0	%100
19	D019	Y	-1.59	-1.59	0	%100
20	D020	Y	-1.59	-1.59	0	%100
21	D021	Y	-1.59	-1.59	0	%100
22	D022	Y	-1.59	-1.59	0	%100
23	D023	Y	-1.59	-1.59	0	%100
24	H024	Y	-4.397	-4.397	0	%100
25	H025	Y	-4.397	-4.397	0	%100
26	D026	Y	-4.397	-4.397	0	%100
27	V027	Y	-1.802	-1.802	0	%100
28	H028	Y	-4.397	-4.397	0	%100
29	V029	Y	-1.802	-1.802	0	%100
30	D030	Y	-4.397	-4.397	0	%100
31	D031	Y	-1.59	-1.59	0	%100
32	V032	Y	-1.59	-1.59	0	%100
33	D033	Y	-1.59	-1.59	0	%100
34	V034	Y	-1.59	-1.59	0	%100
35	D035	Y	-1.59	-1.59	0	%100
36	V036	Y	-1.59	-1.59	0	%100
37	D037	Y	-1.59	-1.59	0	%100
38	V038	Y	-1.59	-1.59	0	%100
39	D039	Y	-1.59	-1.59	0	%100



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 2 : Ice) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in,%]	End Location[in,%]
40	V040	Y	-1.59	-1.59	0 %100
41	D041	Y	-1.59	-1.59	0 %100
42	V042	Y	-1.59	-1.59	0 %100
43	D043	Y	-1.59	-1.59	0 %100
44	V044	Y	-1.59	-1.59	0 %100
45	D045	Y	-1.59	-1.59	0 %100
46	V046	Y	-1.59	-1.59	0 %100
47	H047	Y	-4.397	-4.397	0 %100
48	D048	Y	-1.59	-1.59	0 %100
49	V049	Y	-1.59	-1.59	0 %100
50	D050	Y	-1.59	-1.59	0 %100
51	V051	Y	-1.59	-1.59	0 %100
52	D052	Y	-1.59	-1.59	0 %100
53	V053	Y	-1.59	-1.59	0 %100
54	D054	Y	-1.59	-1.59	0 %100
55	V055	Y	-1.59	-1.59	0 %100
56	D056	Y	-1.59	-1.59	0 %100
57	V057	Y	-1.59	-1.59	0 %100
58	D058	Y	-1.59	-1.59	0 %100
59	V059	Y	-1.59	-1.59	0 %100
60	D060	Y	-1.59	-1.59	0 %100
61	V061	Y	-1.59	-1.59	0 %100
62	D062	Y	-1.59	-1.59	0 %100
63	V063	Y	-1.59	-1.59	0 %100
64	V064	Y	-1.802	-1.802	0 %100
65	V065	Y	-1.802	-1.802	0 %100
66	V066	Y	-1.802	-1.802	0 %100
67	V067	Y	-1.802	-1.802	0 %100
68	V068	Y	-1.802	-1.802	0 %100
69	V069	Y	-1.802	-1.802	0 %100
70	H070	Y	-5.356	-5.356	0 %100
71	H071	Y	-1.942	-1.942	0 %100
72	H072	Y	-1.942	-1.942	0 %100
73	H073	Y	-1.942	-1.942	0 %100
74	H074	Y	-1.942	-1.942	0 %100
75	H075	Y	-1.942	-1.942	0 %100
76	H076	Y	-1.942	-1.942	0 %100
77	H077	Y	-5.356	-5.356	0 %100
78	H078	Y	-5.356	-5.356	0 %100
79	H079	Y	-9.123	-9.123	0 %100
80	H080	Y	-9.123	-9.123	0 %100
81	H081	Y	-9.123	-9.123	0 %100
82	H082	Y	-1.942	-1.942	0 %100
83	H083	Y	-1.942	-1.942	0 %100
84	H084	Y	-1.942	-1.942	0 %100
85	H085	Y	-1.942	-1.942	0 %100
86	H086	Y	-1.942	-1.942	0 %100
87	H087	Y	-1.942	-1.942	0 %100
88	H088	Y	-1.802	-1.802	0 %100
89	H089	Y	-1.802	-1.802	0 %100
90	H090	Y	-1.802	-1.802	0 %100
91	H091	Y	-1.802	-1.802	0 %100
92	H092	Y	-1.802	-1.802	0 %100
93	H093	Y	-1.802	-1.802	0 %100
94	H094	Y	-2.836	-2.836	0 %100
95	H095	Y	-2.836	-2.836	0 %100
96	H096	Y	-2.836	-2.836	0 %100



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 2 : Ice) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
97	H127	Y	-2.836	-2.836	0	%100
98	H128	Y	-2.836	-2.836	0	%100
99	H129	Y	-2.836	-2.836	0	%100
100	V130	Y	-1.802	-1.802	0	%100
101	V131	Y	-1.802	-1.802	0	%100
102	V132	Y	-1.802	-1.802	0	%100
103	MP1	Y	-4.679	-4.679	0	%100
104	MP2	Y	-4.679	-4.679	0	%100
105	MP3	Y	-4.679	-4.679	0	%100
106	MP4	Y	-4.679	-4.679	0	%100
107	MP5	Y	-4.679	-4.679	0	%100
108	MP6	Y	-4.679	-4.679	0	%100
109	MP7	Y	-4.679	-4.679	0	%100
110	MP8	Y	-4.679	-4.679	0	%100
111	MP9	Y	-4.679	-4.679	0	%100
112	MP10	Y	-4.679	-4.679	0	%100
113	MP11	Y	-4.679	-4.679	0	%100
114	MP12	Y	-4.679	-4.679	0	%100
115	MP13	Y	-4.679	-4.679	0	%100
116	MP14	Y	-4.679	-4.679	0	%100
117	MP15	Y	-4.679	-4.679	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	V001	Z	-1.15	-1.15	0	%100
2	V002	Z	-1.15	-1.15	0	%100
3	V003	Z	-1.15	-1.15	0	%100
4	H004	Z	-1.15	-1.15	0	%100
5	D005	Z	-1.15	-1.15	0	%100
6	V006	Z	-1.15	-1.15	0	%100
7	H007	Z	-1.15	-1.15	0	%100
8	V008	Z	-1.15	-1.15	0	%100
9	D009	Z	-1.15	-1.15	0	%100
10	V010	Z	-1.15	-1.15	0	%100
11	V011	Z	-1.15	-1.15	0	%100
12	V012	Z	-1.15	-1.15	0	%100
13	V013	Z	-1.15	-1.15	0	%100
14	V014	Z	-1.15	-1.15	0	%100
15	V015	Z	-1.15	-1.15	0	%100
16	V016	Z	-1.15	-1.15	0	%100
17	D017	Z	-1.15	-1.15	0	%100
18	D018	Z	-1.15	-1.15	0	%100
19	D019	Z	-1.15	-1.15	0	%100
20	D020	Z	-1.15	-1.15	0	%100
21	D021	Z	-1.15	-1.15	0	%100
22	D022	Z	-1.15	-1.15	0	%100
23	D023	Z	-1.15	-1.15	0	%100
24	H024	Z	-1.15	-1.15	0	%100
25	H025	Z	-1.15	-1.15	0	%100
26	D026	Z	-1.15	-1.15	0	%100
27	V027	Z	-1.15	-1.15	0	%100
28	H028	Z	-1.15	-1.15	0	%100
29	V029	Z	-1.15	-1.15	0	%100
30	D030	Z	-1.15	-1.15	0	%100
31	D031	Z	-1.15	-1.15	0	%100
32	V032	Z	-1.15	-1.15	0	%100



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 5 : Wind -Z (Ice)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
33	D033	Z	-1.15	-1.15	0 %100
34	V034	Z	-1.15	-1.15	0 %100
35	D035	Z	-1.15	-1.15	0 %100
36	V036	Z	-1.15	-1.15	0 %100
37	D037	Z	-1.15	-1.15	0 %100
38	V038	Z	-1.15	-1.15	0 %100
39	D039	Z	-1.15	-1.15	0 %100
40	V040	Z	-1.15	-1.15	0 %100
41	D041	Z	-1.15	-1.15	0 %100
42	V042	Z	-1.15	-1.15	0 %100
43	D043	Z	-1.15	-1.15	0 %100
44	V044	Z	-1.15	-1.15	0 %100
45	D045	Z	-1.15	-1.15	0 %100
46	V046	Z	-1.15	-1.15	0 %100
47	H047	Z	-1.15	-1.15	0 %100
48	D048	Z	-1.15	-1.15	0 %100
49	V049	Z	-1.15	-1.15	0 %100
50	D050	Z	-1.15	-1.15	0 %100
51	V051	Z	-1.15	-1.15	0 %100
52	D052	Z	-1.15	-1.15	0 %100
53	V053	Z	-1.15	-1.15	0 %100
54	D054	Z	-1.15	-1.15	0 %100
55	V055	Z	-1.15	-1.15	0 %100
56	D056	Z	-1.15	-1.15	0 %100
57	V057	Z	-1.15	-1.15	0 %100
58	D058	Z	-1.15	-1.15	0 %100
59	V059	Z	-1.15	-1.15	0 %100
60	D060	Z	-1.15	-1.15	0 %100
61	V061	Z	-1.15	-1.15	0 %100
62	D062	Z	-1.15	-1.15	0 %100
63	V063	Z	-1.15	-1.15	0 %100
64	V064	Z	-1.15	-1.15	0 %100
65	V065	Z	-1.15	-1.15	0 %100
66	V066	Z	-1.15	-1.15	0 %100
67	V067	Z	-1.15	-1.15	0 %100
68	V068	Z	-1.15	-1.15	0 %100
69	V069	Z	-1.15	-1.15	0 %100
70	H070	Z	-1.15	-1.15	0 %100
71	H071	Z	-1.15	-1.15	0 %100
72	H072	Z	-1.15	-1.15	0 %100
73	H073	Z	-1.15	-1.15	0 %100
74	H074	Z	-1.15	-1.15	0 %100
75	H075	Z	-1.15	-1.15	0 %100
76	H076	Z	-1.15	-1.15	0 %100
77	H077	Z	-1.15	-1.15	0 %100
78	H078	Z	-1.15	-1.15	0 %100
79	H079	Z	-1.15	-1.15	0 %100
80	H080	Z	-1.15	-1.15	0 %100
81	H081	Z	-1.15	-1.15	0 %100
82	H082	Z	-1.15	-1.15	0 %100
83	H083	Z	-1.15	-1.15	0 %100
84	H084	Z	-1.15	-1.15	0 %100
85	H085	Z	-1.15	-1.15	0 %100
86	H086	Z	-1.15	-1.15	0 %100
87	H087	Z	-1.15	-1.15	0 %100
88	H088	Z	-1.15	-1.15	0 %100
89	H089	Z	-1.15	-1.15	0 %100



Member Distributed Loads (BLC 5 : Wind -Z (Ice)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
90	H090	Z	-1.15	-1.15	0 %100
91	H091	Z	-1.15	-1.15	0 %100
92	H092	Z	-1.15	-1.15	0 %100
93	H093	Z	-1.15	-1.15	0 %100
94	H094	Z	-1.15	-1.15	0 %100
95	H095	Z	-1.15	-1.15	0 %100
96	H096	Z	-1.15	-1.15	0 %100
97	H127	Z	-1.15	-1.15	0 %100
98	H128	Z	-1.15	-1.15	0 %100
99	H129	Z	-1.15	-1.15	0 %100
100	V130	Z	-1.15	-1.15	0 %100
101	V131	Z	-1.15	-1.15	0 %100
102	V132	Z	-1.15	-1.15	0 %100
103	MP1	Z	-1.15	-1.15	0 %100
104	MP2	Z	-1.15	-1.15	0 %100
105	MP3	Z	-1.15	-1.15	0 %100
106	MP4	Z	-1.15	-1.15	0 %100
107	MP5	Z	-1.15	-1.15	0 %100
108	MP6	Z	-1.15	-1.15	0 %100
109	MP7	Z	-1.15	-1.15	0 %100
110	MP8	Z	-1.15	-1.15	0 %100
111	MP9	Z	-1.15	-1.15	0 %100
112	MP10	Z	-1.15	-1.15	0 %100
113	MP11	Z	-1.15	-1.15	0 %100
114	MP12	Z	-1.15	-1.15	0 %100
115	MP13	Z	-1.15	-1.15	0 %100
116	MP14	Z	-1.15	-1.15	0 %100
117	MP15	Z	-1.15	-1.15	0 %100

Member Distributed Loads (BLC 6 : Wind -X (Ice))

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in,%]	End Location[in,%]
1	V001	X	-1.158	-1.158	0 %100
2	V002	X	-1.158	-1.158	0 %100
3	V003	X	-1.158	-1.158	0 %100
4	H004	X	-1.158	-1.158	0 %100
5	D005	X	-1.158	-1.158	0 %100
6	V006	X	-1.158	-1.158	0 %100
7	H007	X	-1.158	-1.158	0 %100
8	V008	X	-1.158	-1.158	0 %100
9	D009	X	-1.158	-1.158	0 %100
10	V010	X	-1.158	-1.158	0 %100
11	V011	X	-1.158	-1.158	0 %100
12	V012	X	-1.158	-1.158	0 %100
13	V013	X	-1.158	-1.158	0 %100
14	V014	X	-1.158	-1.158	0 %100
15	V015	X	-1.158	-1.158	0 %100
16	V016	X	-1.158	-1.158	0 %100
17	D017	X	-1.158	-1.158	0 %100
18	D018	X	-1.158	-1.158	0 %100
19	D019	X	-1.158	-1.158	0 %100
20	D020	X	-1.158	-1.158	0 %100
21	D021	X	-1.158	-1.158	0 %100
22	D022	X	-1.158	-1.158	0 %100
23	D023	X	-1.158	-1.158	0 %100
24	H024	X	-1.158	-1.158	0 %100
25	H025	X	-1.158	-1.158	0 %100



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 6 : Wind -X (Ice)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in,%]	End Location[in,%]
26	D026	X	-1.158	-1.158	0 %100
27	V027	X	-1.158	-1.158	0 %100
28	H028	X	-1.158	-1.158	0 %100
29	V029	X	-1.158	-1.158	0 %100
30	D030	X	-1.158	-1.158	0 %100
31	D031	X	-1.158	-1.158	0 %100
32	V032	X	-1.158	-1.158	0 %100
33	D033	X	-1.158	-1.158	0 %100
34	V034	X	-1.158	-1.158	0 %100
35	D035	X	-1.158	-1.158	0 %100
36	V036	X	-1.158	-1.158	0 %100
37	D037	X	-1.158	-1.158	0 %100
38	V038	X	-1.158	-1.158	0 %100
39	D039	X	-1.158	-1.158	0 %100
40	V040	X	-1.158	-1.158	0 %100
41	D041	X	-1.158	-1.158	0 %100
42	V042	X	-1.158	-1.158	0 %100
43	D043	X	-1.158	-1.158	0 %100
44	V044	X	-1.158	-1.158	0 %100
45	D045	X	-1.158	-1.158	0 %100
46	V046	X	-1.158	-1.158	0 %100
47	H047	X	-1.158	-1.158	0 %100
48	D048	X	-1.158	-1.158	0 %100
49	V049	X	-1.158	-1.158	0 %100
50	D050	X	-1.158	-1.158	0 %100
51	V051	X	-1.158	-1.158	0 %100
52	D052	X	-1.158	-1.158	0 %100
53	V053	X	-1.158	-1.158	0 %100
54	D054	X	-1.158	-1.158	0 %100
55	V055	X	-1.158	-1.158	0 %100
56	D056	X	-1.158	-1.158	0 %100
57	V057	X	-1.158	-1.158	0 %100
58	D058	X	-1.158	-1.158	0 %100
59	V059	X	-1.158	-1.158	0 %100
60	D060	X	-1.158	-1.158	0 %100
61	V061	X	-1.158	-1.158	0 %100
62	D062	X	-1.158	-1.158	0 %100
63	V063	X	-1.158	-1.158	0 %100
64	V064	X	-1.158	-1.158	0 %100
65	V065	X	-1.158	-1.158	0 %100
66	V066	X	-1.158	-1.158	0 %100
67	V067	X	-1.158	-1.158	0 %100
68	V068	X	-1.158	-1.158	0 %100
69	V069	X	-1.158	-1.158	0 %100
70	H070	X	-1.158	-1.158	0 %100
71	H071	X	-1.158	-1.158	0 %100
72	H072	X	-1.158	-1.158	0 %100
73	H073	X	-1.158	-1.158	0 %100
74	H074	X	-1.158	-1.158	0 %100
75	H075	X	-1.158	-1.158	0 %100
76	H076	X	-1.158	-1.158	0 %100
77	H077	X	-1.158	-1.158	0 %100
78	H078	X	-1.158	-1.158	0 %100
79	H079	X	-1.158	-1.158	0 %100
80	H080	X	-1.158	-1.158	0 %100
81	H081	X	-1.158	-1.158	0 %100
82	H082	X	-1.158	-1.158	0 %100



Member Distributed Loads (BLC 6 : Wind -X (Ice)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
83	H083	X	-1.158	-1.158	0 %100
84	H084	X	-1.158	-1.158	0 %100
85	H085	X	-1.158	-1.158	0 %100
86	H086	X	-1.158	-1.158	0 %100
87	H087	X	-1.158	-1.158	0 %100
88	H088	X	-1.158	-1.158	0 %100
89	H089	X	-1.158	-1.158	0 %100
90	H090	X	-1.158	-1.158	0 %100
91	H091	X	-1.158	-1.158	0 %100
92	H092	X	-1.158	-1.158	0 %100
93	H093	X	-1.158	-1.158	0 %100
94	H094	X	-1.158	-1.158	0 %100
95	H095	X	-1.158	-1.158	0 %100
96	H096	X	-1.158	-1.158	0 %100
97	H127	X	-1.158	-1.158	0 %100
98	H128	X	-1.158	-1.158	0 %100
99	H129	X	-1.158	-1.158	0 %100
100	V130	X	-1.158	-1.158	0 %100
101	V131	X	-1.158	-1.158	0 %100
102	V132	X	-1.158	-1.158	0 %100
103	MP1	X	-1.158	-1.158	0 %100
104	MP2	X	-1.158	-1.158	0 %100
105	MP3	X	-1.158	-1.158	0 %100
106	MP4	X	-1.158	-1.158	0 %100
107	MP5	X	-1.158	-1.158	0 %100
108	MP6	X	-1.158	-1.158	0 %100
109	MP7	X	-1.158	-1.158	0 %100
110	MP8	X	-1.158	-1.158	0 %100
111	MP9	X	-1.158	-1.158	0 %100
112	MP10	X	-1.158	-1.158	0 %100
113	MP11	X	-1.158	-1.158	0 %100
114	MP12	X	-1.158	-1.158	0 %100
115	MP13	X	-1.158	-1.158	0 %100
116	MP14	X	-1.158	-1.158	0 %100
117	MP15	X	-1.158	-1.158	0 %100

Member Distributed Loads (BLC 9 : Ev -Y (Seismic))

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	V001	Y	-484	-484	0 %100
2	V002	Y	-484	-484	0 %100
3	V003	Y	-484	-484	0 %100
4	H004	Y	-484	-484	0 %100
5	D005	Y	-484	-484	0 %100
6	V006	Y	-484	-484	0 %100
7	H007	Y	-484	-484	0 %100
8	V008	Y	-484	-484	0 %100
9	D009	Y	-484	-484	0 %100
10	V010	Y	-484	-484	0 %100
11	V011	Y	-484	-484	0 %100
12	V012	Y	-484	-484	0 %100
13	V013	Y	-484	-484	0 %100
14	V014	Y	-484	-484	0 %100
15	V015	Y	-484	-484	0 %100
16	V016	Y	-484	-484	0 %100
17	D017	Y	-484	-484	0 %100
18	D018	Y	-484	-484	0 %100



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 9 : Ev -Y (Seismic)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
19	D019	-484	-484	0	%100
20	D020	-484	-484	0	%100
21	D021	-484	-484	0	%100
22	D022	-484	-484	0	%100
23	D023	-484	-484	0	%100
24	H024	-484	-484	0	%100
25	H025	-484	-484	0	%100
26	D026	-484	-484	0	%100
27	V027	-484	-484	0	%100
28	H028	-484	-484	0	%100
29	V029	-484	-484	0	%100
30	D030	-484	-484	0	%100
31	D031	-484	-484	0	%100
32	V032	-484	-484	0	%100
33	D033	-484	-484	0	%100
34	V034	-484	-484	0	%100
35	D035	-484	-484	0	%100
36	V036	-484	-484	0	%100
37	D037	-484	-484	0	%100
38	V038	-484	-484	0	%100
39	D039	-484	-484	0	%100
40	V040	-484	-484	0	%100
41	D041	-484	-484	0	%100
42	V042	-484	-484	0	%100
43	D043	-484	-484	0	%100
44	V044	-484	-484	0	%100
45	D045	-484	-484	0	%100
46	V046	-484	-484	0	%100
47	H047	-484	-484	0	%100
48	D048	-484	-484	0	%100
49	V049	-484	-484	0	%100
50	D050	-484	-484	0	%100
51	V051	-484	-484	0	%100
52	D052	-484	-484	0	%100
53	V053	-484	-484	0	%100
54	D054	-484	-484	0	%100
55	V055	-484	-484	0	%100
56	D056	-484	-484	0	%100
57	V057	-484	-484	0	%100
58	D058	-484	-484	0	%100
59	V059	-484	-484	0	%100
60	D060	-484	-484	0	%100
61	V061	-484	-484	0	%100
62	D062	-484	-484	0	%100
63	V063	-484	-484	0	%100
64	V064	-484	-484	0	%100
65	V065	-484	-484	0	%100
66	V066	-484	-484	0	%100
67	V067	-484	-484	0	%100
68	V068	-484	-484	0	%100
69	V069	-484	-484	0	%100
70	H070	-484	-484	0	%100
71	H071	-484	-484	0	%100
72	H072	-484	-484	0	%100
73	H073	-484	-484	0	%100
74	H074	-484	-484	0	%100
75	H075	-484	-484	0	%100



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 9 : Ev -Y (Seismic)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
76	H076	Y	-484	-484	0 %100
77	H077	Y	-484	-484	0 %100
78	H078	Y	-484	-484	0 %100
79	H079	Y	-484	-484	0 %100
80	H080	Y	-484	-484	0 %100
81	H081	Y	-484	-484	0 %100
82	H082	Y	-484	-484	0 %100
83	H083	Y	-484	-484	0 %100
84	H084	Y	-484	-484	0 %100
85	H085	Y	-484	-484	0 %100
86	H086	Y	-484	-484	0 %100
87	H087	Y	-484	-484	0 %100
88	H088	Y	-484	-484	0 %100
89	H089	Y	-484	-484	0 %100
90	H090	Y	-484	-484	0 %100
91	H091	Y	-484	-484	0 %100
92	H092	Y	-484	-484	0 %100
93	H093	Y	-484	-484	0 %100
94	H094	Y	-484	-484	0 %100
95	H095	Y	-484	-484	0 %100
96	H096	Y	-484	-484	0 %100
97	H127	Y	-484	-484	0 %100
98	H128	Y	-484	-484	0 %100
99	H129	Y	-484	-484	0 %100
100	V130	Y	-484	-484	0 %100
101	V131	Y	-484	-484	0 %100
102	V132	Y	-484	-484	0 %100
103	MP1	Y	-484	-484	0 %100
104	MP2	Y	-484	-484	0 %100
105	MP3	Y	-484	-484	0 %100
106	MP4	Y	-484	-484	0 %100
107	MP5	Y	-484	-484	0 %100
108	MP6	Y	-484	-484	0 %100
109	MP7	Y	-484	-484	0 %100
110	MP8	Y	-484	-484	0 %100
111	MP9	Y	-484	-484	0 %100
112	MP10	Y	-484	-484	0 %100
113	MP11	Y	-484	-484	0 %100
114	MP12	Y	-484	-484	0 %100
115	MP13	Y	-484	-484	0 %100
116	MP14	Y	-484	-484	0 %100
117	MP15	Y	-484	-484	0 %100

Member Distributed Loads (BLC 10 : Eh -Z (Seismic))

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
1	V001	Z	-1.21	-1.21	0 %100
2	V002	Z	-1.21	-1.21	0 %100
3	V003	Z	-1.21	-1.21	0 %100
4	H004	Z	-1.21	-1.21	0 %100
5	D005	Z	-1.21	-1.21	0 %100
6	V006	Z	-1.21	-1.21	0 %100
7	H007	Z	-1.21	-1.21	0 %100
8	V008	Z	-1.21	-1.21	0 %100
9	D009	Z	-1.21	-1.21	0 %100
10	V010	Z	-1.21	-1.21	0 %100
11	V011	Z	-1.21	-1.21	0 %100



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 10 : Eh -Z (Seismic)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in,%]	End Location[in,%]
12	V012	Z	-1.21	-1.21	0 %100
13	V013	Z	-1.21	-1.21	0 %100
14	V014	Z	-1.21	-1.21	0 %100
15	V015	Z	-1.21	-1.21	0 %100
16	V016	Z	-1.21	-1.21	0 %100
17	D017	Z	-1.21	-1.21	0 %100
18	D018	Z	-1.21	-1.21	0 %100
19	D019	Z	-1.21	-1.21	0 %100
20	D020	Z	-1.21	-1.21	0 %100
21	D021	Z	-1.21	-1.21	0 %100
22	D022	Z	-1.21	-1.21	0 %100
23	D023	Z	-1.21	-1.21	0 %100
24	H024	Z	-1.21	-1.21	0 %100
25	H025	Z	-1.21	-1.21	0 %100
26	D026	Z	-1.21	-1.21	0 %100
27	V027	Z	-1.21	-1.21	0 %100
28	H028	Z	-1.21	-1.21	0 %100
29	V029	Z	-1.21	-1.21	0 %100
30	D030	Z	-1.21	-1.21	0 %100
31	D031	Z	-1.21	-1.21	0 %100
32	V032	Z	-1.21	-1.21	0 %100
33	D033	Z	-1.21	-1.21	0 %100
34	V034	Z	-1.21	-1.21	0 %100
35	D035	Z	-1.21	-1.21	0 %100
36	V036	Z	-1.21	-1.21	0 %100
37	D037	Z	-1.21	-1.21	0 %100
38	V038	Z	-1.21	-1.21	0 %100
39	D039	Z	-1.21	-1.21	0 %100
40	V040	Z	-1.21	-1.21	0 %100
41	D041	Z	-1.21	-1.21	0 %100
42	V042	Z	-1.21	-1.21	0 %100
43	D043	Z	-1.21	-1.21	0 %100
44	V044	Z	-1.21	-1.21	0 %100
45	D045	Z	-1.21	-1.21	0 %100
46	V046	Z	-1.21	-1.21	0 %100
47	H047	Z	-1.21	-1.21	0 %100
48	D048	Z	-1.21	-1.21	0 %100
49	V049	Z	-1.21	-1.21	0 %100
50	D050	Z	-1.21	-1.21	0 %100
51	V051	Z	-1.21	-1.21	0 %100
52	D052	Z	-1.21	-1.21	0 %100
53	V053	Z	-1.21	-1.21	0 %100
54	D054	Z	-1.21	-1.21	0 %100
55	V055	Z	-1.21	-1.21	0 %100
56	D056	Z	-1.21	-1.21	0 %100
57	V057	Z	-1.21	-1.21	0 %100
58	D058	Z	-1.21	-1.21	0 %100
59	V059	Z	-1.21	-1.21	0 %100
60	D060	Z	-1.21	-1.21	0 %100
61	V061	Z	-1.21	-1.21	0 %100
62	D062	Z	-1.21	-1.21	0 %100
63	V063	Z	-1.21	-1.21	0 %100
64	V064	Z	-1.21	-1.21	0 %100
65	V065	Z	-1.21	-1.21	0 %100
66	V066	Z	-1.21	-1.21	0 %100
67	V067	Z	-1.21	-1.21	0 %100
68	V068	Z	-1.21	-1.21	0 %100



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 10 : Eh -Z (Seismic)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
69	V069	Z	-1.21	-1.21	0 %100
70	H070	Z	-1.21	-1.21	0 %100
71	H071	Z	-1.21	-1.21	0 %100
72	H072	Z	-1.21	-1.21	0 %100
73	H073	Z	-1.21	-1.21	0 %100
74	H074	Z	-1.21	-1.21	0 %100
75	H075	Z	-1.21	-1.21	0 %100
76	H076	Z	-1.21	-1.21	0 %100
77	H077	Z	-1.21	-1.21	0 %100
78	H078	Z	-1.21	-1.21	0 %100
79	H079	Z	-1.21	-1.21	0 %100
80	H080	Z	-1.21	-1.21	0 %100
81	H081	Z	-1.21	-1.21	0 %100
82	H082	Z	-1.21	-1.21	0 %100
83	H083	Z	-1.21	-1.21	0 %100
84	H084	Z	-1.21	-1.21	0 %100
85	H085	Z	-1.21	-1.21	0 %100
86	H086	Z	-1.21	-1.21	0 %100
87	H087	Z	-1.21	-1.21	0 %100
88	H088	Z	-1.21	-1.21	0 %100
89	H089	Z	-1.21	-1.21	0 %100
90	H090	Z	-1.21	-1.21	0 %100
91	H091	Z	-1.21	-1.21	0 %100
92	H092	Z	-1.21	-1.21	0 %100
93	H093	Z	-1.21	-1.21	0 %100
94	H094	Z	-1.21	-1.21	0 %100
95	H095	Z	-1.21	-1.21	0 %100
96	H096	Z	-1.21	-1.21	0 %100
97	H127	Z	-1.21	-1.21	0 %100
98	H128	Z	-1.21	-1.21	0 %100
99	H129	Z	-1.21	-1.21	0 %100
100	V130	Z	-1.21	-1.21	0 %100
101	V131	Z	-1.21	-1.21	0 %100
102	V132	Z	-1.21	-1.21	0 %100
103	MP1	Z	-1.21	-1.21	0 %100
104	MP2	Z	-1.21	-1.21	0 %100
105	MP3	Z	-1.21	-1.21	0 %100
106	MP4	Z	-1.21	-1.21	0 %100
107	MP5	Z	-1.21	-1.21	0 %100
108	MP6	Z	-1.21	-1.21	0 %100
109	MP7	Z	-1.21	-1.21	0 %100
110	MP8	Z	-1.21	-1.21	0 %100
111	MP9	Z	-1.21	-1.21	0 %100
112	MP10	Z	-1.21	-1.21	0 %100
113	MP11	Z	-1.21	-1.21	0 %100
114	MP12	Z	-1.21	-1.21	0 %100
115	MP13	Z	-1.21	-1.21	0 %100
116	MP14	Z	-1.21	-1.21	0 %100
117	MP15	Z	-1.21	-1.21	0 %100

