March 4, 2020

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

Regarding: Notice of Exempt Modification – AT&T Site CT2051/ ATC Asset 302498
Address: 45 Spaulding Road, Plainfield, CT 06374

Dear Ms. Bachman:

New Cingular Wireless, PCS, LLC ("AT&T") currently maintains a wireless telecommunications facility on an existing +/- 150' monopole tower at the above-referenced address, latitude 41.674800, longitude -71.879100. Said monopole tower is operated by American Tower Corporation.

AT&T desires to modify its existing telecommunications facility by removing six (6) antennas, adding nine (9) antennas, removing six (6) remote radio units ("RRU"), adding twelve (12) RRU, removing six (6) diplexers, removing six (6) coax, adding one (1) surge arrestor and feedlines as more particularly detailed and described in the enclosed Construction Drawings prepared by A.T. Engineering Service, PLLC, last revised July 22, 2020. The centerline height of the existing antennas is and will remain at 154 feet. AT&T will also be conducting Structural Modifications as more particularly detailed and described in the enclosed Structural Modification Drawings prepared by A.T. Engineering Service, PLLC, dated February 8, 2021. This modification/proposal 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.

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: Kevin Cunningham, First Selectman of the Town of Plainfield; Mary Ann Chinatti, Planning and Zoning Supervisor of the Town of Plainfield; American Tower Corporation, as tower operator and Robert Dominez Sanchez and Nicole Sanchez as underlying property owners. Please note, the original zoning approval was requested from the Town of Plainfield and it was confirmed that there was no such documentation in their files.

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 RF emissions calculation 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 dated February 16, 2021 and prepared by American Tower Corporation enclosed herewith.*

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).

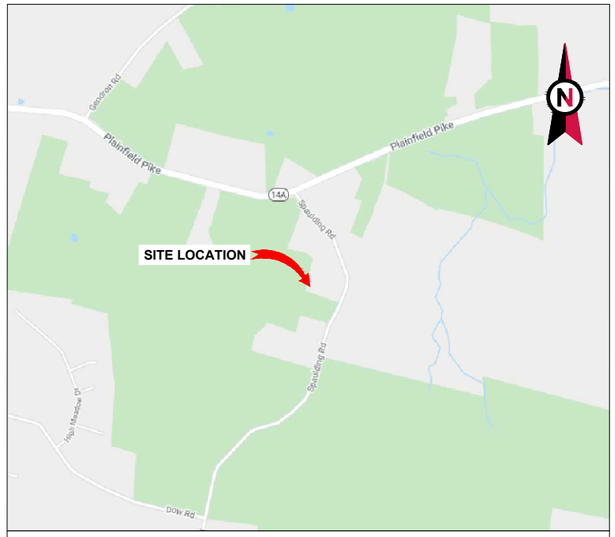
Sincerely,

Jennifer Iliades
Site Acquisition Consultant
Centerline Communications, LLC
750 West Center Street, Suite 301
West Bridgewater, MA 02379
jiliades@clinellc.com

Enclosures:
Exhibit 1 – Construction Drawings
Exhibit 2 – Property Card and GIS
Exhibit 3 – Structural Analysis
Exhibit 4 – Structural Modification Drawings
Exhibit 5 – Mount Analysis
Exhibit 6 – RF Emissions Analysis Report Evaluation
Exhibit 7 – Original Tower Approval
Exhibit 8 – Notice Delivery Confirmations

cc:
Kevin Cunningham, First Selectman of the Town of Plainfield
Mary Ann Chinatti, Planning and Zoning Supervisor of the Town of Plainfield
Robert Dominez Sanchez and Nicole Sanchez as underlying property owners
American Tower Corporation, as tower operator

EXHIBIT 1



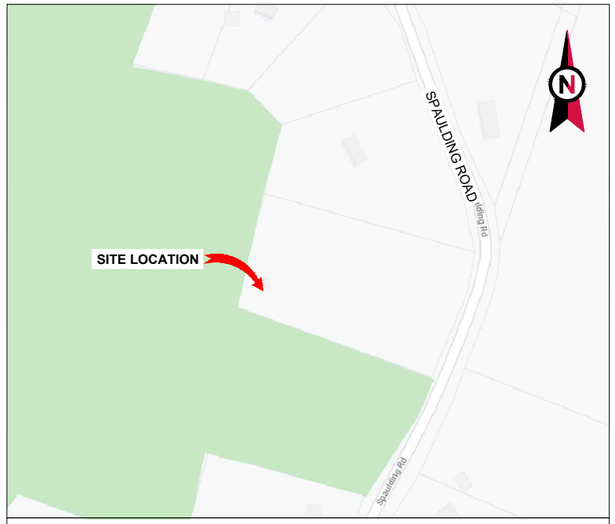
VICINITY MAP

CURRENT PROJECTS:

LTE 5C - PACE #: MRCTB046850
4TX4RX - PACE #: MRCTB046859
4TX4RX - PACE #: MRCTB046857
5G NR 1DR-1 - PACE #: MRCTB046795
LTE 3C - PACE #: MRCTB046596
LTE 4C - PACE #: MRCTB046885

AMERICAN TOWER®

ATC SITE NAME: PLAINFIELD CT 6
ATC SITE NUMBER: 302498
AT&T PACE NUMBER: MRCTB046850
AT&T SITE ID: CTL02051
AT&T FA CODE:10035013
AT&T SITE NAME: PLAINFIELD-SPAULDING RD
SITE ADDRESS: 45 SPAULDING ROAD
PLAINFIELD, CT 06374-1824
AT&T MOBILITY PLAN: LTE 5C/3C/4C, 4TX4RX, 5G NR 1DR-1
AT&T MOBILITY
ANTENNA AMENDMENT PLAN



LOCATION MAP

COMPLIANCE CODE

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. 2018 INTERNATIONAL BUILDING CODE (IBC)
2. 2020 NATIONAL ELECTRIC CODE (NEC)
3. LOCAL BUILDING CODE
4. CITY/COUNTY ORDINANCES

UTILITY COMPANIES

POWER COMPANY: C. L.& P.
PHONE: (800) 286-2000

TELEPHONE COMPANY: AT&T
PHONE: (800) 288-2020

811 Know what's below. Call before you dig.

PROJECT SUMMARY

SITE ADDRESS:

45 SPAULDING ROAD

PLAINFIELD, CT 06374-1824

COUNTY: WINDHAM

GEOGRAPHIC COORDINATES:

LATITUDE: 41.67480556

LONGITUDE: -71.8791

GROUND ELEVATION: 560' AMSL

PROJECT TEAM

TOWER OWNER:

AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

APPLICANT:

AT&T MOBILITY

ENGINEER:

INFINIGY ENGINEERING, PLLC
1211 SR 436, SUITE 101
CASSELBERRY, FL 32707
OFFICE: 407-278-6750

PROPERTY OWNER:

T6 UNISON SITE MANAGEMENT LLC
PO BOX 75655
BALTIMORE - MD - 21275

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW:

TOWER WORK:

REMOVE (3) POWERWAVE 7770 ANTENNA(S), (1) ANDREW SBNH-1D6565C ANTENNA, (2) KMW AM-X-CD-17-65-00T-RET ANTENNA(S), (6) POWERWAVE / LGP 21901 DIPLEXER(S), (3) RRUS-12 B2 RRH(S), (3) RRUS-11 B12 RRH(S), AND (6) GSM COAX CABLE(S)

INSTALL (3) CCI HPA65R-BU8A ANTENNA(S), (3) CCI OPA65R-BU8DA ANTENNA(S), (3) CCI DMP65R-BU8DA ANTENNA(S), (3) 4415 B30 RRH(S), (3) 4478 B14 RRH(S), (3) 4449 B5/B12 RRH(S), (3) 8843 B2/B66A RRH(S), (1) UMTS RET, (2) 2" FLEX CONDUIT(S), (1) SQUID(S), (2) #6 DC TRUNK(S), AND (1) 18 PAIR FIBER TRUNK(S)

EXISTING (3) ANTENNA(S), (6) TMA, (1) SQUID(S) AND (6) GSM COAX CABLE(S) TO REMAIN

GROUND WORK:

INSTALL (2) 6630, (1) IDLE, (1) FIBER MANAGEMENT BOX , (1) DC12, (2) BREAKER PANELS, AND (1) UMTS RET HOMERUN

PROJECT NOTES

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.

PROJECT LOCATION DIRECTIONS

FROM BOSTON - I 90 WEST TO I 395 SOUTH TO EXIT 88 AND TURN LEFT ON TO RT 14A EAST. FOLLOW AND THEN TURN RIGHT ONTO SPAULDING RD . SITE WILL BE UP ON THE RIGHT.

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	0	07/22/20	DB
G-002	GENERAL NOTES	0	07/22/20	DB
C-001	OVERALL SITE PLAN	0	07/22/20	DB
C-101	DETAILED SITE PLAN	0	07/22/20	DB
C-201	TOWER ELEVATION	0	07/22/20	DB
C-401	RF SCHEDULE AND ANTENNA INSTALLATION	0	07/22/20	DB
C-501	CONSTRUCTION DETAILS	0	07/22/20	DB
C-502	EQUIPMENT SPECIFICATIONS	0	07/22/20	DB
E-501	GROUNDING DETAILS	0	07/22/20	DB
R-601	SUPPLEMENTAL	0	07/22/20	DB
R-602	SUPPLEMENTAL	0	07/22/20	DB
R-603	SUPPLEMENTAL	0	07/22/20	DB
R-604	SUPPLEMENTAL	0	07/22/20	DB

AMERICAN TOWER®
A.T. ENGINEERING SERVICE, PLLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: PEC.0001553

INFINIGY ENGINEERING, PLLC
1211 SR 436, SUITE 101
CASSELBERRY, FL 32707 OFFICE: 407-278-6750

REV.	DESCRIPTION	BY	DATE
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ATC SITE NUMBER:
302498
ATC SITE NAME:
PLAINFIELD CT 6
AT&T MOBILITY SITE NAME:
PLAINFIELD-SPAULDING RD
SITE ADDRESS:
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PLAINFIELD, CT 06374-1824

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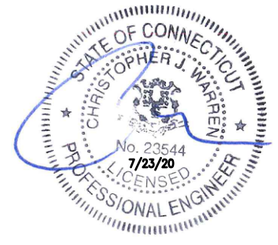

AT&T

DATE DRAWN:	07/02/20
ATC JOB NO:	13211930_G3
CUSTOMER ID:	PLAINFIELD-SPAULDING RD
CUSTOMER #:	10035013

TITLE SHEET

SHEET NUMBER: G-001
REVISION: 0

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 ANSI/EIA/TIA-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 NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT 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, UNCRATE, 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 OD 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.

AMERICAN TOWER®
A.T. ENGINEERING SERVICE, PLLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: PEC.0001553

INFINIGY
ENGINEERING, PLLC
1211 SR 436, SUITE 101
CASSELBERRY, FL 32707 OFFICE: 407-278-6750

REV.	DESCRIPTION	BY	DATE
A	PRELIM	IB	07/02/20
0	CONSTRUCTION	DB	07/22/20

ATC SITE NUMBER:
302498
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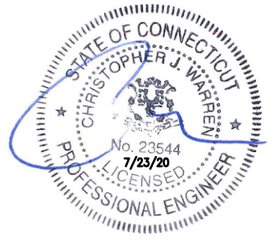
PLAINFIELD CT 6
AT&T MOBILITY SITE NAME:
PLAINFIELD-SPAULDING RD
SITE ADDRESS:
45 SPAULDING ROAD
PLAINFIELD, CT 06374-1824

SEAL:



AT&T

DATE DRAWN:	07/02/20
ATC JOB NO:	13211930_G3
CUSTOMER ID:	PLAINFIELD-SPAULDING RD
CUSTOMER #:	10035013

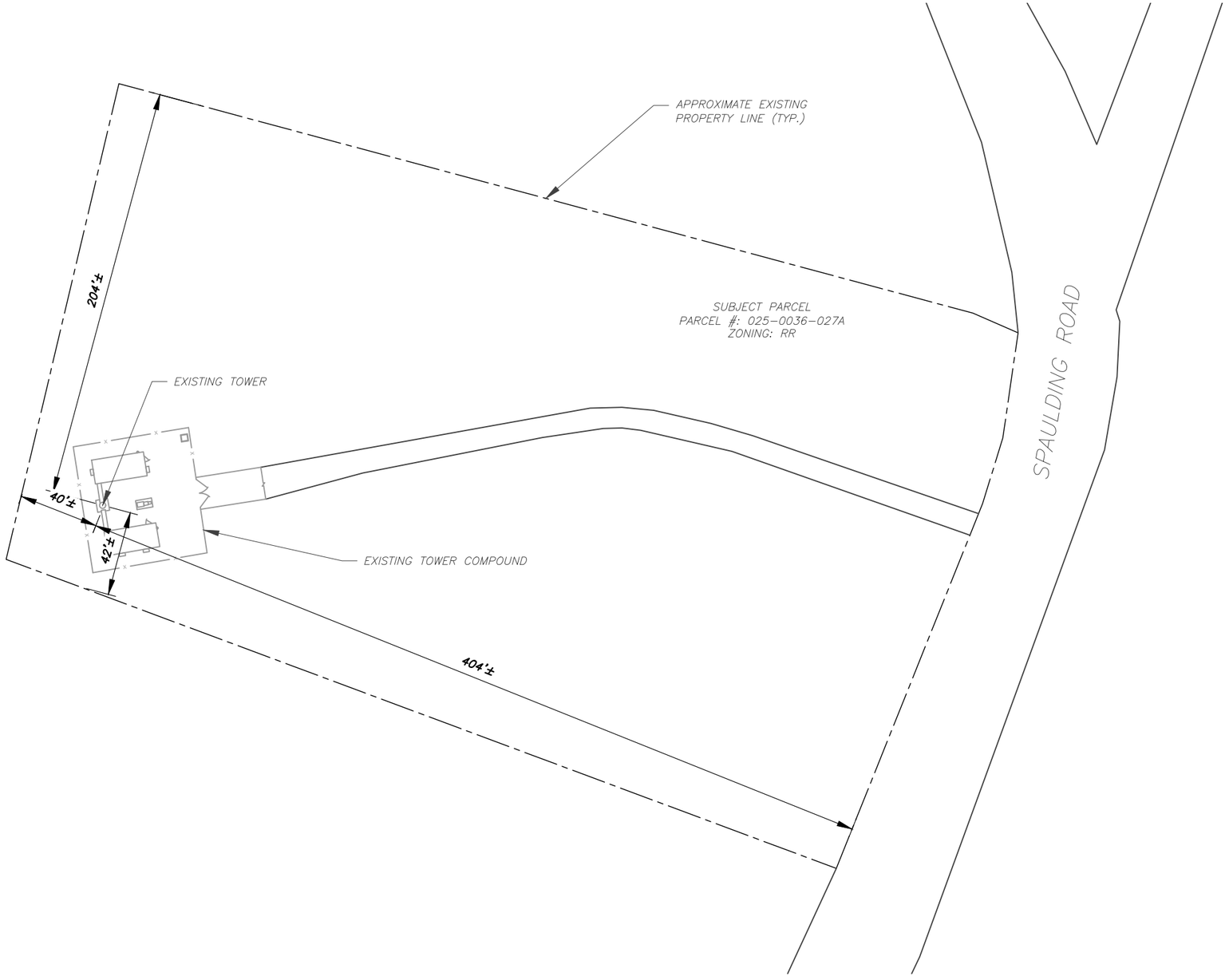
GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0

NOTES:

1. BOUNDARY LINES OBTAINED FROM WINDHAM COUNTY ONLINE GIS.
2. ZONING INFORMATION OBTAINED FROM WINDHAM COUNTY

INFORMATION CONTAINED WITHIN THESE DRAWINGS IS BASED ON PROVIDED INFORMATION. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.



1 OVERALL SITE PLAN

0 60' 120'

SCALE: 1"=60' (11X17)
1"=30' (22X34)

N

AMERICAN TOWER®
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PLAINFIELD CT 6

AT&T MOBILITY SITE NAME:
PLAINFIELD-SPAULDING RD

SITE ADDRESS:
45 SPAULDING ROAD
PLAINFIELD, CT 06374-1824

SEAL:

STATE OF CONNECTICUT
CHRISTOPHER J. WARREN
No. 23544
7/23/20
LICENSED
PROFESSIONAL ENGINEER

AT&T

DATE DRAWN:	07/02/20
ATC JOB NO:	13211930_G3
CUSTOMER ID:	PLAINFIELD-SPAULDING RD
CUSTOMER #:	10035013

OVERALL SITE PLAN

SHEET NUMBER:	REVISION:
C-001	0

SITE PLAN NOTES:

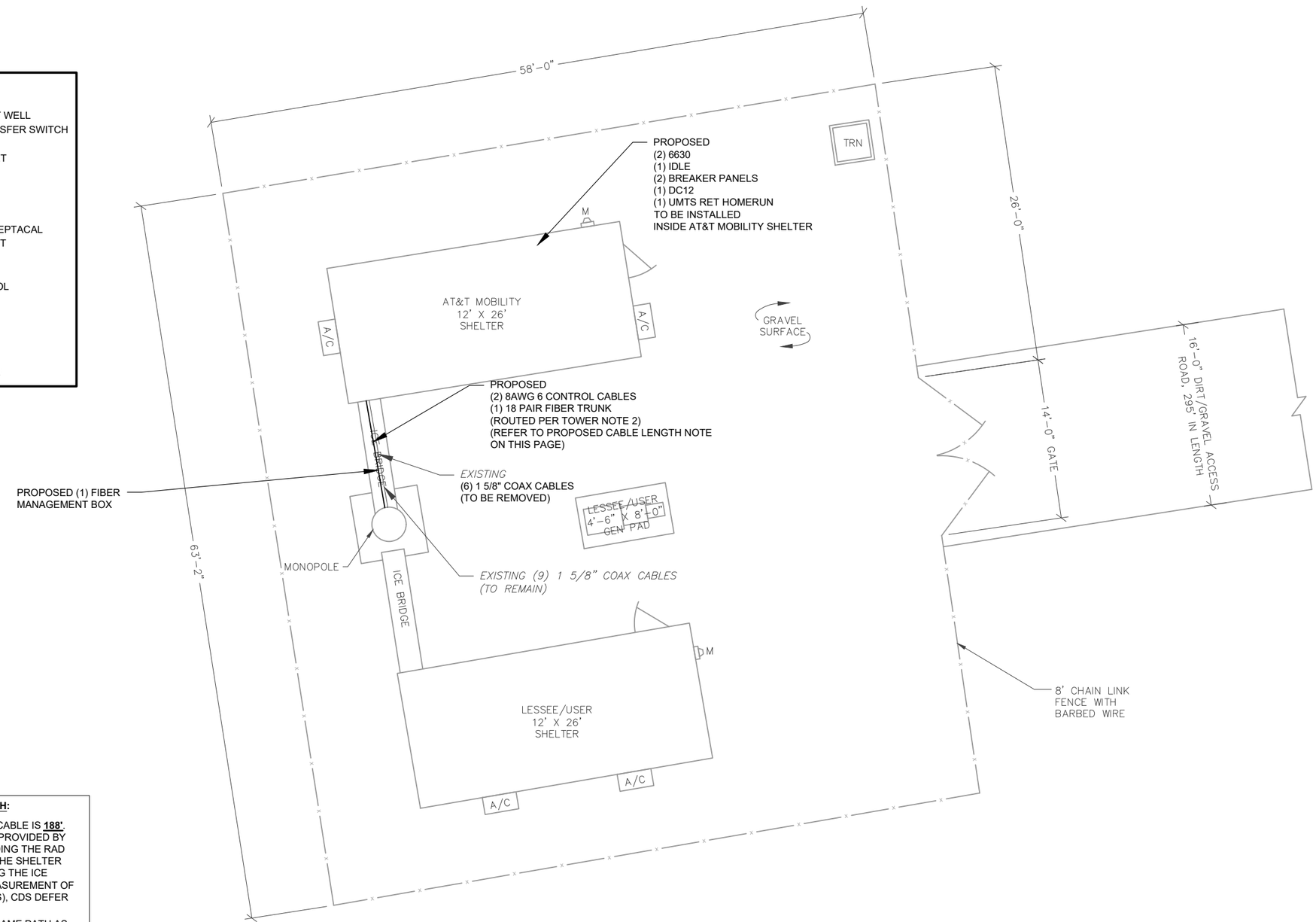
1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.

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.

INFORMATION CONTAINED WITHIN THESE DRAWINGS IS BASED ON PROVIDED INFORMATION. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.

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 **188'**. 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.

1 DETAILED SITE PLAN

0 10' 20'

SCALE: 1"=10' (11X17)
1"=5' (22X34)

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COA: PEC.0001553

INFINIGY ENGINEERING, PLLC
1211 SR 436, SUITE 101
CASSELBERRY, FL 32707 OFFICE: 407-278-6750

REV.	DESCRIPTION	BY	DATE
A	PRELIM	IB	07/02/20
0	CONSTRUCTION	DB	07/22/20

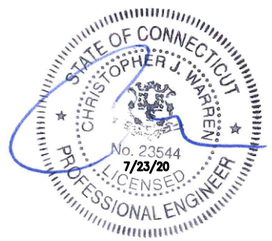
ATC SITE NUMBER:
302498

ATC SITE NAME:
PLAINFIELD CT 6

AT&T MOBILITY SITE NAME:
PLAINFIELD-SPAULDING RD

SITE ADDRESS:
45 SPAULDING ROAD
PLAINFIELD, CT 06374-1824

SEAL:



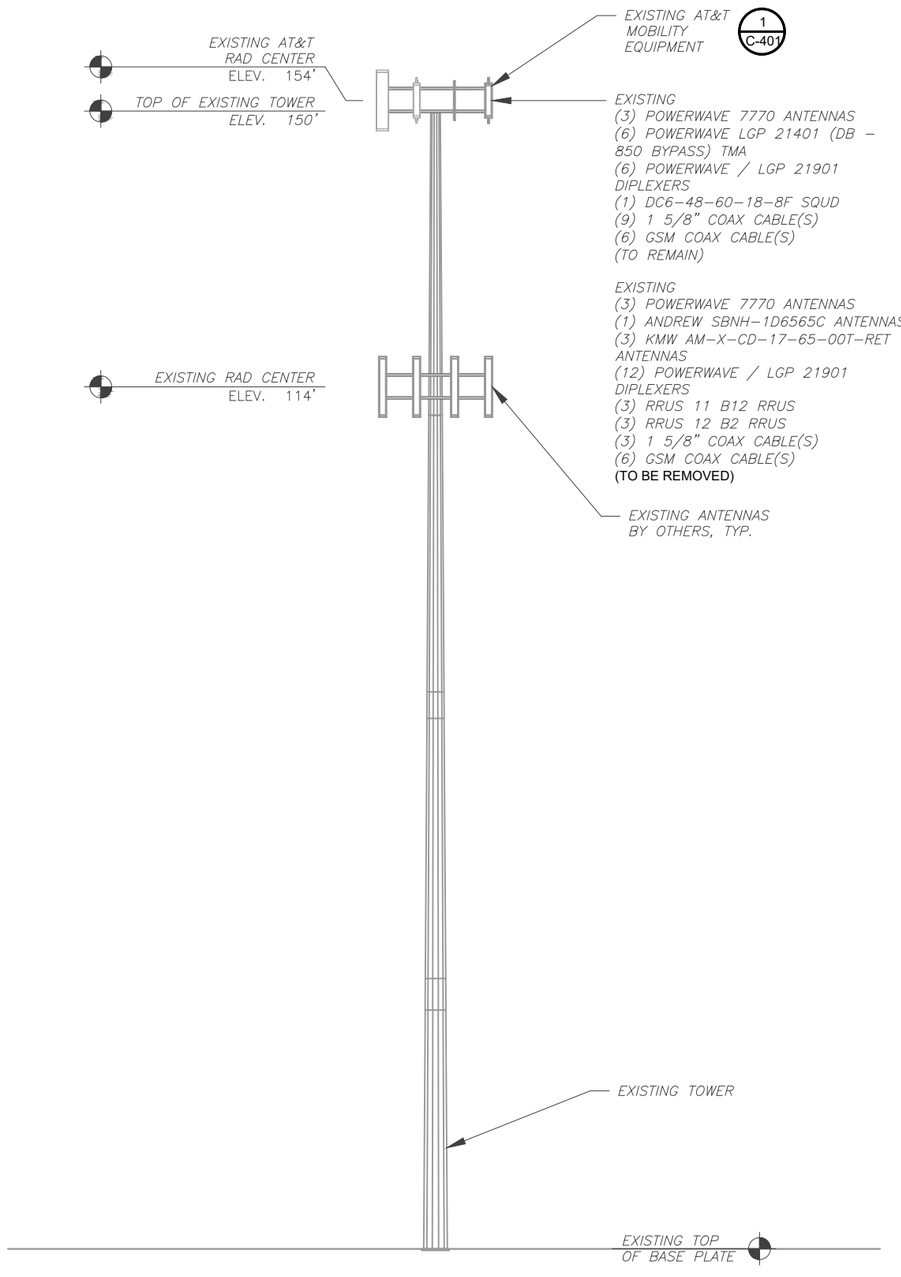
AT&T

DATE DRAWN:	07/02/20
ATC JOB NO:	13211930_G3
CUSTOMER ID:	PLAINFIELD-SPAULDING RD
CUSTOMER #:	10035013

DETAILED SITE PLAN

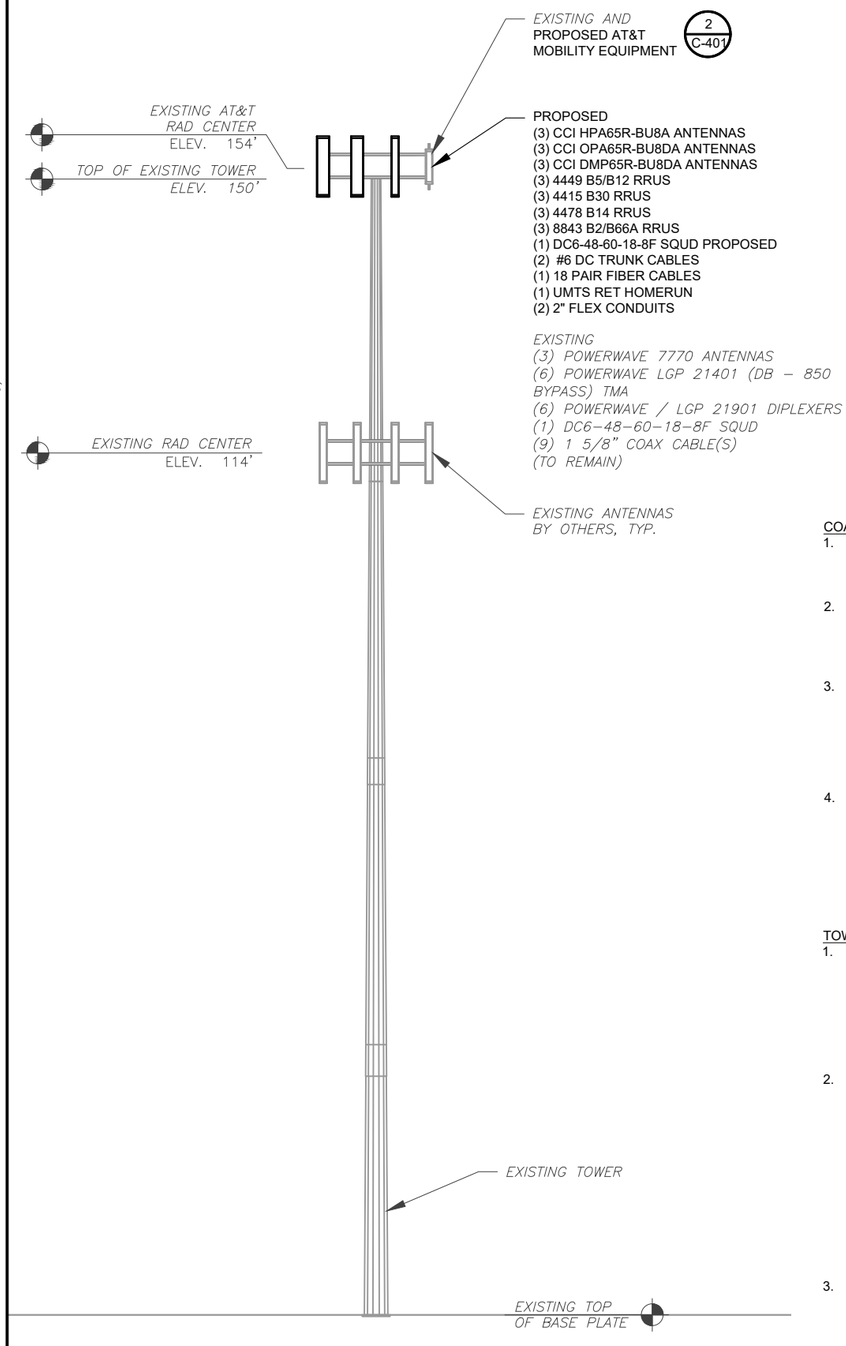
SHEET NUMBER:	REVISION:
C-101	0

EXISTING CONFIGURATION IS BASED ON RFDS.
CONTRACTOR TO VERIFY EXISTING CONDITIONS.



1 EXISTING TOWER ELEVATION
SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY INFINIGY, DATED JULY 15, 2020, THE EXISTING MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING



2 PROPOSED TOWER ELEVATION
SCALE: N.T.S.

COAXIAL CABLE NOTES:

1. CONTRACTOR SHALL CONFIRM COAX COLOR CODING PRIOR TO CONSTRUCTION. REFER TO "ANTENNA SYSTEM LABELING STANDARD" ND-00027 LATEST VERISON.
2. CONTRACTOR SHALL WEATHERPROOF ALL ANTENNA CONNECTORS WITH SELF AMALGAMATING TAPE. WEATHERPROOFING SHALL BE COMPLETED IN STRICT ACCODRANCE WITH AT&T STANDARDS.
3. 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.
4. CONRACTOR 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.

TOWER NOTE:

1. 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.
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.
3. TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)

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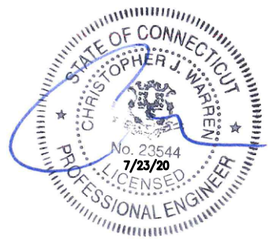
REV.	DESCRIPTION	BY	DATE
A	PRELIM	IB	07/02/20
0	CONSTRUCTION	DB	07/22/20

ATC SITE NUMBER:
302498
ATC SITE NAME:
PLAINFIELD CT 6
AT&T MOBILITY SITE NAME:
PLAINFIELD-SPAULDING RD
SITE ADDRESS:
45 SPAULDING ROAD
PLAINFIELD, CT 06374-1824

SEAL:



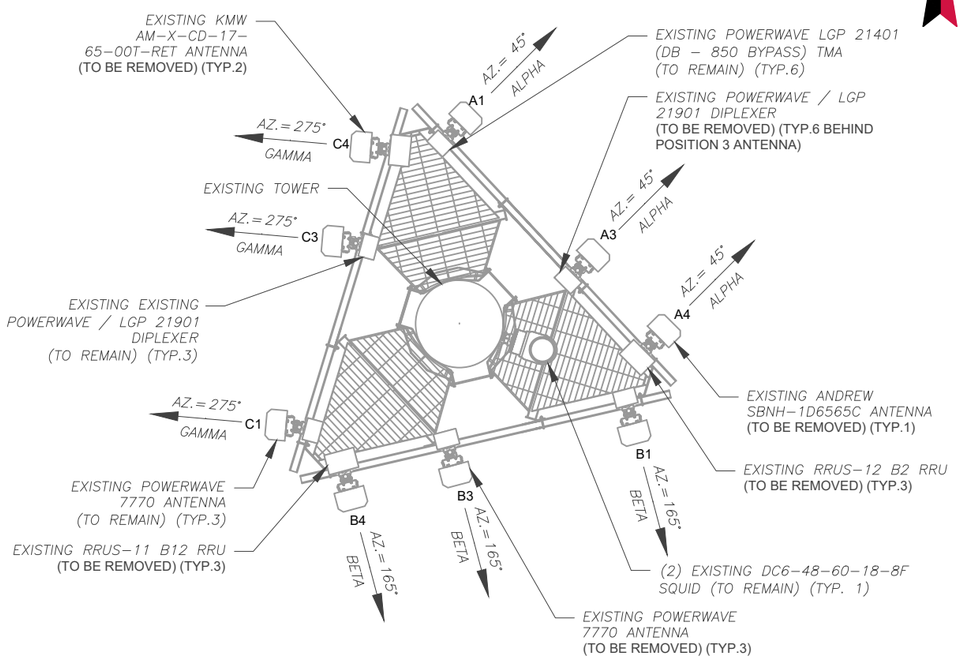
AT&T

DATE DRAWN:	07/02/20
ATC JOB NO:	13211930_G3
CUSTOMER ID:	PLAINFIELD-SPAULDING RD
CUSTOMER #:	10035013

TOWER ELEVATION

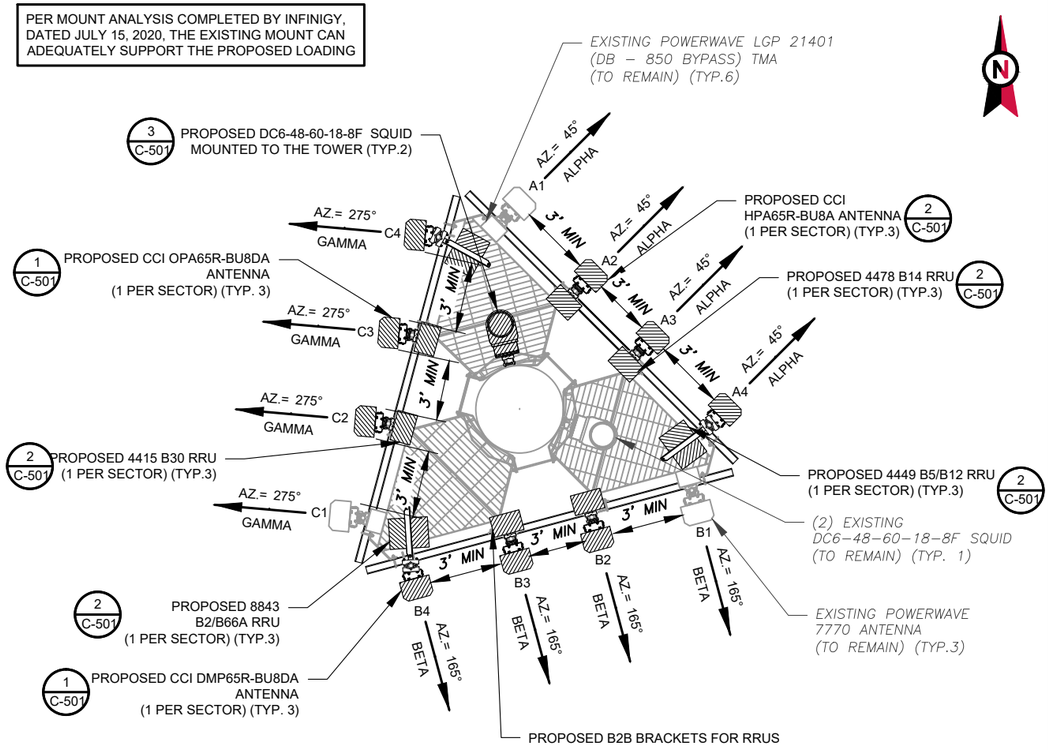
SHEET NUMBER:	REVISION:
C-201	0

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



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

PER MOUNT ANALYSIS COMPLETED BY INFINIGY, DATED JULY 15, 2020, THE EXISTING MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING



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

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

EXISTING ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	154'	45°	A1	POWERWAVE 7770	UMTS 850 / UMTS 1900	RMN	(2) POWERWAVE / LGP 21901, (2) POWERWAVE LGP 21401	RMN
			A2	–	–		–	–
			A3	POWERWAVE 7770	GSM 850	RMV	(2) POWERWAVE / LGP 21901	RMV
			A4	ANDREW SBNH-1D6565C	LTE 700/LTE 1900	RMV	RRUS-12 B2, RRUS-11 B12	RMV
BETA	154'	165°	B1	POWERWAVE 7770	UMTS 850 / UMTS 1900	RMN	(2) POWERWAVE / LGP 21901, (2) POWERWAVE LGP 21401	RMN
			B2	–	–		–	–
			B3	POWERWAVE 7770	GSM 850	RMV	(2) POWERWAVE / LGP 21901	RMV
			B4	KMW AM-X-CD-17-65-00T-RET	LTE 700/LTE 1900	RMV	RRUS-12 B2, RRUS-11 B12	RMV
GAMMA	154'	275°	C1	POWERWAVE 7770	UMTS 850 / UMTS 1900	RMN	(2) POWERWAVE / LGP 21901, (2) POWERWAVE LGP 21401	RMN
			C2	–	–		–	–
			C3	POWERWAVE 7770	GSM 850	RMV	(2) POWERWAVE / LGP 21901	RMV
			C4	KMW AM-X-CD-17-65-00T-RET	LTE 700/LTE 1900	RMV	RRUS-12 B2, RRUS-11 B12	RMV

NOTES

1. CONFIRM WITH AT&T MOBILITY REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.
2. CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.
3. THE ANTENNA ORIENTATION PLAN IS A SCHEMATIC. ATC DID NOT CONFIRM EXISTING SITE CONDITIONS INCLUDING, BUT NOT LIMITED TO, ANTENNA AZIMUTHS, MOUNT CONFIGURATIONS AND TOWER ORIENTATION. SCALES SHOWN ARE FOR REFERENCE ONLY AND EXISTING DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO INSTALLATION AND NOTIFY ATC OF ANY DISCREPANCIES.
4. CONTRACTOR TO ENSURE PROPER SEPARATION IN ACCORDANCE WITH AT&T'S FIRSTNET REQUIREMENTS (SEE SHEET R-602)

FINAL ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	154'	45°	A1	POWERWAVE 7770	UMTS 850	RMN	(2) POWERWAVE / LGP 21901, (2) POWERWAVE LGP 21401	RMN
			A2	CCI HPA65R-BU8A	LTE WCS	ADD	4415 B30	ADD
			A3	CCI OPA65R-BU8DA	LTE 700/LTE AWS	ADD	4478 B14	ADD
			A4	CCI DMP65R-BU8DA	LTE 700/LTE 850/LTE 1900/5G 850-	ADD	4449 B5/B12, 8843 B2/B66A	ADD
BETA	154'	165°	B1	POWERWAVE 7770	UMTS 850	RMN	(2) POWERWAVE / LGP 21901, (2) POWERWAVE LGP 21401	RMN
			B2	CCI HPA65R-BU8A	LTE WCS	ADD	4415 B30	ADD
			B3	CCI OPA65R-BU8DA	LTE 700/LTE AWS	ADD	4478 B14	ADD
			B4	CCI DMP65R-BU8DA	LTE 700/LTE 850/LTE 1900/5G 850-	ADD	4449 B5/B12, 8843 B2/B66A	ADD
GAMMA	154'	275°	C1	POWERWAVE 7770	UMTS 850	RMN	(2) POWERWAVE / LGP 21901, (2) POWERWAVE LGP 21401	RMN
			C2	CCI HPA65R-BU8A	LTE WCS	ADD	4415 B30	ADD
			C3	CCI OPA65R-BU8DA	LTE 700/LTE AWS	ADD	4478 B14	ADD
			C4	CCI DMP65R-BU8DA	LTE 700/LTE 850/LTE 1900/5G 850-	ADD	4449 B5/B12, 8843 B2/B66A	ADD

EXISTING FIBER DISTRIBUTION/SQUID

MODEL NUMBER	STATUS
DC6-48-60-18-8F	RMN
–	–

EXISTING CABLING SUMMARY

COAX	DC	FIBER	STATUS
(9) 1 5/8"	–	–	RMN
(3) 1 5/8"	–	–	RMV

STATUS ABBREVIATIONS

RMV: TO BE REMOVED
RMN: TO REMAIN
REL: TO BE RELOCATED
ADD: TO BE ADDED

CABLE LENGTHS FOR JUMPERS

JUNCTION BOX TO RRU: 15'
RRU TO ANTENNA: 10'

3 EQUIPMENT SCHEDULES

FINAL FIBER DISTRIBUTION/SQUID

MODEL NUMBER	STATUS
DC6-48-60-18-8F	RMN
DC6-48-60-18-8F	ADD

FINAL CABLING SUMMARY

COAX	DC	FIBER	STATUS
(9) 1 5/8"	-	-	RMN
-	(2) #6	(1) 18 PAIR	ADD

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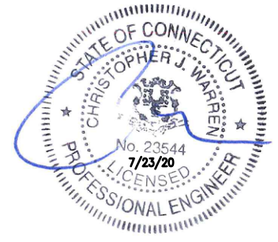
INFINIGY ENGINEERING, PLLC
1211 SR 436, SUITE 101
CASSELBERRY, FL 32707 OFFICE: 407-278-6750

REV.	DESCRIPTION	BY	DATE
A	PRELIM	IB	07/02/20
0	CONSTRUCTION	DB	07/22/20

ATC SITE NUMBER:
302498
ATC SITE NAME:
PLAINFIELD CT 6
AT&T MOBILITY SITE NAME:
PLAINFIELD-SPAULDING RD
SITE ADDRESS:
45 SPAULDING ROAD
PLAINFIELD, CT 06374-1824

SEAL:

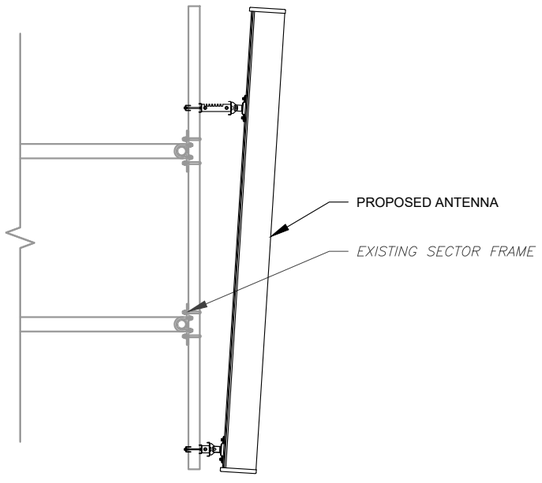


AT&T

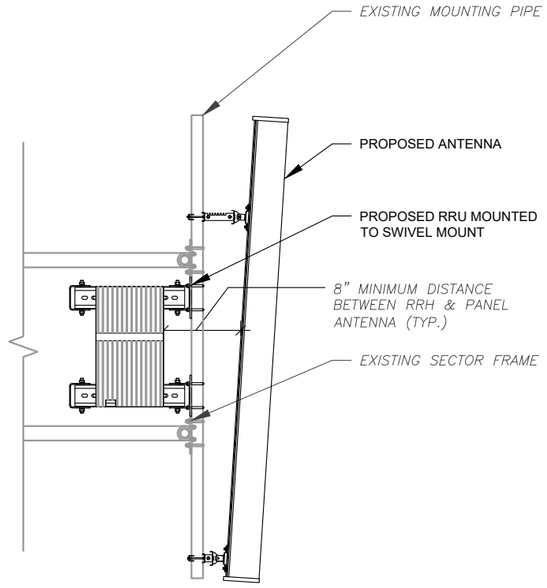
DATE DRAWN:	07/02/20
ATC JOB NO:	13211930_G3
CUSTOMER ID:	PLAINFIELD-SPAULDING RD
CUSTOMER #:	10035013

RF SCHEDULE AND ANTENNA INSTALLATION

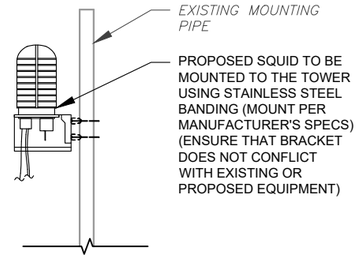
SHEET NUMBER:	REVISION:
C-401	0



1 ANTENNA DETAIL
SCALE: N.T.S.



2 RRU DETAIL
SCALE: N.T.S.



3 PROPOSED SQUID MOUNTING
SCALE: N.T.S.

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1211 SR 436, SUITE 101
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REV.	DESCRIPTION	BY	DATE
A	PRELIM	IB	07/02/20
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ATC SITE NUMBER:
302498
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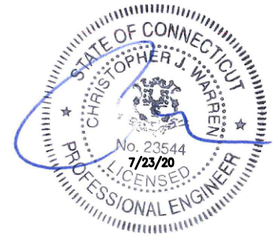
PLAINFIELD CT 6
AT&T MOBILITY SITE NAME:
PLAINFIELD-SPAULDING RD
SITE ADDRESS:
45 SPAULDING ROAD
PLAINFIELD, CT 06374-1824

SEAL:

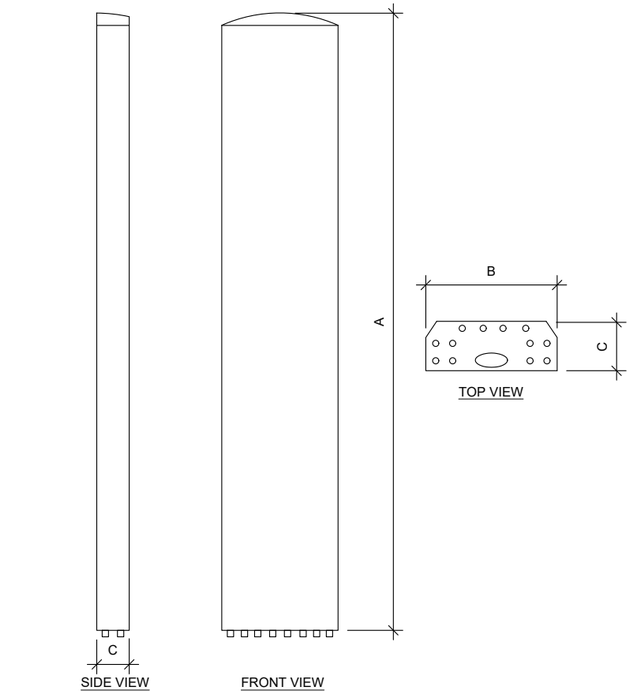


AT&T

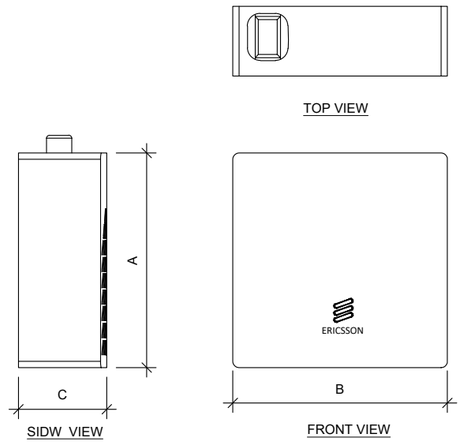
DATE DRAWN:	07/02/20
ATC JOB NO:	13211930_G3
CUSTOMER ID:	PLAINFIELD-SPAULDING RD
CUSTOMER #:	10035013

CONSTRUCTION DETAILS

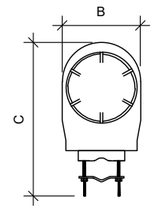
SHEET NUMBER:	REVISION:
C-501	0

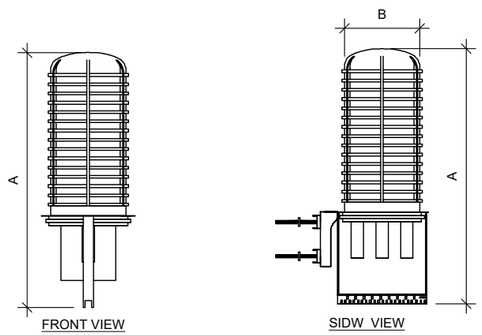


ANTENNA SPECIFICATIONS				
ANTENNA MODEL	A	B	C	WEIGHT (LBS)
HPA65R-BU8A	96"	11.7"	7.7"	54
OPA65R-BU8DA	96"	21"	7.8"	76.5
HPA65R-BU8A	96"	20.7"	7.7"	95.7



RRU SPECIFICATIONS				
RRU MODEL	A	B	C	WEIGHT (LBS)
4415 B30	16.5"	13.4"	5.9"	46.0
4478 B14	18.1"	13.4"	8.3"	59.4
4449 B5, B12	17.9"	13.2"	9.4"	71.0
8843 B2, B66A	14.9"	13.2"	10.9"	72.0





RAYCAP SPECIFICATIONS				
RAYCAP MODEL	A	B	C	WEIGHT (LBS)
DC6-48-60-18-8F	23.5"	9.7"	9.7"	20.0

1 EQUIPMENT SPECIFICATIONS

SCALE: N.T.S.

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SITE ADDRESS:
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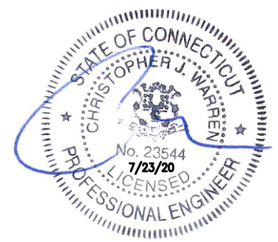
SEAL:

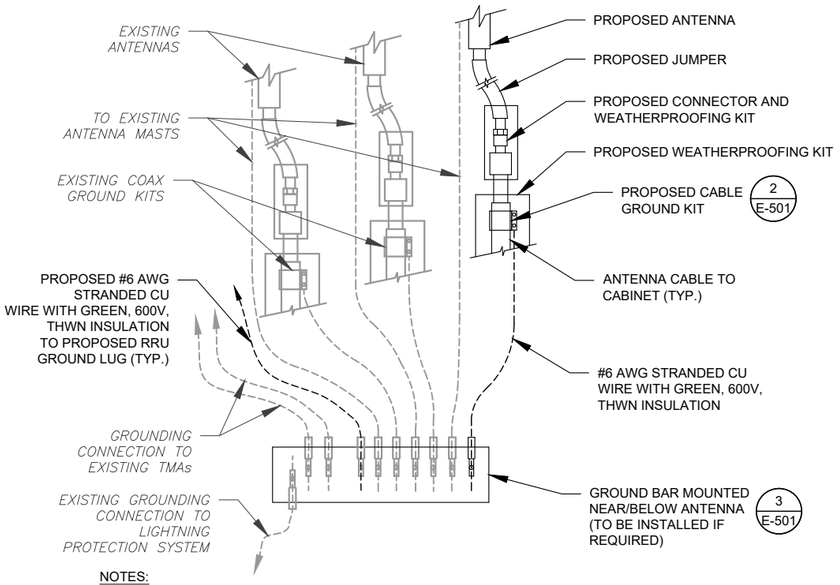


AT&T

DATE DRAWN:	07/02/20
ATC JOB NO:	13211930_G3
CUSTOMER ID:	PLAINFIELD-SPAULDING RD
CUSTOMER #:	10035013

EQUIPMENT SPECIFICATIONS

SHEET NUMBER:	REVISION:
C-502	0

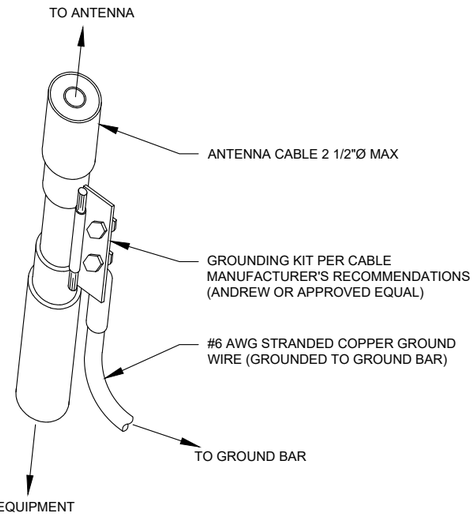


NOTES:

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.

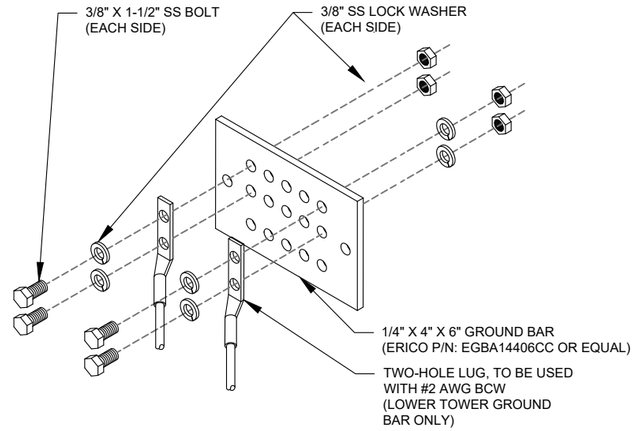


GROUND KIT NOTES:

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.

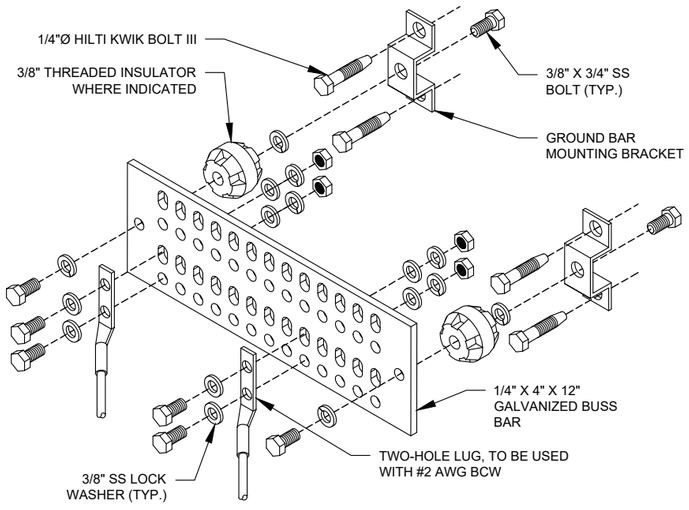


GROUND BAR NOTES:

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.

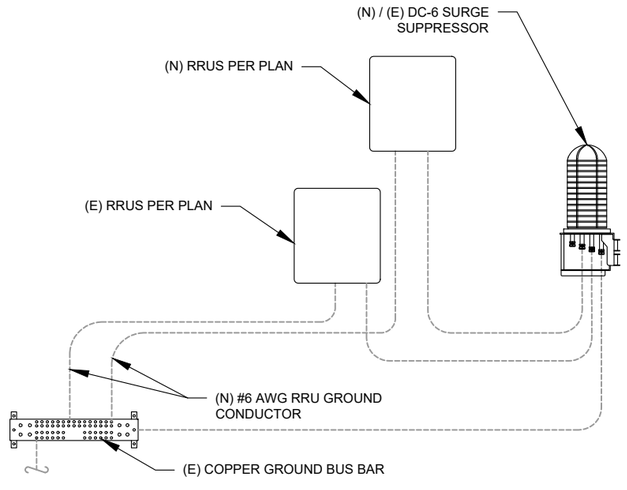


GROUND BAR NOTES

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.

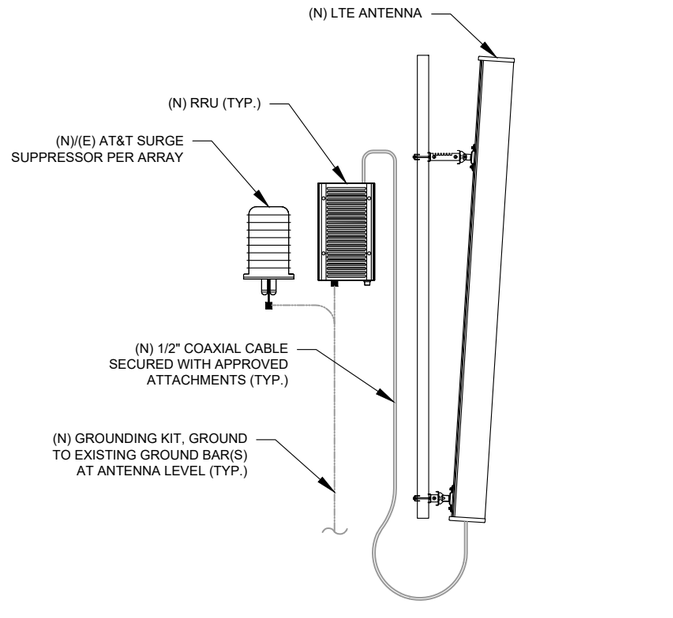
4 MAIN GROUND BAR DETAIL

SCALE: N.T.S.



5 RRU GROUNDING

SCALE: N.T.S.



6 ANTENNA/RRU GROUNDING

SCALE: N.T.S.

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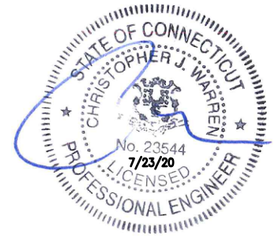
INFINIGY ENGINEERING, PLLC
1211 SR 436, SUITE 101
CASSELBERRY, FL 32707 OFFICE: 407-278-6750

REV.	DESCRIPTION	BY	DATE
A	PRELIM	IB	07/02/20
0	CONSTRUCTION	DB	07/22/20

ATC SITE NUMBER:
302498
ATC SITE NAME:
PLAINFIELD CT 6
AT&T MOBILITY SITE NAME:
PLAINFIELD-SPAULDING RD
SITE ADDRESS:
45 SPAULDING ROAD
PLAINFIELD, CT 06374-1824

SEAL:



AT&T

DATE DRAWN:	07/02/20
ATC JOB NO:	13211930_G3
CUSTOMER ID:	PLAINFIELD-SPAULDING RD
CUSTOMER #:	10035013

GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-501	0

INFINIGY

FROM ZERO TO INFINIGY

the solutions are endless

1033 WATERVLIET SHAKER RD, ALBANY, NY 12205

Mount Modification Report

July 15, 2020

AT&T Site Name	MRCTB046850
AT&T Site Number	CTL02051
ATC Site Name	Plainfield CT 6, CT
ATC Site Number	302498
ATC Engineering Number	13211930_C9_06
Infinigy Job Number	1009-Z0003-B
Client	American Tower Corporation
Carrier	AT&T Mobility
Site Location	Spaulding Road, Plainfield, CT 06374 Windham County 41.674806 N NAD83 71.879100 W NAD83
Mount Centerline EL.	154 ft
Mount Classification	Platform w/ Handrails
Structural Usage Ratio	75.1%
Overall Result	Pass
Note	-

Upon reviewing the results of this analysis, it is our opinion that the structure meets the specified TIA code requirements. The mounts and connections for the proposed carrier are therefore deemed adequate to support the final loading configuration as listed in this report.

STATE OF CONNECTICUT · BRADLEY D. DAVENPORT · 24705 · LICENSED PROFESSIONAL ENGINEER

7/15/2020

AZ CA CO FL GA IL MD NC NH NJ NY TN TX WA

INFINIGY

Introduction

Infinigy Engineering has been requested to perform a mount analysis of the existing AT&T Platform. All supporting documents have been obtained from the client and are assumed to be accurate and applicable to this site. The mount was analyzed using RISA-3D Version 17.0.2 analysis software.

Supporting Documentation

Mount Mapping	MasTec Job No. 202199, dated June 22, 2020
Structural Analysis Report	American Tower Corporation, Engineering No. OAA681936_C3_01, dated July 27, 2016
Collocation Application	ATC Asset No. 302498

Analysis Code Requirements

Wind Speed	124 mph (3-Second Gust)
Wind Speed w/ ice	50 mph (3-Second Gust) w/ 1.0" radial ice concurrent
TIA Revision	ANSI/TIA-222-H
Structure Class	II
Exposure Category	B
Topographic Category	1
Seismic Design Values	S_S = 0.187 g, S_1 = 0.054 g
Site Class	D - Stiff Soil
HMSL	556 ft

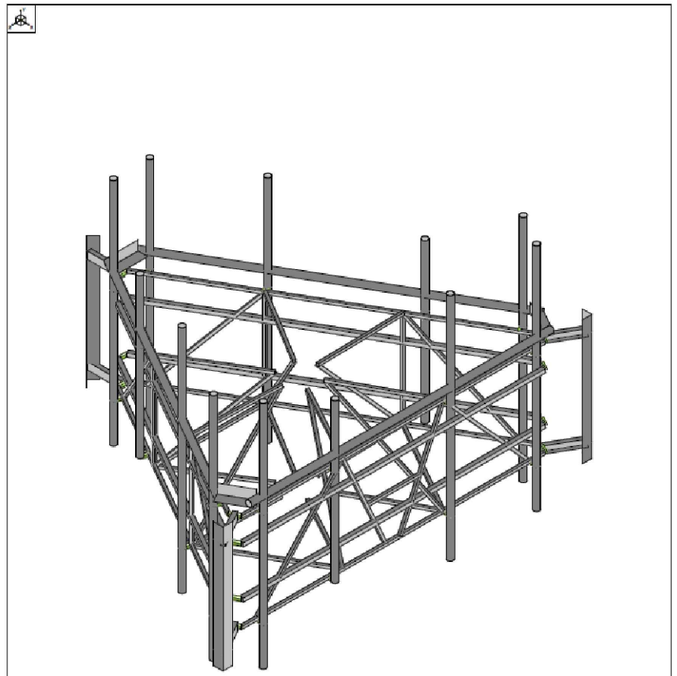
Conclusion

Upon reviewing the results of this analysis, it is our opinion that the structure meets the specified TIA code requirements. The mounts and connections are therefore deemed adequate to support the final loading configuration as listed in this report.

