EMPIRE telecom

July 8, 2014

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

Regarding:	Notice of Exempt Modification – Addition of 3 radio heads previously approved
Property Address:	260 Beckley Road, Berlin, CT (the "Property")
Applicant:	AT&T Mobility ("AT&T")

Dear Ms. Bachman:

AT&T currently maintains a wireless telecommunications facility on an existing 150 foot Monopole ("tower") location on the Property. AT&T's facility consists of nine (9) wireless telecommunications antenna at 152 feet. The tower was previously owned by AT&T and is now controlled by Crown Castle, LLC. The Council approved the previous application on May 11th 2012 reference number EM-AT&T-007-120427A. This application (attached) granted AT&T the use of 6 radio heads at this location. The approval expired one year from the issue date. During that time AT&T made the changes to the site per the approval but only installed three (3) of the six (6) radio heads that they received approval. AT&T would now like to install the additional three(3) radio heads that were originally approved under EM-AT&T-007-120427A.

Please accept this application 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 Mayor, and the Town Planner for the Town of Berlin. A copy of this letter is also being sent to American Tower Corp., the owner of the structure that AT&T is located.

The planned modifications to AT&T's facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The planned modifications will not result in an increase in the height of the existing structure. AT&T's additional, previously approved 3 radio heads will be installed at 152 foot level of the 150 foot monopole.
2. The proposed modifications will not involve any changes to ground-mounted equipment and, therefore will not require an extension of the site boundary.
3. The proposed modification will not increase the noise level at the facility by six decibel or more, or to levels that exceed state and local criteria.

16 Esquire Road, Billerica, MA 01862 Mobile 617-639-4908 Email: Dcooper@empiretelecomm.com

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4. The operation of the modified facility will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. An RF emissions calculation (attached) for AT&T's modified facility was provided in the application which led to the May 11th 2012 Decision.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The tower and its foundation can support AT&T's proposed modifications. (Please see attached Structural analysis completed by American Tower Corp. dated April 20, 2012).

For the foregoing reasons AT&T respectfully requests that the proposed addition of 3 radio heads previously approved be allowed within the exempt modifications under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

David P Cooper

David P. Cooper
Director of Site Acquisition
Empire Telecom

CC: the Mayor, for the City of Bridgeport
American Tower Corp.

16 Esquire Road, Billerica, MA 01862 Mobile 617-639-4908 Email: Dcooper@empiretelecomm.com

CT1014

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

May 11, 2012

John Lawrence
Real Estate Consultant
95 Ryan Drive, Suite #1
Raynham, MA 02767

RE: **EM-AT&T-007-120427A** – AT&T Mobility notice of intent to modify an existing telecommunications facility located at 260 Beckley Road, Berlin, Connecticut.

Dear Mr. Lawrence:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- Any deviation from the proposed modification as specified in this notice and supporting materials with Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Not less than 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration;

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated April 27, 2012. 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 an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies 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 General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. 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 of

uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Very truly yours,

Linda Roberts/cm

Linda Roberts
Executive Director

LR/cm

c: The Honorable Adam P. Salina, Mayor, Town of Berlin
Denise McNairHellyn Riggins, Town Planner, Town of Berlin

EM-AT&T-007-120427A

ew Cingular Wireless
CS, LLC
0 Enterprise Drive
ıcky Hill, Connecticut 06067

John Lawrence
Real Estate Consultant
95 Ryan Drive, Suite #1
Raynham, MA 02767
Phone: (781) 715-5532
jlawrence@clinellc.com

April 23, 2012

Honorable Robert Stein, Chairman,
and Members of the Connecticut Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: Notice of Exempt Modification – Existing Telecommunications Facility at 260 Beckley Road, Berlin

Dear Chairman Stein and Members of the Council:

New Cingular Wireless PCS, LLC ("AT&T") intends to modify the existing telecommunications antennas and associated equipment at an existing multicarrier telecommunications tower at 260 Beckley Road, Berlin, CT. AT&T operates under licenses issued by the Federal Communications Commission ("FCC") to provide cellular and PCS mobile telephone service in Hartford County, which includes the area to be served by AT&T's proposed installation.

In order to accommodate technological changes, implement Long Term Evolution ("LTE") capabilities, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("AT&T") plans to modify the equipment configurations at many of its existing cell sites. LTE is a new high-performance air interface for cellular mobile communications. It is designed to increase the capacity and speed of mobile telephone networks.

Please accept this letter as notification to the Council, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter is being sent to the Town Manager Denise McNair.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in AT&T's operations at the site. Also included is documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

Existing Facility

The Berlin facility is located at 260 Beckley Road, Berlin, CT

The facility is owned by American Tower.

The existing facility consists of a 150 foot monopole tower. AT&T currently operates wireless communications equipment at the facility and has six (6) antennas mounted at the tower centerline height of 152 feet.

Statutory Considerations

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

1. The height of the overall structure will be unaffected.

2. The proposed changes will not affect the property boundaries. All new construction will take place inside the existing fenced compound.

3. The proposed additions will not increase the noise level at the existing facility by six decibels or more.

4. LTE will utilize additional radio frequencies newly licensed by the FCC for cellular mobile communications. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons, New Cingular Wireless respectfully submits that the proposed changes at the referenced site constitute exempt modifications under R.C.S.A Section §16-50j-72(b)(2).

Respectfully yours,

John Lawrence
Real Estate Consultant

Enclosures:
Denise McNair, Town Manager

New Cingular Wireless PCS, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067

John Lawrence
Real Estate Consultant
95 Ryan Drive, Suite #1
Raynham, MA 02767
Phone: (781) 715-5532
jlawrence@clinellc.com

April 23, 2012

Denise McNair, Town Manager
Berlin Town Hall
240 Kensington Road
Berlin, CT 06037

Re: Notice of Exempt Modification – Existing Telecommunications Facility at 260 Beckley Road, Berlin

Dear Denise,

New Cingular Wireless PCS, LLC ("AT&T") intends to replace telecommunications antennas and associated equipment at an existing telecommunications tower, owned and operated by AT&T.

A Notice of Exempt Modification has been filed with the Connecticut Siting Council as required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73. Please accept this letter as notification to the Town of Berlin under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The attached letter fully sets forth the AT&T proposal. However, if you have any questions or require any further information on the plans for the site or the Siting Council's procedures, please contact John Lawrence at (781) 715-5532 or Linda Roberts, Executive Director of the Connecticut Siting Council, at (860) 827-2935.