Member Distributed Loads (BLC 11 : Eh -X (Seismic))

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	V001	X	-1.21	-1.21	0 %100
2	V002	X	-1.21	-1.21	0 %100
3	V003	X	-1.21	-1.21	0 %100
4	H004	X	-1.21	-1.21	0 %100



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 11 : Eh -X (Seismic)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
5	D005	X	-1.21	-1.21	0 %100
6	V006	X	-1.21	-1.21	0 %100
7	H007	X	-1.21	-1.21	0 %100
8	V008	X	-1.21	-1.21	0 %100
9	D009	X	-1.21	-1.21	0 %100
10	V010	X	-1.21	-1.21	0 %100
11	V011	X	-1.21	-1.21	0 %100
12	V012	X	-1.21	-1.21	0 %100
13	V013	X	-1.21	-1.21	0 %100
14	V014	X	-1.21	-1.21	0 %100
15	V015	X	-1.21	-1.21	0 %100
16	V016	X	-1.21	-1.21	0 %100
17	D017	X	-1.21	-1.21	0 %100
18	D018	X	-1.21	-1.21	0 %100
19	D019	X	-1.21	-1.21	0 %100
20	D020	X	-1.21	-1.21	0 %100
21	D021	X	-1.21	-1.21	0 %100
22	D022	X	-1.21	-1.21	0 %100
23	D023	X	-1.21	-1.21	0 %100
24	H024	X	-1.21	-1.21	0 %100
25	H025	X	-1.21	-1.21	0 %100
26	D026	X	-1.21	-1.21	0 %100
27	V027	X	-1.21	-1.21	0 %100
28	H028	X	-1.21	-1.21	0 %100
29	V029	X	-1.21	-1.21	0 %100
30	D030	X	-1.21	-1.21	0 %100
31	D031	X	-1.21	-1.21	0 %100
32	V032	X	-1.21	-1.21	0 %100
33	D033	X	-1.21	-1.21	0 %100
34	V034	X	-1.21	-1.21	0 %100
35	D035	X	-1.21	-1.21	0 %100
36	V036	X	-1.21	-1.21	0 %100
37	D037	X	-1.21	-1.21	0 %100
38	V038	X	-1.21	-1.21	0 %100
39	D039	X	-1.21	-1.21	0 %100
40	V040	X	-1.21	-1.21	0 %100
41	D041	X	-1.21	-1.21	0 %100
42	V042	X	-1.21	-1.21	0 %100
43	D043	X	-1.21	-1.21	0 %100
44	V044	X	-1.21	-1.21	0 %100
45	D045	X	-1.21	-1.21	0 %100
46	V046	X	-1.21	-1.21	0 %100
47	H047	X	-1.21	-1.21	0 %100
48	D048	X	-1.21	-1.21	0 %100
49	V049	X	-1.21	-1.21	0 %100
50	D050	X	-1.21	-1.21	0 %100
51	V051	X	-1.21	-1.21	0 %100
52	D052	X	-1.21	-1.21	0 %100
53	V053	X	-1.21	-1.21	0 %100
54	D054	X	-1.21	-1.21	0 %100
55	V055	X	-1.21	-1.21	0 %100
56	D056	X	-1.21	-1.21	0 %100
57	V057	X	-1.21	-1.21	0 %100
58	D058	X	-1.21	-1.21	0 %100
59	V059	X	-1.21	-1.21	0 %100
60	D060	X	-1.21	-1.21	0 %100
61	V061	X	-1.21	-1.21	0 %100



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 11 : Eh -X (Seismic)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
62	D062	X	-1.21	-1.21	0 %100
63	V063	X	-1.21	-1.21	0 %100
64	V064	X	-1.21	-1.21	0 %100
65	V065	X	-1.21	-1.21	0 %100
66	V066	X	-1.21	-1.21	0 %100
67	V067	X	-1.21	-1.21	0 %100
68	V068	X	-1.21	-1.21	0 %100
69	V069	X	-1.21	-1.21	0 %100
70	H070	X	-1.21	-1.21	0 %100
71	H071	X	-1.21	-1.21	0 %100
72	H072	X	-1.21	-1.21	0 %100
73	H073	X	-1.21	-1.21	0 %100
74	H074	X	-1.21	-1.21	0 %100
75	H075	X	-1.21	-1.21	0 %100
76	H076	X	-1.21	-1.21	0 %100
77	H077	X	-1.21	-1.21	0 %100
78	H078	X	-1.21	-1.21	0 %100
79	H079	X	-1.21	-1.21	0 %100
80	H080	X	-1.21	-1.21	0 %100
81	H081	X	-1.21	-1.21	0 %100
82	H082	X	-1.21	-1.21	0 %100
83	H083	X	-1.21	-1.21	0 %100
84	H084	X	-1.21	-1.21	0 %100
85	H085	X	-1.21	-1.21	0 %100
86	H086	X	-1.21	-1.21	0 %100
87	H087	X	-1.21	-1.21	0 %100
88	H088	X	-1.21	-1.21	0 %100
89	H089	X	-1.21	-1.21	0 %100
90	H090	X	-1.21	-1.21	0 %100
91	H091	X	-1.21	-1.21	0 %100
92	H092	X	-1.21	-1.21	0 %100
93	H093	X	-1.21	-1.21	0 %100
94	H094	X	-1.21	-1.21	0 %100
95	H095	X	-1.21	-1.21	0 %100
96	H096	X	-1.21	-1.21	0 %100
97	H127	X	-1.21	-1.21	0 %100
98	H128	X	-1.21	-1.21	0 %100
99	H129	X	-1.21	-1.21	0 %100
100	V130	X	-1.21	-1.21	0 %100
101	V131	X	-1.21	-1.21	0 %100
102	V132	X	-1.21	-1.21	0 %100
103	MP1	X	-1.21	-1.21	0 %100
104	MP2	X	-1.21	-1.21	0 %100
105	MP3	X	-1.21	-1.21	0 %100
106	MP4	X	-1.21	-1.21	0 %100
107	MP5	X	-1.21	-1.21	0 %100
108	MP6	X	-1.21	-1.21	0 %100
109	MP7	X	-1.21	-1.21	0 %100
110	MP8	X	-1.21	-1.21	0 %100
111	MP9	X	-1.21	-1.21	0 %100
112	MP10	X	-1.21	-1.21	0 %100
113	MP11	X	-1.21	-1.21	0 %100
114	MP12	X	-1.21	-1.21	0 %100
115	MP13	X	-1.21	-1.21	0 %100
116	MP14	X	-1.21	-1.21	0 %100
117	MP15	X	-1.21	-1.21	0 %100



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 27 : BLC 3 Transient Area Loads)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	V001	Z	-1.356	-1.356	0 12
2	V002	Z	-3.027	-3.027	0 12
3	V003	Z	-3.027	-3.027	0 12
4	D005	Z	-2.128	-2.128	0 45.891
5	V006	Z	0	0	0 3
6	V008	Z	-1.356	-1.356	0 12
7	D009	Z	-1.021	-1.021	0 15.945
8	V010	Z	-1.356	-1.356	0 12
9	V011	Z	-1.356	-1.356	0 10.235
10	V012	Z	-1.356	-1.356	0 8.635
11	V013	Z	-1.356	-1.356	0 7.335
12	V014	Z	-1.356	-1.356	0 6.335
13	V015	Z	-1.356	-1.356	0 5.435
14	V016	Z	-1.356	-1.356	0 4.835
15	D017	Z	-1.021	-1.021	0 15.945
16	D018	Z	-1.027	-1.027	0 13.514
17	D019	Z	-0.995	-0.995	0 11.771
18	D020	Z	-1.015	-1.015	0 9.801
19	D021	Z	-1.064	-1.064	0 8.07
20	D022	Z	-1.044	-1.044	0 7.056
21	D023	Z	-1.152	-1.152	0 5.69
22	H024	Z	-3.523	-3.523	0 66
23	H025	Z	-3.523	-3.523	0 66
24	D026	Z	-4.055	-4.055	0 45.891
25	V027	Z	0	0	0 3
26	H028	Z	-3.523	-3.523	0 21
27	V029	Z	0	0	0 3
28	D030	Z	-4.055	-4.055	0 45.891
29	D031	Z	-2.859	-2.859	0 15.945
30	V032	Z	-3.027	-3.027	0 12
31	D033	Z	-2.859	-2.859	0 15.945
32	V034	Z	-3.027	-3.027	0 12
33	D035	Z	-2.862	-2.862	0 13.514
34	V036	Z	-3.027	-3.027	0 10.235
35	D037	Z	-2.846	-2.846	0 11.771
36	V038	Z	-3.027	-3.027	0 8.635
37	D039	Z	-2.856	-2.856	0 9.801
38	V040	Z	-3.027	-3.027	0 7.335
39	D041	Z	-2.881	-2.881	0 8.07
40	V042	Z	-3.027	-3.027	0 6.335
41	D043	Z	-2.871	-2.871	0 7.056
42	V044	Z	-3.027	-3.027	0 5.435
43	D045	Z	-2.925	-2.925	0 5.69
44	V046	Z	-3.027	-3.027	0 4.835
45	H047	Z	-3.523	-3.523	0 21
46	D048	Z	-2.859	-2.859	0 15.945
47	V049	Z	-3.027	-3.027	0 12
48	D050	Z	-2.859	-2.859	0 15.945
49	V051	Z	-3.027	-3.027	0 12
50	D052	Z	-2.862	-2.862	0 13.514
51	V053	Z	-3.027	-3.027	0 10.235
52	D054	Z	-2.846	-2.846	0 11.771
53	V055	Z	-3.027	-3.027	0 8.635
54	D056	Z	-2.856	-2.856	0 9.801
55	V057	Z	-3.027	-3.027	0 7.335
56	D058	Z	-2.881	-2.881	0 8.07
57	V059	Z	-3.027	-3.027	0 6.335



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 27 : BLC 3 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in,%]	End Location[in,%]
58	D060	Z	-2.871	-2.871	0 7.056
59	V061	Z	-3.027	-3.027	0 5.435
60	D062	Z	-2.925	-2.925	0 5.69
61	V063	Z	-3.027	-3.027	0 4.835
62	V064	Z	0	0	0 3
63	V065	Z	0	0	0 3
64	V066	Z	0	0	0 3
65	V067	Z	0	0	0 3
66	V068	Z	0	0	0 3
67	V069	Z	0	0	0 3
68	H070	Z	-7.797	-7.797	0 150
69	H071	Z	-.107	-.107	0 30.753
70	H072	Z	-6.992	-6.992	0 30.753
71	H073	Z	-7.099	-7.099	0 30.753
72	H074	Z	-.107	-.107	0 30.753
73	H075	Z	-7.099	-7.099	0 30.753
74	H076	Z	-6.992	-6.992	0 30.753
75	H077	Z	-3.899	-3.899	0 150
76	H078	Z	-3.899	-3.899	0 150
77	H080	Z	-9.395	-9.395	0 45
78	H081	Z	-9.395	-9.395	0 45
79	H082	Z	-5.427	-5.427	0 40.23
80	H083	Z	-7.963	-7.963	0 40.23
81	H084	Z	-2.537	-2.537	0 40.23
82	H085	Z	-5.427	-5.427	0 40.23
83	H086	Z	-2.537	-2.537	0 40.23
84	H087	Z	-7.963	-7.963	0 40.23
85	H088	Z	0	0	0 5.545
86	H089	Z	0	0	0 5.545
87	H090	Z	0	0	0 5.545
88	H091	Z	0	0	0 5.545
89	H092	Z	0	0	0 5.545
90	H093	Z	0	0	0 5.545
91	H094	Z	-5.424	-5.424	0 150
92	H095	Z	-2.712	-2.712	0 150
93	H096	Z	-2.712	-2.712	0 150
94	U097	Z	-2.349	-2.349	0 3
95	U098	Z	-2.349	-2.349	0 3
96	U099	Z	-2.349	-2.349	0 3
97	U100	Z	-2.349	-2.349	0 3
98	U101	Z	-2.349	-2.349	0 3
99	U102	Z	-2.349	-2.349	0 3
100	U103	Z	-2.349	-2.349	0 3
101	U104	Z	-2.349	-2.349	0 3
102	U105	Z	-2.349	-2.349	0 3
103	U106	Z	-2.349	-2.349	0 3
104	U117	Z	-2.349	-2.349	0 3
105	U118	Z	-2.349	-2.349	0 3
106	U119	Z	-2.349	-2.349	0 3
107	U120	Z	-2.349	-2.349	0 3
108	U121	Z	-2.349	-2.349	0 3
109	U122	Z	-2.349	-2.349	0 3
110	U123	Z	-2.349	-2.349	0 3
111	U124	Z	-2.349	-2.349	0 3
112	U125	Z	-2.349	-2.349	0 3
113	U126	Z	-2.349	-2.349	0 3
114	H127	Z	-5.424	-5.424	0 17.665



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 27 : BLC 3 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
115	H128	Z	-2.712	-2.712	0 17.665
116	H129	Z	-2.712	-2.712	0 17.665
117	V130	Z	0	0	0 3
118	V131	Z	0	0	0 3
119	V132	Z	0	0	0 3
120	MP1	Z	-6.441	-6.441	0 120
121	MP2	Z	-6.441	-6.441	0 120
122	MP3	Z	-6.441	-6.441	0 120
123	MP4	Z	-6.441	-6.441	0 120
124	MP5	Z	-6.441	-6.441	0 120
125	MP6	Z	-6.441	-6.441	0 120
126	MP7	Z	-6.441	-6.441	0 120
127	MP8	Z	-6.441	-6.441	0 120
128	MP9	Z	-6.441	-6.441	0 120
129	MP10	Z	-6.441	-6.441	0 120
130	MP11	Z	-6.441	-6.441	0 120
131	MP12	Z	-6.441	-6.441	0 120
132	MP13	Z	-6.441	-6.441	0 120
133	MP14	Z	-6.441	-6.441	0 120
134	MP15	Z	-6.441	-6.441	0 120

Member Distributed Loads (BLC 28 : BLC 4 Transient Area Loads)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	V001	X	-2.712	-2.712	0 12
2	V002	X	-2.53	-2.53	0 12
3	V003	X	-2.53	-2.53	0 12
4	H004	X	-4.068	-4.068	0 66
5	D005	X	-4.068	-4.068	0 45.891
6	V006	X	0	0	0 3
7	H007	X	-4.068	-4.068	0 21
8	V008	X	-2.712	-2.712	0 12
9	D009	X	-2.712	-2.712	0 15.945
10	V010	X	-2.712	-2.712	0 12
11	V011	X	-2.712	-2.712	0 10.235
12	V012	X	-2.712	-2.712	0 8.635
13	V013	X	-2.712	-2.712	0 7.335
14	V014	X	-2.712	-2.712	0 6.335
15	V015	X	-2.712	-2.712	0 5.435
16	V016	X	-2.712	-2.712	0 4.835
17	D017	X	-2.712	-2.712	0 15.945
18	D018	X	-2.712	-2.712	0 13.514
19	D019	X	-2.712	-2.712	0 11.771
20	D020	X	-2.712	-2.712	0 9.801
21	D021	X	-2.712	-2.712	0 8.07
22	D022	X	-2.712	-2.712	0 7.056
23	D023	X	-2.712	-2.712	0 5.69
24	H024	X	-2.034	-2.034	0 66
25	H025	X	-2.034	-2.034	0 66
26	D026	X	-2.955	-2.955	0 45.891
27	V027	X	0	0	0 3
28	H028	X	-2.034	-2.034	0 21
29	V029	X	0	0	0 3
30	D030	X	-2.955	-2.955	0 45.891
31	D031	X	-2.24	-2.24	0 15.945
32	V032	X	-2.53	-2.53	0 12
33	D033	X	-2.24	-2.24	0 15.945



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 28 : BLC 4 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in,%]	End Location[in,%]
34	V034	X	-2.53	-2.53	0 12
35	D035	X	-2.245	-2.245	0 13.514
36	V036	X	-2.53	-2.53	0 10.235
37	D037	X	-2.217	-2.217	0 11.771
38	V038	X	-2.53	-2.53	0 8.635
39	D039	X	-2.235	-2.235	0 9.801
40	V040	X	-2.53	-2.53	0 7.335
41	D041	X	-2.278	-2.278	0 8.07
42	V042	X	-2.53	-2.53	0 6.335
43	D043	X	-2.261	-2.261	0 7.056
44	V044	X	-2.53	-2.53	0 5.435
45	D045	X	-2.354	-2.354	0 5.69
46	V046	X	-2.53	-2.53	0 4.835
47	H047	X	-2.034	-2.034	0 21
48	D048	X	-2.24	-2.24	0 15.945
49	V049	X	-2.53	-2.53	0 12
50	D050	X	-2.24	-2.24	0 15.945
51	V051	X	-2.53	-2.53	0 12
52	D052	X	-2.245	-2.245	0 13.514
53	V053	X	-2.53	-2.53	0 10.235
54	D054	X	-2.217	-2.217	0 11.771
55	V055	X	-2.53	-2.53	0 8.635
56	D056	X	-2.235	-2.235	0 9.801
57	V057	X	-2.53	-2.53	0 7.335
58	D058	X	-2.278	-2.278	0 8.07
59	V059	X	-2.53	-2.53	0 6.335
60	D060	X	-2.261	-2.261	0 7.056
61	V061	X	-2.53	-2.53	0 5.435
62	D062	X	-2.354	-2.354	0 5.69
63	V063	X	-2.53	-2.53	0 4.835
64	V064	X	0	0	0 3
65	V065	X	0	0	0 3
66	V066	X	0	0	0 3
67	V067	X	0	0	0 3
68	V068	X	0	0	0 3
69	V069	X	0	0	0 3
70	H071	X	-8.135	-8.135	0 30.753
71	H072	X	-4.16	-4.16	0 30.753
72	H073	X	-3.975	-3.975	0 30.753
73	H074	X	-8.135	-8.135	0 30.753
74	H075	X	-3.975	-3.975	0 30.753
75	H076	X	-4.16	-4.16	0 30.753
76	H077	X	-6.753	-6.753	0 150
77	H078	X	-6.753	-6.753	0 150
78	H079	X	-10.848	-10.848	0 45
79	H080	X	-5.424	-5.424	0 45
80	H081	X	-5.424	-5.424	0 45
81	H082	X	-6.062	-6.062	0 40.23
82	H083	X	-1.668	-1.668	0 40.23
83	H084	X	-7.731	-7.731	0 40.23
84	H085	X	-6.062	-6.062	0 40.23
85	H086	X	-7.731	-7.731	0 40.23
86	H087	X	-1.668	-1.668	0 40.23
87	H088	X	0	0	0 5.545
88	H089	X	0	0	0 5.545
89	H090	X	0	0	0 5.545
90	H091	X	0	0	0 5.545



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 28 : BLC 4 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
91	H092	X	0	0	5.545
92	H093	X	0	0	5.545
93	H095	X	-4.697	-4.697	150
94	H096	X	-4.697	-4.697	150
95	U097	X	-1.356	-1.356	3
96	U098	X	-1.356	-1.356	3
97	U099	X	-1.356	-1.356	3
98	U100	X	-1.356	-1.356	3
99	U101	X	-1.356	-1.356	3
100	U102	X	-1.356	-1.356	3
101	U103	X	-1.356	-1.356	3
102	U104	X	-1.356	-1.356	3
103	U105	X	-1.356	-1.356	3
104	U106	X	-1.356	-1.356	3
105	U107	X	-2.712	-2.712	3
106	U108	X	-2.712	-2.712	3
107	U109	X	-2.712	-2.712	3
108	U110	X	-2.712	-2.712	3
109	U111	X	-2.712	-2.712	3
110	U112	X	-2.712	-2.712	3
111	U113	X	-2.712	-2.712	3
112	U114	X	-2.712	-2.712	3
113	U115	X	-2.712	-2.712	3
114	U116	X	-2.712	-2.712	3
115	U117	X	-1.356	-1.356	3
116	U118	X	-1.356	-1.356	3
117	U119	X	-1.356	-1.356	3
118	U120	X	-1.356	-1.356	3
119	U121	X	-1.356	-1.356	3
120	U122	X	-1.356	-1.356	3
121	U123	X	-1.356	-1.356	3
122	U124	X	-1.356	-1.356	3
123	U125	X	-1.356	-1.356	3
124	U126	X	-1.356	-1.356	3
125	H128	X	-4.697	-4.697	17.665
126	H129	X	-4.697	-4.697	17.665
127	V130	X	0	0	3
128	V131	X	0	0	3
129	V132	X	0	0	3
130	MP1	X	-6.441	-6.441	120
131	MP2	X	-6.441	-6.441	120
132	MP3	X	-6.441	-6.441	120
133	MP4	X	-6.441	-6.441	120
134	MP5	X	-6.441	-6.441	120
135	MP6	X	-6.441	-6.441	120
136	MP7	X	-6.441	-6.441	120
137	MP8	X	-6.441	-6.441	120
138	MP9	X	-6.441	-6.441	120
139	MP10	X	-6.441	-6.441	120
140	MP11	X	-6.441	-6.441	120
141	MP12	X	-6.441	-6.441	120
142	MP13	X	-6.441	-6.441	120
143	MP14	X	-6.441	-6.441	120
144	MP15	X	-6.441	-6.441	120

Member Distributed Loads (BLC 29 : BLC 5 Transient Area Loads)

Member Label Direction Start Magnitude[lb/ft.... End Magnitude[lb/ft.... Start Location[in, %] End Location[in, %]



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 29 : BLC 5 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	V001	Z	- .239	- .239	0 12
2	V002	Z	- .534	- .534	0 12
3	V003	Z	- .534	- .534	0 12
4	D005	Z	- .376	- .376	0 45.891
5	V006	Z	0	0	0 3
6	V008	Z	- .239	- .239	0 12
7	D009	Z	- .18	- .18	0 15.945
8	V010	Z	- .239	- .239	0 12
9	V011	Z	- .239	- .239	0 10.235
10	V012	Z	- .239	- .239	0 8.635
11	V013	Z	- .239	- .239	0 7.335
12	V014	Z	- .239	- .239	0 6.335
13	V015	Z	- .239	- .239	0 5.435
14	V016	Z	- .239	- .239	0 4.835
15	D017	Z	- .18	- .18	0 15.945
16	D018	Z	- .181	- .181	0 13.514
17	D019	Z	- .176	- .176	0 11.771
18	D020	Z	- .179	- .179	0 9.801
19	D021	Z	- .188	- .188	0 8.07
20	D022	Z	- .184	- .184	0 7.056
21	D023	Z	- .203	- .203	0 5.69
22	H024	Z	- .622	- .622	0 66
23	H025	Z	- .622	- .622	0 66
24	D026	Z	- .716	- .716	0 45.891
25	V027	Z	0	0	0 3
26	H028	Z	- .622	- .622	0 21
27	V029	Z	0	0	0 3
28	D030	Z	- .716	- .716	0 45.891
29	D031	Z	- .505	- .505	0 15.945
30	V032	Z	- .534	- .534	0 12
31	D033	Z	- .505	- .505	0 15.945
32	V034	Z	- .534	- .534	0 12
33	D035	Z	- .505	- .505	0 13.514
34	V036	Z	- .534	- .534	0 10.235
35	D037	Z	- .502	- .502	0 11.771
36	V038	Z	- .534	- .534	0 8.635
37	D039	Z	- .504	- .504	0 9.801
38	V040	Z	- .534	- .534	0 7.335
39	D041	Z	- .509	- .509	0 8.07
40	V042	Z	- .534	- .534	0 6.335
41	D043	Z	- .507	- .507	0 7.056
42	V044	Z	- .534	- .534	0 5.435
43	D045	Z	- .516	- .516	0 5.69
44	V046	Z	- .534	- .534	0 4.835
45	H047	Z	- .622	- .622	0 21
46	D048	Z	- .505	- .505	0 15.945
47	V049	Z	- .534	- .534	0 12
48	D050	Z	- .505	- .505	0 15.945
49	V051	Z	- .534	- .534	0 12
50	D052	Z	- .505	- .505	0 13.514
51	V053	Z	- .534	- .534	0 10.235
52	D054	Z	- .502	- .502	0 11.771
53	V055	Z	- .534	- .534	0 8.635
54	D056	Z	- .504	- .504	0 9.801
55	V057	Z	- .534	- .534	0 7.335
56	D058	Z	- .509	- .509	0 8.07
57	V059	Z	- .534	- .534	0 6.335



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 29 : BLC 5 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in,%]	End Location[in,%]
58	D060	Z	-507	-507	0 7.056
59	V061	Z	-534	-534	0 5.435
60	D062	Z	-516	-516	0 5.69
61	V063	Z	-534	-534	0 4.835
62	V064	Z	0	0	0 3
63	V065	Z	0	0	0 3
64	V066	Z	0	0	0 3
65	V067	Z	0	0	0 3
66	V068	Z	0	0	0 3
67	V069	Z	0	0	0 3
68	H070	Z	-1.377	-1.377	0 150
69	H071	Z	-0.19	-0.19	0 30.753
70	H072	Z	-1.234	-1.234	0 30.753
71	H073	Z	-1.253	-1.253	0 30.753
72	H074	Z	-0.19	-0.19	0 30.753
73	H075	Z	-1.253	-1.253	0 30.753
74	H076	Z	-1.234	-1.234	0 30.753
75	H077	Z	-0.688	-0.688	0 150
76	H078	Z	-0.688	-0.688	0 150
77	H080	Z	-1.659	-1.659	0 45
78	H081	Z	-1.659	-1.659	0 45
79	H082	Z	-0.958	-0.958	0 40.23
80	H083	Z	-1.406	-1.406	0 40.23
81	H084	Z	-0.448	-0.448	0 40.23
82	H085	Z	-0.958	-0.958	0 40.23
83	H086	Z	-0.448	-0.448	0 40.23
84	H087	Z	-1.406	-1.406	0 40.23
85	H088	Z	0	0	0 5.545
86	H089	Z	0	0	0 5.545
87	H090	Z	0	0	0 5.545
88	H091	Z	0	0	0 5.545
89	H092	Z	0	0	0 5.545
90	H093	Z	0	0	0 5.545
91	H094	Z	-0.958	-0.958	0 150
92	H095	Z	-0.479	-0.479	0 150
93	H096	Z	-0.479	-0.479	0 150
94	U097	Z	-0.415	-0.415	0 3
95	U098	Z	-0.415	-0.415	0 3
96	U099	Z	-0.415	-0.415	0 3
97	U100	Z	-0.415	-0.415	0 3
98	U101	Z	-0.415	-0.415	0 3
99	U102	Z	-0.415	-0.415	0 3
100	U103	Z	-0.415	-0.415	0 3
101	U104	Z	-0.415	-0.415	0 3
102	U105	Z	-0.415	-0.415	0 3
103	U106	Z	-0.415	-0.415	0 3
104	U117	Z	-0.415	-0.415	0 3
105	U118	Z	-0.415	-0.415	0 3
106	U119	Z	-0.415	-0.415	0 3
107	U120	Z	-0.415	-0.415	0 3
108	U121	Z	-0.415	-0.415	0 3
109	U122	Z	-0.415	-0.415	0 3
110	U123	Z	-0.415	-0.415	0 3
111	U124	Z	-0.415	-0.415	0 3
112	U125	Z	-0.415	-0.415	0 3
113	U126	Z	-0.415	-0.415	0 3
114	H127	Z	-0.958	-0.958	0 17.665



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 29 : BLC 5 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
115	H128	Z	-479	-479	0 17.665
116	H129	Z	-479	-479	0 17.665
117	V130	Z	0	0	0 3
118	V131	Z	0	0	0 3
119	V132	Z	0	0	0 3
120	MP1	Z	-1.137	-1.137	0 120
121	MP2	Z	-1.137	-1.137	0 120
122	MP3	Z	-1.137	-1.137	0 120
123	MP4	Z	-1.137	-1.137	0 120
124	MP5	Z	-1.137	-1.137	0 120
125	MP6	Z	-1.137	-1.137	0 120
126	MP7	Z	-1.137	-1.137	0 120
127	MP8	Z	-1.137	-1.137	0 120
128	MP9	Z	-1.137	-1.137	0 120
129	MP10	Z	-1.137	-1.137	0 120
130	MP11	Z	-1.137	-1.137	0 120
131	MP12	Z	-1.137	-1.137	0 120
132	MP13	Z	-1.137	-1.137	0 120
133	MP14	Z	-1.137	-1.137	0 120
134	MP15	Z	-1.137	-1.137	0 120