If you have any questions, require additional information, or actual conditions differ from those as detailed in this report please contact me via the information below:

Type te:

Brad Davenport
Engineering Manager | INFINIGY
1517 Old Apex Road, Cary, NC 27513
(0) (518) 690-0792
BDavenport@infinigy.com | www.infinigy.com



Infinigy Engineering, LLC	MRCTB046850	
DVA		July 15, 2020 at 4:48 PM
1009-Z0003-B		302498.R3D

1 MOUNT ANALYSES

AMERICAN TOWER®
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1211 SR 436, SUITE 101
CASSELBERRY, FL 32707 OFFICE: 407-278-6750

REV.	DESCRIPTION	BY	DATE
A	PRELIM	IB	07/02/20
0	CONSTRUCTION	DB	07/22/20

ATC SITE NUMBER:
302498
ATC SITE NAME:
PLAINFIELD CT 6
AT&T MOBILITY SITE NAME:
PLAINFIELD-SPAULDING RD
SITE ADDRESS:
45 SPAULDING ROAD
PLAINFIELD, CT 06374-1824

SEAL:

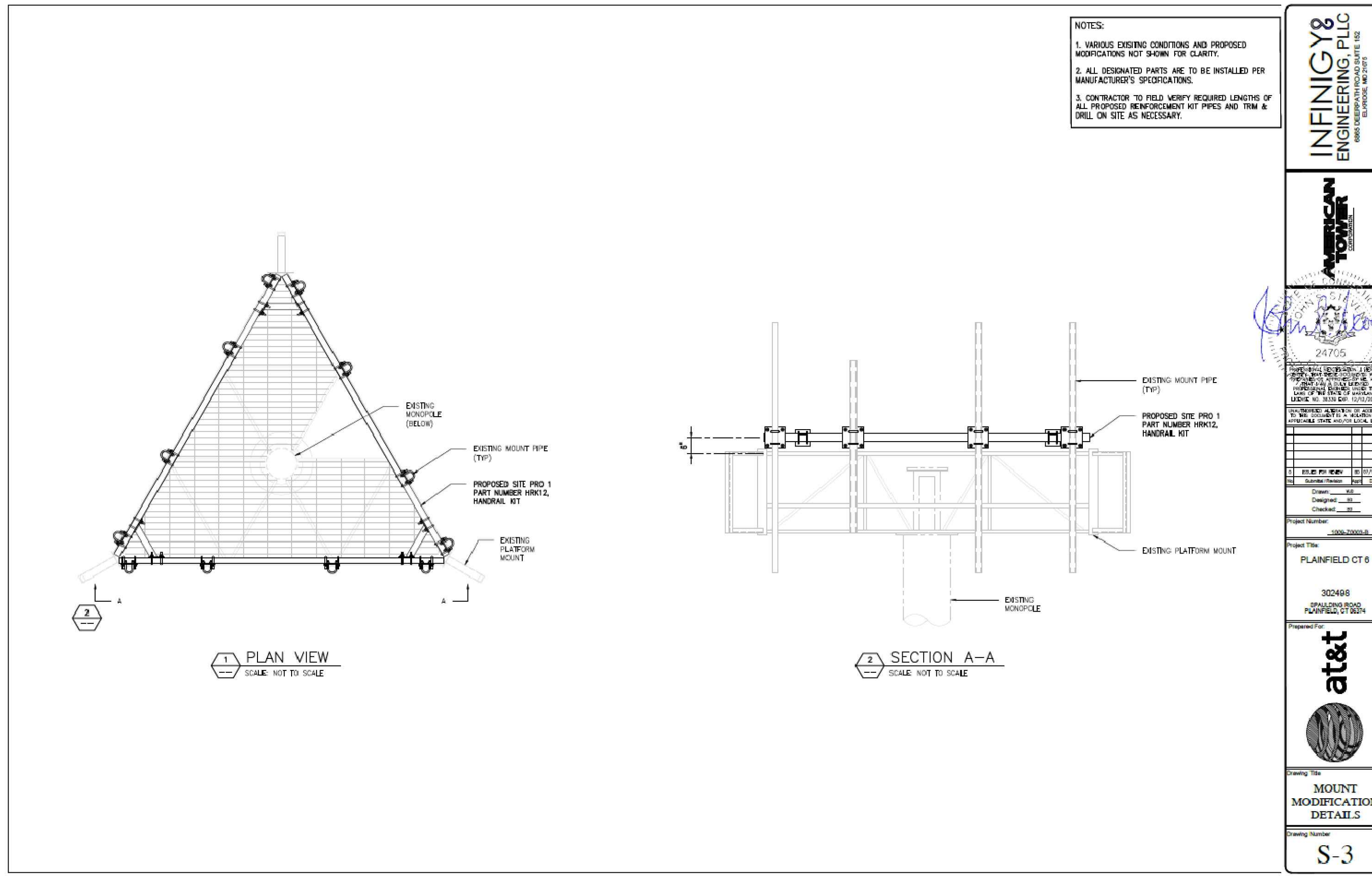
STATE OF CONNECTICUT · CHRISTOPHER J. WARREN · No. 23544 · LICENSED PROFESSIONAL ENGINEER · 7/23/20

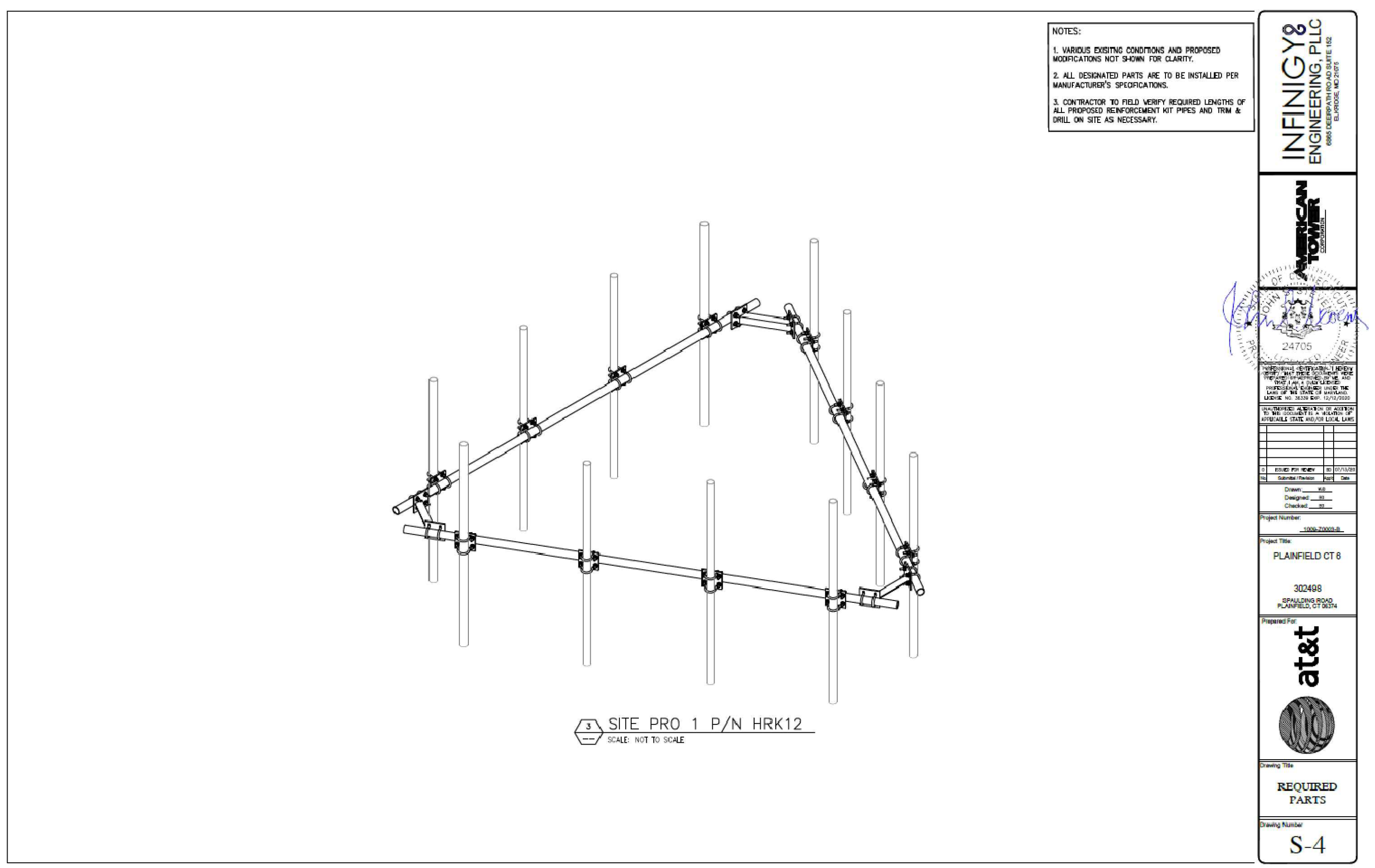
AT&T

DATE DRAWN:	07/02/20
ATC JOB NO:	13211930_G3
CUSTOMER ID:	PLAINFIELD-SPAULDING RD
CUSTOMER #:	10035013

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-601	0


NOTES:
1. VARIOUS EXISITING CONDITIONS AND PROPOSED MODIFICATIONS NOT SHOWN FOR CLARITY.
2. ALL DESIGNATED PARTS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
3. CONTRACTOR TO FIELD VERIFY REQUIRED LENGTHS OF ALL PROPOSED REINFORCEMENT KIT PIPES AND TRIM & DRILL ON SITE AS NECESSARY.
EXISTING MONOPOLE (BELOW)
EXISTING MOUNT PIPE (TYP)
PROPOSED SITE PRO 1 PART NUMBER HRK12, HANDRAIL KIT
EXISTING PLATFORM MOUNT
PLAN VIEW
SCALE: NOT TO SCALE
EXISTING MOUNT PIPE (TYP)
PROPOSED SITE PRO 1 PART NUMBER HRK12, HANDRAIL KIT
EXISTING PLATFORM MOUNT
EXISTING MONOPOLE
SECTION A-A
SCALE: NOT TO SCALE
INFINIGY
ENGINEERING, PLLC
PLAINFIELD CT 6
302498
MOUNT MODIFICATION DETAILS
S-3


NOTES:
1. VARIOUS EXISITING CONDITIONS AND PROPOSED MODIFICATIONS NOT SHOWN FOR CLARITY.
2. ALL DESIGNATED PARTS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
3. CONTRACTOR TO FIELD VERIFY REQUIRED LENGTHS OF ALL PROPOSED REINFORCEMENT KIT PIPES AND TRIM & DRILL ON SITE AS NECESSARY.
SITE PRO 1 P/N HRK12
SCALE: NOT TO SCALE
INFINIGY
ENGINEERING, PLLC
PLAINFIELD CT 6
302498
REQUIRED PARTS
S-4

1 MOUNT ANALYSES

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REV.	DESCRIPTION	BY	DATE
A	PRELIM	IB	07/02/20
0	CONSTRUCTION	DB	07/22/20

ATC SITE NUMBER:
302498
ATC SITE NAME:
PLAINFIELD CT 6
AT&T MOBILITY SITE NAME:
PLAINFIELD-SPAULDING RD
SITE ADDRESS:
45 SPAULDING ROAD
PLAINFIELD, CT 06374-1824

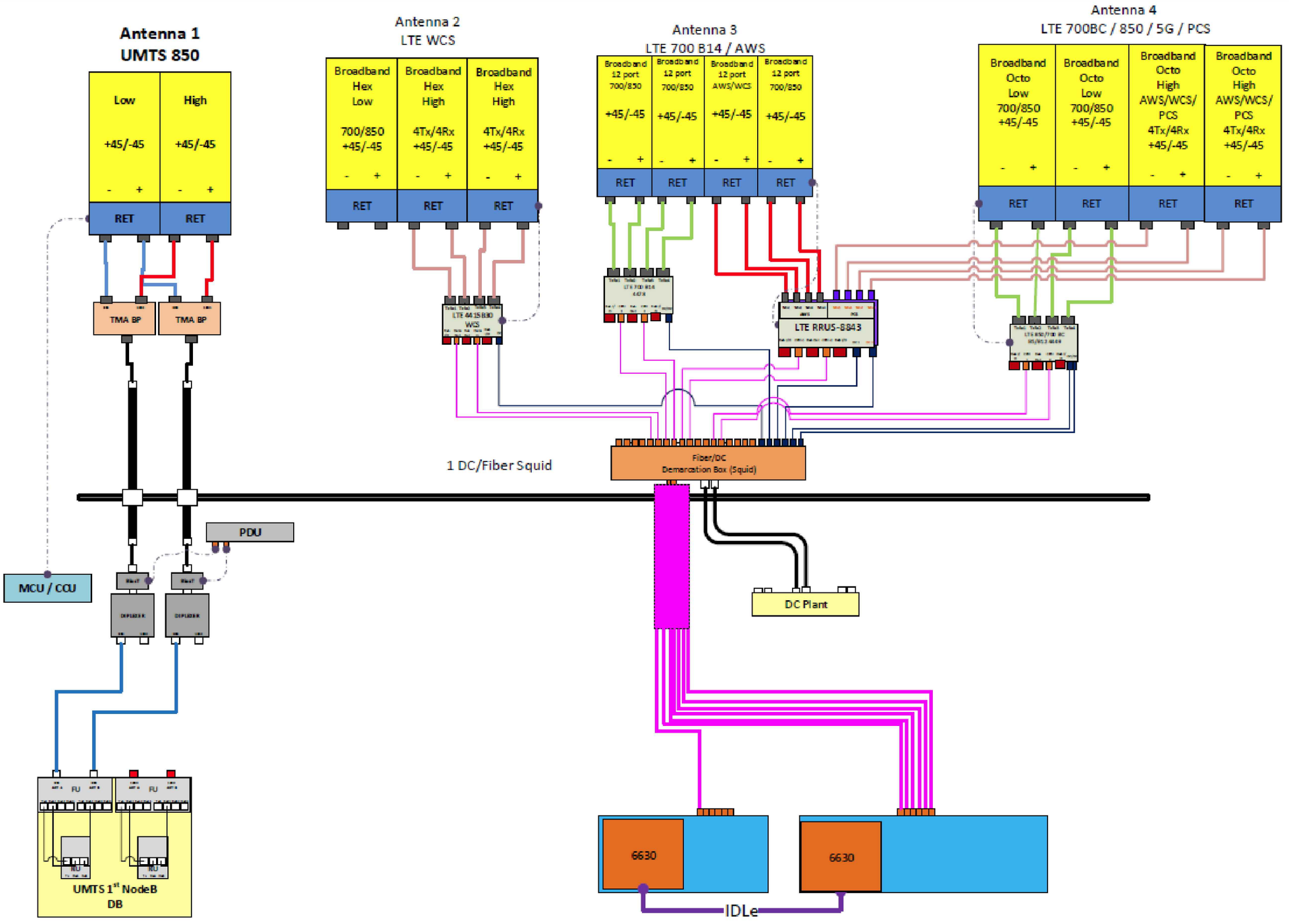
SEAL:
STATE OF CONNECTICUT
CHRISTOPHER J. WARREN
No. 23544
7/23/20
LICENSED
PROFESSIONAL ENGINEER

AT&T

DATE DRAWN:	07/02/20
ATC JOB NO:	13211930_G3
CUSTOMER ID:	PLAINFIELD-SPAULDING RD
CUSTOMER #:	10035013

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-602	0



1 RFDS PLUMBING DIAGRAM

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT. GENERAL CONTRACTOR IS TO CHECK WITH THE AT&T MOBILITY CM TO ENSURE THIS IS THE MOST RECENT VERSION OF THE RFDS.

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REV.	DESCRIPTION	BY	DATE
A	PRELIM	IB	07/02/20
0	CONSTRUCTION	DB	07/22/20

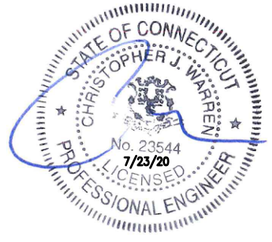
ATC SITE NUMBER:
302498

ATC SITE NAME:
PLAINFIELD CT 6

AT&T MOBILITY SITE NAME:
PLAINFIELD-SPAULDING RD

SITE ADDRESS:
45 SPAULDING ROAD
PLAINFIELD, CT 06374-1824

SEAL:



AT&T

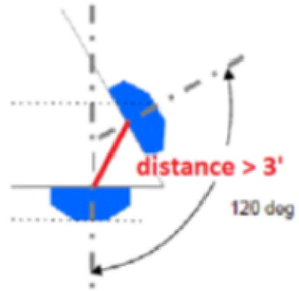
DATE DRAWN:	07/02/20
ATC JOB NO:	13211930_G3
CUSTOMER ID:	PLAINFIELD-SPAULDING RD
CUSTOMER #:	10035013

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-603	0

RF REQUIREMENTS FOR 700 B14 FIRSTNET, 700 B12, 700D B29 ANTENNA SEPARATION

- ❑ Horizontal separation (side to side of antenna): >= 3’
- ❑ Vertical separation (between the tips of the antennas): > 3’
- ❑ Inter-sector separation: > 3’ between the center of the antenna backplanes.



- ❑ Please note additional horizontal separation may be required if B14 antennas azimuth are different from others or antennas are severely angled with respect to the mount.
- ❑ Typical 3' horizontal separation can tolerate skew angle up to 6°.

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

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CASSELBERRY, FL 32707 OFFICE: 407-278-6750

REV.	DESCRIPTION	BY	DATE
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0	CONSTRUCTION	DB	07/22/20

ATC SITE NUMBER:
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SITE ADDRESS:
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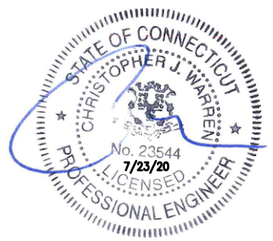
SEAL:



AT&T

DATE DRAWN:	07/02/20
ATC JOB NO:	13211930_G3
CUSTOMER ID:	PLAINFIELD-SPAULDING RD
CUSTOMER #:	10035013

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-604	0

EXHIBIT 2

45 SPAULDING RD

Location	45 SPAULDING RD	**Mblu**	025/ 0036/ 027A/ /
Acct#	00325300	**Owner**	SANCHEZ ROBERT DOMINEZ & NICOLE (JT)
Assessment	$117,920	**Appraisal**	$168,450
PID	3562	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$128,360	$40,090	$168,450

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$89,860	$28,060	$117,920

Owner of Record

Owner	SANCHEZ ROBERT DOMINEZ & NICOLE (JT)	**Sale Price**	$39,000
Co-Owner		**Certificate**	
Address	161 PICKETT RD PLAINFIELD , CT 06374	**Book & Page**	0560/0654
		Sale Date	11/16/2020
		Instrument	00

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
SANCHEZ ROBERT DOMINEZ & NICOLE (JT)	$39,000		0560/0654	00	11/16/2020
ROYS SCOTT	$10,000		0548/0710	25	01/28/2020
THEROUX BEATRICE L - C/O SPECTRASITE COM	$0		0253/0587		09/01/1998
CREDIE MARGARET M + FLORINDA L	$0		0161/0916		03/04/1986

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:	Outbuildings
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:	
Full Baths:	
Half Baths:	
Extra Fixtures:	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Fireplaces:	
Xtra Openings:	
Gas Fireplaces:	
Woodstove/Pellet	
Bsmt Gar:	
Num Park	
Fireplaces	
Color	
Basement:	
Fndtn Cndtn	
Basement	

Building Photo

(http://images.vgsi.com/photos/PlainfieldCTPhotos//default.jpg)

Building Layout

Building Layout (ParcelSketch.ashx?pid=3562&bid=3562)

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

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code	5040
Description	PUB UTIL
Zone	RA60
Neighborhood	1000
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	2.79
Frontage	
Depth	
Assessed Value	$28,060
Appraised Value	$40,090

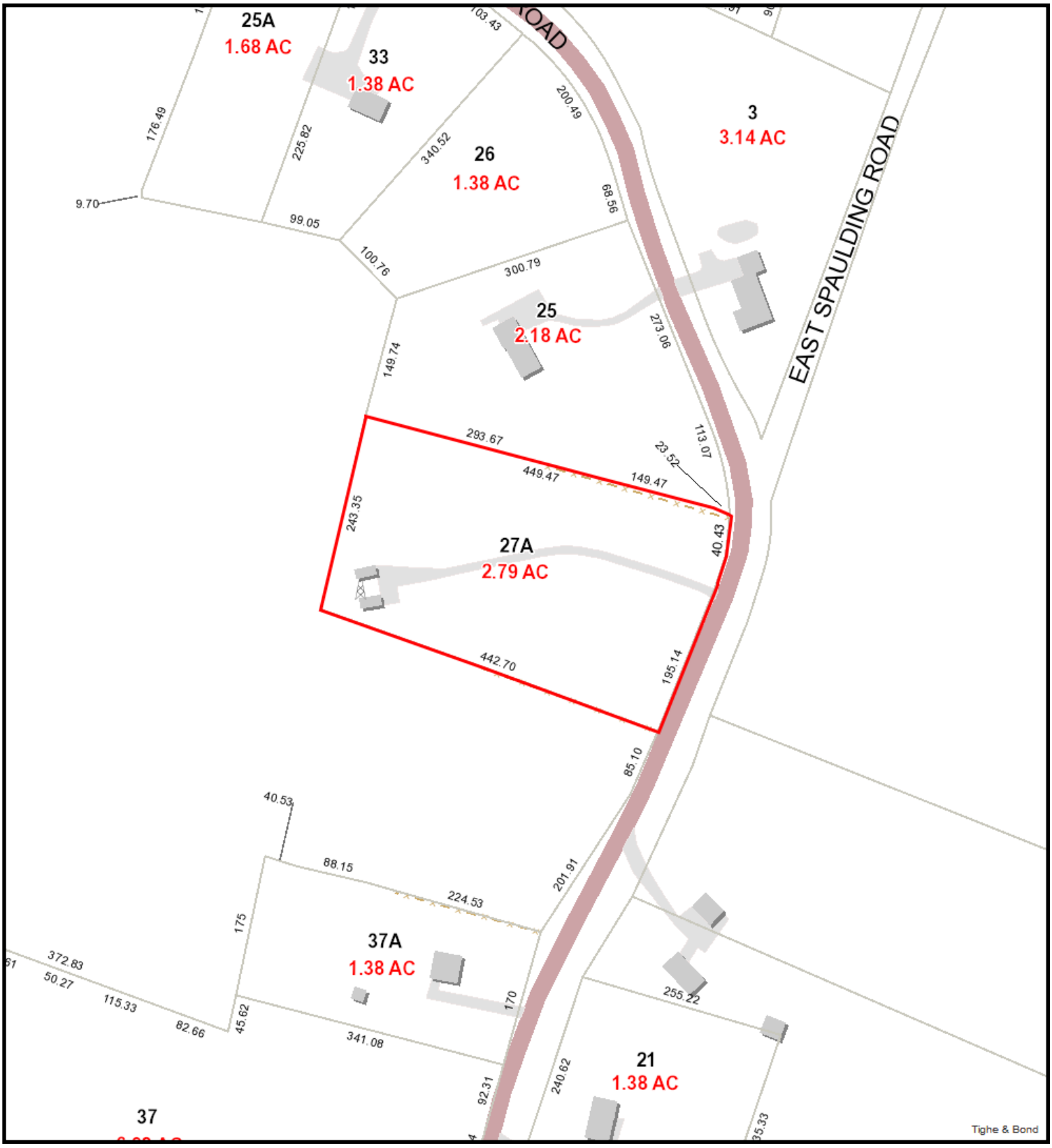
Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
RS5	Cell Tower Building			312.00 UNITS	$23,400	1
TT4	Cell Tower			150.00 HEIGHT	$101,250	1
FN4	Fence 8' Chain			256.00 L.F.	$3,710	1

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$128,360	$40,090	$168,450
2019	$128,360	$40,090	$168,450

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$89,860	$28,060	$117,920
2019	$89,860	$28,060	$117,920



2/25/2021 3:07:52 PM

Scale: 1"=166'

Scale is approximate

The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

EXHIBIT 3

AMERICAN TOWER®
CORPORATION

Post – Modification Structural Analysis Report

Structure	:	**150 ft Monopole**
ATC Site Name	:	**Plainfield CT 6, CT**
ATC Asset Number	:	**302498**
Engineering Number	:	**13211930_C4_10**
Proposed Carrier	:	**AT&T MOBILITY**
Carrier Site Name	:	**MRCTB046850**
Carrier Site Number	:	**CTL02051**
Site Location	:	**45 Spaulding Road** **Plainfield, CT 06374-1824** **41.674800,-71.879100**
County	:	**Windham**
Date	:	**February 16, 2021**
Max Usage	:	**99%**
Result	:	**Pass**

Prepared By:
Christopher Jolly
Structural Engineer III

Reviewed By:

COA: PEC.0001553

AMERICAN TOWER®
CORPORATION

Table of Contents

Introduction

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

Supporting Documents

Tower Drawings	ITT Meyer 'Type B' Specification, ATT Spec AT-8935, dated April 13, 1984
Foundation Drawing	SNET Job #3C234, dated April 24, 1990
Geotechnical Report	GEOServices Project #21-07254, dated April 20, 2009
Modifications	ATC Project #48651233, dated May 8, 2012 Mount Mods by Infinigy Job #1009-Z003-B, dated July 15, 2020 ATC Projecct #13211930_C6_09, dated February 8, 2021 (Pending)*
Inspection	Infinigy Project #1009-Z003-B, dated July 1, 2020

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:	121 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	49 mph (3-Second Gust) w/ 0.85" 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 1
Topographic Category:	1
Crest Height (H):	0 ft
Spectral Response:	Ss = 0.19, 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 American 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
154.0	6	Powerwave Allgon LGP21401	-	(1) 0.39" (10mm) Fiber Trunk (2) 0.78" (19.7mm) 8 AWG 6 (6) 1 5/8" Coax	AT&T MOBILITY
	6	Powerwave Allgon LGP21901			
	3	Powerwave Allgon 7770.00			
	1	Raycap DC6-48-60-18-8F (23.5" Height)			
114.0	1	RFS DB-T1-6Z-8AB-0Z	T-Arm	(12) 1 5/8" Coax (1) 1 5/8" Hybriflex	VERIZON WIRELESS
	3	Amphenol Antel BXA-70063-6CF-EDIN-X			
	3	Amphenol Antel BXA-70080-4CF-EDIN-X			
	3	Alcatel-Lucent RRH2X60-AWS Band 4			
	6	Commscope HBXX-6517DS-A2M			
	6	RFS FD9R6004/2C-3L (3.1 lbs)			
	3	Alcatel-Lucent RRH2X60-1900			

Equipment to be Removed

Elev.[1] (ft)	Qty	Antenna	Mount Type	Lines	Carrier
154.0	3	Ericsson RRUS 12	Platform with Handrails	(6) 1 5/8" Coax (1) 3" conduit	AT&T MOBILITY
	3	Ericsson RRUS-11			
	3	Powerwave Allgon 7770.00			
	2	KMW AM-X-CD-17-65-00T-RET (96" Height)			
	1	Andrew SBNH-1D6565C (60.8 lbs)			
39.0	1	Generic 0.5' Omni	-	(1) 1/2" Coax	

Proposed Equipment

Elev.[1] (ft)	Qty	Antenna	Mount Type	Lines	Carrier
154.0	1	Raycap DC6-48-60-18-8F (23.5" Height)	Platform with Handrails with Site Pro 1 P/N HRK12 Kit	(2) 0.39" (10mm) Fiber Trunk (4) 0.78" (19.7mm) 8 AWG 6 (3) 2" conduit	AT&T MOBILITY
	3	Ericsson RRUS 8843 B2, B66A			
	3	Ericsson RRUS 4478 B14			
	3	Ericsson RRUS 4415 B30			
	3	Ericsson RRUS 4449 B5, B12			
	3	CCI HPA65R-BU8A			
	3	CCI DMP65R-BU8D			
	3	CCI OPA65R-BU8D			

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

Install proposed lines inside the pole shaft.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	84%	Pass
Shaft	99%	Pass
Base Plate	57%	Pass
Flange Plate	81%	Pass
Reinforcement	77%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Moment (Kips-Ft)	2,440.6	95%
Axial (Kips)	48.0	76%
Shear (Kips)	24.4	24%

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) (°)
150.0	Raycap DC6-48-60-18-8F (23.5" Height)	AT&T MOBILITY	2.420	2.037
	Ericsson RRUS 8843 B2, B66A			
	Ericsson RRUS 4478 B14			
	Ericsson RRUS 4415 B30			
	Ericsson RRUS 4449 B5, B12			
	CCI HPA65R-BU8A			
	CCI DMP65R-BU8D			
	CCI OPA65R-BU8D			

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

Standard Conditions

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

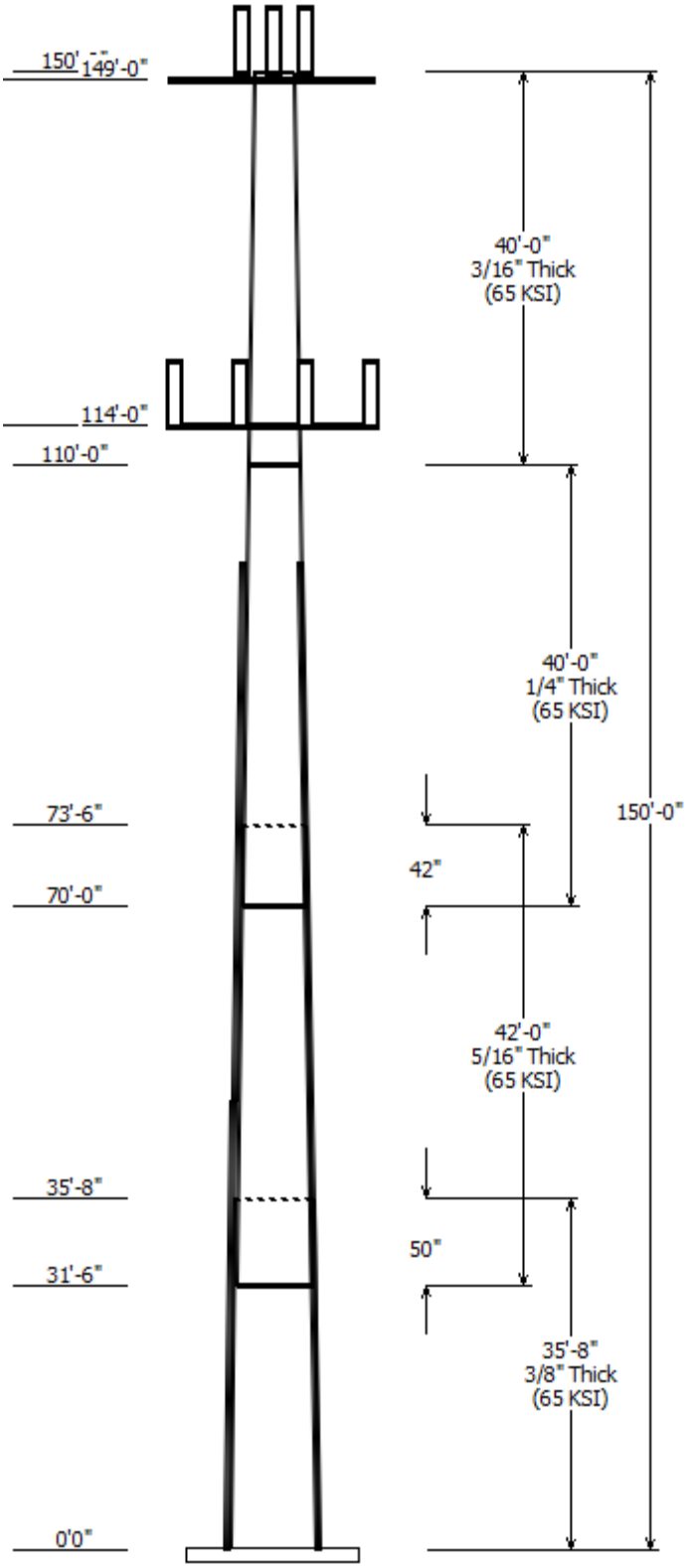
- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

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

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

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

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



Job Information

Client :	AT&T MOBILITY		
Pole :	302498-post mod	Code:	ANSI/TIA-222-H
Location :	Plainfield CT 6, CT		
Description :	150' ITT Meyer Type "B" Monopole	Risk Category :	II
Shape :	12 Sides	Exposure :	B
Height :	150.00 (ft)	Topo Method :	Method 1
Base Elev (ft):	0.00	Topographic Category :	1
Taper:	0.156706 (in/ft)		

Sections Properties

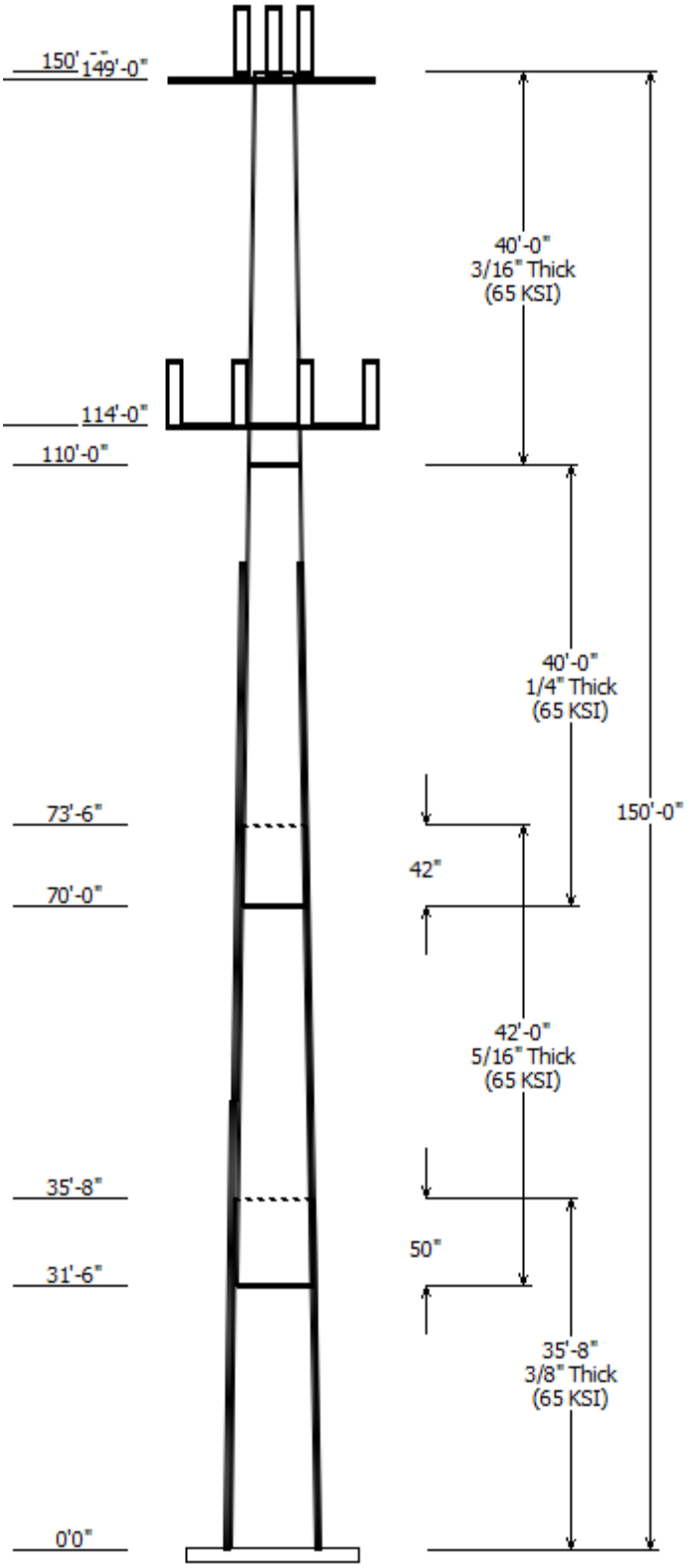
Shaft Section	Length (ft)	Diameter (in) Accross Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Shape	Steel Grade (ksi)
1	35.667	31.79	37.38	0.375		0.000	12 Sides	65
2	42.000	26.48	33.06	0.313	Slip Joint	50.000	12 Sides	65
3	40.000	21.26	27.53	0.250	Slip Joint	42.000	12 Sides	65
4	40.000	14.99	21.26	0.188	Butt Joint	0.000	12 Sides	65

Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Qty	Description
150.000	154.000	3	CCI OPA65R-BU8D
150.000	154.000	3	CCI DMP65R-BU8D
150.000	154.000	3	CCI HPA65R-BU8A
150.000	154.000	3	Powerwave Allgon 7770.00
150.000	154.000	3	Ericsson RRUS 4449 B5, B12
150.000	154.000	3	Ericsson RRUS 4415 B30
150.000	154.000	3	Ericsson RRUS 4478 B14
150.000	154.000	3	Ericsson RRUS 8843 B2, B66A
150.000	154.000	1	Raycap DC6-48-60-18-8F (23.5"
150.000	154.000	1	Raycap DC6-48-60-18-8F (23.5"
150.000	154.000	6	Powerwave Allgon LGP21401
150.000	154.000	6	Powerwave Allgon LGP21901
149.000	149.000	1	Platform w/ HRs w/ SitePro1
149.000	149.000	3	Flat Side Arm
114.000	117.000	6	Commscope HBXX-6517DS-
114.000	114.000	3	Round T-Arms
114.000	117.000	3	Amphenol Antel BXA-70063-
114.000	117.000	1	RFS DB-T1-6Z-8AB-0Z
114.000	117.000	3	Amphenol Antel BXA-70080-
114.000	117.000	3	Alcatel-Lucent RRH2X60-AWS
114.000	117.000	3	Alcatel-Lucent RRH2X60-1900
114.000	117.000	6	RFS FD9R6004/2C-3L (3.1 lbs)

Linear Appurtenance

Elev (ft) From	To	Description	Exposed To Wind
52.500	106.0	#20 w/ Angle	Yes
52.500	106.0	#20 w/ Angle	Yes
52.500	106.0	#20 w/ Angle	Yes
52.500	106.0	#20 w/ Angle	Yes
5.000	114.0	1 5/8" Coax	No
5.000	114.0	1 5/8" Hybriflex	No
5.000	154.0	0.39" (10mm)	No
5.000	154.0	0.78" (19.7mm) 8	No
0.000	52.500	#20 w/ Angle	Yes
0.000	52.500	#20 w/ Angle	Yes
0.000	52.500	#20 w/ Angle	Yes
0.000	52.500	#20 w/ Angle	Yes
0.000	154.0	0.39" (10mm)	No



0.000	154.0	0.78" (19.7mm) 8	No
0.000	154.0	1 5/8" Coax	No
0.000	154.0	2" conduit	No

Load Cases

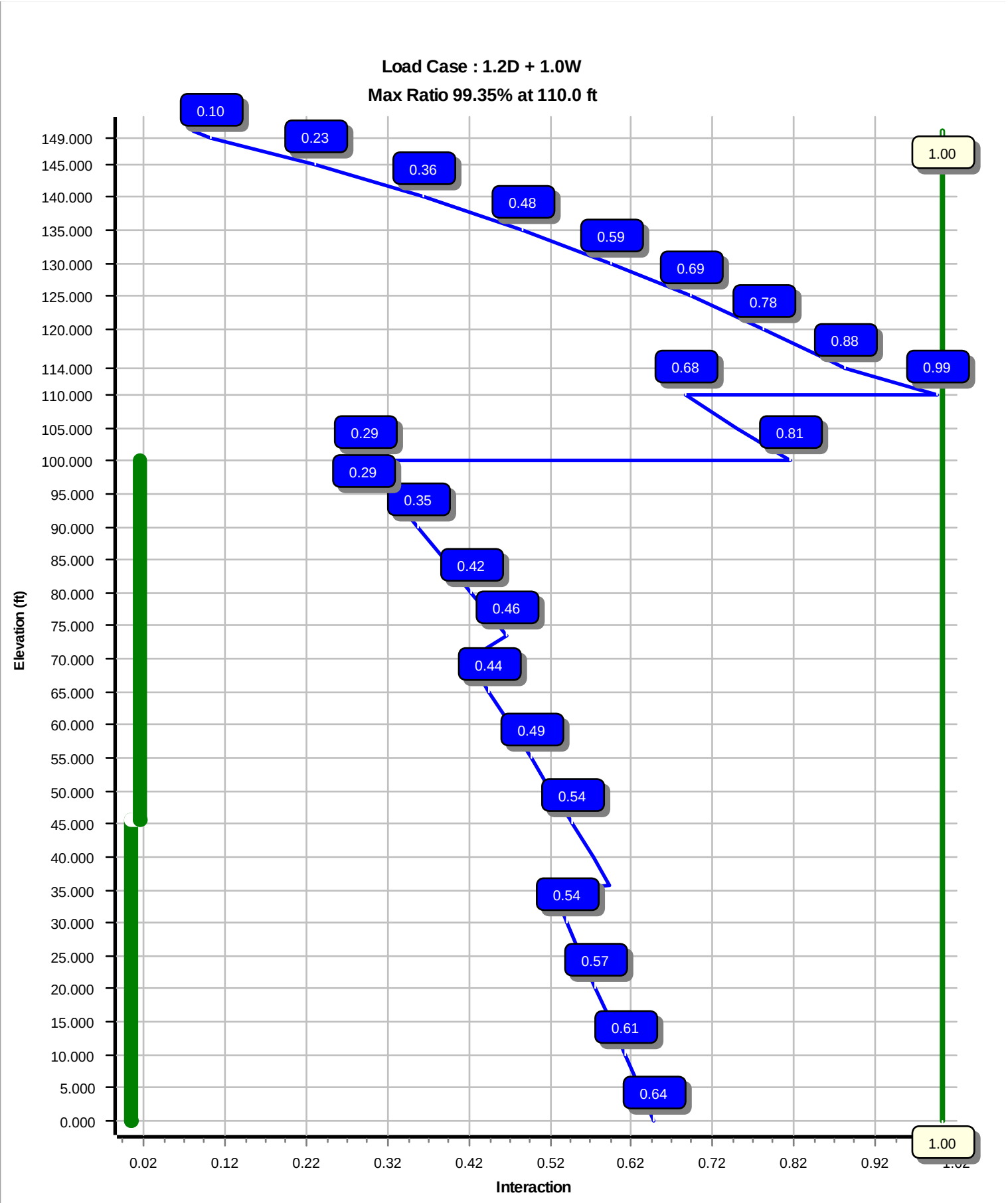
1.2D + 1.0W	121 mph with No Ice
0.9D + 1.0W	121 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	49 mph with 0.85 in Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	Serviceability 60 mph

Reactions

Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.0W	2440.63	24.39	38.66
0.9D + 1.0W	2403.41	24.36	28.98
1.2D + 1.0Di + 1.0Wi	492.11	4.48	47.96
1.2D + 1.0Ev + 1.0Eh	122.43	0.97	38.43
0.9D - 1.0Ev + 1.0Eh	120.02	0.97	26.66
1.0D + 1.0W	534.09	5.38	32.26

Dish Deflections

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


Load Case : 1.2D + 1.0W
Max Ratio 99.35% at 110.0 ft
0.10
0.23
0.36
0.48
0.59
0.69
0.78
0.88
0.99
1.00
0.68
0.81
0.29
0.29
0.35
0.42
0.46
0.44
0.49
0.54
0.54
0.57
0.61
0.64
1.00
149.000
145.000
140.000
135.000
130.000
125.000
120.000
114.000
110.000
105.000
100.000
95.000
90.000
85.000
80.000
75.000
70.000
65.000
60.000
55.000
50.000
45.000
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
Elevation (ft)
0.02
0.12
0.22
0.32
0.42
0.52
0.62
0.72
0.82
0.92
Interaction

Site Number: 302498-post mod	**Code: ANSI/TIA-222-H**	
Site Name: Plainfield CT 6, CT	**Engineering Number:13211930_C4_10**	**2/16/2021 12:54:32 PM**
Customer: AT&T MOBILITY		

Analysis Parameters

Location :	**Windham County, CT**	**Height (ft) :**	**150**
Code :	**ANSI/TIA-222-H**	**Base Diameter (in) :**	**37.38**
Shape :	**12 Sides**	**Top Diameter (in) :**	**15.00**
Pole Type :	**Taper**	**Taper (in/ft) :**	**0.157**
Pole Manfacturer :	**ITT Meyer**	**Rotation (deg) :**	**0.00**
Kd (non-service) :	**0.95**	**Ke :**	**0.98**

Ice & Wind Parameters

Exposure Category:	**B**	**Design Wind Speed Without Ice:**	**121 mph**
Risk Category:	**II**	**Design Wind Speed With Ice:**	**49 mph**
Topographic Factor Procedure:	**Method 1**	**Operational Wind Speed:**	**60 mph**
Topographic Category:	**1**	**Design Ice Thickness:**	**0.85 in**
Crest Height:	**0 ft**	**HMSL:**	**560.00 ft**

Seismic Parameters

Analysis Method:	**Equivalent Lateral Force Method**				
Site Class:	**D - Stiff Soil**				
Period Based on Rayleigh Method (sec):	**2.73**				
T_L (sec):	**6**	**p:**	**1**	**C_s:**	**0.030**
S_s:	**0.187**	**S_1:**	**0.054**	**C_s Max:**	**0.030**
F_a:	**1.600**	**F_v:**	**2.400**	**C_s Min:**	**0.030**
S_{ds}:	**0.199**	**S_{d1}:**	**0.086**		

Load Cases

1.2D + 1.0W	**121 mph with No Ice**
0.9D + 1.0W	**121 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: 302498-post mod | Code: ANSI/TIA-222-H |

Site Name: Plainfield CT 6, CT | Engineering Number:13211930_C4_10 | 2/16/2021 12:54:32 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 Dia (in)	Bottom Elev (ft)	Bottom Area (in²)	Bottom Ix (in⁴)	Bottom W/t Ratio	Bottom D/t Ratio	Top Dia (in)	Top Elev (ft)	Top Area (in²)	Top Ix (in⁴)	Top W/t Ratio	Top D/t Ratio	Taper (in/ft)
1-12	35.667	0.3750	65		0.00	5,014	37.38	0.00	44.68	7810.1	24.03	99.68	31.79	35.67	37.93	4778.8	20.04	84.78	0.156706
2-12	42.000	0.3125	65	Slip	50.00	4,237	33.06	31.50	32.96	4514.1	25.67	105.82	26.48	73.50	26.34	2303.2	20.03	84.76	0.156706
3-12	40.000	0.2500	65	Slip	42.00	2,646	27.53	70.00	21.96	2087.3	26.83	110.14	21.26	110.00	16.92	953.9	20.11	85.07	0.156706
4-12	40.000	0.1875	65	Butt	0.00	1,475	21.26	110.00	12.73	721.8	27.71	113.43	14.99	150.00	8.94	250.4	18.76	79.99	0.156706
				Shaft Weight		13,372													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	No Ice Weight (lb)	No Ice EPAa (sf)	No Ice Orientation Factor	Ice Weight (lb)	Ice EPAa (sf)	Ice Orientation Factor
150.00	Powerwave Allgon LGP21901	6	0.75	4.000	5.50	0.200	0.50	9.86	0.381	0.50
150.00	Powerwave Allgon LGP21401	6	0.75	4.000	14.10	1.104	0.50	28.26	1.509	0.50
150.00	Raycap DC6-48-60-18-8F (23.5"	1	0.75	4.000	20.00	1.260	1.00	49.89	1.634	1.00
150.00	Raycap DC6-48-60-18-8F (23.5"	1	0.75	4.000	20.00	1.260	1.00	49.89	1.634	1.00
150.00	Ericsson RRUS 8843 B2, B66A	3	0.75	4.000	72.00	1.639	0.50	106.79	2.119	0.50
150.00	Ericsson RRUS 4478 B14	3	0.75	4.000	59.90	1.842	0.50	91.29	2.351	0.50
150.00	Ericsson RRUS 4415 B30	3	0.75	4.000	46.00	1.842	0.50	73.83	2.351	0.50
150.00	Ericsson RRUS 4449 B5, B12	3	0.75	4.000	71.00	1.969	0.50	107.58	2.498	0.50
150.00	Powerwave Allgon 7770.00	3	0.75	4.000	35.00	5.508	0.65	104.16	6.087	0.65
150.00	CCI HPA65R-BU8A	3	0.75	4.000	54.00	11.230	0.71	185.86	13.060	0.71
150.00	CCI DMP65R-BU8D	3	0.75	4.000	95.70	17.871	0.63	288.63	19.963	0.63
150.00	CCI OPA65R-BU8D	3	0.75	4.000	76.50	18.089	0.63	272.23	20.185	0.63
149.00	Flat Side Arm	3	1.00	0.000	150.00	5.000	0.67	191.45	6.105	0.67
149.00	Platform w/ HRs w/ SitePro1 HRK	1	1.00	0.000	2,500.00	44.500	1.00	3,486.96	62.068	1.00
114.00	RFS FD9R6004/2C-3L (3.1 lbs)	6	0.80	3.000	3.10	0.314	0.50	7.52	0.527	0.50
114.00	Alcatel-Lucent RRH2X60-1900	3	0.80	3.000	43.00	1.876	0.50	73.51	2.393	0.50
114.00	Alcatel-Lucent RRH2X60-AWS	3	0.80	3.000	55.00	3.347	0.50	99.50	4.144	0.50
114.00	Amphenol Antel BXA-70080-4CF-	3	0.80	3.000	12.00	3.570	0.72	59.92	4.589	0.72
114.00	RFS DB-T1-6Z-8AB-0Z	1	0.80	3.000	44.00	4.800	1.00	113.41	5.584	1.00
114.00	Amphenol Antel BXA-70063-6CF-	3	0.80	3.000	17.00	7.569	0.66	98.61	9.090	0.66
114.00	Round T-Arms	3	0.75	0.000	250.00	8.000	0.67	365.26	11.750	0.67
114.00	Commscope HBXX-6517DS-A2M	6	0.80	3.000	40.80	8.528	0.68	137.80	10.130	0.68
Totals	Num Loadings:22	70			6,076.30			11,156.67		

Linear Appurtenance Properties

Load Case Azimuth (deg) :

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Dia (in)	Coax Wt (lb/ft)	Flat	Max Coax / Row	Dist Between Rows (in)	Dist Between Cols (in)	Azimuth (deg)	Dist From Face (in)	Exposed To Wind	Carrier
0.00	154.00	2	0.39" (10mm) Fiber	0.39	0.06	N	0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	154.00	4	0.78" (19.7mm) 8 AWG	0.78	0.59	N	0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	154.00	6	1 5/8" Coax	1.98	0.82	N	0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	154.00	3	2" conduit	2.38	3.65	N	0	0.00	0.00	0	0.00	N	AT&T MOBILITY
5.00	154.00	1	0.39" (10mm) Fiber	0.39	0.06	N	0	0.00	0.00	0	0.00	N	AT&T MOBILITY
5.00	154.00	2	0.78" (19.7mm) 8 AWG	0.78	0.59	N	0	0.00	0.00	0	0.00	N	AT&T MOBILITY
5.00	114.00	12	1 5/8" Coax	1.98	0.82	N	0	0.00	0.00	0	0.00	N	VERIZON WIRELESS
5.00	114.00	1	1 5/8" Hybriflex	1.98	1.30	N	0	0.00	0.00	0	0.00	N	VERIZON WIRELESS
52.50	106.00	1	#20 w/ Angle Brackets	4.00	4.68	N	1	0.00	0.00	0	1.00	Y	
52.50	106.00	1	#20 w/ Angle Brackets	4.00	4.68	N	1	0.00	0.00	90	1.00	Y	
52.50	106.00	1	#20 w/ Angle Brackets	4.00	4.68	N	1	0.00	0.00	180	1.00	Y	
52.50	106.00	1	#20 w/ Angle Brackets	4.00	4.68	N	1	0.00	0.00	270	1.00	Y	

0.00	52.50	1	#20 w/ Angle Brackets	4.00	4.68	N	1	0.00	0.00	180	1.00	Y
0.00	52.50	1	#20 w/ Angle Brackets	4.00	4.68	N	1	0.00	0.00	0	1.00	Y
0.00	52.50	1	#20 w/ Angle Brackets	4.00	4.68	N	1	0.00	0.00	90	1.00	Y
0.00	52.50	1	#20 w/ Angle Brackets	4.00	4.68	N	1	0.00	0.00	270	1.00	Y

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Offset (in)	Intermediate Connections			Connectors	Continuation?
						Description	Spacing (in)	Len (in)		
0.00	45.50	4	SOL #20 All Thread	80	2.19	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	No
45.50	100.0	4	SOL #20 All Thread	80	2.19	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	Yes

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)	Additional Reinforcing Ix (in^4)	Additional Reinforcing Weight (lb)
0.00		0.3750	37.380	44.684	7,810.1	24.03	99.68	78.5	403.6	0.0	0.0	19.64	4,816	0.0
5.00		0.3750	36.596	43.737	7,324.4	23.47	97.59	79.1	386.6	0.0	752.2	19.64	4,648	334.0
10.00		0.3750	35.813	42.791	6,859.3	22.91	95.50	79.7	370.0	0.0	736.1	19.64	4,482	334.0
15.00		0.3750	35.029	41.845	6,414.3	22.35	93.41	80.3	353.7	0.0	720.0	19.64	4,319	334.0
20.00		0.3750	34.246	40.899	5,989.0	21.79	91.32	80.9	337.8	0.0	703.9	19.64	4,159	334.0
25.00		0.3750	33.462	39.953	5,582.9	21.23	89.23	81.6	322.3	0.0	687.8	19.64	4,003	334.0
30.00		0.3750	32.679	39.007	5,195.6	20.67	87.14	81.9	307.1	0.0	671.7	19.64	3,849	334.0
31.50	Bot - Section 2	0.3750	32.444	38.723	5,083.0	20.50	86.52	81.9	302.7	0.0	198.4	19.64	3,804	100.2
35.00		0.3750	31.895	38.061	4,826.6	20.11	85.05	81.9	292.3	0.0	846.5	19.64	3,818	233.8
35.67	Top - Section 1	0.3125	32.416	32.304	4,249.5	25.12	103.73	77.3	253.3	0.0	159.6	19.64	3,798	44.5
40.00		0.3125	31.737	31.621	3,985.5	24.53	101.56	78.0	242.6	0.0	471.3	19.64	3,668	289.5
45.00		0.3125	30.953	30.832	3,694.8	23.86	99.05	78.7	230.6	0.0	531.3	19.64	3,521	334.0
45.50	Reinf. Top Reinf	0.3125	30.875	30.753	3,666.5	23.79	98.80	78.8	229.4	0.0	52.4	19.64	3,507	33.4
50.00		0.3125	30.170	30.044	3,418.5	23.19	96.54	79.4	218.9	0.0	465.5	19.64	3,377	300.6
55.00		0.3125	29.386	29.255	3,156.4	22.52	94.04	80.2	207.5	0.0	504.5	19.64	3,236	334.0
60.00		0.3125	28.603	28.467	2,908.0	21.85	91.53	80.9	196.4	0.0	491.0	19.64	3,098	334.0
65.00		0.3125	27.819	27.679	2,673.0	21.17	89.02	81.6	185.6	0.0	477.6	19.64	2,963	334.0
70.00	Bot - Section 3	0.3125	27.036	26.890	2,451.0	20.50	86.51	81.9	175.1	0.0	464.2	19.64	2,831	334.0
73.50	Top - Section 2	0.2500	26.987	21.523	1,963.9	26.25	107.95	76.1	140.6	0.0	575.9	19.64	2,823	233.8
75.00		0.2500	26.752	21.334	1,912.6	25.99	107.01	76.4	138.1	0.0	109.4	19.64	2,784	100.2
80.00		0.2500	25.968	20.703	1,747.9	25.15	103.87	77.3	130.0	0.0	357.6	19.64	2,656	334.0
85.00		0.2500	25.185	20.073	1,593.0	24.31	100.74	78.2	122.2	0.0	346.9	19.64	2,531	334.0
90.00		0.2500	24.401	19.442	1,447.5	23.47	97.61	79.1	114.6	0.0	336.1	19.64	2,410	334.0
95.00		0.2500	23.618	18.811	1,311.1	22.63	94.47	80.0	107.2	0.0	325.4	19.64	2,291	334.0
100.0		0.2500	22.834	18.180	1,183.6	21.79	91.34	80.9	100.1	0.0	314.7	19.64	2,175	334.0
100.0	Reinf. Top	0.2500	22.822	18.170	1,181.6	21.78	91.29	81.0	100.0	0.0	4.9	19.64	2,173	5.3
105.0		0.2500	22.051	17.550	1,064.6	20.95	88.20	81.9	93.3	0.0	299.0			
110.0	Top - Section 3	0.2500	21.267	16.919	953.9	20.11	85.07	81.9	86.7	0.0	293.2			
110.0	Bot - Section 4	0.1875	21.267	12.727	721.8	27.71	113.43	74.5	65.6	0.0				
114.0		0.1875	20.640	12.348	659.3	26.82	110.08	75.5	61.7	0.0	170.7			
115.0		0.1875	20.484	12.254	644.3	26.59	109.25	75.7	60.8	0.0	41.9			
120.0		0.1875	19.700	11.781	572.5	25.47	105.07	76.9	56.1	0.0	204.5			
125.0		0.1875	18.917	11.308	506.3	24.35	100.89	78.2	51.7	0.0	196.4			
130.0		0.1875	18.133	10.835	445.4	23.23	96.71	79.4	47.4	0.0	188.4			
135.0		0.1875	17.350	10.362	389.5	22.11	92.53	80.6	43.4	0.0	180.3			
140.0		0.1875	16.566	9.889	338.6	20.99	88.35	81.8	39.5	0.0	172.3			
145.0		0.1875	15.783	9.416	292.3	19.87	84.17	81.9	35.8	0.0	164.2			
149.0		0.1875	15.156	9.037	258.4	18.98	80.83	81.9	32.9	0.0	125.6			
150.0		0.1875	14.999	8.942	250.4	18.76	79.99	81.9	32.3	0.0	30.6			
											13,371.9			6,685.3

Site Number: 302498-post mod
Site Name: Plainfield CT 6, CT
Customer: AT&T MOBILITY

Code: ANSI/TIA-222-H
Engineering Number:13211930_C4_10

2/16/2021 12:54:32 PM

Load Case: 1.2D + 1.0W — 121 mph with No Ice — 27 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 Wind FX (lb)	Shaft Forces Dead Load (lb)	Discrete Forces Wind FX (lb)	Discrete Forces Torsion MY (lb-ft)	Discrete Forces Moment MZ (lb-ft)	Discrete Forces Dead Load (lb)	Linear Forces Wind FX (lb)	Linear Forces Dead Load (lb)	Sum of Forces Wind FX (lb)	Sum of Forces Dead Load (lb)	Sum of Forces Torsion MY (lb-ft)	Sum of Forces Moment MZ (lb)
0.00		256.6	0.0					0.0	0.0	256.6	0.0	0.0	0.0
5.00		507.8	902.6					107.2	623.2	615.0	1,525.8	0.0	0.0
10.00		496.9	883.3					107.2	697.5	604.1	1,580.8	0.0	0.0
15.00		486.0	864.0					107.2	697.5	593.3	1,561.5	0.0	0.0
20.00		475.2	844.7					107.2	697.5	582.4	1,542.2	0.0	0.0
25.00		464.3	825.4					107.2	697.5	571.5	1,522.9	0.0	0.0
30.00		297.7	806.0					107.2	697.5	405.0	1,503.5	0.0	0.0
31.50	Bot - Section 2	232.5	238.0					32.4	209.3	264.9	447.3	0.0	0.0
35.00		195.6	1,015.8					77.4	488.2	273.0	1,504.1	0.0	0.0
35.67	Top - Section 1	237.8	191.5					15.0	93.0	252.7	284.5	0.0	0.0
40.00		446.7	565.6					99.4	604.5	546.0	1,170.1	0.0	0.0
45.00		264.6	637.5					118.5	697.5	383.1	1,335.0	0.0	0.0
45.50	Reinf. Top Reinf	242.0	62.9					12.1	69.7	254.0	132.6	0.0	0.0
50.00		460.4	558.6					110.3	627.7	570.7	1,186.3	0.0	0.0
55.00		485.1	605.3					125.9	697.5	611.0	1,302.8	0.0	0.0
60.00		484.0	589.2					129.2	697.5	613.3	1,286.7	0.0	0.0
65.00		481.7	573.2					132.3	697.5	614.0	1,270.6	0.0	0.0
70.00	Bot - Section 3	410.1	557.1					135.3	697.5	545.4	1,254.6	0.0	0.0
73.50	Top - Section 2	242.5	691.1					96.4	488.2	338.9	1,179.4	0.0	0.0
75.00		312.6	131.3					41.7	209.2	354.3	340.5	0.0	0.0
80.00		477.2	429.1					140.7	697.5	617.9	1,126.6	0.0	0.0
85.00		470.8	416.3					143.3	697.5	614.1	1,113.8	0.0	0.0
90.00		463.7	403.4					145.7	697.5	609.4	1,100.9	0.0	0.0
95.00		455.8	390.5					147.3	697.5	603.1	1,088.0	0.0	0.0
100.00		229.4	377.6					148.4	697.5	377.8	1,075.1	0.0	0.0
100.08	Reinf. Top	221.4	5.9					2.4	11.2	223.7	17.1	0.0	0.0
105.00		434.4	358.8					147.0	292.0	581.4	650.8	0.0	0.0
110.00	Top - Section 3	350.8	351.9					150.5	206.8	501.3	558.7	0.0	0.0
114.00	Appurtenance(s)	167.4	204.8	2,724.0	0.0	6,750.7	1,726.1	0.0	147.5	2,891.4	2,078.4	0.0	0.0
115.00		196.3	50.2					0.0	23.5	196.3	73.7	0.0	0.0
120.00		321.8	245.4					0.0	117.5	321.8	362.9	0.0	0.0
125.00		312.6	235.7					0.0	117.5	312.6	353.2	0.0	0.0
130.00		303.0	226.0					0.0	117.5	303.0	343.6	0.0	0.0
135.00		293.1	216.4					0.0	117.5	293.1	333.9	0.0	0.0
140.00		282.8	206.7					0.0	117.5	282.8	324.3	0.0	0.0
145.00		245.9	197.1					0.0	117.5	245.9	314.6	0.0	0.0
149.00	Appurtenance(s)	133.3	150.7	2,313.4	0.0	0.0	3,540.0	0.0	94.0	2,446.8	3,784.7	0.0	0.0
150.00	Appurtenance(s)	26.2	36.7	3,852.8	0.0	15,411.2	2,025.5	0.0	23.5	3,879.0	2,085.7	0.0	0.0
								Totals:		24,550.6	38,717.2	0.00	0.00