Sincerely,

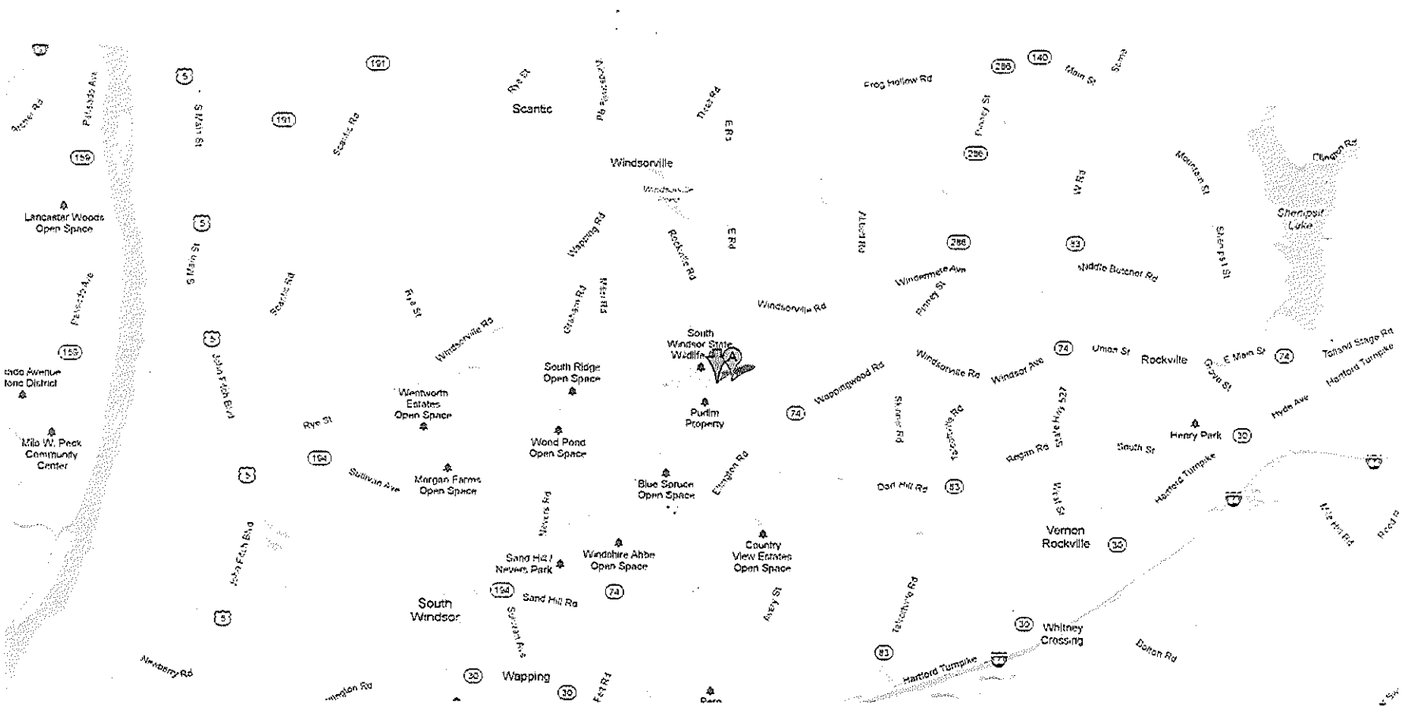
John Lawrence
Real Estate Consultant

Enclosure
CC: Honorable Robert Stein, Chairmen of the Connecticut Siting Council

CT1014 – 260 Beckley Road, Berlin CT

Aerial Location Map

Street Location Map



PROJECT INFORMATION

SCOPE OF WORK:	UNMANNED TELECOMMUNICATIONS FACILITY MODIFICATIONS
SITE ADDRESS:	260 BECKLEY ROAD BERLIN, CT 06037
LATITUDE:	41.863556 N 41° 51' 48.8" N
LONGITUDE:	-72.523056 W -72° 31' 23" W
JURISDICTION:	NATIONAL, STATE & LOCAL CODES OR ORDINANCES
CURRENT USE:	TELECOMMUNICATIONS FACILITY
PROPOSED USE:	TELECOMMUNICATIONS FACILITY

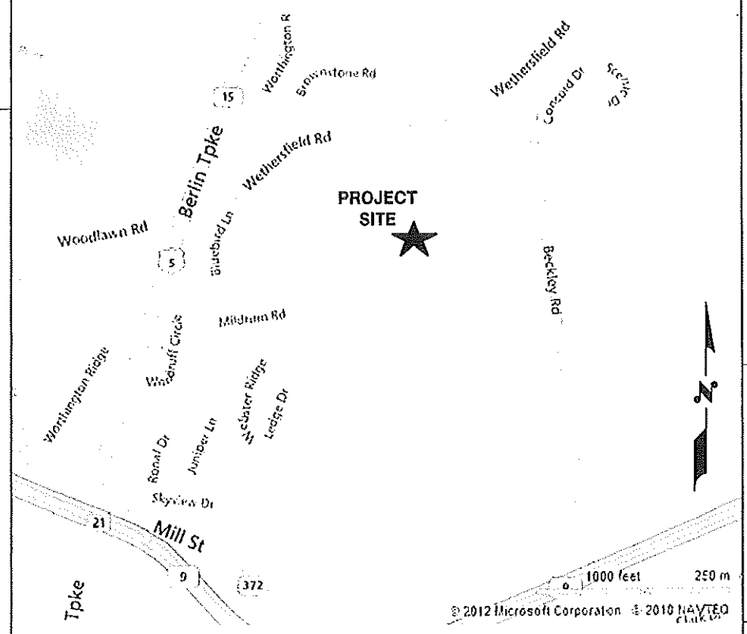
at&t

SITE NUMBER: CT1014
SITE NAME: BERLIN NE

DRAWING INDEX

VICINITY MAP

DIRECTION TO SITE:
START AT 500 ENTERPRISE DR, ROCKY HILL GOING TOWARD CAPITOL BLVD – GO 0.3 MI, TURN LEFT ON CAPITOL BLVD – GO 0.3 MI, TURN LEFT ON WEST ST – GO 0.3 MI, TURN LEFT TO TAKE RAMP ONTO I-91 S TOWARD NEW HAVEN – GO 1.7 MI, TAKE EXIT #22N/NEW BRITAIN ONTO CT-9 N – GO 2.2 MI, TAKE EXIT #21/EAST BERLIN (US-5 N) – GO 0.2 MI, TURN LEFT ON MILL ST(CT-372) – GO 0.4 MI, TURN LEFT ON BERLIN ST, BEAR LEFT ON BECKLEY RD -- GO 1.1 MI, ARRIVE AT 260 BECKLEY RD, BERLIN, ON THE LEFT



GENERAL NOTES

1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF AT&T. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.
2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

72 HOURS
BEFORE YOU DIG
CALL TOLL FREE 800-922-4455

UNDERGROUND SERVICE ALERT

Hudson Design Group LLC
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 2-101
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

NEXLINK GLOBAL SERVICES
a UniTek GLOBAL SERVICES company
800 MARSHALL PHELPS ROAD UNIT#: 2A
WINDSOR, CT 06095

SITE NUMBER: CT1014
SITE NAME: BERLIN NE
260 BECKLEY ROAD
BERLIN, CT 06037
HARTFORD COUNTY

at&t
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	03/30/12	ISSUED FOR CONSTRUCTION	DB	DC	DPH
0	03/06/12	ISSUED FOR REVIEW	DB	DC	DPH

SCALE: AS SHOWN | DESIGNED BY: DC | DRAWN BY: DB

STATE OF CONNECTICUT · DANIEL P. HAMM · No. 24178 · LICENSED PROFESSIONAL ENGINEER

AT&T

TITLE SHEET
(LTE)

JOB NUMBER	DRAWING NUMBER	REV
1014.01	T-1	1

GROUNDING NOTES

1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.