Member Distributed Loads (BLC 30 : BLC 6 Transient Area Loads)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	V001	X	-479	-479	0 12
2	V002	X	-447	-447	0 12
3	V003	X	-447	-447	0 12
4	H004	X	-718	-718	0 66
5	D005	X	-718	-718	0 45.891
6	V006	X	0	0	0 3
7	H007	X	-718	-718	0 21
8	V008	X	-479	-479	0 12
9	D009	X	-479	-479	0 15.945
10	V010	X	-479	-479	0 12
11	V011	X	-479	-479	0 10.235
12	V012	X	-479	-479	0 8.635
13	V013	X	-479	-479	0 7.335
14	V014	X	-479	-479	0 6.335
15	V015	X	-479	-479	0 5.435
16	V016	X	-479	-479	0 4.835
17	D017	X	-479	-479	0 15.945
18	D018	X	-479	-479	0 13.514
19	D019	X	-479	-479	0 11.771
20	D020	X	-479	-479	0 9.801
21	D021	X	-479	-479	0 8.07
22	D022	X	-479	-479	0 7.056
23	D023	X	-479	-479	0 5.69
24	H024	X	-359	-359	0 66
25	H025	X	-359	-359	0 66
26	D026	X	-522	-522	0 45.891
27	V027	X	0	0	0 3
28	H028	X	-359	-359	0 21
29	V029	X	0	0	0 3
30	D030	X	-522	-522	0 45.891
31	D031	X	-395	-395	0 15.945
32	V032	X	-447	-447	0 12
33	D033	X	-395	-395	0 15.945



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 30 : BLC 6 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in,%]	End Location[in,%]
34	V034	X	- .447	- .447	0 12
35	D035	X	- .396	- .396	0 13.514
36	V036	X	- .447	- .447	0 10.235
37	D037	X	- .391	- .391	0 11.771
38	V038	X	- .447	- .447	0 8.635
39	D039	X	- .395	- .395	0 9.801
40	V040	X	- .447	- .447	0 7.335
41	D041	X	- .402	- .402	0 8.07
42	V042	X	- .447	- .447	0 6.335
43	D043	X	- .399	- .399	0 7.056
44	V044	X	- .447	- .447	0 5.435
45	D045	X	- .416	- .416	0 5.69
46	V046	X	- .447	- .447	0 4.835
47	H047	X	- .359	- .359	0 21
48	D048	X	- .395	- .395	0 15.945
49	V049	X	- .447	- .447	0 12
50	D050	X	- .395	- .395	0 15.945
51	V051	X	- .447	- .447	0 12
52	D052	X	- .396	- .396	0 13.514
53	V053	X	- .447	- .447	0 10.235
54	D054	X	- .391	- .391	0 11.771
55	V055	X	- .447	- .447	0 8.635
56	D056	X	- .395	- .395	0 9.801
57	V057	X	- .447	- .447	0 7.335
58	D058	X	- .402	- .402	0 8.07
59	V059	X	- .447	- .447	0 6.335
60	D060	X	- .399	- .399	0 7.056
61	V061	X	- .447	- .447	0 5.435
62	D062	X	- .416	- .416	0 5.69
63	V063	X	- .447	- .447	0 4.835
64	V064	X	0	0	0 3
65	V065	X	0	0	0 3
66	V066	X	0	0	0 3
67	V067	X	0	0	0 3
68	V068	X	0	0	0 3
69	V069	X	0	0	0 3
70	H071	X	-1.436	-1.436	0 30.753
71	H072	X	- .734	- .734	0 30.753
72	H073	X	- .702	- .702	0 30.753
73	H074	X	-1.436	-1.436	0 30.753
74	H075	X	- .702	- .702	0 30.753
75	H076	X	- .734	- .734	0 30.753
76	H077	X	-1.192	-1.192	0 150
77	H078	X	-1.192	-1.192	0 150
78	H079	X	-1.915	-1.915	0 45
79	H080	X	- .958	- .958	0 45
80	H081	X	- .958	- .958	0 45
81	H082	X	-1.07	-1.07	0 40.23
82	H083	X	- .295	- .295	0 40.23
83	H084	X	-1.365	-1.365	0 40.23
84	H085	X	-1.07	-1.07	0 40.23
85	H086	X	-1.365	-1.365	0 40.23
86	H087	X	- .295	- .295	0 40.23
87	H088	X	0	0	0 5.545
88	H089	X	0	0	0 5.545
89	H090	X	0	0	0 5.545
90	H091	X	0	0	0 5.545



Member Distributed Loads (BLC 30 : BLC 6 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in,%]	End Location[in,%]
91	H092	X	0	0	5.545
92	H093	X	0	0	5.545
93	H095	X	-.829	-.829	150
94	H096	X	-.829	-.829	150
95	U097	X	-.239	-.239	3
96	U098	X	-.239	-.239	3
97	U099	X	-.239	-.239	3
98	U100	X	-.239	-.239	3
99	U101	X	-.239	-.239	3
100	U102	X	-.239	-.239	3
101	U103	X	-.239	-.239	3
102	U104	X	-.239	-.239	3
103	U105	X	-.239	-.239	3
104	U106	X	-.239	-.239	3
105	U107	X	-.479	-.479	3
106	U108	X	-.479	-.479	3
107	U109	X	-.479	-.479	3
108	U110	X	-.479	-.479	3
109	U111	X	-.479	-.479	3
110	U112	X	-.479	-.479	3
111	U113	X	-.479	-.479	3
112	U114	X	-.479	-.479	3
113	U115	X	-.479	-.479	3
114	U116	X	-.479	-.479	3
115	U117	X	-.239	-.239	3
116	U118	X	-.239	-.239	3
117	U119	X	-.239	-.239	3
118	U120	X	-.239	-.239	3
119	U121	X	-.239	-.239	3
120	U122	X	-.239	-.239	3
121	U123	X	-.239	-.239	3
122	U124	X	-.239	-.239	3
123	U125	X	-.239	-.239	3
124	U126	X	-.239	-.239	3
125	H128	X	-.829	-.829	17.665
126	H129	X	-.829	-.829	17.665
127	V130	X	0	0	3
128	V131	X	0	0	3
129	V132	X	0	0	3
130	MP1	X	-1.137	-1.137	120
131	MP2	X	-1.137	-1.137	120
132	MP3	X	-1.137	-1.137	120
133	MP4	X	-1.137	-1.137	120
134	MP5	X	-1.137	-1.137	120
135	MP6	X	-1.137	-1.137	120
136	MP7	X	-1.137	-1.137	120
137	MP8	X	-1.137	-1.137	120
138	MP9	X	-1.137	-1.137	120
139	MP10	X	-1.137	-1.137	120
140	MP11	X	-1.137	-1.137	120
141	MP12	X	-1.137	-1.137	120
142	MP13	X	-1.137	-1.137	120
143	MP14	X	-1.137	-1.137	120
144	MP15	X	-1.137	-1.137	120

Member Distributed Loads (BLC 31 : BLC 7 Transient Area Loads)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in,%]	End Location[in,%]
--------------	-----------	---------------------------	-------------------------	----------------------	--------------------



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 31 : BLC 7 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	V001	Z	-0.086	-0.086	0 12
2	V002	Z	-0.192	-0.192	0 12
3	V003	Z	-0.192	-0.192	0 12
4	D005	Z	-0.135	-0.135	0 45.891
5	V006	Z	0	0	0 3
6	V008	Z	-0.086	-0.086	0 12
7	D009	Z	-0.065	-0.065	0 15.945
8	V010	Z	-0.086	-0.086	0 12
9	V011	Z	-0.086	-0.086	0 10.235
10	V012	Z	-0.086	-0.086	0 8.635
11	V013	Z	-0.086	-0.086	0 7.335
12	V014	Z	-0.086	-0.086	0 6.335
13	V015	Z	-0.086	-0.086	0 5.435
14	V016	Z	-0.086	-0.086	0 4.835
15	D017	Z	-0.065	-0.065	0 15.945
16	D018	Z	-0.065	-0.065	0 13.514
17	D019	Z	-0.063	-0.063	0 11.771
18	D020	Z	-0.064	-0.064	0 9.801
19	D021	Z	-0.068	-0.068	0 8.07
20	D022	Z	-0.066	-0.066	0 7.056
21	D023	Z	-0.073	-0.073	0 5.69
22	H024	Z	-0.224	-0.224	0 66
23	H025	Z	-0.224	-0.224	0 66
24	D026	Z	-0.258	-0.258	0 45.891
25	V027	Z	0	0	0 3
26	H028	Z	-0.224	-0.224	0 21
27	V029	Z	0	0	0 3
28	D030	Z	-0.258	-0.258	0 45.891
29	D031	Z	-0.182	-0.182	0 15.945
30	V032	Z	-0.192	-0.192	0 12
31	D033	Z	-0.182	-0.182	0 15.945
32	V034	Z	-0.192	-0.192	0 12
33	D035	Z	-0.182	-0.182	0 13.514
34	V036	Z	-0.192	-0.192	0 10.235
35	D037	Z	-0.181	-0.181	0 11.771
36	V038	Z	-0.192	-0.192	0 8.635
37	D039	Z	-0.182	-0.182	0 9.801
38	V040	Z	-0.192	-0.192	0 7.335
39	D041	Z	-0.183	-0.183	0 8.07
40	V042	Z	-0.192	-0.192	0 6.335
41	D043	Z	-0.182	-0.182	0 7.056
42	V044	Z	-0.192	-0.192	0 5.435
43	D045	Z	-0.186	-0.186	0 5.69
44	V046	Z	-0.192	-0.192	0 4.835
45	H047	Z	-0.224	-0.224	0 21
46	D048	Z	-0.182	-0.182	0 15.945
47	V049	Z	-0.192	-0.192	0 12
48	D050	Z	-0.182	-0.182	0 15.945
49	V051	Z	-0.192	-0.192	0 12
50	D052	Z	-0.182	-0.182	0 13.514
51	V053	Z	-0.192	-0.192	0 10.235
52	D054	Z	-0.181	-0.181	0 11.771
53	V055	Z	-0.192	-0.192	0 8.635
54	D056	Z	-0.182	-0.182	0 9.801
55	V057	Z	-0.192	-0.192	0 7.335
56	D058	Z	-0.183	-0.183	0 8.07
57	V059	Z	-0.192	-0.192	0 6.335



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 31 : BLC 7 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in,%]	End Location[in,%]
58	D060	Z	- .182	- .182	0 7.056
59	V061	Z	- .192	- .192	0 5.435
60	D062	Z	- .186	- .186	0 5.69
61	V063	Z	- .192	- .192	0 4.835
62	V064	Z	0	0	0 3
63	V065	Z	0	0	0 3
64	V066	Z	0	0	0 3
65	V067	Z	0	0	0 3
66	V068	Z	0	0	0 3
67	V069	Z	0	0	0 3
68	H070	Z	- .496	- .496	0 150
69	H071	Z	- .007	- .007	0 30.753
70	H072	Z	- .444	- .444	0 30.753
71	H073	Z	- .451	- .451	0 30.753
72	H074	Z	- .007	- .007	0 30.753
73	H075	Z	- .451	- .451	0 30.753
74	H076	Z	- .444	- .444	0 30.753
75	H077	Z	- .248	- .248	0 150
76	H078	Z	- .248	- .248	0 150
77	H080	Z	- .597	- .597	0 45
78	H081	Z	- .597	- .597	0 45
79	H082	Z	- .345	- .345	0 40.23
80	H083	Z	- .506	- .506	0 40.23
81	H084	Z	- .161	- .161	0 40.23
82	H085	Z	- .345	- .345	0 40.23
83	H086	Z	- .161	- .161	0 40.23
84	H087	Z	- .506	- .506	0 40.23
85	H088	Z	0	0	0 5.545
86	H089	Z	0	0	0 5.545
87	H090	Z	0	0	0 5.545
88	H091	Z	0	0	0 5.545
89	H092	Z	0	0	0 5.545
90	H093	Z	0	0	0 5.545
91	H094	Z	- .345	- .345	0 150
92	H095	Z	- .172	- .172	0 150
93	H096	Z	- .172	- .172	0 150
94	U097	Z	- .149	- .149	0 3
95	U098	Z	- .149	- .149	0 3
96	U099	Z	- .149	- .149	0 3
97	U100	Z	- .149	- .149	0 3
98	U101	Z	- .149	- .149	0 3
99	U102	Z	- .149	- .149	0 3
100	U103	Z	- .149	- .149	0 3
101	U104	Z	- .149	- .149	0 3
102	U105	Z	- .149	- .149	0 3
103	U106	Z	- .149	- .149	0 3
104	U117	Z	- .149	- .149	0 3
105	U118	Z	- .149	- .149	0 3
106	U119	Z	- .149	- .149	0 3
107	U120	Z	- .149	- .149	0 3
108	U121	Z	- .149	- .149	0 3
109	U122	Z	- .149	- .149	0 3
110	U123	Z	- .149	- .149	0 3
111	U124	Z	- .149	- .149	0 3
112	U125	Z	- .149	- .149	0 3
113	U126	Z	- .149	- .149	0 3
114	H127	Z	- .345	- .345	0 17.665



Member Distributed Loads (BLC 31 : BLC 7 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
115	H128	Z	-172	-172	0 17.665
116	H129	Z	-172	-172	0 17.665
117	V130	Z	0	0	0 3
118	V131	Z	0	0	0 3
119	V132	Z	0	0	0 3
120	MP1	Z	-409	-409	0 120
121	MP2	Z	-409	-409	0 120
122	MP3	Z	-409	-409	0 120
123	MP4	Z	-409	-409	0 120
124	MP5	Z	-409	-409	0 120
125	MP6	Z	-409	-409	0 120
126	MP7	Z	-409	-409	0 120
127	MP8	Z	-409	-409	0 120
128	MP9	Z	-409	-409	0 120
129	MP10	Z	-409	-409	0 120
130	MP11	Z	-409	-409	0 120
131	MP12	Z	-409	-409	0 120
132	MP13	Z	-409	-409	0 120
133	MP14	Z	-409	-409	0 120
134	MP15	Z	-409	-409	0 120

Member Distributed Loads (BLC 32 : BLC 8 Transient Area Loads)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	V001	X	-172	-172	0 12
2	V002	X	-161	-161	0 12
3	V003	X	-161	-161	0 12
4	H004	X	-259	-259	0 66
5	D005	X	-259	-259	0 45.891
6	V006	X	0	0	0 3
7	H007	X	-259	-259	0 21
8	V008	X	-172	-172	0 12
9	D009	X	-172	-172	0 15.945
10	V010	X	-172	-172	0 12
11	V011	X	-172	-172	0 10.235
12	V012	X	-172	-172	0 8.635
13	V013	X	-172	-172	0 7.335
14	V014	X	-172	-172	0 6.335
15	V015	X	-172	-172	0 5.435
16	V016	X	-172	-172	0 4.835
17	D017	X	-172	-172	0 15.945
18	D018	X	-172	-172	0 13.514
19	D019	X	-172	-172	0 11.771
20	D020	X	-172	-172	0 9.801
21	D021	X	-172	-172	0 8.07
22	D022	X	-172	-172	0 7.056
23	D023	X	-172	-172	0 5.69
24	H024	X	-129	-129	0 66
25	H025	X	-129	-129	0 66
26	D026	X	-188	-188	0 45.891
27	V027	X	0	0	0 3
28	H028	X	-129	-129	0 21
29	V029	X	0	0	0 3
30	D030	X	-188	-188	0 45.891
31	D031	X	-142	-142	0 15.945
32	V032	X	-161	-161	0 12
33	D033	X	-142	-142	0 15.945



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 32 : BLC 8 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
34	V034	X	- .161	- .161	0 12
35	D035	X	- .143	- .143	0 13.514
36	V036	X	- .161	- .161	0 10.235
37	D037	X	- .141	- .141	0 11.771
38	V038	X	- .161	- .161	0 8.635
39	D039	X	- .142	- .142	0 9.801
40	V040	X	- .161	- .161	0 7.335
41	D041	X	- .145	- .145	0 8.07
42	V042	X	- .161	- .161	0 6.335
43	D043	X	- .144	- .144	0 7.056
44	V044	X	- .161	- .161	0 5.435
45	D045	X	- .15	- .15	0 5.69
46	V046	X	- .161	- .161	0 4.835
47	H047	X	- .129	- .129	0 21
48	D048	X	- .142	- .142	0 15.945
49	V049	X	- .161	- .161	0 12
50	D050	X	- .142	- .142	0 15.945
51	V051	X	- .161	- .161	0 12
52	D052	X	- .143	- .143	0 13.514
53	V053	X	- .161	- .161	0 10.235
54	D054	X	- .141	- .141	0 11.771
55	V055	X	- .161	- .161	0 8.635
56	D056	X	- .142	- .142	0 9.801
57	V057	X	- .161	- .161	0 7.335
58	D058	X	- .145	- .145	0 8.07
59	V059	X	- .161	- .161	0 6.335
60	D060	X	- .144	- .144	0 7.056
61	V061	X	- .161	- .161	0 5.435
62	D062	X	- .15	- .15	0 5.69
63	V063	X	- .161	- .161	0 4.835
64	V064	X	0	0	0 3
65	V065	X	0	0	0 3
66	V066	X	0	0	0 3
67	V067	X	0	0	0 3
68	V068	X	0	0	0 3
69	V069	X	0	0	0 3
70	H071	X	- .517	- .517	0 30.753
71	H072	X	- .264	- .264	0 30.753
72	H073	X	- .253	- .253	0 30.753
73	H074	X	- .517	- .517	0 30.753
74	H075	X	- .253	- .253	0 30.753
75	H076	X	- .264	- .264	0 30.753
76	H077	X	- .429	- .429	0 150
77	H078	X	- .429	- .429	0 150
78	H079	X	- .689	- .689	0 45
79	H080	X	- .345	- .345	0 45
80	H081	X	- .345	- .345	0 45
81	H082	X	- .385	- .385	0 40.23
82	H083	X	- .106	- .106	0 40.23
83	H084	X	- .491	- .491	0 40.23
84	H085	X	- .385	- .385	0 40.23
85	H086	X	- .491	- .491	0 40.23
86	H087	X	- .106	- .106	0 40.23
87	H088	X	0	0	0 5.545
88	H089	X	0	0	0 5.545
89	H090	X	0	0	0 5.545
90	H091	X	0	0	0 5.545



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Distributed Loads (BLC 32 : BLC 8 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
91	H092	X	0	0	5.545
92	H093	X	0	0	5.545
93	H095	X	-.299	-.299	150
94	H096	X	-.299	-.299	150
95	U097	X	-.086	-.086	3
96	U098	X	-.086	-.086	3
97	U099	X	-.086	-.086	3
98	U100	X	-.086	-.086	3
99	U101	X	-.086	-.086	3
100	U102	X	-.086	-.086	3
101	U103	X	-.086	-.086	3
102	U104	X	-.086	-.086	3
103	U105	X	-.086	-.086	3
104	U106	X	-.086	-.086	3
105	U107	X	-.172	-.172	3
106	U108	X	-.172	-.172	3
107	U109	X	-.172	-.172	3
108	U110	X	-.172	-.172	3
109	U111	X	-.172	-.172	3
110	U112	X	-.172	-.172	3
111	U113	X	-.172	-.172	3
112	U114	X	-.172	-.172	3
113	U115	X	-.172	-.172	3
114	U116	X	-.172	-.172	3
115	U117	X	-.086	-.086	3
116	U118	X	-.086	-.086	3
117	U119	X	-.086	-.086	3
118	U120	X	-.086	-.086	3
119	U121	X	-.086	-.086	3
120	U122	X	-.086	-.086	3
121	U123	X	-.086	-.086	3
122	U124	X	-.086	-.086	3
123	U125	X	-.086	-.086	3
124	U126	X	-.086	-.086	3
125	H128	X	-.299	-.299	17.665
126	H129	X	-.299	-.299	17.665
127	V130	X	0	0	3
128	V131	X	0	0	3
129	V132	X	0	0	3
130	MP1	X	-.409	-.409	120
131	MP2	X	-.409	-.409	120
132	MP3	X	-.409	-.409	120
133	MP4	X	-.409	-.409	120
134	MP5	X	-.409	-.409	120
135	MP6	X	-.409	-.409	120
136	MP7	X	-.409	-.409	120
137	MP8	X	-.409	-.409	120
138	MP9	X	-.409	-.409	120
139	MP10	X	-.409	-.409	120
140	MP11	X	-.409	-.409	120
141	MP12	X	-.409	-.409	120
142	MP13	X	-.409	-.409	120
143	MP14	X	-.409	-.409	120
144	MP15	X	-.409	-.409	120



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Member Area Loads (BLC 3 : Wind -Z)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	NAL1	NAL2	NAL4	NAL3	PZ	Open Structure	-32.545

Member Area Loads (BLC 4 : Wind -X)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	NAL3	NAL4	NAL6	NAL5	PX	Open Structure	-32.545

Member Area Loads (BLC 5 : Wind -Z (Ice))

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	NAL1	NAL2	NAL4	NAL3	PZ	Open Structure	-5.746

Member Area Loads (BLC 6 : Wind -X (Ice))

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	NAL3	NAL4	NAL6	NAL5	PX	Open Structure	-5.746

Member Area Loads (BLC 7 : Wind -Z (Working))

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	NAL1	NAL2	NAL4	NAL3	PZ	Open Structure	-2.068

Member Area Loads (BLC 8 : Wind -X (Working))

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	NAL3	NAL4	NAL6	NAL5	PX	Open Structure	-2.068

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
1	Dead	DL		-1			33		
2	Ice	IL					33	117	3
3	Wind -Z	WLZ					33		1
4	Wind -X	WLX					33		1
5	Wind -Z (Ice)	WL-Z					33	117	1
6	Wind -X (Ice)	WL-X					33	117	1
7	Wind -Z (Working)	WLZP1					33		1
8	Wind -X (Working)	WLXP1					33		1
9	Ev -Y (Seismic)	ELY						117	
10	Eh -Z (Seismic)	ELZ						117	
11	Eh -X (Seismic)	ELX						117	
12	Lm (1)	LL				1			
13	Lm (2)	LL				1			
14	Lm (3)	LL				1			
15	Lm (4)	LL				1			
16	Lm (5)	LL				1			
17	Lm (6)	LL				1			
18	Lm (7)	LL				1			
19	Lm (8)	LL				1			
20	Lm (9)	LL				1			
21	Lm (10)	LL				1			
22	Lm (11)	LL				1			
23	Lm (12)	LL				1			
24	Lm (13)	LL				1			
25	Lm (14)	LL				1			
26	Lm (15)	LL				1			
27	BLC 3 Transient Area...	None						134	
28	BLC 4 Transient Area...	None						144	



Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
29	BLC 5 Transient Area...	None						134	
30	BLC 6 Transient Area...	None						144	
31	BLC 7 Transient Area...	None						134	
32	BLC 8 Transient Area...	None						144	

Load Combinations

	Description	Sol..	PD..	SR..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..
1	1.4D	Yes	Y		DL	1.4													
2	1.2D + 1.0..	Yes	Y		DL	1.2	W...	.001	WLZ	1									
3	1.2D + 1.0..	Yes	Y		DL	1.2	W...	.5	WLZ	.866									
4	1.2D + 1.0..	Yes	Y		DL	1.2	W...	.866	WLZ	.5									
5	1.2D + 1.0..	Yes	Y		DL	1.2	W...	1	WLZ	.001									
6	1.2D + 1.0..	Yes	Y		DL	1.2	W...	.866	WLZ	-.5									
7	1.2D + 1.0..	Yes	Y		DL	1.2	W...	.5	WLZ	-.866									
8	1.2D + 1.0..	Yes	Y		DL	1.2	W...	.001	WLZ	-1									
9	1.2D + 1.0..	Yes	Y		DL	1.2	W...	-.5	WLZ	-.866									
10	1.2D + 1.0..	Yes	Y		DL	1.2	W...	-.866	WLZ	-.5									
11	1.2D + 1.0..	Yes	Y		DL	1.2	W...	-1	WLZ	.001									
12	1.2D + 1.0..	Yes	Y		DL	1.2	W...	-.866	WLZ	.5									
13	1.2D + 1.0..	Yes	Y		DL	1.2	W...	-.5	WLZ	.866									
14	0.9D + 1.0..	Yes	Y		DL	.9	W...	.001	WLZ	1									
15	0.9D + 1.0..	Yes	Y		DL	.9	W...	.5	WLZ	.866									
16	0.9D + 1.0..	Yes	Y		DL	.9	W...	.866	WLZ	.5									
17	0.9D + 1.0..	Yes	Y		DL	.9	W...	1	WLZ	.001									
18	0.9D + 1.0..	Yes	Y		DL	.9	W...	.866	WLZ	-.5									
19	0.9D + 1.0..	Yes	Y		DL	.9	W...	.5	WLZ	-.866									
20	0.9D + 1.0..	Yes	Y		DL	.9	W...	.001	WLZ	-1									
21	0.9D + 1.0..	Yes	Y		DL	.9	W...	-.5	WLZ	-.866									
22	0.9D + 1.0..	Yes	Y		DL	.9	W...	-.866	WLZ	-.5									
23	0.9D + 1.0..	Yes	Y		DL	.9	W...	-1	WLZ	.001									
24	0.9D + 1.0..	Yes	Y		DL	.9	W...	-.866	WLZ	.5									
25	0.9D + 1.0..	Yes	Y		DL	.9	W...	-.5	WLZ	.866									
26	1.2D + 1.0..	Yes	Y		DL	1.2	IL	1	W...	.001	W...	1							
27	1.2D + 1.0..	Yes	Y		DL	1.2	IL	1	W...	.5	W...	.866							
28	1.2D + 1.0..	Yes	Y		DL	1.2	IL	1	W...	.866	W...	.5							
29	1.2D + 1.0..	Yes	Y		DL	1.2	IL	1	W...	1	W...	.001							
30	1.2D + 1.0..	Yes	Y		DL	1.2	IL	1	W...	.866	W...	-.5							
31	1.2D + 1.0..	Yes	Y		DL	1.2	IL	1	W...	.5	W...	-.866							
32	1.2D + 1.0..	Yes	Y		DL	1.2	IL	1	W...	.001	W...	-1							
33	1.2D + 1.0..	Yes	Y		DL	1.2	IL	1	W...	-.5	W...	-.866							
34	1.2D + 1.0..	Yes	Y		DL	1.2	IL	1	W...	-.866	W...	-.5							
35	1.2D + 1.0..	Yes	Y		DL	1.2	IL	1	W...	-1	W...	.001							
36	1.2D + 1.0..	Yes	Y		DL	1.2	IL	1	W...	-.866	W...	.5							
37	1.2D + 1.0..	Yes	Y		DL	1.2	IL	1	W...	-.5	W...	.866							
38	1.2D + 1.0..	Yes	Y		DL	1.2	ELY	1	ELZ	1	ELX	.001							
39	1.2D + 1.0..	Yes	Y		DL	1.2	ELY	1	ELZ	.866	ELX	.5							
40	1.2D + 1.0..	Yes	Y		DL	1.2	ELY	1	ELZ	.5	ELX	.866							
41	1.2D + 1.0..	Yes	Y		DL	1.2	ELY	1	ELZ	.001	ELX	1							
42	1.2D + 1.0..	Yes	Y		DL	1.2	ELY	1	ELZ	-.5	ELX	.866							
43	1.2D + 1.0..	Yes	Y		DL	1.2	ELY	1	ELZ	-.866	ELX	.5							
44	1.2D + 1.0..	Yes	Y		DL	1.2	ELY	1	ELZ	-1	ELX	.001							
45	1.2D + 1.0..	Yes	Y		DL	1.2	ELY	1	ELZ	-.866	ELX	-.5							
46	1.2D + 1.0..	Yes	Y		DL	1.2	ELY	1	ELZ	-.5	ELX	-.866							
47	1.2D + 1.0..	Yes	Y		DL	1.2	ELY	1	ELZ	.001	ELX	-1							
48	1.2D + 1.0..	Yes	Y		DL	1.2	ELY	1	ELZ	.5	ELX	-.866							



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Load Combinations (Continued)