Code: ANSI/TIA-222-H
Engineering Number:13211930_C4_10

2/16/2021 12:54:35 PM

Load Case: 1.2D + 1.0W — 121 mph with No Ice — 27 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	-38.66	-24.39	0.00	-2,440.63	0.00	2,440.63	3,157.17	784.20	2,737.77	2,376.61	0.00	0.00	0.645
5.00	-37.02	-23.94	0.00	-2,318.70	0.00	2,318.70	3,114.35	767.59	2,623.10	2,294.24	0.14	-0.27	0.627
10.00	-35.34	-23.49	0.00	-2,198.99	0.00	2,198.99	3,070.50	750.99	2,510.88	2,212.51	0.57	-0.54	0.610
15.00	-33.67	-23.04	0.00	-2,081.54	0.00	2,081.54	3,025.61	734.38	2,401.12	2,131.45	1.27	-0.80	0.592
20.00	-32.04	-22.58	0.00	-1,966.35	0.00	1,966.35	2,979.67	717.78	2,293.81	2,051.12	2.26	-1.07	0.574
25.00	-30.42	-22.12	0.00	-1,853.45	0.00	1,853.45	2,932.70	701.17	2,188.95	1,971.58	3.53	-1.34	0.555
30.00	-28.87	-21.76	0.00	-1,742.85	0.00	1,742.85	2,875.19	684.57	2,086.54	1,886.63	5.08	-1.61	0.538
31.50	-28.38	-21.55	0.00	-1,710.21	0.00	1,710.21	2,854.27	679.59	2,056.30	1,859.12	5.59	-1.69	0.534
35.00	-26.84	-21.28	0.00	-1,634.78	0.00	1,634.78	2,805.46	667.97	1,986.59	1,795.71	6.90	-1.88	0.516
35.67	-26.51	-21.08	0.00	-1,620.59	0.00	1,620.59	2,248.06	566.93	1,717.05	1,468.68	7.17	-1.91	0.591
40.00	-25.27	-20.61	0.00	-1,529.23	0.00	1,529.23	2,218.58	554.94	1,645.20	1,418.47	9.01	-2.14	0.570
45.00	-23.90	-20.23	0.00	-1,426.19	0.00	1,426.19	2,183.59	541.11	1,564.21	1,360.95	11.40	-2.41	0.545
45.50	-23.73	-20.03	0.00	-1,416.08	0.00	1,416.08	2,180.04	539.72	1,556.22	1,355.22	11.65	-2.44	0.542
45.50	-23.73	-20.03	0.00	-1,416.08	0.00	1,416.08	2,180.04	539.72	1,556.22	1,355.22	11.65	-2.44	0.542
50.00	-22.49	-19.51	0.00	-1,325.93	0.00	1,325.93	2,147.57	527.27	1,485.26	1,303.92	14.07	-2.69	0.519
55.00	-21.13	-18.93	0.00	-1,228.39	0.00	1,228.39	2,110.50	513.43	1,408.36	1,247.44	17.03	-2.95	0.494
60.00	-19.79	-18.34	0.00	-1,133.73	0.00	1,133.73	2,072.40	499.59	1,333.50	1,191.56	20.26	-3.22	0.468
65.00	-18.48	-17.74	0.00	-1,042.02	0.00	1,042.02	2,033.25	485.76	1,260.68	1,136.32	23.76	-3.47	0.442
70.00	-17.20	-17.18	0.00	-953.34	0.00	953.34	1,982.07	471.92	1,189.91	1,075.81	27.54	-3.73	0.418
73.50	-16.01	-16.79	0.00	-893.22	0.00	893.22	1,473.95	377.73	952.77	802.29	30.33	-3.90	0.464
75.00	-15.65	-16.46	0.00	-868.03	0.00	868.03	1,466.27	374.41	936.10	791.03	31.57	-3.97	0.454
80.00	-14.50	-15.83	0.00	-785.72	0.00	785.72	1,439.98	363.34	881.58	753.67	35.86	-4.22	0.421
85.00	-13.37	-15.19	0.00	-706.58	0.00	706.58	1,412.66	352.27	828.70	716.63	40.41	-4.46	0.387
90.00	-12.27	-14.54	0.00	-630.64	0.00	630.64	1,384.30	341.21	777.46	679.95	45.21	-4.69	0.354
95.00	-11.18	-13.89	0.00	-557.95	0.00	557.95	1,354.89	330.14	727.85	643.70	50.24	-4.91	0.321
100.00	-10.12	-13.44	0.00	-488.50	0.00	488.50	1,324.45	319.07	679.87	607.91	55.49	-5.12	0.289
100.08	-10.10	-13.23	0.00	-487.43	0.00	487.43	1,323.95	318.89	679.12	607.34	55.57	-5.12	0.288
100.08	-10.10	-13.23	0.00	-487.43	0.00	487.43	1,323.95	318.89	679.12	607.34	55.57	-5.12	0.812
105.00	-9.43	-12.65	0.00	-422.34	0.00	422.34	1,292.97	308.00	633.54	572.65	60.95	-5.31	0.746
110.00	-8.82	-12.17	0.00	-359.08	0.00	359.08	1,247.09	296.93	588.83	532.25	66.79	-5.84	0.683
110.00	-8.82	-12.17	0.00	-359.08	0.00	359.08	853.22	223.36	444.16	366.32	66.79	-5.84	0.994
114.00	-7.02	-9.11	0.00	-303.66	0.00	303.66	838.71	216.72	418.15	349.29	71.84	-6.24	0.879
115.00	-6.91	-8.95	0.00	-294.55	0.00	294.55	834.98	215.06	411.77	345.05	73.16	-6.36	0.864
120.00	-6.50	-8.65	0.00	-249.81	0.00	249.81	815.69	206.75	380.60	323.94	80.13	-6.97	0.781
125.00	-6.11	-8.36	0.00	-206.54	0.00	206.54	795.37	198.45	350.66	303.07	87.72	-7.53	0.691
130.00	-5.74	-8.06	0.00	-164.75	0.00	164.75	774.00	190.15	321.94	282.47	95.87	-8.05	0.592
135.00	-5.39	-7.76	0.00	-124.45	0.00	124.45	751.60	181.85	294.45	262.19	104.52	-8.52	0.484
140.00	-5.07	-7.46	0.00	-85.64	0.00	85.64	728.15	173.54	268.19	242.29	113.62	-8.90	0.362
145.00	-4.78	-7.19	0.00	-48.33	0.00	48.33	694.02	165.24	243.15	219.76	123.07	-9.18	0.229
149.00	-1.43	-4.17	0.00	-19.58	0.00	19.58	666.12	158.60	224.01	202.35	130.79	-9.31	0.100
150.00	0.00	-3.88	0.00	-15.41	0.00	15.41	659.15	156.94	219.34	198.11	132.73	-9.33	0.078

Site Number: 302498-post mod
Site Name: Plainfield CT 6, CT
Customer: AT&T MOBILITY

Code: ANSI/TIA-222-H
Engineering Number:13211930_C4_10

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Load Case: 0.9D + 1.0W — 121 mph with No Ice (Reduced DL) — 27 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 Wind FX (lb)	Shaft Forces Dead Load (lb)	Discrete Forces Wind FX (lb)	Discrete Forces Torsion MY (lb-ft)	Discrete Forces Moment MZ (lb-ft)	Discrete Forces Dead Load (lb)	Linear Forces Wind FX (lb)	Linear Forces Dead Load (lb)	Sum of Forces Wind FX (lb)	Sum of Forces Dead Load (lb)	Sum of Forces Torsion MY (lb-ft)	Sum of Forces Moment MZ (lb)
0.00		256.6	0.0					0.0	0.0	256.6	0.0	0.0	0.0
5.00		507.8	677.0					107.2	467.4	615.0	1,144.4	0.0	0.0
10.00		496.9	662.5					107.2	523.1	604.1	1,185.6	0.0	0.0
15.00		486.0	648.0					107.2	523.1	593.3	1,171.1	0.0	0.0
20.00		475.2	633.5					107.2	523.1	582.4	1,156.6	0.0	0.0
25.00		464.3	619.0					107.2	523.1	571.5	1,142.1	0.0	0.0
30.00		297.7	604.5					107.2	523.1	405.0	1,127.7	0.0	0.0
31.50	Bot - Section 2	232.5	178.5					32.4	156.9	264.9	335.5	0.0	0.0
35.00		195.6	761.9					77.4	366.2	273.0	1,128.0	0.0	0.0
35.67	Top - Section 1	237.8	143.6					15.0	69.8	252.7	213.4	0.0	0.0
40.00		446.7	424.2					99.4	453.4	546.0	877.5	0.0	0.0
45.00		264.6	478.2					118.5	523.1	383.1	1,001.3	0.0	0.0
45.50	Reinf. Top Reinf	242.0	47.2					12.1	52.3	254.0	99.5	0.0	0.0
50.00		460.4	418.9					110.3	470.8	570.7	889.7	0.0	0.0
55.00		485.1	454.0					125.9	523.1	611.0	977.1	0.0	0.0
60.00		484.0	441.9					129.2	523.1	613.3	965.1	0.0	0.0
65.00		481.7	429.9					132.3	523.1	614.0	953.0	0.0	0.0
70.00	Bot - Section 3	410.1	417.8					135.3	523.1	545.4	940.9	0.0	0.0
73.50	Top - Section 2	242.5	518.3					96.4	366.2	338.9	884.5	0.0	0.0
75.00		312.6	98.4					41.7	156.9	354.3	255.4	0.0	0.0
80.00		477.2	321.8					140.7	523.1	617.9	845.0	0.0	0.0
85.00		470.8	312.2					143.3	523.1	614.1	835.3	0.0	0.0
90.00		463.7	302.5					145.7	523.1	609.4	825.7	0.0	0.0
95.00		455.8	292.9					147.3	523.1	603.1	816.0	0.0	0.0
100.00		229.4	283.2					148.4	523.1	377.8	806.3	0.0	0.0
100.08	Reinf. Top	221.4	4.5					2.4	8.4	223.7	12.8	0.0	0.0
105.00		434.4	269.1					147.0	219.0	581.4	488.1	0.0	0.0
110.00	Top - Section 3	350.8	263.9					150.5	155.1	501.3	419.0	0.0	0.0
114.00	Appurtenance(s)	167.4	153.6	2,724.0	0.0	6,750.7	1,294.6	0.0	110.6	2,891.4	1,558.8	0.0	0.0
115.00		196.3	37.7					0.0	17.6	196.3	55.3	0.0	0.0
120.00		321.8	184.0					0.0	88.2	321.8	272.2	0.0	0.0
125.00		312.6	176.8					0.0	88.2	312.6	264.9	0.0	0.0
130.00		303.0	169.5					0.0	88.2	303.0	257.7	0.0	0.0
135.00		293.1	162.3					0.0	88.2	293.1	250.4	0.0	0.0
140.00		282.8	155.0					0.0	88.2	282.8	243.2	0.0	0.0
145.00		245.9	147.8					0.0	88.2	245.9	236.0	0.0	0.0
149.00	Appurtenance(s)	133.3	113.0	2,313.4	0.0	0.0	2,655.0	0.0	70.5	2,446.8	2,838.5	0.0	0.0
150.00	Appurtenance(s)	26.2	27.5	3,852.8	0.0	15,411.2	1,519.1	0.0	17.6	3,879.0	1,564.3	0.0	0.0
								Totals:		24,550.6	29,037.9	0.00	0.00

Code: ANSI/TIA-222-H
Engineering Number:13211930_C4_10

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Load Case: 0.9D + 1.0W — 121 mph with No Ice (Reduced DL) — 27 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	-28.98	-24.36	0.00	-2,403.41	0.00	2,403.41	3,157.17	784.20	2,737.77	2,376.61	0.00	0.00	0.633
5.00	-27.73	-23.87	0.00	-2,281.60	0.00	2,281.60	3,114.35	767.59	2,623.10	2,294.24	0.14	-0.26	0.616
10.00	-26.44	-23.38	0.00	-2,162.24	0.00	2,162.24	3,070.50	750.99	2,510.88	2,212.51	0.56	-0.53	0.598
15.00	-25.17	-22.89	0.00	-2,045.34	0.00	2,045.34	3,025.61	734.38	2,401.12	2,131.45	1.25	-0.79	0.580
20.00	-23.92	-22.40	0.00	-1,930.88	0.00	1,930.88	2,979.67	717.78	2,293.81	2,051.12	2.22	-1.06	0.562
25.00	-22.69	-21.91	0.00	-1,818.88	0.00	1,818.88	2,932.70	701.17	2,188.95	1,971.58	3.47	-1.32	0.543
30.00	-21.51	-21.54	0.00	-1,709.33	0.00	1,709.33	2,875.19	684.57	2,086.54	1,886.63	4.99	-1.58	0.526
31.50	-21.13	-21.31	0.00	-1,677.02	0.00	1,677.02	2,854.27	679.59	2,056.30	1,859.12	5.50	-1.66	0.522
35.00	-19.97	-21.05	0.00	-1,602.42	0.00	1,602.42	2,805.46	667.97	1,986.59	1,795.71	6.79	-1.84	0.504
35.67	-19.72	-20.83	0.00	-1,588.39	0.00	1,588.39	2,248.06	566.93	1,717.05	1,468.68	7.05	-1.88	0.578
40.00	-18.78	-20.33	0.00	-1,498.13	0.00	1,498.13	2,218.58	554.94	1,645.20	1,418.47	8.86	-2.10	0.557
45.00	-17.74	-19.96	0.00	-1,396.46	0.00	1,396.46	2,183.59	541.11	1,564.21	1,360.95	11.20	-2.37	0.532
45.50	-17.60	-19.74	0.00	-1,386.48	0.00	1,386.48	2,180.04	539.72	1,556.22	1,355.22	11.45	-2.40	0.529
45.50	-17.60	-19.74	0.00	-1,386.48	0.00	1,386.48	2,180.04	539.72	1,556.22	1,355.22	11.45	-2.40	0.529
50.00	-16.66	-19.21	0.00	-1,297.64	0.00	1,297.64	2,147.57	527.27	1,485.26	1,303.92	13.82	-2.64	0.507
55.00	-15.63	-18.62	0.00	-1,201.62	0.00	1,201.62	2,110.50	513.43	1,408.36	1,247.44	16.72	-2.90	0.481
60.00	-14.61	-18.02	0.00	-1,108.52	0.00	1,108.52	2,072.40	499.59	1,333.50	1,191.56	19.90	-3.15	0.456
65.00	-13.62	-17.41	0.00	-1,018.42	0.00	1,018.42	2,033.25	485.76	1,260.68	1,136.32	23.33	-3.41	0.430
70.00	-12.66	-16.86	0.00	-931.36	0.00	931.36	1,982.07	471.92	1,189.91	1,075.81	27.03	-3.65	0.407
73.50	-11.76	-16.48	0.00	-872.36	0.00	872.36	1,473.95	377.73	952.77	802.29	29.77	-3.82	0.452
75.00	-11.49	-16.15	0.00	-847.64	0.00	847.64	1,466.27	374.41	936.10	791.03	30.99	-3.89	0.442
80.00	-10.62	-15.52	0.00	-766.91	0.00	766.91	1,439.98	363.34	881.58	753.67	35.19	-4.14	0.409
85.00	-9.77	-14.88	0.00	-689.33	0.00	689.33	1,412.66	352.27	828.70	716.63	39.65	-4.37	0.377
90.00	-8.94	-14.24	0.00	-614.93	0.00	614.93	1,384.30	341.21	777.46	679.95	44.35	-4.60	0.344
95.00	-8.13	-13.60	0.00	-543.72	0.00	543.72	1,354.89	330.14	727.85	643.70	49.28	-4.81	0.312
100.00	-7.34	-13.17	0.00	-475.70	0.00	475.70	1,324.45	319.07	679.87	607.91	54.42	-5.01	0.280
100.08	-7.32	-12.96	0.00	-474.65	0.00	474.65	1,323.95	318.89	679.12	607.34	54.50	-5.02	0.280
100.08	-7.32	-12.96	0.00	-474.65	0.00	474.65	1,323.95	318.89	679.12	607.34	54.50	-5.02	0.789
105.00	-6.81	-12.38	0.00	-410.89	0.00	410.89	1,292.97	308.00	633.54	572.65	59.77	-5.20	0.724
110.00	-6.35	-11.89	0.00	-348.99	0.00	348.99	1,247.09	296.93	588.83	532.25	65.48	-5.71	0.662
110.00	-6.35	-11.89	0.00	-348.99	0.00	348.99	853.22	223.36	444.16	366.32	65.48	-5.71	0.963
114.00	-5.06	-8.88	0.00	-294.68	0.00	294.68	838.71	216.72	418.15	349.29	70.43	-6.10	0.851
115.00	-4.97	-8.71	0.00	-285.81	0.00	285.81	834.98	215.06	411.77	345.05	71.71	-6.22	0.836
120.00	-4.65	-8.40	0.00	-242.28	0.00	242.28	815.69	206.75	380.60	323.94	78.53	-6.81	0.755
125.00	-4.35	-8.10	0.00	-200.27	0.00	200.27	795.37	198.45	350.66	303.07	85.94	-7.36	0.668
130.00	-4.07	-7.80	0.00	-159.77	0.00	159.77	774.00	190.15	321.94	282.47	93.90	-7.86	0.573
135.00	-3.81	-7.50	0.00	-120.78	0.00	120.78	751.60	181.85	294.45	262.19	102.35	-8.31	0.467
140.00	-3.57	-7.21	0.00	-83.27	0.00	83.27	728.15	173.54	268.19	242.29	111.23	-8.68	0.350
145.00	-3.36	-6.94	0.00	-47.24	0.00	47.24	694.02	165.24	243.15	219.76	120.44	-8.96	0.222
149.00	-0.93	-4.08	0.00	-19.49	0.00	19.49	666.12	158.60	224.01	202.35	127.98	-9.09	0.098
150.00	0.00	-3.88	0.00	-15.41	0.00	15.41	659.15	156.94	219.34	198.11	129.87	-9.10	0.078

Load Case: 1.2D + 1.0Di + 1.0Wi — 49 mph with 0.85 in Radial Ice — 25 Iterations

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

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces Wind FX (lb)	Shaft Forces Dead Load (lb)	Discrete Forces Wind FX (lb)	Discrete Forces Torsion MY (lb-ft)	Discrete Forces Moment MZ (lb-ft)	Discrete Forces Dead Load (lb)	Linear Forces Wind FX (lb)	Linear Forces Dead Load (lb)	Sum of Forces Wind FX (lb)	Sum of Forces Dead Load (lb)	Sum of Forces Torsion MY (lb-ft)	Sum of Forces Moment MZ (lb)
0.00		43.5	0.0					0.0	0.0	43.5	0.0	0.0	0.0
5.00		86.5	1,061.1					0.0	657.9	86.5	1,719.1	0.0	0.0
10.00		85.4	1,056.8					0.0	736.6	85.4	1,793.4	0.0	0.0
15.00		84.1	1,042.9					0.0	738.8	84.1	1,781.7	0.0	0.0
20.00		82.8	1,025.8					0.0	740.4	82.8	1,766.1	0.0	0.0
25.00		81.5	1,007.0					0.0	741.6	81.5	1,748.6	0.0	0.0
30.00		52.5	987.2					0.0	742.5	52.5	1,729.7	0.0	0.0
31.50	Bot - Section 2	41.2	292.6					0.0	222.9	41.2	515.6	0.0	0.0
35.00		34.8	1,144.5					0.0	520.4	34.8	1,664.9	0.0	0.0
35.67	Top - Section 1	42.3	216.1					0.0	99.2	42.3	315.3	0.0	0.0
40.00		79.8	723.2					0.0	644.9	79.8	1,368.1	0.0	0.0
45.00		47.4	817.2					0.0	744.7	47.4	1,562.0	0.0	0.0
45.50	Reinf. Top Reinf	43.7	80.9					0.0	74.5	43.7	155.4	0.0	0.0
50.00		83.6	718.2					0.0	670.8	83.6	1,389.0	0.0	0.0
55.00		88.8	779.9					0.0	745.9	88.8	1,525.8	0.0	0.0
60.00		89.3	760.9					0.0	746.3	89.3	1,507.2	0.0	0.0
65.00		89.7	741.7					7.5	746.8	97.2	1,488.5	0.0	0.0
70.00	Bot - Section 3	77.0	722.3					15.0	747.2	92.0	1,469.5	0.0	0.0
73.50	Top - Section 2	45.7	807.3					13.8	523.3	59.5	1,330.6	0.0	0.0
75.00		59.2	180.8					5.8	224.3	65.0	405.1	0.0	0.0
80.00		91.0	590.3					22.5	748.0	113.6	1,338.3	0.0	0.0
85.00		90.8	573.8					26.9	748.3	117.7	1,322.1	0.0	0.0
90.00		90.4	557.1					30.9	748.7	121.3	1,305.7	0.0	0.0
95.00		89.3	540.3					34.6	749.0	123.9	1,289.3	0.0	0.0
100.00		44.9	523.4					38.1	749.3	83.0	1,272.7	0.0	0.0
100.08	Reinf. Top	43.4	8.3					0.6	12.0	44.0	20.3	0.0	0.0
105.00		85.1	498.3					40.6	343.2	125.8	841.5	0.0	0.0
110.00	Top - Section 3	72.5	489.5					8.9	217.3	81.3	706.8	0.0	0.0
114.00	Appurtenance(s)	37.4	312.2	556.9	0.0	1,331.2	2,937.2	0.0	147.5	594.3	3,396.9	0.0	0.0
115.00		44.0	77.0					0.0	23.5	44.0	100.5	0.0	0.0
120.00		72.3	374.4					0.0	117.5	72.3	492.0	0.0	0.0
125.00		70.6	360.4					0.0	117.5	70.6	477.9	0.0	0.0
130.00		68.7	346.3					0.0	117.5	68.7	463.9	0.0	0.0
135.00		66.7	332.2					0.0	117.5	66.7	449.7	0.0	0.0
140.00		64.7	318.0					0.0	117.5	64.7	435.6	0.0	0.0
145.00		56.6	303.8					0.0	117.5	56.6	421.3	0.0	0.0
149.00	Appurtenance(s)	30.8	233.1	512.5	0.0	0.0	4,161.3	0.0	94.0	543.3	4,488.5	0.0	0.0
150.00	Appurtenance(s)	6.1	57.2	722.8	0.0	2,891.4	3,820.0	0.0	23.5	728.9	3,900.7	0.0	0.0
								Totals:		4,501.87	47,959.2	0.00	0.00

Site Number: 302498-post mod
Site Name: Plainfield CT 6, CT
Customer: AT&T MOBILITY

Code: ANSI/TIA-222-H
Engineering Number:13211930_C4_10

2/16/2021 12:54:43 PM

Load Case: 1.2D + 1.0Di + 1.0Wi — 49 mph with 0.85 in Radial Ice — 25 Iterations

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

Ice Dead Load Factor 1.00

Ice Importance 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	-47.96	-4.48	0.00	-492.11	0.00	492.11	3,157.17	784.20	2,737.77	2,376.61	0.00	0.00	0.139
5.00	-46.23	-4.44	0.00	-469.71	0.00	469.71	3,114.35	767.59	2,623.10	2,294.24	0.03	-0.05	0.136
10.00	-44.44	-4.39	0.00	-447.52	0.00	447.52	3,070.50	750.99	2,510.88	2,212.51	0.11	-0.11	0.132
15.00	-42.65	-4.34	0.00	-425.57	0.00	425.57	3,025.61	734.38	2,401.12	2,131.45	0.26	-0.16	0.129
20.00	-40.88	-4.29	0.00	-403.85	0.00	403.85	2,979.67	717.78	2,293.81	2,051.12	0.46	-0.22	0.125
25.00	-39.13	-4.24	0.00	-382.38	0.00	382.38	2,932.70	701.17	2,188.95	1,971.58	0.72	-0.27	0.122
30.00	-37.40	-4.20	0.00	-361.16	0.00	361.16	2,875.19	684.57	2,086.54	1,886.63	1.03	-0.33	0.119
31.50	-36.88	-4.18	0.00	-354.85	0.00	354.85	2,854.27	679.59	2,056.30	1,859.12	1.14	-0.35	0.118
35.00	-35.21	-4.15	0.00	-340.23	0.00	340.23	2,805.46	667.97	1,986.59	1,795.71	1.41	-0.38	0.114
35.67	-34.90	-4.12	0.00	-337.46	0.00	337.46	2,248.06	566.93	1,717.05	1,468.68	1.46	-0.39	0.131
40.00	-33.52	-4.06	0.00	-319.61	0.00	319.61	2,218.58	554.94	1,645.20	1,418.47	1.84	-0.44	0.127
45.00	-31.96	-4.02	0.00	-299.31	0.00	299.31	2,183.59	541.11	1,564.21	1,360.95	2.33	-0.50	0.122
45.50	-31.80	-3.99	0.00	-297.30	0.00	297.30	2,180.04	539.72	1,556.22	1,355.22	2.38	-0.50	0.121
45.50	-31.80	-3.99	0.00	-297.30	0.00	297.30	2,180.04	539.72	1,556.22	1,355.22	2.38	-0.50	0.121
50.00	-30.41	-3.92	0.00	-279.35	0.00	279.35	2,147.57	527.27	1,485.26	1,303.92	2.88	-0.55	0.116
55.00	-28.88	-3.85	0.00	-259.74	0.00	259.74	2,110.50	513.43	1,408.36	1,247.44	3.49	-0.61	0.111
60.00	-27.37	-3.77	0.00	-240.52	0.00	240.52	2,072.40	499.59	1,333.50	1,191.56	4.16	-0.67	0.106
65.00	-25.88	-3.67	0.00	-221.69	0.00	221.69	2,033.25	485.76	1,260.68	1,136.32	4.89	-0.72	0.100
70.00	-24.41	-3.58	0.00	-203.32	0.00	203.32	1,982.07	471.92	1,189.91	1,075.81	5.67	-0.77	0.095
73.50	-23.08	-3.52	0.00	-190.78	0.00	190.78	1,473.95	377.73	952.77	802.29	6.25	-0.81	0.106
75.00	-22.67	-3.46	0.00	-185.50	0.00	185.50	1,466.27	374.41	936.10	791.03	6.51	-0.83	0.104
80.00	-21.34	-3.34	0.00	-168.21	0.00	168.21	1,439.98	363.34	881.58	753.67	7.41	-0.88	0.096
85.00	-20.01	-3.22	0.00	-151.49	0.00	151.49	1,412.66	352.27	828.70	716.63	8.36	-0.93	0.089
90.00	-18.71	-3.10	0.00	-135.37	0.00	135.37	1,384.30	341.21	777.46	679.95	9.36	-0.98	0.082
95.00	-17.42	-2.96	0.00	-119.89	0.00	119.89	1,354.89	330.14	727.85	643.70	10.41	-1.03	0.074
100.00	-16.14	-2.86	0.00	-105.07	0.00	105.07	1,324.45	319.07	679.87	607.91	11.52	-1.07	0.067
100.08	-16.12	-2.83	0.00	-104.84	0.00	104.84	1,323.95	318.89	679.12	607.34	11.53	-1.07	0.067
100.08	-16.12	-2.83	0.00	-104.84	0.00	104.84	1,323.95	318.89	679.12	607.34	11.53	-1.07	0.185
105.00	-15.28	-2.70	0.00	-90.94	0.00	90.94	1,292.97	308.00	633.54	572.65	12.66	-1.11	0.171
110.00	-14.57	-2.63	0.00	-77.42	0.00	77.42	1,247.09	296.93	588.83	532.25	13.89	-1.23	0.157
110.00	-14.57	-2.63	0.00	-77.42	0.00	77.42	853.22	223.36	444.16	366.32	13.89	-1.23	0.229
114.00	-11.19	-1.98	0.00	-65.55	0.00	65.55	838.71	216.72	418.15	349.29	14.96	-1.31	0.201
115.00	-11.09	-1.94	0.00	-63.58	0.00	63.58	834.98	215.06	411.77	345.05	15.23	-1.34	0.198
120.00	-10.59	-1.88	0.00	-53.86	0.00	53.86	815.69	206.75	380.60	323.94	16.71	-1.47	0.179
125.00	-10.11	-1.82	0.00	-44.44	0.00	44.44	795.37	198.45	350.66	303.07	18.32	-1.59	0.159
130.00	-9.65	-1.76	0.00	-35.34	0.00	35.34	774.00	190.15	321.94	282.47	20.05	-1.71	0.138
135.00	-9.20	-1.69	0.00	-26.55	0.00	26.55	751.60	181.85	294.45	262.19	21.89	-1.80	0.114
140.00	-8.76	-1.62	0.00	-18.10	0.00	18.10	728.15	173.54	268.19	242.29	23.82	-1.89	0.087
145.00	-8.34	-1.56	0.00	-9.99	0.00	9.99	694.02	165.24	243.15	219.76	25.83	-1.94	0.058
149.00	-3.87	-0.86	0.00	-3.75	0.00	3.75	666.12	158.60	224.01	202.35	27.47	-1.97	0.024
150.00	0.00	-0.73	0.00	-2.89	0.00	2.89	659.15	156.94	219.34	198.11	27.88	-1.97	0.015

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

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

Applied Segment Forces Summary

		Shaft Forces		Discrete Forces				Linear Forces		Sum of Forces			
Seg Elev (ft)	Description	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		56.6	0.0					0.0	0.0	56.6	0.0	0.0	0.0
5.00		112.0	752.2					23.6	519.3	135.6	1,271.5	0.0	0.0
10.00		109.6	736.1					23.6	581.2	133.2	1,317.3	0.0	0.0
15.00		107.2	720.0					23.6	581.2	130.8	1,301.2	0.0	0.0
20.00		104.8	703.9					23.6	581.2	128.4	1,285.1	0.0	0.0
25.00		102.4	687.8					23.6	581.2	126.0	1,269.1	0.0	0.0
30.00		65.7	671.7					23.6	581.2	89.3	1,253.0	0.0	0.0
31.50	Bot - Section 2	51.3	198.4					7.1	174.4	58.4	372.7	0.0	0.0
35.00		43.1	846.5					17.1	406.9	60.2	1,253.4	0.0	0.0
35.67	Top - Section 1	52.4	159.6					3.3	77.5	55.7	237.1	0.0	0.0
40.00		98.5	471.3					21.9	503.7	120.4	975.0	0.0	0.0
45.00		58.3	531.3					26.1	581.2	84.5	1,112.5	0.0	0.0
45.50	Reinf. Top Reinf	53.4	52.4					2.7	58.1	56.0	110.5	0.0	0.0
50.00		101.5	465.5					24.3	523.1	125.9	988.6	0.0	0.0
55.00		107.0	504.5					27.8	581.2	134.7	1,085.7	0.0	0.0
60.00		106.7	491.0					28.5	581.2	135.2	1,072.3	0.0	0.0
65.00		106.2	477.6					29.2	581.2	135.4	1,058.9	0.0	0.0
70.00	Bot - Section 3	90.4	464.2					29.8	581.2	120.3	1,045.5	0.0	0.0
73.50	Top - Section 2	53.5	575.9					21.3	406.9	74.7	982.8	0.0	0.0
75.00		68.9	109.4					9.2	174.4	78.1	283.7	0.0	0.0
80.00		105.2	357.6					31.0	581.2	136.3	938.9	0.0	0.0
85.00		103.8	346.9					31.6	581.2	135.4	928.1	0.0	0.0
90.00		102.3	336.1					32.1	581.2	134.4	917.4	0.0	0.0
95.00		100.5	325.4					32.6	581.2	133.2	906.7	0.0	0.0
100.00		50.6	314.7					33.1	581.2	83.7	895.9	0.0	0.0
100.08	Reinf. Top	48.8	4.9					0.5	9.3	49.3	14.2	0.0	0.0
105.00		95.8	299.0					33.1	243.3	128.9	542.3	0.0	0.0
110.00	Top - Section 3	77.4	293.2					34.1	172.4	111.4	465.6	0.0	0.0
114.00	Appurtenance(s)	36.9	170.7	600.7	0.0	1,488.6	1,438.4	0.0	122.9	637.6	1,732.0	0.0	0.0
115.00		43.3	41.9					0.0	19.6	43.3	61.4	0.0	0.0
120.00		71.0	204.5					0.0	97.9	71.0	302.4	0.0	0.0
125.00		68.9	196.4					0.0	97.9	68.9	294.4	0.0	0.0
130.00		66.8	188.4					0.0	97.9	66.8	286.3	0.0	0.0
135.00		64.6	180.3					0.0	97.9	64.6	278.3	0.0	0.0
140.00		62.4	172.3					0.0	97.9	62.4	270.2	0.0	0.0
145.00		54.2	164.2					0.0	97.9	54.2	262.2	0.0	0.0
149.00	Appurtenance(s)	29.4	125.6	510.1	0.0	0.0	2,950.0	0.0	78.4	539.5	3,153.9	0.0	0.0
150.00	Appurtenance(s)	5.8	30.6	849.6	0.0	3,398.4	1,687.9	0.0	19.6	855.4	1,738.1	0.0	0.0
								Totals:		5,415.87	32,264.3	0.00	0.00

Code: ANSI/TIA-222-H
Engineering Number:13211930_C4_10

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Load Case: 1.0D + 1.0W

Serviceability 60 mph

25 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	-32.26	-5.38	0.00	-534.09	0.00	534.09	3,157.17	784.20	2,737.77	2,376.61	0.00	0.00	0.146
5.00	-30.98	-5.27	0.00	-507.22	0.00	507.22	3,114.35	767.59	2,623.10	2,294.24	0.03	-0.06	0.142
10.00	-29.66	-5.17	0.00	-480.86	0.00	480.86	3,070.50	750.99	2,510.88	2,212.51	0.12	-0.12	0.138
15.00	-28.36	-5.06	0.00	-455.03	0.00	455.03	3,025.61	734.38	2,401.12	2,131.45	0.28	-0.18	0.134
20.00	-27.07	-4.96	0.00	-429.73	0.00	429.73	2,979.67	717.78	2,293.81	2,051.12	0.49	-0.23	0.130
25.00	-25.79	-4.85	0.00	-404.95	0.00	404.95	2,932.70	701.17	2,188.95	1,971.58	0.77	-0.29	0.126
30.00	-24.54	-4.77	0.00	-380.70	0.00	380.70	2,875.19	684.57	2,086.54	1,886.63	1.11	-0.35	0.122
31.50	-24.16	-4.72	0.00	-373.55	0.00	373.55	2,854.27	679.59	2,056.30	1,859.12	1.22	-0.37	0.121
35.00	-22.91	-4.66	0.00	-357.02	0.00	357.02	2,805.46	667.97	1,986.59	1,795.71	1.51	-0.41	0.116
35.67	-22.67	-4.62	0.00	-353.92	0.00	353.92	2,248.06	566.93	1,717.05	1,468.68	1.57	-0.42	0.134
40.00	-21.69	-4.51	0.00	-333.91	0.00	333.91	2,218.58	554.94	1,645.20	1,418.47	1.97	-0.47	0.129
45.00	-20.58	-4.43	0.00	-311.37	0.00	311.37	2,183.59	541.11	1,564.21	1,360.95	2.49	-0.53	0.123
45.50	-20.46	-4.38	0.00	-309.15	0.00	309.15	2,180.04	539.72	1,556.22	1,355.22	2.55	-0.53	0.122
45.50	-20.46	-4.38	0.00	-309.15	0.00	309.15	2,180.04	539.72	1,556.22	1,355.22	2.55	-0.53	0.122
50.00	-19.47	-4.26	0.00	-289.44	0.00	289.44	2,147.57	527.27	1,485.26	1,303.92	3.08	-0.59	0.117
55.00	-18.38	-4.14	0.00	-268.12	0.00	268.12	2,110.50	513.43	1,408.36	1,247.44	3.72	-0.65	0.111
60.00	-17.31	-4.01	0.00	-247.44	0.00	247.44	2,072.40	499.59	1,333.50	1,191.56	4.43	-0.70	0.106
65.00	-16.25	-3.87	0.00	-227.41	0.00	227.41	2,033.25	485.76	1,260.68	1,136.32	5.20	-0.76	0.100
70.00	-15.20	-3.75	0.00	-208.05	0.00	208.05	1,982.07	471.92	1,189.91	1,075.81	6.02	-0.81	0.094
73.50	-14.22	-3.67	0.00	-194.93	0.00	194.93	1,473.95	377.73	952.77	802.29	6.63	-0.85	0.105
75.00	-13.93	-3.59	0.00	-189.43	0.00	189.43	1,466.27	374.41	936.10	791.03	6.90	-0.87	0.103
80.00	-12.99	-3.46	0.00	-171.46	0.00	171.46	1,439.98	363.34	881.58	753.67	7.84	-0.92	0.095
85.00	-12.07	-3.32	0.00	-154.18	0.00	154.18	1,412.66	352.27	828.70	716.63	8.83	-0.98	0.087
90.00	-11.15	-3.17	0.00	-137.60	0.00	137.60	1,384.30	341.21	777.46	679.95	9.88	-1.03	0.080
95.00	-10.24	-3.03	0.00	-121.73	0.00	121.73	1,354.89	330.14	727.85	643.70	10.98	-1.07	0.073
100.00	-9.35	-2.94	0.00	-106.57	0.00	106.57	1,324.45	319.07	679.87	607.91	12.13	-1.12	0.065
100.08	-9.33	-2.89	0.00	-106.33	0.00	106.33	1,323.95	318.89	679.12	607.34	12.15	-1.12	0.065
100.08	-9.33	-2.89	0.00	-106.33	0.00	106.33	1,323.95	318.89	679.12	607.34	12.15	-1.12	0.182
105.00	-8.79	-2.76	0.00	-92.11	0.00	92.11	1,292.97	308.00	633.54	572.65	13.32	-1.16	0.168
110.00	-8.32	-2.66	0.00	-78.30	0.00	78.30	1,247.09	296.93	588.83	532.25	14.60	-1.27	0.154
110.00	-8.32	-2.66	0.00	-78.30	0.00	78.30	853.22	223.36	444.16	366.32	14.60	-1.27	0.224
114.00	-6.60	-1.98	0.00	-66.19	0.00	66.19	838.71	216.72	418.15	349.29	15.71	-1.36	0.197
115.00	-6.54	-1.95	0.00	-64.21	0.00	64.21	834.98	215.06	411.77	345.05	16.00	-1.39	0.194
120.00	-6.23	-1.88	0.00	-54.46	0.00	54.46	815.69	206.75	380.60	323.94	17.52	-1.52	0.176
125.00	-5.94	-1.82	0.00	-45.04	0.00	45.04	795.37	198.45	350.66	303.07	19.18	-1.64	0.156
130.00	-5.65	-1.76	0.00	-35.94	0.00	35.94	774.00	190.15	321.94	282.47	20.96	-1.76	0.135
135.00	-5.37	-1.69	0.00	-27.16	0.00	27.16	751.60	181.85	294.45	262.19	22.86	-1.86	0.111
140.00	-5.10	-1.63	0.00	-18.71	0.00	18.71	728.15	173.54	268.19	242.29	24.85	-1.94	0.084
145.00	-4.84	-1.57	0.00	-10.58	0.00	10.58	694.02	165.24	243.15	219.76	26.92	-2.00	0.055
149.00	-1.71	-0.92	0.00	-4.31	0.00	4.31	666.12	158.60	224.01	202.35	28.62	-2.03	0.024
150.00	0.00	-0.86	0.00	-3.40	0.00	3.40	659.15	156.94	219.34	198.11	29.04	-2.04	0.017

Equivalent Lateral Forces Method Analysis

Spectral Response Acceleration for Short Period (S_s):	0.19
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.05
Long-Period Transition Period (T_L):	6
Importance Factor (I_E):	1.00
Site Coefficient F_a:	1.60
Site Coeffiecient F_v:	2.40
Response Modification Coefficient (R):	1.50
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.20
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.09
Seismic Response Coefficient (C_s):	0.03
Upper Limit C_s	0.03
Lower Limit C_s	0.03
Period based on Rayleigh Method (sec):	2.73
Redundancy Factor (p):	1.00
Seismic Force Distribution Exponent (k):	2.00
Total Unfactored Dead Load:	32.26 k
Seismic Base Shear (E):	0.97 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)
37	149.50	50	1,122	0.005	5	62
36	147.00	204	4,407	0.018	18	253
35	142.50	262	5,324	0.022	22	325
34	137.50	270	5,109	0.021	21	335
33	132.50	278	4,885	0.020	20	345
32	127.50	286	4,654	0.019	19	355
31	122.50	294	4,417	0.018	18	365
30	117.50	302	4,175	0.017	17	375
29	114.50	61	806	0.003	3	76
28	112.00	294	3,683	0.015	15	364
27	107.50	466	5,381	0.022	22	577
26	102.54	542	5,702	0.024	23	672
25	100.04	14	143	0.001	1	18
24	97.50	896	8,517	0.036	34	1,111
23	92.50	907	7,758	0.032	31	1,124
22	87.50	917	7,024	0.029	28	1,137
21	82.50	928	6,317	0.026	26	1,151
20	77.50	939	5,639	0.024	23	1,164
19	74.25	284	1,564	0.007	6	352
18	71.75	983	5,060	0.021	20	1,219
17	67.50	1,045	4,763	0.020	19	1,296
16	62.50	1,059	4,136	0.017	17	1,313
15	57.50	1,072	3,545	0.015	14	1,330
14	52.50	1,086	2,992	0.012	12	1,346
13	47.75	989	2,254	0.009	9	1,226

12	45.25	111	226	0.001	1	137
11	42.50	1,113	2,010	0.008	8	1,379
10	37.83	975	1,396	0.006	6	1,209
9	35.33	237	296	0.001	1	294
8	33.25	1,253	1,386	0.006	6	1,554
7	30.75	373	352	0.001	1	462
6	27.50	1,253	948	0.004	4	1,554
5	22.50	1,269	642	0.003	3	1,573
4	17.50	1,285	394	0.002	2	1,593
3	12.50	1,301	203	0.001	1	1,613
2	7.50	1,317	74	0.000	0	1,633
1	2.50	1,272	8	0.000	0	1,577
Powerwave Allgon LGP	150.00	33	743	0.003	3	41
Powerwave Allgon LGP	150.00	85	1,904	0.008	8	105
Raycap DC6-48-60-18-	150.00	20	450	0.002	2	25
Raycap DC6-48-60-18-	150.00	20	450	0.002	2	25
Ericsson RRUS 8843 B	150.00	216	4,860	0.020	20	268
Ericsson RRUS 4478 B	150.00	180	4,043	0.017	16	223
Ericsson RRUS 4415 B	150.00	138	3,105	0.013	13	171
Ericsson RRUS 4449 B	150.00	213	4,793	0.020	19	264
Powerwave Allgon 777	150.00	105	2,363	0.010	10	130
CCI HPA65R-BU8A	150.00	162	3,645	0.015	15	201
CCI DMP65R-BU8D	150.00	287	6,460	0.027	26	356
CCI OPA65R-BU8D	150.00	229	5,164	0.022	21	285
Flat Side Arm	149.00	450	9,990	0.042	40	558
Platform w/ HRs w/ S	149.00	2,500	55,503	0.232	224	3,100
RFS FD9R6004/2C-3L (	114.00	19	242	0.001	1	23
Alcatel-Lucent RRH2X	114.00	129	1,676	0.007	7	160
Alcatel-Lucent RRH2X	114.00	165	2,144	0.009	9	205
Amphenol Antel BXA-7	114.00	36	468	0.002	2	45
RFS DB-T1-6Z-8AB-0Z	114.00	44	572	0.002	2	55
Amphenol Antel BXA-7	114.00	51	663	0.003	3	63
Round T-Arms	114.00	750	9,747	0.041	39	930
Commscope HBXX-6517D	114.00	245	3,181	0.013	13	304
		32,264	239,475	1.000	968	40,004

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)
37	149.50	50	1,122	0.005	5	43
36	147.00	204	4,407	0.018	18	175
35	142.50	262	5,324	0.022	22	225
34	137.50	270	5,109	0.021	21	232
33	132.50	278	4,885	0.020	20	239
32	127.50	286	4,654	0.019	19	246
31	122.50	294	4,417	0.018	18	253
30	117.50	302	4,175	0.017	17	260
29	114.50	61	806	0.003	3	53
28	112.00	294	3,683	0.015	15	253
27	107.50	466	5,381	0.022	22	400
26	102.54	542	5,702	0.024	23	466
25	100.04	14	143	0.001	1	12
24	97.50	896	8,517	0.036	34	771
23	92.50	907	7,758	0.032	31	780
22	87.50	917	7,024	0.029	28	789
21	82.50	928	6,317	0.026	26	798
20	77.50	939	5,639	0.024	23	808
19	74.25	284	1,564	0.007	6	244
18	71.75	983	5,060	0.021	20	845
17	67.50	1,045	4,763	0.020	19	899

16	62.50	1,059	4,136	0.017	17	911
15	57.50	1,072	3,545	0.015	14	922
14	52.50	1,086	2,992	0.012	12	934
13	47.75	989	2,254	0.009	9	850
12	45.25	111	226	0.001	1	95
11	42.50	1,113	2,010	0.008	8	957
10	37.83	975	1,396	0.006	6	839
9	35.33	237	296	0.001	1	204
8	33.25	1,253	1,386	0.006	6	1,078
7	30.75	373	352	0.001	1	321
6	27.50	1,253	948	0.004	4	1,078
5	22.50	1,269	642	0.003	3	1,092
4	17.50	1,285	394	0.002	2	1,105
3	12.50	1,301	203	0.001	1	1,119
2	7.50	1,317	74	0.000	0	1,133
1	2.50	1,272	8	0.000	0	1,094
Powerwave Allgon LGP	150.00	33	743	0.003	3	28
Powerwave Allgon LGP	150.00	85	1,904	0.008	8	73
Raycap DC6-48-60-18-	150.00	20	450	0.002	2	17
Raycap DC6-48-60-18-	150.00	20	450	0.002	2	17
Ericsson RRUS 8843 B	150.00	216	4,860	0.020	20	186
Ericsson RRUS 4478 B	150.00	180	4,043	0.017	16	155
Ericsson RRUS 4415 B	150.00	138	3,105	0.013	13	119
Ericsson RRUS 4449 B	150.00	213	4,793	0.020	19	183
Powerwave Allgon 777	150.00	105	2,363	0.010	10	90
CCI HPA65R-BU8A	150.00	162	3,645	0.015	15	139
CCI DMP65R-BU8D	150.00	287	6,460	0.027	26	247
CCI OPA65R-BU8D	150.00	229	5,164	0.022	21	197
Flat Side Arm	149.00	450	9,990	0.042	40	387
Platform w/ HRs w/ S	149.00	2,500	55,503	0.232	224	2,150
RFS FD9R6004/2C-3L (	114.00	19	242	0.001	1	16
Alcatel-Lucent RRH2X	114.00	129	1,676	0.007	7	111
Alcatel-Lucent RRH2X	114.00	165	2,144	0.009	9	142
Amphenol Antel BXA-7	114.00	36	468	0.002	2	31
RFS DB-T1-6Z-8AB-0Z	114.00	44	572	0.002	2	38
Amphenol Antel BXA-7	114.00	51	663	0.003	3	44
Round T-Arms	114.00	750	9,747	0.041	39	645
Commscope HBXX-6517D	114.00	245	3,181	0.013	13	211
		32,264	239,475	1.000	968	27,751

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	-38.43	-0.97	0.00	-122.43	0.00	122.43	3,157.17	784.20	2,737.77	2,376.61	0.00	0.00	0.040
5.00	-36.79	-0.98	0.00	-117.57	0.00	117.57	3,114.35	767.59	2,623.10	2,294.24	0.01	-0.01	0.040
10.00	-35.18	-0.99	0.00	-112.67	0.00	112.67	3,070.50	750.99	2,510.88	2,212.51	0.03	-0.03	0.039
15.00	-33.59	-0.99	0.00	-107.74	0.00	107.74	3,025.61	734.38	2,401.12	2,131.45	0.06	-0.04	0.038
20.00	-32.01	-1.00	0.00	-102.77	0.00	102.77	2,979.67	717.78	2,293.81	2,051.12	0.11	-0.05	0.037
25.00	-30.46	-1.00	0.00	-97.79	0.00	97.79	2,932.70	701.17	2,188.95	1,971.58	0.18	-0.07	0.036
30.00	-30.00	-1.00	0.00	-92.80	0.00	92.80	2,875.19	684.57	2,086.54	1,886.63	0.26	-0.08	0.035
31.50	-28.44	-1.00	0.00	-91.29	0.00	91.29	2,854.27	679.59	2,056.30	1,859.12	0.29	-0.09	0.035
35.00	-28.15	-1.00	0.00	-87.80	0.00	87.80	2,805.46	667.97	1,986.59	1,795.71	0.35	-0.10	0.034
35.67	-26.94	-0.99	0.00	-87.14	0.00	87.14	2,248.06	566.93	1,717.05	1,468.68	0.37	-0.10	0.039
40.00	-25.56	-0.99	0.00	-82.83	0.00	82.83	2,218.58	554.94	1,645.20	1,418.47	0.46	-0.11	0.038
45.00	-25.42	-0.99	0.00	-77.88	0.00	77.88	2,183.59	541.11	1,564.21	1,360.95	0.59	-0.13	0.036
45.50	-24.20	-0.98	0.00	-77.39	0.00	77.39	2,180.04	539.72	1,556.22	1,355.22	0.60	-0.13	0.036
45.50	-24.20	-0.98	0.00	-77.39	0.00	77.39	2,180.04	539.72	1,556.22	1,355.22	0.60	-0.13	0.036
50.00	-22.85	-0.97	0.00	-72.96	0.00	72.96	2,147.57	527.27	1,485.26	1,303.92	0.73	-0.14	0.035
55.00	-21.52	-0.96	0.00	-68.09	0.00	68.09	2,110.50	513.43	1,408.36	1,247.44	0.89	-0.16	0.033
60.00	-20.21	-0.95	0.00	-63.29	0.00	63.29	2,072.40	499.59	1,333.50	1,191.56	1.06	-0.17	0.031
65.00	-18.91	-0.93	0.00	-58.56	0.00	58.56	2,033.25	485.76	1,260.68	1,136.32	1.24	-0.19	0.030
70.00	-17.69	-0.91	0.00	-53.92	0.00	53.92	1,982.07	471.92	1,189.91	1,075.81	1.45	-0.20	0.028
73.50	-17.34	-0.90	0.00	-50.75	0.00	50.75	1,473.95	377.73	952.77	802.29	1.60	-0.21	0.032
75.00	-16.18	-0.88	0.00	-49.40	0.00	49.40	1,466.27	374.41	936.10	791.03	1.66	-0.21	0.031
80.00	-15.03	-0.85	0.00	-45.01	0.00	45.01	1,439.98	363.34	881.58	753.67	1.89	-0.23	0.029
85.00	-13.89	-0.82	0.00	-40.76	0.00	40.76	1,412.66	352.27	828.70	716.63	2.14	-0.24	0.027
90.00	-12.76	-0.79	0.00	-36.66	0.00	36.66	1,384.30	341.21	777.46	679.95	2.40	-0.26	0.025
95.00	-11.65	-0.75	0.00	-32.72	0.00	32.72	1,354.89	330.14	727.85	643.70	2.67	-0.27	0.023
100.00	-11.64	-0.75	0.00	-28.97	0.00	28.97	1,324.45	319.07	679.87	607.91	2.96	-0.28	0.021
100.08	-10.96	-0.73	0.00	-28.91	0.00	28.91	1,323.95	318.89	679.12	607.34	2.97	-0.28	0.021
100.08	-10.96	-0.73	0.00	-28.91	0.00	28.91	1,323.95	318.89	679.12	607.34	2.97	-0.28	0.056
105.00	-10.39	-0.71	0.00	-25.34	0.00	25.34	1,292.97	308.00	633.54	572.65	3.26	-0.29	0.052
110.00	-10.02	-0.69	0.00	-21.81	0.00	21.81	1,247.09	296.93	588.83	532.25	3.58	-0.32	0.049
110.00	-10.02	-0.69	0.00	-21.81	0.00	21.81	853.22	223.36	444.16	366.32	3.58	-0.32	0.071
114.00	-8.16	-0.61	0.00	-19.04	0.00	19.04	838.71	216.72	418.15	349.29	3.87	-0.35	0.064
115.00	-7.79	-0.59	0.00	-18.43	0.00	18.43	834.98	215.06	411.77	345.05	3.94	-0.36	0.063
120.00	-7.42	-0.57	0.00	-15.49	0.00	15.49	815.69	206.75	380.60	323.94	4.33	-0.39	0.057
125.00	-7.07	-0.56	0.00	-12.61	0.00	12.61	795.37	198.45	350.66	303.07	4.76	-0.43	0.051
130.00	-6.72	-0.54	0.00	-9.83	0.00	9.83	774.00	190.15	321.94	282.47	5.23	-0.46	0.043
135.00	-6.39	-0.52	0.00	-7.14	0.00	7.14	751.60	181.85	294.45	262.19	5.72	-0.49	0.036
140.00	-6.06	-0.50	0.00	-4.55	0.00	4.55	728.15	173.54	268.19	242.29	6.25	-0.51	0.027
145.00	-5.81	-0.48	0.00	-2.08	0.00	2.08	694.02	165.24	243.15	219.76	6.79	-0.52	0.018
149.00	-2.09	-0.17	0.00	-0.17	0.00	0.17	666.12	158.60	224.01	202.35	7.23	-0.53	0.004
150.00	0.00	-0.15	0.00	0.00	0.00	0.00	659.15	156.94	219.34	198.11	7.34	-0.53	0.000

Load Case 0.9D - 1.0Ev + 1.0Eh Seismic (Reduced DL)

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-26.66	-0.97	0.00	-120.02	0.00	120.02	3,157.17	784.20	2,737.77	2,376.61	0.00	0.00	0.037
5.00	-25.52	-0.98	0.00	-115.17	0.00	115.17	3,114.35	767.59	2,623.10	2,294.24	0.01	-0.01	0.036
10.00	-24.40	-0.98	0.00	-110.29	0.00	110.29	3,070.50	750.99	2,510.88	2,212.51	0.03	-0.03	0.036
15.00	-23.30	-0.98	0.00	-105.39	0.00	105.39	3,025.61	734.38	2,401.12	2,131.45	0.06	-0.04	0.035
20.00	-22.21	-0.99	0.00	-100.47	0.00	100.47	2,979.67	717.78	2,293.81	2,051.12	0.11	-0.05	0.034
25.00	-21.13	-0.99	0.00	-95.54	0.00	95.54	2,932.70	701.17	2,188.95	1,971.58	0.18	-0.07	0.033
30.00	-20.81	-0.99	0.00	-90.61	0.00	90.61	2,875.19	684.57	2,086.54	1,886.63	0.25	-0.08	0.032
31.50	-19.73	-0.98	0.00	-89.13	0.00	89.13	2,854.27	679.59	2,056.30	1,859.12	0.28	-0.09	0.032
35.00	-19.53	-0.98	0.00	-85.69	0.00	85.69	2,805.46	667.97	1,986.59	1,795.71	0.35	-0.10	0.031
35.67	-18.69	-0.98	0.00	-85.04	0.00	85.04	2,248.06	566.93	1,717.05	1,468.68	0.36	-0.10	0.036
40.00	-17.73	-0.97	0.00	-80.80	0.00	80.80	2,218.58	554.94	1,645.20	1,418.47	0.45	-0.11	0.035
45.00	-17.64	-0.97	0.00	-75.94	0.00	75.94	2,183.59	541.11	1,564.21	1,360.95	0.58	-0.12	0.034
45.50	-16.78	-0.96	0.00	-75.45	0.00	75.45	2,180.04	539.72	1,556.22	1,355.22	0.59	-0.13	0.033
45.50	-16.78	-0.96	0.00	-75.45	0.00	75.45	2,180.04	539.72	1,556.22	1,355.22	0.59	-0.13	0.033
50.00	-15.85	-0.95	0.00	-71.11	0.00	71.11	2,147.57	527.27	1,485.26	1,303.92	0.71	-0.14	0.032
55.00	-14.93	-0.94	0.00	-66.33	0.00	66.33	2,110.50	513.43	1,408.36	1,247.44	0.87	-0.15	0.030
60.00	-14.02	-0.93	0.00	-61.63	0.00	61.63	2,072.40	499.59	1,333.50	1,191.56	1.03	-0.17	0.029
65.00	-13.12	-0.91	0.00	-57.00	0.00	57.00	2,033.25	485.76	1,260.68	1,136.32	1.22	-0.18	0.028
70.00	-12.27	-0.89	0.00	-52.46	0.00	52.46	1,982.07	471.92	1,189.91	1,075.81	1.41	-0.19	0.026
73.50	-12.03	-0.88	0.00	-49.36	0.00	49.36	1,473.95	377.73	952.77	802.29	1.56	-0.20	0.030
75.00	-11.22	-0.86	0.00	-48.04	0.00	48.04	1,466.27	374.41	936.10	791.03	1.62	-0.21	0.029
80.00	-10.42	-0.83	0.00	-43.76	0.00	43.76	1,439.98	363.34	881.58	753.67	1.85	-0.22	0.027
85.00	-9.63	-0.80	0.00	-39.61	0.00	39.61	1,412.66	352.27	828.70	716.63	2.09	-0.24	0.025
90.00	-8.85	-0.77	0.00	-35.60	0.00	35.60	1,384.30	341.21	777.46	679.95	2.34	-0.25	0.023
95.00	-8.08	-0.73	0.00	-31.76	0.00	31.76	1,354.89	330.14	727.85	643.70	2.61	-0.26	0.021
100.00	-8.07	-0.73	0.00	-28.09	0.00	28.09	1,324.45	319.07	679.87	607.91	2.89	-0.27	0.019
100.08	-7.60	-0.71	0.00	-28.04	0.00	28.04	1,323.95	318.89	679.12	607.34	2.90	-0.27	0.019
100.08	-7.60	-0.71	0.00	-28.04	0.00	28.04	1,323.95	318.89	679.12	607.34	2.90	-0.27	0.052
105.00	-7.20	-0.69	0.00	-24.55	0.00	24.55	1,292.97	308.00	633.54	572.65	3.18	-0.28	0.048
110.00	-6.95	-0.67	0.00	-21.12	0.00	21.12	1,247.09	296.93	588.83	532.25	3.50	-0.31	0.045
110.00	-6.95	-0.67	0.00	-21.12	0.00	21.12	853.22	223.36	444.16	366.32	3.50	-0.31	0.066
114.00	-5.66	-0.59	0.00	-18.42	0.00	18.42	838.71	216.72	418.15	349.29	3.77	-0.34	0.059
115.00	-5.40	-0.57	0.00	-17.83	0.00	17.83	834.98	215.06	411.77	345.05	3.84	-0.35	0.058
120.00	-5.15	-0.56	0.00	-14.96	0.00	14.96	815.69	206.75	380.60	323.94	4.23	-0.38	0.053
125.00	-4.90	-0.54	0.00	-12.18	0.00	12.18	795.37	198.45	350.66	303.07	4.64	-0.42	0.046
130.00	-4.66	-0.52	0.00	-9.48	0.00	9.48	774.00	190.15	321.94	282.47	5.10	-0.45	0.040
135.00	-4.43	-0.50	0.00	-6.88	0.00	6.88	751.60	181.85	294.45	262.19	5.58	-0.47	0.032
140.00	-4.20	-0.48	0.00	-4.39	0.00	4.39	728.15	173.54	268.19	242.29	6.09	-0.49	0.024
145.00	-4.03	-0.46	0.00	-2.00	0.00	2.00	694.02	165.24	243.15	219.76	6.61	-0.51	0.015
149.00	-1.45	-0.17	0.00	-0.17	0.00	0.17	666.12	158.60	224.01	202.35	7.04	-0.51	0.003
150.00	0.00	-0.15	0.00	0.00	0.00	0.00	659.15	156.94	219.34	198.11	7.14	-0.51	0.000

Analysis Summary

	Reactions						Max Usage	
Load Case	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	24.39	0.00	38.66	0.00	0.00	2440.63	110.00	0.99
0.9D + 1.0W	24.36	0.00	28.98	0.00	0.00	2403.41	110.00	0.96
1.2D + 1.0Di + 1.0Wi	4.48	0.00	47.96	0.00	0.00	492.11	110.00	0.23
1.2D + 1.0Ev + 1.0Eh	0.97	0.00	38.43	0.00	0.00	122.43	110.00	0.07
0.9D - 1.0Ev + 1.0Eh	0.97	0.00	26.66	0.00	0.00	120.02	110.00	0.07
1.0D + 1.0W	5.38	0.00	32.26	0.00	0.00	534.09	110.00	0.22

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors VQ/I (lb/in)	Shear Applied (kips)	Shear phiVn (kips)	Ratio	Max Member Pu (kip)	phiPn (kip)	Ratio
0.00	45.50	(4) SOL-#20 All Thread Bar	260.4	7.8	16.8	0.465	255.0	330.5	0.772
45.50	100.08	(4) SOL-#20 All Thread Bar	291.8	8.8	16.8	0.521	221.9	330.5	0.671

Elev From (ft)	Elev To (ft)	Member	Upper Termination Connectors MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Ratio	Lower Termination Connectors MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Ratio
0.00	45.50	(4) SOL-#20 All Thread Bar	0.0	12.0	0	20	0.000	0.0	12.0	0	0	0.000
45.50	100.08	(4) SOL-#20 All Thread Bar	127.1	12.0	11	16	0.662	0.0	12.0	0	0	0.000

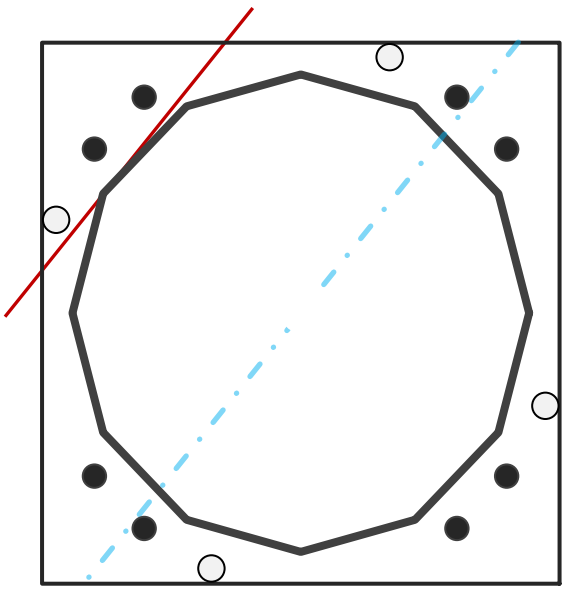
Base Plate & Anchor Rod Analysis

Pole Dimensions		
Number of Sides	12	-
Diameter	37.38	in
Thickness	3/8	in
Orientation Offset	0	°

Base Reactions		
Moment, Mu	2440.6	k-ft
Axial, Pu	38.7	k
Shear, Vu	24.4	k
Neutral Axis	50	°

Report Capacities		
Component	Capacity	Result
Base Plate	57%	Pass
Anchor Rods	84%	Pass
Dwyidag	68%	Pass

Base Plate		
Shape	Square	-
Width	44	in
Thickness	2 1/2	in
Grade	A633 Gr. E	
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	80	ksi
Clip	0	in
Orientation Offset	0	°
Anchor Rod Detail	c	η=0.55
Clear Distance	N/A	in
Applied Moment, Mu	1194.1	k
Bending Stress, ϕMn	2085.8	k



Dywidag Reinforcement		
Quantity	4	-
Bar Size	#20	in
Diameter, ø	2.5	in
Bracket Type	Angle	-
Circle	44.26	in
Orientation Offset	70	°
Applied Force, Pu	249.0	k
Dywidag Bar, ϕPn	368.2	k

Original Anchor Rods		
Arrangement	Cluster	-
Quantity	8	-
Diameter, ø	2 1/4	in
Bolt Circle	44	in
Grade	A615-75	
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Spacing	6.0	in
Orientation Offset	0	°
Applied Force, Pu	203.9	k
Anchor Rods, ϕPn	243.6	k

Flange Plate Analysis

Flange Plate

Plate Type	***Flange***	***@ 110 ft***
Pole Diameter	21.25	in
Pole Thickness	0.1875	in
Plate Diameter	28.5	in
Plate Thickness	1	in
Plate Fy	60	ksi
Weld Length	3/16	in
f_s Resistance	670.59	k-in
Applied	82.52	k-in