2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.

3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.

4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.

5. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS 2 AWG STRANDED COPPER FOR OUTDOOR BTS.

6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.

7. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.

8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.

9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.

10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.

11. METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWS COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.

12. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/2 IN. OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250.50

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR – NEXLINK
   SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
   OWNER – AT&T MOBILITY

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.

3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

4. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.

5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.

7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.

9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.

10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.

11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.

13. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.

14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.

15. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E (Fy = 36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.

16. CONSTRUCTION SHALL COMPLY WITH UMTS SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T MOBILITY SITES."

17. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

18. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.

19. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

20. APPLICABLE BUILDING CODES:
SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.
   BUILDING CODE: 2003 IBC WITH 2005 CT SUPPLEMENT & 2009 CT AMENDMENTS
   ELECTRICAL CODE: REFER TO ELECTRICAL DRAWINGS
   LIGHTENING CODE: REFER TO ELECTRICAL DRAWINGS

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION;

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-F, STRUCTURAL STANDARDS FOR STEEL

ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES; REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC ELECTRICAL STANDARDS.

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ABBREVIATIONS

AGL	ABOVE GRADE LEVEL	G.C.	GENERAL CONTRACTOR	RF	RADIO FREQUENCY
AWG	AMERICAN WIRE GAUGE	MGB	MASTER GROUND BUS		
BCW	BARE COPPER WIRE	MIN	MINIMUM	TBD	TO BE DETERMINED
BTS	BASE TRANSCEIVER STATION	PROPOSED	NEW	TBR	TO BE REMOVED
EXISTING	EXISTING	N.T.S.	NOT TO SCALE	TBRR	TO BE REMOVED AND REPLACED
EG	EQUIPMENT GROUND	REF	REFERENCE	TYP	TYPICAL
EGR	EQUIPMENT GROUND RING	REQ	REQUIRED		

Hudson Design Group LLC
1600 OSGOOD STREET
BUILDING 60 NORTH, SUITE 2-101
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

NEXLINK GLOBAL SERVICES
a UniTek GLOBAL SERVICES company
800 MARSHALL PHELPS ROAD UNIT#: 2A
WINDSOR, CT 06095

SITE NUMBER: CT1014
SITE NAME: BERLIN NE
260 BECKLEY ROAD
BERLIN, CT 06037
HARTFORD COUNTY

at&t
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
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SCALE: AS SHOWN | DESIGNED BY: DC | DRAWN BY: DB

STATE OF CONNECTICUT
DANIEL P. HAMM
No. 24178
LICENSED PROFESSIONAL ENGINEER

AT&T

GENERAL NOTES (LTE)

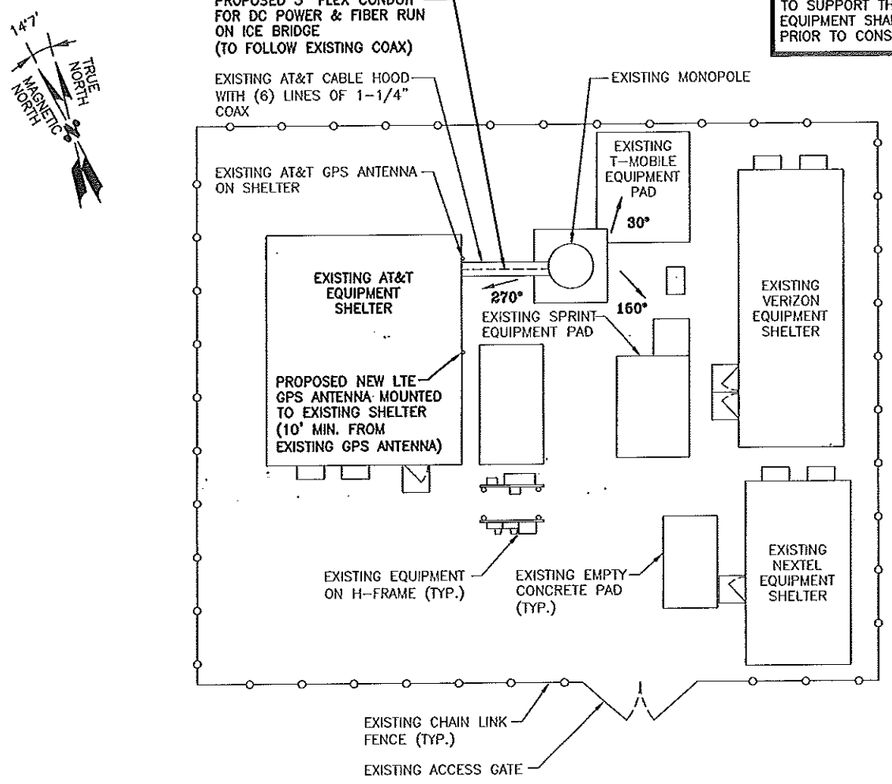
JOB NUMBER	DRAWING NUMBER	REV
1014.01	GN-1	1

NOTE:

REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

NOTE:

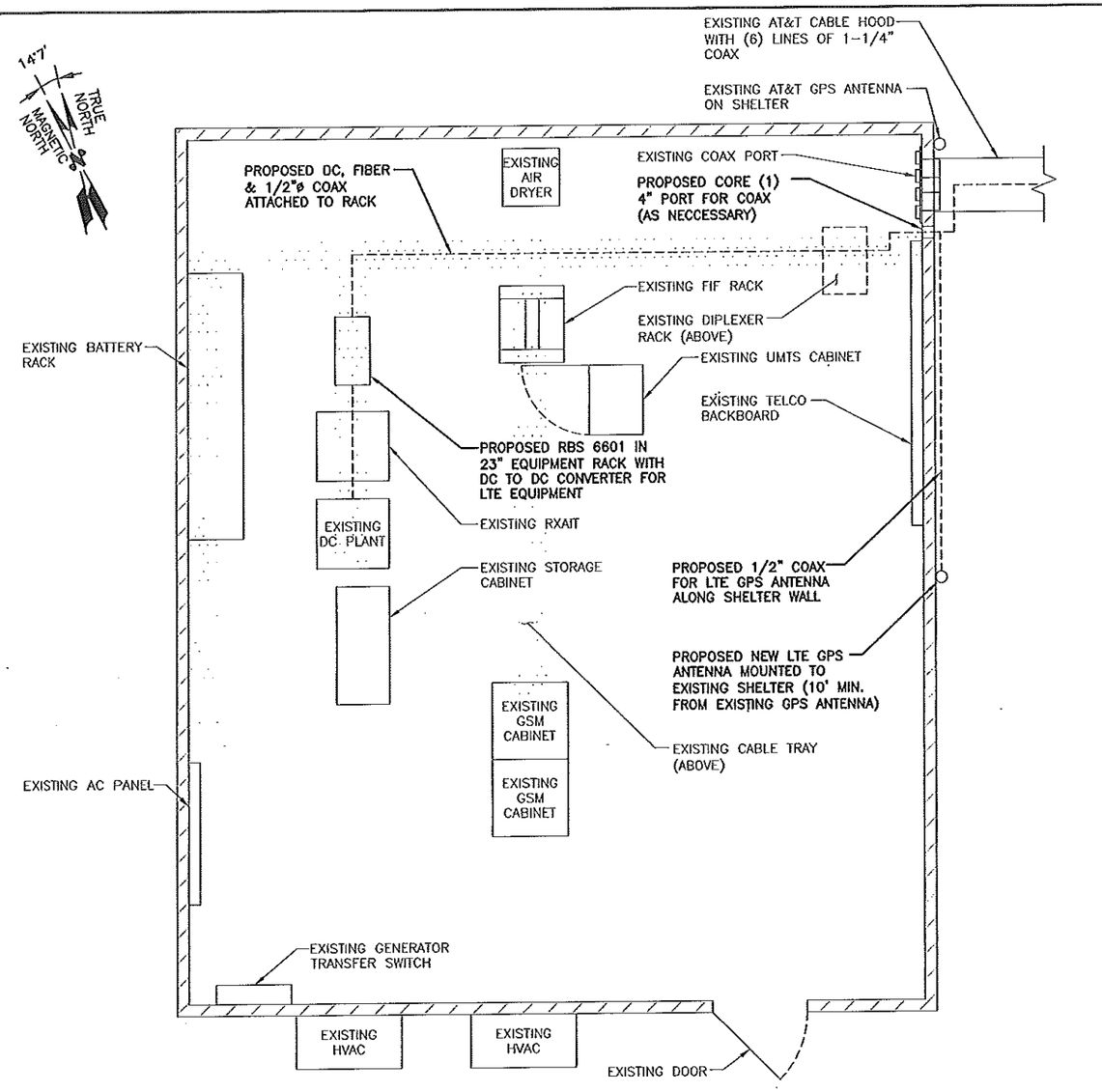
AN ANALYSIS FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION.



COMPOUND PLAN

SCALE: 1/8"=1'-0"

0 4'-0" 8'-0" 16'-0" 24'-0"



EQUIPMENT PLAN

SCALE: 1/2"=1'-0"

0 1'-0" 2'-0" 4'-0" 6'-0"

Hudson Design Group LLC
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 2-101
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

NEXLINK GLOBAL SERVICES
a UniTek GLOBAL SERVICES company
800 MARSHALL PHELPS ROAD UNIT#: 2A
WINDSOR, CT 06095

SITE NUMBER: CT1014
SITE NAME: BERLIN NE
260 BECKLEY ROAD
BERLIN, CT 06037
HARTFORD COUNTY

at&t
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	03/30/12	ISSUED FOR CONSTRUCTION	DC	DPH	DPH
0	03/06/12	ISSUED FOR REVIEW	DB	DPH	DPH

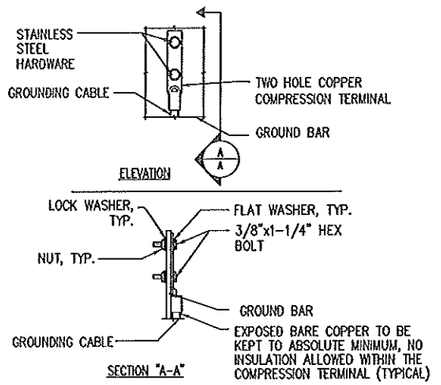
SCALE: AS SHOWN | DESIGNED BY: DC | DRAWN BY: DB

STATE OF CONNECTION — DANIEL P. HAMM — No. 24178 — LICENSED PROFESSIONAL ENGINEER

AT&T

COMPOUND & EQUIPMENT PLAN (LTE)

JOB NUMBER	DRAWING NUMBER	REV
1014.01	A-1	1



NOTE:
1. "DOUBLING UP" OR "STACKING " OF CONNECTION IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
3. CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB, AND MGB.

1 TYPICAL GROUND BAR CONNECTION DETAIL

N.T.S.

EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION.

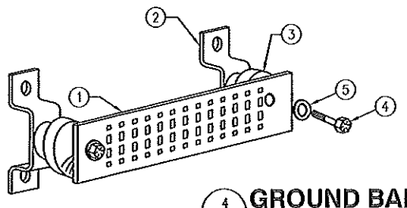
SECTION "P" – SURGE PRODUCERS

CABLE ENTRY PORTS (HATCH PLATES) (#2)
GENERATOR FRAMEWORK (IF AVAILABLE) (#2)
TELCO GROUND BAR
COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2)
+24V POWER SUPPLY RETURN BAR (#2)
-48V POWER SUPPLY RETURN BAR (#2)
RECTIFIER FRAMES.

SECTION "A" – SURGE ABSORBERS

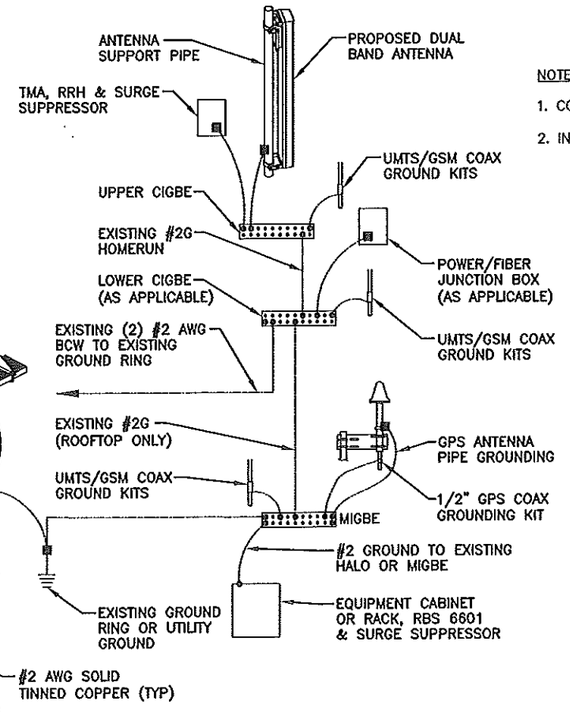
INTERIOR GROUND RING (#2)
EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2)
METALLIC COLD WATER PIPE (IF AVAILABLE) (#2)
BUILDING STEEL (IF AVAILABLE) (#2)

WIRELESS SOLUTIONS INC.			
NO.	REQ.	PART NO.	DESCRIPTION
1	1	HLGB-0420-IS	SOLID GND. BAR (20"x4"x1/4")
2	2	———	WALL MTG. BRKT.
3	2	———	INSULATORS
4	4	———	5/8"-11x1" H.H.C.S.
5	4	———	5/8 LOCKWASHER



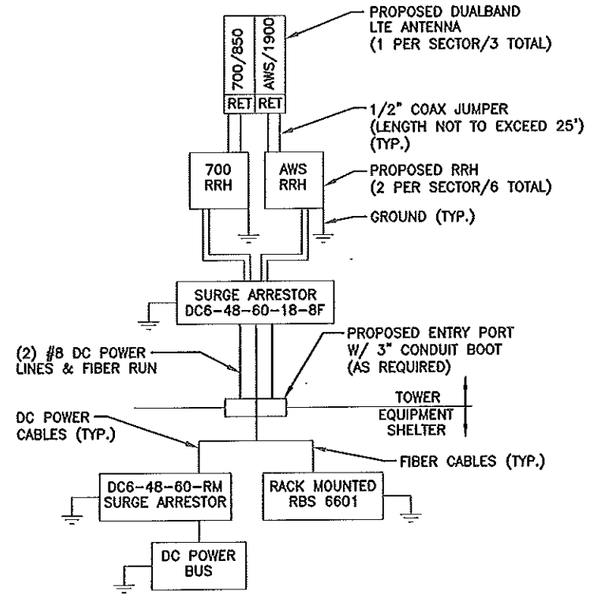
4 GROUND BAR - DETAIL

N.T.S.