	Description	Sol.	PD	SR	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.
49	1.2D + 1.0..	Yes	Y		DL 1.2	ELY 1	ELZ .866	ELX -.5					
50	0.9D + 1.0..	Yes	Y		DL .9	ELY 1	ELZ 1	ELX .001					
51	0.9D + 1.0..	Yes	Y		DL .9	ELY 1	ELZ .866	ELX .5					
52	0.9D + 1.0..	Yes	Y		DL .9	ELY 1	ELZ .5	ELX .866					
53	0.9D + 1.0..	Yes	Y		DL .9	ELY 1	ELZ .001	ELX 1					
54	0.9D + 1.0..	Yes	Y		DL .9	ELY 1	ELZ -.5	ELX .866					
55	0.9D + 1.0..	Yes	Y		DL .9	ELY 1	ELZ -.866	ELX .5					
56	0.9D + 1.0..	Yes	Y		DL .9	ELY 1	ELZ -.1	ELX .001					
57	0.9D + 1.0..	Yes	Y		DL .9	ELY 1	ELZ -.866	ELX -.5					
58	0.9D + 1.0..	Yes	Y		DL .9	ELY 1	ELZ -.5	ELX -.866					
59	0.9D + 1.0..	Yes	Y		DL .9	ELY 1	ELZ .001	ELX -.1					
60	0.9D + 1.0..	Yes	Y		DL .9	ELY 1	ELZ .5	ELX -.866					
61	0.9D + 1.0..	Yes	Y		DL .9	ELY 1	ELZ .866	ELX -.5					
62	1.2D + 1.5..	Yes	Y		DL 1.2	12 1.5	W... .001	W... 1					
63	1.2D + 1.5..	Yes	Y		DL 1.2	12 1.5	W... .5	W... .866					
64	1.2D + 1.5..	Yes	Y		DL 1.2	12 1.5	W... .866	W... .5					
65	1.2D + 1.5..	Yes	Y		DL 1.2	12 1.5	W... 1	W... .001					
66	1.2D + 1.5..	Yes	Y		DL 1.2	12 1.5	W... .866	W... -.5					
67	1.2D + 1.5..	Yes	Y		DL 1.2	12 1.5	W... .5	W... -.866					
68	1.2D + 1.5..	Yes	Y		DL 1.2	12 1.5	W... .001	W... -.1					
69	1.2D + 1.5..	Yes	Y		DL 1.2	12 1.5	W... -.5	W... -.866					
70	1.2D + 1.5..	Yes	Y		DL 1.2	12 1.5	W... -.866	W... -.5					
71	1.2D + 1.5..	Yes	Y		DL 1.2	12 1.5	W... -.1	W... .001					
72	1.2D + 1.5..	Yes	Y		DL 1.2	12 1.5	W... -.866	W... .5					
73	1.2D + 1.5..	Yes	Y		DL 1.2	12 1.5	W... -.5	W... .866					
74	1.2D + 1.5..	Yes	Y		DL 1.2	13 1.5	W... .001	W... 1					
75	1.2D + 1.5..	Yes	Y		DL 1.2	13 1.5	W... .5	W... .866					
76	1.2D + 1.5..	Yes	Y		DL 1.2	13 1.5	W... .866	W... .5					
77	1.2D + 1.5..	Yes	Y		DL 1.2	13 1.5	W... 1	W... .001					
78	1.2D + 1.5..	Yes	Y		DL 1.2	13 1.5	W... .866	W... -.5					
79	1.2D + 1.5..	Yes	Y		DL 1.2	13 1.5	W... .5	W... -.866					
80	1.2D + 1.5..	Yes	Y		DL 1.2	13 1.5	W... .001	W... -.1					
81	1.2D + 1.5..	Yes	Y		DL 1.2	13 1.5	W... -.5	W... -.866					
82	1.2D + 1.5..	Yes	Y		DL 1.2	13 1.5	W... -.866	W... -.5					
83	1.2D + 1.5..	Yes	Y		DL 1.2	13 1.5	W... -.1	W... .001					
84	1.2D + 1.5..	Yes	Y		DL 1.2	13 1.5	W... -.866	W... .5					
85	1.2D + 1.5..	Yes	Y		DL 1.2	13 1.5	W... -.5	W... .866					
86	1.2D + 1.5..	Yes	Y		DL 1.2	14 1.5	W... .001	W... 1					
87	1.2D + 1.5..	Yes	Y		DL 1.2	14 1.5	W... .5	W... .866					
88	1.2D + 1.5..	Yes	Y		DL 1.2	14 1.5	W... .866	W... .5					
89	1.2D + 1.5..	Yes	Y		DL 1.2	14 1.5	W... 1	W... .001					
90	1.2D + 1.5..	Yes	Y		DL 1.2	14 1.5	W... .866	W... -.5					
91	1.2D + 1.5..	Yes	Y		DL 1.2	14 1.5	W... .5	W... -.866					
92	1.2D + 1.5..	Yes	Y		DL 1.2	14 1.5	W... .001	W... -.1					
93	1.2D + 1.5..	Yes	Y		DL 1.2	14 1.5	W... -.5	W... -.866					
94	1.2D + 1.5..	Yes	Y		DL 1.2	14 1.5	W... -.866	W... -.5					
95	1.2D + 1.5..	Yes	Y		DL 1.2	14 1.5	W... -.1	W... .001					
96	1.2D + 1.5..	Yes	Y		DL 1.2	14 1.5	W... -.866	W... .5					
97	1.2D + 1.5..	Yes	Y		DL 1.2	14 1.5	W... -.5	W... .866					
98	1.2D + 1.5..	Yes	Y		DL 1.2	15 1.5	W... .001	W... 1					
99	1.2D + 1.5..	Yes	Y		DL 1.2	15 1.5	W... .5	W... .866					
100	1.2D + 1.5..	Yes	Y		DL 1.2	15 1.5	W... .866	W... .5					
101	1.2D + 1.5..	Yes	Y		DL 1.2	15 1.5	W... 1	W... .001					
102	1.2D + 1.5..	Yes	Y		DL 1.2	15 1.5	W... .866	W... -.5					
103	1.2D + 1.5..	Yes	Y		DL 1.2	15 1.5	W... .5	W... -.866					
104	1.2D + 1.5..	Yes	Y		DL 1.2	15 1.5	W... .001	W... -.1					
105	1.2D + 1.5..	Yes	Y		DL 1.2	15 1.5	W... -.5	W... -.866					



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Load Combinations (Continued)

	Description	Sol.	PD	SR	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.
106	1.2D + 1.5..	Yes	Y		DL	1.2	15	1.5	W...	-866	W...	-5		
107	1.2D + 1.5..	Yes	Y		DL	1.2	15	1.5	W...	-1	W...	.001		
108	1.2D + 1.5..	Yes	Y		DL	1.2	15	1.5	W...	-866	W...	.5		
109	1.2D + 1.5..	Yes	Y		DL	1.2	15	1.5	W...	-.5	W...	.866		
110	1.2D + 1.5..	Yes	Y		DL	1.2	16	1.5	W...	.001	W...	1		
111	1.2D + 1.5..	Yes	Y		DL	1.2	16	1.5	W...	.5	W...	.866		
112	1.2D + 1.5..	Yes	Y		DL	1.2	16	1.5	W...	.866	W...	.5		
113	1.2D + 1.5..	Yes	Y		DL	1.2	16	1.5	W...	1	W...	.001		
114	1.2D + 1.5..	Yes	Y		DL	1.2	16	1.5	W...	.866	W...	-.5		
115	1.2D + 1.5..	Yes	Y		DL	1.2	16	1.5	W...	.5	W...	-.866		
116	1.2D + 1.5..	Yes	Y		DL	1.2	16	1.5	W...	.001	W...	-1		
117	1.2D + 1.5..	Yes	Y		DL	1.2	16	1.5	W...	-.5	W...	-.866		
118	1.2D + 1.5..	Yes	Y		DL	1.2	16	1.5	W...	-.866	W...	-.5		
119	1.2D + 1.5..	Yes	Y		DL	1.2	16	1.5	W...	-1	W...	.001		
120	1.2D + 1.5..	Yes	Y		DL	1.2	16	1.5	W...	-.866	W...	.5		
121	1.2D + 1.5..	Yes	Y		DL	1.2	16	1.5	W...	-.5	W...	.866		
122	1.2D + 1.5..	Yes	Y		DL	1.2	17	1.5	W...	.001	W...	1		
123	1.2D + 1.5..	Yes	Y		DL	1.2	17	1.5	W...	.5	W...	.866		
124	1.2D + 1.5..	Yes	Y		DL	1.2	17	1.5	W...	.866	W...	.5		
125	1.2D + 1.5..	Yes	Y		DL	1.2	17	1.5	W...	1	W...	.001		
126	1.2D + 1.5..	Yes	Y		DL	1.2	17	1.5	W...	.866	W...	-.5		
127	1.2D + 1.5..	Yes	Y		DL	1.2	17	1.5	W...	.5	W...	-.866		
128	1.2D + 1.5..	Yes	Y		DL	1.2	17	1.5	W...	.001	W...	-1		
129	1.2D + 1.5..	Yes	Y		DL	1.2	17	1.5	W...	-.5	W...	-.866		
130	1.2D + 1.5..	Yes	Y		DL	1.2	17	1.5	W...	-.866	W...	-.5		
131	1.2D + 1.5..	Yes	Y		DL	1.2	17	1.5	W...	-1	W...	.001		
132	1.2D + 1.5..	Yes	Y		DL	1.2	17	1.5	W...	-.866	W...	.5		
133	1.2D + 1.5..	Yes	Y		DL	1.2	17	1.5	W...	-.5	W...	.866		
134	1.2D + 1.5..	Yes	Y		DL	1.2	18	1.5	W...	.001	W...	1		
135	1.2D + 1.5..	Yes	Y		DL	1.2	18	1.5	W...	.5	W...	.866		
136	1.2D + 1.5..	Yes	Y		DL	1.2	18	1.5	W...	.866	W...	.5		
137	1.2D + 1.5..	Yes	Y		DL	1.2	18	1.5	W...	1	W...	.001		
138	1.2D + 1.5..	Yes	Y		DL	1.2	18	1.5	W...	.866	W...	-.5		
139	1.2D + 1.5..	Yes	Y		DL	1.2	18	1.5	W...	.5	W...	-.866		
140	1.2D + 1.5..	Yes	Y		DL	1.2	18	1.5	W...	.001	W...	-1		
141	1.2D + 1.5..	Yes	Y		DL	1.2	18	1.5	W...	-.5	W...	-.866		
142	1.2D + 1.5..	Yes	Y		DL	1.2	18	1.5	W...	-.866	W...	-.5		
143	1.2D + 1.5..	Yes	Y		DL	1.2	18	1.5	W...	-1	W...	.001		
144	1.2D + 1.5..	Yes	Y		DL	1.2	18	1.5	W...	-.866	W...	.5		
145	1.2D + 1.5..	Yes	Y		DL	1.2	18	1.5	W...	-.5	W...	.866		
146	1.2D + 1.5..	Yes	Y		DL	1.2	19	1.5	W...	.001	W...	1		
147	1.2D + 1.5..	Yes	Y		DL	1.2	19	1.5	W...	.5	W...	.866		
148	1.2D + 1.5..	Yes	Y		DL	1.2	19	1.5	W...	.866	W...	.5		
149	1.2D + 1.5..	Yes	Y		DL	1.2	19	1.5	W...	1	W...	.001		
150	1.2D + 1.5..	Yes	Y		DL	1.2	19	1.5	W...	.866	W...	-.5		
151	1.2D + 1.5..	Yes	Y		DL	1.2	19	1.5	W...	.5	W...	-.866		
152	1.2D + 1.5..	Yes	Y		DL	1.2	19	1.5	W...	.001	W...	-1		
153	1.2D + 1.5..	Yes	Y		DL	1.2	19	1.5	W...	-.5	W...	-.866		
154	1.2D + 1.5..	Yes	Y		DL	1.2	19	1.5	W...	-.866	W...	-.5		
155	1.2D + 1.5..	Yes	Y		DL	1.2	19	1.5	W...	-1	W...	.001		
156	1.2D + 1.5..	Yes	Y		DL	1.2	19	1.5	W...	-.866	W...	.5		
157	1.2D + 1.5..	Yes	Y		DL	1.2	19	1.5	W...	-.5	W...	.866		
158	1.2D + 1.5..	Yes	Y		DL	1.2	20	1.5	W...	.001	W...	1		
159	1.2D + 1.5..	Yes	Y		DL	1.2	20	1.5	W...	.5	W...	.866		
160	1.2D + 1.5..	Yes	Y		DL	1.2	20	1.5	W...	.866	W...	.5		
161	1.2D + 1.5..	Yes	Y		DL	1.2	20	1.5	W...	1	W...	.001		
162	1.2D + 1.5..	Yes	Y		DL	1.2	20	1.5	W...	.866	W...	-.5		



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Load Combinations (Continued)

	Description	Sol.	PD	SR	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.
163	1.2D + 1.5..	Yes	Y		DL	1.2	20	1.5	W...	.5	W...	-.866		
164	1.2D + 1.5..	Yes	Y		DL	1.2	20	1.5	W...	.001	W...	-.1		
165	1.2D + 1.5..	Yes	Y		DL	1.2	20	1.5	W...	-.5	W...	-.866		
166	1.2D + 1.5..	Yes	Y		DL	1.2	20	1.5	W...	-.866	W...	-.5		
167	1.2D + 1.5..	Yes	Y		DL	1.2	20	1.5	W...	-.1	W...	.001		
168	1.2D + 1.5..	Yes	Y		DL	1.2	20	1.5	W...	-.866	W...	.5		
169	1.2D + 1.5..	Yes	Y		DL	1.2	20	1.5	W...	-.5	W...	.866		
170	1.2D + 1.5..	Yes	Y		DL	1.2	21	1.5	W...	.001	W...	.1		
171	1.2D + 1.5..	Yes	Y		DL	1.2	21	1.5	W...	.5	W...	.866		
172	1.2D + 1.5..	Yes	Y		DL	1.2	21	1.5	W...	.866	W...	.5		
173	1.2D + 1.5..	Yes	Y		DL	1.2	21	1.5	W...	.1	W...	.001		
174	1.2D + 1.5..	Yes	Y		DL	1.2	21	1.5	W...	.866	W...	-.5		
175	1.2D + 1.5..	Yes	Y		DL	1.2	21	1.5	W...	.5	W...	-.866		
176	1.2D + 1.5..	Yes	Y		DL	1.2	21	1.5	W...	.001	W...	-.1		
177	1.2D + 1.5..	Yes	Y		DL	1.2	21	1.5	W...	-.5	W...	-.866		
178	1.2D + 1.5..	Yes	Y		DL	1.2	21	1.5	W...	-.866	W...	-.5		
179	1.2D + 1.5..	Yes	Y		DL	1.2	21	1.5	W...	-.1	W...	.001		
180	1.2D + 1.5..	Yes	Y		DL	1.2	21	1.5	W...	-.866	W...	.5		
181	1.2D + 1.5..	Yes	Y		DL	1.2	21	1.5	W...	-.5	W...	.866		
182	1.2D + 1.5..	Yes	Y		DL	1.2	22	1.5	W...	.001	W...	.1		
183	1.2D + 1.5..	Yes	Y		DL	1.2	22	1.5	W...	.5	W...	.866		
184	1.2D + 1.5..	Yes	Y		DL	1.2	22	1.5	W...	.866	W...	.5		
185	1.2D + 1.5..	Yes	Y		DL	1.2	22	1.5	W...	.1	W...	.001		
186	1.2D + 1.5..	Yes	Y		DL	1.2	22	1.5	W...	.866	W...	-.5		
187	1.2D + 1.5..	Yes	Y		DL	1.2	22	1.5	W...	.5	W...	-.866		
188	1.2D + 1.5..	Yes	Y		DL	1.2	22	1.5	W...	.001	W...	-.1		
189	1.2D + 1.5..	Yes	Y		DL	1.2	22	1.5	W...	-.5	W...	-.866		
190	1.2D + 1.5..	Yes	Y		DL	1.2	22	1.5	W...	-.866	W...	-.5		
191	1.2D + 1.5..	Yes	Y		DL	1.2	22	1.5	W...	-.1	W...	.001		
192	1.2D + 1.5..	Yes	Y		DL	1.2	22	1.5	W...	-.866	W...	.5		
193	1.2D + 1.5..	Yes	Y		DL	1.2	22	1.5	W...	-.5	W...	.866		
194	1.2D + 1.5..	Yes	Y		DL	1.2	23	1.5	W...	.001	W...	.1		
195	1.2D + 1.5..	Yes	Y		DL	1.2	23	1.5	W...	.5	W...	.866		
196	1.2D + 1.5..	Yes	Y		DL	1.2	23	1.5	W...	.866	W...	.5		
197	1.2D + 1.5..	Yes	Y		DL	1.2	23	1.5	W...	.1	W...	.001		
198	1.2D + 1.5..	Yes	Y		DL	1.2	23	1.5	W...	.866	W...	-.5		
199	1.2D + 1.5..	Yes	Y		DL	1.2	23	1.5	W...	.5	W...	-.866		
200	1.2D + 1.5..	Yes	Y		DL	1.2	23	1.5	W...	.001	W...	-.1		
201	1.2D + 1.5..	Yes	Y		DL	1.2	23	1.5	W...	-.5	W...	-.866		
202	1.2D + 1.5..	Yes	Y		DL	1.2	23	1.5	W...	-.866	W...	-.5		
203	1.2D + 1.5..	Yes	Y		DL	1.2	23	1.5	W...	-.1	W...	.001		
204	1.2D + 1.5..	Yes	Y		DL	1.2	23	1.5	W...	-.866	W...	.5		
205	1.2D + 1.5..	Yes	Y		DL	1.2	23	1.5	W...	-.5	W...	.866		
206	1.2D + 1.5..	Yes	Y		DL	1.2	24	1.5	W...	.001	W...	.1		
207	1.2D + 1.5..	Yes	Y		DL	1.2	24	1.5	W...	.5	W...	.866		
208	1.2D + 1.5..	Yes	Y		DL	1.2	24	1.5	W...	.866	W...	.5		
209	1.2D + 1.5..	Yes	Y		DL	1.2	24	1.5	W...	.1	W...	.001		
210	1.2D + 1.5..	Yes	Y		DL	1.2	24	1.5	W...	.866	W...	-.5		
211	1.2D + 1.5..	Yes	Y		DL	1.2	24	1.5	W...	.5	W...	-.866		
212	1.2D + 1.5..	Yes	Y		DL	1.2	24	1.5	W...	.001	W...	-.1		
213	1.2D + 1.5..	Yes	Y		DL	1.2	24	1.5	W...	-.5	W...	-.866		
214	1.2D + 1.5..	Yes	Y		DL	1.2	24	1.5	W...	-.866	W...	-.5		
215	1.2D + 1.5..	Yes	Y		DL	1.2	24	1.5	W...	-.1	W...	.001		
216	1.2D + 1.5..	Yes	Y		DL	1.2	24	1.5	W...	-.866	W...	.5		
217	1.2D + 1.5..	Yes	Y		DL	1.2	24	1.5	W...	-.5	W...	.866		
218	1.2D + 1.5..	Yes	Y		DL	1.2	25	1.5	W...	.001	W...	.1		
219	1.2D + 1.5..	Yes	Y		DL	1.2	25	1.5	W...	.5	W...	.866		



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

Load Combinations (Continued)

Description	Sol.	PD	SR	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.	BLC Fact.
220	1.2D + 1.5..	Yes	Y	DL	1.2	25	1.5	W...	.866	W...	.5			
221	1.2D + 1.5..	Yes	Y	DL	1.2	25	1.5	W...	1	W...	.001			
222	1.2D + 1.5..	Yes	Y	DL	1.2	25	1.5	W...	.866	W...	-.5			
223	1.2D + 1.5..	Yes	Y	DL	1.2	25	1.5	W...	.5	W...	-.866			
224	1.2D + 1.5..	Yes	Y	DL	1.2	25	1.5	W...	.001	W...	-.1			
225	1.2D + 1.5..	Yes	Y	DL	1.2	25	1.5	W...	-.5	W...	-.866			
226	1.2D + 1.5..	Yes	Y	DL	1.2	25	1.5	W...	-.866	W...	-.5			
227	1.2D + 1.5..	Yes	Y	DL	1.2	25	1.5	W...	-.1	W...	.001			
228	1.2D + 1.5..	Yes	Y	DL	1.2	25	1.5	W...	-.866	W...	.5			
229	1.2D + 1.5..	Yes	Y	DL	1.2	25	1.5	W...	-.5	W...	.866			
230	1.2D + 1.5..	Yes	Y	DL	1.2	26	1.5	W...	.001	W...	1			
231	1.2D + 1.5..	Yes	Y	DL	1.2	26	1.5	W...	.5	W...	.866			
232	1.2D + 1.5..	Yes	Y	DL	1.2	26	1.5	W...	.866	W...	.5			
233	1.2D + 1.5..	Yes	Y	DL	1.2	26	1.5	W...	1	W...	.001			
234	1.2D + 1.5..	Yes	Y	DL	1.2	26	1.5	W...	.866	W...	-.5			
235	1.2D + 1.5..	Yes	Y	DL	1.2	26	1.5	W...	.5	W...	-.866			
236	1.2D + 1.5..	Yes	Y	DL	1.2	26	1.5	W...	.001	W...	-.1			
237	1.2D + 1.5..	Yes	Y	DL	1.2	26	1.5	W...	-.5	W...	-.866			
238	1.2D + 1.5..	Yes	Y	DL	1.2	26	1.5	W...	-.866	W...	-.5			
239	1.2D + 1.5..	Yes	Y	DL	1.2	26	1.5	W...	-.1	W...	.001			
240	1.2D + 1.5..	Yes	Y	DL	1.2	26	1.5	W...	-.866	W...	.5			
241	1.2D + 1.5..	Yes	Y	DL	1.2	26	1.5	W...	-.5	W...	.866			

Envelope Joint Reactions

Joint	X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC		
1	N001	max	909.815	5	2904.37	26	237.826	20	2.092	20	1881.809	5	41.954	17
2		min	-919.681	11	16.762	20	-8546.93	26	-192.355	26	-1819.193	11	-45.003	11
3	N002	max	253.542	24	2919.207	30	4302.698	29	94.603	32	713.245	7	170.921	29
4		min	-7427.777	30	2.107	24	-5.687	24	-11.58	14	-644.903	25	-6.81	23
5	N003	max	7478.391	34	2920.106	34	4246.23	35	103.223	33	1011.334	3	4.764	17
6		min	-372.565	16	-1.195	16	192.426	17	-13.639	15	-965.922	21	-165.845	35
7	N004	max	694.879	17	133.4	26	12745.273	26	1.047	20	1767.191	17	28.852	23
8		min	-698.945	23	5.095	20	-1329.127	20	-126.564	26	-1767.269	23	-30.995	5
9	N005	max	11109.382	30	134.028	30	661.301	24	59.562	30	807.005	20	112.492	30
10		min	-1134.759	24	4.137	24	-6383.078	30	12.199	14	-782.059	14	-10.399	24
11	N006	max	1074.084	16	134.057	34	760.779	16	62.161	34	962.083	14	12.621	16
12		min	-11082.182	34	3.966	16	-6429.063	34	16.949	14	-1007.436	20	-111.025	34
13	N008	max	0	241	0	241	0	241	0	241	0	241	0	241
14		min	0	1	0	1	0	1	0	1	0	1	0	1
15	N009	max	0	241	0	241	0	241	0	241	0	241	0	241
16		min	0	1	0	1	0	1	0	1	0	1	0	1
17	N045	max	0	241	0	241	0	241	0	241	0	241	0	241
18		min	0	1	0	1	0	1	0	1	0	1	0	1
19	N046	max	0	241	0	241	0	241	0	241	0	241	0	241
20		min	0	1	0	1	0	1	0	1	0	1	0	1
21	Totals:	max	5388.9	17	8337.266	29	5236.058	14						
22		min	-5388.901	11	3235.274	23	-5236.058	20						

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

Member	Shape	Code	Loc[in]	LC	Shear	Loc[in]	Dir	LC	phi*Pnc	phi*Pnt	phi*Mn y	phi*Mn z	Cb	Eqn
1	V001	PL1x0.5	.001	12	11	.000	12	z	23	18173.9...	22500	234.375	468.75	2...H1-1b
2	V002	PL1x0.5	.001	0	8	.000	12	y	22	18173.9...	22500	234.375	468.75	2...H1-1b
3	V003	PL1x0.5	.001	0	2	.000	12	y	24	18173.9...	22500	234.375	468.75	2...H1-1b
4	H004	T4x1.5x.5	.347	0	4	.183	30.25	z	11	37807.3...	112500	7736.25	1050	2...H1-1b



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

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

Member	Shape	Code	Loc[in]	LC	Shear	Loc[in]	Dir	LC	phi*Pnc	phi*Pnt	phi*Mn y	phi*Mn z	Cb	Eqn	
5	D005	T4x1.5x.5	.247	45.8...	13	.069	23.9...	z	11	66345.7...	112500	7736.25	1050	1...	H1-1b
6	H007	T4x1.5x.5	.323	0	12	.049	10.5	z	5	100722....	112500	7736.25	1050	1...	H1-1b
7	V008	PL1x0.5	.220	0	37	.026	12	y	1...	13891.4...	16200	168.75	337.5	2...	H1-1b
8	D009	PL1x0.5	.244	15.9...	26	.056	15.9...	y	5	12348.8...	16200	168.75	337.5	1...	H1-1a
9	V010	PL1x0.5	.195	0	12	.030	12	y	2...	13891.4...	16200	168.75	337.5	2...	H1-1b
10	V011	PL1x0.5	.377	0	11	.049	10.2...	y	12	14485.8...	16200	168.75	337.5	2...	H1-1b
11	V012	PL1x0.5	.377	0	11	.070	8.635	y	12	14960.38	16200	168.75	337.5	2...	H1-1b
12	V013	PL1x0.5	.350	0	12	.077	7.335	y	11	15295.68	16200	168.75	337.5	2...	H1-1b
13	V014	PL1x0.5	.342	0	5	.075	6.335	y	11	15520.5...	16200	168.75	337.5	2...	H1-1b
14	V015	PL1x0.5	.226	0	12	.066	5.435	y	11	15697.0...	16200	168.75	337.5	2...	H1-1b
15	V016	PL1x0.5	.285	0	12	.073	4.835	y	12	15800.6...	16200	168.75	337.5	2...	H1-1b
16	D017	PL1x0.5	.273	0	26	.089	15.9...	y	11	12348.8...	16200	168.75	337.5	2...	H1-1a
17	D018	PL1x0.5	.127	0	12	.112	13.5...	y	11	13330.09	16200	168.75	337.5	2...	H1-1b
18	D019	PL1x0.5	.223	0	5	.171	11.7...	y	11	13972.3...	16200	168.75	337.5	2...	H1-1b
19	D020	PL1x0.5	.216	0	12	.183	9.801	y	11	14621.0...	16200	168.75	337.5	2...	H1-1b
20	D021	PL1x0.5	.218	0	12	.177	8.07	y	11	15111.7...	16200	168.75	337.5	2...	H1-1b
21	D022	PL1x0.5	.194	0	5	.177	7.056	y	11	15361.3...	16200	168.75	337.5	2...	H1-1b
22	D023	PL1x0.5	.178	0	12	.139	5.69	y	11	15649.5...	16200	168.75	337.5	2...	H1-1b
23	H024	T4x1.5x.5	.262	66	6	.160	35.75	z	3	37807.3...	112500	7736.25	1050	1...	H1-1b
24	H025	T4x1.5x.5	.294	66	10	.158	35.75	z	7	37807.3...	112500	7736.25	1050	2...	H1-1b
25	D026	T4x1.5x.5	.234	45.8...	9	.055	36.8...	y	8	66345.7...	112500	7736.25	1050	1...	H1-1b
26	H028	T4x1.5x.5	.266	0	9	.034	10.7...	y	11	100722....	112500	7736.25	1050	1...	H1-1b
27	D030	T4x1.5x.5	.230	45.8...	5	.054	23.9...	y	3	66345.7...	112500	7736.25	1050	1...	H1-1b
28	D031	PL1x0.5	.245	15.9...	34	.029	15.9...	y	9	12348.8...	16200	168.75	337.5	1...	H1-1a
29	V032	PL1x0.5	.218	0	33	.029	12	y	12	13891.4...	16200	168.75	337.5	2...	H1-1b
30	D033	PL1x0.5	.272	0	34	.049	15.9...	y	9	12348.8...	16200	168.75	337.5	2...	H1-1a
31	V034	PL1x0.5	.197	0	7	.040	0	y	6	13891.4...	16200	168.75	337.5	2...	H1-1b
32	D035	PL1x0.5	.119	0	8	.074	13.5...	y	8	13330.09	16200	168.75	337.5	2...	H1-1b
33	V036	PL1x0.5	.331	0	7	.063	10.2...	y	7	14485.8...	16200	168.75	337.5	2...	H1-1b
34	D037	PL1x0.5	.194	0	8	.128	11.7...	y	8	13972.3...	16200	168.75	337.5	2...	H1-1b
35	V038	PL1x0.5	.323	0	8	.073	8.635	y	7	14960.38	16200	168.75	337.5	2...	H1-1b
36	D039	PL1x0.5	.182	0	8	.139	9.801	y	7	14621.0...	16200	168.75	337.5	2...	H1-1b
37	V040	PL1x0.5	.295	0	8	.072	7.335	y	7	15295.68	16200	168.75	337.5	2...	H1-1b
38	D041	PL1x0.5	.183	0	8	.132	8.07	y	8	15111.7...	16200	168.75	337.5	2...	H1-1b
39	V042	PL1x0.5	.278	0	8	.066	6.335	y	7	15520.5...	16200	168.75	337.5	2...	H1-1b
40	D043	PL1x0.5	.156	0	8	.129	7.056	y	8	15361.3...	16200	168.75	337.5	2...	H1-1b
41	V044	PL1x0.5	.185	0	8	.056	5.435	y	7	15697.0...	16200	168.75	337.5	2...	H1-1b
42	D045	PL1x0.5	.149	0	8	.104	5.69	y	8	15649.5...	16200	168.75	337.5	2...	H1-1b
43	V046	PL1x0.5	.245	0	9	.065	4.835	y	8	15800.6...	16200	168.75	337.5	2...	H1-1b
44	H047	T4x1.5x.5	.229	0	7	.037	10.7...	y	5	100722....	112500	7736.25	1050	1...	H1-1b
45	D048	PL1x0.5	.248	15.9...	30	.023	15.9...	y	7	12348.8...	16200	168.75	337.5	1...	H1-1a
46	V049	PL1x0.5	.224	0	29	.034	12	y	4	13891.4...	16200	168.75	337.5	2...	H1-1b
47	D050	PL1x0.5	.280	15.9...	30	.035	15.9...	y	7	12348.8...	16200	168.75	337.5	2...	H1-1a
48	V051	PL1x0.5	.224	0	4	.049	12	y	4	13891.4...	16200	168.75	337.5	2...	H1-1b
49	D052	PL1x0.5	.127	0	4	.064	13.5...	y	3	13330.09	16200	168.75	337.5	2...	H1-1b
50	V053	PL1x0.5	.344	0	4	.075	10.2...	y	4	14485.8...	16200	168.75	337.5	2...	H1-1b
51	D054	PL1x0.5	.193	0	4	.126	11.7...	y	3	13972.3...	16200	168.75	337.5	2.3	H1-1b
52	V055	PL1x0.5	.323	0	4	.082	8.635	y	4	14960.38	16200	168.75	337.5	2...	H1-1b
53	D056	PL1x0.5	.175	0	4	.139	9.801	y	3	14621.0...	16200	168.75	337.5	2...	H1-1b
54	V057	PL1x0.5	.280	0	4	.076	7.335	y	4	15295.68	16200	168.75	337.5	2...	H1-1b
55	D058	PL1x0.5	.175	0	8	.131	8.07	y	3	15111.7...	16200	168.75	337.5	2...	H1-1b
56	V059	PL1x0.5	.256	0	8	.068	6.335	y	4	15520.5...	16200	168.75	337.5	2...	H1-1b
57	D060	PL1x0.5	.146	0	8	.127	7.056	y	3	15361.3...	16200	168.75	337.5	2...	H1-1b
58	V061	PL1x0.5	.169	0	8	.056	5.435	y	4	15697.0...	16200	168.75	337.5	2...	H1-1b
59	D062	PL1x0.5	.136	0	8	.100	5.69	y	3	15649.5...	16200	168.75	337.5	2...	H1-1b
60	V063	PL1x0.5	.219	0	4	.064	4.835	y	4	15800.6...	16200	168.75	337.5	2...	H1-1b
61	H070	PIPE_2.5	.400	112.5	8	.440	112.5		2	14558.7...	50715	3596.25	3596.25	1...	H3-6