Code Rev.	***H***
Moment	359.1 k-ft
Axial	8.8 k

Date	2/16/2021
Engineer	CLJ
Site #	302498
Carrier	AT&T MOBILITY

Stiffeners

#	***12***	***Show***
Thickness	5/8	in
Length	3 1/2	in
Height	9	in
Chamfer	1/4	in
Offset Angle	0	°
Fy	50	ksi

Bolts

#	***12***	
Bolt Circle	25.75	in
(R)adial / (S)quare	R	
Diameter	1	in
Hole Diameter	1 1/8	in
Type	A490	
Fy	130	ksi
Fu	150	ksi
f_s Resistance	68.15	k
Applied	55.01	k

Reinforcement

#		

Extra Bolts O

#		

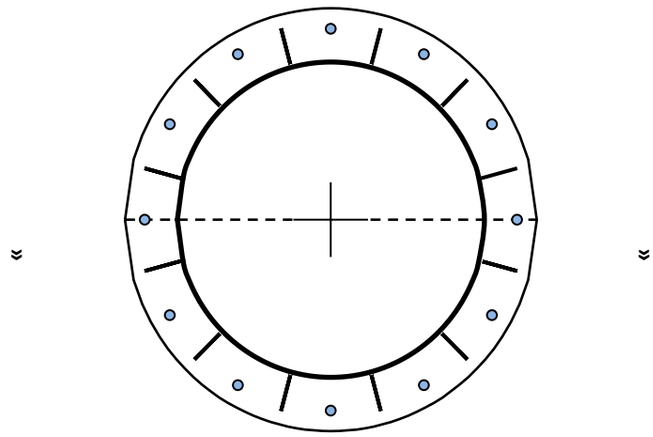


Plate Stress Ratio:

12% Pass

Bolt Stress Ratio:

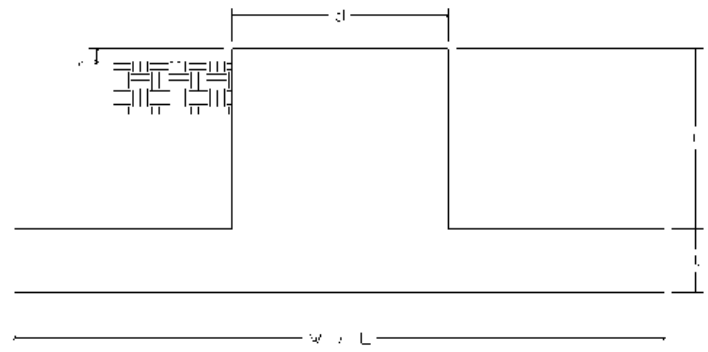
81% Pass

Site Name: Plainfield CT 6, CT
Site Number: 302498
Tower Type: MP
Design Loads (Factored) - Analysis per TIA-222-H Standards

Monolithic Mat & Pier Foundation Analysis

Foundation Analysis Parameters		
Design / Analysis / Mapping:	Analysis	-
Compression/Leg:	38.7	k
Uplift/Leg:	0.0	k
Total Shear:	24.4	k
Moment:	2,440.6	k-ft
Tower + Appurtenance Weight:	38.7	k
Depth to Base of Foundation (l + t - h):	8	ft
Diameter of Pier (d):	6	ft
Length of Pier (l):	5.5	ft
Height of Pier above Ground (h):	0.5	ft
Width of Pad (W):	18	ft
Length of Pad (L):	18	ft
Thickness of Pad (t):	3	ft
Tower Leg Center to Center:	0	ft
Number of Tower Legs:	1	-
Tower Center from Mat Center:	0	ft
Depth Below Ground Surface to Water Table:	3.5	ft
Unit Weight of Concrete:	150	pcf
Unit Weight of Soil Above Water Table:	136	pcf
Unit Weight of Water:	62.4	pcf
Unit Weight of Soil Below Water Table:	73.6	pcf
Friction Angle of Uplift:	15	°
Coefficient of Shear Friction:	0.30	-
Ultimate Compressive Bearing Pressure:	15,000	psf
Ultimate Passive Pressure on Pad Face:	1,000	psf
$f_{Soil\ and\ Concrete\ Weight}$:	0.9	-
f_{Soil}:	0.75	-

Foundation Steel Parameters		
Shear/Leg (Compression):	24.4	k
Shear/Leg (Uplift):	24.4	k
Concrete Strength (f'_c):	3,000	psi
Pad Tension Steel Depth:	32.38	in
Dead Load Factor:	0.9	-
f_{Shear}:	0.75	-
$f_{Flexure\ /\ Tension}$:	0.9	-
$f_{Compression:}$	0.65	-
b:	0.85	-
Bottom Pad Rebar Size #:	10	-
# of Bottom Pad Rebar:	36	-
Pad Bottom Steel Area:	45.72	in^2
Pad Steel F_y:	60,000	psi
Top Pad Rebar Size #:	5	-
# of Top Pad Rebar:	36	-
Pad Top Steel Area:	11.16	in^2
Pier Rebar Size #:	11	-
Pier Steel Area (Single Bar):	1.56	in^2
# of Pier Rebar:	52	-
Pier Steel F_y:	60,000	psi
Pier Cage Diameter:	63.6	in
Rebar Strain Limit:	0.008	-
Steel Elastic Modulus:	29,000	ksi
Tie Rebar Size #:	4	-
Tie Steel Area (Single Bar):	0.20	in^2
Tie Spacing:	12	in
Tie Steel F_y:	60,000	psi
Clear Cover:	3	in



Overturning Moment Usage		
Design OTM:	2647.9	k-ft
Weight of Soil and Concrete OTM Resistance:	279.2	k
OTM Resistance from Soil and Concrete:	2513.2	k-ft
OTM Resistance from Tower:	261.0	k-ft
OTM Resistance from Soil Facture:	335.8	k-ft
OTM Resistance from Passive Pressure on Pad Face:	60.8	k-ft
OTM Resistance:	2794.1	k-ft
Design OTM / OTM Resistance:	95%	Pass

Soil Bearing Pressure Usage		
Net Bearing Pressure:	8507	psf
Factored Nominal Bearing Pressure:	11250	psf
Factored Nominal (Net) Bearing Pressure:	76%	Pass
Load Direction Controling Design Bearing Pressure:	*Diagonal to Pad Edge*	

Sliding Factor of Safety		
Ultimate Friction Resistance:	93.4	k
Ultimate Passive Pressure Resistance:	40.5	k
Total Factored Sliding Resistance:	100.5	k
Sliding Design / Sliding Resistance:	24%	Pass

Pad Strength Capacity			
One Way Shear, Flexual Capacity, and Punching Shear			
Factored One Way Shear (V_u):	252.8	k	
One Way Shear Capacity (fV_c):	574.5	k	*ACI 318-14 25.5.5.1*
V_u / fV_c:	44%	Pass	
Load Direction Controling Shear Capacity:	*Parallel to Pad Edge*		
Lower Steel Pad Factored Moment (M_u):	878.4	k-ft	
Lower Steel Pad Moment Capacity (fM_n):	6640.2	k-ft	*ACI 318-14 22.3.1.1*
M_u / fM_n:	13%	Pass	
Load Direction Controling Flexural Capacity:	*Diagonal to Pad Edge*		
Upper Steel Pad Factored Moment (M_u):	275.1	k-ft	
Upper Steel Pad Moment Capacity (fM_n):	1599.9	k-ft	
M_u / fM_n:	17%	Pass	
Lower Pad Flexural Reinforcement Ratio:	0.0065		*OK - ACI 318-14 7.6.1.1 & 8.6.1.1*
Upper Pad Flexural Reinforcement Ratio:	0.0016		*OK - ACI 318-14 7.6.1.1 & 8.6.1.1*
Lower Pad Reinforcement Spacing:	6.0	in	*OK - ACI 318-14 7.7.2.3, 8.7.2.2, & 24.4.3.3*
Upper Pad Reinforcement Spacing:	6.0	in	*OK - ACI 318-14 7.7.2.3, 8.7.2.2, & 24.4.3.3*
Ultimate Punching Shear Stress, v_u:	37.40	psi	*ACI 318-14 R8.4.4.2.3*
Nominal Punching Shear Capacity (f_cv_c):	164.3	psi	*ACI 318-14 22.6.5.2*
v_u / f_cv_c:	23%	Pass	
Pier Moment Pad Flexure Transfer Ratio, γ_f:	0.60		*TIA-222-H 9.4.2*
Moment Transfer Effective Flexural Width, B_{eff}:	15.00	ft	*TIA-222-H 9.4.2*
Moment Transfer Through Pad Flexure:	18538.38	k-in	*TIA-222-H 9.4.2*
Moment Transfer Flexural Capacity ($fM_{sc,f}$):	64350.54	k-in	
g_fM_{sc} / $fM_{sc,f}$:	0%	Pass	

Pier Strength Capacity			
Factored Moment in Pier (M_u):	2574.8	k-ft	
Pier Moment Capacity (fM_n):	11356.3	k-ft	
M_u / fM_n:	23%	Pass	
Factored Shear in Pier (V_u):	24.4	k	
Pier Shear Capacity (fV_n):	422.5	k	*ACI 318-14 22.5.1.1*
V_u / fV_c:	6%	Pass	
Pier Shear Reinforcement Ratio:	0.0005		*OK - No Ties Necessary for Shear - ACI11.5.6.1*
Factored Tension in Pier (T_u):	0.0	k	
Pier Tension Capacity (fT_n):	4380.5	k	
T_u / fT_n:	0%	Pass	
Factored Compression in Pier (P_u):	38.7	k	
Pier Compression Capacity (fP_n):	5339.9	k	*ACI 318-14 22.4.2.1*
P_u / fP_n:	1%	Pass	
Minimum Depth to Develop Vertical Rebar:	63	in	*ACI 318-14 25.4.2.3*
Minimum Hook Development Length:	31	in	*ACI 318-14 25.4.3.1*
Minimum Mat Thickness / Edge Distance from Pier:	34.0	in	
Minimum Foundation Depth:	8.35	ft	
$M_u/f_BM_n + T_u/f_TT_n$:	23%	Pass	

EXHIBIT 4

VICINITY MAP

AMERICAN TOWER®

SITE NAME: PLAINFIELD CT 6
SITE NUMBER: 302498
ATC PROJECT NUMBER: 13211930_C6_09
SITE ADDRESS: 45 SPAULDING ROAD
PLAINFIELD, CT 06374

LOCATION MAP

150 FT MONOPOLE MODIFICATIONS

PROJECT TEAM

TOWER OWNER

AMERICAN TOWER
10 PRESIDENTAL WAY
WOBURN, MA 01801

ENGINEERED BY

ATC TOWER SERVICES
3500 REGENCY PARKWAY, SUITE 100
CARY, NC 27518

CARRIER INFORMATION

CARRIER: AT&T MOBILITY
CARRIER SITE NAME: MRCTB046850
CARRIER SITE NUMBER: CTL02051

811 Know what's below. Call before you dig.

PROJECT DESCRIPTION

THE MODIFICATIONS PRESENTED ON THESE DRAWINGS ARE BASED ON THE RECOMMENDATIONS OUTLINED IN THE STRUCTURAL ANALYSIS COMPLETED UNDER ENGINEERING PROJECT NUMBER 13211930_C3_11 DATED 01/07/21. SATISFACTORY COMPLETION OF THE WORK INDICATED ON THESE DRAWINGS WILL RESULT IN THE STRUCTURE MEETING THE REQUIREMENTS OF THE SPECIFICATIONS UNDER WHICH THE STRUCTURAL WAS COMPLETED.

COMPLIANCE CODE

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. ANSI/TIA/EIA: STRUCTURAL STANDARDS (222-H EDITION)
2. INTERNATIONAL BUILDING CODE (2015 IBC)
3. CONNECTICUT STATE BUILDING CODE (2018)

PROJECT LOCATION

GEOGRAPHIC COORDINATES

LATITUDE: 41.67480556

LONGITUDE: -71.8791

SHEET	SHEET TITLE	REV.
G-002	IBC GENERAL NOTES	0
G-003	SPECIAL INSPECTION CHECKLIST	0
G-004	BILL OF MATERIALS	0
C-101	SITE PLAN	0
S-201	MODIFICATION PROFILE	0
S-501	REINFORCEMENT INSTALLATION DETAILS	0
S-502	REINFORCEMENT INSTALLATION DETAILS (CONT'D)	0
S-503	#20 STEP BOLT BRACKET INSTALLATION DETAILS	0
S-504	STIFFENER & FLANGE BOLT INSTALLATION DETAILS	0
Z-501	STIFFENER FABRICATION DETAILS	0

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SUITE 100
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COA: PEC.0001553

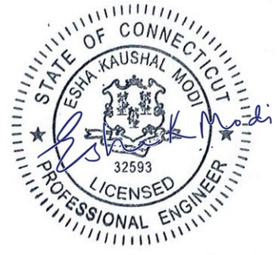
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	NYG	02/08/21

ATC SITE NUMBER:
302498

ATC SITE NAME:
PLAINFIELD CT 6

CONNECTICUT

SITE ADDRESS:
45 SPAULDING ROAD
PLAINFIELD, CT 06374



DRAWN BY:	NYG
APPROVED BY:	CLJ
DATE DRAWN:	02/08/21
ATC JOB NO:	13211930_C6_09

COVER

SHEET NUMBER:	REVISION:
G-001	0

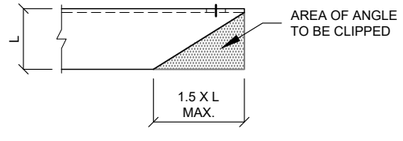
GENERAL

1. ALL WORK TO BE COMPLETED PER APPLICABLE LOCAL, STATE, FEDERAL CODES AND ORDINANCES AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS FOR WIRELESS TOWER SITES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND ABIDING BY ALL REQUIRED PERMITS.
2. ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TOWER AND FOUNDATION CONSTRUCTION.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY OF ANY INSTALLATION INTERFERENCES. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. DETAILS NOT SPECIFICALLY SHOWN ON THE DRAWINGS SHALL FOLLOW SIMILAR DETAILS FOR THIS JOB.
4. ANY SUBSTITUTIONS SHALL CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
5. ANY MANUFACTURED DESIGN ELEMENTS SHALL CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS AND SHOULD BE SIMILAR TO THOSE SHOWN. THESE DESIGN ELEMENTS MUST BE STAMPED BY AN ENGINEER PROFESSIONALLY REGISTERED IN THE STATE OF THE PROJECT, AND SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION.
6. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL CODES AND OSHA SAFETY REGULATIONS.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY, PER ANSI/TIA-322 AND ANSI/ASSE A10.48, TO PROVIDE A COMPLETE AND STABLE STRUCTURE AS SHOWN ON THESE DRAWINGS.
8. CONTRACTOR'S PROPOSED INSTALLATION SHALL NOT INTERFERE, NOR DENY ACCESS TO, ANY EXISTING OPERATIONAL AND SAFETY EQUIPMENT.

STRUCTURAL STEEL

1. ALL DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS, LATEST EDITION.
2. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
3. ALL U-BOLTS SHALL BE ASTM A36 OR EQUIVALENT, WITH LOCKING DEVICE, UNLESS NOTED OTHERWISE.
4. FIELD CUT EDGES, EXCEPT DRILLED HOLES, SHALL BE GROUND SMOOTH.
5. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES & GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.
6. ALL STRUCTURAL STEEL EMBEDDED IN THE CONCRETE SHALL BE APPLIED WITH (2) BRUSHED COATS OF POLYGUARD CA-14 MASTIC OR EQUIVALENT. REFER TO THE MANUFACTURER SPECIFICATIONS FOR SURFACE PREPARATION AND APPLICATION. APPLICATION OF POLYGUARD 400 WRAP IS NOT ESSENTIAL.
7. CONTRACTOR SHALL PERFORM WORK ON ONLY ONE (1) TOWER FACE AND REPLACE/REINFORCE ONE (1) BOLT/MEMBER AT A TIME.
8. ALL FIELD DRILLED HOLES TO BE USED FOR FIELD BOLTING INSTALLATION SHALL BE STANDARD HOLES, AS DEFINED BY AISC, UNLESS NOTED OTHERWISE.

MAXIMUM ALLOWABLE ANGLE CLIP



PAINT

1. AS REQUIRED, CLEAN AND PAINT PROPOSED STEEL ACCORDING TO FAA ADVISORY CIRCULAR AC 70/7460-1L.

WELDING

1. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
2. ALL WELDS SHALL BE INSPECTED VISUALLY. IF DIRECTED BY ENGINEER OF RECORD, 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE (100% IF REJECTABLE DEFECTS ARE FOUND) TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY.
3. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
4. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER AND/OR BASE METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
5. IN CASES WHERE BASE METAL GRADE IS UNKNOWN, ALL WELDING ON LATTICE TOWERS SHALL BE DONE WITH E70XX ELECTRODES; ALL WELDING ON POLE STRUCTURES SHALL BE DONE WITH E80XX ELECTRODES, UNLESS NOTED OTHERWISE.
6. PRIOR TO FIELD WELDING GALVANIZED MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING 1/2" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.

BOLT TIGHTENING PROCEDURE

1. STRUCTURAL CONNECTIONS TO BE ASSEMBLED AND INSPECTED IN ACCORDANCE WITH RCSC SPECIFICATIONS.
2. FLANGE BOLTS SHALL BE INSTALLED AND TIGHTENED USING DIRECT TENSION INDICATING (DTI) SQUIRTER WASHERS. DTI SQUIRTER WASHERS ARE TO BE INSTALLED AND ORIENTED / TIGHTENED PER MANUFACTURER SPECIFICATIONS TO ACHIEVE DESIRED LEVEL OF BOLT PRE-TENSION.
3. IN LIEU OF USING DTI SQUIRTER WASHERS, FLANGE BOLTS MAY BE TIGHTENED USING AISC / RCSC "TURN-OF-THE-NUT" METHOD, PENDING APPROVAL BY THE ENGINEER OF RECORD (EOR). TIGHTEN FLANGE BOLTS USING THE CHART BELOW:

BOLT LENGTHS UP TO AND INCLUDING FOUR DIAMETERS

1/2"	BOLTS UP TO AND INCLUDING 2.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
5/8"	BOLTS UP TO AND INCLUDING 2.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
3/4"	BOLTS UP TO AND INCLUDING 3.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
7/8"	BOLTS UP TO AND INCLUDING 3.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1"	BOLTS UP TO AND INCLUDING 4.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/8"	BOLTS UP TO AND INCLUDING 4.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/4"	BOLTS UP TO AND INCLUDING 5.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-3/8"	BOLTS UP TO AND INCLUDING 5.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/2"	BOLTS UP TO AND INCLUDING 6.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT

BOLT LENGTHS OVER FOUR DIAMETERS BUT NOT EXCEEDING EIGHT DIAMETERS

1/2"	BOLTS 2.25 TO 4.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
5/8"	BOLTS 2.75 TO 5.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
3/4"	BOLTS 3.25 TO 6.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
7/8"	BOLTS 3.75 TO 7.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1"	BOLTS 4.25 TO 8.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/8"	BOLTS 4.75 TO 9.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/4"	BOLTS 5.25 TO 10.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-3/8"	BOLTS 5.75 TO 11.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/2"	BOLTS 6.25 TO 12.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT

4. SPLICE BOLTS SUBJECT TO DIRECT TENSION SHALL BE INSTALLED AND TIGHTENED AS PER SECTION 8.2.1 OF THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS", LOCATED IN THE AISC MANUAL OF STEEL CONSTRUCTION. THE INSTALLATION PROCEDURE IS PARAPHRASED AS FOLLOWS:

   FASTENERS SHALL BE INSTALLED IN PROPERLY ALIGNED HOLES AND TIGHTENED BY ONE OF THE METHODS DESCRIBED IN SUBSECTION 8.2.1 THROUGH 8.2.4.

   8.2.1 TURN-OF-NUT PRETENSIONING
   BOLTS SHALL BE INSTALLED IN ALL HOLES OF THE CONNECTION AND BROUGHT TO A SNUG TIGHT CONDITION AS DEFINED IN SECTION 8.1, UNTIL ALL THE BOLTS ARE SIMULTANEOUSLY SNUG TIGHT AND THE CONNECTION IS FULLY COMPACTED. FOLLOWING THIS INITIAL OPERATION ALL BOLTS IN THE CONNECTION SHALL BE TIGHTENED FURTHER BY THE APPLICABLE AMOUNT OF ROTATION SPECIFIED ABOVE. DURING THE TIGHTENING OPERATION THERE SHALL BE NO ROTATION OF THE PART NOT TURNED BY THE WRENCH. TIGHTENING SHALL PROGRESS SYSTEMATICALLY.

5. ALL OTHER BOLTED CONNECTIONS SHALL BE BROUGHT TO A SNUG TIGHT CONDITION AS DEFINED IN SECTION 8.1 OF THE SPECIFICATION.

   ALL BOLT HOLES SHALL BE ALIGNED TO PERMIT INSERTION OF THE BOLTS WITHOUT UNDUE DAMAGE TO THE THREADS. BOLTS SHALL BE PLACED IN ALL HOLES WITH WASHERS POSITIONED AS REQUIRED AND NUTS THREADED TO COMPLETE THE ASSEMBLY. COMPACTING THE JOINT TO THE SNUG-TIGHT CONDITION SHALL PROGRESS SYSTEMATICALLY FROM THE MOST RIGID PART OF THE JOINT. THE SNUG-TIGHTENED CONDITION IS THE TIGHTNESS THAT IS ATTAINED WITH A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.

APPLICABLE CODES AND STANDARDS

1. ANSI/TIA: STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES, 222-H EDITION.
2. 2018 CONNECTICUT STATE BUILDING CODE.
3. 2015 INTERNATIONAL BUILDING CODE.
4. ACI 318: AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE. REFERENCE LATEST APPROPRIATE EDITION TO MATCH LOCAL AND/OR INTERNATIONAL BUILDING CODE(S) LISTED ABOVE.
5. CRSI: CONCRETE REINFORCING STEEL INSTITUTE, MANUAL OF STANDARD PRACTICE, LATEST EDITION.
6. AISC: AMERICAN INSTITUTE OF STEEL CONSTRUCTION, MANUAL OF STEEL CONSTRUCTION, LATEST EDITION.
7. AWS: AMERICAN WELDING SOCIETY D1.1, STRUCTURAL WELDING CODE, LATEST EDITION.

SPECIAL INSPECTION

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH IBC 2015, SECTION 1704 AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK:
   a) STRUCTURAL WELDING (CONTINUOUS INSPECTION OF FIELD WELD ONLY)
   b) HIGH STRENGTH BOLTS (PERIODIC INSPECTION OF A325 EXTENSION FLANGE BOLTS TO BE TIGHTENED PER "TURN-OF-THE-NUT" METHOD)
2. THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER IN ACCORDANCE WITH IBC 2015, SECTION 1704, UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM SUCH WORK WITHOUT THE SPECIAL INSPECTIONS.

AMERICAN TOWER®
A.T. ENGINEERING SERVICE, PLLC
3500 REGENCY PARKWAY
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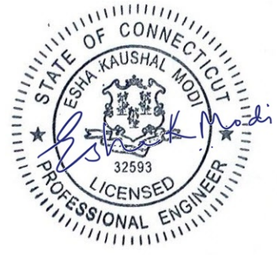
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	NYG	02/08/21

ATC SITE NUMBER:
302498

ATC SITE NAME:
PLAINFIELD CT 6

CONNECTICUT

SITE ADDRESS:
45 SPAULDING ROAD
PLAINFIELD, CT 06374



DRAWN BY:	NYG
APPROVED BY:	CLJ
DATE DRAWN:	02/08/21
ATC JOB NO:	13211930_C6_09

IBC GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0

MODIFICATION INSPECTION NOTES

THE SPECIAL INSPECTION (SI) PROCEDURE IS INTENDED TO CONFIRM THAT CONSTRUCTION AND INSTALLATION MEETS ENGINEERING DESIGN, ATC PROCEDURES AND ATC STANDARD SPECIFICATIONS FOR WIRELESS TOWER SITES.

TO ENSURE THAT THE REQUIREMENTS OF THE SI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR AND THE INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PO IS RECEIVED FROM AMERICAN TOWER CORPORATION (ATC). IT IS EXPECTED THAT EACH PARTY WILL PROACTIVELY REACH OUT TO THE OTHER PARTY. IF CONTACT INFORMATION IS NOT KNOWN, CONTACT YOUR AMERICAN TOWER POINT OF CONTACT.

SPECIAL INSPECTOR

THE SPECIAL INSPECTOR IS REQUIRED TO CONTACT THE GENERAL CONTRACTOR AS SOON AS RECEIVING A PO FROM ATC. UPON RECEIVING A PO FROM ATC THE SPECIAL INSPECTOR AT A MINIMUM MUST:

- REVIEW THE REQUIREMENTS OF THE SI CHECKLIST.
- WORK WITH THE GENERAL CONTRACTOR TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS.
- ANY CONCERNS WITH THE SCOPE OF WORK OR PROJECT COMMITMENT MUST BE RELAYED TO THE ATC POINT OF CONTACT IMMEDIATELY.

THE SPECIAL INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GENERAL CONTRACTOR INSPECTION AND TEST REPORTS, REVIEWING THESE DOCUMENTS FOR ADHERENCE TO CONTRACT DOCUMENTS, CONDUCTING THE IN-FIELD INSPECTIONS, AND SUBMITTING THE SI REPORT TO AMERICAN TOWER CORPORATION.

GENERAL CONTRACTOR

THE GENERAL CONTRACTOR IS REQUIRED TO CONTACT THE SI INSPECTOR AS SOON AS RECEIVING A PO FOR THE MODIFICATION INSTALLATION OR TURNKEY PROJECT TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE SI CHECKLIST.
- WORK WITH THE SI TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS.
- BETTER UNDERSTAND ALL INSPECTION AND TESTING REQUIREMENTS.

THE GENERAL CONTRACTOR SHALL PERFORM AND RECORD THE TEST AND INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE SI CHECKLIST.

SPECIAL INSPECTION CHECKLIST

INSPECTION DOCUMENT	DESCRIPTION	INSPECTION TESTING REQUIRED	RESPONSIBILITY	SI REVIEW REQUIRED			INSPECTION FREQUENCY	
				PRE CX	DURING CX	POST CX	PERIODIC	CONTINUOUS
SPECIAL INSPECTION FIELD WORK & REPORT	DOCUMENTATION AND SITE VISIT CONDUCTED BY AN ATC APPROVED SPECIAL INSPECTOR AS REQUIRED BY ATC AND OTHER AUTHORITIES HAVING JURISDICTION. INSPECTION PARAMETERS TO FOLLOW ATC'S STANDARD SPECIFICATION FOR WIRELESS TOWER SITES.	✔	SI			✔		
ENGINEERING ASSEMBLY DRAWINGS	GC SHALL SUBMIT DRAWINGS TO SI FOR INCLUSION IN SI REPORT	✔	GC	✔				
FABRICATED MATERIAL VERIFICATION & INSPECTION	MTR AND OR MILL CERTIFICATIONS FOR SUPPLIED MATERIALS GC SHALL SUPPLY SI WITH REPORTS TO BE INCLUDED IN SI REPORT WHEN REQUIRED BY ATC	✔	SI	✔				
CERTIFIED WELD INSPECTION	INSPECTION AND REPORT OF STRUCTURAL WELDING PERFORMED DURING PROJECT COMPLETED BY A CWI AND INCLUDED WITHIN SI REPORT	✔	GC / TA			✔	✔	
FOUNDATION INSPECTION & VERIFICATION	VISUAL OBSERVATION AND APPROVAL OF FOUNDATION EXCAVATION, REBAR PLACEMENT, CASING/SHORING/FORMING PLACEMENT, AND ANCHOR TEMPLATE AND ANCHOR PLACEMENT - TO BE SI APPROVED PRIOR TO CONCRETE POUR AND DOCUMENTED IN THE SI REPORT		SI					
ANCHOR, ROCK ANCHOR OR HELICAL PULL-OUT TEST	PULL TESTING OF INSTALLED ANCHORS TO BE COMPLETED AND DOCUMENTED IN SI REPORT		GC / TA					
CONCRETE INSPECTION & VERIFICATION	CONCRETE MIX DESIGN, SLUMP TEST, COMPRESSIVE TESTING, AND SAMPLE GATHERING TECHNIQUES ARE TO BE PROVIDED FOR INCLUSION IN THE SI REPORT. SI SHALL VERIFY CONCRETE PLACEMENT AS REQUIRED BY THE DESIGN DOCUMENTS (INSPECTION FREQUENCY IS MARKED CONTINUOUS)		GC / TA					
DYWIDAG PLACEMENT/ANCHOR BOLT EMBEDMENT - EPOXY/GROUT INSTALL	ANCHOR/BAR EMBEDMENT, HOLE SIZE, EPOXY/GROUT TYPE, INSTALLATION TEMPERATURE AND INSTALLATION SHALL BE VERIFIED BY THE SI AND INCLUDED IN THE SI REPORT		GC / SI					
BASE PLATE GROUT INSPECTION & VERIFICATION	BASE PLATE GROUTING TYPE AND PLACEMENT SHALL BE CONFIRMED BY THE SI AND INCLUDED IN THE SI REPORT		GC / SI					
EARTHWORK INSPECTION & VERIFICATION	EXCAVATION, FILL, SLOPE, GRADE AND OTHER EARTHWORK REQUIREMENTS PER PLANS SHALL BE VERIFIED BY THE SI AND INCLUDED IN THE SI REPORT		GC / TA					
COMPACTION VERIFICATION	CONTRACTOR SHALL PROVIDE AN INDEPENDENT THIRD PARTY CERTIFIED INSPECTION WHICH PROVIDES TEST RESULTS FOR COMPACTION TEST OF SOILS IN PLACE TO ASTM STANDARDS.		GC / TA					
GROUND TESTING & VERIFICATION	GC SHALL PROVIDE DOCUMENTATION SHOWING THAT THE GROUNDING SYSTEM SHALL HAVE A MEASURED RESISTANCE TO THE GROUND OF NOT MORE THAN THE RECOMMENDED 10 OHMS. PER THE ATC CONSTRUCTION SPECIFICATION UNDER SECTION 2.15 THIS DOCUMENTATION MUST BE AN INDEPENDENT CERTIFICATION.		GC					
STEEL CONSTRUCTION INSPECTION & VERIFICATION	VISUAL OBSERVATION AND APPROVAL OF STEEL CONSTRUCTION TO BE PERFORMED BY THE SI. INSPECTION TO INCLUDE VERIFICATION OF NEW CONSTRUCTION OR MODIFICATION OF EXISTING CONSTRUCTION PER ENGINEERED PLANS. DETAILED VERIFICATION SHALL BE INCLUDED IN SI REPORT.	✔	SI			✔	✔	
ON-SITE COLD GALVANIZING VERIFICATION	SI SHALL VERIFY WITH GC ALL COLD GALVANIZATION TYPE AND APPLICATION AND INCLUDE SUMMARY IN SI REPORT	✔	GC			✔	✔	
GUY WIRE TENSIONING & TOWER ALIGNMENT REPORT	GC SHALL PROVIDE SI EVIDENCE OF PROPER GUY TENSIONING AND TOWER PLUMB PER PLANS. SI SHALL VERIFY AND INCLUDE PLUMB AND TENSION REPORTING IN SI REPORT.		GC					
GC AS-BUILT DRAWINGS WITH CONSTRUCTION RED-LINES	GC SHALL SUBMIT "AS-BUILT" DRAWINGS INDICATING ANY APPROVED CHANGES TO ENGINEERED PLANS TO SI FOR APPROVAL/REVIEW AND INCLUSION IN SI REPORT	✔	GC			✔		
SI AS-BUILT DRAWINGS WITH INSPECTION RED-LINES (AS REQUIRED)	SI SHALL SUBMIT "AS-BUILT" DRAWINGS INDICATING ANY APPROVED CHANGES TO ENGINEERED PLANS WITHIN SI REPORT	✔	SI			✔		
TIA INSPECTION	SI SHALL COMPLETE TIA INSPECTION AND PROVIDE SEPARATE TIA INSPECTION DOCUMENTATION TO ATC CM		SI					
PHOTOGRAPHS	PHOTOGRAPHIC EVIDENCE OF SPECIAL INSPECTION, ON SITE REMEDIATION, AND ITEMS FAILING INSPECTION & REQUIRING FOLLOW UP TO BE INCLUDED WITHIN THE SI REPORT. COMPLETE PHOTO LOG IS TO BE SUBMITTED WITHIN SI REPORT.	✔	GC / SI			✔		

NOTE: SPECIAL INSPECTIONS ARE INTENDED TO BE A COLLABORATIVE EFFORT BETWEEN GC AND SI. WHENEVER POSSIBLE GC IS TO PROVIDE SI WITH PHOTOGRAPHIC OR OTHER ACCEPTABLE EVIDENCE OF PROPER INSTALLATION IF PERIODIC INSPECTION FREQUENCY IS ACCEPTABLE. THE GC AND SI SHALL WORK TO COMPILE EVIDENCE OF PROPER CONSTRUCTION AND LIMIT THE NUMBER OF SI SITE VISITS REQUIRED.

TABLE KEY:
SI - ATC APPROVED SPECIAL INSPECTOR
GC - GENERAL CONTRACTOR
TA - 3RD PARTY TESTING AGENCY
CX - CONSTRUCTION
CM - CONSTRUCTION MANAGER
ATC - AMERICAN TOWER CORPORATION

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A.T. ENGINEERING SERVICE, PLLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: PEC.0001553

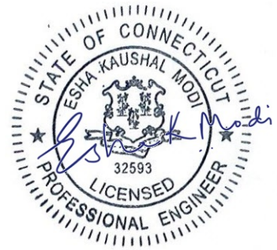
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	NYG	02/08/21

ATC SITE NUMBER:
302498

ATC SITE NAME:
PLAINFIELD CT 6

CONNECTICUT

SITE ADDRESS:
45 SPAULDING ROAD
PLAINFIELD, CT 06374



DRAWN BY:	NYG
APPROVED BY:	CLJ
DATE DRAWN:	02/08/21
ATC JOB NO:	13211930_C6_09

SPECIAL INSPECTION CHECKLIST

SHEET NUMBER:	REVISION:
G-003	0

BILL OF MATERIALS

QUANTITY REQUIRED	QUANTITY PROVIDED	PART NUMBER	DESCRIPTION	LENGTH	SHEET LIST	PART WEIGHT	WEIGHT (lb)	NOTES
			DYWIDAG REINFORCEMENT MATERIAL & HARDWARE					
4	4	DYD-20-ATR-30	#20 ALL THREAD ROD 30'	30'-0"	S-501	501.0	2004	GALVANIZED
4	4	DYD-20-ATR-PF	#20 ALL THREAD ROD (PER FT)	23'-6"	S-501	392.5	1570	GALVANIZED
8	8	DYD-20-COUP-00	#20 COUPLING HDG	—	—	—	—	GALVANIZED
16	16	DYD-20-HN-00	#20 HEX NUT HDG	—	—	—	—	GALVANIZED
76	76	BR-20E	L 6" X 3 1/2" X 3/8"	1'-0"	S-503	12.3	935	ECCENTRIC
8	8	TB-20E-8	L 6" X 3 1/2" X 3/8"	2'-5 1/2"	S-503	30.2	242	ECCENTRIC
259	272	UB-580-3125	U-BOLT ASSEMBLIES FOR #20 ROD	—	—	—	—	GALVANIZED
192	202	NG-0625-0875-A490	NEXGEN2 BLIND BOLT ASSEMB., M20 W/ SPRING SLEEVE, A490	—	—	—	—	ALLFASTENERS - 2NG2060
16	17	NG-0938-1438-A490	NEXGEN2 BLIND BOLT ASSEMB., M20 W/ SPRING SLEEVE, A490	—	—	—	—	ALLFASTENERS - 2NG2036
43	48	#20SB	STEP BOLT WELDMENT	0'-7 1/4"	S-504	2.5	120	
			STIFFENER MATERIAL					
12	12	302498-1	PL 5/8" X 3 1/2"	0'-9"	S-504, Z-501	3.2	38	
			FLANGE BOLT HARDWARE					
12	13	BK-1000-375-A490-MAG	BOLT, 1"Ø A490 W/ HHN-LKW-FW, MAGNI 565 COATING	3 3/4"	—	—	—	ALLFASTENERS - 2STB01334A490M-A

TOTAL WEIGHT (lb) **4,909**

PAGE 1 OF 1

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CONNECTICUT

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45 SPAULDING ROAD
PLAINFIELD, CT 06374

ESHA KAUSHAL MODI
32593

DRAWN BY:	NYG
APPROVED BY:	CLJ
DATE DRAWN:	02/08/21
ATC JOB NO:	13211930_C6_09

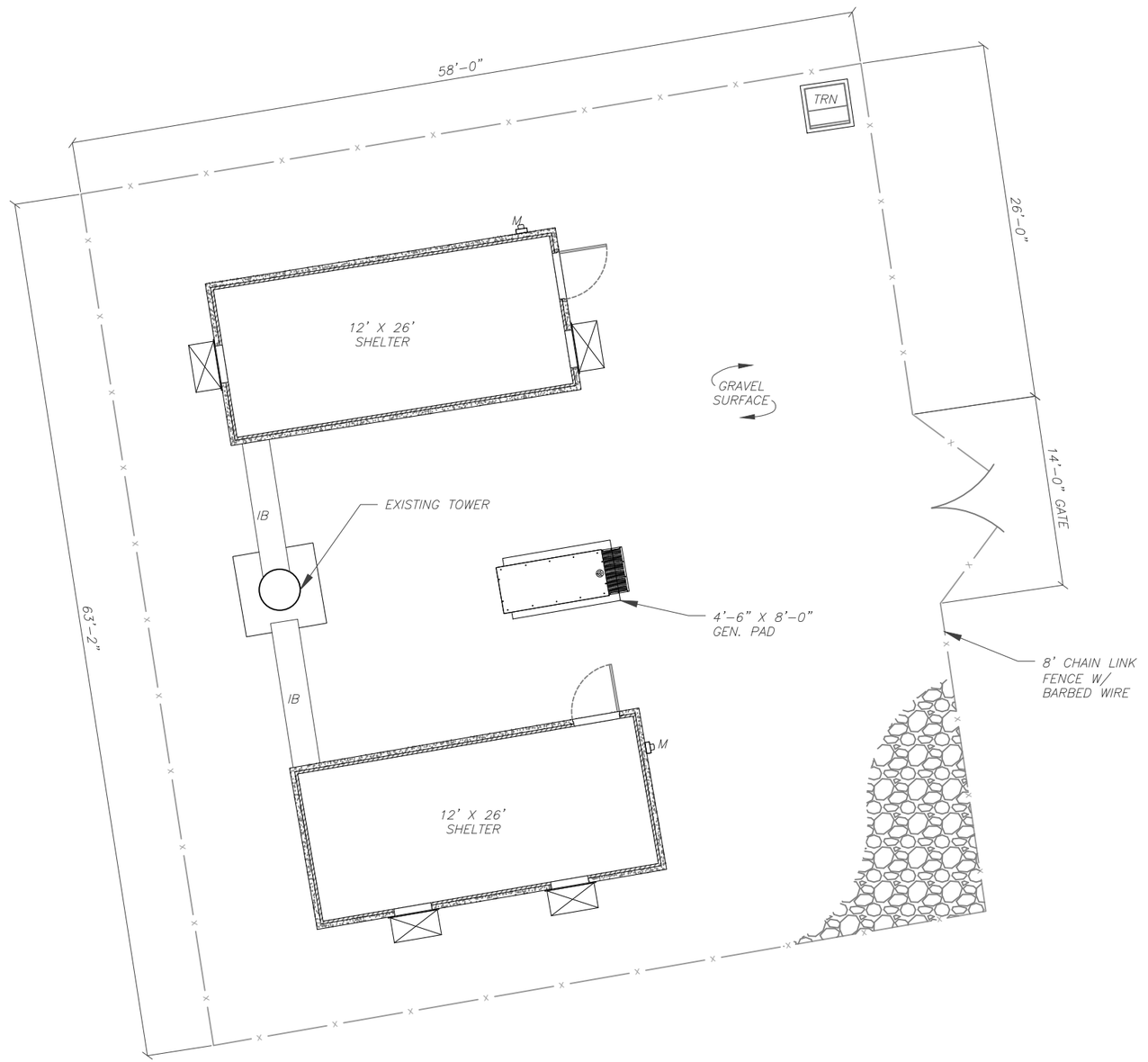
BILL OF MATERIALS

SHEET NUMBER: G-004

REVISION: 0

LEGEND

⊗	GROUNDING TEST WELL
AV, A/V	AIR VENT
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
C	CABINET
CS	COAX SHROUD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACLE
HH, V	HAND HOLE, VAULT
HFC	HYDROGEN FUEL CELL
HSM	HYDROGEN STORAGE MATERIAL
IB	ICE BRIDGE
K	KENTROX BOX
LC	LIGHTING CONTROL
LPG	LIQUID PROPANE GAS
M	METER
OHW	OVERHEAD WIRE
P	POWER
PB	PULL BOX
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	LEASE AREA
	EASEMENT
	WOOD FENCE
	WIRE FENCE
	METAL FENCE
	GUARD RAIL
	CHAINLINK FENCE
	ROAD (DIRT)
	ROAD (STONE)
	ROAD (PAVED)



0 10' 20'

SCALE: 1"=10' (11X17)
1"=5' (22X34)

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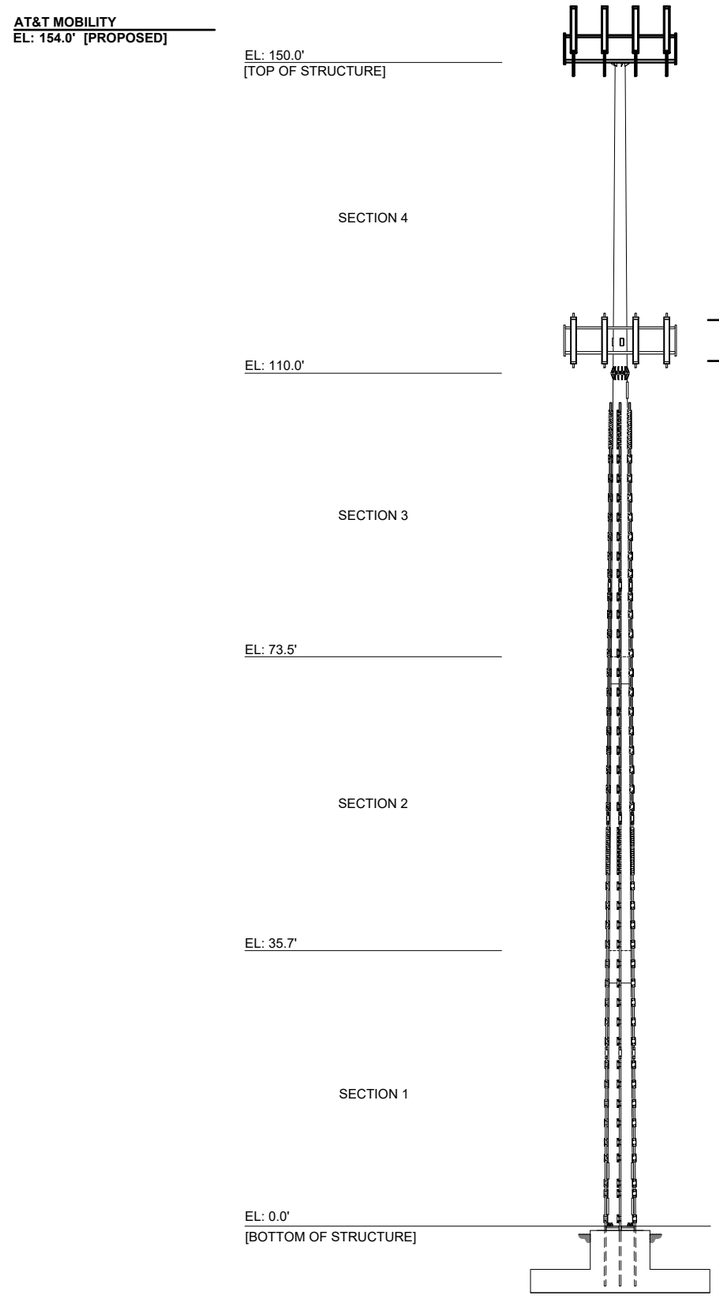
SITE PLAN

SHEET NUMBER:	REVISION:
C-101	0



TOWER ELEVATION VIEW

MODIFICATION INTERFERENCE
EL: 114'-0"±

NOTES:

1. **PROPOSED #20 DYWIDAG REINFORCEMENT TO BE COUPLED WITH EXISTING #20 DYWIDAG REINFORCEMENT AT EL: 52'-6"±. CONTRACTOR TO VERIFY IN FIELD ORIENTATION WITH BASE PLATE AND EXISTING #20 DYWIDAG REINFORCEMENT.**
2. **PROPOSED AT&T MOBILITY COAX TO BE INSTALLED INSIDE MONOPOLE.**
3. **BASE FLANGE WELD AND STIFFENER PLATE WELDS (WHEN PRESENT) ARE TO BE INSPECTED VISUALLY AND BY NDT METHODS BY A CERTIFIED WELD INSPECTOR WITH NDT LEVEL II CERTIFICATION. RESULTS ARE TO BE SENT TO PMI@AMERICANTOWER.COM .**
4. **CONTACT AMERICAN TOWER FIELD OPERATIONS WHEN EXISTING EQUIPMENT INTERFERES WITH INSTALLATION OF MODIFICATIONS. ONCE APPROVED, EXISTING EQUIPMENT MAY BE TEMPORARILY MOVED DURING INSTALLATION & REINSTALLED TO THE ORIGINAL HEIGHT & LOCATION BY CONTRACTOR POST COMPLETION OF MODIFICATIONS.**

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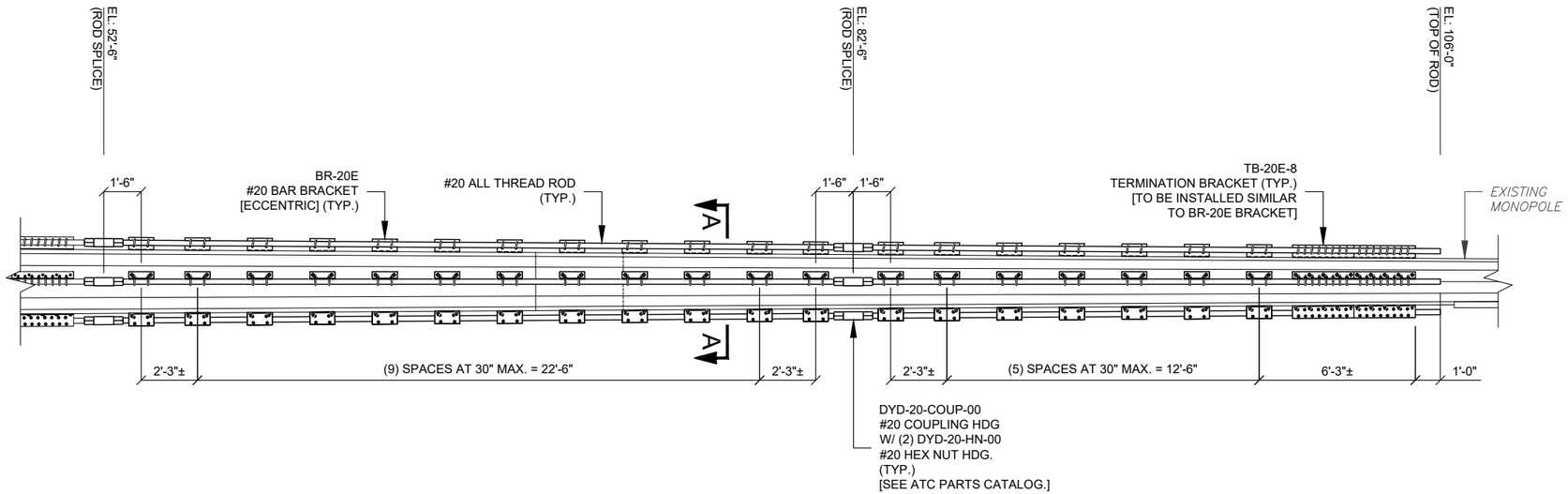
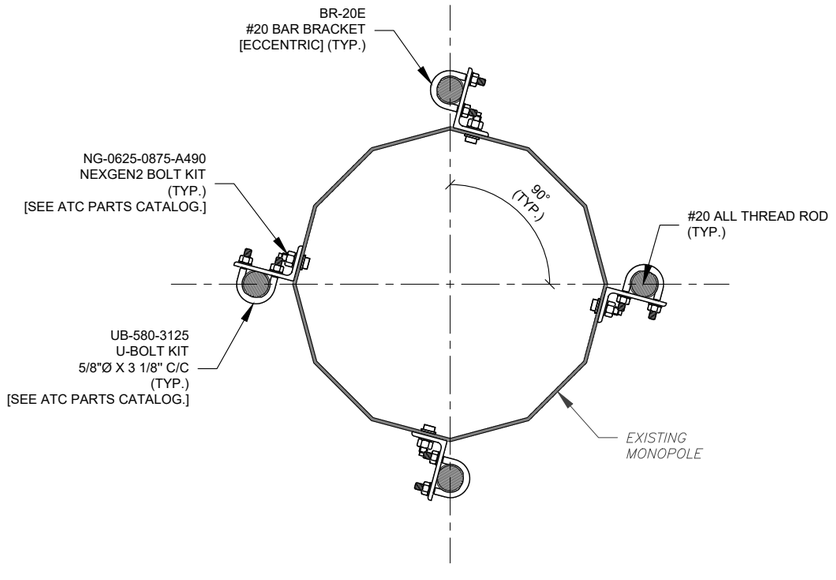
MODIFICATION PROFILE

SHEET NUMBER:	REVISION:
S-201	0



ELEVATION VIEW
#20 BAR BRACKET SPACING DETAIL



SECTION "A-A"
TYPICAL DETAIL

NOTES:

1. **REPLACE ANY EXISTING STEP BOLTS THAT INTERFERE WITH THE NEW #20 ALL THREAD ROD REINFORCEMENTS. THE NEW STEP BOLTS SHALL BE ATTACHED TO THE #20 ALL THREAD RODS IN THE SAME APPROXIMATE LOCATION. SEE SHEET S-503 FOR INSTALLATION DETAILS.**
2. **PLACE A BRACKET (BR-20E) DIRECTLY ABOVE AND BELOW ANY EXISTING PORTHOLE AS REQUIRED.**
3. **SEE SHEET S-502 FOR #20 ALL THREAD ROD BRACKET INSTALLATION DETAILS.**
4. **NG-0938-1438-A490 NEXGEN2 BOLT KITS ARE SUPPLIED AS REQUIRED FOR BAR BRACKET CONNECTIONS THAT FALL WITHIN SLIP JOINT LOCATIONS.**

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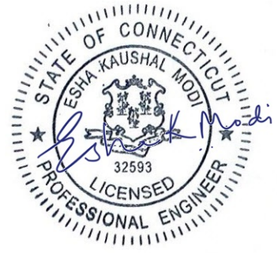

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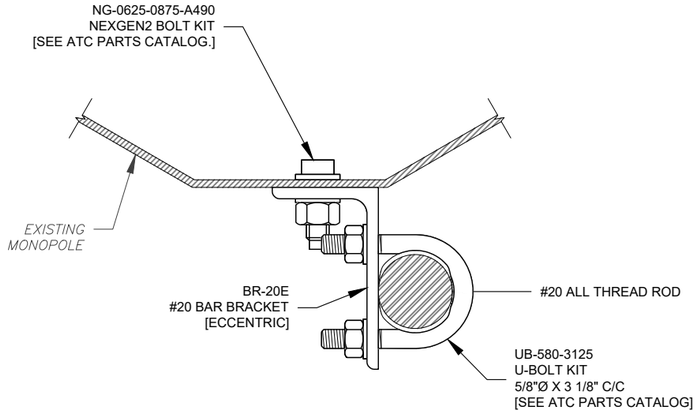
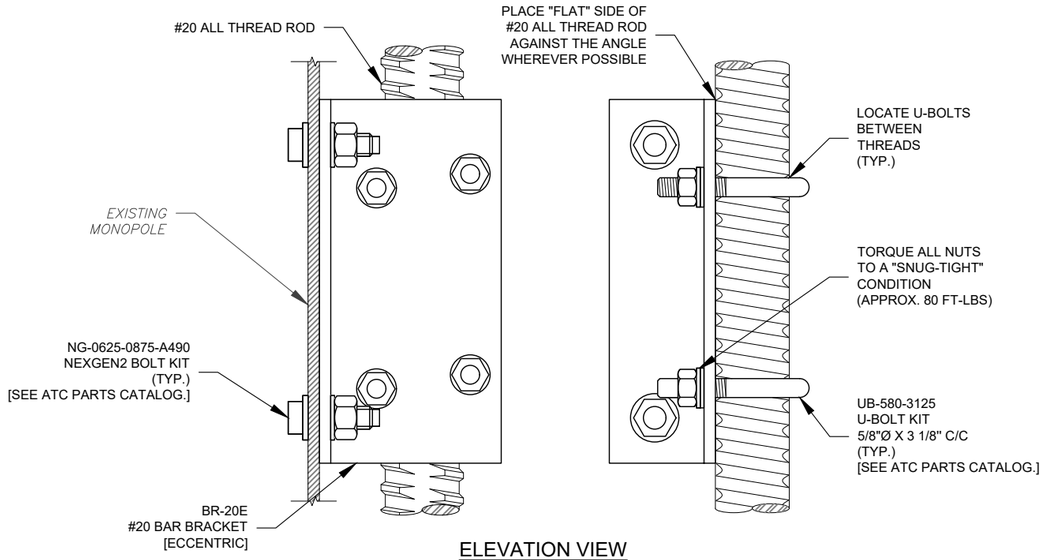
DATE DRAWN:	02/08/21
ATC JOB NO:	13211930_C6_09

REINFORCEMENT
INSTALLATION DETAILS

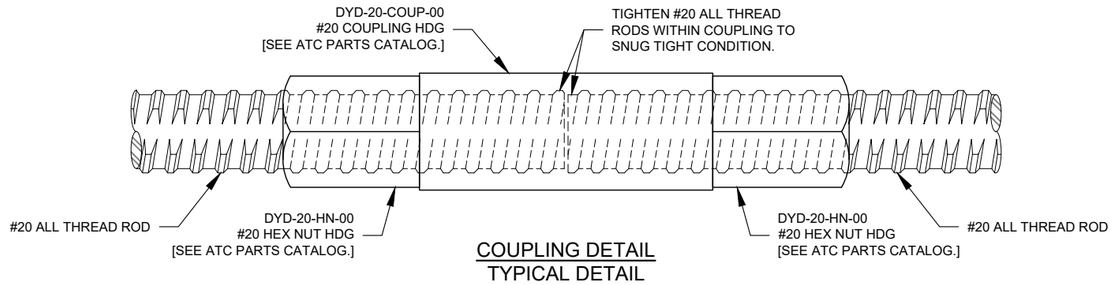
SHEET NUMBER:	REVISION:
S-501	0



PLAN VIEW
#20 BAR BRACKET ORIENTATION
[ECCENTRIC]



ELEVATION VIEW
#20 BAR BRACKET ORIENTATION
[ECCENTRIC]



COUPLING DETAIL
TYPICAL DETAIL

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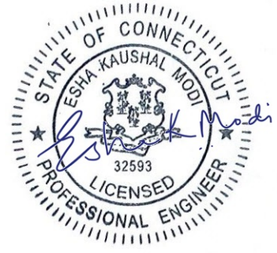
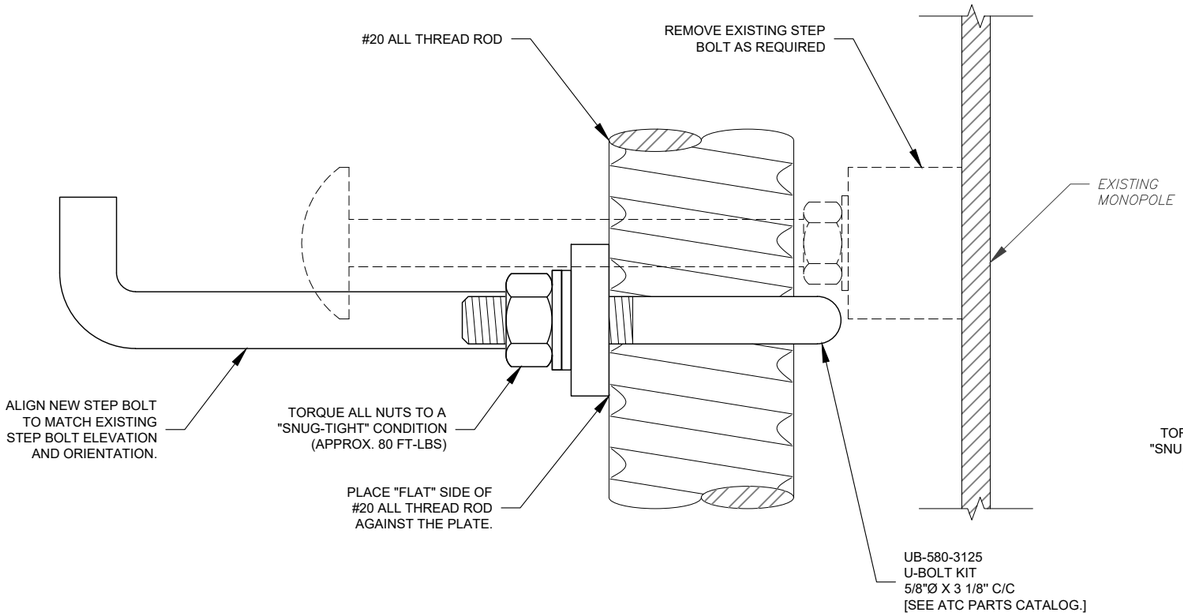
PLAINFIELD, CT 06374



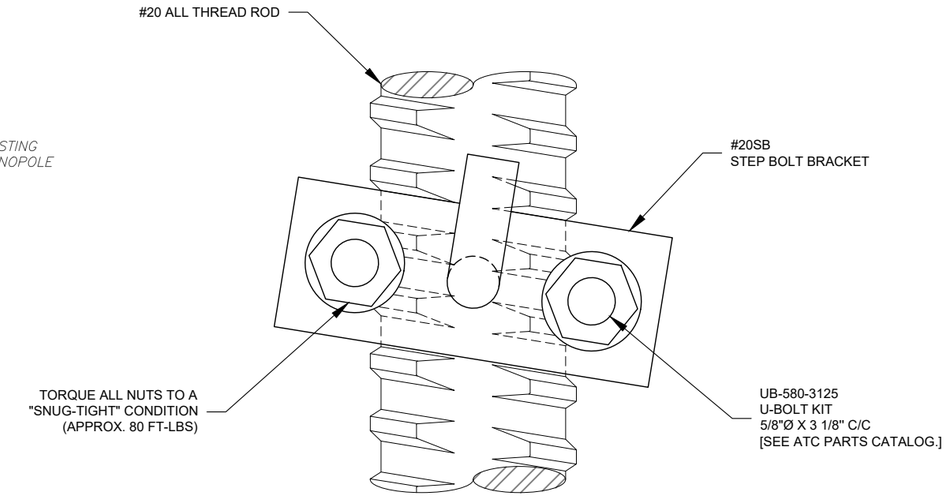
DRAWN BY:	NYG
APPROVED BY:	CLJ
DATE DRAWN:	02/08/21
ATC JOB NO:	13211930_C6_09

REINFORCEMENT
INSTALLATION DETAILS
(CONT'D)

SHEET NUMBER:	REVISION:
S-502	0



#20SB INSTALLATION DETAILS
SIDE VIEW



#20SB INSTALLATION DETAILS
FRONT VIEW

NOTE:
STEP PEG SPACING IS NOT TO EXCEED 15" MAX. STAGGERED OR 30" MAX. ON ANY SINGLE SIDE OF THE DYWIDAG BAR.