3 GROUNDING RISER DIAGRAM

N.T.S.



NOTES:

1. CONTRACTOR TO CONFIRM ALL PARTS.
2. INSTALL ALL EQUIPMENT TO MANUFACTURER'S RECOMMENDATIONS.

2 PLUMBING DIAGRAM

N.T.S.

Hudson Design Group LLC
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 2-101
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5588

NEXLINK GLOBAL SERVICES
a UniTek GLOBAL SERVICES company
800 MARSHALL PHELPS ROAD UNIT#: 2A
WINDSOR, CT 06095

SITE NUMBER: CT1014
SITE NAME: BERLIN NE
260 BECKLEY ROAD
BERLIN, CT 06037
HARTFORD COUNTY

at&t
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	03/30/12	ISSUED FOR CONSTRUCTION	DB	DC	DPH
0	03/06/12	ISSUED FOR REVIEW	DB	DC	DPH

SCALE: AS SHOWN | DESIGNED BY: DC | DRAWN BY: DB

STATE OF CONNECTICUT — DANIEL P. HAMM — No. 24178 — LICENSED PROFESSIONAL ENGINEER

AT&T

PLUMBING DIAGRAM & GROUNDING DETAILS (LTE)

JOB NUMBER	DRAWING NUMBER	REV
1014.01	G-1	1

C Squared Systems, LLC
65 Dartmouth Drive, Unit A3
Auburn, NH 03032
(603) 644-2800
support@csquaredsystems.com

Calculated Radio Frequency Emissions

CT1014

260 Beckley Rd, Berlin, CT 06037

March 15, 2012

Table of Contents

List of Tables

List of Figures

1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed modifications to the existing AT&T antenna arrays mounted on the monopole tower located at 260 Beckley Rd in Berlin, CT. The coordinates of the tower are 41-37-54.13 N, 72-43-47.59 W.

AT&T is proposing the following modifications:

1) Install three 700 MHz LTE antennas (one per sector);
2) Add 700 MHz LTE frequencies.

2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by OET Bulletin 65 Edition 97-01. These new rules include Maximum Permissible Exposure (MPE) limits for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based upon those recommended by the National Council on Radiation Protection and Measurements (NCRP), developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

The FCC general population/uncontrolled limits set the maximum exposure to which most people may be subjected. 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.

Public exposure to radio frequencies is regulated and enforced in units of milliwatts per square centimeter (mW/cm^2). The general population exposure limits for the various frequency ranges are defined in the attached "FCC Limits for Maximum Permissible Exposure (MPE)" in Attachment B of this report.

Higher exposure limits are permitted under the occupational/controlled exposure category, but only for persons who are exposed as a consequence of their employment and who have been made fully aware of the potential for exposure, and they must be able to exercise control over their exposure. General population/uncontrolled limits are five times more stringent than the levels that are acceptable for occupational, or radio frequency trained individuals. Attachment B contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit.

Finally, it should be noted that the MPE limits adopted by the FCC for both general population/uncontrolled exposure and for occupational/controlled exposure incorporate a substantial margin of safety and have been established to be well below levels generally accepted as having the potential to cause adverse health effects.

3. RF Exposure Prediction Methods

The emission field calculation results displayed in the following figures were generated using the following formula as outlined in FCC bulletin OET 65:

$$\text{Power Density} = \left(\frac{1.6^2 \times EIRP}{4\pi \times R^2} \right) \text{x Off Beam Loss}$$

Where:

EIRP = Effective Isotropic Radiated Power

R = Radial Distance = $\sqrt{(H^2 + V^2)}$

H = Horizontal Distance from antenna in meters

V = Vertical Distance from radiation center of antenna in meters

Ground reflection factor of 1.6

Off Beam Loss is determined by the selected antenna pattern

These calculations assume that the antennas are operating at 100 percent capacity and power, and that all channels are transmitting simultaneously. Obstructions (trees, buildings, etc.) that would normally attenuate the signal are not taken into account. The calculations assume even terrain in the area of study and do not take into account actual terrain elevations which could attenuate the signal. As a result, the predicted signal levels reported below are much higher than the actual signal levels will be from the finished modifications.

4. Calculation Results

Table 1 below outlines the power density information for the site. Because the proposed AT&T antennas are directional in nature, the majority of the RF power is focused out towards the horizon. As a result, there will be less RF power directed below the antennas relative to the horizon, and consequently lower power density levels around the base of the tower. Please refer to Attachment C for the vertical pattern of the proposed AT&T antennas. The calculated results for AT&T in Table 1 include a nominal 10 dB off-beam pattern loss to account for the lower relative gain below the antennas.

Carrier	Antenna Height (Feet)	Operating Frequency (MHz)	Number of Trans.	ERP Per Transmitter (Watts)	Power Density (mw/cm^2)	Limit	%MPE
Cingular UMTS	*152*	*880*	*1*	*500*	*0.0073*	*0.5867*	*1.33%*
Cingular PCS	*152*	*1900*	*1*	*500*	*0.0029*	*0.2000*	*1.33%*
Cingular GSM	*152*	*880*	*4*	*295*	*0.0034*	*0.5867*	*1.14%*
Cingular GSM	*152*	*1900*	*2*	*427*	*0.0035*	*1.0000*	*1.33%*
Pocket	142	2130	3	631	0.0338	1.0000	3.38%
Berlin FD	94.5	953.55	1	25	0.0010	0.6357	0.16%
Verizon	116	869	9	200	0.0481	0.5793	8.30%
Verizon	116	190	3	200	0.0160	0.2000	8.02%
T-Mobile GSM	162	1945	8	171	0.0187	1.0000	1.87%
T-Mobile UMTS	162	2100	2	683	0.0187	1.0000	1.87%
Sprint	125	1962.5	11	122	0.0309	1.0000	3.09%
Nextel	90	851	12	100	0.0533	0.5673	9.39%
AT&T UMTS	152	880	2	565	0.0176	0.5867	0.30%
AT&T UMTS	152	1900	2	875	0.0272	1.0000	0.27%
AT&T LTE	152	734	1	1313	0.0204	0.4893	0.42%
AT&T GSM	152	880	1	283	0.0044	0.5867	0.08%
AT&T GSM	152	1900	4	525	0.0327	1.0000	0.33%
						Total	**37.47%**

Table 1: Carrier Information[1]

[1] The existing CSC filing for Cingular should be removed and replaced with the updated AT&T technologies and values provided in Table 1 above.