Company : American Tower Corp.
 Designer : Rohith.Koduru
 Job Number : 13193668_C8_01
 Model Name : 302485, Mdfd - Middlefield

Apr 21, 2020
 11:27 PM
 Checked By: -

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

Member	Shape	Code	Loc[in]	LC	Shear	Loc[in]	Dir	LC	phi*Pnc	phi*Pnt	phi*Mn y	phi*Mn z	Cb	Eqn	
62	H071	L3x3x6	.689	30.7...	3	.079	0	y	4	64233.9...	68364	2307.398	5322.329	2...	H2-1
63	H072	L3x3x6	.714	30.7...	6	.069	0	y	8	64233.9...	68364	2307.398	5322.329	1...	H2-1
64	H073	L3x3x6	.790	30.7...	11	.069	0	y	12	64233.9...	68364	2307.398	5322.329	1...	H2-1
65	H074	L3x3x6	.700	30.7...	2	.071	0	y	12	64233.9...	68364	2307.398	5322.329	1...	H2-1
66	H075	L3x3x6	.775	30.7...	6	.066	0	y	5	64233.9...	68364	2307.398	5322.329	1...	H2-1
67	H076	L3x3x6	.782	30.7...	10	.064	0	y	9	64233.9...	68364	2307.398	5322.329	1...	H2-1
68	H077	PIPE 2.5	.479	112.5	12	.500	112.5		6	14558.7...	50715	3596.25	3596.25	1...	H3-6
69	H078	PIPE 2.5	.437	112.5	4	.467	112.5		10	14558.7...	50715	3596.25	3596.25	1...	H3-6
70	H079	HSS4x4x4	.180	0	2	.096	15	y	12	136091....	139518	16180.5	16180.5	4...	H1-1b
71	H080	HSS4x4x4	.188	0	6	.090	15	y	4	136091....	139518	16180.5	16180.5	4...	H1-1b
72	H081	HSS4x4x4	.186	0	10	.087	15	y	8	136091....	139518	16180.5	16180.5	4...	H1-1b
73	H082	L3x3x6	.495	0	3	.271	0	y	4	61448.7...	68364	2307.398	5322.329	2.3	H2-1
74	H083	L3x3x6	.470	0	7	.246	0	y	8	61448.7...	68364	2307.398	5322.329	2...	H2-1
75	H084	L3x3x6	.521	0	11	.269	0	y	12	61448.7...	68364	2307.398	5322.329	2...	H2-1
76	H085	L3x3x6	.546	0	13	.319	0	y	12	61448.7...	68364	2307.398	5322.329	2...	H2-1
77	H086	L3x3x6	.551	0	5	.327	0	y	4	61448.7...	68364	2307.398	5322.329	2...	H2-1
78	H087	L3x3x6	.535	0	9	.297	0	y	8	61448.7...	68364	2307.398	5322.329	2...	H2-1
79	H094	Platform	.279	75	7	.055	39.0...	z	5	7175.628	94921.8...	1844.022	6397.21	1...	H1-1b
80	H095	Platform	.339	75	10	.057	39.0...	z	9	7175.628	94921.8...	1844.022	6575.937	1...	H1-1b
81	H096	Platform	.350	75	6	.054	39.0...	z	13	7175.628	94921.8...	1844.022	6906.041	1...	H1-1b
82	H127	Platform	.004	8.832	13	.001	17.6...	z	37	74717.1...	94921.8...	1844.022	29063.8...	1...	H1-1b
83	H128	Platform	.005	0	6	.001	0	z	37	74717.1...	94921.8...	1844.022	29063.8...	1...	H1-1b*
84	H129	Platform	.005	0	9	.001	17.6...	z	37	74717.1...	94921.8...	1844.022	29063.8...	1...	H1-1b*
85	MP1	PIPE 2.0	.467	27.5	4	.191	27.5		5	2230.521	32130	1871.625	1871.625	1...	H1-1b
86	MP2	PIPE 2.0	.561	27.5	3	.197	27.5		5	2230.521	32130	1871.625	1871.625	1...	H1-1b
87	MP3	PIPE 2.0	.413	27.5	3	.177	27.5		5	2230.521	32130	1871.625	1871.625	1...	H1-1b
88	MP4	PIPE 2.0	.600	27.5	2	.196	27.5		5	2230.521	32130	1871.625	1871.625	1...	H1-1b
89	MP5	PIPE 2.0	.514	27.5	13	.190	27.5		5	2230.521	32130	1871.625	1871.625	1...	H1-1b
90	MP6	PIPE 2.0	.459	27.5	8	.156	27.5		9	2230.521	32130	1871.625	1871.625	1...	H1-1b
91	MP7	PIPE 2.0	.505	27.5	11	.143	27.5		13	2230.521	32130	1871.625	1871.625	1...	H1-1b
92	MP8	PIPE 2.0	.582	27.5	7	.175	27.5		9	2230.521	32130	1871.625	1871.625	1...	H1-1b
93	MP9	PIPE 2.0	.656	27.5	11	.161	27.5		13	2230.521	32130	1871.625	1871.625	1...	H1-1b
94	MP10	PIPE 2.0	.434	27.5	6	.186	27.5		10	2230.521	32130	1871.625	1871.625	1...	H1-1b
95	MP11	PIPE 2.0	.474	27.5	11	.170	27.5		13	2230.521	32130	1871.625	1871.625	1...	H1-1b
96	MP12	PIPE 2.0	.685	27.5	5	.173	27.5		21	2230.521	32130	1871.625	1871.625	1...	H1-1b
97	MP13	PIPE 2.0	.650	27.5	10	.162	27.5		13	2230.521	32130	1871.625	1871.625	1...	H1-1b
98	MP14	PIPE 2.0	.577	27.5	5	.154	27.5		21	2230.521	32130	1871.625	1871.625	1...	H1-1b
99	MP15	PIPE 2.0	.498	27.5	9	.144	27.5		13	2230.521	32130	1871.625	1871.625	1...	H1-1b

EXHIBIT 3

AN APPLICATION SUBMITTED BY THE SOUTHERN : CONNECTICUT SITING
NEW ENGLAND TELEPHONE COMPANY FOR A
CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY :
AND PUBLIC NEED FOR THE CONSTRUCTION, : COUNCIL
MAINTENANCE, AND OPERATION OF FACILITIES
TO PROVIDE CELLULAR SERVICE IN THE HARTFORD :
AND MIDDLESEX COUNTIES. : May 15, 1984

D E C I S I O N A N D O R D E R

Pursuant to the foregoing opinion, the Council hereby directs that a certificate of environmental compatibility and public need as required by section 16-50k of the General Statutes of Connecticut, revisions of 1958, revised to 1983, as amended, be issued to Southern New England Telephone for the construction, operation, and maintenance of a telecommunications tower and associated equipment to provide cellular service at each of the following sites:

Shuttle Meadow Road, Southington, Connecticut;
Mountain Street, Hartford, Connecticut;
Prestige Park Road, East Hartford, Connecticut;
Beckley Road, Berlin, Connecticut;
Slicer tract, Niederwerfer Road, South Windsor, Connecticut; and
Kikapoo Road, Middlefield, Connecticut.

The facilities shall be constructed, operated, and maintained as specified in the Council's record on this matter, and subject to the following conditions.

1. The towers shall be no taller than necessary to provide the proposed service and in no event shall exceed
 - a) 150 feet at the Southington site,
 - b) 100 feet at the Hartford site,
 - c) 150 feet at the East Hartford site,
 - d) 150 feet at the Berlin site,
 - e) 75 feet at the South Windsor site, and
 - f) 75 feet at the Middlefield site.
2. A fence not lower than eight feet shall surround each tower and its associated equipment.

3. The applicant or its successor shall notify the Council if and when directional antennas or any other equipment is added to any of these facilities.
4. The applicant or its successor shall permit in accordance with representations made by it during the proceeding public or private entities to share space on the facilities, for due consideration received, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
5. Unless necessary to comply with condition number seven, below, no lights shall be installed on any of these towers.
6. The facility construction shall be conducted in accordance with all applicable federal, state, and municipal laws and regulations.
7. The applicant shall submit a development and management plan (D&M) for the South Windsor, Southington, and Berlin sites pursuant to sections 16-50j-85 through 16-50j-87 of the regulations of state agencies, except that irrelevant items in section 16-50j-86 need only be identified as such. The D&M plans shall include appropriate evergreen screening of the sites. The applicant shall comply with the reporting requirements of section 16-50j-87 for all sites. The applicant shall consult with Mrs. Claire Aubin and the Town of South Windsor in the preparation of the South Windsor site D&M.
8. Construction activities shall take place during daylight working hours.
9. This decision and order shall be void and the towers and associated equipment approved herein shall be dismantled and removed,

or reapplication for any new use shall be made to the Connecticut Siting Council before any such new use is made, if the towers do not provide or permanently cease to provide cellular service following completion of construction.

10. This decision and order shall be void if all construction authorized is not completed within three years of the issuance of this decision.

Pursuant to section 16-50p(c) of the General Statutes, we hereby direct that a copy of the opinion and decision and order be served on each person listed below. A notice of the issuance shall be published in the Hartford Courant, Journal Inquirer, and the Middletown Press.

The parties to this proceeding are

Southern New England
Telephone Company
Room 314
227 Church Street
New Haven, Connecticut 06506

(Applicant)

ATTN: Mr. Peter J. Tyrrell, Esquire

(its attorney)

Town of South Windsor
1540 Sullivan Avenue
South Windsor, Connecticut 06074

represented by:

Mr. Richard M. Rittenband
Town Attorney
1734 Ellington Road
South Windsor, Connecticut 06074

Frank Niederwerfer
260 Niederwerfer Road
South Windsor, Connecticut 06074

(service waived)

Claire Aubin
407 Niederwerfer Road
South Windsor, Connecticut 06074

(service waived)

Betty S. Kleiner
Chairman
Hartford Audubon Society, Inc.
5 Flintlock Ridge
Simsbury, Connecticut 06070

(service waived)

Roger Thorpe
2916 Ellington Road
South Windsor, Connecticut 06074

Intervenors in this proceeding are

Dwight A. Johnson
Murtha, Cullina, Richter
and Pinney
101 Pearl Street
P.O. Box 3197
Hartford, Connecticut 06103-0197

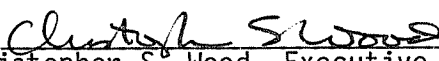
representing:

Metromedia TeleCommunications
Nutmeg Telecommunications, Inc.
CSI of New Haven
CSI of Stamford
Cellular Communications, Inc.
LIN Cellular Corp.
Cellular Mobile Services
Maxcell TeleCommunications, Inc.
Mobile Cellular Telephone, Inc.
Cellular Dynamics
Connecticut Corridor Cellular
Chase/Post Cellular

STATE OF CONNECTICUT)
 :
COUNTY OF HARTFORD) ss. New Britain, May 15, 1984

I hereby certify that the foregoing is a true and correct copy of the decision and order issued by the Connecticut Siting Council, State of Connecticut.

ATTEST:



Christopher S. Wood, Executive Director
Connecticut Siting Council

EXHIBIT 4

PALISADES DR

Location PALISADES DR

Mblu 10/ 10.2/ 34-1/ /

Acct# 02012010

Owner SBC TOWER HOLDINGS LLC

Assessment \$87,500

PID 142

Building Count 1

Current Value

Assessment			
Valuation Year	Improvements	Land	Total
2016	\$0	\$87,500	\$87,500

Owner of Record

Owner SBC TOWER HOLDINGS LLC
Co-Owner ATTN: PROPERTY TAX DEPT
Address P.O.BOX 723597
ATLANTA, GA 31139

Sale Price \$0
Certificate
Book & Page 0333/0901
Sale Date 12/11/2018

Ownership History

Ownership History				
Owner	Sale Price	Certificate	Book & Page	Sale Date
SBC TOWER HOLDINGS LLC	\$0		0333/0901	12/11/2018
SBC TOWER HOLDINS LLC	\$0		0333/0899	12/11/2018
SBC TOWER HOLDINS LLC	\$0		0318/0808	09/30/2013
AMERICAN TOWER ASSET SUB II LLC	\$502,705		0318/0794	09/30/2013
VINCI REAL PROPERTY LLC	\$0		0185/0019	05/21/2003

Building Information

Building 1 : Section 1

Year Built:
Living Area: 0
Replacement Cost: \$0
Building Percent Good:
Replacement Cost
Less Depreciation: \$0

Building Attributes

Field	Description
Style	Vacant Land
Model	
Grade:	
Stories:	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure:	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Total Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Num Kitchens	
Whirlpool	
Usrflid 103	
Usrflid 104	
Usrflid 105	
Usrflid 106	
Usrflid 107	
Num Park	
Fireplaces	
Usrflid 108	
Usrflid 101	
Usrflid 102	
Interior	
Usrflid 300	
Usrflid 301	

Building Photo



(<http://images.vgsi.com/photos/MiddlefieldCTPhotos/A01\00\25\59.jpg>)

Building Layout

(http://images.vgsi.com/photos/MiddlefieldCTPhotos/Sketches/142_142.jp)

Building Sub-Areas (sq ft)	Legend
No Data for Building Sub-Areas	

Extra Features

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

Land

Land Use		Land Line Valuation	
Use Code	431V	Size (Acres)	0.15
Description	TEL REL TW MDL-00	Frontage	
Zone	HD1	Depth	
Neighborhood		Assessed Value	\$87,500
Alt Land Appr Category	No		

Outbuildings

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

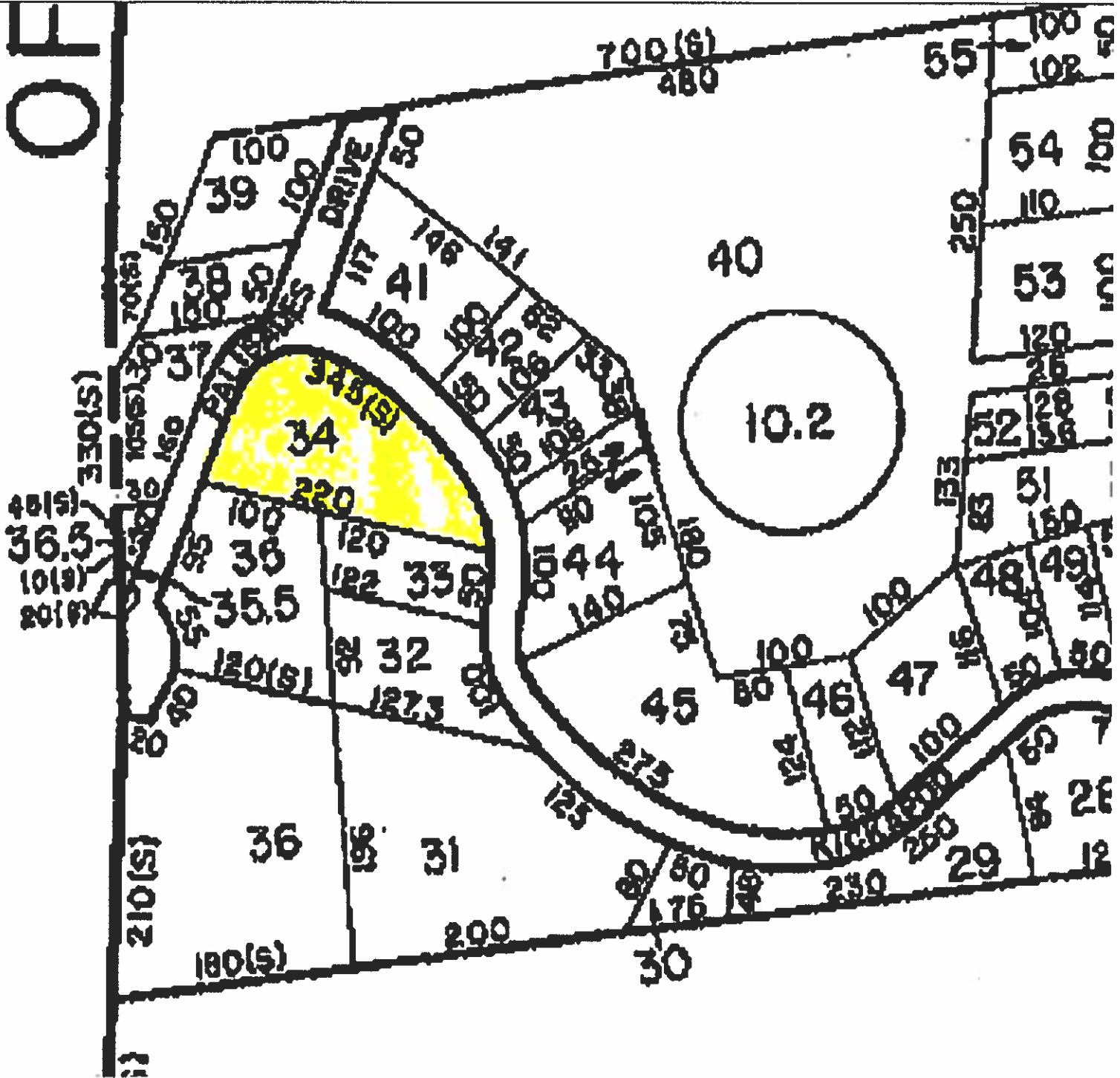


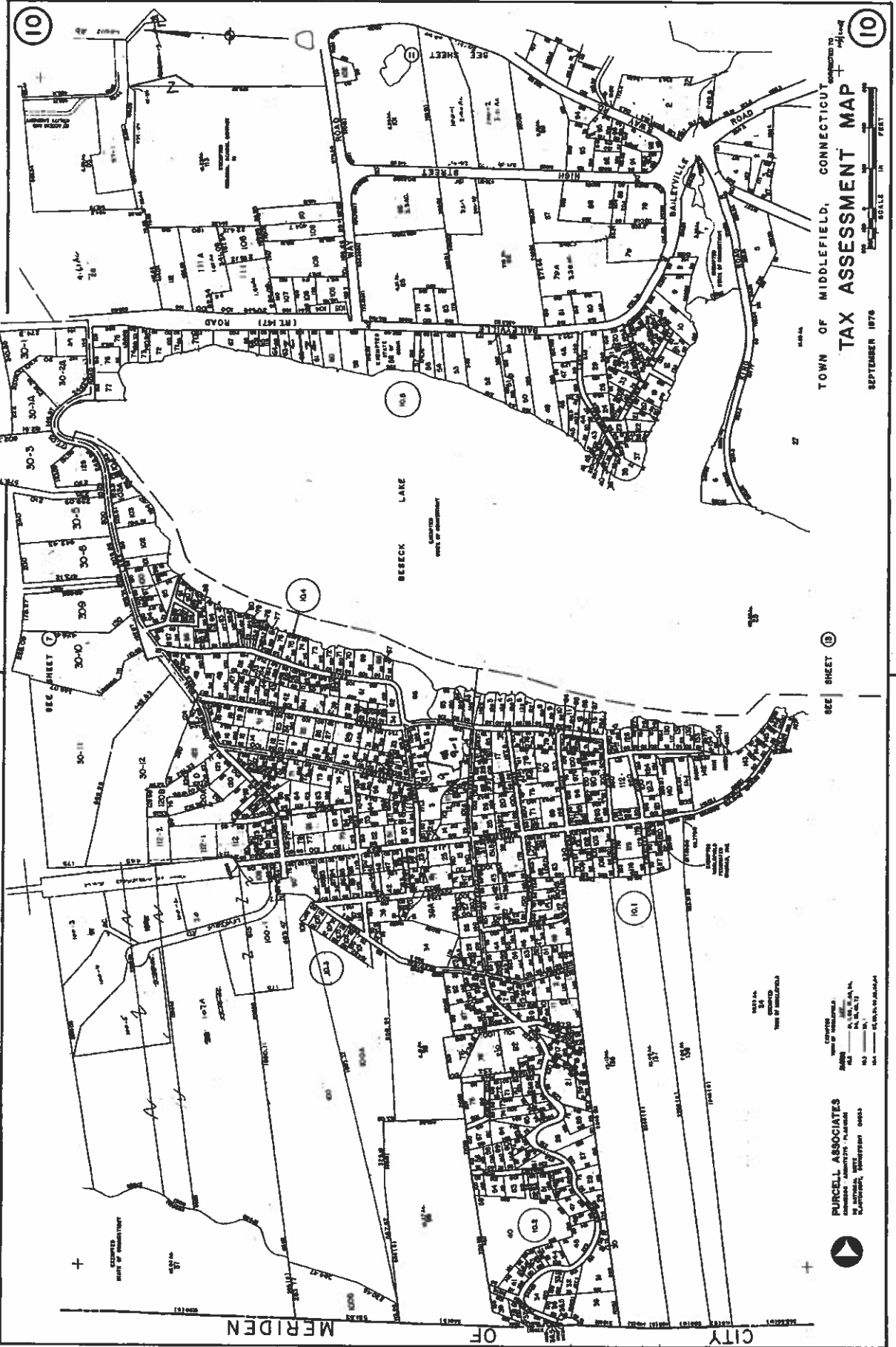
134 Kikapoo Road, Middlefield CT

Also referred to as off of Palisades Drive in the Town's property record cards.

MBLU: 10/10.2/34-1

OF





TOWN OF MIDDLEFIELD, CONNECTICUT
 TAX ASSESSMENT MAP
 SEPTEMBER 1979

PURCELL ASSOCIATES
 1000 WEST 10TH AVENUE
 DENVER, COLORADO 80202
 (303) 733-1111



10

10

MERIDEN CITY OF

EXHIBIT 5



**Lawrence Behr
Associates** INC
www.lbagroup.com

Radio Frequency Emissions Report

SITE NAME:

302485 Mdfd-Middlefield

LOCATION:

Middlefield, Connecticut

COMPANY:

**American Tower Corporation
Woburn, Massachusetts**

September 14th, 2020

Contents

DISCLAIMER NOTICE	2
INTRODUCTION	3
SITE AND FACILITY CONSIDERATIONS.....	3
POWER DENSITY CALCULATIONS.....	4
APPENDIX 1 LOAD LIST.....	4
APPENDIX 2 AT&T CHANNELS USED.....	5
APPENDIX 3 AT&T ANTENNA INFORMATION	6
APPENDIX 4 FCC OET-65 MPE LIMIT STUDY.....	7
APPENDIX 5 SUMMARY OF POWER DENSITY.....	8
APPENDIX 6 INFORMATION PERTAINING TO MPE STUDIES.....	9
APPENDIX 7 MPE STANDARDS METHODOLOGY	11



DISCLAIMER NOTICE

This work is based upon our best interpretation of available information. However, these data and their interpretation are constantly changing. Therefore, we do not warrant that any undertaking based on this report will be successful, or that others will not require further research or actions in support of this proposal or future undertaking. In the event of errors, our liability is strictly limited to replacement of this document with a corrected one. Liability for consequential damages is specifically disclaimed. Any use of this document constitutes an agreement to hold Lawrence Behr Associates, Inc. and its employees harmless and indemnify it for any and all liability, claims, demands, and litigation expenses and attorney's fees arising out of such use.

Work product documents released prior to account settlement remain the sole property of Lawrence Behr Associates, Inc. and must be returned on demand. Underlying work notes and data relating to this document remain the property of Lawrence Behr Associates, Inc. This document shall not be reproduced in whole or part without permission of Lawrence Behr Associates, Inc. Any dispute hereunder shall be adjudicated in North Carolina. Any use or retention of this document constitutes acceptance of these terms, the entire work product, and all charges associated therewith.

COPYRIGHT © 2020 BY
LAWRENCE BEHR ASSOCIATES, INC.
GREENVILLE, NORTH CAROLINA

RADIO FREQUENCY EMISSIONS REPORT

302485 Mdfd-Middlefield

Middlefield, Connecticut

INTRODUCTION

Lawrence Behr Associates, Inc. (LBA) has been retained by American Tower Corporation (ATC) of Woburn, Massachusetts to evaluate the RF emissions of an existing tower at this location. AT&T is adding emitters to this site and the purpose of this study is to determine if, after the addition of the AT&T emitters, the site is in Compliance with FCC Regulations. This study determined that **THIS SITE IS IN COMPLIANCE** with Federal Regulations.

Details regarding the FCC Rules and the methodology used to determine compliance may be seen below.

SITE AND FACILITY CONSIDERATIONS

Site 302485 Mdfd-Middlefield is located at 134 Kikapoo Road in Middlefield, Connecticut at coordinates 41.51361, -72.7458. The support structure is a 79' monopole.

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 LBA

AT&T proposes to add antennas to the tower at the 77' level. The structure already supports other antennas. This study only considers the new AT&T facility in detail.

The load list may be seen in Appendix 1. Appendix 2 contains the AT&T channel counts, frequency bands, and power levels. AT&T Antenna information may be seen in Appendix 3.

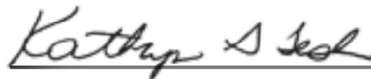
POWER DENSITY CALCULATIONS

Based upon the provided information and the FCC limits for exposure as outlined in 47 CFR 1.1307(b)(1) - (b)(3), the power levels and percentages of the FCC's allowable general population limit are shown in Appendix 4. Calculations were done at industry standard average head height of six feet above ground level.

A summary of the power density from all emitters may be seen in Appendix 5.

These limits are based upon the Information Relating to MPE Standards found in Appendix 6. Study methodology may be seen in Appendix 7, which describes the Non-Ionizing Radiation Prediction Models. Approximate radiation patterns may be found in Appendix 5. This site ***IS*** in compliance with FCC OET-65 MPE limits.