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REV.	DESCRIPTION	BY	DATE
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45 SPAULDING ROAD
PLAINFIELD, CT 06374

DRAWN BY:	NYG
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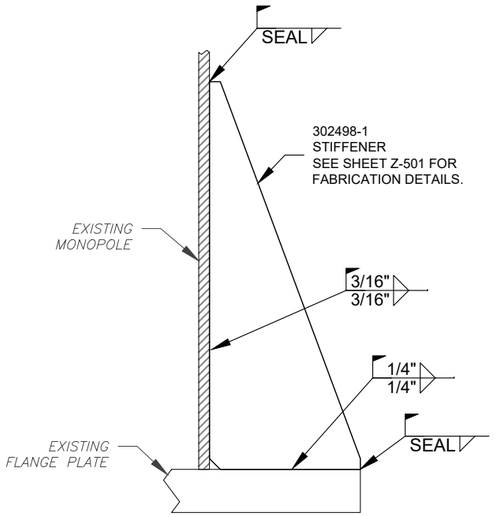
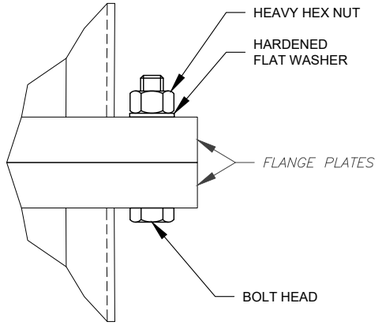
DATE DRAWN:	02/08/21
ATC JOB NO:	13211930_C6_09

#20 STEP BOLT BRACKET
INSTALLATION DETAILS

SHEET NUMBER:	REVISION:
S-503	0

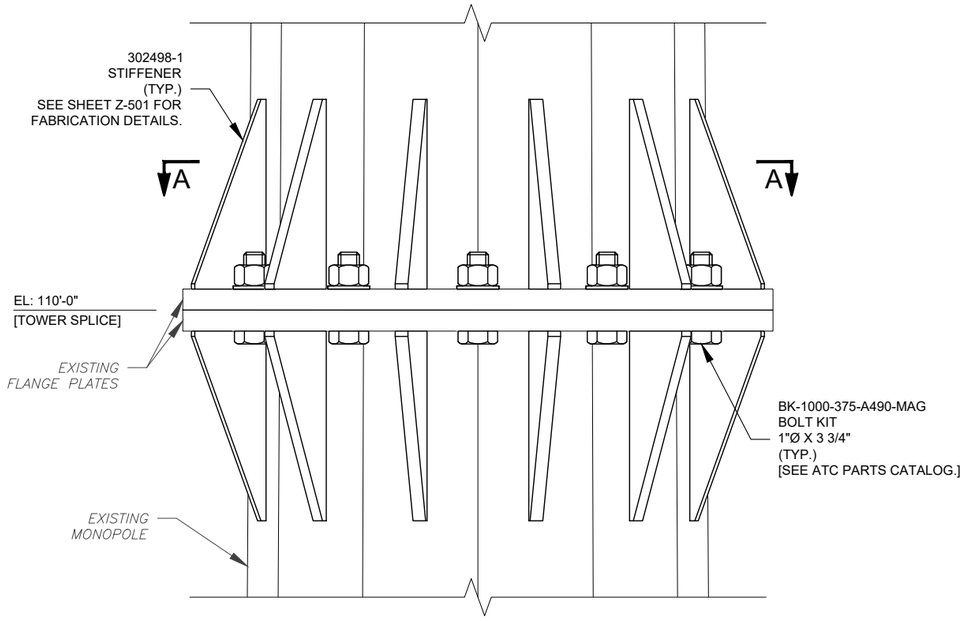


STIFFENER WELD DETAIL
TYPICAL DETAIL

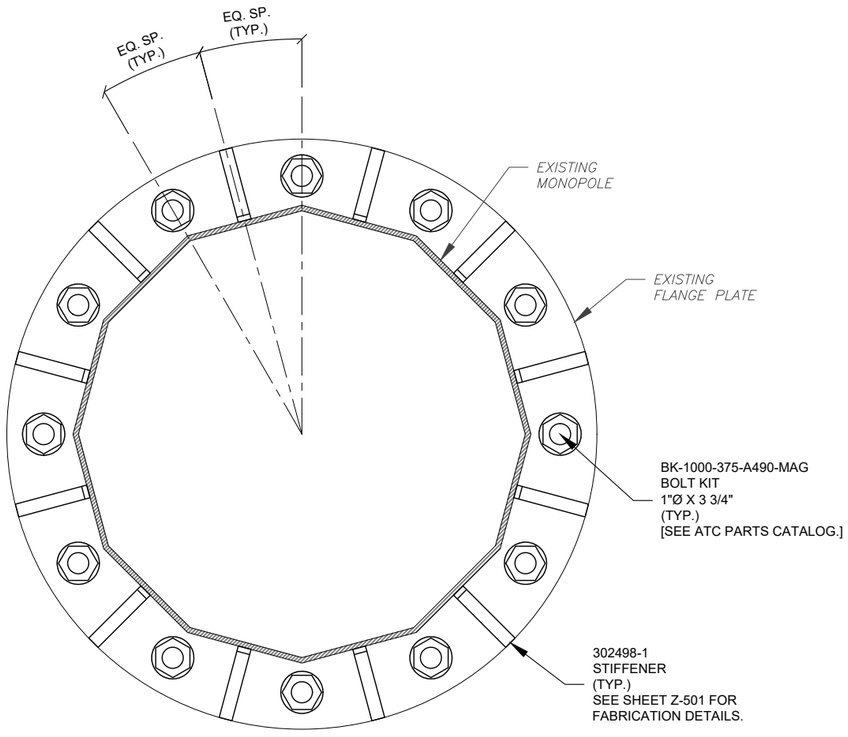


FLANGE BOLT INSTALLATION
TYPICAL DETAIL

ALL FLANGE BOLTS SHALL BE TIGHTENED BY USING AISC/RCSC "TURN-OF-THE-NUT" METHODOLOGY. SEE SHEET G-002 FOR DETAILS



ELEVATION VIEW
STIFFENER INSTALLATION



SECTION "A-A"
TYPICAL DETAIL

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CONNECTICUT

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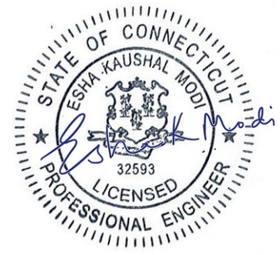

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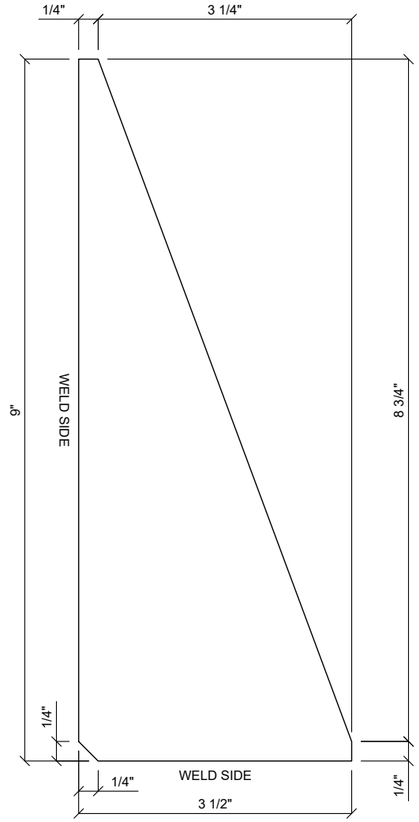
APPROVED BY:	CLJ
DATE DRAWN:	02/08/21
ATC JOB NO:	13211930_C6_09

STIFFENER & FLANGE BOLT INSTALLATION DETAILS

SHEET NUMBER:	REVISION:
S-504	0



302498-1
STIFFENER

302498-1	PL 5/8" X 3 1/2"	0'-9"	SHAPE	3.1#	3.2#
PART NO.	**DESCRIPTION**	**LENGTH**	**NOTES**	**BLK WT**	**GALV WT**
MATERIAL: A572 GR. 50		**FINISH:** GALVANIZED		**HOLES:** N/A	

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DRAWN BY:	NYG
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STIFFENER
FABRICATION DETAILS

SHEET NUMBER:	REVISION:
Z-501	0

EXHIBIT 5

INFINIGY
FROM ZERO TO INFINIGY
the solutions are endless

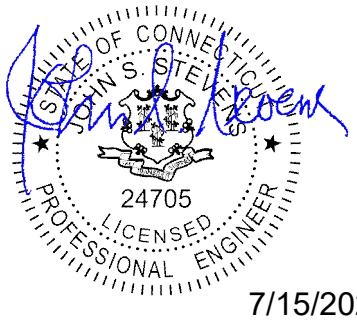
1033 WATERVLIET SHAKER RD, ALBANY, NY 12205

Mount Modification Report

July 15, 2020

AT&T Site Name	MRCTB046850
AT&T Site Number	CTL02051
ATC Site Name	Plainfield CT 6, CT
ATC Site Number	302498
ATC Engineering Number	13211930_C9_06
Infinigy Job Number	1009-Z0003-B
Client	American Tower Corporation
Carrier	AT&T Mobility
Site Location	Spaulding Road, Plainfield, CT 06374 Windham County 41.674806 N NAD83 71.879100 W NAD83
Mount Centerline EL.	154 ft
Mount Classification	Platform w/ Handrails
Structural Usage Ratio	**75.1%**
Overall Result	**Pass**
Note	-

Upon reviewing the results of this analysis, it is our opinion that the structure meets the specified TIA code requirements. The mounts and connections for the proposed carrier are therefore deemed adequate to support the final loading configuration as listed in this report.



7/15/2020

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Contents

Introduction

Infinigy Engineering has been requested to perform a mount analysis of the existing AT&T Platform. All supporting documents have been obtained from the client and are assumed to be accurate and applicable to this site. The mount was analyzed using RISA-3D Version 17.0.2 analysis software.

Supporting Documentation

Mount Mapping	MasTec Job No. 202199, dated June 22, 2020
Structural Analysis Report	American Tower Corporation, Engineering No. OAA681936_C3_01, dated July 27, 2016
Collocation Application	ATC Asset No. 302498

Analysis Code Requirements

Wind Speed	124 mph (3-Second Gust)
Wind Speed w/ ice	50 mph (3-Second Gust) w/ 1.0” radial ice concurrent
TIA Revision	ANSI/TIA-222-H
Structure Class	II
Exposure Category	B
Topographic Category	1
Seismic Design Values	S_S = 0.187 g, S_1 = 0.054 g
Site Class	D - Stiff Soil
HMSL	556 ft

Conclusion

Upon reviewing the results of this analysis, it is our opinion that the structure meets the specified TIA code requirements. The mounts and connections are therefore deemed adequate to support the final loading configuration as listed in this report.

If you have any questions, require additional information, or actual conditions differ from those as detailed in this report please contact me via the information below:

Brad Davenport
Engineering Manager | **INFINIGY**
1517 Old Apex Road, Cary, NC 27513
(0) (518) 690-0792
BDavenport@infinigy.com | www.infinigy.com

Final Loading Configuration

Mount CL (ft)	Rad. HT (ft)	Vert. O/S (ft)	Horiz. O/S (ft)*	Qty.	Appurtenance	Carrier
154.0	154.0	-	0.5	3	CCI HPA65R-BU8A	AT&T Mobility
			3.6	3	CCI OPA65R-BU8D	
			10	3	CCI DMP65R-BU8D	
			7.5	3	Powerwave 7770.00	
		4	0.5	6	Powerwave LGP21401	
		4	7.5	6	Powerwave LGP21901	
		6	10	3	Raycap DC6-48-60-18-8F	
		5	3.6	3	Ericsson RRUS 4478 B14	
		5	0.5	3	Ericsson RRUS 4449 B5/B12	
		5	7.5	3	Ericsson RRUS 4415 B30	
		5	10	3	Ericsson RRUS 8843 B2/B66A	

***Horizontal Offset is defined as the distance from the left most edge of the mount face horizontal when viewed facing the tower**

Structure Usages

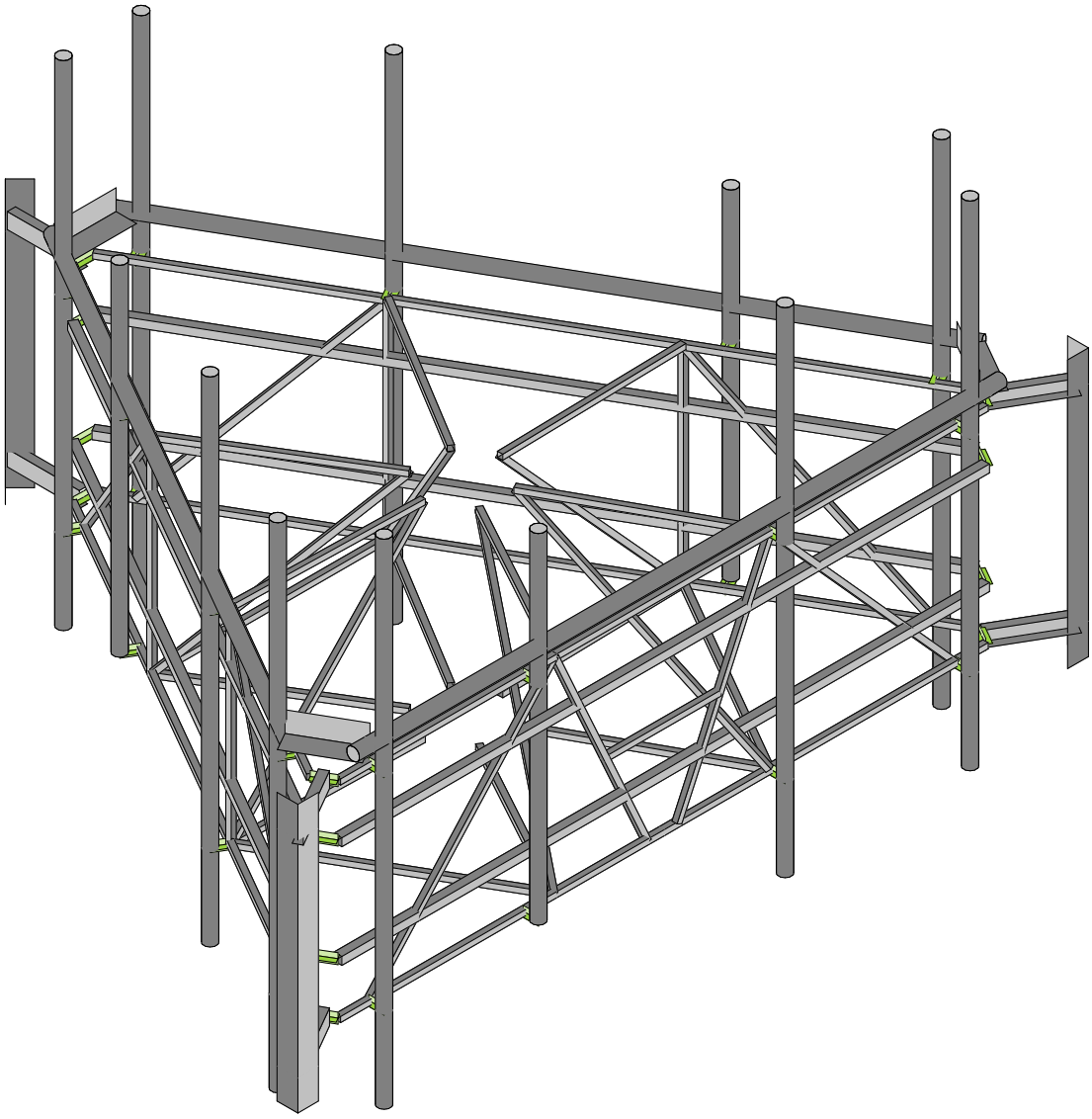
Top Rail	75.1%	Pass
Bottom Rail	65.8%	Pass
Mount Pipe	56.2%	Pass
RATING =	**75.1%**	**Pass**

Assumptions and Limitations

Our structural calculations are completed assuming all information provided to Infinigy Engineering is accurate and applicable to this site. For the purposes of calculations, we assume an overall structure condition of "like new" and all members, connections, anchors, and masonry to be free of corrosion and/or structural defects. The structure owner and/or contractor shall verify the structure's condition prior to installation of any proposed equipment. If actual conditions differ from those described in this report Infinigy Engineering should be notified immediately to complete a revised evaluation.

Our evaluation is completed using standard TIA, AISC, ACI, and ASCE methods and procedures. Our structural results are proprietary and should not be used by others as their own. Infinigy Engineering is not responsible for decisions made by others that are or are not based on our supplied assumptions and conclusions.

This report is an evaluation of the rooftop mounted equipment and/or antenna supporting structures to be proposed or modified as shown in the referenced construction drawings. Applicable building element adequacy to support these structures is also evaluated when the applied forces increase significantly based on engineering judgment.



Envelope Only Solution

Infinigy Engineering, LLC	MRCTB046850	
DVA		July 15, 2020 at 4:48 PM
1009-Z0003-B		302498.R3D

INFINIGY

FROM ZERO TO INFINIGY

the solutions are endless

Date:	6/30/2020		**Decimal Degrees**	
Site:	MRCTB046850		**Latitude:**	28.4236
Engineer:	DVA		**Longitude:**	-98.7454
Location:	WINDHAM	CT		
Project No:	1009-Z0003-B			
Carrier:	AT&T			
Mount Type:	3-Side Platform			
TIA Rev.	H		**Mount Existing?**	Existing
ASCE Standard	ASCE 7-16		**Run Seismic?**	Yes

Ultimate Wind Speed:	124	mph				**q_z:**	38.92	psf
Exposure Category:	B		**Esc. Ice:**	0.992	in	**$q_{z\ ice}$:**	6.80	psf
Service Wind:	30	mph	**I:**	1.00		**$q_{z\ live}$:**	2.45	psf
Risk Category:	II		**G_h:**	1.00				
Ice Thickness:	1	in	**Z_g:**	1200		**S1:**	0.054	
Ice Wind Speed:	50	mph	**K_{zmin}:**	0.70		**Sds:**	0.199	
Centerline AGL	154.0	ft	**α:**	7.00		**Cs:**	0.100	
Ground Elevation	556.0	ft	**K_z:**	1.12		**Cs min:**	0.030	
Site Soil:			**K_d:**	0.95				
Topographic Category:	1		**K_{zt}:**	1.000				
			Ks:	1.00				
			Ke:	0.980				
			Ka:	0.90				
			Kes(Wind)	0.950				
			Kes(Ice)	0.850				

								Wind Load (F_A), lb				Wind Load Ice Case (F_A), lb					Wind Load Live Case (F_A), lb				Seismic Load		
Appurtenance Name		Existing / Proposed	Weight (lb)	Height (in)	Width (in)	Depth (in)	Type	0 deg	30 deg	60 deg	90 deg	0 deg	30 deg	60 deg	90 deg	Weight w/ Ice	0 deg	30 deg	60 deg	90 deg	0 deg	90 deg	Vertical
CCI ANTENNAS	HPA65R-BU8A	Proposed	54	96	11.7	7.6	Flat	394	366	310	282	82	77	68	63	148	25	23	19	18	5	5	11
CCI ANTENNAS	OPA65R-BU8D	Proposed	76.5	96	21	7.8	Flat	634	547	374	287	124	109	79	64	232	40	34	24	18	8	8	15
RAYCAP	DC6-48-60-18-8F	Existing / Proposed	20	23.5	9.7	9.7	Round	28	28	28	28	9	9	9	9	36	2	2	2	2	2	2	4
CCI ANTENNAS	DMP65R-BU8D	Proposed	95.7	96	20.7	7.7	Flat	626	541	370	285	122	108	78	64	229	39	34	23	18	10	10	19
WERWAVE TECHNOLOGI	7770.00	Existing	35	55	11	5	Flat	193	170	125	103	41	37	30	26	74	12	11	8	6	3	3	7
ERICSSON	RRUS 4449 B5/B12	Proposed	71	17.9	13.2	9.4	Flat	69	64	54	49	15	14	13	12	32	4	4	3	3	7	7	14
ERICSSON	RRUS 4478 B14	Proposed	59.4	16.5	13.4	7.7	Flat	65	58	44	37	14	13	10	9	28	4	4	3	2	6	6	12
ERICSSON	RRUS 8843 B2/B66A	Proposed	72	14.9	13.2	10.9	Flat	57	55	50	47	13	13	12	11	28	4	3	3	3	7	7	14
ERICSSON	RRUS 4415 B30	Proposed	46	16.5	13.4	5.9	Flat	65	56	38	29	14	13	9	8	27	4	3	2	2	5	5	9
WERWAVE TECHNOLOGI	LGP21401	Existing	14.1	14.4	9.2	2.6	Flat	39	32	19	12	9	8	6	4	16	2	2	1	1	1	1	3
WERWAVE TECHNOLOGI	LGP21901	Existing	5.5	4	6	3	Flat	7	6	4	4	2	2	2	2	3	0	0	0	0	1	1	1

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N1	N2			Rails and Arms	Beam	Tube	A500 Gr....	Typical
2	M2	N25	N22			Unistrut	Beam	Tube	A500 Gr....	Typical
3	M3	N24	N21			Unistrut	Beam	Tube	A500 Gr....	Typical
4	M4	N23	N20			Rails and Arms	Beam	Tube	A500 Gr....	Typical
5	M5	N3	N36			Bracing	VBrace	Tube	A500 Gr....	Typical
6	M6	N26	N37			Bracing	VBrace	Tube	A500 Gr....	Typical
7	M7	N3	N4			RIGID	None	None	RIGID	Typical
8	M8	N5	N6			RIGID	None	None	RIGID	Typical
9	M9	N26	N27			RIGID	None	None	RIGID	Typical
10	M10	N28	N29			RIGID	None	None	RIGID	Typical
11	M11	N7	N8			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
12	M12	N9	N12			RIGID	None	None	RIGID	Typical
13	M13	N10	N11			RIGID	None	None	RIGID	Typical
14	M14	N12	N13			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
15	M15	N14	N15			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
16	M16	N16	N158			RIGID	None	None	RIGID	Typical
17	M17	N36	N17			RIGID	None	None	RIGID	Typical
18	M18	N18	N19			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
19	M19	N16	N30			Rails and Arms	Beam	Tube	A500 Gr....	Typical
20	M20	N40	N31			Rails and Arms	Beam	Tube	A500 Gr....	Typical
21	M21	N32	N36			Bracing	VBrace	Tube	A500 Gr....	Typical
22	M22	N33	N37			Bracing	VBrace	Tube	A500 Gr....	Typical
23	M23	N34	N35			Rails and Arms	Beam	Tube	A500 Gr....	Typical
24	M24	N36	N38			Rails and Arms	Beam	Tube	A500 Gr....	Typical
25	M25	N37	N39			Rails and Arms	Beam	Tube	A500 Gr....	Typical
26	M26	N38	N16			Bracing	VBrace	Tube	A500 Gr....	Typical
27	M27	N39	N40			Bracing	VBrace	Tube	A500 Gr....	Typical
28	M28	N56	N57			Rails and Arms	Beam	Tube	A500 Gr....	Typical
29	M29	N77	N74			Unistrut	Beam	Tube	A500 Gr....	Typical
30	M30	N76	N73			Unistrut	Beam	Tube	A500 Gr....	Typical
31	M31	N75	N72			Rails and Arms	Beam	Tube	A500 Gr....	Typical
32	M32	N58	N84			Bracing	VBrace	Tube	A500 Gr....	Typical
33	M33	N78	N85			Bracing	VBrace	Tube	A500 Gr....	Typical
34	M34	N58	N59			RIGID	None	None	RIGID	Typical
35	M35	N60	N61			RIGID	None	None	RIGID	Typical
36	M36	N78	N79			RIGID	None	None	RIGID	Typical
37	M37	N80	N81			RIGID	None	None	RIGID	Typical
38	M38	N62	N63			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
39	M39	N64	N67			RIGID	None	None	RIGID	Typical
40	M40	N65	N66			RIGID	None	None	RIGID	Typical
41	M41	N67	N68			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
42	M42	N69	N70			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
43	M43	N71	N82			Rails and Arms	Beam	Tube	A500 Gr....	Typical
44	M44	N88	N83			Rails and Arms	Beam	Tube	A500 Gr....	Typical
45	M45	N84	N86			Rails and Arms	Beam	Tube	A500 Gr....	Typical
46	M46	N85	N87			Rails and Arms	Beam	Tube	A500 Gr....	Typical
47	M47	N86	N71			Bracing	VBrace	Tube	A500 Gr....	Typical
48	M48	N87	N88			Bracing	VBrace	Tube	A500 Gr....	Typical
49	M49	N94	N95			Rails and Arms	Beam	Tube	A500 Gr....	Typical
50	M50	N115	N112			Unistrut	Beam	Tube	A500 Gr....	Typical
51	M51	N114	N111			Unistrut	Beam	Tube	A500 Gr....	Typical
52	M52	N113	N110			Rails and Arms	Beam	Tube	A500 Gr....	Typical
53	M53	N96	N122			Bracing	VBrace	Tube	A500 Gr....	Typical
54	M54	N116	N123			Bracing	VBrace	Tube	A500 Gr....	Typical
55	M55	N96	N97			RIGID	None	None	RIGID	Typical
56	M56	N98	N99			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
57	M57	N116	N117			RIGID	None	None	RIGID	Typical
58	M58	N118	N119			RIGID	None	None	RIGID	Typical
59	M59	N100	N101			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
60	M60	N102	N105			RIGID	None	None	RIGID	Typical
61	M61	N103	N104			RIGID	None	None	RIGID	Typical
62	M62	N105	N106			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
63	M63	N107	N108			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
64	M64	N109	N120			Rails and Arms	Beam	Tube	A500 Gr....	Typical
65	M65	N126	N121			Rails and Arms	Beam	Tube	A500 Gr....	Typical
66	M66	N122	N124			Rails and Arms	Beam	Tube	A500 Gr....	Typical
67	M67	N123	N125			Rails and Arms	Beam	Tube	A500 Gr....	Typical
68	M68	N124	N109			Bracing	VBrace	Tube	A500 Gr....	Typical
69	M69	N125	N126			Bracing	VBrace	Tube	A500 Gr....	Typical
70	M70	N16	N88			Rails and Arms	Beam	Tube	A500 Gr....	Typical
71	M71	N126	N71			Rails and Arms	Beam	Tube	A500 Gr....	Typical
72	M72	N109	N40			Rails and Arms	Beam	Tube	A500 Gr....	Typical
73	M73	N109	N122			Bracing	VBrace	Tube	A500 Gr....	Typical
74	M74	N126	N123			Bracing	VBrace	Tube	A500 Gr....	Typical
75	M75	N88	N85			Bracing	VBrace	Tube	A500 Gr....	Typical
76	M76	N71	N84			Bracing	VBrace	Tube	A500 Gr....	Typical
77	M77	N72	N113			RIGID	None	None	RIGID	Typical
78	M78	N73	N114			RIGID	None	None	RIGID	Typical
79	M79	N74	N115			RIGID	None	None	RIGID	Typical
80	M80	N57	N94			RIGID	None	None	RIGID	Typical
81	M81	N110	N23			RIGID	None	None	RIGID	Typical
82	M82	N24	N111			RIGID	None	None	RIGID	Typical
83	M83	N112	N25			RIGID	None	None	RIGID	Typical
84	M84	N1	N95			RIGID	None	None	RIGID	Typical
85	M85	N75	N20			RIGID	None	None	RIGID	Typical
86	M86	N76	N21			RIGID	None	None	RIGID	Typical
87	M87	N77	N22			RIGID	None	None	RIGID	Typical
88	M88	N56	N2			RIGID	None	None	RIGID	Typical
89	M89	N140	N141			Corner Channel	Beam	Channel	A36 Gr.36	Typical
90	M90	N142	N143			Corner Channel	Beam	Channel	A36 Gr.36	Typical
91	M91	N145	N144		135	Corner Angle	Column	Single Angle	A36 Gr.36	Typical
92	M92	N146	N147			Corner Channel	Beam	Channel	A36 Gr.36	Typical
93	M93	N148	N149			Corner Channel	Beam	Channel	A36 Gr.36	Typical
94	M94	N151	N150		270	Corner Angle	Column	Single Angle	A36 Gr.36	Typical
95	M95	N152	N153			Corner Channel	Beam	Channel	A36 Gr.36	Typical
96	M96	N154	N155			Corner Channel	Beam	Channel	A36 Gr.36	Typical
97	M97	N157	N156			Corner Angle	Column	Single Angle	A36 Gr.36	Typical
98	M98	N71	N162			RIGID	None	None	RIGID	Typical
99	M99	N84	N159			RIGID	None	None	RIGID	Typical
100	M100	N160	N161			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
101	M101	N109	N166			RIGID	None	None	RIGID	Typical
102	M102	N122	N163			RIGID	None	None	RIGID	Typical
103	M103	N164	N165			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
104	M104	N169	N168			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
105	M105	N172	N171			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
106	M106	N174	N173			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
107	M107	N192	N189			Corner Angle	Column	Single Angle	A36 Gr.36	Typical
108	M108	N186	N190			Corner Angle	Column	Single Angle	A36 Gr.36	Typical
109	M109	N191	N187			Corner Angle	Column	Single Angle	A36 Gr.36	Typical

Hot Rolled Steel Design Parameters

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torqu...	Kyy	Kzz	Cb	Function
1	M1	Rails and Ar...	126	42	42	42	42					Lateral
2	M2	Unistrut	126	42	42	42	42					Lateral
3	M3	Unistrut	126	42	42	42	42					Lateral
4	M4	Rails and Ar...	126	42	42	42	42					Lateral
5	M5	Bracing	53.814			Lbyy						Lateral
6	M6	Bracing	53.814			Lbyy						Lateral
7	M11	Mount Pipe	96			Lbyy						Lateral
8	M14	Mount Pipe	66			Lbyy						Lateral
9	M15	Mount Pipe	96			Lbyy						Lateral
10	M18	Mount Pipe	96			Lbyy						Lateral
11	M19	Rails and Ar...	36.473			Lbyy						Lateral
12	M20	Rails and Ar...	36.473			Lbyy						Lateral
13	M21	Bracing	43.863			Lbyy						Lateral
14	M22	Bracing	43.863			Lbyy						Lateral
15	M23	Rails and Ar...	22.2			Lbyy						Lateral
16	M24	Rails and Ar...	36.473			Lbyy						Lateral
17	M25	Rails and Ar...	36.473			Lbyy						Lateral
18	M26	Bracing	54.132			Lbyy						Lateral
19	M27	Bracing	54.132			Lbyy						Lateral
20	M28	Rails and Ar...	126	42	42	42	42					Lateral
21	M29	Unistrut	126	42	42	42	42					Lateral
22	M30	Unistrut	126	42	42	42	42					Lateral
23	M31	Rails and Ar...	126	42	42							Lateral
24	M32	Bracing	53.814			Lbyy						Lateral
25	M33	Bracing	53.814			Lbyy						Lateral
26	M38	Mount Pipe	96			Lbyy						Lateral
27	M41	Mount Pipe	66			Lbyy						Lateral
28	M42	Mount Pipe	96			Lbyy						Lateral
29	M43	Rails and Ar...	36.473			Lbyy						Lateral
30	M44	Rails and Ar...	36.473			Lbyy						Lateral
31	M45	Rails and Ar...	36.473			Lbyy						Lateral
32	M46	Rails and Ar...	36.473			Lbyy						Lateral
33	M47	Bracing	54.132			Lbyy						Lateral
34	M48	Bracing	54.132			Lbyy						Lateral
35	M49	Rails and Ar...	126	42	42	42	42					Lateral
36	M50	Unistrut	126	42	42	42	42					Lateral
37	M51	Unistrut	126	42	42	42	42					Lateral
38	M52	Rails and Ar...	126	42	42	42	42					Lateral
39	M53	Bracing	53.814			Lbyy						Lateral
40	M54	Bracing	53.814			Lbyy						Lateral
41	M59	Mount Pipe	96			Lbyy						Lateral
42	M62	Mount Pipe	66			Lbyy						Lateral
43	M63	Mount Pipe	96			Lbyy						Lateral
44	M64	Rails and Ar...	36.473			Lbyy						Lateral
45	M65	Rails and Ar...	36.473			Lbyy						Lateral
46	M66	Rails and Ar...	36.473			Lbyy						Lateral
47	M67	Rails and Ar...	36.473			Lbyy						Lateral
48	M68	Bracing	54.132			Lbyy						Lateral
49	M69	Bracing	54.132			Lbyy						Lateral
50	M70	Rails and Ar...	45.945			Lbyy						Lateral
51	M71	Rails and Ar...	45.945			Lbyy						Lateral
52	M72	Rails and Ar...	45.945			Lbyy						Lateral
53	M73	Bracing	40			Lbyy						Lateral
54	M74	Bracing	40			Lbyy						Lateral
55	M75	Bracing	40			Lbyy						Lateral
56	M76	Bracing	40			Lbyy						Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torqu...	Kyy	Kzz	Cb	Function
57	M89	Corner Cha...	14			Lbyy						Lateral
58	M90	Corner Cha...	14			Lbyy						Lateral
59	M91	Corner Angle	52									Lateral
60	M92	Corner Cha...	14			Lbyy						Lateral
61	M93	Corner Cha...	14			Lbyy						Lateral
62	M94	Corner Angle	52									Lateral
63	M95	Corner Cha...	14			Lbyy						Lateral
64	M96	Corner Cha...	14			Lbyy						Lateral
65	M97	Corner Angle	52									Lateral
66	M100	Mount Pipe	96			Lbyy						Lateral
67	M103	Mount Pipe	96			Lbyy						Lateral
68	M104	Mount Pipe	126									Lateral
69	M105	Mount Pipe	126									Lateral
70	M106	Mount Pipe	126									Lateral
71	M107	Corner Angle	12.141									Lateral
72	M108	Corner Angle	12.141									Lateral
73	M109	Corner Angle	12.141									Lateral

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ra...	Analysis Offset[in]	Inactive	Seismic...
1	M1						Yes				None
2	M2						Yes				None
3	M3						Yes				None
4	M4						Yes				None
5	M5						Yes	** NA **			None
6	M6						Yes	** NA **			None
7	M7		OOOXOO				Yes	** NA **			None
8	M8		OOOXOO				Yes	** NA **			None
9	M9		OOOXOO				Yes	** NA **			None
10	M10		OOOXOO				Yes	** NA **			None
11	M11						Yes	** NA **			None
12	M12		OOOXOO				Yes	** NA **			None
13	M13		OOOXOO				Yes	** NA **			None
14	M14						Yes	** NA **			None
15	M15						Yes	** NA **			None
16	M16		OOOXOO				Yes	** NA **			None
17	M17		OOOXOO				Yes	** NA **			None
18	M18						Yes	** NA **			None
19	M19						Yes				None
20	M20						Yes				None
21	M21						Yes	** NA **			None
22	M22						Yes	** NA **			None
23	M23						Yes				None
24	M24						Yes				None
25	M25						Yes				None
26	M26						Yes	** NA **			None
27	M27						Yes	** NA **			None
28	M28						Yes				None
29	M29						Yes				None
30	M30						Yes				None
31	M31						Yes				None
32	M32						Yes	** NA **			None
33	M33						Yes	** NA **			None
34	M34						Yes	** NA **			None
35	M35		OOOXOO				Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ra..	Analysis Offset[in]	Inactive	Seismic
36	M36		OOOXOO				Yes	** NA **			None
37	M37		OOOXOO				Yes	** NA **			None
38	M38						Yes	** NA **			None
39	M39		OOOXOO				Yes	** NA **			None
40	M40		OOOXOO				Yes	** NA **			None
41	M41						Yes	** NA **			None
42	M42						Yes	** NA **			None
43	M43						Yes				None
44	M44						Yes				None
45	M45						Yes				None
46	M46						Yes				None
47	M47						Yes	** NA **			None
48	M48						Yes	** NA **			None
49	M49						Yes				None
50	M50						Yes				None
51	M51						Yes				None
52	M52						Yes				None
53	M53						Yes	** NA **			None
54	M54						Yes	** NA **			None
55	M55		OOOXOO				Yes	** NA **			None
56	M56		OOOXOO				Yes	** NA **			None
57	M57		OOOXOO				Yes	** NA **			None
58	M58		OOOXOO				Yes	** NA **			None
59	M59						Yes	** NA **			None
60	M60		OOOXOO				Yes	** NA **			None
61	M61		OOOXOO				Yes	** NA **			None
62	M62						Yes	** NA **			None
63	M63						Yes	** NA **			None
64	M64						Yes				None
65	M65						Yes				None
66	M66						Yes				None
67	M67						Yes				None
68	M68						Yes	** NA **			None
69	M69						Yes	** NA **			None
70	M70						Yes				None
71	M71						Yes				None
72	M72						Yes				None
73	M73						Yes	** NA **			None
74	M74						Yes	** NA **			None
75	M75						Yes	** NA **			None
76	M76						Yes	** NA **			None
77	M77						Yes	** NA **			None
78	M78						Yes	** NA **			None
79	M79						Yes	** NA **			None
80	M80						Yes	** NA **			None
81	M81						Yes	** NA **			None
82	M82						Yes	** NA **			None
83	M83						Yes	** NA **			None
84	M84						Yes	** NA **			None
85	M85						Yes	** NA **			None
86	M86						Yes	** NA **			None
87	M87						Yes	** NA **			None
88	M88						Yes	** NA **			None
89	M89						Yes				None
90	M90						Yes				None
91	M91						Yes	** NA **			None
92	M92						Yes				None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ra...	Analysis Offset[in]	Inactive	Seismic
93	M93						Yes				None
94	M94						Yes	** NA **			None
95	M95						Yes				None
96	M96						Yes				None
97	M97						Yes	** NA **			None
98	M98		OOOXOO				Yes	** NA **			None
99	M99		OOOXOO				Yes	** NA **			None
100	M100						Yes	** NA **			None
101	M101		OOOXOO				Yes	** NA **			None
102	M102		OOOXOO				Yes	** NA **			None
103	M103						Yes	** NA **			None
104	M104						Yes	** NA **			None
105	M105						Yes	** NA **			None
106	M106						Yes	** NA **			None
107	M107	BenPIN	BenPIN				Yes	** NA **			None
108	M108	BenPIN	BenPIN				Yes	** NA **			None
109	M109	BenPIN	BenPIN				Yes	** NA **			None

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Unistrut	HSS1.5x1.5x4	Beam	Tube	A500 Gr.B Rect	Typical	1.25	.339	.339	.488
2	Bracing	HSS1x1x2	VBrace	Tube	A500 Gr.B Rect	Typical	.518	.064	.064	.093
3	Rails and Arms	HSS1x1x2	Beam	Tube	A500 Gr.B Rect	Typical	.518	.064	.064	.093
4	Corner Channel	C3X6	Beam	Channel	A36 Gr.36	Typical	1.76	.3	2.07	.072
5	Corner Angle	L4X4X4	Column	Single Angle	A36 Gr.36	Typical	1.93	3	3	.044
6	Mount Pipe	PIPE_2.0	Column	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(...
1	Dead	None		-1			27		9	
2	Wind (0 deg)	None					27	53		
3	Wind (90 deg)	None					27	57		
4	Wind (30 deg)	None					54	110		
5	Wind (60 deg)	None					54	110		
6	Wind (120 deg)	None					54	110		
7	Wind (150 deg)	None					54	110		
8	Dead Ice	None					27	67	9	
9	Wind + Ice (0 deg)	None					27	53		
10	Wind + Ice (90 deg)	None					27	57		
11	Wind + Ice (30 deg)	None					54	110		
12	Wind + Ice (60 deg)	None					54	110		
13	Wind + Ice (120 deg)	None					54	110		
14	Wind + Ice (150 deg)	None					54	110		
15	Live Lm1	None					1			
16	Live Lm2	None					1			
17	Live Lm3	None					1			
18	Wind + Live Lm (0 deg)	None					27	53		
19	Wind + Live Lm (90 deg)	None					27	57		
20	Wind + Live Lm (30 deg)	None					54	110		
21	Wind + Live Lm (60 deg)	None					54	110		
22	Wind + Live Lm (120 deg)	None					54	110		
23	Wind + Live Lm (150 deg)	None					54	110		
24	Live Lv1	None					3			
25	Live Lv2	None					3			

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(...
26	Live Lv3	None					3			
27	Seismic Antenna (0 deg)	None					27			
28	Seismic Antenna (90 deg)	None					27			
29	Seismic (0 deg)	None	-.1	-.04						
30	Seismic (90 deg)	None		-.04	.1					
31	Seismic (30 deg)	None	-.086	-.04	.05					
32	Seismic (60 deg)	None	-.05	-.04	.086					
33	Seismic (120 deg)	None	.05	-.04	.086					
34	Seismic (150 deg)	None	.086	-.04	.05					
35	Seismic Vertical	None					27			
36	BLC 1 Transient Area Loads	None						123		
37	BLC 8 Transient Area Loads	None						123		

Load Combinations

	Description	S...	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.4DL	Yes	Y		1	1.4																		
2	1.2DL+1.0WL(0)	Yes	Y		1	1.2	2	1																
3	1.2DL+1.0WL(30)	Yes	Y		1	1.2	4	1																
4	1.2DL+1.0WL(60)	Yes	Y		1	1.2	5	1																
5	1.2DL+1.0WL(90)	Yes	Y		1	1.2	3	1																
6	1.2DL+1.0WL(120)	Yes	Y		1	1.2	6	1																
7	1.2DL+1.0WL(150)	Yes	Y		1	1.2	7	1																
8	1.2DL+1.0WL(180)	Yes	Y		1	1.2	2	-1																
9	1.2DL+1.0WL(210)	Yes	Y		1	1.2	4	-1																
10	1.2DL+1.0WL(240)	Yes	Y		1	1.2	5	-1																
11	1.2DL+1.0WL(270)	Yes	Y		1	1.2	3	-1																
12	1.2DL+1.0WL(300)	Yes	Y		1	1.2	6	-1																
13	1.2DL+1.0WL(330)	Yes	Y		1	1.2	7	-1																
14	1.2DL+1.0DLi+1.0WLi(0)	Yes	Y		1	1.2	8	1	9	1														
15	1.2DL+1.0DLi+1.0WLi(30)	Yes	Y		1	1.2	8	1	11	1														
16	1.2DL+1.0DLi+1.0WLi(60)	Yes	Y		1	1.2	8	1	12	1														
17	1.2DL+1.0DLi+1.0WLi(90)	Yes	Y		1	1.2	8	1	10	1														
18	1.2DL+1.0DLi+1.0WLi(120)	Yes	Y		1	1.2	8	1	13	1														
19	1.2DL+1.0DLi+1.0WLi(150)	Yes	Y		1	1.2	8	1	14	1														
20	1.2DL+1.0DLi+1.0WLi(180)	Yes	Y		1	1.2	8	1	9	-1														
21	1.2DL+1.0DLi+1.0WLi(210)	Yes	Y		1	1.2	8	1	11	-1														
22	1.2DL+1.0DLi+1.0WLi(240)	Yes	Y		1	1.2	8	1	12	-1														
23	1.2DL+1.0DLi+1.0WLi(270)	Yes	Y		1	1.2	8	1	10	-1														
24	1.2DL+1.0DLi+1.0WLi(300)	Yes	Y		1	1.2	8	1	13	-1														
25	1.2DL+1.0DLi+1.0WLi(330)	Yes	Y		1	1.2	8	1	14	-1														
26	1.2DL+1.5LLm1+1.0WL(0)	Yes	Y		1	1.2	15	1.5	18	1														
27	1.2DL+1.5LLm1+1.0WL(30)	Yes	Y		1	1.2	15	1.5	20	1														
28	1.2DL+1.5LLm1+1.0WL(60)	Yes	Y		1	1.2	15	1.5	21	1														
29	1.2DL+1.5LLm1+1.0WL(90)	Yes	Y		1	1.2	15	1.5	19	1														
30	1.2DL+1.5LLm1+1.0WL(12...	Yes	Y		1	1.2	15	1.5	22	1														
31	1.2DL+1.5LLm1+1.0WL(15...	Yes	Y		1	1.2	15	1.5	23	1														
32	1.2DL+1.5LLm1+1.0WL(18...	Yes	Y		1	1.2	15	1.5	18	-1														
33	1.2DL+1.5LLm1+1.0WL(21...	Yes	Y		1	1.2	15	1.5	20	-1														
34	1.2DL+1.5LLm1+1.0WL(24...	Yes	Y		1	1.2	15	1.5	21	-1														
35	1.2DL+1.5LLm1+1.0WL(27...	Yes	Y		1	1.2	15	1.5	19	-1														
36	1.2DL+1.5LLm1+1.0WL(30...	Yes	Y		1	1.2	15	1.5	22	-1														
37	1.2DL+1.5LLm1+1.0WL(33...	Yes	Y		1	1.2	15	1.5	23	-1														
38	1.2DL+1.5LLm2+1.0WL(0)	Yes	Y		1	1.2	16	1.5	18	1														
39	1.2DL+1.5LLm2+1.0WL(30)	Yes	Y		1	1.2	16	1.5	20	1														
40	1.2DL+1.5LLm2+1.0WL(60)	Yes	Y		1	1.2	16	1.5	21	1														

Load Combinations (Continued)

	Description	S...	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
41	1.2DL+1.5LLm2+1.0WL(90)	Yes	Y		1	1.2	16	1.5	19	1														
42	1.2DL+1.5LLm2+1.0WL(12..	Yes	Y		1	1.2	16	1.5	22	1														
43	1.2DL+1.5LLm2+1.0WL(15..	Yes	Y		1	1.2	16	1.5	23	1														
44	1.2DL+1.5LLm2+1.0WL(18..	Yes	Y		1	1.2	16	1.5	18	-1														
45	1.2DL+1.5LLm2+1.0WL(21..	Yes	Y		1	1.2	16	1.5	20	-1														
46	1.2DL+1.5LLm2+1.0WL(24..	Yes	Y		1	1.2	16	1.5	21	-1														
47	1.2DL+1.5LLm2+1.0WL(27..	Yes	Y		1	1.2	16	1.5	19	-1														
48	1.2DL+1.5LLm2+1.0WL(30..	Yes	Y		1	1.2	16	1.5	22	-1														
49	1.2DL+1.5LLm2+1.0WL(33..	Yes	Y		1	1.2	16	1.5	23	-1														
50	1.2DL+1.5LLm3+1.0WL(0)	Yes	Y		1	1.2	17	1.5	18	1														
51	1.2DL+1.5LLm3+1.0WL(30)	Yes	Y		1	1.2	17	1.5	20	1														
52	1.2DL+1.5LLm3+1.0WL(60)	Yes	Y		1	1.2	17	1.5	21	1														
53	1.2DL+1.5LLm3+1.0WL(90)	Yes	Y		1	1.2	17	1.5	19	1														
54	1.2DL+1.5LLm3+1.0WL(12..	Yes	Y		1	1.2	17	1.5	22	1														
55	1.2DL+1.5LLm3+1.0WL(15..	Yes	Y		1	1.2	17	1.5	23	1														
56	1.2DL+1.5LLm3+1.0WL(18..	Yes	Y		1	1.2	17	1.5	18	-1														
57	1.2DL+1.5LLm3+1.0WL(21..	Yes	Y		1	1.2	17	1.5	20	-1														
58	1.2DL+1.5LLm3+1.0WL(24..	Yes	Y		1	1.2	17	1.5	21	-1														
59	1.2DL+1.5LLm3+1.0WL(27..	Yes	Y		1	1.2	17	1.5	19	-1														
60	1.2DL+1.5LLm3+1.0WL(30..	Yes	Y		1	1.2	17	1.5	22	-1														
61	1.2DL+1.5LLm3+1.0WL(33..	Yes	Y		1	1.2	17	1.5	23	-1														
62	1.2DL+1.5LLv1	Yes	Y		1	1.2	24	1.5																
63	1.2DL+1.5LLv2	Yes	Y		1	1.2	25	1.5																
64	1.2DL+1.5LLv3	Yes	Y		1	1.2	26	1.5																
65	1.2DL+1.0Ev+1.0Eh(0)	Yes	Y		1	1.2	35	1	29	1	27	1	28											
66	1.2DL+1.0Ev+1.0Eh(30)	Yes	Y		1	1.2	35	1	31	1	27	.867	28	.5										
67	1.2DL+1.0Ev+1.0Eh(60)	Yes	Y		1	1.2	35	1	32	1	27	.5	28	.866										
68	1.2DL+1.0Ev+1.0Eh(90)	Yes	Y		1	1.2	35	1	30	1	27		28	1										
69	1.2DL+1.0Ev+1.0Eh(120)	Yes	Y		1	1.2	35	1	33	1	27	-.5	28	.866										
70	1.2DL+1.0Ev+1.0Eh(150)	Yes	Y		1	1.2	35	1	34	1	27	-.867	28	.5										
71	1.2DL+1.0Ev+1.0Eh(180)	Yes	Y		1	1.2	35	1	29	-1	27	-1	28											
72	1.2DL+1.0Ev+1.0Eh(210)	Yes	Y		1	1.2	35	1	31	-1	27	-.866	28	-.5										
73	1.2DL+1.0Ev+1.0Eh(240)	Yes	Y		1	1.2	35	1	32	-1	27	-.5	28	-.866										
74	1.2DL+1.0Ev+1.0Eh(270)	Yes	Y		1	1.2	35	1	30	-1	27		28	-1										
75	1.2DL+1.0Ev+1.0Eh(300)	Yes	Y		1	1.2	35	1	33	-1	27	.5	28	-.866										
76	1.2DL+1.0Ev+1.0Eh(330)	Yes	Y		1	1.2	35	1	34	-1	27	.866	28	-.5										

Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]	Y Rot [k-ft/rad]	Z Rot [k-ft/rad]
1	N120	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N121	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N31	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
4	N30	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
5	N83	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
6	N82	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
7	N86	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
8	N125	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
9	N124	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
10	N39	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
11	N38	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
12	N87	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

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	N120	max	86.031	7	36.69	24	1709.717	12	-8.353	6	206.571	11	7.206	7
2		min	-101.724	5	14.799	6	-649.444	6	-23.793	24	-208.789	5	-7.3	13
3	N121	max	820.284	2	42.115	21	842.95	7	3.631	13	205.582	11	-7.1	2
4		min	-1372.792	8	11.552	2	-519.687	13	-14.021	19	-208.741	5	-24.449	21
5	N31	max	1117.879	12	35.61	24	639.554	12	-2.274	11	194.364	11	15.159	24
6		min	-796.725	6	7.373	6	-470.561	6	-15.167	17	-198.776	5	-4.127	6
7	N30	max	1201.52	5	25.501	17	177.323	12	4.139	8	202.056	11	14.526	5
8		min	-300.648	11	2.148	11	-659.832	6	-3.168	2	-205.454	5	-4.38	11
9	N83	max	50.924	13	41.225	17	1208.484	10	26.936	17	205.953	11	6.69	9
10		min	-97.071	11	11.299	10	-1919.005	4	3.988	10	-210.429	5	-4.429	3
11	N82	max	800.09	3	36.253	20	463.723	3	13.814	21	202.965	11	-5.559	11
12		min	-1383.134	9	12.871	11	-826.528	9	-1.049	3	-205.283	5	-19.039	17
13	N86	max	2039.963	13	1538.818	24	1170.377	12	62.95	5	321.594	11	31.694	13
14		min	-1111.77	7	-192.701	6	-627.59	6	-53.918	11	-323.004	5	-46.04	7
15	N125	max	1551.391	4	1423.69	16	467.007	10	49.138	5	301.155	11	19.475	11
16		min	-694.365	10	-197.181	10	-1013.384	4	-57.076	11	-304.668	5	-32.59	5
17	N124	max	129.34	11	1812.971	16	991.081	11	11.988	5	325.28	11	60.115	11
18		min	-156.213	5	66.094	10	-2417.267	5	-31.618	11	-334.73	5	-60.712	5
19	N39	max	795.528	13	901.555	18	568.73	13	41.001	11	248.567	7	46.964	7
20		min	-1412.754	7	-107.307	13	-948.625	7	-54.094	5	-237.747	13	-16.901	13
21	N38	max	1303.225	3	2076.055	9	1371.578	9	57.335	11	235.871	11	47.699	13
22		min	-2514.461	9	-543.586	3	-720.553	3	-40.405	5	-231.373	5	-24.135	7
23	N87	max	159.155	13	1418.192	25	1855.56	11	21.682	17	337.394	11	59.286	5
24		min	-163.171	11	-119.904	7	-757.154	5	-1.097	11	-335.756	5	-58.546	11
25	Totals:	max	7175.549	2	8077.618	22	7552.095	11						
26		min	-7175.551	8	3794.141	4	-7552.091	5						

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	Y	-76.6	%10
2	M15	Y	-76.6	%90
3	M18	Y	-68	%10
4	M18	Y	-68	%90
5	M11	Y	-70.9	%10
6	M11	Y	-70.9	%90
7	M14	Y	-56.3	%10
8	M14	Y	-56.3	%90
9	M11	Y	-20	%80
10	M63	Y	-76.6	%10
11	M63	Y	-76.6	%90
12	M103	Y	-68	%10
13	M103	Y	-68	%90
14	M59	Y	-70.9	%10
15	M59	Y	-70.9	%90
16	M62	Y	-56.3	%10
17	M62	Y	-56.3	%90
18	M59	Y	-20	%80
19	M42	Y	-76.6	%10
20	M42	Y	-76.6	%90
21	M100	Y	-68	%10
22	M100	Y	-68	%90
23	M38	Y	-70.9	%10
24	M38	Y	-70.9	%90
25	M41	Y	-56.3	%10

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

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
26	M41	Y	-56.3	%90
27	M38	Y	-20	%80

Member Point Loads (BLC 2 : Wind (0 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	-231.3	%10
2	M15	X	-231.3	%90
3	M18	X	-349.1	%10
4	M18	X	-349.1	%90
5	M11	X	-345.3	%10
6	M11	X	-345.3	%90
7	M14	X	-125.2	%10
8	M14	X	-125.2	%90
9	M11	X	-27.7	%80
10	M63	X	-201.7	%10
11	M63	X	-201.7	%90
12	M103	X	-202	%10
13	M103	X	-202	%90
14	M59	X	-198.4	%10
15	M59	X	-198.4	%90
16	M62	X	-81.3	%10
17	M62	X	-81.3	%90
18	M59	X	-27.7	%80
19	M42	X	-201.7	%10
20	M42	X	-201.7	%90
21	M100	X	-202	%10
22	M100	X	-202	%90
23	M38	X	-198.4	%10
24	M38	X	-198.4	%90
25	M41	X	-81.3	%10
26	M41	X	-81.3	%90
27	M38	X	-27.7	%80

Member Point Loads (BLC 3 : Wind (90 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	Z	191.9	%10
2	M15	Z	191.9	%90
3	M18	Z	152.9	%10
4	M18	Z	152.9	%90
5	M11	Z	149.5	%10
6	M11	Z	149.5	%90
7	M14	Z	66.6	%10
8	M14	Z	66.6	%90
9	M11	Z	27.7	%80
10	M63	Z	221.4	%10
11	M63	Z	221.4	%90
12	M103	Z	300.1	%10
13	M103	Z	300.1	%90
14	M59	Z	296.3	%10
15	M59	Z	296.3	%90
16	M62	Z	110.6	%10
17	M62	Z	110.6	%90
18	M59	Z	27.7	%80
19	M42	Z	221.4	%10
20	M42	Z	221.4	%90
21	M100	Z	300.1	%10

Member Point Loads (BLC 3 : Wind (90 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
22	M100	Z	300.1	%90
23	M38	Z	296.3	%10
24	M38	Z	296.3	%90
25	M41	Z	110.6	%10
26	M41	Z	110.6	%90
27	M38	Z	27.7	%80

Member Point Loads (BLC 4 : Wind (30 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	-191.7	%10
2	M15	X	-191.7	%90
3	M18	X	-259.9	%10
4	M18	X	-259.9	%90
5	M11	X	-256.6	%10
6	M11	X	-256.6	%90
7	M14	X	-95.7	%10
8	M14	X	-95.7	%90
9	M11	X	-24	%80
10	M63	X	-166.2	%10
11	M63	X	-166.2	%90
12	M103	X	-132.4	%10
13	M103	X	-132.4	%90
14	M59	X	-129.4	%10
15	M59	X	-129.4	%90
16	M62	X	-57.7	%10
17	M62	X	-57.7	%90
18	M59	X	-24	%80
19	M42	X	-191.7	%10
20	M42	X	-191.7	%90
21	M100	X	-259.9	%10
22	M100	X	-259.9	%90
23	M38	X	-256.6	%10
24	M38	X	-256.6	%90
25	M41	X	-95.7	%10
26	M41	X	-95.7	%90
27	M38	X	-24	%80
28	M15	Z	110.7	%10
29	M15	Z	110.7	%90
30	M18	Z	150	%10
31	M18	Z	150	%90
32	M11	Z	148.2	%10
33	M11	Z	148.2	%90
34	M14	Z	55.3	%10
35	M14	Z	55.3	%90
36	M11	Z	13.9	%80
37	M63	Z	95.9	%10
38	M63	Z	95.9	%90
39	M103	Z	76.5	%10
40	M103	Z	76.5	%90
41	M59	Z	74.7	%10
42	M59	Z	74.7	%90
43	M62	Z	33.3	%10
44	M62	Z	33.3	%90
45	M59	Z	13.9	%80
46	M42	Z	110.7	%10
47	M42	Z	110.7	%90

Member Point Loads (BLC 4 : Wind (30 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
48	M100	Z	150	%10
49	M100	Z	150	%90
50	M38	Z	148.2	%10
51	M38	Z	148.2	%90
52	M41	Z	55.3	%10
53	M41	Z	55.3	%90
54	M38	Z	13.9	%80

Member Point Loads (BLC 5 : Wind (60 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	-100.9	%10
2	M15	X	-100.9	%90
3	M18	X	-101	%10
4	M18	X	-101	%90
5	M11	X	-99.2	%10
6	M11	X	-99.2	%90
7	M14	X	-40.6	%10
8	M14	X	-40.6	%90
9	M11	X	-13.9	%80
10	M63	X	-100.9	%10
11	M63	X	-100.9	%90
12	M103	X	-101	%10
13	M103	X	-101	%90
14	M59	X	-99.2	%10
15	M59	X	-99.2	%90
16	M62	X	-40.6	%10
17	M62	X	-40.6	%90
18	M59	X	-13.9	%80
19	M42	X	-115.6	%10
20	M42	X	-115.6	%90
21	M100	X	-174.6	%10
22	M100	X	-174.6	%90
23	M38	X	-172.7	%10
24	M38	X	-172.7	%90
25	M41	X	-62.6	%10
26	M41	X	-62.6	%90
27	M38	X	-13.9	%80
28	M15	Z	174.7	%10
29	M15	Z	174.7	%90
30	M18	Z	174.9	%10
31	M18	Z	174.9	%90
32	M11	Z	171.8	%10
33	M11	Z	171.8	%90
34	M14	Z	70.4	%10
35	M14	Z	70.4	%90
36	M11	Z	24	%80
37	M63	Z	174.7	%10
38	M63	Z	174.7	%90
39	M103	Z	174.9	%10
40	M103	Z	174.9	%90
41	M59	Z	171.8	%10
42	M59	Z	171.8	%90
43	M62	Z	70.4	%10
44	M62	Z	70.4	%90
45	M59	Z	24	%80
46	M42	Z	200.3	%10

Member Point Loads (BLC 5 : Wind (60 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
47	M42	Z	200.3	%90
48	M100	Z	302.3	%10
49	M100	Z	302.3	%90
50	M38	Z	299	%10
51	M38	Z	299	%90
52	M41	Z	108.4	%10
53	M41	Z	108.4	%90
54	M38	Z	24	%80

Member Point Loads (BLC 6 : Wind (120 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	100.9	%10
2	M15	X	100.9	%90
3	M18	X	101	%10
4	M18	X	101	%90
5	M11	X	99.2	%10
6	M11	X	99.2	%90
7	M14	X	40.6	%10
8	M14	X	40.6	%90
9	M11	X	13.9	%80
10	M63	X	100.9	%10
11	M63	X	100.9	%90
12	M103	X	101	%10
13	M103	X	101	%90
14	M59	X	99.2	%10
15	M59	X	99.2	%90
16	M62	X	40.6	%10
17	M62	X	40.6	%90
18	M59	X	13.9	%80
19	M42	X	115.6	%10
20	M42	X	115.6	%90
21	M100	X	174.6	%10
22	M100	X	174.6	%90
23	M38	X	172.7	%10
24	M38	X	172.7	%90
25	M41	X	62.6	%10
26	M41	X	62.6	%90
27	M38	X	13.9	%80
28	M15	Z	174.7	%10
29	M15	Z	174.7	%90
30	M18	Z	174.9	%10
31	M18	Z	174.9	%90
32	M11	Z	171.8	%10
33	M11	Z	171.8	%90
34	M14	Z	70.4	%10
35	M14	Z	70.4	%90
36	M11	Z	24	%80
37	M63	Z	174.7	%10
38	M63	Z	174.7	%90
39	M103	Z	174.9	%10
40	M103	Z	174.9	%90
41	M59	Z	171.8	%10
42	M59	Z	171.8	%90
43	M62	Z	70.4	%10
44	M62	Z	70.4	%90
45	M59	Z	24	%80

Member Point Loads (BLC 6 : Wind (120 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
46	M42	Z	200.3	%10
47	M42	Z	200.3	%90
48	M100	Z	302.3	%10
49	M100	Z	302.3	%90
50	M38	Z	299	%10
51	M38	Z	299	%90
52	M41	Z	108.4	%10
53	M41	Z	108.4	%90
54	M38	Z	24	%80

Member Point Loads (BLC 7 : Wind (150 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	191.7	%10
2	M15	X	191.7	%90
3	M18	X	259.9	%10
4	M18	X	259.9	%90
5	M11	X	256.6	%10
6	M11	X	256.6	%90
7	M14	X	95.7	%10
8	M14	X	95.7	%90
9	M11	X	24	%80
10	M63	X	166.2	%10
11	M63	X	166.2	%90
12	M103	X	132.4	%10
13	M103	X	132.4	%90
14	M59	X	129.4	%10
15	M59	X	129.4	%90
16	M62	X	57.7	%10
17	M62	X	57.7	%90
18	M59	X	24	%80
19	M42	X	191.7	%10
20	M42	X	191.7	%90
21	M100	X	259.9	%10
22	M100	X	259.9	%90
23	M38	X	256.6	%10
24	M38	X	256.6	%90
25	M41	X	95.7	%10
26	M41	X	95.7	%90
27	M38	X	24	%80
28	M15	Z	110.7	%10
29	M15	Z	110.7	%90
30	M18	Z	150	%10
31	M18	Z	150	%90
32	M11	Z	148.2	%10
33	M11	Z	148.2	%90
34	M14	Z	55.3	%10
35	M14	Z	55.3	%90
36	M11	Z	13.9	%80
37	M63	Z	95.9	%10
38	M63	Z	95.9	%90
39	M103	Z	76.5	%10
40	M103	Z	76.5	%90
41	M59	Z	74.7	%10
42	M59	Z	74.7	%90
43	M62	Z	33.3	%10
44	M62	Z	33.3	%90

Member Point Loads (BLC 7 : Wind (150 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
45	M59	Z	13.9	%80
46	M42	Z	110.7	%10
47	M42	Z	110.7	%90
48	M100	Z	150	%10
49	M100	Z	150	%90
50	M38	Z	148.2	%10
51	M38	Z	148.2	%90
52	M41	Z	55.3	%10
53	M41	Z	55.3	%90
54	M38	Z	13.9	%80

Member Point Loads (BLC 8 : Dead Ice)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	Y	-105.6	%10
2	M15	Y	-105.6	%90
3	M18	Y	-129.8	%10
4	M18	Y	-129.8	%90
5	M11	Y	-127.6	%10
6	M11	Y	-127.6	%90
7	M14	Y	-52.6	%10
8	M14	Y	-52.6	%90
9	M11	Y	-35.7	%80
10	M63	Y	-105.6	%10
11	M63	Y	-105.6	%90
12	M103	Y	-129.8	%10
13	M103	Y	-129.8	%90
14	M59	Y	-127.6	%10
15	M59	Y	-127.6	%90
16	M62	Y	-52.6	%10
17	M62	Y	-52.6	%90
18	M59	Y	-35.7	%80
19	M42	Y	-105.6	%10
20	M42	Y	-105.6	%90
21	M100	Y	-129.8	%10
22	M100	Y	-129.8	%90
23	M38	Y	-127.6	%10
24	M38	Y	-127.6	%90
25	M41	Y	-52.6	%10
26	M41	Y	-52.6	%90
27	M38	Y	-35.7	%80

Member Point Loads (BLC 9 : Wind + Ice (0 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	-48.7	%10
2	M15	X	-48.7	%90
3	M18	X	-69.1	%10
4	M18	X	-69.1	%90
5	M11	X	-68.4	%10
6	M11	X	-68.4	%90
7	M14	X	-27.1	%10
8	M14	X	-27.1	%90
9	M11	X	-8.9	%80
10	M63	X	-45.1	%10
11	M63	X	-45.1	%90
12	M103	X	-43.1	%10
13	M103	X	-43.1	%90

Member Point Loads (BLC 9 : Wind + Ice (0 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
14	M59	X	-42.4	%10
15	M59	X	-42.4	%90
16	M62	X	-19.5	%10
17	M62	X	-19.5	%90
18	M59	X	-8.9	%80
19	M42	X	-45.1	%10
20	M42	X	-45.1	%90
21	M100	X	-43.1	%10
22	M100	X	-43.1	%90
23	M38	X	-42.4	%10
24	M38	X	-42.4	%90
25	M41	X	-19.5	%10
26	M41	X	-19.5	%90
27	M38	X	-8.9	%80