5. Conclusion

The above analysis verifies that emissions from the existing site will be below the maximum power density levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. Even when using conservative methods, the cumulative power density from the proposed transmit antennas at the existing facility is well below the limits for the general public. The highest expected percent of Maximum Permissible Exposure at ground level is 37.47% of the FCC limit.

As noted previously, obstructions (trees, buildings, etc.) that would normally attenuate the signal are not taken into account. As a result, the predicted signal levels are more conservative (higher) than the actual signal levels will be from the finished modifications.

6. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate. The calculations follow guidelines set forth in ANSI/IEEE Std. C95.3, ANSI/IEEE Std. C95.1 and FCC OET Bulletin 65 Edition 97-01.

Daniel L. Goulet
C Squared Systems, LLC

March 15, 2012
Date

Attachment A: References

OET Bulletin 65 - Edition 97-01 - August 1997 Federal Communications Commission Office of Engineering & Technology

ANSI C95.1-1982, American National Standard Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 300 kHz to 100 GHz. IEEE-SA Standards Board

IEEE Std C95.3-1991 (Reaff 1997), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave. IEEE-SA Standards Board

Attachment B: FCC Limits for Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/Controlled Exposure[2]

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (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

(B) Limits for General Population/Uncontrolled Exposure[3]

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (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 in MHz * Plane-wave equivalent power density

Table 2: FCC Limits for Maximum Permissible Exposure (MPE)

[2] 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

[3] 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

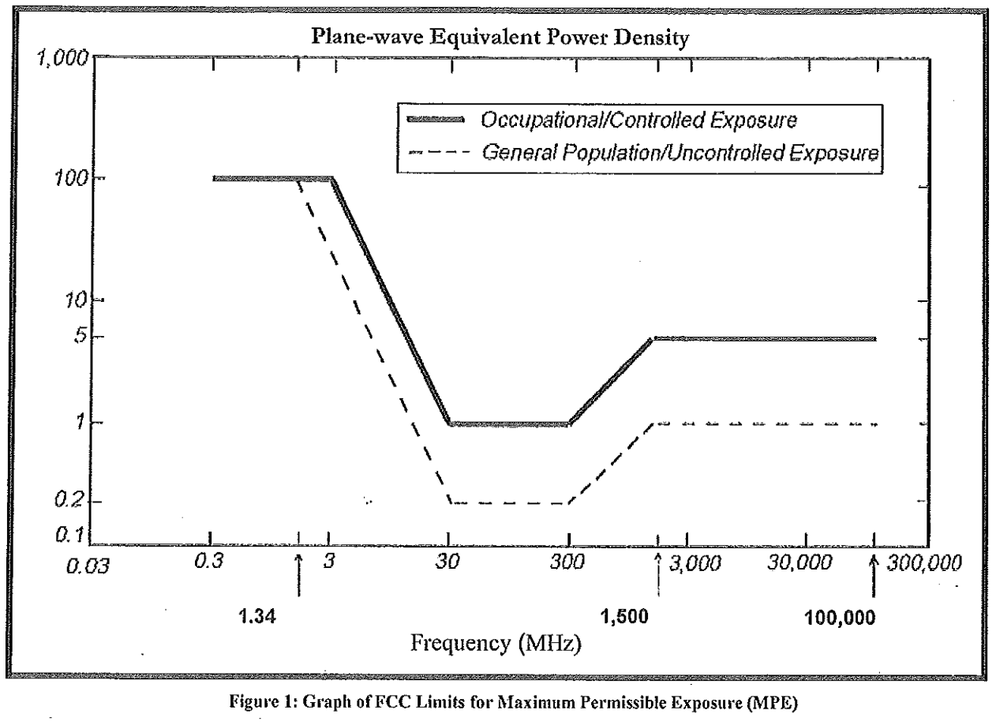
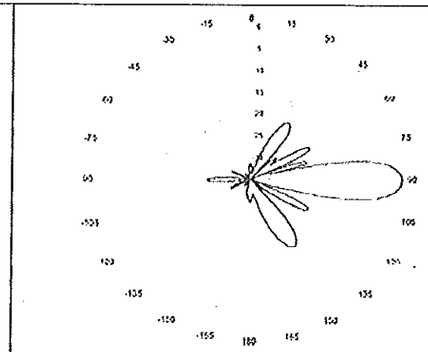
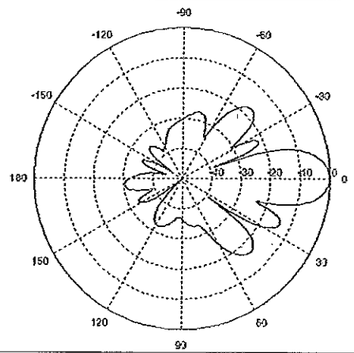
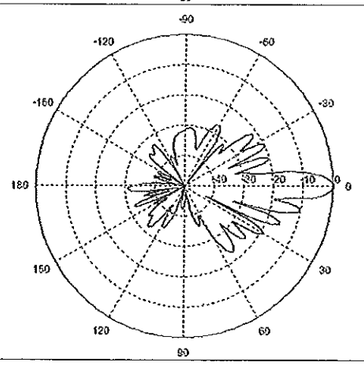


Figure 1: Graph of FCC Limits for Maximum Permissible Exposure (MPE)

Attachment C: AT&T Antenna Data Sheets and Electrical Patterns

700 MHz Manufacturer: KMW Model #: AM-X-CD-16-65 Frequency Band: 698-894 MHz Gain: 11.9 dBd Vertical Beamwidth: 15° Horizontal Beamwidth: 65° Polarization: Dual Slant ± 45° Size L x W x D: 54.0" x 12.6" x 7.87"	
850 MHz Manufacturer: Powerwave Model #: 7770.00 Frequency Band: 824-896 MHz Gain: 11.4 dBd Vertical Beamwidth: 15° Horizontal Beamwidth: 85° Polarization: Dual Linear ±45° Size L x W x D: 55.0" x 11.0" x 5.0"	
1900 MHz Manufacturer: Powerwave Model #: 7770.00 Frequency Band: 1850-1990 MHz Gain: 13.4 dBd Vertical Beamwidth: 7° Horizontal Beamwidth: 90° Polarization: Dual Linear ±45° Size L x W x D: 55.0" x 11.0" x 5.0"	

AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure	:	150 ft ITT Meyer Monopole
ATC Site Name	:	Brln - Berlin, CT
ATC Site Number	:	302483
Proposed Carrier	:	AT&T Mobility
Carrier Site Name	:	Berlin NE
Carrier Site Number	:	10034969/CT1014
County	:	Hartford
Eng. Number	:	49234121
Date	:	April 20, 2012
Usage	:	87%
Portholes Required	:	No

Submitted by:
Esha Modi
Project Engineer

American Tower Engineering Services
400 Regency Forest Drive
Cary, NC 27518
Phone: 919-468-0112

Introduction

The purpose of this report is to summarize results of the structural analysis performed on the 150 ft ITT Meyer Monopole located at 260 Beckley Road, Kensington, CT 06037, Hartford County (ATC site #302483). The tower was originally designed and manufactured by ITT Meyer to Type "B" specifications; this was verified in a field mapping by Smith Cullum, Inc. (Acq. # CT-0019, dated July 21, 2001). It has been modified per design by Scientel (Project Spectrasite Berlin-CT0019, dated July 30, 2002).