September 14th, 2020



Kathryn G. Tesh
Wireless Services Manager



APPENDIX 1 *Load List*

Proposed	Customer	RAD Height (ft)	Equipment Quantity	Equipment Type	Manufacturer	Model Number	Line Quantity	Line size	Mount Type	Azimuths	TX Power	ERP	TX Frequency	RX Frequency
No	SPOK HOLDINGS, INC.	84	1	OMNI	Generic	10' Omni	1	1 5/8" Coax	Platform with Handrails	Omni			927	
No	OTHER	83	1	OMNI	Generic	10' Omni	1	7/8" Coax	Platform with Handrails	Omni				
Yes	AT&T MOBILITY	78	3	PANEL	CCI	HPA-65R-BUU-H8			Platform with Handrails	45/145/260			1850-1865, 1885-1910, 704-716, 758-763, 824-845, 869-890	1930-1945, 1965-1990, 728-746, 788-793, 845-849, 890-894
Yes	AT&T MOBILITY	78	3	PANEL	CCI	DMP65R-BU8D	6	7/8" Coax	Platform with Handrails	45/145/260			1850-1865, 1885-1910, 704-716, 758-763, 824-845, 869-890	1930-1945, 1965-1990, 728-746, 788-793, 845-849, 890-894
Yes	AT&T MOBILITY	78	3	PANEL	CCI	TPA-65R-LCUUU-H8			Platform with Handrails	45/145/260			1850-1865, 1885-1910, 704-716, 758-763, 824-845, 850, 869-890	19002300, 1930-1945, 1965-1990, 2100, 728-746, 788-793, 845-849, 890-894
No	AT&T MOBILITY	77	3	PANEL	CCI	CCI-HPA-65R-BUU-H8			Platform with Handrails	45/145/260			1930-1935, 1945-1950, 1965-1970, 1982-1990, 891-894	1930-1935, 1945-1950, 1965-1970, 1982-1990, 891-894
No	AT&T MOBILITY	77	3	PANEL	Powerwave Allgon	7770.00	12	7/8" Coax	Platform with Handrails	45/145/260			850	19002300, 2100
No	AT&T MOBILITY	77	3	PANEL	CCI	TPA-65R-LCUUU-H8			Platform with Handrails	45/145/260			1850-1865, 1885-1910, 704-716, 758-763, 824-845, 850, 869-890	19002300, 1930-1945, 1965-1990, 2100, 728-746, 788-793, 845-849, 890-894



APPENDIX 2

AT&T Channels Used

Antenna	Technology	Frequency Band	Channel Count	Transmitter Power per Channel (W)
AT&T A1	LTE	1900	1	40
AT&T A2	LTE	1900	1	40
AT&T A3	LTE	700	1	40
AT&T A4	LTE	700	1	40
AT&T A5	UMTS	850	1	40
AT&T A6	UMTS	850	1	40
AT&T A7	LTE	1900	1	40
AT&T A8	LTE	1900	1	40
AT&T A9	LTE	700	1	40
AT&T A10	LTE	700	1	40
AT&T A11	UMTS	850	1	40
AT&T A12	UMTS	850	1	40
AT&T A13	LTE	1900	1	40
AT&T A14	LTE	1900	1	40
AT&T A15	LTE	700	1	40
AT&T A16	LTE	700	1	40
AT&T A17	UMTS	850	1	40
AT&T A18	UMTS	850	1	40
AT&T A19	LTE	1900	1	40
AT&T A20	LTE	1900	1	40
AT&T A21	LTE	1900	1	40
AT&T A22	LTE	1900	1	40
AT&T A23	UMTS	850	1	40
AT&T A24	UMTS	850	1	40
AT&T B1	LTE	1900	1	40
AT&T B2	LTE	1900	1	40
AT&T B3	LTE	700	1	40
AT&T B4	LTE	700	1	40
AT&T B5	UMTS	850	1	40
AT&T B6	UMTS	850	1	40
AT&T B7	LTE	1900	1	40
AT&T B8	LTE	1900	1	40
AT&T B9	LTE	700	1	40
AT&T B10	LTE	700	1	40
AT&T B11	UMTS	850	1	40
AT&T B12	UMTS	850	1	40
AT&T B13	LTE	1900	1	40
AT&T B14	LTE	1900	1	40
AT&T B15	LTE	700	1	40
AT&T B16	LTE	700	1	40
AT&T B17	UMTS	850	1	40
AT&T B18	UMTS	850	1	40
AT&T B19	LTE	1900	1	40
AT&T B20	LTE	1900	1	40
AT&T B21	LTE	1900	1	40
AT&T B22	LTE	1900	1	40
AT&T B23	UMTS	850	1	40
AT&T B24	UMTS	850	1	40
AT&T C1	LTE	1900	1	40
AT&T C2	LTE	1900	1	40
AT&T C3	LTE	700	1	40
AT&T C4	LTE	700	1	40
AT&T C5	UMTS	850	1	40
AT&T C6	UMTS	850	1	40
AT&T C7	LTE	1900	1	40
AT&T C8	LTE	1900	1	40
AT&T C9	LTE	700	1	40
AT&T C10	LTE	700	1	40
AT&T C11	UMTS	850	1	40
AT&T C12	UMTS	850	1	40
AT&T C13	LTE	1900	1	40
AT&T C14	LTE	1900	1	40
AT&T C15	LTE	700	1	40
AT&T C16	LTE	700	1	40
AT&T C17	UMTS	850	1	40
AT&T C18	UMTS	850	1	40
AT&T C19	LTE	1900	1	40
AT&T C20	LTE	1900	1	40
AT&T C21	LTE	1900	1	40
AT&T C22	LTE	1900	1	40
AT&T C23	UMTS	850	1	40
AT&T C24	UMTS	850	1	40

APPENDIX 3

AT&T Antenna Information

Sector	Antenna Number	Antenna Make / Model	Antenna Centerline (ft)
A	AT&T A1	CCI HPA-65R-BUU-H8	77
A	AT&T A2	CCI HPA-65R-BUU-H8	77
A	AT&T A3	CCI HPA-65R-BUU-H8	77
A	AT&T A4	CCI HPA-65R-BUU-H8	77
A	AT&T A5	CCI HPA-65R-BUU-H8	77
A	AT&T A6	CCI HPA-65R-BUU-H8	77
A	AT&T A7	CCI DMP65R-BU8D	77
A	AT&T A8	CCI DMP65R-BU8D	77
A	AT&T A9	CCI DMP65R-BU8D	77
A	AT&T A10	CCI DMP65R-BU8D	77
A	AT&T A11	CCI DMP65R-BU8D	77
A	AT&T A12	CCI DMP65R-BU8D	77
A	AT&T A13	CCI TPA-65R-LCUUUU-H8	77
A	AT&T A14	CCI TPA-65R-LCUUUU-H8	77
A	AT&T A15	CCI TPA-65R-LCUUUU-H8	77
A	AT&T A16	CCI TPA-65R-LCUUUU-H8	77
A	AT&T A17	CCI TPA-65R-LCUUUU-H8	77
A	AT&T A18	CCI TPA-65R-LCUUUU-H8	77
A	AT&T A19	CCI CCI-HPA-65R-BUU-H8	77
A	AT&T A20	CCI CCI-HPA-65R-BUU-H8	77
A	AT&T A21	CCI CCI-HPA-65R-BUU-H8	77
A	AT&T A22	CCI CCI-HPA-65R-BUU-H8	77
A	AT&T A23	CCI CCI-HPA-65R-BUU-H8	77
A	AT&T A24	Powerwave Allgon 7770	77
B	AT&T B1	CCI HPA-65R-BUU-H8	77
B	AT&T B2	CCI HPA-65R-BUU-H8	77
B	AT&T B3	CCI HPA-65R-BUU-H8	77
B	AT&T B4	CCI HPA-65R-BUU-H8	77
B	AT&T B5	CCI HPA-65R-BUU-H8	77
B	AT&T B6	CCI HPA-65R-BUU-H8	77
B	AT&T B7	CCI DMP65R-BU8D	77
B	AT&T B8	CCI DMP65R-BU8D	77
B	AT&T B9	CCI DMP65R-BU8D	77
B	AT&T B10	CCI DMP65R-BU8D	77
B	AT&T B11	CCI DMP65R-BU8D	77
B	AT&T B12	CCI DMP65R-BU8D	77
B	AT&T B13	CCI TPA-65R-LCUUUU-H8	77
B	AT&T B14	CCI TPA-65R-LCUUUU-H8	77
B	AT&T B15	CCI TPA-65R-LCUUUU-H8	77
B	AT&T B16	CCI TPA-65R-LCUUUU-H8	77
B	AT&T B17	CCI TPA-65R-LCUUUU-H8	77
B	AT&T B18	CCI TPA-65R-LCUUUU-H8	77
B	AT&T B19	CCI CCI-HPA-65R-BUU-H8	77
B	AT&T B20	CCI CCI-HPA-65R-BUU-H8	77
B	AT&T B21	CCI CCI-HPA-65R-BUU-H8	77
B	AT&T B22	CCI CCI-HPA-65R-BUU-H8	77
B	AT&T B23	CCI CCI-HPA-65R-BUU-H8	77
B	AT&T B24	Powerwave Allgon 7770	77
C	AT&T C1	CCI HPA-65R-BUU-H8	77
C	AT&T C2	CCI HPA-65R-BUU-H8	77
C	AT&T C3	CCI HPA-65R-BUU-H8	77
C	AT&T C4	CCI HPA-65R-BUU-H8	77
C	AT&T C5	CCI HPA-65R-BUU-H8	77
C	AT&T C6	CCI HPA-65R-BUU-H8	77
C	AT&T C7	CCI DMP65R-BU8D	77
C	AT&T C8	CCI DMP65R-BU8D	77
C	AT&T C9	CCI DMP65R-BU8D	77
C	AT&T C10	CCI DMP65R-BU8D	77
C	AT&T C11	CCI DMP65R-BU8D	77
C	AT&T C12	CCI DMP65R-BU8D	77
C	AT&T C13	CCI TPA-65R-LCUUUU-H8	77
C	AT&T C14	CCI TPA-65R-LCUUUU-H8	77
C	AT&T C15	CCI TPA-65R-LCUUUU-H8	77
C	AT&T C16	CCI TPA-65R-LCUUUU-H8	77
C	AT&T C17	CCI TPA-65R-LCUUUU-H8	77
C	AT&T C18	CCI TPA-65R-LCUUUU-H8	77
C	AT&T C19	CCI CCI-HPA-65R-BUU-H8	77
C	AT&T C20	CCI CCI-HPA-65R-BUU-H8	77
C	AT&T C21	CCI CCI-HPA-65R-BUU-H8	77
C	AT&T C22	CCI CCI-HPA-65R-BUU-H8	77
C	AT&T C23	CCI CCI-HPA-65R-BUU-H8	77
C	AT&T C24	Powerwave Allgon 7770	77

APPENDIX 4

FCC OET-65 MPE Limit Study

Antenna ID	Antenna Make / Model	Frequency Band	Antenna Gain (dBd)	Antenna Height (ft)	Channel Count	TX Power (W)	ERP (W) (All Channels)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Allowable Public MPE ($\mu\text{W}/\text{cm}^2$)	Public MPE%
AT&T A1	CCI HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T A2	CCI HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T A3	CCI HPA-65R-BUU-H8	700	11.95	77	1	40	1028.16	0.2590797	466.67	0.055517%
AT&T A4	CCI HPA-65R-BUU-H8	700	11.95	77	1	40	1028.16	0.2590797	466.67	0.055517%
AT&T A5	CCI HPA-65R-BUU-H8	850	12.65	77	1	40	1207.98	0.5435681	566.67	0.095924%
AT&T A6	CCI HPA-65R-BUU-H8	850	12.65	77	1	40	1207.98	0.5435681	566.67	0.095924%
AT&T A7	CCI DMP65R-BU8D	1900	15.55	77	1	40	2355.37	1.0721861	1000.00	0.107219%
AT&T A8	CCI DMP65R-BU8D	1900	15.55	77	1	40	2355.37	1.0721861	1000.00	0.107219%
AT&T A9	CCI DMP65R-BU8D	700	11.85	77	1	40	1004.75	0.2531823	466.67	0.054253%
AT&T A10	CCI DMP65R-BU8D	700	11.85	77	1	40	1004.75	0.2531823	466.67	0.054253%
AT&T A11	CCI DMP65R-BU8D	850	12.45	77	1	40	1153.61	0.5191035	566.67	0.091606%
AT&T A12	CCI DMP65R-BU8D	850	12.45	77	1	40	1153.61	0.5191035	566.67	0.091606%
AT&T A13	CCI TPA-65R-LCUUUU-H8	1900	13.75	77	1	40	1556.18	2.0131772	1000.00	0.201318%
AT&T A14	CCI TPA-65R-LCUUUU-H8	1900	13.75	77	1	40	1556.18	2.0131772	1000.00	0.201318%
AT&T A15	CCI TPA-65R-LCUUUU-H8	700	12.95	77	1	40	1294.37	0.5824437	466.67	0.124809%
AT&T A16	CCI TPA-65R-LCUUUU-H8	700	12.95	77	1	40	1294.37	0.5824437	466.67	0.124809%
AT&T A17	CCI TPA-65R-LCUUUU-H8	850	13.45	77	1	40	1452.31	0.1065531	566.67	0.018803%
AT&T A18	CCI TPA-65R-LCUUUU-H8	850	13.45	77	1	40	1452.31	0.1065531	566.67	0.018803%
AT&T A19	CCI CCI-HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T A20	CCI CCI-HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T A21	CCI CCI-HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T A22	CCI CCI-HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T A23	CCI CCI-HPA-65R-BUU-H8	850	12.65	77	1	40	1207.98	0.5435681	566.67	0.095924%
AT&T A24	Powerwave Allgon 7770	850	11.45	77	1	40	916.35	0.230905	566.67	0.040748%
AT&T B1	CCI HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T B2	CCI HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T B3	CCI HPA-65R-BUU-H8	700	11.95	77	1	40	1028.16	0.2590797	466.67	0.055517%
AT&T B4	CCI HPA-65R-BUU-H8	700	11.95	77	1	40	1028.16	0.2590797	466.67	0.055517%
AT&T B5	CCI HPA-65R-BUU-H8	850	12.65	77	1	40	1207.98	0.5435681	566.67	0.095924%
AT&T B6	CCI HPA-65R-BUU-H8	850	12.65	77	1	40	1207.98	0.5435681	566.67	0.095924%
AT&T B7	CCI DMP65R-BU8D	1900	15.55	77	1	40	2355.37	1.0721861	1000.00	0.107219%
AT&T B8	CCI DMP65R-BU8D	1900	15.55	77	1	40	2355.37	1.0721861	1000.00	0.107219%
AT&T B9	CCI DMP65R-BU8D	700	11.85	77	1	40	1004.75	0.2531823	466.67	0.054253%
AT&T B10	CCI DMP65R-BU8D	700	11.85	77	1	40	1004.75	0.2531823	466.67	0.054253%
AT&T B11	CCI DMP65R-BU8D	850	12.45	77	1	40	1153.61	0.5191035	566.67	0.091606%
AT&T B12	CCI DMP65R-BU8D	850	12.45	77	1	40	1153.61	0.5191035	566.67	0.091606%
AT&T B13	CCI TPA-65R-LCUUUU-H8	1900	13.75	77	1	40	1556.18	2.0131772	1000.00	0.201318%
AT&T B14	CCI TPA-65R-LCUUUU-H8	1900	13.75	77	1	40	1556.18	2.0131772	1000.00	0.201318%
AT&T B15	CCI TPA-65R-LCUUUU-H8	700	12.95	77	1	40	1294.37	0.5824437	466.67	0.124809%
AT&T B16	CCI TPA-65R-LCUUUU-H8	700	12.95	77	1	40	1294.37	0.5824437	466.67	0.124809%
AT&T B17	CCI TPA-65R-LCUUUU-H8	850	13.45	77	1	40	1452.31	0.1065531	566.67	0.018803%
AT&T B18	CCI TPA-65R-LCUUUU-H8	850	13.45	77	1	40	1452.31	0.1065531	566.67	0.018803%
AT&T B19	CCI CCI-HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T B20	CCI CCI-HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T B21	CCI CCI-HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T B22	CCI CCI-HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T B23	CCI CCI-HPA-65R-BUU-H8	850	12.65	77	1	40	1207.98	0.5435681	566.67	0.095924%
AT&T B24	Powerwave Allgon 7770	850	11.45	77	1	40	916.35	0.230905	566.67	0.040748%
AT&T C1	CCI HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T C2	CCI HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T C3	CCI HPA-65R-BUU-H8	700	11.95	77	1	40	1028.16	0.2590797	466.67	0.055517%
AT&T C4	CCI HPA-65R-BUU-H8	700	11.95	77	1	40	1028.16	0.2590797	466.67	0.055517%
AT&T C5	CCI HPA-65R-BUU-H8	850	12.65	77	1	40	1207.98	0.5435681	566.67	0.095924%
AT&T C6	CCI HPA-65R-BUU-H8	850	12.65	77	1	40	1207.98	0.5435681	566.67	0.095924%
AT&T C7	CCI DMP65R-BU8D	1900	15.55	77	1	40	2355.37	1.0721861	1000.00	0.107219%
AT&T C8	CCI DMP65R-BU8D	1900	15.55	77	1	40	2355.37	1.0721861	1000.00	0.107219%
AT&T C9	CCI DMP65R-BU8D	700	11.85	77	1	40	1004.75	0.2531823	466.67	0.054253%
AT&T C10	CCI DMP65R-BU8D	700	11.85	77	1	40	1004.75	0.2531823	466.67	0.054253%
AT&T C11	CCI DMP65R-BU8D	850	12.45	77	1	40	1153.61	0.5191035	566.67	0.091606%
AT&T C12	CCI DMP65R-BU8D	850	12.45	77	1	40	1153.61	0.5191035	566.67	0.091606%
AT&T C13	CCI TPA-65R-LCUUUU-H8	1900	13.75	77	1	40	1556.18	2.0131772	1000.00	0.201318%
AT&T C14	CCI TPA-65R-LCUUUU-H8	1900	13.75	77	1	40	1556.18	2.0131772	1000.00	0.201318%
AT&T C15	CCI TPA-65R-LCUUUU-H8	700	12.95	77	1	40	1294.37	0.5824437	466.67	0.124809%
AT&T C16	CCI TPA-65R-LCUUUU-H8	700	12.95	77	1	40	1294.37	0.5824437	466.67	0.124809%
AT&T C17	CCI TPA-65R-LCUUUU-H8	850	13.45	77	1	40	1452.31	0.1065531	566.67	0.018803%
AT&T C18	CCI TPA-65R-LCUUUU-H8	850	13.45	77	1	40	1452.31	0.1065531	566.67	0.018803%
AT&T C19	CCI CCI-HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T C20	CCI CCI-HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T C21	CCI CCI-HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T C22	CCI CCI-HPA-65R-BUU-H8	1900	14.75	77	1	40	1959.12	0.8918056	1000.00	0.089181%
AT&T C23	CCI CCI-HPA-65R-BUU-H8	850	12.65	77	1	40	1207.98	0.5435681	566.67	0.095924%
AT&T C24	Powerwave Allgon 7770	850	11.45	77	1	40	916.35	0.230905	566.67	0.040748%
AT&T All Sectors									Total:	6.5120%

APPENDIX 5

Summary of Power Density

Carriers	Power Density Value (% of General Population)
AT&T All Sectors:	6.5120%
Other Carriers:	0.0200%
Site Total:	6.5320%
Site Compliance Status:	Compliant



APPENDIX 6

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/cm²), 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).

The FCC guidelines define two separate tiers of exposure limits. As defined by the FCC, these limits are:

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.

For the purposes of this study, only General population/uncontrolled exposure limits were studied.

APPENDIX 7

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/cm ²)	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



Where:

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

Where:

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 6



AMERICAN TOWER®
CORPORATION

Post Modification Structural Analysis Report

Structure : 75 ft Monopole
ATC Site Name : Mdfd - Middlefield, CT
ATC Asset Number : 302485
Engineering Number : 13193668_C4_09
Proposed Carrier : AT&T MOBILITY
Carrier Site Name : MRCTB045372
Carrier Site Number : CTL01016
Site Location : 134 Kikapoo Road
Middlefield, CT 06455-1334
41.513600,-72.745800
County : Middlesex
Date : October 21, 2020
Max Usage : 99%
Result : Pass

Prepared By:
Kingsley C. Igboanugo
Structural Engineer III

Reviewed By:



COA: PEC.0001553



Table of Contents

Introduction	1
Supporting Documents	1
Analysis	1
Conclusion.....	1
Existing and Reserved Equipment.....	2
Equipment to be Removed.....	2
Proposed Equipment	2
Structure Usages	3
Foundations	3
Deflection, Twist, and Sway.....	3
Standard Conditions	4
Calculations	Attached



Introduction

The purpose of this report is to summarize results of a post modification structural analysis performed on the 75 ft monopole to reflect the change in loading by AT&T MOBILITY.

Supporting Documents

Tower Drawings	Meyer Industries Job #AT&T Technologies Mapping by HTS Project #HTS071108, dated July 10, 2008
Foundation Drawing	Southern New England Telephone Job #38920, dated October 28, 1983
Geotechnical Report	S&ME Job #1261-08-261M, dated July 30, 2008
Modifications	ATC Project #13193668_C6_08, dated August 27, 2020 (Pending)

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:	116 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	49 mph (3-Second Gust) w/ 7/8" 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 Topped Ridge
Crest Height (H):	309 ft
Crest Length (L):	422 ft
Spectral Response:	$S_s = 0.21, S_1 = 0.05$
Site Class:	D - Stiff Soil

**Wind load and Ice thickness have been reduced by applicable existing structure load modification factors in accordance with TIA-222-H, Annex S.

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 the pending modifications cited in the supporting documents table are not completed, the results of this analysis are no longer valid, and AT&T mobility should contact America Tower's Site Manager for further direction on how to proceed.

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
83.0	1	Generic 10' Omni	Flush	(1) 7/8" Coax	OTHER
	1	Generic 10' Omni		(1) 1 5/8" Coax	SPOK HOLDINGS, INC.
78.0	6	Powerwave Allgon 7020	Platform with Handrails	(2) 0.39" (10mm) Fiber Trunk (6) 0.78" (19.7mm) 8 AWG 6 (1) 3" conduit (6) 7/8" Coax	AT&T MOBILITY
	2	Raycap DC6-48-60-18-8F (23.5" Height)			
	3	Ericsson 4478 Band 14 (15" Height)			
	3	Ericsson RRUS 32 B2			
	3	CCI TPA-65R-LCUUUU-H8			
10.0	1	Channel Master Type 120	Flush	(1) 0.28" (7mm) RG-6	SPOK HOLDINGS, INC.

Equipment to be Removed

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
77.0	6	Powerwave Allgon LGP21401	-	(1) 0.39" (10mm) Fiber Trunk (6) 7/8" Coax	AT&T MOBILITY
	1	Raycap DC6-48-60-18-8F (23.5" Height)			
	3	Ericsson RRUS-11 (50 lbs.)			
	3	CCI CCI-HPA-65R-BUU-H8			
	3	Ericsson RRUS 32 B66			
	3	Powerwave Allgon 7770.00			
	3	Ericsson RRUS 32 (50.8 lbs)			

Proposed Equipment

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
78.0	3	Ericsson RRUS 4449 B5, B12	Platform with Handrails	(2) 0.78" (19.7mm) 8 AWG 6 (1) 3" conduit	AT&T MOBILITY
	2	Raycap DC6-48-60-18-8C			
	3	Ericsson RRUS 32 B66A			
	3	Ericsson RRUS 32 B30			
	3	Ericsson RRUS 32 B2			
	3	CCI HPA-65R-BUU-H8			
	3	CCI DMP65R-BU8D			

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

Install proposed coax inside the pole shaft.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	30%	Pass
Shaft	99%	Pass
Base Plate	45%	Pass
Reinforcement	79%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Moment (Kips-Ft)	947.9	90%
Axial (Kips)	24.5	1%
Shear (Kips)	18.6	53%

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

Deflection and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
78.0	Ericsson RRUS 4449 B5, B12	AT&T MOBILITY	1.278	1.810
	Raycap DC6-48-60-18-8C			
	Ericsson RRUS 32 B66A			
	Ericsson RRUS 32 B30			
	Ericsson RRUS 32 B2			
	CCI HPA-65R-BUU-H8			
	CCI DMP65R-BU8D			
10.0	Channel Master Type 120	SPOK HOLDINGS, INC.	0.009	0.096

*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

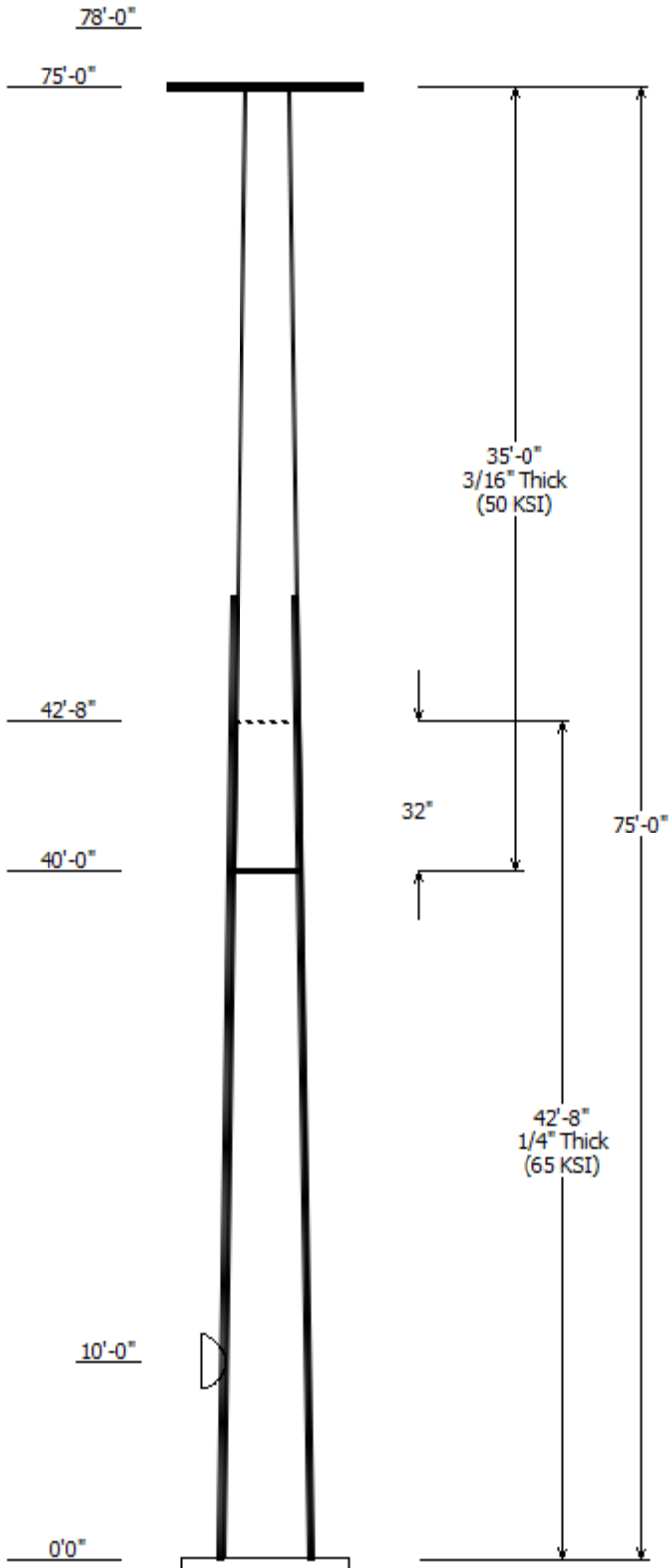
It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

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.

© 2007 - 2020 by ATC IP LLC. All rights reserved.