Member Point Loads (BLC 10 : Wind + Ice (90 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	Z	43.9	%10
2	M15	Z	43.9	%90
3	M18	Z	34.4	%10
4	M18	Z	34.4	%90
5	M11	Z	33.8	%10
6	M11	Z	33.8	%90
7	M14	Z	17	%10
8	M14	Z	17	%90
9	M11	Z	8.9	%80
10	M63	Z	47.5	%10
11	M63	Z	47.5	%90
12	M103	Z	60.4	%10
13	M103	Z	60.4	%90
14	M59	Z	59.7	%10
15	M59	Z	59.7	%90
16	M62	Z	24.6	%10
17	M62	Z	24.6	%90
18	M59	Z	8.9	%80
19	M42	Z	47.5	%10
20	M42	Z	47.5	%90
21	M100	Z	60.4	%10
22	M100	Z	60.4	%90
23	M38	Z	59.7	%10
24	M38	Z	59.7	%90
25	M41	Z	24.6	%10
26	M41	Z	24.6	%90
27	M38	Z	8.9	%80

Member Point Loads (BLC 11 : Wind + Ice (30 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	-41.1	%10
2	M15	X	-41.1	%90
3	M18	X	-52.3	%10
4	M18	X	-52.3	%90
5	M11	X	-51.7	%10
6	M11	X	-51.7	%90
7	M14	X	-21.3	%10
8	M14	X	-21.3	%90
9	M11	X	-7.7	%80

Member Point Loads (BLC 11 : Wind + Ice (30 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
10	M63	X	-38	%10
11	M63	X	-38	%90
12	M103	X	-29.8	%10
13	M103	X	-29.8	%90
14	M59	X	-29.2	%10
15	M59	X	-29.2	%90
16	M62	X	-14.7	%10
17	M62	X	-14.7	%90
18	M59	X	-7.7	%80
19	M42	X	-41.1	%10
20	M42	X	-41.1	%90
21	M100	X	-52.3	%10
22	M100	X	-52.3	%90
23	M38	X	-51.7	%10
24	M38	X	-51.7	%90
25	M41	X	-21.3	%10
26	M41	X	-21.3	%90
27	M38	X	-7.7	%80
28	M15	Z	23.8	%10
29	M15	Z	23.8	%90
30	M18	Z	30.2	%10
31	M18	Z	30.2	%90
32	M11	Z	29.9	%10
33	M11	Z	29.9	%90
34	M14	Z	12.3	%10
35	M14	Z	12.3	%90
36	M11	Z	4.4	%80
37	M63	Z	21.9	%10
38	M63	Z	21.9	%90
39	M103	Z	17.2	%10
40	M103	Z	17.2	%90
41	M59	Z	16.9	%10
42	M59	Z	16.9	%90
43	M62	Z	8.5	%10
44	M62	Z	8.5	%90
45	M59	Z	4.4	%80
46	M42	Z	23.8	%10
47	M42	Z	23.8	%90
48	M100	Z	30.2	%10
49	M100	Z	30.2	%90
50	M38	Z	29.9	%10
51	M38	Z	29.9	%90
52	M41	Z	12.3	%10
53	M41	Z	12.3	%90
54	M38	Z	4.4	%80

Member Point Loads (BLC 12 : Wind + Ice (60 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	-22.5	%10
2	M15	X	-22.5	%90
3	M18	X	-21.5	%10
4	M18	X	-21.5	%90
5	M11	X	-21.2	%10
6	M11	X	-21.2	%90
7	M14	X	-9.7	%10
8	M14	X	-9.7	%90

Member Point Loads (BLC 12 : Wind + Ice (60 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
9	M11	X	-4.4	%80
10	M63	X	-22.5	%10
11	M63	X	-22.5	%90
12	M103	X	-21.5	%10
13	M103	X	-21.5	%90
14	M59	X	-21.2	%10
15	M59	X	-21.2	%90
16	M62	X	-9.7	%10
17	M62	X	-9.7	%90
18	M59	X	-4.4	%80
19	M42	X	-24.4	%10
20	M42	X	-24.4	%90
21	M100	X	-34.5	%10
22	M100	X	-34.5	%90
23	M38	X	-34.2	%10
24	M38	X	-34.2	%90
25	M41	X	-13.6	%10
26	M41	X	-13.6	%90
27	M38	X	-4.4	%80
28	M15	Z	39.1	%10
29	M15	Z	39.1	%90
30	M18	Z	37.3	%10
31	M18	Z	37.3	%90
32	M11	Z	36.7	%10
33	M11	Z	36.7	%90
34	M14	Z	16.9	%10
35	M14	Z	16.9	%90
36	M11	Z	7.7	%80
37	M63	Z	39.1	%10
38	M63	Z	39.1	%90
39	M103	Z	37.3	%10
40	M103	Z	37.3	%90
41	M59	Z	36.7	%10
42	M59	Z	36.7	%90
43	M62	Z	16.9	%10
44	M62	Z	16.9	%90
45	M59	Z	7.7	%80
46	M42	Z	42.2	%10
47	M42	Z	42.2	%90
48	M100	Z	59.8	%10
49	M100	Z	59.8	%90
50	M38	Z	59.2	%10
51	M38	Z	59.2	%90
52	M41	Z	23.5	%10
53	M41	Z	23.5	%90
54	M38	Z	7.7	%80

Member Point Loads (BLC 13 : Wind + Ice (120 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	22.5	%10
2	M15	X	22.5	%90
3	M18	X	21.5	%10
4	M18	X	21.5	%90
5	M11	X	21.2	%10
6	M11	X	21.2	%90
7	M14	X	9.7	%10

Member Point Loads (BLC 13 : Wind + Ice (120 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
8	M14	X	9.7	%90
9	M11	X	4.4	%80
10	M63	X	22.5	%10
11	M63	X	22.5	%90
12	M103	X	21.5	%10
13	M103	X	21.5	%90
14	M59	X	21.2	%10
15	M59	X	21.2	%90
16	M62	X	9.7	%10
17	M62	X	9.7	%90
18	M59	X	4.4	%80
19	M42	X	24.4	%10
20	M42	X	24.4	%90
21	M100	X	34.5	%10
22	M100	X	34.5	%90
23	M38	X	34.2	%10
24	M38	X	34.2	%90
25	M41	X	13.6	%10
26	M41	X	13.6	%90
27	M38	X	4.4	%80
28	M15	Z	39.1	%10
29	M15	Z	39.1	%90
30	M18	Z	37.3	%10
31	M18	Z	37.3	%90
32	M11	Z	36.7	%10
33	M11	Z	36.7	%90
34	M14	Z	16.9	%10
35	M14	Z	16.9	%90
36	M11	Z	7.7	%80
37	M63	Z	39.1	%10
38	M63	Z	39.1	%90
39	M103	Z	37.3	%10
40	M103	Z	37.3	%90
41	M59	Z	36.7	%10
42	M59	Z	36.7	%90
43	M62	Z	16.9	%10
44	M62	Z	16.9	%90
45	M59	Z	7.7	%80
46	M42	Z	42.2	%10
47	M42	Z	42.2	%90
48	M100	Z	59.8	%10
49	M100	Z	59.8	%90
50	M38	Z	59.2	%10
51	M38	Z	59.2	%90
52	M41	Z	23.5	%10
53	M41	Z	23.5	%90
54	M38	Z	7.7	%80

Member Point Loads (BLC 14 : Wind + Ice (150 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	41.1	%10
2	M15	X	41.1	%90
3	M18	X	52.3	%10
4	M18	X	52.3	%90
5	M11	X	51.7	%10
6	M11	X	51.7	%90

Member Point Loads (BLC 14 : Wind + Ice (150 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
7	M14	X	21.3	%10
8	M14	X	21.3	%90
9	M11	X	7.7	%80
10	M63	X	38	%10
11	M63	X	38	%90
12	M103	X	29.8	%10
13	M103	X	29.8	%90
14	M59	X	29.2	%10
15	M59	X	29.2	%90
16	M62	X	14.7	%10
17	M62	X	14.7	%90
18	M59	X	7.7	%80
19	M42	X	41.1	%10
20	M42	X	41.1	%90
21	M100	X	52.3	%10
22	M100	X	52.3	%90
23	M38	X	51.7	%10
24	M38	X	51.7	%90
25	M41	X	21.3	%10
26	M41	X	21.3	%90
27	M38	X	7.7	%80
28	M15	Z	23.8	%10
29	M15	Z	23.8	%90
30	M18	Z	30.2	%10
31	M18	Z	30.2	%90
32	M11	Z	29.9	%10
33	M11	Z	29.9	%90
34	M14	Z	12.3	%10
35	M14	Z	12.3	%90
36	M11	Z	4.4	%80
37	M63	Z	21.9	%10
38	M63	Z	21.9	%90
39	M103	Z	17.2	%10
40	M103	Z	17.2	%90
41	M59	Z	16.9	%10
42	M59	Z	16.9	%90
43	M62	Z	8.5	%10
44	M62	Z	8.5	%90
45	M59	Z	4.4	%80
46	M42	Z	23.8	%10
47	M42	Z	23.8	%90
48	M100	Z	30.2	%10
49	M100	Z	30.2	%90
50	M38	Z	29.9	%10
51	M38	Z	29.9	%90
52	M41	Z	12.3	%10
53	M41	Z	12.3	%90
54	M38	Z	4.4	%80

Member Point Loads (BLC 15 : Live Lm1)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	Y	-500	0

Member Point Loads (BLC 16 : Live Lm2)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M63	Y	-500	0

Member Point Loads (BLC 17 : Live Lm3)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M42	Y	-500	0

Member Point Loads (BLC 18 : Wind + Live Lm (0 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	-14.5	%10
2	M15	X	-14.5	%90
3	M18	X	-21.9	%10
4	M18	X	-21.9	%90
5	M11	X	-21.7	%10
6	M11	X	-21.7	%90
7	M14	X	-7.9	%10
8	M14	X	-7.9	%90
9	M11	X	-1.7	%80
10	M63	X	-12.7	%10
11	M63	X	-12.7	%90
12	M103	X	-12.7	%10
13	M103	X	-12.7	%90
14	M59	X	-12.5	%10
15	M59	X	-12.5	%90
16	M62	X	-5.1	%10
17	M62	X	-5.1	%90
18	M59	X	-1.7	%80
19	M42	X	-12.7	%10
20	M42	X	-12.7	%90
21	M100	X	-12.7	%10
22	M100	X	-12.7	%90
23	M38	X	-12.5	%10
24	M38	X	-12.5	%90
25	M41	X	-5.1	%10
26	M41	X	-5.1	%90
27	M38	X	-1.7	%80

Member Point Loads (BLC 19 : Wind + Live Lm (90 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	Z	12.1	%10
2	M15	Z	12.1	%90
3	M18	Z	9.6	%10
4	M18	Z	9.6	%90
5	M11	Z	9.4	%10
6	M11	Z	9.4	%90
7	M14	Z	4.2	%10
8	M14	Z	4.2	%90
9	M11	Z	1.7	%80
10	M63	Z	13.9	%10
11	M63	Z	13.9	%90
12	M103	Z	18.9	%10
13	M103	Z	18.9	%90
14	M59	Z	18.6	%10
15	M59	Z	18.6	%90
16	M62	Z	7	%10
17	M62	Z	7	%90
18	M59	Z	1.7	%80
19	M42	Z	13.9	%10
20	M42	Z	13.9	%90
21	M100	Z	18.9	%10
22	M100	Z	18.9	%90

Member Point Loads (BLC 19 : Wind + Live Lm (90 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
23	M38	Z	18.6	%10
24	M38	Z	18.6	%90
25	M41	Z	7	%10
26	M41	Z	7	%90
27	M38	Z	1.7	%80

Member Point Loads (BLC 20 : Wind + Live Lm (30 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	-12.1	%10
2	M15	X	-12.1	%90
3	M18	X	-16.3	%10
4	M18	X	-16.3	%90
5	M11	X	-16.1	%10
6	M11	X	-16.1	%90
7	M14	X	-6	%10
8	M14	X	-6	%90
9	M11	X	-1.5	%80
10	M63	X	-10.4	%10
11	M63	X	-10.4	%90
12	M103	X	-8.3	%10
13	M103	X	-8.3	%90
14	M59	X	-8.1	%10
15	M59	X	-8.1	%90
16	M62	X	-3.6	%10
17	M62	X	-3.6	%90
18	M59	X	-1.5	%80
19	M42	X	-12.1	%10
20	M42	X	-12.1	%90
21	M100	X	-16.3	%10
22	M100	X	-16.3	%90
23	M38	X	-16.1	%10
24	M38	X	-16.1	%90
25	M41	X	-6	%10
26	M41	X	-6	%90
27	M38	X	-1.5	%80
28	M15	Z	7	%10
29	M15	Z	7	%90
30	M18	Z	9.4	%10
31	M18	Z	9.4	%90
32	M11	Z	9.3	%10
33	M11	Z	9.3	%90
34	M14	Z	3.5	%10
35	M14	Z	3.5	%90
36	M11	Z	.9	%80
37	M63	Z	6	%10
38	M63	Z	6	%90
39	M103	Z	4.8	%10
40	M103	Z	4.8	%90
41	M59	Z	4.7	%10
42	M59	Z	4.7	%90
43	M62	Z	2.1	%10
44	M62	Z	2.1	%90
45	M59	Z	.9	%80
46	M42	Z	7	%10
47	M42	Z	7	%90
48	M100	Z	9.4	%10

Member Point Loads (BLC 20 : Wind + Live Lm (30 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
49	M100	Z	9.4	%90
50	M38	Z	9.3	%10
51	M38	Z	9.3	%90
52	M41	Z	3.5	%10
53	M41	Z	3.5	%90
54	M38	Z	.9	%80

Member Point Loads (BLC 21 : Wind + Live Lm (60 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	-6.3	%10
2	M15	X	-6.3	%90
3	M18	X	-6.3	%10
4	M18	X	-6.3	%90
5	M11	X	-6.2	%10
6	M11	X	-6.2	%90
7	M14	X	-2.6	%10
8	M14	X	-2.6	%90
9	M11	X	-.9	%80
10	M63	X	-6.3	%10
11	M63	X	-6.3	%90
12	M103	X	-6.3	%10
13	M103	X	-6.3	%90
14	M59	X	-6.2	%10
15	M59	X	-6.2	%90
16	M62	X	-2.6	%10
17	M62	X	-2.6	%90
18	M59	X	-.9	%80
19	M42	X	-7.3	%10
20	M42	X	-7.3	%90
21	M100	X	-11	%10
22	M100	X	-11	%90
23	M38	X	-10.9	%10
24	M38	X	-10.9	%90
25	M41	X	-3.9	%10
26	M41	X	-3.9	%90
27	M38	X	-.9	%80
28	M15	Z	11	%10
29	M15	Z	11	%90
30	M18	Z	11	%10
31	M18	Z	11	%90
32	M11	Z	10.8	%10
33	M11	Z	10.8	%90
34	M14	Z	4.4	%10
35	M14	Z	4.4	%90
36	M11	Z	1.5	%80
37	M63	Z	11	%10
38	M63	Z	11	%90
39	M103	Z	11	%10
40	M103	Z	11	%90
41	M59	Z	10.8	%10
42	M59	Z	10.8	%90
43	M62	Z	4.4	%10
44	M62	Z	4.4	%90
45	M59	Z	1.5	%80
46	M42	Z	12.6	%10
47	M42	Z	12.6	%90

Member Point Loads (BLC 21 : Wind + Live Lm (60 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
48	M100	Z	19	%10
49	M100	Z	19	%90
50	M38	Z	18.8	%10
51	M38	Z	18.8	%90
52	M41	Z	6.8	%10
53	M41	Z	6.8	%90
54	M38	Z	1.5	%80

Member Point Loads (BLC 22 : Wind + Live Lm (120 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	6.3	%10
2	M15	X	6.3	%90
3	M18	X	6.3	%10
4	M18	X	6.3	%90
5	M11	X	6.2	%10
6	M11	X	6.2	%90
7	M14	X	2.6	%10
8	M14	X	2.6	%90
9	M11	X	.9	%80
10	M63	X	6.3	%10
11	M63	X	6.3	%90
12	M103	X	6.3	%10
13	M103	X	6.3	%90
14	M59	X	6.2	%10
15	M59	X	6.2	%90
16	M62	X	2.6	%10
17	M62	X	2.6	%90
18	M59	X	.9	%80
19	M42	X	7.3	%10
20	M42	X	7.3	%90
21	M100	X	11	%10
22	M100	X	11	%90
23	M38	X	10.9	%10
24	M38	X	10.9	%90
25	M41	X	3.9	%10
26	M41	X	3.9	%90
27	M38	X	.9	%80
28	M15	Z	11	%10
29	M15	Z	11	%90
30	M18	Z	11	%10
31	M18	Z	11	%90
32	M11	Z	10.8	%10
33	M11	Z	10.8	%90
34	M14	Z	4.4	%10
35	M14	Z	4.4	%90
36	M11	Z	1.5	%80
37	M63	Z	11	%10
38	M63	Z	11	%90
39	M103	Z	11	%10
40	M103	Z	11	%90
41	M59	Z	10.8	%10
42	M59	Z	10.8	%90
43	M62	Z	4.4	%10
44	M62	Z	4.4	%90
45	M59	Z	1.5	%80
46	M42	Z	12.6	%10

Member Point Loads (BLC 22 : Wind + Live Lm (120 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
47	M42	Z	12.6	%90
48	M100	Z	19	%10
49	M100	Z	19	%90
50	M38	Z	18.8	%10
51	M38	Z	18.8	%90
52	M41	Z	6.8	%10
53	M41	Z	6.8	%90
54	M38	Z	1.5	%80

Member Point Loads (BLC 23 : Wind + Live Lm (150 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	12.1	%10
2	M15	X	12.1	%90
3	M18	X	16.3	%10
4	M18	X	16.3	%90
5	M11	X	16.1	%10
6	M11	X	16.1	%90
7	M14	X	6	%10
8	M14	X	6	%90
9	M11	X	1.5	%80
10	M63	X	10.4	%10
11	M63	X	10.4	%90
12	M103	X	8.3	%10
13	M103	X	8.3	%90
14	M59	X	8.1	%10
15	M59	X	8.1	%90
16	M62	X	3.6	%10
17	M62	X	3.6	%90
18	M59	X	1.5	%80
19	M42	X	12.1	%10
20	M42	X	12.1	%90
21	M100	X	16.3	%10
22	M100	X	16.3	%90
23	M38	X	16.1	%10
24	M38	X	16.1	%90
25	M41	X	6	%10
26	M41	X	6	%90
27	M38	X	1.5	%80
28	M15	Z	7	%10
29	M15	Z	7	%90
30	M18	Z	9.4	%10
31	M18	Z	9.4	%90
32	M11	Z	9.3	%10
33	M11	Z	9.3	%90
34	M14	Z	3.5	%10
35	M14	Z	3.5	%90
36	M11	Z	.9	%80
37	M63	Z	6	%10
38	M63	Z	6	%90
39	M103	Z	4.8	%10
40	M103	Z	4.8	%90
41	M59	Z	4.7	%10
42	M59	Z	4.7	%90
43	M62	Z	2.1	%10
44	M62	Z	2.1	%90
45	M59	Z	.9	%80

Member Point Loads (BLC 23 : Wind + Live Lm (150 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
46	M42	Z	7	%10
47	M42	Z	7	%90
48	M100	Z	9.4	%10
49	M100	Z	9.4	%90
50	M38	Z	9.3	%10
51	M38	Z	9.3	%90
52	M41	Z	3.5	%10
53	M41	Z	3.5	%90
54	M38	Z	.9	%80

Member Point Loads (BLC 24 : Live Lv1)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M1	Y	-250	0
2	M28	Y	-250	0
3	M49	Y	-250	0

Member Point Loads (BLC 25 : Live Lv2)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M1	Y	-250	%50
2	M28	Y	-250	%50
3	M49	Y	-250	%50

Member Point Loads (BLC 26 : Live Lv3)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M1	Y	-250	%100
2	M28	Y	-250	%100
3	M49	Y	-250	%100

Member Point Loads (BLC 27 : Seismic Antenna (0 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	X	-7.6	%10
2	M15	X	-7.6	%90
3	M18	X	-6.8	%10
4	M18	X	-6.8	%90
5	M11	X	-7	%10
6	M11	X	-7	%90
7	M14	X	-5.6	%10
8	M14	X	-5.6	%90
9	M11	X	-2	%80
10	M63	X	-7.6	%10
11	M63	X	-7.6	%90
12	M103	X	-6.8	%10
13	M103	X	-6.8	%90
14	M59	X	-7	%10
15	M59	X	-7	%90
16	M62	X	-5.6	%10
17	M62	X	-5.6	%90
18	M59	X	-2	%80
19	M42	X	-7.6	%10
20	M42	X	-7.6	%90
21	M100	X	-6.8	%10
22	M100	X	-6.8	%90
23	M38	X	-7	%10
24	M38	X	-7	%90
25	M41	X	-5.6	%10

Member Point Loads (BLC 27 : Seismic Antenna (0 deg)) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
26	M41	X	-5.6	%90
27	M38	X	-2	%80

Member Point Loads (BLC 28 : Seismic Antenna (90 deg))

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	Z	7.6	%10
2	M15	Z	7.6	%90
3	M18	Z	6.8	%10
4	M18	Z	6.8	%90
5	M11	Z	7	%10
6	M11	Z	7	%90
7	M14	Z	5.6	%10
8	M14	Z	5.6	%90
9	M11	Z	2	%80
10	M63	Z	7.6	%10
11	M63	Z	7.6	%90
12	M103	Z	6.8	%10
13	M103	Z	6.8	%90
14	M59	Z	7	%10
15	M59	Z	7	%90
16	M62	Z	5.6	%10
17	M62	Z	5.6	%90
18	M59	Z	2	%80
19	M42	Z	7.6	%10
20	M42	Z	7.6	%90
21	M100	Z	6.8	%10
22	M100	Z	6.8	%90
23	M38	Z	7	%10
24	M38	Z	7	%90
25	M41	Z	5.6	%10
26	M41	Z	5.6	%90
27	M38	Z	2	%80

Member Point Loads (BLC 35 : Seismic Vertical)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	M15	Y	-15.3	%10
2	M15	Y	-15.3	%90
3	M18	Y	-13.6	%10
4	M18	Y	-13.6	%90
5	M11	Y	-14.2	%10
6	M11	Y	-14.2	%90
7	M14	Y	-11.3	%10
8	M14	Y	-11.3	%90
9	M11	Y	-4	%80
10	M63	Y	-15.3	%10
11	M63	Y	-15.3	%90
12	M103	Y	-13.6	%10
13	M103	Y	-13.6	%90
14	M59	Y	-14.2	%10
15	M59	Y	-14.2	%90
16	M62	Y	-11.3	%10
17	M62	Y	-11.3	%90
18	M59	Y	-4	%80
19	M42	Y	-15.3	%10
20	M42	Y	-15.3	%90
21	M100	Y	-13.6	%10

Member Point Loads (BLC 35 : Seismic Vertical) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
22	M100	Y	-13.6	%90
23	M38	Y	-14.2	%10
24	M38	Y	-14.2	%90
25	M41	Y	-11.3	%10
26	M41	Y	-11.3	%90
27	M38	Y	-4	%80

Joint Loads and Enforced Displacements

Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s...
No Data to Print ...			

Member Distributed Loads (BLC 2 : Wind (0 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	-6.5	-6.5	0	0
2	M2	X	-9.7	-9.7	0	0
3	M3	X	-9.7	-9.7	0	0
4	M4	X	-6.5	-6.5	0	0
5	M5	X	-6.5	-6.5	0	0
6	M6	X	-6.5	-6.5	0	0
7	M19	X	-6.5	-6.5	0	0
8	M20	X	-6.5	-6.5	0	0
9	M21	X	-6.5	-6.5	0	0
10	M22	X	-6.5	-6.5	0	0
11	M23	X	-6.5	-6.5	0	0
12	M24	X	-6.5	-6.5	0	0
13	M25	X	-6.5	-6.5	0	0
14	M26	X	-6.5	-6.5	0	0
15	M27	X	-6.5	-6.5	0	0
16	M28	X	-6.5	-6.5	0	0
17	M29	X	-9.7	-9.7	0	0
18	M30	X	-9.7	-9.7	0	0
19	M31	X	-6.5	-6.5	0	0
20	M32	X	-6.5	-6.5	0	0
21	M33	X	-6.5	-6.5	0	0
22	M43	X	-6.5	-6.5	0	0
23	M44	X	-6.5	-6.5	0	0
24	M45	X	-6.5	-6.5	0	0
25	M46	X	-6.5	-6.5	0	0
26	M47	X	-6.5	-6.5	0	0
27	M48	X	-6.5	-6.5	0	0
28	M49	X	-6.5	-6.5	0	0
29	M50	X	-9.7	-9.7	0	0
30	M51	X	-9.7	-9.7	0	0
31	M52	X	-6.5	-6.5	0	0
32	M53	X	-6.5	-6.5	0	0
33	M54	X	-6.5	-6.5	0	0
34	M64	X	-6.5	-6.5	0	0
35	M65	X	-6.5	-6.5	0	0
36	M66	X	-6.5	-6.5	0	0
37	M67	X	-6.5	-6.5	0	0
38	M68	X	-6.5	-6.5	0	0
39	M69	X	-6.5	-6.5	0	0
40	M70	X	-6.5	-6.5	0	0
41	M71	X	-6.5	-6.5	0	0

Member Distributed Loads (BLC 2 : Wind (0 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
42	M72	X	-6.5	-6.5	0	0
43	M73	X	-6.5	-6.5	0	0
44	M74	X	-6.5	-6.5	0	0
45	M75	X	-6.5	-6.5	0	0
46	M76	X	-6.5	-6.5	0	0
47	M91	X	-25.9	-25.9	0	0
48	M92	X	-19.5	-19.5	0	0
49	M93	X	-19.5	-19.5	0	0
50	M94	X	-25.9	-25.9	0	0
51	M95	X	-19.5	-19.5	0	0
52	M96	X	-19.5	-19.5	0	0
53	M97	X	-25.9	-25.9	0	0

Member Distributed Loads (BLC 3 : Wind (90 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M11	Z	9.2	9.2	0	0
2	M14	Z	9.2	9.2	0	0
3	M15	Z	9.2	9.2	0	0
4	M18	Z	9.2	9.2	0	0
5	M19	Z	6.5	6.5	0	0
6	M20	Z	6.5	6.5	0	0
7	M24	Z	6.5	6.5	0	0
8	M25	Z	6.5	6.5	0	0
9	M26	Z	6.5	6.5	0	0
10	M27	Z	6.5	6.5	0	0
11	M28	Z	6.5	6.5	0	0
12	M29	Z	9.7	9.7	0	0
13	M30	Z	9.7	9.7	0	0
14	M31	Z	6.5	6.5	0	0
15	M32	Z	6.5	6.5	0	0
16	M33	Z	6.5	6.5	0	0
17	M38	Z	9.2	9.2	0	0
18	M41	Z	9.2	9.2	0	0
19	M42	Z	9.2	9.2	0	0
20	M43	Z	6.5	6.5	0	0
21	M44	Z	6.5	6.5	0	0
22	M45	Z	6.5	6.5	0	0
23	M46	Z	6.5	6.5	0	0
24	M47	Z	6.5	6.5	0	0
25	M48	Z	6.5	6.5	0	0
26	M49	Z	6.5	6.5	0	0
27	M50	Z	9.7	9.7	0	0
28	M51	Z	9.7	9.7	0	0
29	M52	Z	6.5	6.5	0	0
30	M53	Z	6.5	6.5	0	0
31	M54	Z	6.5	6.5	0	0
32	M59	Z	9.2	9.2	0	0
33	M62	Z	9.2	9.2	0	0
34	M63	Z	9.2	9.2	0	0
35	M64	Z	6.5	6.5	0	0
36	M65	Z	6.5	6.5	0	0
37	M66	Z	6.5	6.5	0	0
38	M67	Z	6.5	6.5	0	0
39	M68	Z	6.5	6.5	0	0
40	M69	Z	6.5	6.5	0	0
41	M70	Z	6.5	6.5	0	0

Member Distributed Loads (BLC 3 : Wind (90 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
42	M72	Z	6.5	6.5	0	0
43	M73	Z	6.5	6.5	0	0
44	M74	Z	6.5	6.5	0	0
45	M75	Z	6.5	6.5	0	0
46	M76	Z	6.5	6.5	0	0
47	M89	Z	19.5	19.5	0	0
48	M90	Z	19.5	19.5	0	0
49	M91	Z	25.9	25.9	0	0
50	M92	Z	19.5	19.5	0	0
51	M93	Z	19.5	19.5	0	0
52	M94	Z	25.9	25.9	0	0
53	M95	Z	19.5	19.5	0	0
54	M96	Z	19.5	19.5	0	0
55	M97	Z	25.9	25.9	0	0
56	M100	Z	9.2	9.2	0	0
57	M103	Z	9.2	9.2	0	0

Member Distributed Loads (BLC 4 : Wind (30 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	-5.6	-5.6	0	0
2	M2	X	-8.4	-8.4	0	0
3	M3	X	-8.4	-8.4	0	0
4	M4	X	-5.6	-5.6	0	0
5	M5	X	-5.6	-5.6	0	0
6	M6	X	-5.6	-5.6	0	0
7	M19	X	-5.6	-5.6	0	0
8	M20	X	-5.6	-5.6	0	0
9	M21	X	-5.6	-5.6	0	0
10	M22	X	-5.6	-5.6	0	0
11	M23	X	-5.6	-5.6	0	0
12	M24	X	-5.6	-5.6	0	0
13	M25	X	-5.6	-5.6	0	0
14	M26	X	-5.6	-5.6	0	0
15	M27	X	-5.6	-5.6	0	0
16	M28	X	-5.6	-5.6	0	0
17	M29	X	-8.4	-8.4	0	0
18	M30	X	-8.4	-8.4	0	0
19	M31	X	-5.6	-5.6	0	0
20	M32	X	-5.6	-5.6	0	0
21	M33	X	-5.6	-5.6	0	0
22	M43	X	-5.6	-5.6	0	0
23	M44	X	-5.6	-5.6	0	0
24	M45	X	-5.6	-5.6	0	0
25	M46	X	-5.6	-5.6	0	0
26	M47	X	-5.6	-5.6	0	0
27	M48	X	-5.6	-5.6	0	0
28	M49	X	-5.6	-5.6	0	0
29	M50	X	-8.4	-8.4	0	0
30	M51	X	-8.4	-8.4	0	0
31	M52	X	-5.6	-5.6	0	0
32	M53	X	-5.6	-5.6	0	0
33	M54	X	-5.6	-5.6	0	0
34	M64	X	-5.6	-5.6	0	0
35	M65	X	-5.6	-5.6	0	0
36	M66	X	-5.6	-5.6	0	0
37	M67	X	-5.6	-5.6	0	0

Member Distributed Loads (BLC 4 : Wind (30 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
38	M68	X	-5.6	-5.6	0	0
39	M69	X	-5.6	-5.6	0	0
40	M70	X	-5.6	-5.6	0	0
41	M71	X	-5.6	-5.6	0	0
42	M72	X	-5.6	-5.6	0	0
43	M73	X	-5.6	-5.6	0	0
44	M74	X	-5.6	-5.6	0	0
45	M75	X	-5.6	-5.6	0	0
46	M76	X	-5.6	-5.6	0	0
47	M89	X	-16.9	-16.9	0	0
48	M90	X	-16.9	-16.9	0	0
49	M91	X	-22.4	-22.4	0	0
50	M92	X	-16.9	-16.9	0	0
51	M93	X	-16.9	-16.9	0	0
52	M94	X	-22.4	-22.4	0	0
53	M95	X	-16.9	-16.9	0	0
54	M96	X	-16.9	-16.9	0	0
55	M97	X	-22.4	-22.4	0	0
56	M1	Z	3.3	3.3	0	0
57	M2	Z	4.9	4.9	0	0
58	M3	Z	4.9	4.9	0	0
59	M4	Z	3.3	3.3	0	0
60	M5	Z	3.3	3.3	0	0
61	M6	Z	3.3	3.3	0	0
62	M19	Z	3.3	3.3	0	0
63	M20	Z	3.3	3.3	0	0
64	M21	Z	3.3	3.3	0	0
65	M22	Z	3.3	3.3	0	0
66	M23	Z	3.3	3.3	0	0
67	M24	Z	3.3	3.3	0	0
68	M25	Z	3.3	3.3	0	0
69	M26	Z	3.3	3.3	0	0
70	M27	Z	3.3	3.3	0	0
71	M28	Z	3.3	3.3	0	0
72	M29	Z	4.9	4.9	0	0
73	M30	Z	4.9	4.9	0	0
74	M31	Z	3.3	3.3	0	0
75	M32	Z	3.3	3.3	0	0
76	M33	Z	3.3	3.3	0	0
77	M43	Z	3.3	3.3	0	0
78	M44	Z	3.3	3.3	0	0
79	M45	Z	3.3	3.3	0	0
80	M46	Z	3.3	3.3	0	0
81	M47	Z	3.3	3.3	0	0
82	M48	Z	3.3	3.3	0	0
83	M49	Z	3.3	3.3	0	0
84	M50	Z	4.9	4.9	0	0
85	M51	Z	4.9	4.9	0	0
86	M52	Z	3.3	3.3	0	0
87	M53	Z	3.3	3.3	0	0
88	M54	Z	3.3	3.3	0	0
89	M64	Z	3.3	3.3	0	0
90	M65	Z	3.3	3.3	0	0
91	M66	Z	3.3	3.3	0	0
92	M67	Z	3.3	3.3	0	0
93	M68	Z	3.3	3.3	0	0
94	M69	Z	3.3	3.3	0	0

Member Distributed Loads (BLC 4 : Wind (30 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
95	M70	Z	3.3	3.3	0	0
96	M71	Z	3.3	3.3	0	0
97	M72	Z	3.3	3.3	0	0
98	M73	Z	3.3	3.3	0	0
99	M74	Z	3.3	3.3	0	0
100	M75	Z	3.3	3.3	0	0
101	M76	Z	3.3	3.3	0	0
102	M89	Z	9.8	9.8	0	0
103	M90	Z	9.8	9.8	0	0
104	M91	Z	13	13	0	0
105	M92	Z	9.8	9.8	0	0
106	M93	Z	9.8	9.8	0	0
107	M94	Z	13	13	0	0
108	M95	Z	9.8	9.8	0	0
109	M96	Z	9.8	9.8	0	0
110	M97	Z	13	13	0	0

Member Distributed Loads (BLC 5 : Wind (60 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	-3.3	-3.3	0	0
2	M2	X	-4.9	-4.9	0	0
3	M3	X	-4.9	-4.9	0	0
4	M4	X	-3.3	-3.3	0	0
5	M5	X	-3.3	-3.3	0	0
6	M6	X	-3.3	-3.3	0	0
7	M19	X	-3.3	-3.3	0	0
8	M20	X	-3.3	-3.3	0	0
9	M21	X	-3.3	-3.3	0	0
10	M22	X	-3.3	-3.3	0	0
11	M23	X	-3.3	-3.3	0	0
12	M24	X	-3.3	-3.3	0	0
13	M25	X	-3.3	-3.3	0	0
14	M26	X	-3.3	-3.3	0	0
15	M27	X	-3.3	-3.3	0	0
16	M28	X	-3.3	-3.3	0	0
17	M29	X	-4.9	-4.9	0	0
18	M30	X	-4.9	-4.9	0	0
19	M31	X	-3.3	-3.3	0	0
20	M32	X	-3.3	-3.3	0	0
21	M33	X	-3.3	-3.3	0	0
22	M43	X	-3.3	-3.3	0	0
23	M44	X	-3.3	-3.3	0	0
24	M45	X	-3.3	-3.3	0	0
25	M46	X	-3.3	-3.3	0	0
26	M47	X	-3.3	-3.3	0	0
27	M48	X	-3.3	-3.3	0	0
28	M49	X	-3.3	-3.3	0	0
29	M50	X	-4.9	-4.9	0	0
30	M51	X	-4.9	-4.9	0	0
31	M52	X	-3.3	-3.3	0	0
32	M53	X	-3.3	-3.3	0	0
33	M54	X	-3.3	-3.3	0	0
34	M64	X	-3.3	-3.3	0	0
35	M65	X	-3.3	-3.3	0	0
36	M66	X	-3.3	-3.3	0	0
37	M67	X	-3.3	-3.3	0	0

Member Distributed Loads (BLC 5 : Wind (60 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
38	M68	X	-3.3	-3.3	0	0
39	M69	X	-3.3	-3.3	0	0
40	M70	X	-3.3	-3.3	0	0
41	M71	X	-3.3	-3.3	0	0
42	M72	X	-3.3	-3.3	0	0
43	M73	X	-3.3	-3.3	0	0
44	M74	X	-3.3	-3.3	0	0
45	M75	X	-3.3	-3.3	0	0
46	M76	X	-3.3	-3.3	0	0
47	M89	X	-9.8	-9.8	0	0
48	M90	X	-9.8	-9.8	0	0
49	M91	X	-13	-13	0	0
50	M92	X	-9.8	-9.8	0	0
51	M93	X	-9.8	-9.8	0	0
52	M94	X	-13	-13	0	0
53	M95	X	-9.8	-9.8	0	0
54	M96	X	-9.8	-9.8	0	0
55	M97	X	-13	-13	0	0
56	M1	Z	5.6	5.6	0	0
57	M2	Z	8.4	8.4	0	0
58	M3	Z	8.4	8.4	0	0
59	M4	Z	5.6	5.6	0	0
60	M5	Z	5.6	5.6	0	0
61	M6	Z	5.6	5.6	0	0
62	M19	Z	5.6	5.6	0	0
63	M20	Z	5.6	5.6	0	0
64	M21	Z	5.6	5.6	0	0
65	M22	Z	5.6	5.6	0	0
66	M23	Z	5.6	5.6	0	0
67	M24	Z	5.6	5.6	0	0
68	M25	Z	5.6	5.6	0	0
69	M26	Z	5.6	5.6	0	0
70	M27	Z	5.6	5.6	0	0
71	M28	Z	5.6	5.6	0	0
72	M29	Z	8.4	8.4	0	0
73	M30	Z	8.4	8.4	0	0
74	M31	Z	5.6	5.6	0	0
75	M32	Z	5.6	5.6	0	0
76	M33	Z	5.6	5.6	0	0
77	M43	Z	5.6	5.6	0	0
78	M44	Z	5.6	5.6	0	0
79	M45	Z	5.6	5.6	0	0
80	M46	Z	5.6	5.6	0	0
81	M47	Z	5.6	5.6	0	0
82	M48	Z	5.6	5.6	0	0
83	M49	Z	5.6	5.6	0	0
84	M50	Z	8.4	8.4	0	0
85	M51	Z	8.4	8.4	0	0
86	M52	Z	5.6	5.6	0	0
87	M53	Z	5.6	5.6	0	0
88	M54	Z	5.6	5.6	0	0
89	M64	Z	5.6	5.6	0	0
90	M65	Z	5.6	5.6	0	0
91	M66	Z	5.6	5.6	0	0
92	M67	Z	5.6	5.6	0	0
93	M68	Z	5.6	5.6	0	0
94	M69	Z	5.6	5.6	0	0

Member Distributed Loads (BLC 5 : Wind (60 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
95	M70	Z	5.6	5.6	0	0
96	M71	Z	5.6	5.6	0	0
97	M72	Z	5.6	5.6	0	0
98	M73	Z	5.6	5.6	0	0
99	M74	Z	5.6	5.6	0	0
100	M75	Z	5.6	5.6	0	0
101	M76	Z	5.6	5.6	0	0
102	M89	Z	16.9	16.9	0	0
103	M90	Z	16.9	16.9	0	0
104	M91	Z	22.4	22.4	0	0
105	M92	Z	16.9	16.9	0	0
106	M93	Z	16.9	16.9	0	0
107	M94	Z	22.4	22.4	0	0
108	M95	Z	16.9	16.9	0	0
109	M96	Z	16.9	16.9	0	0
110	M97	Z	22.4	22.4	0	0

Member Distributed Loads (BLC 6 : Wind (120 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	3.3	3.3	0	0
2	M2	X	4.9	4.9	0	0
3	M3	X	4.9	4.9	0	0
4	M4	X	3.3	3.3	0	0
5	M5	X	3.3	3.3	0	0
6	M6	X	3.3	3.3	0	0
7	M19	X	3.3	3.3	0	0
8	M20	X	3.3	3.3	0	0
9	M21	X	3.3	3.3	0	0
10	M22	X	3.3	3.3	0	0
11	M23	X	3.3	3.3	0	0
12	M24	X	3.3	3.3	0	0
13	M25	X	3.3	3.3	0	0
14	M26	X	3.3	3.3	0	0
15	M27	X	3.3	3.3	0	0
16	M28	X	3.3	3.3	0	0
17	M29	X	4.9	4.9	0	0
18	M30	X	4.9	4.9	0	0
19	M31	X	3.3	3.3	0	0
20	M32	X	3.3	3.3	0	0
21	M33	X	3.3	3.3	0	0
22	M43	X	3.3	3.3	0	0
23	M44	X	3.3	3.3	0	0
24	M45	X	3.3	3.3	0	0
25	M46	X	3.3	3.3	0	0
26	M47	X	3.3	3.3	0	0
27	M48	X	3.3	3.3	0	0
28	M49	X	3.3	3.3	0	0
29	M50	X	4.9	4.9	0	0
30	M51	X	4.9	4.9	0	0
31	M52	X	3.3	3.3	0	0
32	M53	X	3.3	3.3	0	0
33	M54	X	3.3	3.3	0	0
34	M64	X	3.3	3.3	0	0
35	M65	X	3.3	3.3	0	0
36	M66	X	3.3	3.3	0	0
37	M67	X	3.3	3.3	0	0

Member Distributed Loads (BLC 6 : Wind (120 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
38	M68	X	3.3	3.3	0	0
39	M69	X	3.3	3.3	0	0
40	M70	X	3.3	3.3	0	0
41	M71	X	3.3	3.3	0	0
42	M72	X	3.3	3.3	0	0
43	M73	X	3.3	3.3	0	0
44	M74	X	3.3	3.3	0	0
45	M75	X	3.3	3.3	0	0
46	M76	X	3.3	3.3	0	0
47	M89	X	9.8	9.8	0	0
48	M90	X	9.8	9.8	0	0
49	M91	X	13	13	0	0
50	M92	X	9.8	9.8	0	0
51	M93	X	9.8	9.8	0	0
52	M94	X	13	13	0	0
53	M95	X	9.8	9.8	0	0
54	M96	X	9.8	9.8	0	0
55	M97	X	13	13	0	0
56	M1	Z	5.6	5.6	0	0
57	M2	Z	8.4	8.4	0	0
58	M3	Z	8.4	8.4	0	0
59	M4	Z	5.6	5.6	0	0
60	M5	Z	5.6	5.6	0	0
61	M6	Z	5.6	5.6	0	0
62	M19	Z	5.6	5.6	0	0
63	M20	Z	5.6	5.6	0	0
64	M21	Z	5.6	5.6	0	0
65	M22	Z	5.6	5.6	0	0
66	M23	Z	5.6	5.6	0	0
67	M24	Z	5.6	5.6	0	0
68	M25	Z	5.6	5.6	0	0
69	M26	Z	5.6	5.6	0	0
70	M27	Z	5.6	5.6	0	0
71	M28	Z	5.6	5.6	0	0
72	M29	Z	8.4	8.4	0	0
73	M30	Z	8.4	8.4	0	0
74	M31	Z	5.6	5.6	0	0
75	M32	Z	5.6	5.6	0	0
76	M33	Z	5.6	5.6	0	0
77	M43	Z	5.6	5.6	0	0
78	M44	Z	5.6	5.6	0	0
79	M45	Z	5.6	5.6	0	0
80	M46	Z	5.6	5.6	0	0
81	M47	Z	5.6	5.6	0	0
82	M48	Z	5.6	5.6	0	0
83	M49	Z	5.6	5.6	0	0
84	M50	Z	8.4	8.4	0	0
85	M51	Z	8.4	8.4	0	0
86	M52	Z	5.6	5.6	0	0
87	M53	Z	5.6	5.6	0	0
88	M54	Z	5.6	5.6	0	0
89	M64	Z	5.6	5.6	0	0
90	M65	Z	5.6	5.6	0	0
91	M66	Z	5.6	5.6	0	0
92	M67	Z	5.6	5.6	0	0
93	M68	Z	5.6	5.6	0	0
94	M69	Z	5.6	5.6	0	0

Member Distributed Loads (BLC 6 : Wind (120 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
95	M70	Z	5.6	5.6	0	0
96	M71	Z	5.6	5.6	0	0
97	M72	Z	5.6	5.6	0	0
98	M73	Z	5.6	5.6	0	0
99	M74	Z	5.6	5.6	0	0
100	M75	Z	5.6	5.6	0	0
101	M76	Z	5.6	5.6	0	0
102	M89	Z	16.9	16.9	0	0
103	M90	Z	16.9	16.9	0	0
104	M91	Z	22.4	22.4	0	0
105	M92	Z	16.9	16.9	0	0
106	M93	Z	16.9	16.9	0	0
107	M94	Z	22.4	22.4	0	0
108	M95	Z	16.9	16.9	0	0
109	M96	Z	16.9	16.9	0	0
110	M97	Z	22.4	22.4	0	0

Member Distributed Loads (BLC 7 : Wind (150 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	5.6	5.6	0	0
2	M2	X	8.4	8.4	0	0
3	M3	X	8.4	8.4	0	0
4	M4	X	5.6	5.6	0	0
5	M5	X	5.6	5.6	0	0
6	M6	X	5.6	5.6	0	0
7	M19	X	5.6	5.6	0	0
8	M20	X	5.6	5.6	0	0
9	M21	X	5.6	5.6	0	0
10	M22	X	5.6	5.6	0	0
11	M23	X	5.6	5.6	0	0
12	M24	X	5.6	5.6	0	0
13	M25	X	5.6	5.6	0	0
14	M26	X	5.6	5.6	0	0
15	M27	X	5.6	5.6	0	0
16	M28	X	5.6	5.6	0	0
17	M29	X	8.4	8.4	0	0
18	M30	X	8.4	8.4	0	0
19	M31	X	5.6	5.6	0	0
20	M32	X	5.6	5.6	0	0
21	M33	X	5.6	5.6	0	0
22	M43	X	5.6	5.6	0	0
23	M44	X	5.6	5.6	0	0
24	M45	X	5.6	5.6	0	0
25	M46	X	5.6	5.6	0	0
26	M47	X	5.6	5.6	0	0
27	M48	X	5.6	5.6	0	0
28	M49	X	5.6	5.6	0	0
29	M50	X	8.4	8.4	0	0
30	M51	X	8.4	8.4	0	0
31	M52	X	5.6	5.6	0	0
32	M53	X	5.6	5.6	0	0
33	M54	X	5.6	5.6	0	0
34	M64	X	5.6	5.6	0	0
35	M65	X	5.6	5.6	0	0
36	M66	X	5.6	5.6	0	0
37	M67	X	5.6	5.6	0	0

Member Distributed Loads (BLC 7 : Wind (150 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
38	M68	X	5.6	5.6	0	0
39	M69	X	5.6	5.6	0	0
40	M70	X	5.6	5.6	0	0
41	M71	X	5.6	5.6	0	0
42	M72	X	5.6	5.6	0	0
43	M73	X	5.6	5.6	0	0
44	M74	X	5.6	5.6	0	0
45	M75	X	5.6	5.6	0	0
46	M76	X	5.6	5.6	0	0
47	M89	X	16.9	16.9	0	0
48	M90	X	16.9	16.9	0	0
49	M91	X	22.4	22.4	0	0
50	M92	X	16.9	16.9	0	0
51	M93	X	16.9	16.9	0	0
52	M94	X	22.4	22.4	0	0
53	M95	X	16.9	16.9	0	0
54	M96	X	16.9	16.9	0	0
55	M97	X	22.4	22.4	0	0
56	M1	Z	3.3	3.3	0	0
57	M2	Z	4.9	4.9	0	0
58	M3	Z	4.9	4.9	0	0
59	M4	Z	3.3	3.3	0	0
60	M5	Z	3.3	3.3	0	0
61	M6	Z	3.3	3.3	0	0
62	M19	Z	3.3	3.3	0	0
63	M20	Z	3.3	3.3	0	0
64	M21	Z	3.3	3.3	0	0
65	M22	Z	3.3	3.3	0	0
66	M23	Z	3.3	3.3	0	0
67	M24	Z	3.3	3.3	0	0
68	M25	Z	3.3	3.3	0	0
69	M26	Z	3.3	3.3	0	0
70	M27	Z	3.3	3.3	0	0
71	M28	Z	3.3	3.3	0	0
72	M29	Z	4.9	4.9	0	0
73	M30	Z	4.9	4.9	0	0
74	M31	Z	3.3	3.3	0	0
75	M32	Z	3.3	3.3	0	0
76	M33	Z	3.3	3.3	0	0
77	M43	Z	3.3	3.3	0	0
78	M44	Z	3.3	3.3	0	0
79	M45	Z	3.3	3.3	0	0
80	M46	Z	3.3	3.3	0	0
81	M47	Z	3.3	3.3	0	0
82	M48	Z	3.3	3.3	0	0
83	M49	Z	3.3	3.3	0	0
84	M50	Z	4.9	4.9	0	0
85	M51	Z	4.9	4.9	0	0
86	M52	Z	3.3	3.3	0	0
87	M53	Z	3.3	3.3	0	0
88	M54	Z	3.3	3.3	0	0
89	M64	Z	3.3	3.3	0	0
90	M65	Z	3.3	3.3	0	0
91	M66	Z	3.3	3.3	0	0
92	M67	Z	3.3	3.3	0	0
93	M68	Z	3.3	3.3	0	0
94	M69	Z	3.3	3.3	0	0

Member Distributed Loads (BLC 7 : Wind (150 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
95	M70	Z	3.3	3.3	0	0
96	M71	Z	3.3	3.3	0	0
97	M72	Z	3.3	3.3	0	0
98	M73	Z	3.3	3.3	0	0
99	M74	Z	3.3	3.3	0	0
100	M75	Z	3.3	3.3	0	0
101	M76	Z	3.3	3.3	0	0
102	M89	Z	9.8	9.8	0	0
103	M90	Z	9.8	9.8	0	0
104	M91	Z	13	13	0	0
105	M92	Z	9.8	9.8	0	0
106	M93	Z	9.8	9.8	0	0
107	M94	Z	13	13	0	0
108	M95	Z	9.8	9.8	0	0
109	M96	Z	9.8	9.8	0	0
110	M97	Z	13	13	0	0

Member Distributed Loads (BLC 8 : Dead Ice)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	Y	-3	-3	0	0
2	M2	Y	-3.9	-3.9	0	0
3	M3	Y	-3.9	-3.9	0	0
4	M4	Y	-3	-3	0	0
5	M5	Y	-3	-3	0	0
6	M6	Y	-3	-3	0	0
7	M11	Y	-4.2	-4.2	0	0
8	M14	Y	-4.2	-4.2	0	0
9	M15	Y	-4.2	-4.2	0	0
10	M18	Y	-4.2	-4.2	0	0
11	M19	Y	-3	-3	0	0
12	M20	Y	-3	-3	0	0
13	M21	Y	-3	-3	0	0
14	M22	Y	-3	-3	0	0
15	M23	Y	-3	-3	0	0
16	M24	Y	-3	-3	0	0
17	M25	Y	-3	-3	0	0
18	M26	Y	-3	-3	0	0
19	M27	Y	-3	-3	0	0
20	M28	Y	-3	-3	0	0
21	M29	Y	-3.9	-3.9	0	0
22	M30	Y	-3.9	-3.9	0	0
23	M31	Y	-3	-3	0	0
24	M32	Y	-3	-3	0	0
25	M33	Y	-3	-3	0	0
26	M38	Y	-4.2	-4.2	0	0
27	M41	Y	-4.2	-4.2	0	0
28	M42	Y	-4.2	-4.2	0	0
29	M43	Y	-3	-3	0	0
30	M44	Y	-3	-3	0	0
31	M45	Y	-3	-3	0	0
32	M46	Y	-3	-3	0	0
33	M47	Y	-3	-3	0	0
34	M48	Y	-3	-3	0	0
35	M49	Y	-3	-3	0	0
36	M50	Y	-3.9	-3.9	0	0
37	M51	Y	-3.9	-3.9	0	0

Member Distributed Loads (BLC 8 : Dead Ice) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
38	M52	Y	-3	-3	0	0
39	M53	Y	-3	-3	0	0
40	M54	Y	-3	-3	0	0
41	M59	Y	-4.2	-4.2	0	0
42	M62	Y	-4.2	-4.2	0	0
43	M63	Y	-4.2	-4.2	0	0
44	M64	Y	-3	-3	0	0
45	M65	Y	-3	-3	0	0
46	M66	Y	-3	-3	0	0
47	M67	Y	-3	-3	0	0
48	M68	Y	-3	-3	0	0
49	M69	Y	-3	-3	0	0
50	M70	Y	-3	-3	0	0
51	M71	Y	-3	-3	0	0
52	M72	Y	-3	-3	0	0
53	M73	Y	-3	-3	0	0
54	M74	Y	-3	-3	0	0
55	M75	Y	-3	-3	0	0
56	M76	Y	-3	-3	0	0
57	M89	Y	-5.4	-5.4	0	0
58	M90	Y	-5.4	-5.4	0	0
59	M91	Y	-8.2	-8.2	0	0
60	M92	Y	-5.4	-5.4	0	0
61	M93	Y	-5.4	-5.4	0	0
62	M94	Y	-8.2	-8.2	0	0
63	M95	Y	-5.4	-5.4	0	0
64	M96	Y	-5.4	-5.4	0	0
65	M97	Y	-8.2	-8.2	0	0
66	M100	Y	-4.2	-4.2	0	0
67	M103	Y	-4.2	-4.2	0	0

Member Distributed Loads (BLC 9 : Wind + Ice (0 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	-3.4	-3.4	0	0
2	M2	X	-3.9	-3.9	0	0
3	M3	X	-3.9	-3.9	0	0
4	M4	X	-3.4	-3.4	0	0
5	M5	X	-3.4	-3.4	0	0
6	M6	X	-3.4	-3.4	0	0
7	M19	X	-3.4	-3.4	0	0
8	M20	X	-3.4	-3.4	0	0
9	M21	X	-3.4	-3.4	0	0
10	M22	X	-3.4	-3.4	0	0
11	M23	X	-3.4	-3.4	0	0
12	M24	X	-3.4	-3.4	0	0
13	M25	X	-3.4	-3.4	0	0
14	M26	X	-3.4	-3.4	0	0
15	M27	X	-3.4	-3.4	0	0
16	M28	X	-3.4	-3.4	0	0
17	M29	X	-3.9	-3.9	0	0
18	M30	X	-3.9	-3.9	0	0
19	M31	X	-3.4	-3.4	0	0
20	M32	X	-3.4	-3.4	0	0
21	M33	X	-3.4	-3.4	0	0
22	M43	X	-3.4	-3.4	0	0
23	M44	X	-3.4	-3.4	0	0

Member Distributed Loads (BLC 9 : Wind + Ice (0 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
24	M45	X	-3.4	-3.4	0	0
25	M46	X	-3.4	-3.4	0	0
26	M47	X	-3.4	-3.4	0	0
27	M48	X	-3.4	-3.4	0	0
28	M49	X	-3.4	-3.4	0	0
29	M50	X	-3.9	-3.9	0	0
30	M51	X	-3.9	-3.9	0	0
31	M52	X	-3.4	-3.4	0	0
32	M53	X	-3.4	-3.4	0	0
33	M54	X	-3.4	-3.4	0	0
34	M64	X	-3.4	-3.4	0	0
35	M65	X	-3.4	-3.4	0	0
36	M66	X	-3.4	-3.4	0	0
37	M67	X	-3.4	-3.4	0	0
38	M68	X	-3.4	-3.4	0	0
39	M69	X	-3.4	-3.4	0	0
40	M70	X	-3.4	-3.4	0	0
41	M71	X	-3.4	-3.4	0	0
42	M72	X	-3.4	-3.4	0	0
43	M73	X	-3.4	-3.4	0	0
44	M74	X	-3.4	-3.4	0	0
45	M75	X	-3.4	-3.4	0	0
46	M76	X	-3.4	-3.4	0	0
47	M91	X	-6.8	-6.8	0	0
48	M92	X	-5.6	-5.6	0	0
49	M93	X	-5.6	-5.6	0	0
50	M94	X	-6.8	-6.8	0	0
51	M95	X	-5.6	-5.6	0	0
52	M96	X	-5.6	-5.6	0	0
53	M97	X	-6.8	-6.8	0	0

Member Distributed Loads (BLC 10 : Wind + Ice (90 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M11	Z	3	3	0	0
2	M14	Z	3	3	0	0
3	M15	Z	3	3	0	0
4	M18	Z	3	3	0	0
5	M19	Z	3.4	3.4	0	0
6	M20	Z	3.4	3.4	0	0
7	M24	Z	3.4	3.4	0	0
8	M25	Z	3.4	3.4	0	0
9	M26	Z	3.4	3.4	0	0
10	M27	Z	3.4	3.4	0	0
11	M28	Z	3.4	3.4	0	0
12	M29	Z	3.9	3.9	0	0
13	M30	Z	3.9	3.9	0	0
14	M31	Z	3.4	3.4	0	0
15	M32	Z	3.4	3.4	0	0
16	M33	Z	3.4	3.4	0	0
17	M38	Z	3	3	0	0
18	M41	Z	3	3	0	0
19	M42	Z	3	3	0	0
20	M43	Z	3.4	3.4	0	0
21	M44	Z	3.4	3.4	0	0
22	M45	Z	3.4	3.4	0	0
23	M46	Z	3.4	3.4	0	0

Member Distributed Loads (BLC 10 : Wind + Ice (90 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
24	M47	Z	3.4	3.4	0	0
25	M48	Z	3.4	3.4	0	0
26	M49	Z	3.4	3.4	0	0
27	M50	Z	3.9	3.9	0	0
28	M51	Z	3.9	3.9	0	0
29	M52	Z	3.4	3.4	0	0
30	M53	Z	3.4	3.4	0	0
31	M54	Z	3.4	3.4	0	0
32	M59	Z	3	3	0	0
33	M62	Z	3	3	0	0
34	M63	Z	3	3	0	0
35	M64	Z	3.4	3.4	0	0
36	M65	Z	3.4	3.4	0	0
37	M66	Z	3.4	3.4	0	0
38	M67	Z	3.4	3.4	0	0
39	M68	Z	3.4	3.4	0	0
40	M69	Z	3.4	3.4	0	0
41	M70	Z	3.4	3.4	0	0
42	M72	Z	3.4	3.4	0	0
43	M73	Z	3.4	3.4	0	0
44	M74	Z	3.4	3.4	0	0
45	M75	Z	3.4	3.4	0	0
46	M76	Z	3.4	3.4	0	0
47	M89	Z	5.6	5.6	0	0
48	M90	Z	5.6	5.6	0	0
49	M91	Z	6.8	6.8	0	0
50	M92	Z	5.6	5.6	0	0
51	M93	Z	5.6	5.6	0	0
52	M94	Z	6.8	6.8	0	0
53	M95	Z	5.6	5.6	0	0
54	M96	Z	5.6	5.6	0	0
55	M97	Z	6.8	6.8	0	0
56	M100	Z	3	3	0	0
57	M103	Z	3	3	0	0

Member Distributed Loads (BLC 11 : Wind + Ice (30 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	-2.9	-2.9	0	0
2	M2	X	-3.4	-3.4	0	0
3	M3	X	-3.4	-3.4	0	0
4	M4	X	-2.9	-2.9	0	0
5	M5	X	-2.9	-2.9	0	0
6	M6	X	-2.9	-2.9	0	0
7	M19	X	-2.9	-2.9	0	0
8	M20	X	-2.9	-2.9	0	0
9	M21	X	-2.9	-2.9	0	0
10	M22	X	-2.9	-2.9	0	0
11	M23	X	-2.9	-2.9	0	0
12	M24	X	-2.9	-2.9	0	0
13	M25	X	-2.9	-2.9	0	0
14	M26	X	-2.9	-2.9	0	0
15	M27	X	-2.9	-2.9	0	0
16	M28	X	-2.9	-2.9	0	0
17	M29	X	-3.4	-3.4	0	0
18	M30	X	-3.4	-3.4	0	0
19	M31	X	-2.9	-2.9	0	0

Member Distributed Loads (BLC 11 : Wind + Ice (30 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
20	M32	X	-2.9	-2.9	0	0
21	M33	X	-2.9	-2.9	0	0
22	M43	X	-2.9	-2.9	0	0
23	M44	X	-2.9	-2.9	0	0
24	M45	X	-2.9	-2.9	0	0
25	M46	X	-2.9	-2.9	0	0
26	M47	X	-2.9	-2.9	0	0
27	M48	X	-2.9	-2.9	0	0
28	M49	X	-2.9	-2.9	0	0
29	M50	X	-3.4	-3.4	0	0
30	M51	X	-3.4	-3.4	0	0
31	M52	X	-2.9	-2.9	0	0
32	M53	X	-2.9	-2.9	0	0
33	M54	X	-2.9	-2.9	0	0
34	M64	X	-2.9	-2.9	0	0
35	M65	X	-2.9	-2.9	0	0
36	M66	X	-2.9	-2.9	0	0
37	M67	X	-2.9	-2.9	0	0
38	M68	X	-2.9	-2.9	0	0
39	M69	X	-2.9	-2.9	0	0
40	M70	X	-2.9	-2.9	0	0
41	M71	X	-2.9	-2.9	0	0
42	M72	X	-2.9	-2.9	0	0
43	M73	X	-2.9	-2.9	0	0
44	M74	X	-2.9	-2.9	0	0
45	M75	X	-2.9	-2.9	0	0
46	M76	X	-2.9	-2.9	0	0
47	M89	X	-4.8	-4.8	0	0
48	M90	X	-4.8	-4.8	0	0
49	M91	X	-5.9	-5.9	0	0
50	M92	X	-4.8	-4.8	0	0
51	M93	X	-4.8	-4.8	0	0
52	M94	X	-5.9	-5.9	0	0
53	M95	X	-4.8	-4.8	0	0
54	M96	X	-4.8	-4.8	0	0
55	M97	X	-5.9	-5.9	0	0
56	M1	Z	1.7	1.7	0	0
57	M2	Z	2	2	0	0
58	M3	Z	2	2	0	0
59	M4	Z	1.7	1.7	0	0
60	M5	Z	1.7	1.7	0	0
61	M6	Z	1.7	1.7	0	0
62	M19	Z	1.7	1.7	0	0
63	M20	Z	1.7	1.7	0	0
64	M21	Z	1.7	1.7	0	0
65	M22	Z	1.7	1.7	0	0
66	M23	Z	1.7	1.7	0	0
67	M24	Z	1.7	1.7	0	0
68	M25	Z	1.7	1.7	0	0
69	M26	Z	1.7	1.7	0	0
70	M27	Z	1.7	1.7	0	0
71	M28	Z	1.7	1.7	0	0
72	M29	Z	2	2	0	0
73	M30	Z	2	2	0	0
74	M31	Z	1.7	1.7	0	0
75	M32	Z	1.7	1.7	0	0
76	M33	Z	1.7	1.7	0	0