Analysis

The tower was analyzed using Semaan Engineering Solutions, Inc., Software. The analysis assumes that the tower is in good, undamaged, and non-corroded condition.

Basic Wind Speed: 80 mph (Fastest Mile)
Radial Ice: 69 mph (Fastest Mile) w/ ½" ice
Code: TIA/EIA-222-F / 2003 International Building Code per Section 1609.1.1, Exception (5) and Section 3108.4 w/ 2005 CT Supplement and 2009 CT Amendments

Antenna Loads

The following antenna loads were used in the tower analysis.

Existing Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
163.0	3	RFS APX16DWV-16DWV-S-E-ACU	Conceal canister	(12) 1 5/8	T-Mobile
	6	Andrew ETW200VS12UB			
152.0	3	KMW AM-X-CD-16-65-00T-RET	Platform w/ Handrails	(12) 1 1/4	AT&T Mobility
	6	Powerwave LGP21401			
	3	Powerwave 7770.00			
142.0	3	RFS APXV18-206517LS-C	Flush	(6) 1 5/8	Youghiogheny
130.0	3	Allgon 7184	Flush	(3) 1 5/8	Sprint Nextel
127.0	3	Allgon 7184	Flush	(3) 1 5/8	
123.0	3	Allgon 7184	Flush	(3) 1 5/8	
121.0	1	GPS	Flush	(1) 1/2	Verizon
118.0	6	Andrew DB948F85E-M	Low Profile Platform	(12) 1 5/8	
	6	Antel RWA-80014			
106.0	3	72" x 12" Panel	Flush	(4) 1 5/8	AT&T Mobility
96.0	12	Decibel 844G65VTZASX	Low Profile Platform	(15) 1 5/8	Sprint Nextel

Proposed Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
152.0	3	KMW AM-X-CD-16-65-00T-RET	Platform w/ Handrails	(1) 10 mm (2) 19.7 mm (1) 3" Conduit	AT&T Mobility
	6	Ericsson RRUS 11			
	1	Raycap DC6-48-60-18-8F			

Install proposed coax on outside of monopole.

Results

The maximum structure usage is: 87%

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	3,291.0	3,319.4	101
Shear (kips)	33.9	34.8	103

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

Conclusion

Based on the analysis results, the structure meets the requirements per TIA/EIA-222-F and 2003 IBC w/ 2005 CT Supplement and 2009 CT Amendments. The tower and foundation can support the existing and proposed antennas with the TX line distribution as described in this report.
If you have any questions or require additional information, please call 919-463-6280.

Standard Conditions

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

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

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

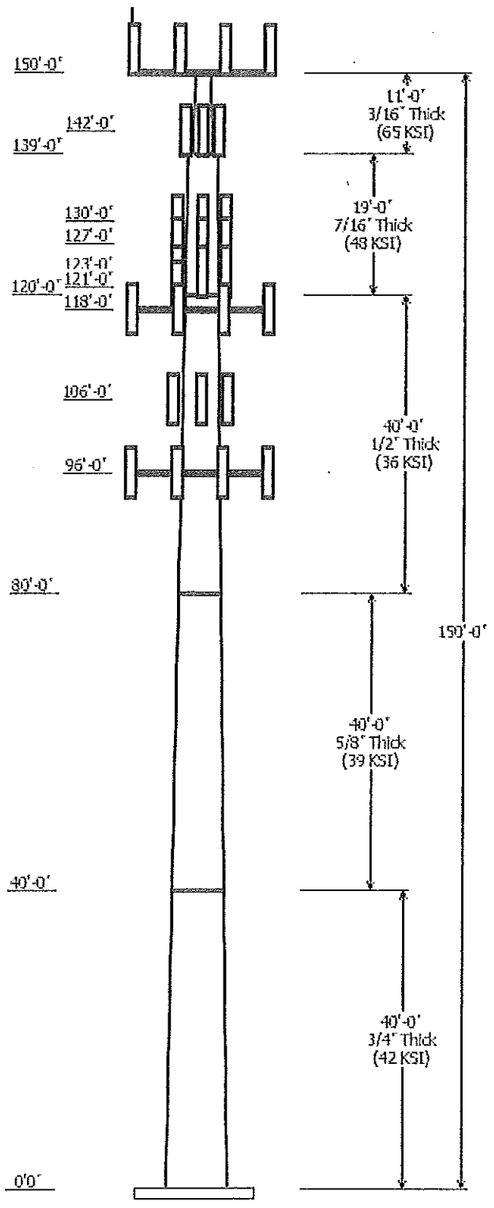
It is the responsibility of the client to ensure that the information provided to ATC Engineering Services and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with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

All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/EIA-222.

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

Job Information

Pole :	302483 Code: TIA/EIA-222 Rev F
Description :	150 ft ITT Meyer Monopole
Client :	AT&T Mobility
Location :	Brin - Berlin, CT
Shape :	12 Sides Base Elev (ft): 0.00
Height :	150.00 (ft) Taper: 0.189701(in/ft)



Sections Properties

Shaft Section	Length (ft)	Diameter (in) Accross Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
1	40.000	43.71	51.30	0.750		0.000	0.189701	42
2	40.000	36.09	43.68	0.625	Butt Joint	0.000	0.189701	39
3	40.000	28.50	36.09	0.500	Butt Joint	0.000	0.189701	36
4	19.000	24.90	28.50	0.438	Butt Joint	0.000	0.189701	48
5	11.000	15.00	16.72	0.188	Butt Joint	0.000	0.156364	65