Job Information	
Client : AT&T MOBILITY	Code: ANSI/TIA-222-H
Pole : 302485	
Location : Mdfd - Middlefield, CT	
Description : 75 ft ITT Meyer Monopole	Risk Category : II
Shape : 12 Sides	Exposure : B
Height : 75.00 (ft)	Topo Method : Method 2
Base Elev (ft): 0.00	Topographic Feature : Flat Topped Ridge
Taper: 0.177934in/ft)	

Sections Properties						
Shaft Section	Length (ft)	Diameter (in)		Joint Type	Overlap Length (in)	Steel Grade
		Across Top	Flats Bottom			
1	42.667	20.37	27.97	0.250	0.000	12 Sides 65
2	35.000	15.00	21.22	0.188 Slip Joint	32.000	12 Sides 50

Discrete Appurtenance			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
83.000	84.000	1	Generic 10' Omni
83.000	83.000	1	Generic 10' Omni
78.000	78.000	3	CCI DMP65R-BU8D
78.000	78.000	3	CCI TPA-65R-LCUUUU-H8
78.000	78.000	3	CCI HPA-65R-BUU-H8
78.000	78.000	3	Ericsson RRUS 32 B2
78.000	78.000	3	Ericsson RRUS 32 B2
78.000	78.000	3	Ericsson RRUS 32 B30
78.000	78.000	3	Ericsson RRUS 32 B66A
78.000	78.000	2	Raycap DC6-48-60-18-8C
78.000	78.000	3	Ericsson RRUS 4449 B5, B12
78.000	78.000	3	Ericsson 4478 Band 14 (15" Hei
78.000	78.000	2	Raycap DC6-48-60-18-8F (23.5"
78.000	78.000	6	Powerwave Allgon 7020
75.000	75.000	1	Flat Platform with Handrails
10.000	10.000	1	Channel Master Type 120

Linear Appurtenance			
Elev From	Elev To	Description	Exposed To Wind
0.000	10.000	0.28" (7mm) RG-6	No
0.000	52.500	#20	Yes
0.000	52.500	#20	Yes
0.000	52.500	#20	Yes
0.000	52.500	#20	Yes
0.000	78.000	0.39" (10mm)	No
0.000	78.000	0.39" (9.8mm)	No
0.000	78.000	0.78" (19.7mm) 8	No
0.000	78.000	0.78" (19.7mm) 8	No
0.000	78.000	3" conduit	No
0.000	78.000	3" conduit	No
0.000	78.000	7/8" Coax	No
0.000	83.000	1 5/8" Coax	No
0.000	83.000	7/8" Coax	No

Load Cases	
1.2D + 1.0W	116 mph with No Ice
0.9D + 1.0W	116 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	49 mph with 0.85 in Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic

0.9D - 1.0Ev + 1.0Eh
1.0D + 1.0W

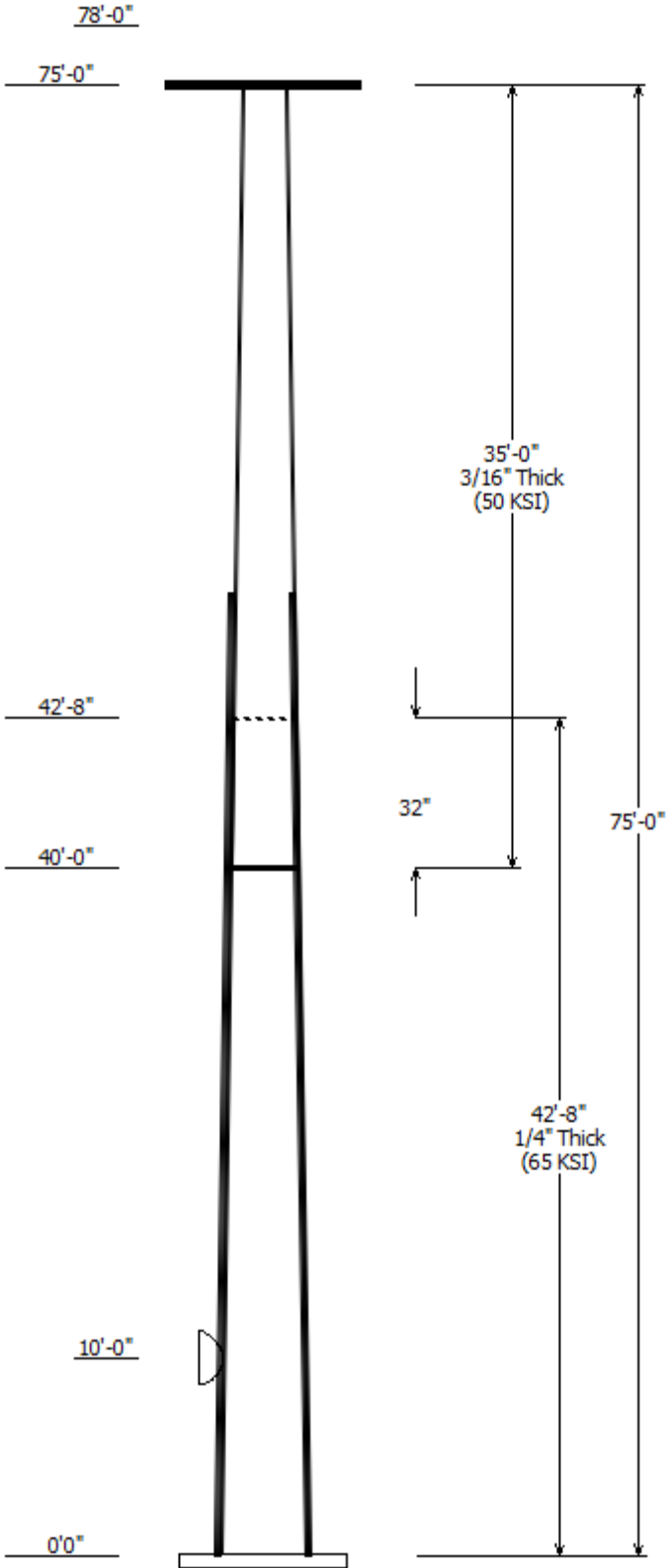
Seismic (Reduced DL)
Serviceability 60 mph

Reactions

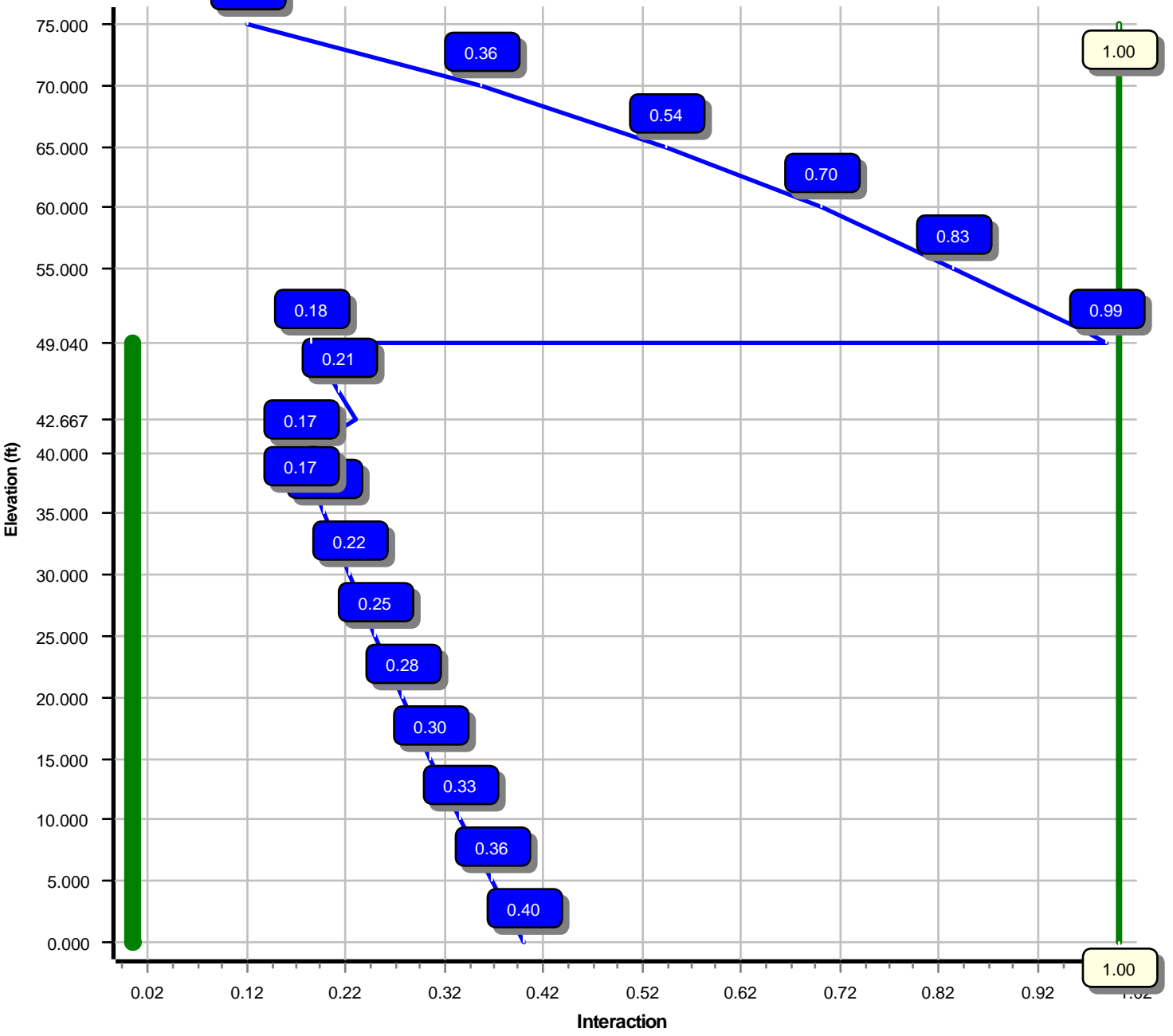
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.0W	947.94	18.56	18.23
0.9D + 1.0W	943.41	18.55	13.66
1.2D + 1.0Di + 1.0Wi	212.19	3.91	24.47
1.2D + 1.0Ev + 1.0Eh	48.42	0.76	17.79
0.9D - 1.0Ev + 1.0Eh	48.13	0.76	12.24
1.0D + 1.0W	228.91	4.53	15.22

Dish Deflections

Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
1.0D + 1.0W	10.00	0.105	0.096



Load Case : 1.2D + 1.0W
Max Ratio 98.66% at 49.0 ft



Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:44:59 PM

Customer: AT&T MOBILITY

Analysis Parameters

Location :	Middlesex County, CT	Height (ft) :	75
Code :	ANSI/TIA-222-H	Base Diameter (in) :	27.97
Shape :	12 Sides	Top Diameter (in) :	15.00
Pole Type :	Taper	Taper (in/ft) :	0.178
Pole Manufacturer :	ITT Meyer	Rotation (deg) :	0.00
Kd (non-service) :	0.95	Ke :	0.97

Ice & Wind Parameters

Exposure Category:	B	Design Wind Speed Without Ice:	116 mph
Risk Category:	II	Design Wind Speed With Ice:	49 mph
Topographic Factor Procedure:	Method 2	Operational Wind Speed:	60 mph
Feature:	Flat Topped Ridge	Design Ice Thickness:	0.85 in
Crest Height (H):	309 ft	HMSL:	770.00 ft
Crest Length (L):	422 ft		
Distance from Apex (x):	165 ft		
Upwind / Downwind	Upwind		

Seismic Parameters

Analysis Method:	Equivalent Lateral Force Method		
Site Class:	D - Stiff Soil		
Period Based on Rayleigh Method (sec):	1.17		
T_L (sec):	6	p :	1
S_s :	0.207	S_1 :	0.055
F_a :	1.600	F_v :	2.400
S_{ds} :	0.221	S_{d1} :	0.088
		C_s :	0.050
		C_s Max:	0.050
		C_s Min:	0.030

Load Cases

1.2D + 1.0W	116 mph with No Ice
0.9D + 1.0W	116 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	49 mph with 0.85 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: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:44:59 PM

Customer: AT&T MOBILITY

Shaft Section Properties

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip 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)
1-12	42.667	0.2500	65		0.00	2,796	27.97	0.00	22.31	2188.6	27.30	111.88	20.37	42.67	16.20	837.9	19.16	81.51	0.177933
2-12	35.000	0.1875	50	Slip	32.00	1,289	21.22	40.00	12.70	717.8	27.66	113.21	15.00	75.00	8.94	250.5	18.76	80.00	0.177933
Shaft Weight						4,085													

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
83.00	Generic 10' Omni	1	0.80	0.000	25.00	3.000	1.00	74.07	5.327	1.00
83.00	Generic 10' Omni	1	1.00	1.000	25.00	3.000	1.00	74.07	5.327	1.00
78.00	Powerwave Allgon 7020	6	0.75	0.000	2.20	0.339	0.50	8.80	0.604	0.50
78.00	Raycap DC6-48-60-18-8F (23.5"	2	0.75	0.000	20.00	1.260	1.00	54.04	1.686	1.00
78.00	Ericsson 4478 Band 14 (15"	3	0.75	0.000	59.90	1.842	0.50	95.64	2.422	0.50
78.00	Ericsson RRUS 4449 B5, B12	3	0.75	0.000	71.00	1.969	0.50	112.67	2.572	0.50
78.00	Raycap DC6-48-60-18-8C	2	0.75	0.000	16.00	2.030	0.70	53.64	2.521	0.70
78.00	Ericsson RRUS 32 B66A	3	0.75	0.000	50.70	2.720	0.50	98.08	3.472	0.50
78.00	Ericsson RRUS 32 B30	3	0.75	0.000	60.00	2.743	0.50	107.56	3.499	0.50
78.00	Ericsson RRUS 32 B2	3	0.75	0.000	53.00	2.743	0.50	100.55	3.499	0.50
78.00	Ericsson RRUS 32 B2	3	0.75	0.000	53.00	2.743	0.50	100.55	3.499	0.50
78.00	CCI HPA-65R-BUU-H8	3	0.75	0.000	68.00	12.976	0.67	234.11	15.290	0.67
78.00	CCI TPA-65R-LCUUUU-H8	3	0.75	0.000	81.60	13.298	0.69	260.54	15.712	0.69
78.00	CCI DMP65R-BU8D	3	0.75	0.000	95.70	17.871	0.63	315.43	20.253	0.63
75.00	Flat Platform with Handrails	1	1.00	0.000	3,100.00	42.400	1.00	4,524.07	55.958	1.00
10.00	Channel Master Type 120	1	1.00	0.000	126.00	20.190	1.00	238.79	21.841	1.00
Totals	Num Loadings:16	41			5,139.90			9,454.51		

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 Row	Dist Between Rows (in)	Dist Between Cols (in)	Dist Azimuth (deg)	Dist From Face (in)	Exposed To Wind Carrier
0.00	83.00	1	1 5/8" Coax	1.98	0.82	N	0	0.00	0.00	0	N SPOK HOLDINGS,
0.00	83.00	1	7/8" Coax	1.09	0.33	N	0	0.00	0.00	0	N OTHER
0.00	78.00	1	0.39" (10mm) Fiber	0.39	0.06	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	78.00	1	0.39" (9.8mm) Cable	0.39	0.07	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	78.00	6	0.78" (19.7mm) 8 AWG	0.78	0.59	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	78.00	2	0.78" (19.7mm) 8 AWG	0.78	0.59	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	78.00	1	3" conduit	3.50	7.58	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	78.00	1	3" conduit	3.50	7.58	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	78.00	6	7/8" Coax	1.09	0.33	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	52.50	1	#20	4.00	4.68	N	1	0.00	0.00	0	Y --
0.00	52.50	1	#20	4.00	4.68	N	1	0.00	0.00	90	Y --
0.00	52.50	1	#20	4.00	4.68	N	1	0.00	0.00	180	Y --
0.00	52.50	1	#20	4.00	4.68	N	1	0.00	0.00	270	Y --
0.00	10.00	1	0.28" (7mm) RG-6	0.28	0.03	N	0	0.00	0.00	0	N SPOK HOLDINGS,

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:00 PM

Customer: AT&T MOBILITY

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Offset (in)	Intermediate Connections Description	Spacing (in)	Len (in)	Connectors	Continuation?
0.00	49.04	4	SOL #20 All Thread	80	5.15	6" Angle Bracket	30.0	3.13	5/8" A36 U-Bolt	No

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:00 PM

Customer: 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)	Additional Reinforcing		
												Area (in ²)	Ix (in ⁴)	Weight (lb)
0.00		0.2500	27.970	22.315	2,188.6	27.30	111.88	74.9	151.2	0.0	0.0	19.64	4,088	0.0
5.00		0.2500	27.080	21.598	1,984.5	26.35	108.32	76.0	141.6	0.0	373.6	19.64	3,912	334.0
10.00		0.2500	26.191	20.882	1,793.6	25.39	104.76	77.0	132.3	0.0	361.4	19.64	3,739	334.0
15.00		0.2500	25.301	20.166	1,615.3	24.44	101.20	78.1	123.3	0.0	349.2	19.64	3,571	334.0
20.00		0.2500	24.411	19.450	1,449.3	23.48	97.65	79.1	114.7	0.0	337.0	19.64	3,407	334.0
25.00		0.2500	23.522	18.734	1,295.0	22.53	94.09	80.1	106.4	0.0	324.8	19.64	3,246	334.0
30.00		0.2500	22.632	18.018	1,152.1	21.58	90.53	81.2	98.3	0.0	312.6	19.64	3,089	334.0
35.00		0.2500	21.742	17.301	1,020.1	20.62	86.97	81.9	90.6	0.0	300.5	19.64	2,936	334.0
40.00		0.2500	20.853	16.585	898.6	19.67	83.41	81.9	83.2	0.0	288.3	19.64	2,788	334.0
40.00	Bot - Section 2	0.2500	20.853	16.585	898.6	19.67	83.41	81.9	83.2	0.0	0.0	19.64	2,788	0.0
42.67	Top - Section 1	0.1875	20.753	12.417	670.3	26.98	110.68	60.7	62.4	0.0	262.7	19.64	2,771	178.1
45.00		0.1875	20.338	12.166	630.5	26.38	108.47	61.1	59.9	0.0	97.6	19.64	2,703	155.8
49.04	Reinf. Top	0.1875	19.619	11.732	565.4	25.36	104.64	61.9	55.7	0.0	164.3	19.64	2,587	269.9
50.00		0.1875	19.448	11.629	550.6	25.11	103.72	62.1	54.7	0.0	38.2			
55.00		0.1875	18.559	11.092	477.8	23.84	98.98	63.0	49.7	0.0	193.3			
60.00		0.1875	17.669	10.554	411.7	22.57	94.23	63.0	45.0	0.0	184.1			
65.00		0.1875	16.779	10.017	352.0	21.30	89.49	63.0	40.5	0.0	175.0			
70.00		0.1875	15.890	9.480	298.4	20.03	84.75	63.0	36.3	0.0	165.9			
75.00		0.1875	15.000	8.943	250.5	18.76	80.00	63.0	32.3	0.0	156.7			
											4,085.1			3,275.9

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:00 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0W 116 mph with No Ice 17 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		377.7	0.0					0.0	0.0	377.7	0.0	0.0	0.0
5.00		737.6	448.3					176.2	652.1	913.8	1,100.4	0.0	0.0
10.00	Appurtenance(s)	702.5	433.7	1,046.0	0.0	0.0	151.2	174.9	652.1	1,923.4	1,237.0	0.0	0.0
15.00		668.5	419.0					173.6	652.0	842.1	1,071.0	0.0	0.0
20.00		635.5	404.4					172.3	652.0	807.8	1,056.4	0.0	0.0
25.00		603.6	389.8					171.0	652.0	774.6	1,041.7	0.0	0.0
30.00		579.2	375.2					169.8	652.0	749.0	1,027.1	0.0	0.0
35.00		566.6	360.5					170.6	652.0	737.2	1,012.5	0.0	0.0
40.00		281.3	345.9					172.9	652.0	454.3	997.9	0.0	0.0
40.00	Bot - Section 2	150.5	0.0					0.0	0.0	150.5	0.1	0.0	0.0
42.67	Top - Section 1	280.6	315.3					93.0	347.7	373.6	663.0	0.0	0.0
45.00		351.8	117.1					81.8	304.2	433.6	421.3	0.0	0.0
49.04	Reinf. Top	273.6	197.1					142.5	526.8	416.0	723.9	0.0	0.0
50.00		317.3	45.8					34.0	48.2	351.3	94.0	0.0	0.0
55.00		468.3	231.9					177.8	195.0	646.1	426.9	0.0	0.0
60.00		398.0	221.0					0.0	138.8	398.0	359.8	0.0	0.0
65.00		381.9	210.0					0.0	138.8	381.9	348.8	0.0	0.0
70.00		364.8	199.0					0.0	138.8	364.8	337.9	0.0	0.0
75.00	Appurtenance(s)	178.0	188.1	2,394.0	0.0	0.0	3,720.0	0.0	138.8	2,572.1	4,046.9	0.0	0.0
Totals:										13,667.8	15,966.6	0.00	0.00

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:05 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0W

116 mph with No Ice

17 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	-18.23	-18.56	0.00	-947.94	0.00	947.94	1,505.06	391.62	1,024.09	849.62	0.00	0.00	0.398
5.00	-17.07	-17.70	0.00	-855.14	0.00	855.14	1,476.97	379.05	959.43	806.77	0.11	-0.20	0.365
10.00	-15.79	-15.83	0.00	-766.62	0.00	766.62	1,447.54	366.48	896.88	764.23	0.43	-0.40	0.333
15.00	-14.68	-15.02	0.00	-687.49	0.00	687.49	1,416.77	353.91	836.43	722.09	0.96	-0.59	0.304
20.00	-13.59	-14.24	0.00	-612.38	0.00	612.38	1,384.66	341.35	778.10	680.41	1.67	-0.77	0.275
25.00	-12.52	-13.49	0.00	-541.16	0.00	541.16	1,351.21	328.78	721.87	639.28	2.56	-0.93	0.248
30.00	-11.47	-12.75	0.00	-473.72	0.00	473.72	1,316.42	316.21	667.75	598.75	3.63	-1.09	0.221
35.00	-10.44	-12.02	0.00	-409.96	0.00	409.96	1,275.28	303.64	615.74	556.73	4.86	-1.24	0.195
40.00	-9.44	-11.55	0.00	-349.85	0.00	349.85	1,222.49	291.07	565.84	511.34	6.23	-1.38	0.172
40.00	-9.44	-11.41	0.00	-349.85	0.00	349.85	1,222.49	291.07	565.84	511.34	6.23	-1.38	0.172
42.67	-8.77	-11.03	0.00	-319.42	0.00	319.42	678.30	167.62	325.21	284.05	7.02	-1.45	0.228
45.00	-8.35	-10.60	0.00	-293.69	0.00	293.69	669.39	164.24	312.21	274.61	7.74	-1.50	0.211
49.04	-7.63	-10.17	0.00	-250.88	0.00	250.88	653.49	158.38	290.34	258.44	9.06	-1.60	0.183
49.04	-7.63	-10.17	0.00	-250.88	0.00	250.88	653.49	158.38	290.34	258.44	9.06	-1.60	0.987
50.00	-7.49	-9.85	0.00	-241.12	0.00	241.12	649.63	156.99	285.26	254.63	9.38	-1.62	0.962
55.00	-7.00	-9.26	0.00	-191.85	0.00	191.85	628.89	149.74	259.53	235.01	11.38	-2.18	0.831
60.00	-6.59	-8.90	0.00	-145.55	0.00	145.55	598.44	142.49	235.01	212.69	13.94	-2.68	0.699
65.00	-6.20	-8.54	0.00	-101.05	0.00	101.05	567.98	135.23	211.70	191.48	16.99	-3.11	0.543
70.00	-5.85	-8.18	0.00	-58.34	0.00	58.34	537.53	127.98	189.62	171.39	20.42	-3.43	0.355
75.00	0.00	-7.81	0.00	-17.42	0.00	17.42	507.07	120.73	168.75	152.41	24.13	-3.61	0.118

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:05 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.0W

116 mph with No Ice (Reduced DL)

16 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		377.7	0.0					0.0	0.0	377.7	0.0	0.0	0.0
5.00		737.6	336.2					176.2	489.1	913.8	825.3	0.0	0.0
10.00	Appurtenance(s)	702.5	325.2	1,046.0	0.0	0.0	113.4	174.9	489.1	1,923.4	927.7	0.0	0.0
15.00		668.5	314.3					173.6	489.0	842.1	803.2	0.0	0.0
20.00		635.5	303.3					172.3	489.0	807.8	792.3	0.0	0.0
25.00		603.6	292.3					171.0	489.0	774.6	781.3	0.0	0.0
30.00		579.2	281.4					169.8	489.0	749.0	770.3	0.0	0.0
35.00		566.6	270.4					170.6	489.0	737.2	759.4	0.0	0.0
40.00		281.3	259.4					172.9	489.0	454.3	748.4	0.0	0.0
40.00	Bot - Section 2	150.5	0.0					0.0	0.0	150.5	0.0	0.0	0.0
42.67	Top - Section 1	280.6	236.5					93.0	260.8	373.6	497.2	0.0	0.0
45.00		351.8	87.8					81.8	228.2	433.6	316.0	0.0	0.0
49.04	Reinf. Top	273.6	147.8					142.5	395.1	416.0	542.9	0.0	0.0
50.00		317.3	34.3					34.0	36.2	351.3	70.5	0.0	0.0
55.00		468.3	174.0					177.8	146.2	646.1	320.2	0.0	0.0
60.00		398.0	165.7					0.0	104.1	398.0	269.9	0.0	0.0
65.00		381.9	157.5					0.0	104.1	381.9	261.6	0.0	0.0
70.00		364.8	149.3					0.0	104.1	364.8	253.4	0.0	0.0
75.00	Appurtenance(s)	178.0	141.1	2,394.0	0.0	0.0	2,790.0	0.0	104.1	2,572.1	3,035.2	0.0	0.0
Totals:										13,667.8	11,975.0	0.00	0.00

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:10 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.0W

116 mph with No Ice (Reduced DL)

16 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	-13.66	-18.55	0.00	-943.41	0.00	943.41	1,505.06	391.62	1,024.09	849.62	0.00	0.00	0.394
5.00	-12.78	-17.68	0.00	-850.65	0.00	850.65	1,476.97	379.05	959.43	806.77	0.11	-0.20	0.362
10.00	-11.81	-15.79	0.00	-762.25	0.00	762.25	1,447.54	366.48	896.88	764.23	0.43	-0.40	0.329
15.00	-10.97	-14.98	0.00	-683.30	0.00	683.30	1,416.77	353.91	836.43	722.09	0.95	-0.58	0.300
20.00	-10.14	-14.19	0.00	-608.42	0.00	608.42	1,384.66	341.35	778.10	680.41	1.66	-0.76	0.272
25.00	-9.33	-13.43	0.00	-537.47	0.00	537.47	1,351.21	328.78	721.87	639.28	2.55	-0.93	0.245
30.00	-8.54	-12.69	0.00	-470.31	0.00	470.31	1,316.42	316.21	667.75	598.75	3.61	-1.09	0.218
35.00	-7.77	-11.96	0.00	-406.86	0.00	406.86	1,275.28	303.64	615.74	556.73	4.83	-1.23	0.193
40.00	-7.02	-11.49	0.00	-347.07	0.00	347.07	1,222.49	291.07	565.84	511.34	6.20	-1.37	0.170
40.00	-7.01	-11.35	0.00	-347.07	0.00	347.07	1,222.49	291.07	565.84	511.34	6.20	-1.37	0.170
42.67	-6.51	-10.97	0.00	-316.80	0.00	316.80	678.30	167.62	325.21	284.05	6.98	-1.44	0.225
45.00	-6.19	-10.54	0.00	-291.21	0.00	291.21	669.39	164.24	312.21	274.61	7.70	-1.49	0.208
49.04	-5.65	-10.11	0.00	-248.64	0.00	248.64	653.49	158.38	290.34	258.44	9.00	-1.59	0.180
49.04	-5.65	-10.11	0.00	-248.64	0.00	248.64	653.49	158.38	290.34	258.44	9.00	-1.59	0.975
50.00	-5.54	-9.79	0.00	-238.94	0.00	238.94	649.63	156.99	285.26	254.63	9.33	-1.61	0.951
55.00	-5.16	-9.18	0.00	-190.00	0.00	190.00	628.89	149.74	259.53	235.01	11.31	-2.16	0.820
60.00	-4.84	-8.81	0.00	-144.11	0.00	144.11	598.44	142.49	235.01	212.69	13.85	-2.66	0.689
65.00	-4.54	-8.44	0.00	-100.06	0.00	100.06	567.98	135.23	211.70	191.48	16.87	-3.08	0.534
70.00	-4.27	-8.08	0.00	-57.84	0.00	57.84	537.53	127.98	189.62	171.39	20.28	-3.40	0.349
75.00	0.00	-7.81	0.00	-17.42	0.00	17.42	507.07	120.73	168.75	152.41	23.95	-3.58	0.118

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:11 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0Di + 1.0Wi	49 mph with 0.85 in Radial Ice	16 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		

Applied Segment Forces Summary

Seg Elev	Description	Shaft Forces		Discrete Forces			Linear Forces			Sum of Forces			
		Wind FX	Dead Load	Wind FX	Torsion MY	Moment MZ	Dead Load	Wind FX	Dead Load	Wind FX	Dead Load	Torsion MY	Moment MZ
(ft)		(lb)	(lb)	(lb)	(lb-ft)	(lb-ft)	(lb)	(lb)	(lb)	(lb)	(lb)	(lb-ft)	(lb)
0.00		76.4	0.0					0.0	0.0	76.4	0.0	0.0	0.0
5.00		150.5	603.9					0.0	698.7	150.5	1,302.6	0.0	0.0
10.00	Appurtenance(s)	145.6	601.5	199.8	0.0	0.0	234.5	0.0	704.4	345.4	1,540.4	0.0	0.0
15.00		140.6	589.3					0.0	706.9	140.6	1,296.2	0.0	0.0
20.00		135.6	573.8					0.0	708.7	135.6	1,282.5	0.0	0.0
25.00		130.7	556.7					14.0	710.0	144.7	1,266.7	0.0	0.0
30.00		127.4	538.6					24.6	711.0	152.0	1,249.5	0.0	0.0
35.00		126.7	519.7					31.7	711.7	158.4	1,231.5	0.0	0.0
40.00		63.5	500.4					37.8	712.4	101.3	1,212.8	0.0	0.0
40.00	Bot - Section 2	34.4	0.0					0.0	0.0	34.4	0.1	0.0	0.0
42.67	Top - Section 1	64.2	397.8					22.3	380.1	86.4	778.0	0.0	0.0
45.00		81.2	188.2					19.9	332.7	101.1	520.9	0.0	0.0
49.04	Reinf. Top	63.6	316.6					36.8	576.3	100.3	893.0	0.0	0.0
50.00		74.7	74.0					9.1	60.0	83.9	134.1	0.0	0.0
55.00		113.2	373.1					24.9	225.9	138.1	599.0	0.0	0.0
60.00		99.6	356.4					0.0	138.8	99.6	495.3	0.0	0.0
65.00		96.1	339.6					0.0	138.8	96.1	478.4	0.0	0.0
70.00		92.5	322.6					0.0	138.8	92.5	461.4	0.0	0.0
75.00	Appurtenance(s)	45.3	305.5	557.8	0.0	0.0	4,827.9	0.0	138.8	603.1	5,272.2	0.0	0.0
Totals:										2,840.17	20,014.4	0.00	0.00

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:16 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0Di + 1.0Wi