Member Distributed Loads (BLC 11 : Wind + Ice (30 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
77	M43	Z	1.7	1.7	0	0
78	M44	Z	1.7	1.7	0	0
79	M45	Z	1.7	1.7	0	0
80	M46	Z	1.7	1.7	0	0
81	M47	Z	1.7	1.7	0	0
82	M48	Z	1.7	1.7	0	0
83	M49	Z	1.7	1.7	0	0
84	M50	Z	2	2	0	0
85	M51	Z	2	2	0	0
86	M52	Z	1.7	1.7	0	0
87	M53	Z	1.7	1.7	0	0
88	M54	Z	1.7	1.7	0	0
89	M64	Z	1.7	1.7	0	0
90	M65	Z	1.7	1.7	0	0
91	M66	Z	1.7	1.7	0	0
92	M67	Z	1.7	1.7	0	0
93	M68	Z	1.7	1.7	0	0
94	M69	Z	1.7	1.7	0	0
95	M70	Z	1.7	1.7	0	0
96	M71	Z	1.7	1.7	0	0
97	M72	Z	1.7	1.7	0	0
98	M73	Z	1.7	1.7	0	0
99	M74	Z	1.7	1.7	0	0
100	M75	Z	1.7	1.7	0	0
101	M76	Z	1.7	1.7	0	0
102	M89	Z	2.8	2.8	0	0
103	M90	Z	2.8	2.8	0	0
104	M91	Z	3.4	3.4	0	0
105	M92	Z	2.8	2.8	0	0
106	M93	Z	2.8	2.8	0	0
107	M94	Z	3.4	3.4	0	0
108	M95	Z	2.8	2.8	0	0
109	M96	Z	2.8	2.8	0	0
110	M97	Z	3.4	3.4	0	0

Member Distributed Loads (BLC 12 : Wind + Ice (60 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	-1.7	-1.7	0	0
2	M2	X	-2	-2	0	0
3	M3	X	-2	-2	0	0
4	M4	X	-1.7	-1.7	0	0
5	M5	X	-1.7	-1.7	0	0
6	M6	X	-1.7	-1.7	0	0
7	M19	X	-1.7	-1.7	0	0
8	M20	X	-1.7	-1.7	0	0
9	M21	X	-1.7	-1.7	0	0
10	M22	X	-1.7	-1.7	0	0
11	M23	X	-1.7	-1.7	0	0
12	M24	X	-1.7	-1.7	0	0
13	M25	X	-1.7	-1.7	0	0
14	M26	X	-1.7	-1.7	0	0
15	M27	X	-1.7	-1.7	0	0
16	M28	X	-1.7	-1.7	0	0
17	M29	X	-2	-2	0	0
18	M30	X	-2	-2	0	0
19	M31	X	-1.7	-1.7	0	0

Member Distributed Loads (BLC 12 : Wind + Ice (60 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
20	M32	X	-1.7	-1.7	0	0
21	M33	X	-1.7	-1.7	0	0
22	M43	X	-1.7	-1.7	0	0
23	M44	X	-1.7	-1.7	0	0
24	M45	X	-1.7	-1.7	0	0
25	M46	X	-1.7	-1.7	0	0
26	M47	X	-1.7	-1.7	0	0
27	M48	X	-1.7	-1.7	0	0
28	M49	X	-1.7	-1.7	0	0
29	M50	X	-2	-2	0	0
30	M51	X	-2	-2	0	0
31	M52	X	-1.7	-1.7	0	0
32	M53	X	-1.7	-1.7	0	0
33	M54	X	-1.7	-1.7	0	0
34	M64	X	-1.7	-1.7	0	0
35	M65	X	-1.7	-1.7	0	0
36	M66	X	-1.7	-1.7	0	0
37	M67	X	-1.7	-1.7	0	0
38	M68	X	-1.7	-1.7	0	0
39	M69	X	-1.7	-1.7	0	0
40	M70	X	-1.7	-1.7	0	0
41	M71	X	-1.7	-1.7	0	0
42	M72	X	-1.7	-1.7	0	0
43	M73	X	-1.7	-1.7	0	0
44	M74	X	-1.7	-1.7	0	0
45	M75	X	-1.7	-1.7	0	0
46	M76	X	-1.7	-1.7	0	0
47	M89	X	-2.8	-2.8	0	0
48	M90	X	-2.8	-2.8	0	0
49	M91	X	-3.4	-3.4	0	0
50	M92	X	-2.8	-2.8	0	0
51	M93	X	-2.8	-2.8	0	0
52	M94	X	-3.4	-3.4	0	0
53	M95	X	-2.8	-2.8	0	0
54	M96	X	-2.8	-2.8	0	0
55	M97	X	-3.4	-3.4	0	0
56	M1	Z	2.9	2.9	0	0
57	M2	Z	3.4	3.4	0	0
58	M3	Z	3.4	3.4	0	0
59	M4	Z	2.9	2.9	0	0
60	M5	Z	2.9	2.9	0	0
61	M6	Z	2.9	2.9	0	0
62	M19	Z	2.9	2.9	0	0
63	M20	Z	2.9	2.9	0	0
64	M21	Z	2.9	2.9	0	0
65	M22	Z	2.9	2.9	0	0
66	M23	Z	2.9	2.9	0	0
67	M24	Z	2.9	2.9	0	0
68	M25	Z	2.9	2.9	0	0
69	M26	Z	2.9	2.9	0	0
70	M27	Z	2.9	2.9	0	0
71	M28	Z	2.9	2.9	0	0
72	M29	Z	3.4	3.4	0	0
73	M30	Z	3.4	3.4	0	0
74	M31	Z	2.9	2.9	0	0
75	M32	Z	2.9	2.9	0	0
76	M33	Z	2.9	2.9	0	0

Member Distributed Loads (BLC 12 : Wind + Ice (60 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
77	M43	Z	2.9	2.9	0	0
78	M44	Z	2.9	2.9	0	0
79	M45	Z	2.9	2.9	0	0
80	M46	Z	2.9	2.9	0	0
81	M47	Z	2.9	2.9	0	0
82	M48	Z	2.9	2.9	0	0
83	M49	Z	2.9	2.9	0	0
84	M50	Z	3.4	3.4	0	0
85	M51	Z	3.4	3.4	0	0
86	M52	Z	2.9	2.9	0	0
87	M53	Z	2.9	2.9	0	0
88	M54	Z	2.9	2.9	0	0
89	M64	Z	2.9	2.9	0	0
90	M65	Z	2.9	2.9	0	0
91	M66	Z	2.9	2.9	0	0
92	M67	Z	2.9	2.9	0	0
93	M68	Z	2.9	2.9	0	0
94	M69	Z	2.9	2.9	0	0
95	M70	Z	2.9	2.9	0	0
96	M71	Z	2.9	2.9	0	0
97	M72	Z	2.9	2.9	0	0
98	M73	Z	2.9	2.9	0	0
99	M74	Z	2.9	2.9	0	0
100	M75	Z	2.9	2.9	0	0
101	M76	Z	2.9	2.9	0	0
102	M89	Z	4.8	4.8	0	0
103	M90	Z	4.8	4.8	0	0
104	M91	Z	5.9	5.9	0	0
105	M92	Z	4.8	4.8	0	0
106	M93	Z	4.8	4.8	0	0
107	M94	Z	5.9	5.9	0	0
108	M95	Z	4.8	4.8	0	0
109	M96	Z	4.8	4.8	0	0
110	M97	Z	5.9	5.9	0	0

Member Distributed Loads (BLC 13 : Wind + Ice (120 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	1.7	1.7	0	0
2	M2	X	2	2	0	0
3	M3	X	2	2	0	0
4	M4	X	1.7	1.7	0	0
5	M5	X	1.7	1.7	0	0
6	M6	X	1.7	1.7	0	0
7	M19	X	1.7	1.7	0	0
8	M20	X	1.7	1.7	0	0
9	M21	X	1.7	1.7	0	0
10	M22	X	1.7	1.7	0	0
11	M23	X	1.7	1.7	0	0
12	M24	X	1.7	1.7	0	0
13	M25	X	1.7	1.7	0	0
14	M26	X	1.7	1.7	0	0
15	M27	X	1.7	1.7	0	0
16	M28	X	1.7	1.7	0	0
17	M29	X	2	2	0	0
18	M30	X	2	2	0	0
19	M31	X	1.7	1.7	0	0

Member Distributed Loads (BLC 13 : Wind + Ice (120 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
20	M32	X	1.7	1.7	0	0
21	M33	X	1.7	1.7	0	0
22	M43	X	1.7	1.7	0	0
23	M44	X	1.7	1.7	0	0
24	M45	X	1.7	1.7	0	0
25	M46	X	1.7	1.7	0	0
26	M47	X	1.7	1.7	0	0
27	M48	X	1.7	1.7	0	0
28	M49	X	1.7	1.7	0	0
29	M50	X	2	2	0	0
30	M51	X	2	2	0	0
31	M52	X	1.7	1.7	0	0
32	M53	X	1.7	1.7	0	0
33	M54	X	1.7	1.7	0	0
34	M64	X	1.7	1.7	0	0
35	M65	X	1.7	1.7	0	0
36	M66	X	1.7	1.7	0	0
37	M67	X	1.7	1.7	0	0
38	M68	X	1.7	1.7	0	0
39	M69	X	1.7	1.7	0	0
40	M70	X	1.7	1.7	0	0
41	M71	X	1.7	1.7	0	0
42	M72	X	1.7	1.7	0	0
43	M73	X	1.7	1.7	0	0
44	M74	X	1.7	1.7	0	0
45	M75	X	1.7	1.7	0	0
46	M76	X	1.7	1.7	0	0
47	M89	X	2.8	2.8	0	0
48	M90	X	2.8	2.8	0	0
49	M91	X	3.4	3.4	0	0
50	M92	X	2.8	2.8	0	0
51	M93	X	2.8	2.8	0	0
52	M94	X	3.4	3.4	0	0
53	M95	X	2.8	2.8	0	0
54	M96	X	2.8	2.8	0	0
55	M97	X	3.4	3.4	0	0
56	M1	Z	2.9	2.9	0	0
57	M2	Z	3.4	3.4	0	0
58	M3	Z	3.4	3.4	0	0
59	M4	Z	2.9	2.9	0	0
60	M5	Z	2.9	2.9	0	0
61	M6	Z	2.9	2.9	0	0
62	M19	Z	2.9	2.9	0	0
63	M20	Z	2.9	2.9	0	0
64	M21	Z	2.9	2.9	0	0
65	M22	Z	2.9	2.9	0	0
66	M23	Z	2.9	2.9	0	0
67	M24	Z	2.9	2.9	0	0
68	M25	Z	2.9	2.9	0	0
69	M26	Z	2.9	2.9	0	0
70	M27	Z	2.9	2.9	0	0
71	M28	Z	2.9	2.9	0	0
72	M29	Z	3.4	3.4	0	0
73	M30	Z	3.4	3.4	0	0
74	M31	Z	2.9	2.9	0	0
75	M32	Z	2.9	2.9	0	0
76	M33	Z	2.9	2.9	0	0

Member Distributed Loads (BLC 13 : Wind + Ice (120 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
77	M43	Z	2.9	2.9	0	0
78	M44	Z	2.9	2.9	0	0
79	M45	Z	2.9	2.9	0	0
80	M46	Z	2.9	2.9	0	0
81	M47	Z	2.9	2.9	0	0
82	M48	Z	2.9	2.9	0	0
83	M49	Z	2.9	2.9	0	0
84	M50	Z	3.4	3.4	0	0
85	M51	Z	3.4	3.4	0	0
86	M52	Z	2.9	2.9	0	0
87	M53	Z	2.9	2.9	0	0
88	M54	Z	2.9	2.9	0	0
89	M64	Z	2.9	2.9	0	0
90	M65	Z	2.9	2.9	0	0
91	M66	Z	2.9	2.9	0	0
92	M67	Z	2.9	2.9	0	0
93	M68	Z	2.9	2.9	0	0
94	M69	Z	2.9	2.9	0	0
95	M70	Z	2.9	2.9	0	0
96	M71	Z	2.9	2.9	0	0
97	M72	Z	2.9	2.9	0	0
98	M73	Z	2.9	2.9	0	0
99	M74	Z	2.9	2.9	0	0
100	M75	Z	2.9	2.9	0	0
101	M76	Z	2.9	2.9	0	0
102	M89	Z	4.8	4.8	0	0
103	M90	Z	4.8	4.8	0	0
104	M91	Z	5.9	5.9	0	0
105	M92	Z	4.8	4.8	0	0
106	M93	Z	4.8	4.8	0	0
107	M94	Z	5.9	5.9	0	0
108	M95	Z	4.8	4.8	0	0
109	M96	Z	4.8	4.8	0	0
110	M97	Z	5.9	5.9	0	0

Member Distributed Loads (BLC 14 : Wind + Ice (150 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	2.9	2.9	0	0
2	M2	X	3.4	3.4	0	0
3	M3	X	3.4	3.4	0	0
4	M4	X	2.9	2.9	0	0
5	M5	X	2.9	2.9	0	0
6	M6	X	2.9	2.9	0	0
7	M19	X	2.9	2.9	0	0
8	M20	X	2.9	2.9	0	0
9	M21	X	2.9	2.9	0	0
10	M22	X	2.9	2.9	0	0
11	M23	X	2.9	2.9	0	0
12	M24	X	2.9	2.9	0	0
13	M25	X	2.9	2.9	0	0
14	M26	X	2.9	2.9	0	0
15	M27	X	2.9	2.9	0	0
16	M28	X	2.9	2.9	0	0
17	M29	X	3.4	3.4	0	0
18	M30	X	3.4	3.4	0	0
19	M31	X	2.9	2.9	0	0

Member Distributed Loads (BLC 14 : Wind + Ice (150 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
20	M32	X	2.9	2.9	0	0
21	M33	X	2.9	2.9	0	0
22	M43	X	2.9	2.9	0	0
23	M44	X	2.9	2.9	0	0
24	M45	X	2.9	2.9	0	0
25	M46	X	2.9	2.9	0	0
26	M47	X	2.9	2.9	0	0
27	M48	X	2.9	2.9	0	0
28	M49	X	2.9	2.9	0	0
29	M50	X	3.4	3.4	0	0
30	M51	X	3.4	3.4	0	0
31	M52	X	2.9	2.9	0	0
32	M53	X	2.9	2.9	0	0
33	M54	X	2.9	2.9	0	0
34	M64	X	2.9	2.9	0	0
35	M65	X	2.9	2.9	0	0
36	M66	X	2.9	2.9	0	0
37	M67	X	2.9	2.9	0	0
38	M68	X	2.9	2.9	0	0
39	M69	X	2.9	2.9	0	0
40	M70	X	2.9	2.9	0	0
41	M71	X	2.9	2.9	0	0
42	M72	X	2.9	2.9	0	0
43	M73	X	2.9	2.9	0	0
44	M74	X	2.9	2.9	0	0
45	M75	X	2.9	2.9	0	0
46	M76	X	2.9	2.9	0	0
47	M89	X	4.8	4.8	0	0
48	M90	X	4.8	4.8	0	0
49	M91	X	5.9	5.9	0	0
50	M92	X	4.8	4.8	0	0
51	M93	X	4.8	4.8	0	0
52	M94	X	5.9	5.9	0	0
53	M95	X	4.8	4.8	0	0
54	M96	X	4.8	4.8	0	0
55	M97	X	5.9	5.9	0	0
56	M1	Z	1.7	1.7	0	0
57	M2	Z	2	2	0	0
58	M3	Z	2	2	0	0
59	M4	Z	1.7	1.7	0	0
60	M5	Z	1.7	1.7	0	0
61	M6	Z	1.7	1.7	0	0
62	M19	Z	1.7	1.7	0	0
63	M20	Z	1.7	1.7	0	0
64	M21	Z	1.7	1.7	0	0
65	M22	Z	1.7	1.7	0	0
66	M23	Z	1.7	1.7	0	0
67	M24	Z	1.7	1.7	0	0
68	M25	Z	1.7	1.7	0	0
69	M26	Z	1.7	1.7	0	0
70	M27	Z	1.7	1.7	0	0
71	M28	Z	1.7	1.7	0	0
72	M29	Z	2	2	0	0
73	M30	Z	2	2	0	0
74	M31	Z	1.7	1.7	0	0
75	M32	Z	1.7	1.7	0	0
76	M33	Z	1.7	1.7	0	0

Member Distributed Loads (BLC 14 : Wind + Ice (150 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
77	M43	Z	1.7	1.7	0	0
78	M44	Z	1.7	1.7	0	0
79	M45	Z	1.7	1.7	0	0
80	M46	Z	1.7	1.7	0	0
81	M47	Z	1.7	1.7	0	0
82	M48	Z	1.7	1.7	0	0
83	M49	Z	1.7	1.7	0	0
84	M50	Z	2	2	0	0
85	M51	Z	2	2	0	0
86	M52	Z	1.7	1.7	0	0
87	M53	Z	1.7	1.7	0	0
88	M54	Z	1.7	1.7	0	0
89	M64	Z	1.7	1.7	0	0
90	M65	Z	1.7	1.7	0	0
91	M66	Z	1.7	1.7	0	0
92	M67	Z	1.7	1.7	0	0
93	M68	Z	1.7	1.7	0	0
94	M69	Z	1.7	1.7	0	0
95	M70	Z	1.7	1.7	0	0
96	M71	Z	1.7	1.7	0	0
97	M72	Z	1.7	1.7	0	0
98	M73	Z	1.7	1.7	0	0
99	M74	Z	1.7	1.7	0	0
100	M75	Z	1.7	1.7	0	0
101	M76	Z	1.7	1.7	0	0
102	M89	Z	2.8	2.8	0	0
103	M90	Z	2.8	2.8	0	0
104	M91	Z	3.4	3.4	0	0
105	M92	Z	2.8	2.8	0	0
106	M93	Z	2.8	2.8	0	0
107	M94	Z	3.4	3.4	0	0
108	M95	Z	2.8	2.8	0	0
109	M96	Z	2.8	2.8	0	0
110	M97	Z	3.4	3.4	0	0

Member Distributed Loads (BLC 18 : Wind + Live Lm (0 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	-.4	-.4	0	0
2	M2	X	-.6	-.6	0	0
3	M3	X	-.6	-.6	0	0
4	M4	X	-.4	-.4	0	0
5	M5	X	-.4	-.4	0	0
6	M6	X	-.4	-.4	0	0
7	M19	X	-.4	-.4	0	0
8	M20	X	-.4	-.4	0	0
9	M21	X	-.4	-.4	0	0
10	M22	X	-.4	-.4	0	0
11	M23	X	-.4	-.4	0	0
12	M24	X	-.4	-.4	0	0
13	M25	X	-.4	-.4	0	0
14	M26	X	-.4	-.4	0	0
15	M27	X	-.4	-.4	0	0
16	M28	X	-.4	-.4	0	0
17	M29	X	-.6	-.6	0	0
18	M30	X	-.6	-.6	0	0
19	M31	X	-.4	-.4	0	0

Member Distributed Loads (BLC 18 : Wind + Live Lm (0 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
20	M32	X	-.4	-.4	0	0
21	M33	X	-.4	-.4	0	0
22	M43	X	-.4	-.4	0	0
23	M44	X	-.4	-.4	0	0
24	M45	X	-.4	-.4	0	0
25	M46	X	-.4	-.4	0	0
26	M47	X	-.4	-.4	0	0
27	M48	X	-.4	-.4	0	0
28	M49	X	-.4	-.4	0	0
29	M50	X	-.6	-.6	0	0
30	M51	X	-.6	-.6	0	0
31	M52	X	-.4	-.4	0	0
32	M53	X	-.4	-.4	0	0
33	M54	X	-.4	-.4	0	0
34	M64	X	-.4	-.4	0	0
35	M65	X	-.4	-.4	0	0
36	M66	X	-.4	-.4	0	0
37	M67	X	-.4	-.4	0	0
38	M68	X	-.4	-.4	0	0
39	M69	X	-.4	-.4	0	0
40	M70	X	-.4	-.4	0	0
41	M71	X	-.4	-.4	0	0
42	M72	X	-.4	-.4	0	0
43	M73	X	-.4	-.4	0	0
44	M74	X	-.4	-.4	0	0
45	M75	X	-.4	-.4	0	0
46	M76	X	-.4	-.4	0	0
47	M91	X	-1.6	-1.6	0	0
48	M92	X	-1.2	-1.2	0	0
49	M93	X	-1.2	-1.2	0	0
50	M94	X	-1.6	-1.6	0	0
51	M95	X	-1.2	-1.2	0	0
52	M96	X	-1.2	-1.2	0	0
53	M97	X	-1.6	-1.6	0	0

Member Distributed Loads (BLC 19 : Wind + Live Lm (90 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M11	Z	.6	.6	0	0
2	M14	Z	.6	.6	0	0
3	M15	Z	.6	.6	0	0
4	M18	Z	.6	.6	0	0
5	M19	Z	.4	.4	0	0
6	M20	Z	.4	.4	0	0
7	M24	Z	.4	.4	0	0
8	M25	Z	.4	.4	0	0
9	M26	Z	.4	.4	0	0
10	M27	Z	.4	.4	0	0
11	M28	Z	.4	.4	0	0
12	M29	Z	.6	.6	0	0
13	M30	Z	.6	.6	0	0
14	M31	Z	.4	.4	0	0
15	M32	Z	.4	.4	0	0
16	M33	Z	.4	.4	0	0
17	M38	Z	.6	.6	0	0
18	M41	Z	.6	.6	0	0
19	M42	Z	.6	.6	0	0

Member Distributed Loads (BLC 19 : Wind + Live Lm (90 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
20	M43	Z	.4	.4	0	0
21	M44	Z	.4	.4	0	0
22	M45	Z	.4	.4	0	0
23	M46	Z	.4	.4	0	0
24	M47	Z	.4	.4	0	0
25	M48	Z	.4	.4	0	0
26	M49	Z	.4	.4	0	0
27	M50	Z	.6	.6	0	0
28	M51	Z	.6	.6	0	0
29	M52	Z	.4	.4	0	0
30	M53	Z	.4	.4	0	0
31	M54	Z	.4	.4	0	0
32	M59	Z	.6	.6	0	0
33	M62	Z	.6	.6	0	0
34	M63	Z	.6	.6	0	0
35	M64	Z	.4	.4	0	0
36	M65	Z	.4	.4	0	0
37	M66	Z	.4	.4	0	0
38	M67	Z	.4	.4	0	0
39	M68	Z	.4	.4	0	0
40	M69	Z	.4	.4	0	0
41	M70	Z	.4	.4	0	0
42	M72	Z	.4	.4	0	0
43	M73	Z	.4	.4	0	0
44	M74	Z	.4	.4	0	0
45	M75	Z	.4	.4	0	0
46	M76	Z	.4	.4	0	0
47	M89	Z	1.2	1.2	0	0
48	M90	Z	1.2	1.2	0	0
49	M91	Z	1.6	1.6	0	0
50	M92	Z	1.2	1.2	0	0
51	M93	Z	1.2	1.2	0	0
52	M94	Z	1.6	1.6	0	0
53	M95	Z	1.2	1.2	0	0
54	M96	Z	1.2	1.2	0	0
55	M97	Z	1.6	1.6	0	0
56	M100	Z	.6	.6	0	0
57	M103	Z	.6	.6	0	0

Member Distributed Loads (BLC 20 : Wind + Live Lm (30 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	-.3	-.3	0	0
2	M2	X	-.5	-.5	0	0
3	M3	X	-.5	-.5	0	0
4	M4	X	-.3	-.3	0	0
5	M5	X	-.3	-.3	0	0
6	M6	X	-.3	-.3	0	0
7	M19	X	-.3	-.3	0	0
8	M20	X	-.3	-.3	0	0
9	M21	X	-.3	-.3	0	0
10	M22	X	-.3	-.3	0	0
11	M23	X	-.3	-.3	0	0
12	M24	X	-.3	-.3	0	0
13	M25	X	-.3	-.3	0	0
14	M26	X	-.3	-.3	0	0
15	M27	X	-.3	-.3	0	0

Member Distributed Loads (BLC 20 : Wind + Live Lm (30 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
16	M28	X	-.3	-.3	0	0
17	M29	X	-.5	-.5	0	0
18	M30	X	-.5	-.5	0	0
19	M31	X	-.3	-.3	0	0
20	M32	X	-.3	-.3	0	0
21	M33	X	-.3	-.3	0	0
22	M43	X	-.3	-.3	0	0
23	M44	X	-.3	-.3	0	0
24	M45	X	-.3	-.3	0	0
25	M46	X	-.3	-.3	0	0
26	M47	X	-.3	-.3	0	0
27	M48	X	-.3	-.3	0	0
28	M49	X	-.3	-.3	0	0
29	M50	X	-.5	-.5	0	0
30	M51	X	-.5	-.5	0	0
31	M52	X	-.3	-.3	0	0
32	M53	X	-.3	-.3	0	0
33	M54	X	-.3	-.3	0	0
34	M64	X	-.3	-.3	0	0
35	M65	X	-.3	-.3	0	0
36	M66	X	-.3	-.3	0	0
37	M67	X	-.3	-.3	0	0
38	M68	X	-.3	-.3	0	0
39	M69	X	-.3	-.3	0	0
40	M70	X	-.3	-.3	0	0
41	M71	X	-.3	-.3	0	0
42	M72	X	-.3	-.3	0	0
43	M73	X	-.3	-.3	0	0
44	M74	X	-.3	-.3	0	0
45	M75	X	-.3	-.3	0	0
46	M76	X	-.3	-.3	0	0
47	M89	X	-1	-1	0	0
48	M90	X	-1	-1	0	0
49	M91	X	-1.4	-1.4	0	0
50	M92	X	-1	-1	0	0
51	M93	X	-1	-1	0	0
52	M94	X	-1.4	-1.4	0	0
53	M95	X	-1	-1	0	0
54	M96	X	-1	-1	0	0
55	M97	X	-1.4	-1.4	0	0
56	M1	Z	.2	.2	0	0
57	M2	Z	.3	.3	0	0
58	M3	Z	.3	.3	0	0
59	M4	Z	.2	.2	0	0
60	M5	Z	.2	.2	0	0
61	M6	Z	.2	.2	0	0
62	M19	Z	.2	.2	0	0
63	M20	Z	.2	.2	0	0
64	M21	Z	.2	.2	0	0
65	M22	Z	.2	.2	0	0
66	M23	Z	.2	.2	0	0
67	M24	Z	.2	.2	0	0
68	M25	Z	.2	.2	0	0
69	M26	Z	.2	.2	0	0
70	M27	Z	.2	.2	0	0
71	M28	Z	.2	.2	0	0
72	M29	Z	.3	.3	0	0

Member Distributed Loads (BLC 20 : Wind + Live Lm (30 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
73	M30	Z	.3	.3	0	0
74	M31	Z	.2	.2	0	0
75	M32	Z	.2	.2	0	0
76	M33	Z	.2	.2	0	0
77	M43	Z	.2	.2	0	0
78	M44	Z	.2	.2	0	0
79	M45	Z	.2	.2	0	0
80	M46	Z	.2	.2	0	0
81	M47	Z	.2	.2	0	0
82	M48	Z	.2	.2	0	0
83	M49	Z	.2	.2	0	0
84	M50	Z	.3	.3	0	0
85	M51	Z	.3	.3	0	0
86	M52	Z	.2	.2	0	0
87	M53	Z	.2	.2	0	0
88	M54	Z	.2	.2	0	0
89	M64	Z	.2	.2	0	0
90	M65	Z	.2	.2	0	0
91	M66	Z	.2	.2	0	0
92	M67	Z	.2	.2	0	0
93	M68	Z	.2	.2	0	0
94	M69	Z	.2	.2	0	0
95	M70	Z	.2	.2	0	0
96	M71	Z	.2	.2	0	0
97	M72	Z	.2	.2	0	0
98	M73	Z	.2	.2	0	0
99	M74	Z	.2	.2	0	0
100	M75	Z	.2	.2	0	0
101	M76	Z	.2	.2	0	0
102	M89	Z	.6	.6	0	0
103	M90	Z	.6	.6	0	0
104	M91	Z	.8	.8	0	0
105	M92	Z	.6	.6	0	0
106	M93	Z	.6	.6	0	0
107	M94	Z	.8	.8	0	0
108	M95	Z	.6	.6	0	0
109	M96	Z	.6	.6	0	0
110	M97	Z	.8	.8	0	0

Member Distributed Loads (BLC 21 : Wind + Live Lm (60 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	-.2	-.2	0	0
2	M2	X	-.3	-.3	0	0
3	M3	X	-.3	-.3	0	0
4	M4	X	-.2	-.2	0	0
5	M5	X	-.2	-.2	0	0
6	M6	X	-.2	-.2	0	0
7	M19	X	-.2	-.2	0	0
8	M20	X	-.2	-.2	0	0
9	M21	X	-.2	-.2	0	0
10	M22	X	-.2	-.2	0	0
11	M23	X	-.2	-.2	0	0
12	M24	X	-.2	-.2	0	0
13	M25	X	-.2	-.2	0	0
14	M26	X	-.2	-.2	0	0
15	M27	X	-.2	-.2	0	0

Member Distributed Loads (BLC 21 : Wind + Live Lm (60 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
16	M28	X	-.2	-.2	0	0
17	M29	X	-.3	-.3	0	0
18	M30	X	-.3	-.3	0	0
19	M31	X	-.2	-.2	0	0
20	M32	X	-.2	-.2	0	0
21	M33	X	-.2	-.2	0	0
22	M43	X	-.2	-.2	0	0
23	M44	X	-.2	-.2	0	0
24	M45	X	-.2	-.2	0	0
25	M46	X	-.2	-.2	0	0
26	M47	X	-.2	-.2	0	0
27	M48	X	-.2	-.2	0	0
28	M49	X	-.2	-.2	0	0
29	M50	X	-.3	-.3	0	0
30	M51	X	-.3	-.3	0	0
31	M52	X	-.2	-.2	0	0
32	M53	X	-.2	-.2	0	0
33	M54	X	-.2	-.2	0	0
34	M64	X	-.2	-.2	0	0
35	M65	X	-.2	-.2	0	0
36	M66	X	-.2	-.2	0	0
37	M67	X	-.2	-.2	0	0
38	M68	X	-.2	-.2	0	0
39	M69	X	-.2	-.2	0	0
40	M70	X	-.2	-.2	0	0
41	M71	X	-.2	-.2	0	0
42	M72	X	-.2	-.2	0	0
43	M73	X	-.2	-.2	0	0
44	M74	X	-.2	-.2	0	0
45	M75	X	-.2	-.2	0	0
46	M76	X	-.2	-.2	0	0
47	M89	X	-.6	-.6	0	0
48	M90	X	-.6	-.6	0	0
49	M91	X	-.8	-.8	0	0
50	M92	X	-.6	-.6	0	0
51	M93	X	-.6	-.6	0	0
52	M94	X	-.8	-.8	0	0
53	M95	X	-.6	-.6	0	0
54	M96	X	-.6	-.6	0	0
55	M97	X	-.8	-.8	0	0
56	M1	Z	.3	.3	0	0
57	M2	Z	.5	.5	0	0
58	M3	Z	.5	.5	0	0
59	M4	Z	.3	.3	0	0
60	M5	Z	.3	.3	0	0
61	M6	Z	.3	.3	0	0
62	M19	Z	.3	.3	0	0
63	M20	Z	.3	.3	0	0
64	M21	Z	.3	.3	0	0
65	M22	Z	.3	.3	0	0
66	M23	Z	.3	.3	0	0
67	M24	Z	.3	.3	0	0
68	M25	Z	.3	.3	0	0
69	M26	Z	.3	.3	0	0
70	M27	Z	.3	.3	0	0
71	M28	Z	.3	.3	0	0
72	M29	Z	.5	.5	0	0

Member Distributed Loads (BLC 21 : Wind + Live Lm (60 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
73	M30	Z	.5	.5	0	0
74	M31	Z	.3	.3	0	0
75	M32	Z	.3	.3	0	0
76	M33	Z	.3	.3	0	0
77	M43	Z	.3	.3	0	0
78	M44	Z	.3	.3	0	0
79	M45	Z	.3	.3	0	0
80	M46	Z	.3	.3	0	0
81	M47	Z	.3	.3	0	0
82	M48	Z	.3	.3	0	0
83	M49	Z	.3	.3	0	0
84	M50	Z	.5	.5	0	0
85	M51	Z	.5	.5	0	0
86	M52	Z	.3	.3	0	0
87	M53	Z	.3	.3	0	0
88	M54	Z	.3	.3	0	0
89	M64	Z	.3	.3	0	0
90	M65	Z	.3	.3	0	0
91	M66	Z	.3	.3	0	0
92	M67	Z	.3	.3	0	0
93	M68	Z	.3	.3	0	0
94	M69	Z	.3	.3	0	0
95	M70	Z	.3	.3	0	0
96	M71	Z	.3	.3	0	0
97	M72	Z	.3	.3	0	0
98	M73	Z	.3	.3	0	0
99	M74	Z	.3	.3	0	0
100	M75	Z	.3	.3	0	0
101	M76	Z	.3	.3	0	0
102	M89	Z	1	1	0	0
103	M90	Z	1	1	0	0
104	M91	Z	1.4	1.4	0	0
105	M92	Z	1	1	0	0
106	M93	Z	1	1	0	0
107	M94	Z	1.4	1.4	0	0
108	M95	Z	1	1	0	0
109	M96	Z	1	1	0	0
110	M97	Z	1.4	1.4	0	0

Member Distributed Loads (BLC 22 : Wind + Live Lm (120 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	.2	.2	0	0
2	M2	X	.3	.3	0	0
3	M3	X	.3	.3	0	0
4	M4	X	.2	.2	0	0
5	M5	X	.2	.2	0	0
6	M6	X	.2	.2	0	0
7	M19	X	.2	.2	0	0
8	M20	X	.2	.2	0	0
9	M21	X	.2	.2	0	0
10	M22	X	.2	.2	0	0
11	M23	X	.2	.2	0	0
12	M24	X	.2	.2	0	0
13	M25	X	.2	.2	0	0
14	M26	X	.2	.2	0	0
15	M27	X	.2	.2	0	0

Member Distributed Loads (BLC 22 : Wind + Live Lm (120 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
16	M28	X	.2	.2	0	0
17	M29	X	.3	.3	0	0
18	M30	X	.3	.3	0	0
19	M31	X	.2	.2	0	0
20	M32	X	.2	.2	0	0
21	M33	X	.2	.2	0	0
22	M43	X	.2	.2	0	0
23	M44	X	.2	.2	0	0
24	M45	X	.2	.2	0	0
25	M46	X	.2	.2	0	0
26	M47	X	.2	.2	0	0
27	M48	X	.2	.2	0	0
28	M49	X	.2	.2	0	0
29	M50	X	.3	.3	0	0
30	M51	X	.3	.3	0	0
31	M52	X	.2	.2	0	0
32	M53	X	.2	.2	0	0
33	M54	X	.2	.2	0	0
34	M64	X	.2	.2	0	0
35	M65	X	.2	.2	0	0
36	M66	X	.2	.2	0	0
37	M67	X	.2	.2	0	0
38	M68	X	.2	.2	0	0
39	M69	X	.2	.2	0	0
40	M70	X	.2	.2	0	0
41	M71	X	.2	.2	0	0
42	M72	X	.2	.2	0	0
43	M73	X	.2	.2	0	0
44	M74	X	.2	.2	0	0
45	M75	X	.2	.2	0	0
46	M76	X	.2	.2	0	0
47	M89	X	.6	.6	0	0
48	M90	X	.6	.6	0	0
49	M91	X	.8	.8	0	0
50	M92	X	.6	.6	0	0
51	M93	X	.6	.6	0	0
52	M94	X	.8	.8	0	0
53	M95	X	.6	.6	0	0
54	M96	X	.6	.6	0	0
55	M97	X	.8	.8	0	0
56	M1	Z	.3	.3	0	0
57	M2	Z	.5	.5	0	0
58	M3	Z	.5	.5	0	0
59	M4	Z	.3	.3	0	0
60	M5	Z	.3	.3	0	0
61	M6	Z	.3	.3	0	0
62	M19	Z	.3	.3	0	0
63	M20	Z	.3	.3	0	0
64	M21	Z	.3	.3	0	0
65	M22	Z	.3	.3	0	0
66	M23	Z	.3	.3	0	0
67	M24	Z	.3	.3	0	0
68	M25	Z	.3	.3	0	0
69	M26	Z	.3	.3	0	0
70	M27	Z	.3	.3	0	0
71	M28	Z	.3	.3	0	0
72	M29	Z	.5	.5	0	0

Member Distributed Loads (BLC 22 : Wind + Live Lm (120 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
73	M30	Z	.5	.5	0	0
74	M31	Z	.3	.3	0	0
75	M32	Z	.3	.3	0	0
76	M33	Z	.3	.3	0	0
77	M43	Z	.3	.3	0	0
78	M44	Z	.3	.3	0	0
79	M45	Z	.3	.3	0	0
80	M46	Z	.3	.3	0	0
81	M47	Z	.3	.3	0	0
82	M48	Z	.3	.3	0	0
83	M49	Z	.3	.3	0	0
84	M50	Z	.5	.5	0	0
85	M51	Z	.5	.5	0	0
86	M52	Z	.3	.3	0	0
87	M53	Z	.3	.3	0	0
88	M54	Z	.3	.3	0	0
89	M64	Z	.3	.3	0	0
90	M65	Z	.3	.3	0	0
91	M66	Z	.3	.3	0	0
92	M67	Z	.3	.3	0	0
93	M68	Z	.3	.3	0	0
94	M69	Z	.3	.3	0	0
95	M70	Z	.3	.3	0	0
96	M71	Z	.3	.3	0	0
97	M72	Z	.3	.3	0	0
98	M73	Z	.3	.3	0	0
99	M74	Z	.3	.3	0	0
100	M75	Z	.3	.3	0	0
101	M76	Z	.3	.3	0	0
102	M89	Z	1	1	0	0
103	M90	Z	1	1	0	0
104	M91	Z	1.4	1.4	0	0
105	M92	Z	1	1	0	0
106	M93	Z	1	1	0	0
107	M94	Z	1.4	1.4	0	0
108	M95	Z	1	1	0	0
109	M96	Z	1	1	0	0
110	M97	Z	1.4	1.4	0	0

Member Distributed Loads (BLC 23 : Wind + Live Lm (150 deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	X	.3	.3	0	0
2	M2	X	.5	.5	0	0
3	M3	X	.5	.5	0	0
4	M4	X	.3	.3	0	0
5	M5	X	.3	.3	0	0
6	M6	X	.3	.3	0	0
7	M19	X	.3	.3	0	0
8	M20	X	.3	.3	0	0
9	M21	X	.3	.3	0	0
10	M22	X	.3	.3	0	0
11	M23	X	.3	.3	0	0
12	M24	X	.3	.3	0	0
13	M25	X	.3	.3	0	0
14	M26	X	.3	.3	0	0
15	M27	X	.3	.3	0	0

Member Distributed Loads (BLC 23 : Wind + Live Lm (150 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
16	M28	X	.3	.3	0	0
17	M29	X	.5	.5	0	0
18	M30	X	.5	.5	0	0
19	M31	X	.3	.3	0	0
20	M32	X	.3	.3	0	0
21	M33	X	.3	.3	0	0
22	M43	X	.3	.3	0	0
23	M44	X	.3	.3	0	0
24	M45	X	.3	.3	0	0
25	M46	X	.3	.3	0	0
26	M47	X	.3	.3	0	0
27	M48	X	.3	.3	0	0
28	M49	X	.3	.3	0	0
29	M50	X	.5	.5	0	0
30	M51	X	.5	.5	0	0
31	M52	X	.3	.3	0	0
32	M53	X	.3	.3	0	0
33	M54	X	.3	.3	0	0
34	M64	X	.3	.3	0	0
35	M65	X	.3	.3	0	0
36	M66	X	.3	.3	0	0
37	M67	X	.3	.3	0	0
38	M68	X	.3	.3	0	0
39	M69	X	.3	.3	0	0
40	M70	X	.3	.3	0	0
41	M71	X	.3	.3	0	0
42	M72	X	.3	.3	0	0
43	M73	X	.3	.3	0	0
44	M74	X	.3	.3	0	0
45	M75	X	.3	.3	0	0
46	M76	X	.3	.3	0	0
47	M89	X	1	1	0	0
48	M90	X	1	1	0	0
49	M91	X	1.4	1.4	0	0
50	M92	X	1	1	0	0
51	M93	X	1	1	0	0
52	M94	X	1.4	1.4	0	0
53	M95	X	1	1	0	0
54	M96	X	1	1	0	0
55	M97	X	1.4	1.4	0	0
56	M1	Z	.2	.2	0	0
57	M2	Z	.3	.3	0	0
58	M3	Z	.3	.3	0	0
59	M4	Z	.2	.2	0	0
60	M5	Z	.2	.2	0	0
61	M6	Z	.2	.2	0	0
62	M19	Z	.2	.2	0	0
63	M20	Z	.2	.2	0	0
64	M21	Z	.2	.2	0	0
65	M22	Z	.2	.2	0	0
66	M23	Z	.2	.2	0	0
67	M24	Z	.2	.2	0	0
68	M25	Z	.2	.2	0	0
69	M26	Z	.2	.2	0	0
70	M27	Z	.2	.2	0	0
71	M28	Z	.2	.2	0	0
72	M29	Z	.3	.3	0	0

Member Distributed Loads (BLC 23 : Wind + Live Lm (150 deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
73	M30	Z	.3	.3	0	0
74	M31	Z	.2	.2	0	0
75	M32	Z	.2	.2	0	0
76	M33	Z	.2	.2	0	0
77	M43	Z	.2	.2	0	0
78	M44	Z	.2	.2	0	0
79	M45	Z	.2	.2	0	0
80	M46	Z	.2	.2	0	0
81	M47	Z	.2	.2	0	0
82	M48	Z	.2	.2	0	0
83	M49	Z	.2	.2	0	0
84	M50	Z	.3	.3	0	0
85	M51	Z	.3	.3	0	0
86	M52	Z	.2	.2	0	0
87	M53	Z	.2	.2	0	0
88	M54	Z	.2	.2	0	0
89	M64	Z	.2	.2	0	0
90	M65	Z	.2	.2	0	0
91	M66	Z	.2	.2	0	0
92	M67	Z	.2	.2	0	0
93	M68	Z	.2	.2	0	0
94	M69	Z	.2	.2	0	0
95	M70	Z	.2	.2	0	0
96	M71	Z	.2	.2	0	0
97	M72	Z	.2	.2	0	0
98	M73	Z	.2	.2	0	0
99	M74	Z	.2	.2	0	0
100	M75	Z	.2	.2	0	0
101	M76	Z	.2	.2	0	0
102	M89	Z	.6	.6	0	0
103	M90	Z	.6	.6	0	0
104	M91	Z	.8	.8	0	0
105	M92	Z	.6	.6	0	0
106	M93	Z	.6	.6	0	0
107	M94	Z	.8	.8	0	0
108	M95	Z	.6	.6	0	0
109	M96	Z	.6	.6	0	0
110	M97	Z	.8	.8	0	0

Member Distributed Loads (BLC 36 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M1	Y	-2.128	-.702	75.6	81.9
2	M1	Y	-.702	-.831	81.9	88.2
3	M1	Y	-.804	-2.706	88.2	94.5
4	M1	Y	-2.706	-4.63	94.5	100.8
5	M1	Y	-4.63	-4.712	100.8	107.1
6	M1	Y	-4.712	-3.653	107.1	113.4
7	M1	Y	-3.653	-2.306	113.4	119.7
8	M1	Y	-2.306	-1.012	119.7	126
9	M28	Y	-.856	-2.419	0	6.3
10	M28	Y	-2.419	-4.289	6.3	12.6
11	M28	Y	-4.289	-5.014	12.6	18.9
12	M28	Y	-5.014	-4.181	18.9	25.2
13	M28	Y	-4.181	-2.857	25.2	31.5
14	M28	Y	-2.857	-1.025	31.5	37.8
15	M28	Y	-1.08	-.967	37.8	44.1

Member Distributed Loads (BLC 36 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
16	M28	Y	-.967	-2.177	44.1	50.4
17	M36	Y	-2.336	-2.336	0	1.501
18	M70	Y	-.11	-3.011	0	6.564
19	M70	Y	-3.011	-6.879	6.564	13.127
20	M70	Y	-6.879	-9.458	13.127	19.691
21	M70	Y	-9.458	-9.123	19.691	26.254
22	M70	Y	-9.123	-6.554	26.254	32.818
23	M70	Y	-6.554	-3.36	32.818	39.381
24	M70	Y	-3.36	-.635	39.381	45.945
25	M88	Y	-.733	-.733	.953	3.945
26	M1	Y	-.852	-2.427	0	6.3
27	M1	Y	-2.427	-4.32	6.3	12.6
28	M1	Y	-4.32	-5.031	12.6	18.9
29	M1	Y	-5.031	-4.207	18.9	25.2
30	M1	Y	-4.207	-2.891	25.2	31.5
31	M1	Y	-2.891	-1.026	31.5	37.8
32	M1	Y	-1.081	-.967	37.8	44.1
33	M1	Y	-.967	-2.178	44.1	50.4
34	M9	Y	-2.341	-2.341	0	1.501
35	M49	Y	-2.17	-1.131	75.6	81.9
36	M49	Y	-1.131	-.858	81.9	88.2
37	M49	Y	-.804	-2.703	88.2	94.5
38	M49	Y	-2.703	-4.611	94.5	100.8
39	M49	Y	-4.611	-4.697	100.8	107.1
40	M49	Y	-4.697	-3.655	107.1	113.4
41	M49	Y	-3.655	-2.306	113.4	119.7
42	M49	Y	-2.306	-1.011	119.7	126
43	M72	Y	-.109	-3.009	0	6.564
44	M72	Y	-3.009	-6.873	6.564	13.127
45	M72	Y	-6.873	-9.437	13.127	19.691
46	M72	Y	-9.437	-9.098	19.691	26.254
47	M72	Y	-9.098	-6.535	26.254	32.818
48	M72	Y	-6.535	-3.35	32.818	39.381
49	M72	Y	-3.35	-.644	39.381	45.945
50	M84	Y	-.735	-.735	.952	3.945
51	M28	Y	-2.126	-.702	75.6	81.9
52	M28	Y	-.702	-.831	81.9	88.2
53	M28	Y	-.804	-2.706	88.2	94.5
54	M28	Y	-2.706	-4.63	94.5	100.8
55	M28	Y	-4.63	-4.712	100.8	107.1
56	M28	Y	-4.712	-3.653	107.1	113.4
57	M28	Y	-3.653	-2.306	113.4	119.7
58	M28	Y	-2.306	-1.012	119.7	126
59	M49	Y	-.856	-2.419	0	6.3
60	M49	Y	-2.419	-4.289	6.3	12.6
61	M49	Y	-4.289	-5.014	12.6	18.9
62	M49	Y	-5.014	-4.181	18.9	25.2
63	M49	Y	-4.181	-2.857	25.2	31.5
64	M49	Y	-2.857	-1.025	31.5	37.8
65	M49	Y	-1.052	-.538	37.8	44.1
66	M49	Y	-.538	-2.136	44.1	50.4
67	M57	Y	-2.336	-2.336	0	1.501
68	M71	Y	-.635	-3.179	0	6.564
69	M71	Y	-3.179	-6.629	6.564	13.127
70	M71	Y	-6.629	-9.379	13.127	19.691
71	M71	Y	-9.379	-9.199	19.691	26.254
72	M71	Y	-9.199	-6.804	26.254	32.818

Member Distributed Loads (BLC 36 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
73	M71	Y	-6.804	-3.193	32.818	39.381
74	M71	Y	-3.193	-.11	39.381	45.945
75	M80	Y	-.733	-.733	0	2.991
76	M1	Y	-2.129	-3.568	50.4	56.7
77	M1	Y	-3.568	-4.096	56.7	63
78	M1	Y	-4.096	-3.594	63	69.3
79	M1	Y	-3.594	-2.088	69.3	75.6
80	M19	Y	-1.389	-3.269	0	6.079
81	M19	Y	-3.269	-5.348	6.079	12.158
82	M19	Y	-5.348	-8.434	12.158	18.236
83	M19	Y	-8.434	-9.446	18.236	24.315
84	M19	Y	-9.446	-6.819	24.315	30.394
85	M19	Y	-6.819	-3.438	30.394	36.473
86	M20	Y	-.361	-2.675	0	6.079
87	M20	Y	-2.675	-5.945	6.079	12.158
88	M20	Y	-5.945	-9.092	12.158	18.236
89	M20	Y	-9.092	-9.251	18.236	24.315
90	M20	Y	-9.251	-6.903	24.315	30.394
91	M20	Y	-6.903	-4.33	30.394	36.473
92	M43	Y	-1.399	-3.195	0	6.079
93	M43	Y	-3.195	-5.518	6.079	12.158
94	M43	Y	-5.518	-8.836	12.158	18.236
95	M43	Y	-8.836	-9.273	18.236	24.315
96	M43	Y	-9.273	-6.432	24.315	30.394
97	M43	Y	-6.432	-3.665	30.394	36.473
98	M65	Y	-1.389	-3.269	0	6.079
99	M65	Y	-3.269	-5.347	6.079	12.158
100	M65	Y	-5.347	-8.433	12.158	18.236
101	M65	Y	-8.433	-9.447	18.236	24.315
102	M65	Y	-9.447	-6.822	24.315	30.394
103	M65	Y	-6.822	-3.439	30.394	36.473
104	M28	Y	-2.128	-3.563	50.4	56.7
105	M28	Y	-3.563	-4.089	56.7	63
106	M28	Y	-4.089	-3.589	63	69.3
107	M28	Y	-3.589	-2.086	69.3	75.6
108	M44	Y	-.362	-2.675	0	6.079
109	M44	Y	-2.675	-5.94	6.079	12.158
110	M44	Y	-5.94	-9.088	12.158	18.236
111	M44	Y	-9.088	-9.251	18.236	24.315
112	M44	Y	-9.251	-6.902	24.315	30.394
113	M44	Y	-6.902	-4.331	30.394	36.473
114	M64	Y	-.351	-2.749	0	6.079
115	M64	Y	-2.749	-5.776	6.079	12.158
116	M64	Y	-5.776	-8.702	12.158	18.236
117	M64	Y	-8.702	-9.438	18.236	24.315
118	M64	Y	-9.438	-7.294	24.315	30.394
119	M64	Y	-7.294	-4.104	30.394	36.473
120	M49	Y	-2.088	-3.594	50.4	56.7
121	M49	Y	-3.594	-4.096	56.7	63
122	M49	Y	-4.096	-3.568	63	69.3
123	M49	Y	-3.568	-2.129	69.3	75.6

Member Distributed Loads (BLC 37 : BLC 8 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
1	M28	Y	-2.891	-.954	75.6	81.9
2	M28	Y	-.954	-1.131	81.9	88.2

Member Distributed Loads (BLC 37 : BLC 8 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
3	M28	Y	-1.094	-3.68	88.2	94.5
4	M28	Y	-3.68	-6.299	94.5	100.8
5	M28	Y	-6.299	-6.416	100.8	107.1
6	M28	Y	-6.416	-4.971	107.1	113.4
7	M28	Y	-4.971	-3.133	113.4	119.7
8	M28	Y	-3.133	-1.377	119.7	126
9	M49	Y	-1.16	-3.292	0	6.3
10	M49	Y	-3.292	-5.837	6.3	12.6
11	M49	Y	-5.837	-6.819	12.6	18.9
12	M49	Y	-6.819	-5.685	18.9	25.2
13	M49	Y	-5.685	-3.885	25.2	31.5
14	M49	Y	-3.885	-1.394	31.5	37.8
15	M49	Y	-1.468	-1.315	37.8	44.1
16	M49	Y	-1.315	-2.961	44.1	50.4
17	M57	Y	-3.175	-3.175	0	1.501
18	M71	Y	-.864	-4.569	0	6.564
19	M71	Y	-4.569	-8.913	6.564	13.127
20	M71	Y	-8.913	-12.405	13.127	19.691
21	M71	Y	-12.405	-12.858	19.691	26.254
22	M71	Y	-12.858	-9.354	26.254	32.818
23	M71	Y	-9.354	-4.095	32.818	39.381
24	M71	Y	-4.095	-.149	39.381	45.945
25	M80	Y	-.996	-.996	0	2.993
26	M28	Y	-1.468	-1.315	37.8	44.1
27	M28	Y	-1.315	-2.96	44.1	50.4
28	M28	Y	-2.894	-4.846	50.4	56.7
29	M28	Y	-4.846	-5.561	56.7	63
30	M28	Y	-5.561	-4.881	63	69.3
31	M28	Y	-4.881	-2.836	69.3	75.6
32	M43	Y	-1.888	-4.446	0	6.079
33	M43	Y	-4.446	-7.275	6.079	12.158
34	M43	Y	-7.275	-11.489	12.158	18.236
35	M43	Y	-11.489	-12.863	18.236	24.315
36	M43	Y	-12.863	-9.275	24.315	30.394
37	M43	Y	-9.275	-4.676	30.394	36.473
38	M44	Y	-.492	-3.638	0	6.079
39	M44	Y	-3.638	-8.079	6.079	12.158
40	M44	Y	-8.079	-12.36	12.158	18.236
41	M44	Y	-12.36	-12.582	18.236	24.315
42	M44	Y	-12.582	-9.386	24.315	30.394
43	M44	Y	-9.386	-5.89	30.394	36.473
44	M19	Y	-1.888	-4.446	0	6.079
45	M19	Y	-4.446	-7.273	6.079	12.158
46	M19	Y	-7.273	-11.47	12.158	18.236
47	M19	Y	-11.47	-12.846	18.236	24.315
48	M19	Y	-12.846	-9.273	24.315	30.394
49	M19	Y	-9.273	-4.676	30.394	36.473
50	M70	Y	-.149	-4.096	0	6.564
51	M70	Y	-4.096	-9.356	6.564	13.127
52	M70	Y	-9.356	-12.862	13.127	19.691
53	M70	Y	-12.862	-12.407	19.691	26.254
54	M70	Y	-12.407	-8.914	26.254	32.818
55	M70	Y	-8.914	-4.57	32.818	39.381
56	M70	Y	-4.57	-.864	39.381	45.945
57	M1	Y	-2.894	-.955	75.6	81.9
58	M1	Y	-.955	-1.131	81.9	88.2
59	M1	Y	-1.094	-3.68	88.2	94.5

Member Distributed Loads (BLC 37 : BLC 8 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
60	M1	Y	-3.68	-6.296	94.5	100.8
61	M1	Y	-6.296	-6.409	100.8	107.1
62	M1	Y	-6.409	-4.968	107.1	113.4
63	M1	Y	-4.968	-3.136	113.4	119.7
64	M1	Y	-3.136	-1.376	119.7	126
65	M28	Y	-1.164	-3.29	0	6.3
66	M28	Y	-3.29	-5.833	6.3	12.6
67	M28	Y	-5.833	-6.818	12.6	18.9
68	M28	Y	-6.818	-5.686	18.9	25.2
69	M28	Y	-5.686	-3.885	25.2	31.5
70	M28	Y	-3.885	-1.394	31.5	37.8
71	M36	Y	-3.177	-3.177	0	1.501
72	M88	Y	-.997	-.997	.953	3.945
73	M1	Y	-1.468	-1.315	37.8	44.1
74	M1	Y	-1.315	-2.962	44.1	50.4
75	M1	Y	-2.896	-4.853	50.4	56.7
76	M1	Y	-4.853	-5.57	56.7	63
77	M1	Y	-5.57	-4.887	63	69.3
78	M1	Y	-4.887	-2.839	69.3	75.6
79	M20	Y	-.479	-3.743	0	6.079
80	M20	Y	-3.743	-7.866	6.079	12.158
81	M20	Y	-7.866	-11.861	12.158	18.236
82	M20	Y	-11.861	-12.875	18.236	24.315
83	M20	Y	-12.875	-9.93	24.315	30.394
84	M20	Y	-9.93	-5.53	30.394	36.473
85	M64	Y	-1.904	-4.343	0	6.079
86	M64	Y	-4.343	-7.496	6.079	12.158
87	M64	Y	-7.496	-12.012	12.158	18.236
88	M64	Y	-12.012	-12.607	18.236	24.315
89	M64	Y	-12.607	-8.738	24.315	30.394
90	M64	Y	-8.738	-4.97	30.394	36.473
91	M72	Y	-.149	-4.336	0	6.564
92	M72	Y	-4.336	-9.24	6.564	13.127
93	M72	Y	-9.24	-12.502	13.127	19.691
94	M72	Y	-12.502	-12.756	19.691	26.254
95	M72	Y	-12.756	-9.016	26.254	32.818
96	M72	Y	-9.016	-4.322	32.818	39.381
97	M72	Y	-4.322	-.864	39.381	45.945
98	M1	Y	-1.164	-3.29	0	6.3
99	M1	Y	-3.29	-5.833	6.3	12.6
100	M1	Y	-5.833	-6.818	12.6	18.9
101	M1	Y	-6.818	-5.686	18.9	25.2
102	M1	Y	-5.686	-3.885	25.2	31.5
103	M1	Y	-3.885	-1.394	31.5	37.8
104	M9	Y	-3.177	-3.177	0	1.501
105	M49	Y	-2.891	-.954	75.6	81.9
106	M49	Y	-.954	-1.131	81.9	88.2
107	M49	Y	-1.094	-3.68	88.2	94.5
108	M49	Y	-3.68	-6.296	94.5	100.8
109	M49	Y	-6.296	-6.409	100.8	107.1
110	M49	Y	-6.409	-4.968	107.1	113.4
111	M49	Y	-4.968	-3.136	113.4	119.7
112	M49	Y	-3.136	-1.376	119.7	126
113	M84	Y	-.997	-.997	.953	3.945
114	M49	Y	-2.894	-4.846	50.4	56.7
115	M49	Y	-4.846	-5.561	56.7	63
116	M49	Y	-5.561	-4.881	63	69.3

Member Distributed Loads (BLC 37 : BLC 8 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,...	End Magnitude[lb/ft,F,psf]	Start Location[in,%]	End Location[in,%]
117	M49	Y	-4.881	-2.836	69.3	75.6
118	M65	Y	-.492	-3.638	0	6.079
119	M65	Y	-3.638	-8.079	6.079	12.158
120	M65	Y	-8.079	-12.36	12.158	18.236
121	M65	Y	-12.36	-12.582	18.236	24.315
122	M65	Y	-12.582	-9.386	24.315	30.394
123	M65	Y	-9.386	-5.89	30.394	36.473

Member Area Loads (BLC 1 : Dead)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N16	N88	N56	N2	Y	Two Way	-5
2	N95	N1	N40	N109	Y	Two Way	-5
3	N71	N126	N94	N57	Y	Two Way	-5
4	N40	N31	N30	N16	Y	Two Way	-5
5	N126	N121	N82	N71	Y	Two Way	-5
6	N82	N71	N88	N83	Y	Two Way	-5
7	N30	N83	N88	N16	Y	Two Way	-5
8	N109	N120	N31	N40	Y	Two Way	-5
9	N109	N120	N121	N126	Y	Two Way	-5

Member Area Loads (BLC 8 : Dead Ice)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N126	N94	N57	N71	Y	Two Way	-6.8
2	N82	N71	N88	N83	Y	Two Way	-6.8
3	N30	N83	N88	N16	Y	Two Way	-6.8
4	N16	N88	N56	N2	Y	Two Way	-6.8
5	N40	N31	N30	N16	Y	Two Way	-6.8
6	N40	N109	N120	N31	Y	Two Way	-6.8
7	N95	N109	N40	N1	Y	Two Way	-6.8
8	N109	N126	N121	N120	Y	Two Way	-6.8
9	N121	N126	N71	N82	Y	Two Way	-6.8

Envelope AISC 14th(360-10): LRFD Steel Code Checks

	Member	Shape	Code Check	Loc[i...	LC	Shear Che...	Loc[i...	Dir	LC	phi*Pnc [lb]	phi*Pnt [...	phi*Mn ...	phi*Mn ...	Cb	Eqn
1	M31	HSS1x1x2	.751	120....	11	.451	126	y	5	8196.364	21445.2	572.7	572.7	4...	H3-6
2	M4	HSS1x1x2	.739	0	2	.439	126	y	13	8196.364	21445.2	572.7	572.7	1	H3-6
3	M52	HSS1x1x2	.733	0	5	.456	5.25	y	5	8196.364	21445.2	572.7	572.7	1	H3-6
4	M1	HSS1x1x2	.658	42	7	.227	120....	y	8	8196.364	21445.2	572.7	572.7	1	H1-1a
5	M100	PIPE_2.0	.562	56	12	.152	56		7	14916.096	32130	1871.625	1871.625	2...	H1-1b
6	M18	PIPE_2.0	.546	56	8	.133	56		2	14916.096	32130	1871.625	1871.625	2...	H1-1b
7	M66	HSS1x1x2	.512	36.4...	11	.036	36.4...	z	11	10394.189	21445.2	572.7	572.7	2...	H1-1b
8	M46	HSS1x1x2	.494	36.4...	5	.040	36.4...	z	11	10394.189	21445.2	572.7	572.7	2...	H1-1b
9	M103	PIPE_2.0	.484	56	5	.166	56		11	14916.096	32130	1871.625	1871.625	2...	H1-1b
10	M44	HSS1x1x2	.473	36.4...	5	.034	36.4...	z	11	10394.189	21445.2	572.7	572.7	2...	H1-1b
11	M45	HSS1x1x2	.472	36.4...	5	.043	36.4...	z	5	10394.189	21445.2	572.7	572.7	2...	H1-1b
12	M64	HSS1x1x2	.456	36.4...	11	.038	0	z	7	10394.189	21445.2	572.7	572.7	2...	H1-1b
13	M19	HSS1x1x2	.446	36.4...	5	.043	0	z	5	10394.189	21445.2	572.7	572.7	2...	H1-1b
14	M25	HSS1x1x2	.425	36.4...	7	.028	36.4...	z	7	10394.189	21445.2	572.7	572.7	2...	H1-1b
15	M65	HSS1x1x2	.424	36.4...	5	.038	0	z	13	10394.189	21445.2	572.7	572.7	3...	H1-1b
16	M20	HSS1x1x2	.415	36.4...	11	.053	0	z	5	10394.189	21445.2	572.7	572.7	2...	H1-1b
17	M43	HSS1x1x2	.414	36.4...	11	.033	36.4...	z	11	10394.189	21445.2	572.7	572.7	3...	H1-1b
18	M28	HSS1x1x2	.410	42	11	.255	5.25	y	2	8196.364	21445.2	572.7	572.7	1	H1-1a
19	M38	PIPE_2.0	.407	62	10	.142	62		13	14916.096	32130	1871.625	1871.625	2...	H1-1b