49 mph with 0.85 in Radial Ice

16 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

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	-24.47	-3.91	0.00	-212.19	0.00	212.19	1,505.06	391.62	1,024.09	849.62	0.00	0.00	0.096
5.00	-23.16	-3.78	0.00	-192.63	0.00	192.63	1,476.97	379.05	959.43	806.77	0.03	-0.05	0.089
10.00	-21.62	-3.45	0.00	-173.74	0.00	173.74	1,447.54	366.48	896.88	764.23	0.10	-0.09	0.081
15.00	-20.32	-3.32	0.00	-156.50	0.00	156.50	1,416.77	353.91	836.43	722.09	0.22	-0.13	0.075
20.00	-19.04	-3.19	0.00	-139.91	0.00	139.91	1,384.66	341.35	778.10	680.41	0.38	-0.17	0.068
25.00	-17.77	-3.06	0.00	-123.94	0.00	123.94	1,351.21	328.78	721.87	639.28	0.58	-0.21	0.062
30.00	-16.52	-2.91	0.00	-108.66	0.00	108.66	1,316.42	316.21	667.75	598.75	0.82	-0.25	0.055
35.00	-15.29	-2.75	0.00	-94.11	0.00	94.11	1,275.28	303.64	615.74	556.73	1.10	-0.28	0.049
40.00	-14.08	-2.65	0.00	-80.34	0.00	80.34	1,222.49	291.07	565.84	511.34	1.41	-0.31	0.044
40.00	-14.08	-2.62	0.00	-80.34	0.00	80.34	1,222.49	291.07	565.84	511.34	1.41	-0.31	0.044
42.67	-13.30	-2.53	0.00	-73.36	0.00	73.36	678.30	167.62	325.21	284.05	1.59	-0.33	0.058
45.00	-12.78	-2.43	0.00	-67.46	0.00	67.46	669.39	164.24	312.21	274.61	1.76	-0.34	0.054
49.04	-11.88	-2.33	0.00	-57.64	0.00	57.64	653.49	158.38	290.34	258.44	2.06	-0.36	0.047
49.04	-11.88	-2.33	0.00	-57.64	0.00	57.64	653.49	158.38	290.34	258.44	2.06	-0.36	0.241
50.00	-11.75	-2.26	0.00	-55.41	0.00	55.41	649.63	156.99	285.26	254.63	2.13	-0.37	0.236
55.00	-11.14	-2.14	0.00	-44.12	0.00	44.12	628.89	149.74	259.53	235.01	2.59	-0.50	0.206
60.00	-10.65	-2.05	0.00	-33.44	0.00	33.44	598.44	142.49	235.01	212.69	3.17	-0.61	0.175
65.00	-10.17	-1.97	0.00	-23.17	0.00	23.17	567.98	135.23	211.70	191.48	3.87	-0.71	0.139
70.00	-9.70	-1.88	0.00	-13.34	0.00	13.34	537.53	127.98	189.62	171.39	4.66	-0.78	0.096
75.00	0.00	-1.74	0.00	-3.95	0.00	3.95	507.07	120.73	168.75	152.41	5.50	-0.83	0.026

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:16 PM

Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W

Serviceability 60 mph

16 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		90.4	0.0					0.0	0.0	90.4	0.0	0.0	0.0
5.00		176.6	373.6					50.8	543.4	227.4	917.0	0.0	0.0
10.00	Appurtenance(s)	168.2	361.4	250.4	0.0	0.0	126.0	50.0	543.4	468.6	1,030.8	0.0	0.0
15.00		160.1	349.2					49.2	543.3	209.3	892.5	0.0	0.0
20.00		152.2	337.0					48.5	543.3	200.7	880.3	0.0	0.0
25.00		144.5	324.8					47.8	543.3	192.3	868.1	0.0	0.0
30.00		138.7	312.6					47.1	543.3	185.8	855.9	0.0	0.0
35.00		135.7	300.5					47.6	543.3	183.2	843.8	0.0	0.0
40.00		67.4	288.3					48.9	543.3	116.2	831.6	0.0	0.0
40.00	Bot - Section 2	36.0	0.0					0.0	0.0	36.0	0.1	0.0	0.0
42.67	Top - Section 1	67.2	262.7					26.5	289.8	93.7	552.5	0.0	0.0
45.00		84.2	97.6					23.4	253.5	107.7	351.1	0.0	0.0
49.04	Reinf. Top	65.5	164.3					41.1	439.0	106.6	603.2	0.0	0.0
50.00		76.0	38.2					9.8	40.2	85.8	78.3	0.0	0.0
55.00		112.1	193.3					51.7	162.5	163.8	355.8	0.0	0.0
60.00		95.3	184.1					0.0	115.7	95.3	299.8	0.0	0.0
65.00		91.4	175.0					0.0	115.7	91.4	290.7	0.0	0.0
70.00		87.3	165.9					0.0	115.7	87.3	281.6	0.0	0.0
75.00	Appurtenance(s)	42.6	156.7	573.2	0.0	0.0	3,100.0	0.0	115.7	615.8	3,372.4	0.0	0.0
Totals:										3,357.53	13,305.5	0.00	0.00

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:21 PM

Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W

Serviceability 60 mph

16 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	-15.22	-4.53	0.00	-228.91	0.00	228.91	1,505.06	391.62	1,024.09	849.62	0.00	0.00	0.099
5.00	-14.30	-4.31	0.00	-206.27	0.00	206.27	1,476.97	379.05	959.43	806.77	0.03	-0.05	0.091
10.00	-13.26	-3.85	0.00	-184.71	0.00	184.71	1,447.54	366.48	896.88	764.23	0.10	-0.10	0.083
15.00	-12.37	-3.65	0.00	-165.45	0.00	165.45	1,416.77	353.91	836.43	722.09	0.23	-0.14	0.076
20.00	-11.49	-3.46	0.00	-147.20	0.00	147.20	1,384.66	341.35	778.10	680.41	0.40	-0.18	0.069
25.00	-10.62	-3.27	0.00	-129.92	0.00	129.92	1,351.21	328.78	721.87	639.28	0.62	-0.22	0.062
30.00	-9.76	-3.08	0.00	-113.58	0.00	113.58	1,316.42	316.21	667.75	598.75	0.87	-0.26	0.055
35.00	-8.92	-2.90	0.00	-98.16	0.00	98.16	1,275.28	303.64	615.74	556.73	1.17	-0.30	0.049
40.00	-8.08	-2.78	0.00	-83.65	0.00	83.65	1,222.49	291.07	565.84	511.34	1.50	-0.33	0.043
40.00	-8.08	-2.75	0.00	-83.65	0.00	83.65	1,222.49	291.07	565.84	511.34	1.50	-0.33	0.043
42.67	-7.53	-2.65	0.00	-76.32	0.00	76.32	678.30	167.62	325.21	284.05	1.69	-0.35	0.057
45.00	-7.18	-2.55	0.00	-70.12	0.00	70.12	669.39	164.24	312.21	274.61	1.86	-0.36	0.053
49.04	-6.58	-2.44	0.00	-59.84	0.00	59.84	653.49	158.38	290.34	258.44	2.18	-0.38	0.046
49.04	-6.58	-2.44	0.00	-59.84	0.00	59.84	653.49	158.38	290.34	258.44	2.18	-0.38	0.242
50.00	-6.50	-2.36	0.00	-57.50	0.00	57.50	649.63	156.99	285.26	254.63	2.26	-0.39	0.236
55.00	-6.14	-2.21	0.00	-45.70	0.00	45.70	628.89	149.74	259.53	235.01	2.74	-0.52	0.204
60.00	-5.83	-2.12	0.00	-34.67	0.00	34.67	598.44	142.49	235.01	212.69	3.35	-0.64	0.173
65.00	-5.54	-2.03	0.00	-24.07	0.00	24.07	567.98	135.23	211.70	191.48	4.08	-0.74	0.136
70.00	-5.26	-1.95	0.00	-13.91	0.00	13.91	537.53	127.98	189.62	171.39	4.90	-0.82	0.091
75.00	0.00	-1.87	0.00	-4.17	0.00	4.17	507.07	120.73	168.75	152.41	5.79	-0.86	0.028

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:21 PM

Customer: AT&T MOBILITY

Equivalent Lateral Forces Method Analysis

Spectral Response Acceleration for Short Period (S_s):	0.21
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}):	0.22
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.09
Seismic Response Coefficient (C_s):	0.05
Upper Limit C_s	0.05
Lower Limit C_s	0.03
Period based on Rayleigh Method (sec):	1.17
Redundancy Factor (p):	1.00
Seismic Force Distribution Exponent (k):	1.33
Total Unfactored Dead Load:	15.22 k
Seismic Base Shear (E):	0.76 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)
18	72.50	272	83	0.032	24	339
17	67.50	282	78	0.030	23	350
16	62.50	291	72	0.028	21	362
15	57.50	300	67	0.026	20	373
14	52.50	356	70	0.027	20	443
13	49.52	78	14	0.005	4	97
12	47.02	603	103	0.039	30	751
11	43.83	351	54	0.021	16	437
10	41.33	552	79	0.030	23	687
9	40.00	0	0	0.000	0	0
8	37.50	832	105	0.040	31	1,035
7	32.50	844	88	0.034	26	1,050
6	27.50	856	71	0.027	21	1,065
5	22.50	868	55	0.021	16	1,080
4	17.50	880	40	0.015	12	1,095
3	12.50	892	26	0.010	8	1,110
2	7.50	905	13	0.005	4	1,126
1	2.50	917	3	0.001	1	1,141
Generic 10' Omni	75.00	25	8	0.003	2	31
Generic 10' Omni	75.00	25	8	0.003	2	31
Powerwave Allgon 702	75.00	13	4	0.002	1	16
Raycap DC6-48-60-18-	75.00	40	13	0.005	4	50
Ericsson 4478 Band 1	75.00	180	57	0.022	17	224
Ericsson RRUS 4449 B	75.00	213	68	0.026	20	265
Raycap DC6-48-60-18-	75.00	32	10	0.004	3	40

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:21 PM

Customer: AT&T MOBILITY

Ericsson RRUS 32 B66	75.00	152	48	0.018	14	189
Ericsson RRUS 32 B30	75.00	180	57	0.022	17	224
Ericsson RRUS 32 B2	75.00	159	50	0.019	15	198
Ericsson RRUS 32 B2	75.00	159	50	0.019	15	198
CCI HPA-65R-BUU-H8	75.00	204	65	0.025	19	254
CCI TPA-65R-LCUUUU-H	75.00	245	78	0.030	23	305
CCI DMP65R-BU8D	75.00	287	91	0.035	27	357
Flat Platform with H	75.00	3,100	984	0.376	287	3,857
Channel Master Type	10.00	126	3	0.001	1	157
		15,219	2,617	1.000	764	18,935

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)
18	72.50	272	83	0.032	24	233
17	67.50	282	78	0.030	23	241
16	62.50	291	72	0.028	21	249
15	57.50	300	67	0.026	20	257
14	52.50	356	70	0.027	20	304
13	49.52	78	14	0.005	4	67
12	47.02	603	103	0.039	30	516
11	43.83	351	54	0.021	16	300
10	41.33	552	79	0.030	23	473
9	40.00	0	0	0.000	0	0
8	37.50	832	105	0.040	31	712
7	32.50	844	88	0.034	26	722
6	27.50	856	71	0.027	21	733
5	22.50	868	55	0.021	16	743
4	17.50	880	40	0.015	12	753
3	12.50	892	26	0.010	8	764
2	7.50	905	13	0.005	4	774
1	2.50	917	3	0.001	1	785
Generic 10' Omni	75.00	25	8	0.003	2	21
Generic 10' Omni	75.00	25	8	0.003	2	21
Powerwave Allgon 702	75.00	13	4	0.002	1	11
Raycap DC6-48-60-18-	75.00	40	13	0.005	4	34
Ericsson 4478 Band 1	75.00	180	57	0.022	17	154
Ericsson RRUS 4449 B	75.00	213	68	0.026	20	182
Raycap DC6-48-60-18-	75.00	32	10	0.004	3	27
Ericsson RRUS 32 B66	75.00	152	48	0.018	14	130
Ericsson RRUS 32 B30	75.00	180	57	0.022	17	154
Ericsson RRUS 32 B2	75.00	159	50	0.019	15	136
Ericsson RRUS 32 B2	75.00	159	50	0.019	15	136
CCI HPA-65R-BUU-H8	75.00	204	65	0.025	19	175
CCI TPA-65R-LCUUUU-H	75.00	245	78	0.030	23	210
CCI DMP65R-BU8D	75.00	287	91	0.035	27	246
Flat Platform with H	75.00	3,100	984	0.376	287	2,653
Channel Master Type	10.00	126	3	0.001	1	108
		15,219	2,617	1.000	764	13,025

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:21 PM

Customer: AT&T MOBILITY

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	-17.79	-0.76	0.00	-48.42	0.00	48.42	1,505.06	391.62	1,024.09	849.62	0.00	0.00	0.026
5.00	-16.67	-0.76	0.00	-44.60	0.00	44.60	1,476.97	379.05	959.43	806.77	0.01	-0.01	0.025
10.00	-15.40	-0.76	0.00	-40.78	0.00	40.78	1,447.54	366.48	896.88	764.23	0.02	-0.02	0.023
15.00	-14.31	-0.75	0.00	-36.99	0.00	36.99	1,416.77	353.91	836.43	722.09	0.05	-0.03	0.021
20.00	-13.23	-0.73	0.00	-33.25	0.00	33.25	1,384.66	341.35	778.10	680.41	0.09	-0.04	0.019
25.00	-12.16	-0.71	0.00	-29.58	0.00	29.58	1,351.21	328.78	721.87	639.28	0.13	-0.05	0.018
30.00	-11.11	-0.69	0.00	-26.02	0.00	26.02	1,316.42	316.21	667.75	598.75	0.19	-0.06	0.016
35.00	-10.08	-0.66	0.00	-22.57	0.00	22.57	1,275.28	303.64	615.74	556.73	0.26	-0.07	0.014
40.00	-10.08	-0.66	0.00	-19.28	0.00	19.28	1,222.49	291.07	565.84	511.34	0.33	-0.07	0.013
40.00	-9.39	-0.64	0.00	-19.28	0.00	19.28	1,222.49	291.07	565.84	511.34	0.33	-0.07	0.013
42.67	-8.95	-0.62	0.00	-17.59	0.00	17.59	678.30	167.62	325.21	284.05	0.37	-0.08	0.017
45.00	-8.20	-0.59	0.00	-16.14	0.00	16.14	669.39	164.24	312.21	274.61	0.41	-0.08	0.016
49.04	-8.10	-0.59	0.00	-13.76	0.00	13.76	653.49	158.38	290.34	258.44	0.48	-0.09	0.014
49.04	-8.10	-0.59	0.00	-13.76	0.00	13.76	653.49	158.38	290.34	258.44	0.48	-0.09	0.066
50.00	-7.66	-0.57	0.00	-13.20	0.00	13.20	649.63	156.99	285.26	254.63	0.50	-0.09	0.064
55.00	-7.29	-0.55	0.00	-10.37	0.00	10.37	628.89	149.74	259.53	235.01	0.61	-0.12	0.056
60.00	-6.93	-0.53	0.00	-7.62	0.00	7.62	598.44	142.49	235.01	212.69	0.75	-0.14	0.047
65.00	-6.58	-0.51	0.00	-4.97	0.00	4.97	567.98	135.23	211.70	191.48	0.91	-0.17	0.038
70.00	-6.24	-0.49	0.00	-2.43	0.00	2.43	537.53	127.98	189.62	171.39	1.09	-0.18	0.026
75.00	0.00	-0.46	0.00	0.00	0.00	0.00	507.07	120.73	168.75	152.41	1.29	-0.19	0.000

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:21 PM

Customer: AT&T MOBILITY

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	-12.24	-0.76	0.00	-48.13	0.00	48.13	1,505.06	391.62	1,024.09	849.62	0.00	0.00	0.024
5.00	-11.47	-0.76	0.00	-44.31	0.00	44.31	1,476.97	379.05	959.43	806.77	0.01	-0.01	0.023
10.00	-10.59	-0.76	0.00	-40.50	0.00	40.50	1,447.54	366.48	896.88	764.23	0.02	-0.02	0.021
15.00	-9.84	-0.75	0.00	-36.72	0.00	36.72	1,416.77	353.91	836.43	722.09	0.05	-0.03	0.019
20.00	-9.10	-0.73	0.00	-32.99	0.00	32.99	1,384.66	341.35	778.10	680.41	0.09	-0.04	0.018
25.00	-8.36	-0.71	0.00	-29.34	0.00	29.34	1,351.21	328.78	721.87	639.28	0.13	-0.05	0.016
30.00	-7.64	-0.68	0.00	-25.79	0.00	25.79	1,316.42	316.21	667.75	598.75	0.19	-0.06	0.014
35.00	-6.93	-0.65	0.00	-22.37	0.00	22.37	1,275.28	303.64	615.74	556.73	0.26	-0.07	0.013
40.00	-6.93	-0.65	0.00	-19.10	0.00	19.10	1,222.49	291.07	565.84	511.34	0.33	-0.07	0.012
40.00	-6.46	-0.63	0.00	-19.10	0.00	19.10	1,222.49	291.07	565.84	511.34	0.33	-0.07	0.012
42.67	-6.16	-0.62	0.00	-17.42	0.00	17.42	678.30	167.62	325.21	284.05	0.37	-0.08	0.015
45.00	-5.64	-0.59	0.00	-15.98	0.00	15.98	669.39	164.24	312.21	274.61	0.41	-0.08	0.014
49.04	-5.57	-0.58	0.00	-13.62	0.00	13.62	653.49	158.38	290.34	258.44	0.48	-0.09	0.013
49.04	-5.57	-0.58	0.00	-13.62	0.00	13.62	653.49	158.38	290.34	258.44	0.48	-0.09	0.061
50.00	-5.27	-0.56	0.00	-13.06	0.00	13.06	649.63	156.99	285.26	254.63	0.50	-0.09	0.059
55.00	-5.01	-0.54	0.00	-10.25	0.00	10.25	628.89	149.74	259.53	235.01	0.60	-0.12	0.052
60.00	-4.76	-0.52	0.00	-7.53	0.00	7.53	598.44	142.49	235.01	212.69	0.74	-0.14	0.043
65.00	-4.52	-0.50	0.00	-4.91	0.00	4.91	567.98	135.23	211.70	191.48	0.90	-0.16	0.034
70.00	-4.29	-0.48	0.00	-2.39	0.00	2.39	537.53	127.98	189.62	171.39	1.08	-0.18	0.022
75.00	0.00	-0.46	0.00	0.00	0.00	0.00	507.07	120.73	168.75	152.41	1.28	-0.19	0.000

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:21 PM

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	18.56	0.00	18.23	0.00	0.00	947.94	49.04	0.99
0.9D + 1.0W	18.55	0.00	13.66	0.00	0.00	943.41	49.04	0.97
1.2D + 1.0Di + 1.0Wi	3.91	0.00	24.47	0.00	0.00	212.19	49.04	0.24
1.2D + 1.0Ev + 1.0Eh	0.76	0.00	17.79	0.00	0.00	48.42	49.04	0.07
0.9D - 1.0Ev + 1.0Eh	0.76	0.00	12.24	0.00	0.00	48.13	49.04	0.06
1.0D + 1.0W	4.53	0.00	15.22	0.00	0.00	228.91	49.04	0.24

Site Number: 302485

Code: ANSI/TIA-222-H

© 2007 - 2020 by ATC IP LLC. All rights reserved.

Site Name: Mdfd - Middlefield, CT

Engineering Number: 13193668_C4_09

10/21/2020 4:45:21 PM

Customer: AT&T MOBILITY

Additional Steel Summary

			Intermediate Connectors				Max Member		
Elev From (ft)	Elev To (ft)	Member	VQ/I (lb/in)	Shear Applied (kips)	Shear phiVn (kips)	Ratio	Pu (kip)	phiPn (kip)	Ratio
0.00	49.04	(4) SOL-#20 All Thread Bar	296.0	8.9	16.8	0.528	183.5	330.5	0.555

			Upper Termination Connectors				Lower Termination Connectors					
Elev From (ft)	Elev To (ft)	Member	MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Ratio	MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Ratio
0.00	49.04	(4) SOL-#20 All Thread Bar	76.0	12.0	7	8	0.792	0.0	12.0	0	0	0.000



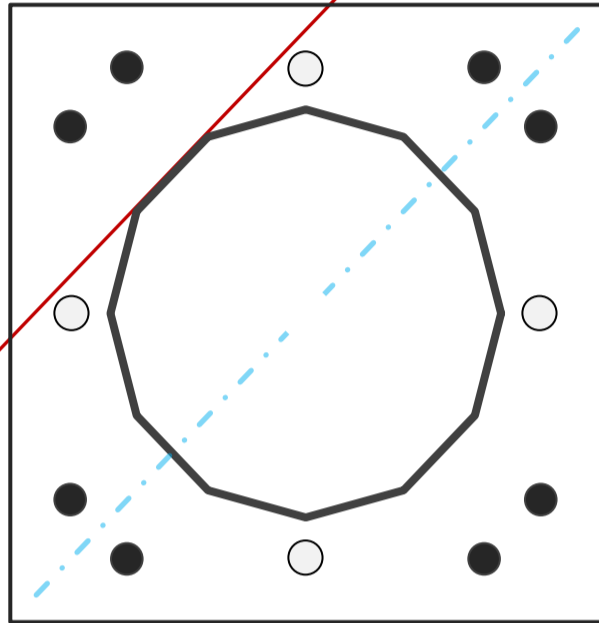
Base Plate & Anchor Rod Analysis

Pole Dimensions		
Number of Sides	12	-
Diameter	27.97	in
Thickness	1/4	in
Orientation Offset	0	°

Base Reactions		
Moment, Mu	947.9	k-ft
Axial, Pu	18.2	k
Shear, Vu	18.6	k
Neutral Axis	45	°

Report Capacities		
Component	Capacity	Result
Base Plate	45%	Pass
Anchor Rods	30%	Pass
Dwyidag	38%	Pass

Base Plate		
Shape	Square	-
Width	44	in
Thickness	2	in
Grade	Other	
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Clip	0	in
Orientation Offset	0	°
Anchor Rod Detail	c	$\eta=0.55$
Clear Distance	N/A	in
Applied Moment, Mu	825.2	k
Bending Stress, ϕMn	1843.0	k



Dwyidag Reinforcement		
Quantity	4	-
Bar Size	#20	in
Diameter, ϕ	2.5	in
Bracket Type	Angle	-
Circle	34.85	in
Orientation Offset	0	°
Applied Force, Pu	138.8	k
Dwyidag Bar, ϕPn	368.2	k

Original Anchor Rods		
Arrangement	Cluster	-
Quantity	8	-
Diameter, ϕ	2 1/4	in
Bolt Circle	44	in
Grade	Other	
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Spacing	6.0	in
Orientation Offset	0	°
Applied Force, Pu	53.2	k
Anchor Rods, ϕPn	182.7	k

Calculations for Monopole Base Plate & Anchor Rod Analysis

Reaction Distribution

Reaction	Shear Vu	Moment Mu	Factor
-	k	k-ft	-
Base Forces	18.6	387.7	0.41
Anchor Rod Forces	18.6	387.7	0.41
Additional Bolt (Grp1) Forces	0.0	0.0	0.00
Additional Bolt (Grp2) Forces	0.0	0.0	0.00
Dywidag Forces	0.0	560.3	0.59
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	21.5234	1.7936	0.0375		2067.77
Bolt	3.9761	3.2477	0.8393	4.5	6294.24
Bolt1	0.0000	0.0000	0.0000	0	0.00
Bolt2	0.0000	0.0000	0.0000	0	0.00
Dywidag	4.9087	4.9087	1.9175		2988.56
Stiffener	0.0000	0.0000	0.0000		0.00

Base Plate		
Shape	Square	-
Width, W	44	in
Thickness, t	2	in
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Base Plate Chord	33.966	in
Detail Type	c	-
Detail Factor	0.55	-
Clear Distance	N/A	-

Anchor Rods		
Anchor Rod Quantity, N	8	-
Rod Diameter, d	2.25	in
Bolt Circle, BC	44	in
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Applied Axial, Pu	53.2	k
Applied Shear, Vu	0.6	k
Compressive Capacity, ϕP_n	182.7	k
Tensile Capacity, ϕR_{nt}	0.291	OK
Interaction Capacity	0.297	OK

External Base Plate		
Chord Length AA	34.130	in
Additional AA	0.000	in
Section Modulus, Z	34.130	in ³
Applied Moment, Mu	825.2	k-ft
Bending Capacity, ϕM_n	1843.0	k-ft
Capacity, Mu/ ϕM_n	0.448	OK
Chord Length AB	33.139	in
Additional AB	0.000	in
Section Modulus, Z	33.139	in ³
Applied Moment, Mu	772.4	k-ft
Bending Capacity, ϕM_n	1789.5	k-ft
Capacity, Mu/ ϕM_n	0.432	OK
Bend Line Length	0.000	in
Additional Bend Line	0.000	in
Section Modulus, Z	0.000	in ³
Applied Moment, Mu	0.0	k-ft
Bending Capacity, ϕM_n	0.0	k-ft
Capacity, Mu/ ϕM_n		

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		

Dywidag Reinforcement		
Dywidag Quantity, N	4	-
Dywidag Diameter, d	2.5	in
Bolt Circle, BC	34.85	in
Yield Strength, Fy	80	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	138.8	k
Compressive Capacity, ϕP_n	368.2	k
Capacity, Pu/ ϕP_n	0.377	OK

Site Name:	Mdfd-Middlefield
Site Number:	302485
Engineering Number:	13193668_C4_01
Engineer:	
Date:	

Design Base Loads (Factored) - Design per TIA-222-H Standard

Foundation Mapped:	N	
Moment (Overturning) (M_u):	947.9 k-ft	
Shear/Leg (V_u):	18.6 k	
Compression/Leg (P_u):	18.2 k	
Uplift/Leg (T_u):	0.0 k	
Tower Type (GT / SST / MP):	MP	
Length of Block:	6.0 ft	
Width of Block:	6.0 ft	
Thickness of Block:	6.0 ft	
Block Height Above Ground:	0.5 ft	
Depth Below Ground Surface to Water Table (w):	99.0 ft	
Unit Weight of Concrete:	150.0 pcf	
Unit Weight of Soil:	114.0 pcf	
Unit Weight of Water:	62.4 pcf	
Ultimate Compressive Bearing Pressure:	89440 psf	
Capacity Increase (Due to Transient Loads):	1.00	
Pullout Angle:	40.0 degrees	
Rod Diameter:	1.00 in	
Rod Ultimate Strength:	71 ksi	
Rod Net Area:	0.85 in ²	
Number of Rods:	12	
Diameter of Cored Hole:	3.00 in	
Ultimate Grout / Rock Interface Bond Strength:	150 psi	
Ultimate Grout / Rock Anchor Interface Bond Strength:	300 psi	
Overall Rod Embedment Length:	170 in	
Rod Exposure Above Lock Off Nut in Foundation:	0 in	
Rod Embedment Square:	60 in	
Free Stress Length:	0 in	
Soil / Concrete Friction Coefficient:	0.55	
Lock Off Load:	60 k	
Rock Anchor Design Plastic or Elastic:	Elastic	
Ignore Pullout Weight Resistance (Y/N):	N	
Weight of Concrete (Buoyancy Effect Considered):	32.4 k	
Compressive Bearing Resistance:	2528.9 k	
Depth to Base of Rock Anchor minus Development Length:	17.9 ft	
Total Rock / Grout Bond Strength:	2884.0 k	
Total Grout / Rod Bond Strength:	1922.7 k	
Total Rod Mechanical Strength:	720.1 k	
Pullout Weight / Rod:	61.7 k	
Rock / Grout Bond Strength / Rod:	240.3 k	
Grout / Rod Bond Strength / Rod:	160.2 k	
Rod Mechanical Strength / Rod:	60.0 k	
Soil Strength Reduction Factor (ϕ_s):	0.75	
Factored Nominal Moment Capacity per Leg ($\phi_s M_n$):	1179.9 k	
Factored Nominal Uplift Capacity per Leg ($\phi_s T_n$):	578.1 k	
Factored Nominal Compressive Capacity per Leg ($\phi_s P_n$):	1896.6 k	
Factored Nominal Shear Capacity per Leg ($\phi_s V_n$):	324.1 k	
M_u :	1059.3 k-ft	
T_u :	0.0 k	

P_u :	26.8 k
V_u :	18.6 k
$T_u/\phi_s T_n + M_u/\phi_s M_n$:	0.90 Result: OK
$P_u/\phi_s P_n$:	0.01 Result: OK
$V_u/\phi_s V_n$:	0.06 Result: OK

Caisson Strength Capacity

Concrete Compressive Strength (f'_c):	3000 psi
Vertical Steel Rebar Size #:	11
Vertical Steel Rebar Area:	1.56 in ²
# of Vertical Steel Rebars:	52 Minimum # of vertical rebar met
Vertical Steel Rebar Yield Strength (F_y):	60 ksi
Horizontal Tie / Stirrup Size #:	4
Horizontal Tie / Stirrup Area:	0.20 in ²
Horizontal Tie / Stirrup Spacing:	12.0 in
Horizontal Tie / Stirrup Steel Yield Strength (F_y):	60 ksi
Anchor Rod Nut Diameter:	2.02 in
Rebar Cage Diameter:	108.0 in
Strength Bending/Tension Reduction Factor (ϕ_B):	0.90 ACI318-05 - 9.3.2.1
Strength Shear Reduction Factor (ϕ_V):	0.75 ACI318-05 - 9.3.2.3
Strength Compression/Bearing Reduction Factor ($\phi_{P/B}$):	0.65 ACI318-05 - 9.3.2.2
Wind Design Factor:	1.00 ACI318-05 - 9.2.1
Steel Elastic Modulus:	29000 ksi
Design Moment (M_u):	1059.3 k-ft
Factored Nominal Moment Capacity ($\phi_B M_n$):	19276.7 k-ft - ACI318-05 - 10.2
$M_u/\phi_B M_n$:	0.05 Result: OK
Design Shear (V_u):	213.9 k
Factored Nominal Shear Capacity ($\phi_V V_n$):	402.2 k - ACI318-05 - 11.3.1.1 or 11.5.7.2
$V_u/\phi_V V_n$:	0.53 Result: OK
Design Tension (T_u):	0.0 k
Factored Nominal Tension Capacity ($\phi_T T_n$):	4380.5 k - ACI318-05 - 10.2
$T_u/\phi_T T_n$:	0.00 Result: OK
Design Compression (P_u):	18.2 k
Factored Nominal Compression Capacity ($\phi_P P_n$):	6225.0 k - ACI318-05 - 10.3.6.2
$P_u/\phi_P P_n$:	0.00 Result: OK