Envelope AISC 14th(360-10): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[i...	LC	Shear Che...	Loc[i...	Dir	LC	phi*Pnc [lb]	phi*Pnt [...	phi*Mn ...	phi*Mn ...	Cb	Eqn
20	M67	HSS1x1x2	.404	36.4...	11	.038	36.4...	z	11	10394.189	21445.2	572.7	572.7	1...	H1-1b
21	M49	HSS1x1x2	.402	42	5	.242	5.25	y	6	8196.364	21445.2	572.7	572.7	1	H1-1a
22	M11	PIPE_2.0	.400	62	2	.161	62		8	14916.096	32130	1871.625	1871.625	1...	H1-1b
23	M59	PIPE_2.0	.375	62	11	.157	62		11	14916.096	32130	1871.625	1871.625	3...	H1-1b
24	M24	HSS1x1x2	.374	36.4...	13	.040	36.4...	z	13	10394.189	21445.2	572.7	572.7	2...	H1-1b
25	M70	HSS1x1x2	.325	0	10	.016	0	y	14	6849.365	21445.2	572.7	572.7	2...	H1-1a
26	M72	HSS1x1x2	.314	0	5	.020	0	y	17	6849.365	21445.2	572.7	572.7	1...	H1-1a
27	M63	PIPE_2.0	.299	62	11	.156	56		9	14916.096	32130	1871.625	1871.625	4...	H1-1b
28	M42	PIPE_2.0	.291	56	11	.170	56		5	14916.096	32130	1871.625	1871.625	3...	H1-1b
29	M106	PIPE_2.0	.285	84	9	.091	35.4...		6	8922.084	32130	1871.625	1871.625	2...	H1-1b
30	M71	HSS1x1x2	.278	45.9...	13	.012	45.9...	y	25	6849.365	21445.2	572.7	572.7	1...	H1-1a
31	M15	PIPE_2.0	.277	62	2	.155	56		6	14916.096	32130	1871.625	1871.625	1...	H1-1b
32	M22	HSS1x1x2	.276	43.8...	8	.068	0	y	4	7514.754	21445.2	572.7	572.7	2...	H1-1b
33	M89	C3X6	.272	0	5	.154	7	z	5	53674.507	57024	1131.878	4698	1...	H1-1b
34	M95	C3X6	.266	0	7	.154	7	z	8	53674.507	57024	1131.878	4698	1...	H1-1b
35	M92	C3X6	.262	0	3	.148	7	z	3	53674.507	57024	1131.878	4698	1...	H1-1b
36	M14	PIPE_2.0	.261	40.5...	8	.161	40.5...		13	22356.067	32130	1871.625	1871.625	2...	H1-1b
37	M54	HSS1x1x2	.260	0	11	.070	40.3...	z	5	4992.537	21445.2	572.7	572.7	2...	H1-1b
38	M5	HSS1x1x2	.253	53.8...	2	.063	53.8...	y	13	4992.537	21445.2	572.7	572.7	2...	H1-1b
39	M74	HSS1x1x2	.250	30	7	.092	40	z	11	8974.45	21445.2	572.7	572.7	1...	H1-1b
40	M33	HSS1x1x2	.248	0	8	.058	40.3...	z	13	4992.537	21445.2	572.7	572.7	2...	H1-1b
41	M105	PIPE_2.0	.247	84	6	.084	6.562		11	8922.084	32130	1871.625	1871.625	3...	H1-1b
42	M41	PIPE_2.0	.247	45.3...	4	.207	40.5...		4	22356.067	32130	1871.625	1871.625	3...	H1-1b
43	M73	HSS1x1x2	.241	40	11	.070	0	y	5	8974.45	21445.2	572.7	572.7	1...	H1-1b
44	M21	HSS1x1x2	.239	0	10	.077	0	y	10	7514.754	21445.2	572.7	572.7	2...	H1-1b
45	M76	HSS1x1x2	.237	40	7	.080	0	z	5	8974.45	21445.2	572.7	572.7	1...	H1-1b
46	M32	HSS1x1x2	.233	0	5	.050	53.8...	y	5	4992.537	21445.2	572.7	572.7	1...	H1-1b
47	M47	HSS1x1x2	.232	0	11	.059	0	z	5	4934.182	21445.2	572.7	572.7	1...	H1-1b
48	M68	HSS1x1x2	.230	0	5	.050	0	z	5	4934.182	21445.2	572.7	572.7	1...	H1-1b
49	M69	HSS1x1x2	.224	0	5	.056	0	z	11	4934.182	21445.2	572.7	572.7	1...	H1-1b
50	M75	HSS1x1x2	.224	0	3	.073	0	y	5	8974.45	21445.2	572.7	572.7	1...	H1-1b
51	M48	HSS1x1x2	.224	0	11	.052	0	z	11	4934.182	21445.2	572.7	572.7	1...	H1-1b
52	M53	HSS1x1x2	.222	0	3	.047	40.3...	z	8	4992.537	21445.2	572.7	572.7	2...	H1-1b
53	M104	PIPE_2.0	.218	84	3	.104	6.563		8	8922.084	32130	1871.625	1871.625	2...	H1-1b
54	M6	HSS1x1x2	.218	53.8...	7	.045	13.4...	y	4	4992.537	21445.2	572.7	572.7	2...	H1-1b
55	M26	HSS1x1x2	.204	0	11	.045	54.1...	z	11	4934.182	21445.2	572.7	572.7	2...	H1-1b
56	M90	C3X6	.202	0	5	.161	7	z	5	53674.507	57024	1131.878	4698	1...	H1-1b
57	M96	C3X6	.198	0	7	.159	7	z	7	53674.507	57024	1131.878	4698	1...	H1-1b
58	M93	C3X6	.195	0	3	.155	7	z	3	53674.507	57024	1131.878	4698	1...	H1-1b
59	M62	PIPE_2.0	.192	45.3...	8	.150	40.5...		8	22356.067	32130	1871.625	1871.625	2...	H1-1b
60	M27	HSS1x1x2	.172	0	7	.044	54.1...	z	11	4934.182	21445.2	572.7	572.7	1...	H1-1b
61	M51	HSS1.5x1.5x4	.118	84	7	.034	84	y	7	33391.24	51750	2048.438	2048.438	1	H1-1b
62	M30	HSS1.5x1.5x4	.116	84	9	.032	42	y	9	33391.24	51750	2048.438	2048.438	1	H1-1b
63	M50	HSS1.5x1.5x4	.109	14.4...	5	.042	111....	y	3	33391.24	51750	2048.438	2048.438	1	H1-1b
64	M29	HSS1.5x1.5x4	.104	111....	11	.045	0	y	8	33391.24	51750	2048.438	2048.438	1	H1-1b
65	M2	HSS1.5x1.5x4	.093	111....	7	.040	0	y	4	33391.24	51750	2048.438	2048.438	1	H1-1b
66	M3	HSS1.5x1.5x4	.072	45.9...	6	.033	32.8...	z	6	33391.24	51750	2048.438	2048.438	1	H1-1b
67	M23	HSS1x1x2	.059	22.2	11	.018	0	y	5	16398.246	21445.2	572.7	572.7	2...	H1-1b
68	M97	L4X4X4	.030	45.5	62	.013	6.5	y	13	46128.587	62532	3137.597	6714.886	1...	H2-1
69	M94	L4X4X4	.030	6.5	15	.010	6.5	z	3	46128.587	62532	3137.597	6695.864	1...	H2-1
70	M91	L4X4X4	.027	6.5	6	.013	6.5	y	5	46128.587	62532	3137.597	6684.654	1...	H2-1
71	M108	L4X4X4	.008	6.07	6	.038	12.1...	y	12	56348.051	62532	3137.597	6714.886	1...	H2-1
72	M109	L4X4X4	.008	6.07	2	.038	12.1...	y	8	56348.051	62532	3137.597	6714.886	1...	H2-1
73	M107	L4X4X4	.004	6.07	7	.030	12.1...	y	11	56348.051	62532	3137.597	6714.886	1...	H2-1

MOUNT MODIFICATION DRAWINGS

PREPARED BY:

INFINIGY

FROM ZERO TO INFINIGY

the solutions are endless

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at&t

302498
PLAINFIELD CT 6
SPAULDING ROAD
PLAINFIELD, CT 06374

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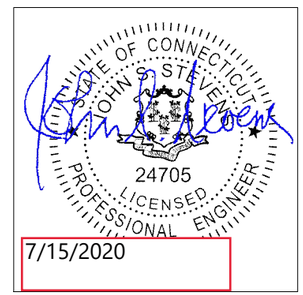


PROFESSIONAL SEAL

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

GENERAL NOTES:

1. THESE DOCUMENTS WERE DESIGNED IN ACCORDANCE WITH THE LATEST VERSION OF APPLICABLE LOCAL/STATE/COUNTY/CITY BUILDING CODES, AS WELL AS ANSI/TIA-222 STANDARD, AWWA-D100 STANDARD, NDS, NEC, MSJC, AND/OR THE LATEST VERSION OF THE INTERNATIONAL BUILDING CODE, UNLESS NOTED OTHERWISE IN THE CORRESPONDING STRUCTURAL REPORT.
2. ALL CONSTRUCTION METHODS SHOULD FOLLOW STANDARDS OF GOOD CONSTRUCTION PRACTICE.
3. ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN SIMILAR CONSTRUCTION.
4. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. IF OBSTRUCTIONS ARE FOUND, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD PRIOR TO CONTINUING WORK.
5. ANY CHANGES OR ADDITIONS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL CHANGES OR ADDITIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND/OR CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY TO PROVIDE A COMPLETE AND STABLE STRUCTURE DURING CONSTRUCTION. TIA-1019-A-2011 IS AN APPROPRIATE REFERENCE FOR THOSE DESIGNS MEETING TIA STANDARDS. THE ENGINEER OF RECORD MAY PROVIDE FORMAL RIGGING PLANS AT THE REQUEST AND EXPENSE OF THE CONTRACTOR.
7. INSTALLATION SHALL NOT INTERFERE NOR DENY ADEQUATE ACCESS TO OR FROM ANY EXISTING OR PROPOSED OPERATIONAL AND SAFETY EQUIPMENT.
8. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO ANY FABRICATION. CONTACT INFINIGY ENGINEERING IF ANY DISCREPANCIES EXIST.

STEEL CONSTRUCTION NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION 14TH EDITION, FOR THE DESIGN AND FABRICATION OF STEEL COMPONENTS.
2. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES, AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS' RECOMMENDATIONS.
3. ALL FIELD DRILLED HOLES TO BE USED FOR FIELD BOLTING INSTALLATION SHALL BE STANDARD HOLES, AS DEFINED BY AISC, UNLESS NOTED OTHERWISE.
4. ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123.
5. ALL STEEL MEMBERS AND CONNECTIONS SHALL MEET THE FOLLOWING GRADES:
   - ANGLES, CHANNELS, PLATES AND BARS TO BE A36. Fy=36 KSI, U.N.O.
   - W SHAPES TO BE A992. Fy=50 KSI, U.N.O.
   - RECTANGULAR HSS TO BE A500, GRADE B. FY=46 KSI, U.N.O.
   - ROUND HSS TO BE A500, GRADE B. FY=42 KSI, U.N.O.
   - STEEL PIPE TO BE A53, GRADE B. Fy=35 KSI, U.N.O.
   - BOLTS TO BE A325-X. Fu=120 KSI, U.N.O.
   - U-BOLTS AND LAG SCREWS TO BE A307 GR A. Fu=60 KSI, U.N.O.
6. ALL WELDING SHALL BE DONE USING E70XX ELECTRODES, U.N.O.
7. ALL WELDING SHALL CONFORM TO AISC AND AWS D1.1 LATEST EDITION.
8. ALL HILTI ANCHORS TO BE CARBON STEEL, U.N.O.
   - MECHANICAL ANCHORS: KWIK BOLT-TZ, U.N.O.
   - CMU BLOCK ANCHORS: ADHESIVE – HY120, U.N.O.
   - CONCRETE ANCHORS: ADHESIVE – HY150, U.N.O.
   - CONCRETE REBAR: ADHESIVE – RE500, U.N.O.
9. ALL STUDS TO BE NELSON CAPACITOR DISCHARGE 1/4"-20 LOW CARBON STEEL COPPER-FLASH AT 55 KSI ULT/50 KSI YIELD, U.N.O.
10. BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC.
11. MINIMUM EDGE DISTANCES SHALL CONFORM TO AISC TABLE J3.4.
12. REMOVAL/REPLACEMENT OF STRUCTURAL MEMBERS SHALL BE DONE ONE MEMBER AT A TIME. CONTRACTOR IS RESPONSIBLE FOR ENSURING THE STRUCTURAL INTEGRITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.

CONCRETE CONSTRUCTION NOTES:

1. CONCRETE TO BE 4000 PSI @ 28 DAYS. REINFORCING BAR TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. CONCRETE INSTALLATION TO CONFORM TO ACI-318 BUILDING REQUIREMENTS FOR REINFORCED CONCRETE. ALL CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH FREE OF WATER AND ALL FOREIGN OBJECTS AND MATERIALS. A MINIMUM OF THREE INCHES OF CONCRETE SHALL COVER ALL REINFORCEMENT. WELDING OF REBAR IS NOT PERMITTED.
2. EXISTING CONCRETE SURFACES THAT ARE TO BE IN CONTACT WITH NEW PROPOSED CONCRETE SHOULD BE WIRE BRUSHED CLEAN AND TREATED WITH APPROPRIATE MECHANICAL SCRATCH COAT AND REPAIR MATERIALS OR APPROPRIATE CHEMICAL METHODS SUCH AS THE APPLICATION OF A BONDING AGENT, EX. SAKRETE OR EQUIVALENT, TO ENSURE A QUALITY BOND BETWEEN EXISTING AND PROPOSED CONCRETE SURFACES.

FIBER REINFORCED POLYMER (FRP) NOTES:

1. FRP PLATES, SHAPES, BOLTS AND NUTS (STUD/NUT ASSEMBLIES) SHALL CONFORM TO ASTM D638, 695, 790. PLATES AND SHAPES TO BE FY = 5.35 KSI LW (SAFETY FACTOR OF 8), .945 KSI CW (SAFETY FACTOR OF 8) MIN.
2. IF FIELD FABRICATION IS REQUIRED, ALL CUT EDGES AND DRILLED HOLES TO BE SEALED USING VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
3. ALL FASTENERS TO BE 1/2" DIA FRP THREADED ROD WITH FIBER REINFORCED THERMOPLASTIC NUT, SPACED AT 12 INCHES ON CENTER MAXIMUM, U.N.O., FOR PANELS AND AS DESIGNED FOR STRUCTURAL MEMBERS.
4. THE COLOR AND SURFACE PATTERN OF EXPOSED FRP PANELS SHALL MATCH THE EXTERIOR OF THE EXISTING BUILDING, U.N.O.
5. STUD/NUT ASSEMBLIES SHOULD BE LUBRICATED FOR INSTALLATION
6. ENSURE BEARING SURFACES OF THE NUTS ARE PARALLEL TO THE SURFACES BEING FASTENED.
7. TORQUE BOLTS ACCORDING TO THE FOLLOWING TABLE:

INSTALLATION TORQUE TABLE		
SIZE	**ULTIMATE TORQUE STRENGTH**	**RECOMMENDED MAXIMUM INSTALLATION TORQUE**
3/8-16 UNC	8 FT-LBS	4 FT-LBS
1/2-13 UNC	18 FT-LBS	8 FT-LBS
5/8-11 UNC	35 FT-LBS	16 FT-LBS
3/4-10 UNC	50 FT-LBS	24 FT-LBS
1-8 UNC	110 FT-LBS	50 FT-LBS

8. WHEN TIGHTENING FRP STUD/NUT ASSEMBLIES, WRENCHES MUST MAKE FULL CONTACT WITH ALL NUT EDGES. A STANDARD SIX POINT SOCKET IS RECOMMENDED.
9. STUD/NUT ASSEMBLIES SHOULD BE BONDED BY APPLYING BONDING AGENT TO ENTIRE NUT AND EXPOSED STUD.
10. ALL FRP MATERIALS TO BE PROVIDED BY FIBERGRATE COMPOSITE STRUCTURES, DALLAS TX, OR APPROVED EQUAL.
11. ALL FRP SHAPES TO BE DYNAFORM PULTRUDED STRUCTURAL SHAPES.
12. ALL FRP PLATES TO BE FIBERPLATE MOLDED FRP PLATE.
13. ALL FRP PANELS TO BE FIBERPLATE CLADDING PANEL.
14. EACH FRP PANEL TO BE IDENTIFIED WITH LARR#25536 AND FIBERGRATE COMPOSITE STRUCTURAL LABEL.
15. FRP MATERIAL TO BE CLASSIFIED AS CC1 OR BETTER, AND HAVE MAXIMUM FLAME SPREAD OF 50.
16. ALL DESIGN AND CONSTRUCTION TO BE COMPLETED IN ACCORDANCE WITH LOS ANGELES RESEARCH REPORT RR25536, DATED FEBRUARY 1, 2016.
17. SPECIAL INSPECTIONS MUST BE PROVIDED FOR ALL FRP INSTALLMENTS. SEE SPECIAL INSPECTION SECTION, THIS SHEET.

RATIO OF EDGE DISTANCE TO FRP FASTENER DIAMETER		
	RANGE	**RECOMMENDED**
EDGE DISTANCE – CL* BOLT TO END	2.0-4.0	3.0
EDGE DISTANCE – CL* BOLT TO SIDE	1.5-3.5	2.5
BOLT PITCH – CL* TO CL*	4.0-5.0	5.0

WOOD CONSTRUCTION NOTES:

1. ALL EXISTING WOOD SHAPES ARE ASSUMED TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN.
2. ALL PROPOSED WOOD SHAPES ARE TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN. U.N.O.
3. ALL EXISTING AND PROPOSED GLUED LAMINATED TIMBERS ARE TO BE 24F-1.8C DOUGLAS FIR BALANCED WITH A REFERENCE DESIGN BENDING VALUE OF 2400 PSI MIN. U.N.O.

MASONRY CONSTRUCTION NOTES:

1. ALL BRICK TO BE 1500 PSI MIN. REINFORCING BAR (IF APPLICABLE) TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. ALL MORTAR TO BE 2000 PSI MIN.
   - FOR INTERIOR/ABOVE GRADE APPLICATIONS TYPE N MORTAR HAVING MINIMUM MODULUS OF RUPTURE OF 100 PSI SHALL BE USED. FOR EXTERIOR/BELOW GRADE APPLICATIONS TYPE M OR S MORTAR HAVING A MINIMUM MODULUS OF RUPTURE OF 133 PSI.
   - BRICK AND MORTAR INSTALLATION TO CONFORM TO MSJC BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.
2. ALL CMU TO BE 1500 PSI MIN. REINFORCING BAR (IF APPLICABLE) TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. ALL MORTAR TO BE 2000 PSI MIN.
   - FOR INTERIOR/ABOVE GRADE APPLICATIONS, TYPE N MORTAR HAVING MINIMUM MODULUS OF RUPTURE OF 64 PSI SHALL BE USED FOR UNGROUTED BLOCKS, AND 158 PSI FOR FULLY GROUTED BLOCKS.
   - FOR EXTERIOR/BELOW GRADE APPLICATIONS TYPE M OR S MORTAR HAVING A MINIMUM MODULUS OF RUPTURE OF 84 PSI SHALL BE USED FOR UNGROUTED BLOCKS, AND 163 PSI FOR FULLY GROUTED BLOCKS.
   - BRICK AND MORTAR INSTALLATION TO CONFORM TO MSJC BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.

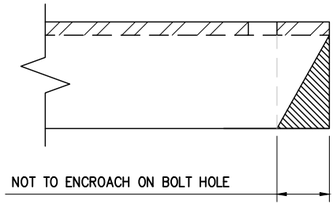
TOWER PLUMB & TENSION NOTES:

1. PLUMB AND TENSION TOWER UPON COMPLETION OF STRUCTURAL MODIFICATIONS DETAILED IN THESE DRAWINGS.
2. RETENSIONING OF EXISTING GUY WIRES SHALL BE PERFORMED AT A TIME WHEN THE WIND VELOCITY IS LESS THAN 10 MPH AT GROUND LEVEL AND WITH NO ICE ON THE STRUCTURE AND GUY WIRES.
3. PLUMB THE TOWER WHILE RETENSIONING THE EXISTING GUY WIRES. THE HORIZONTAL DISTANCE BETWEEN THE VERTICAL CENTERLINES AT ANY TWO ELEVATIONS SHALL NOT EXCEED 0.25% OF THE VERTICAL DISTANCE BETWEEN TWO ELEVATIONS FOR LATTICED STRUCTURES.
4. THE TWIST BETWEEN ANY TWO ELEVATIONS THROUGHOUT THE HEIGHT OF A LATTICE STRUCTURE SHALL NOT EXCEED 0.5 DEGREES IN 10 FEET. THE MAXIMUM TWIST OVER THE LATTICE STRUCTURE HEIGHT SHALL NOT EXCEED 5 DEGREES.

SPECIAL INSPECTIONS NOTES:

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER AND APPROVED BY THE JURISDICTION, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH THE THE GOVERNING BUILDING CODE, APPLICABLE SECTION(S) AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK:
   a. STRUCTURAL WELDING (CONTINUOUS INSPECTION OF FIELD WELDS ONLY).
   b. HIGH STRENGTH BOLTS (PERIODIC INSPECTION OF A325 AND/OR A490 BOLTS) TO BE TIGHTENED PER "TURN-OF-THE-NUT" METHOD.
   c. MECHANICAL AND EPOXIED ANCHORAGES.
   d. FIBER REINFORCED POLYMER.
      - THE SPECIAL INSPECTOR MUST VERIFY THAT THE FRP MATERIAL SPECIFIED ON THE APPROVED DESIGN DOCUMENTS IS BEING INSTALLED.
      - THE SPECIAL INSPECTOR MUST VERIFY THAT ALL CUT EDGES AND DRILLED HOLES ARE PROPERLY SEALED USING A VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
      - THE SPECIAL INSPECTOR MUST VERIFY THAT THE STRUCTURE IS BUILT IN ACCORDANCE WITH THE APPROVED DESIGN DOCUMENTS.
2. THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM WORK WITHOUT THE SPECIAL INSPECTIONS.

MAXIMUM ALLOWABLE ANGLE CLIP



INFINIGY ENGINEERING, PLLC
6865 DEERPATH ROAD SUITE 152
ELKRIDGE, MD 21075

AMERICAN TOWER CORPORATION

STATE OF CONNECTICUT
JOHN S. STEVENS
24705
PROFESSIONAL ENGINEER

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 36339 EXP. 12/12/2020

No.	Submittal / Revision	App'd	Date
0	ISSUED FOR REVIEW	BD	07/13/20

Drawn: WJD
Designed: BD
Checked: BD

Project Number: 1009-Z0003-B

Project Title:
PLAINFIELD CT 6
302498
SPAULDING ROAD
PLAINFIELD, CT 06374

Prepared For: at&t

Drawing Title: GENERAL NOTES

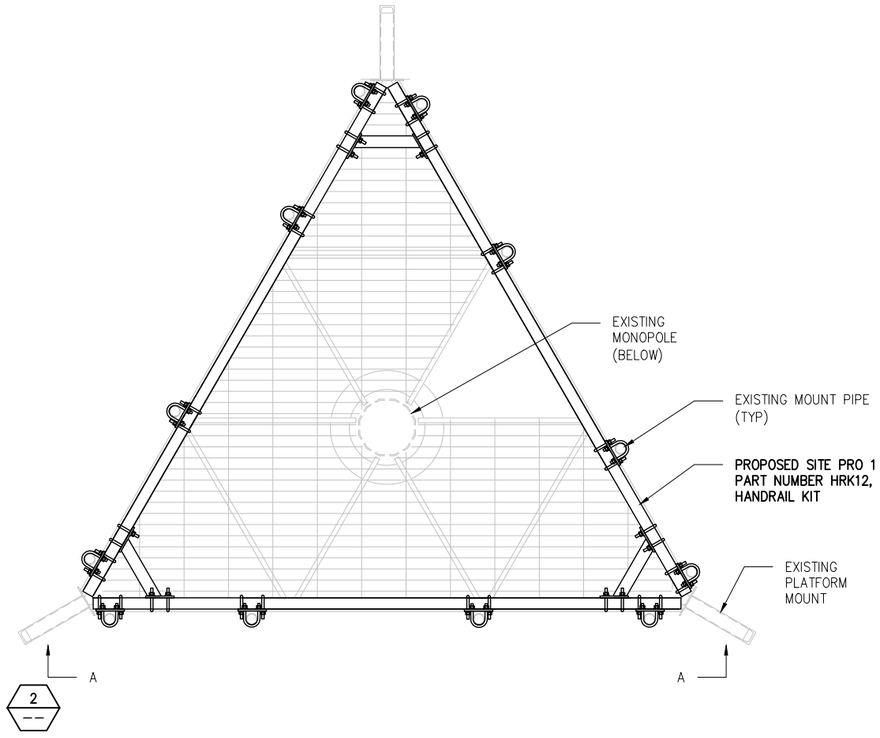
Drawing Number: S-2

NOTES:

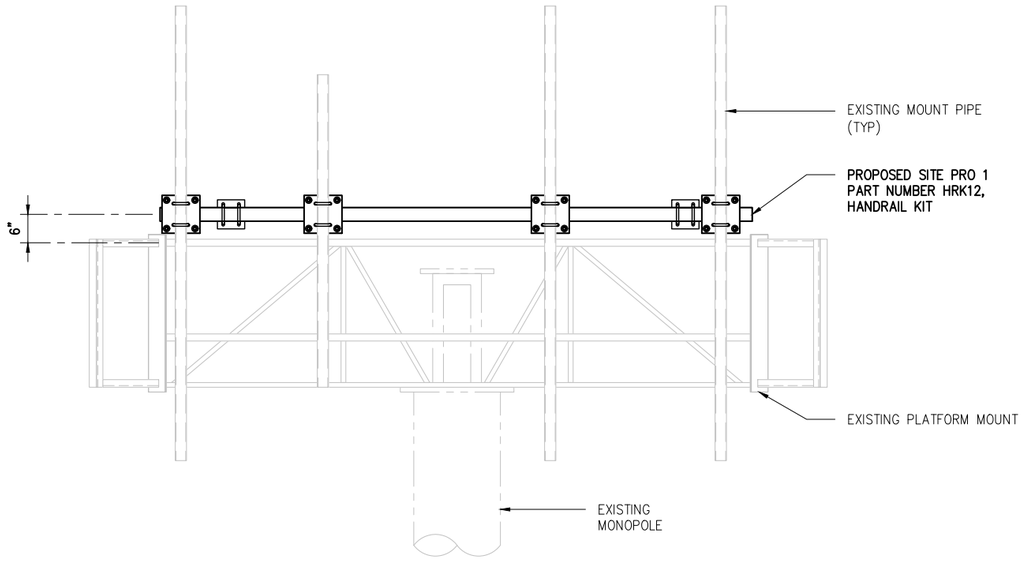
1. VARIOUS EXISITNG CONDITIONS AND PROPOSED MODIFICATIONS NOT SHOWN FOR CLARITY.

2. ALL DESIGNATED PARTS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

3. CONTRACTOR TO FIELD VERIFY REQUIRED LENGTHS OF ALL PROPOSED REINFORCEMENT KIT PIPES AND TRIM & DRILL ON SITE AS NECESSARY.



1 PLAN VIEW
SCALE: NOT TO SCALE



2 SECTION A–A
SCALE: NOT TO SCALE

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ELKRIDGE, MD 21075

AMERICAN TOWER CORPORATION

STATE OF CONNECTICUT
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24705
PROFESSIONAL ENGINEER
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0	ISSUED FOR REVIEW	BD	07/13/20

Drawn: WJD
Designed: BD
Checked: BD

Project Number: 1009-Z0003-B

Project Title:
PLAINFIELD CT 6

302498
SPAULDING ROAD
PLAINFIELD, CT 06374

Prepared For:
at&t

Drawing Title
MOUNT MODIFICATION DETAILS

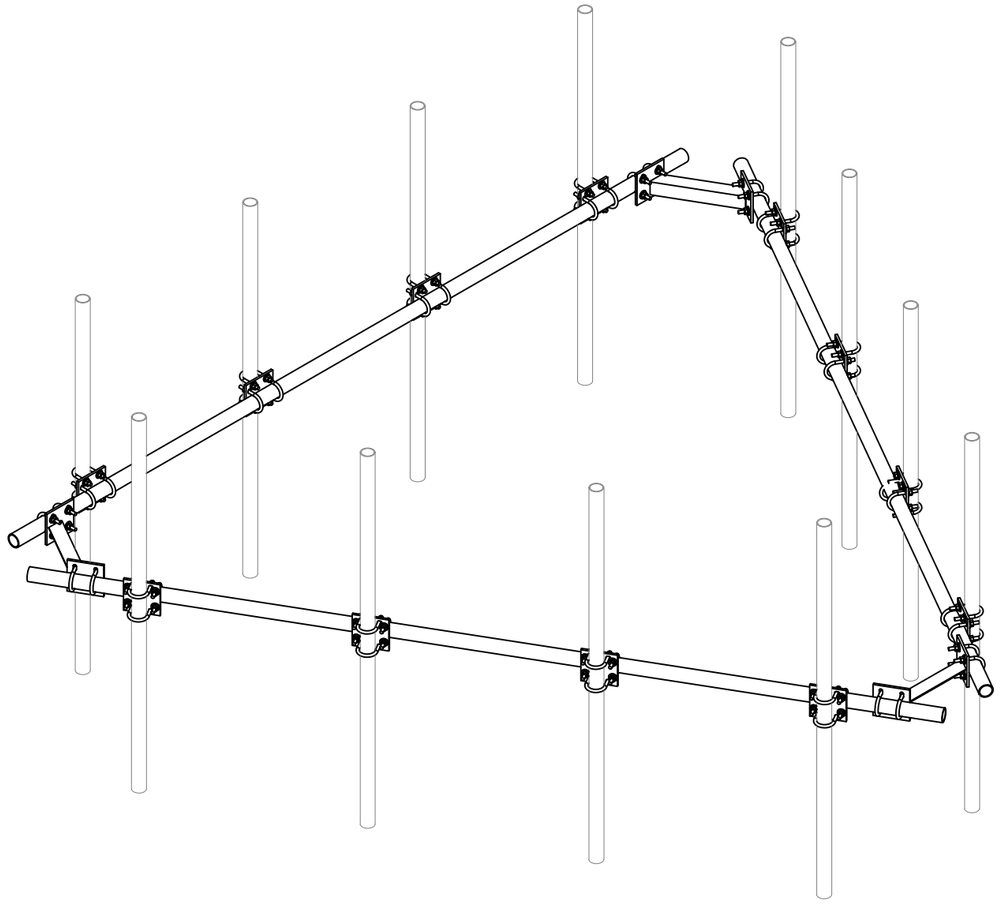
Drawing Number
S-3

NOTES:

1. VARIOUS EXISITNG CONDITIONS AND PROPOSED MODIFICATIONS NOT SHOWN FOR CLARITY.

2. ALL DESIGNATED PARTS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

3. CONTRACTOR TO FIELD VERIFY REQUIRED LENGTHS OF ALL PROPOSED REINFORCEMENT KIT PIPES AND TRIM & DRILL ON SITE AS NECESSARY.



3 SITE PRO 1 P/N HRK12

SCALE: NOT TO SCALE

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STATE OF CONNECTICUT
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No.	Submittal / Revision	App'd	Date
0	ISSUED FOR REVIEW	BD	07/13/20

Drawn: WJD
Designed: BD
Checked: BD

Project Number: 1009-Z0003-B

Project Title:

PLAINFIELD CT 6

302498
SPAULDING ROAD
PLAINFIELD, CT 06374

Prepared For:

at&t

Drawing Title

REQUIRED PARTS

Drawing Number

S-4

Mount Analysisand Mapping Checklist

Mount Detail	
Mount Type	Platform
Mount Model Number	N/A
If RT, then how is it attached	
If WT, then how is it attached	

Inspector
Infinigy
Brad Davenport
(518) 690-0792
Bdavenport@infinigy.com

Mount Mapping Detail	
Material condition (discoloration, cracks, pitting)	Good
Mfg. drawing, cutsheet, spec. available?	No
Date of mount mapping	6/22/2020
Searched prior OOM for material?	Yes
Photos of installation available?	Yes
Original tower drawings show mounts?	No
Searched for previous mapping?	No
Is latest mod design (dwgs) available?	No
Is the latest structural analysis available?	Yes

Project Detail	
Market	Connecticut
PACE Project ID	N/A
Site Name	Plainfield CT 6
City, State	Plainfield, CT
RFDS Version Number	
Initiative (list mult., if applicable)	
Tower Owner	American Tower Corporation
SA Vendor	
A&E firm (for structural analysis)	American Tower Corporation
A&E firm (for mapping, if different)	Infinigy
Last amendment date or last site visit	6/22/2020

Site Information	
Original Lease Date	
FA Code	
Tower Type	Monopole
Tower Height (Ft)	150
AT&T Rad Center # 1	154
AT&T Rad Center # 2	

Measurements and Deliverables on sketches	
Pipe / Angle dimenions and lengths	2" STD. Pipes 8'-0" & 5'-6" long
bolt diameters and lengths	
U-Bolt diameters and lengths	
Steel Grade if indicated	
welds :length and sizes	
appurtenance relative locations	
Grounding Condition	

Equipment Detail Alpha Sector	Model Number for Ant, MW, RRU, TMA, Squid / Size of Coax, DC-Fiber Trunks & Jumpers	Height / COAX-DC-Fiber Trunk & Jumper Lengths in feet	Approz Az	mount position location
	CCI HPA65R-BU8A CCI OPA65R-BU8D CCI DMP65R-BU8D			
Antennas	Powerwave 7770.00	0	0	P1, P2, P3, P4
MW	0	0	0	0
RRU	Ericsson RRUS 4478 B14, Ericsson RRUS 4449 B5/B12, Ericsson RRUS 4415 B30, Ericsson RRUS 8843 B2/B66A	0	0	0
TMA	Powerwave LGP21401, Powerwave LGP21901	0	0	0
Coax	0	0	0	0
RET (not imbedded in antenna)	0	0	0	0
DC Cable	2" conduit	0	0	0
Fiber Cable	1 5/8" coax	0	0	0
Squid	Raycap DC6-48-60-18-8F	0	0	0

Equipment Detail Beta Sector	Model Number for Ant, MW, RRU, TMA, Squid / Size of Coax, DC-Fiber Trunks & Jumpers	Height / COAX-DC-Fiber Trunk & Jumper Lengths in feet	Approz Az	mount position location
	CCI HPA65R-BU8A CCI OPA65R-BU8D CCI DMP65R-BU8D			
Antennas	Powerwave 7770.00	0	0	P1, P2, P3, P4
MW	0	0	0	0
RRU	Ericsson RRUS 4478 B14, Ericsson RRUS 4449 B5/B12, Ericsson RRUS 4415 B30, Ericsson RRUS 8843 B2/B66A	0	0	0
TMA	Powerwave LGP21401, Powerwave LGP21901	0	0	0
Coax	0	0	0	0
RET (not imbedded in antenna)	0	0	0	0
DC Cable	2" conduit	0	0	0
Fiber Cable		0	0	0
Squid	Raycap DC6-48-60-18-8F	0	0	0

Equipment Detail Gamma Sector	Model Number for Ant, MW, RRU, TMA, Squid / Size of Coax, DC-Fiber Trunks & Jumpers	Height / COAX-DC-Fiber Trunk & Jumper Lengths in feet	Approz Az	mount position location
	CCI HPA65R-BU8A CCI OPA65R-BU8D CCI DMP65R-BU8D			
Antennas	Powerwave 7770.00	0	0	P1, P2, P3, P4
MW	0	0	0	0
RRU	Ericsson RRUS 4478 B14, Ericsson RRUS 4449 B5/B12, Ericsson RRUS 4415 B30, Ericsson RRUS 8843 B2/B66A	0	0	0
TMA	Powerwave LGP21401, Powerwave LGP21901	0	0	0
Coax	0	0	0	0
RET (not imbedded in antenna)	0	0	0	0
DC Cable	2" conduit	0	0	0
Fiber Cable		0	0	0
Squid	Raycap DC6-48-60-18-8F	0	0	0

Comments

EXHIBIT 6

Lawrence Behr Associates INC
www.lbagroup.com

NIER Study Report

SITE NAME:

302498 Plainfield CT 6

LOCATION:

Plainfield, Connecticut

COMPANY:

American Tower Corporation
Woburn, Massachusetts

July 14th, 2020

3400 Tupper Drive | Greenville, NC 27834
252-757-0279 | 800-522-4464 | lbagrp@lbagroup.com

Contents

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NIER STUDY REPORT

302498 Plainfield CT 6

Plainfield, 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.

SITE AND FACILITY CONSIDERATIONS

Site 302498 Plainfield CT 6 is located at 45 Spaulding Road in Plainfield, Connecticut at coordinates 41.6748, -71.87909. The support structure is a 155' tall monopole. The installation consists of two antenna levels with radiation centers of 117' and 155' above ground level. All antennae will have a radiation center as described above. All data used in this study was provided by one or more of the following sources:

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

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

The load list may be seen in Appendix 3.

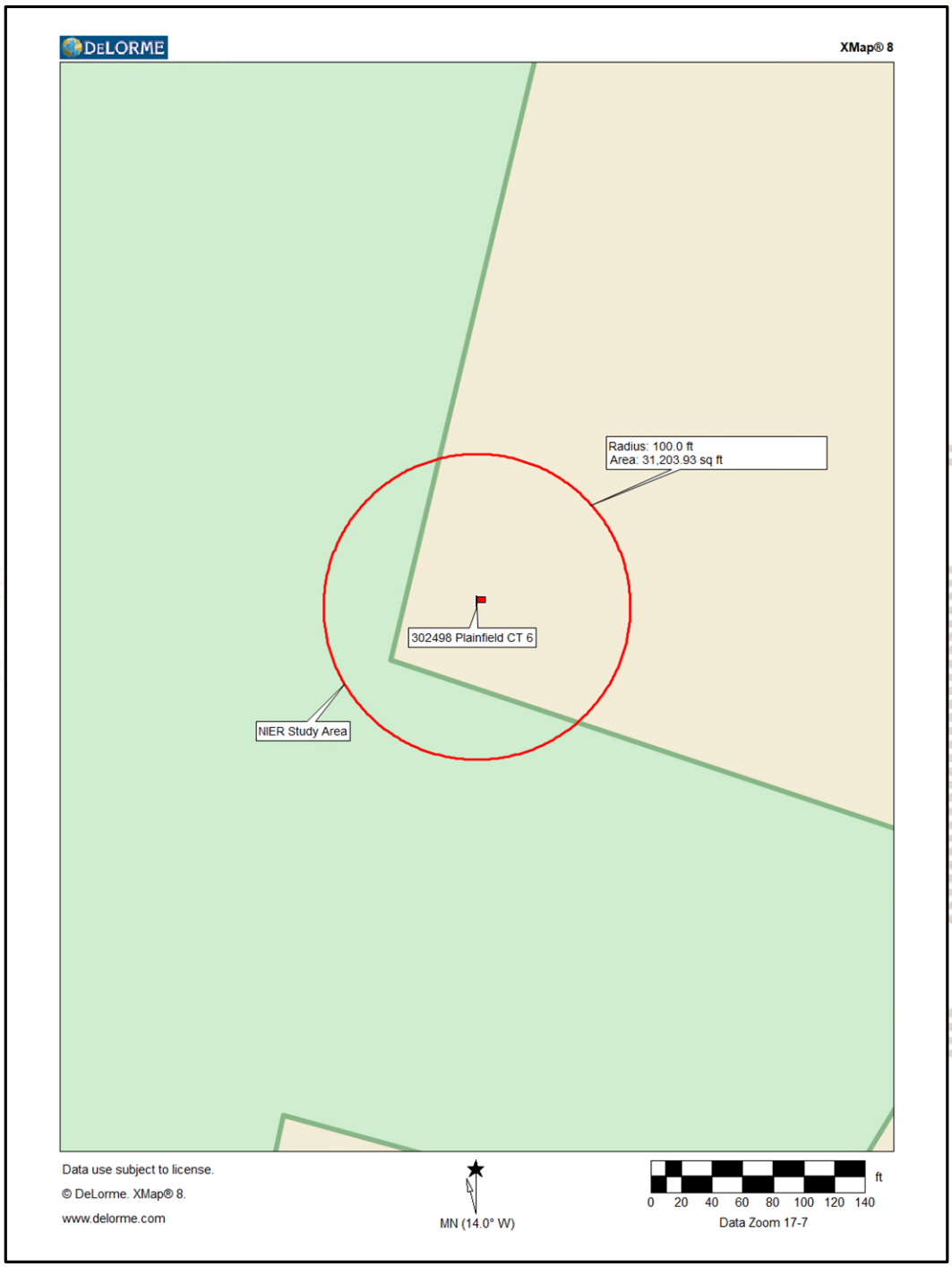
POWER DENSITY CALCULATIONS

Graphs of the power density at different distances from the transmitter, compared to FCC MPE general population and occupational limits, may be seen in Appendix 4. 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.

July 14th, 2020

Kathryn G. Tesh
Wireless Services Manager

APPENDIX 1 *Topographic Map*



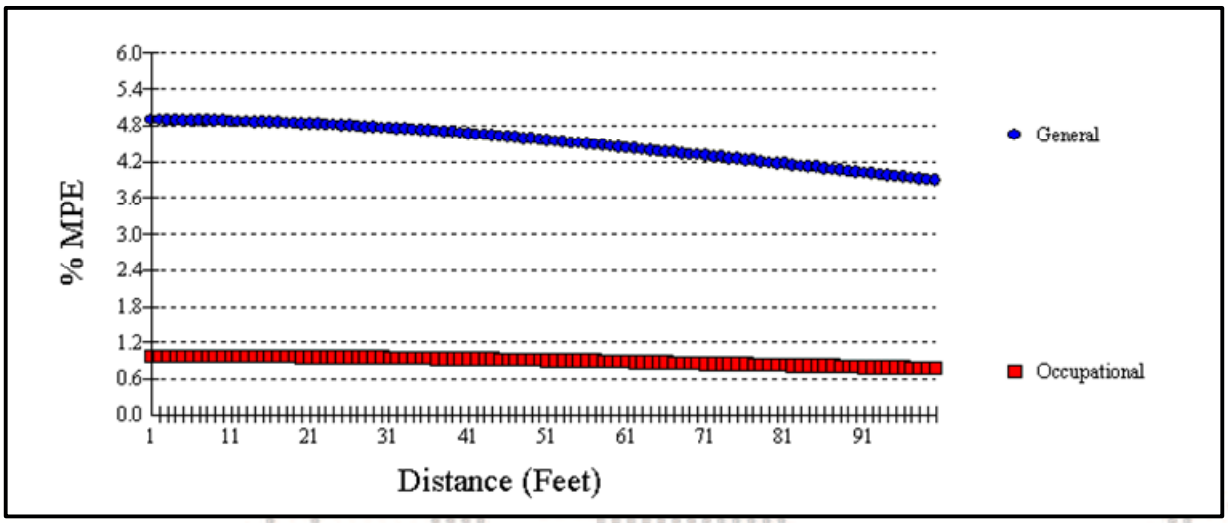
APPENDIX 2 *Satellite Photo*

APPENDIX 3 *Load List*

Proposed	Customer	RAD Height (ft)	Equipment Quantity	Equipment Type	Manufacturer	Model Number	Line Quantity	Line size	Mount Type	Azimuths	TX Frequency	RX Frequency
No	AT&T MOBILITY	155	1	PANEL	Andrew	SBNH-1D6565C (60.8 lbs)			Platform with Handrails	40/140/280		
No	AT&T MOBILITY	155	2	PANEL	KMW	AM-X-CD-17-65-00T-RET (96" Height)			Platform with Handrails	40/140/280		
No	AT&T MOBILITY	155	6	PANEL	Powerwave Allgon	7770.00	12	1 5/8" Coax	Platform with Handrails	40/140/280	824-845, 869-890	845-849, 890-894
Yes	AT&T MOBILITY	154	3	PANEL	CCI	HPA65R-BU8A			Platform with Handrails	45/165/275	2305-2320	2350-2360
Yes	AT&T MOBILITY	154	3	PANEL	CCI	OPA65R-BU8D			Platform with Handrails	45/165/275	704-716	728-746
Yes	AT&T MOBILITY	154	3	PANEL	CCI	DMP65R-BU8D			Platform with Handrails	45/165/275	1850-1865, 1885-1910, 704-716, 824-845, 869-890	1930-1945, 1965-1990, 728-746, 845-849, 890-894
No	AT&T MOBILITY	154	3	PANEL	Powerwave Allgon	7770.00	6	1 5/8" Coax	Platform with Handrails	143/263/23	824-845, 869-890	845-849, 890-894
No	VERIZON WIRELESS	117	3	PANEL	Amphenol Antel	BXA-70063-6CF-EDIN-X			T-Arm	330/90/210	746-757	776-787
No	VERIZON WIRELESS	117	3	PANEL	Amphenol Antel	BXA-70080-4CF-EDIN-X	3	1 5/8" Coax	T-Arm	330/90/210	869-880, 890-892	824-835, 845-847
No	VERIZON WIRELESS	117	6	PANEL	Commscope	HBXX-6517DS-A2M			T-Arm	330/90/210	1970-1975, 2145-2155	1745-1755, 1890-1895

APPENDIX 4

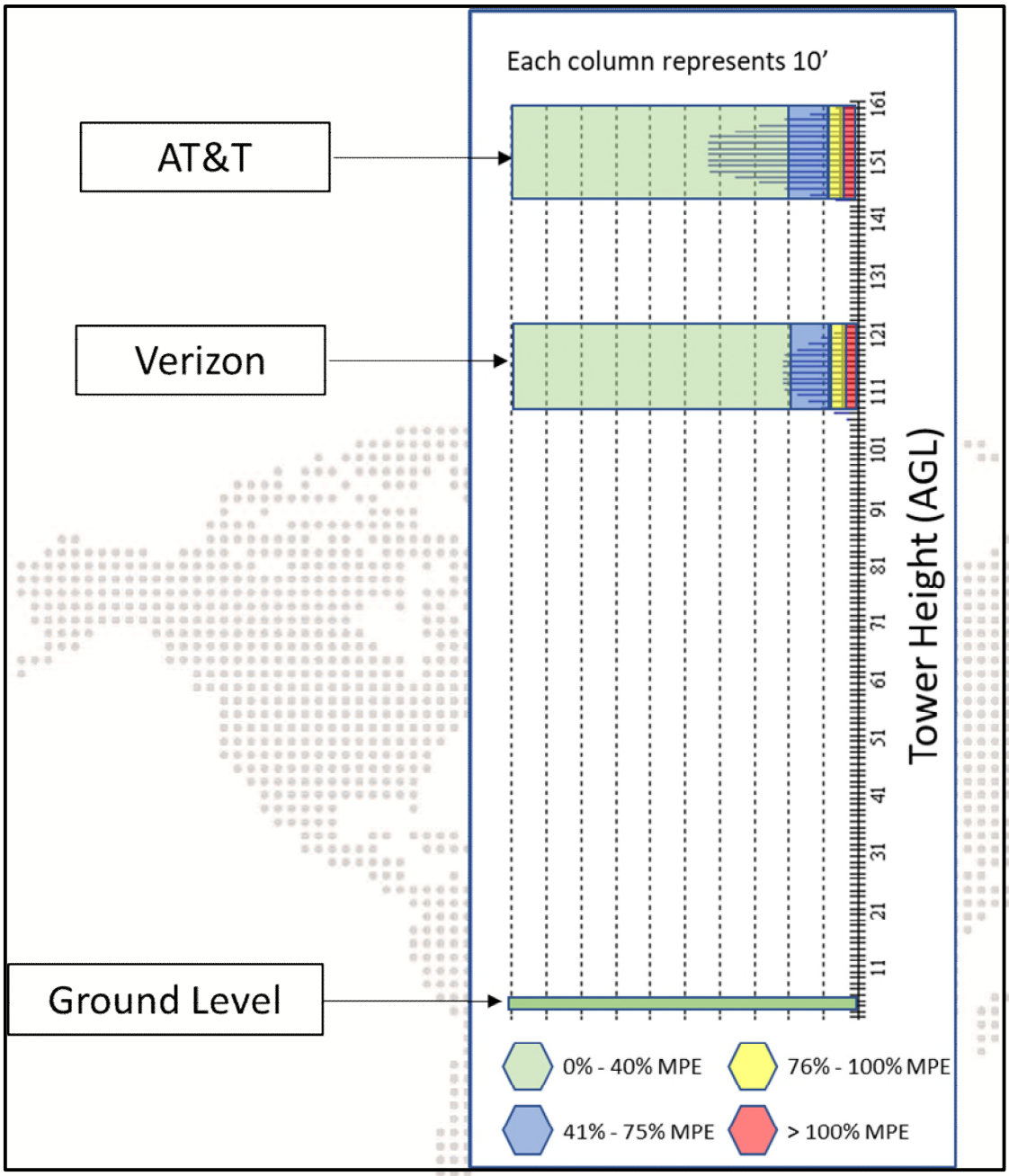
FCC OET-65 MPE Limit Study



General Population MPE (@1'):	4.89%
Occupational MPE (@1'):	0.98%
Maximum Power Density (@1'):	0.0263 mW/cm²

APPENDIX 5

Tower Radiation Patterns



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/cm^2), electric field strength (units of volts per meter: V/m) and magnetic field strength (units of amperes per meter: A/m). The far-field of a transmitting antenna is where the electric field vector (E), the

magnetic field vector (H), and the direction of propagation can be considered to be all mutually orthogonal ("plane-wave" conditions).

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

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area. Additional details can be found in FCC OET 65.

APPENDIX 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

f = frequency

* = Plane-wave equivalent power density

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

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

f = frequency
* = Plane-wave equivalent power density

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

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

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

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

Cylindrical Model (Near Field Predictions)

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

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

Where:
S = Power Density
P = Total Power into antenna
R = Distance from the antenna
L = Antenna aperture length

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

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

Where:
S = Power Density
θ_{BW} = Beam width of antenna in degrees (3 dB half-power point)
P = Total Power into antenna
R = Distance from the antenna
L = Antenna aperture length

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

Spherical Model (Far Field Predictions)

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

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

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

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

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

Where:
S = Power Density
EIRP = Effective Radiated Power from antenna
Rc = Reflection Coefficient (2.56)
R = Distance from the antenna

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

EXHIBIT 7

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

October 23, 2000

Peter W. van Wilgen
Springwich Cellular Limited Partnership
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: **EM-SCLP-014/109/137/130-000926** - Springwich Cellular Limited Partnership (SCLP) notice of intent to modify existing telecommunications facilities located at Brushy Plains Road, Branford; Spalding Road, Plainfield; Taugwank Spur Road, Stonington; and Horse Fence Hill Road, Southbury, Connecticut.

Dear Mr. van Wilgen:

At a public meeting held on Thursday, October 19, 2000, the Connecticut Siting Council (Council) acknowledged your notice to modify these existing telecommunications facilities, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated September 26, 2000, and additional information received on October 11, 2000 and October 18, 2000. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to existing facility sites that would not increase tower heights, extend the boundaries of the tower sites, increase noise levels at the tower site boundaries by six decibels, and increase the total radio frequencies electromagnetic radiation power densities measured at the tower site boundaries to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. These facilities have also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on these towers.

This decision is under the exclusive jurisdiction of the Council. Any additional change to these facilities will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed changes with cumulative worst-case modeling of radio frequency exposures at the closest point of uncontrolled access to the tower bases, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston
Chairman

MAG/RKE/laf

c: Honorable Anthony J. DaRos, First Selectman, Town of Branford
Honorable Donald R. Maranell, First Selectman, Town of Stonington
Honorable Alfio A. Candido, Jr., First Selectman, Town of Southbury
Honorable Paul E. Sweet, First Selectman, Town of Plainfield
Sandy M. Carter, Verizon Wireless
Sam J. D'Agostino, PageNet, Inc.

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STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

January 11, 1999

Peter J. Tyrrell
Senior Counsel
Springwich Cellular Limited Partnership
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: TS-SCLP-109-981222 - Springwich Cellular Limited Partnership request for an order to approve tower sharing at an existing telecommunications facility located on Green Hollow Road in Plainfield, Connecticut.

Dear Attorney Tyrrell:

At a public meeting held on January 8, 1999, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures.

This facility has been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequency now used on this tower. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letter dated December 22, 1998. Please notify the Council when all work is complete.

Very truly yours,

Mortimer A. Gelston
Chairman

MAG/RKE/jlh

c: Honorable Paul E. Sweet, First Selectman, Town of Plainfield

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STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL
136 Main Street, Suite 401
New Britain, Connecticut 06051-4225
Phone: 827-7682

RLO PYJ PJT

July 29, 1993

Peter J. Tyrrell, Esq.
Senior Attorney
Springwich Cellular Limited Partnership
227 Church Street
New Haven, CT 06510

RE: Springwich Cellular Limited Partnership notice of intent to modify an existing telecommunications tower and associated equipment located off Spaulding Road in Plainfield, Connecticut.

Dear Attorney Tyrrell:

At a public meeting held on July 28, 1993, the Connecticut Siting Council acknowledged your notice of intent to modify an existing telecommunications facility off Spaulding Road in Plainfield, Connecticut, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies (RSA).

As proposed in your notice dated July 16, 1993, the modifications are in compliance with the exemption criteria specified in RSA 16-50j-72 for changes to an existing facility site that do not increase the tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by 6 decibels, and increase the total radio frequency electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to Section 22a-162 of the Connecticut General Statutes.

The Council is pleased to note that the shared use of an existing tower serves the Council's long-term goal of protecting the public interest by avoiding proliferation of additional tower structures.

Very truly yours,

Mortimer A. Gelston
Chairman

RECEIVED
DATE 8/2/93
SNET LEGAL DEPT.

MAG/SMH/ss

cc: Paul E. Sweet, First Selectman, Town of Plainfield
Gary S. Schulman, Vice President, BAM

7161E

EXHIBIT 8

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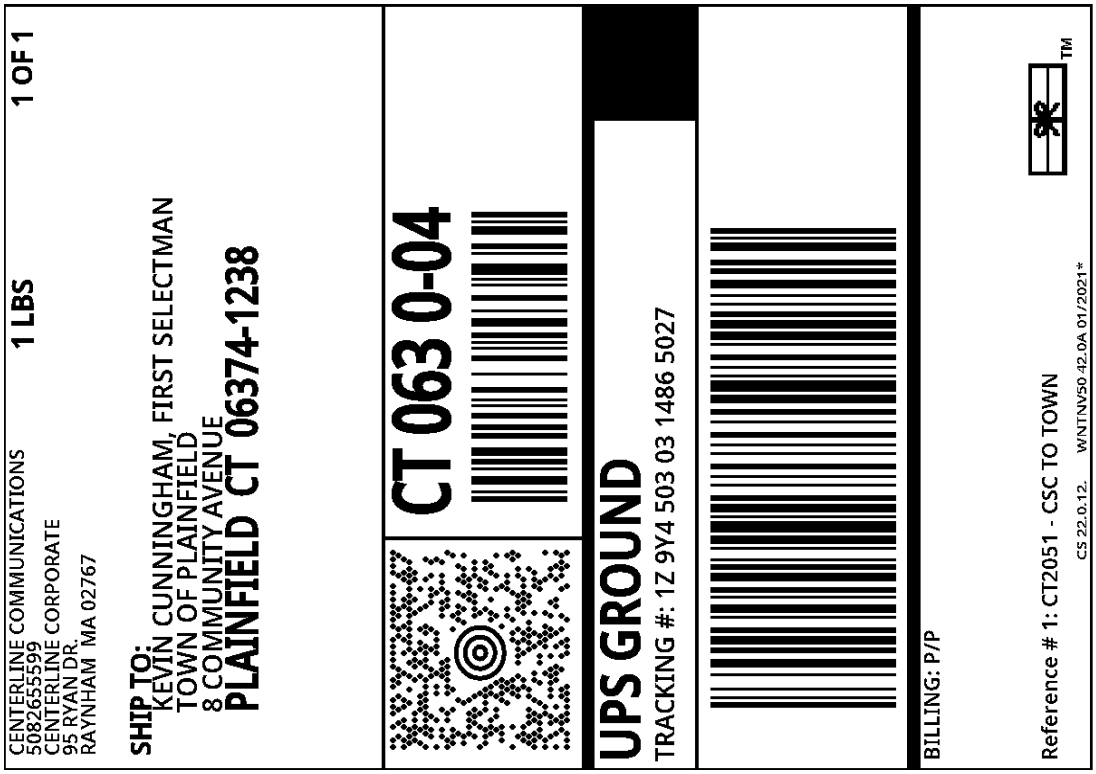

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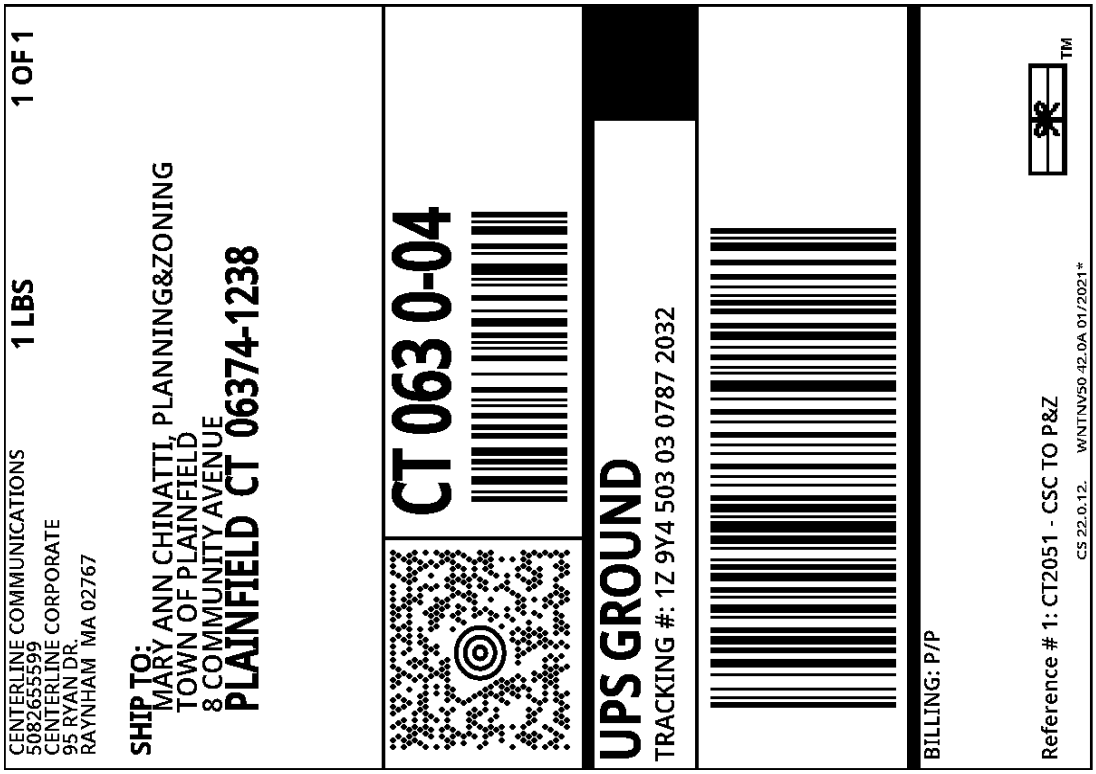

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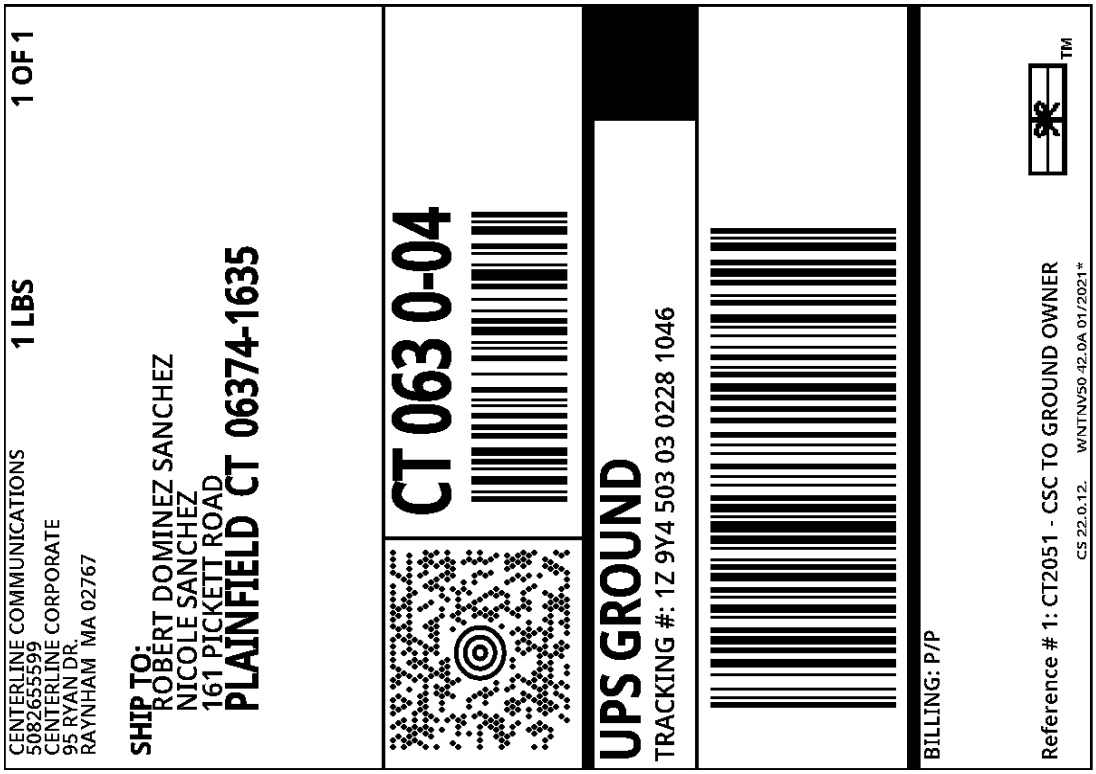

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