Discrete Appurtenance

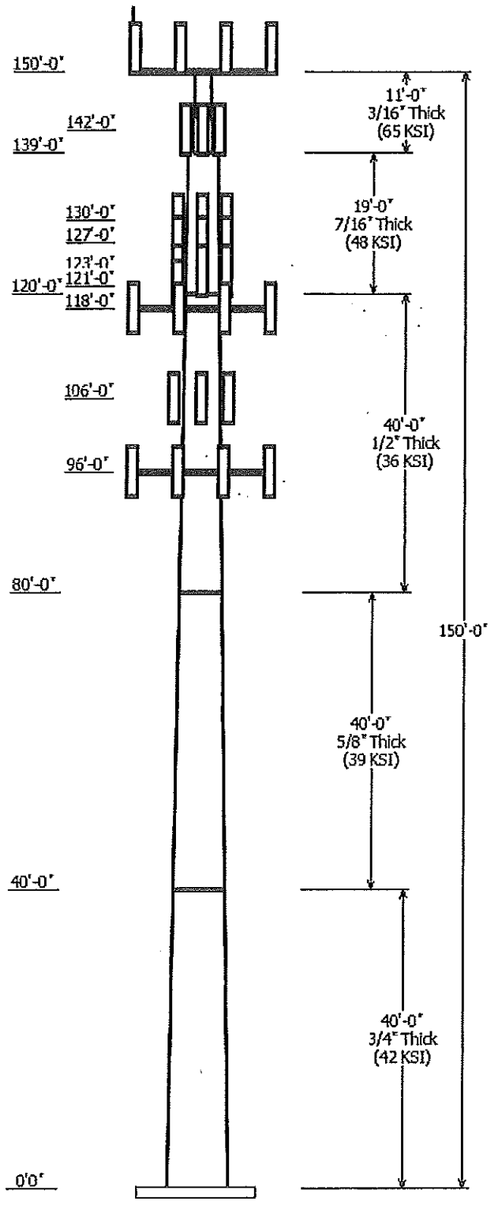
Attach Elev (ft)	Force Elev (ft)	Qty	Description
150.000	152.000	6	KMW AM-X-CD-16-65-00T-RET
150.000	152.000	6	Ericsson RRUS 11
150.000	152.000	1	Raycap DC6-48-60-18-8F
150.000	163.000	3	RFS APX16DWV-16DWV-S-E-
150.000	163.000	6	Andrew ETW200VS12UB
150.000	152.000	6	Powerwave LGP21401
150.000	152.000	3	Powerwave 7770.00
150.000	150.000	1	Flat Platform w/ Handrails
150.000	156.500	1	Concealment Canister
142.000	142.000	3	RFS APXV18-206517LS-C
130.000	130.000	3	Allgon 7184
127.000	127.000	3	Allgon 7184
123.000	123.000	3	Allgon 7184
121.000	121.000	1	GPS
118.000	118.000	1	Round Low Profile Platform
118.000	118.000	6	Andrew DB948F85E-M
118.000	118.000	6	Antel RWA-80014
106.000	106.000	3	72" x 12" Panel
96.000	96.000	1	Flat Low Profile Platform
96.000	96.000	12	Decibel 844G65VTZASX

Linear Appurtenance

Elev (ft) From	To	Description	Exposed To Wind
0.000	96.000	1 5/8" Coax	Yes
0.000	96.000	1 5/8" Coax	No
0.000	106.0	1 5/8" Coax	No
0.000	118.0	1 5/8" Coax	Yes
0.000	121.0	1/2" Coax	Yes
0.000	123.0	1 5/8" Coax	Yes
0.000	127.0	1 5/8" Coax	No
0.000	130.0	1 5/8" Coax	No
0.000	142.0	1 5/8" Coax	Yes
0.000	150.0	1 5/8" Coax	No
0.000	152.0	1 1/4" Coax	No
0.000	152.0	10 mm Cable	Yes
0.000	152.0	19.7 mm Cable	Yes
0.000	152.0	3" Conduit	Yes

Load Cases

No Ice	80.00 mph Wind with No Ice
Ice	69.28 mph Wind with Ice



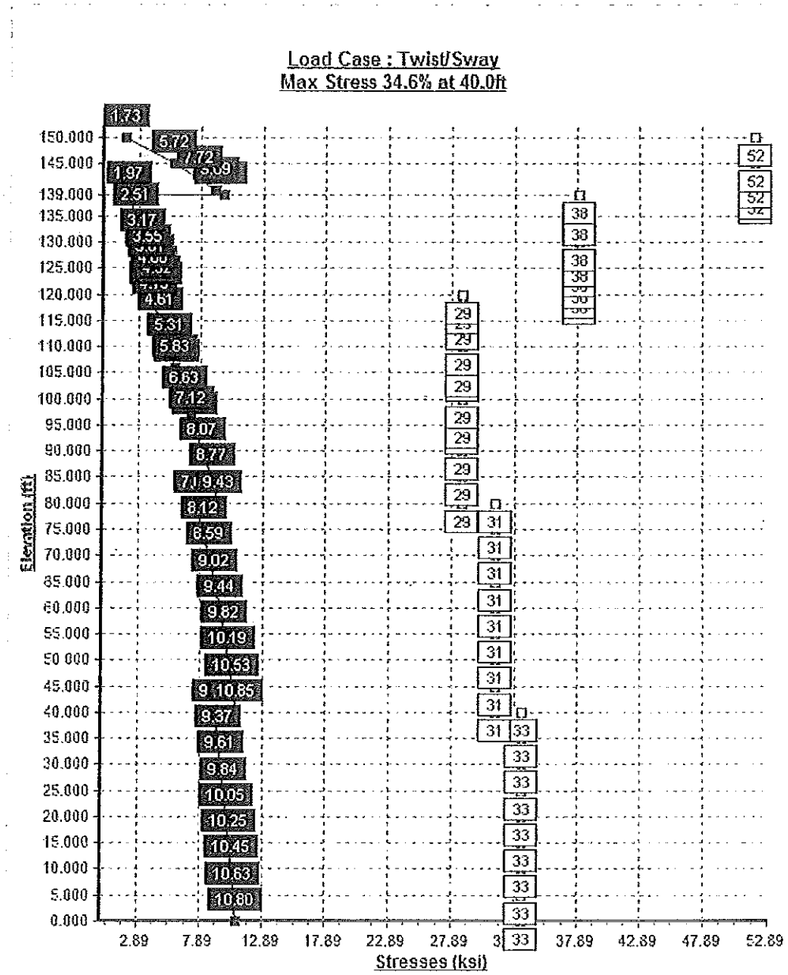
Twist/Sway	50.00 mph Wind with No Ice

Reactions

Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
No Ice	3318.94	34.82	50.93
Ice	2807.35	28.98	59.60
Twist/Sway	1296.82	13.60	50.96

Dish Deflections

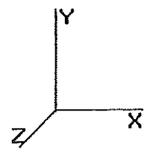
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
Twist/Sway	0.00	0.000	0.000


Load Case : Twist/Sway
Max Stress 34.6% at 40.0ft
Elevation (ft)
150.000
145.000
140.000
135.000
130.000
125.000
120.000
115.000
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
1.73
5.72
1.97
2.51
3.17
4.61
5.31
5.83
6.63
7.12
8.07
8.77
9.43
8.12
6.59
9.02
9.44
9.62
10.19
10.53
10.65
9.37
9.61
9.84
10.05
10.25
10.45
10.63
10.80
52
38
29
31
33
2.89
7.89
12.89
17.89
22.89
27.89
37.89
42.89
47.89
52.89
Stresses (ksi)

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



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Page: 1

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 (sqin)	Bottom Ix (in^4)	Bottom W/t Ratio	Bottom D/t Ratio	Top Dia (in)	Top Elev (ft)	Top Area (sqin)	Top Ix (in^4)	Top W/t Ratio	Top D/t Ratio	Taper (in/ft)
1-12	40.000	0.7500	42		0.00	15,369	51.30	0.00	122.08	39816.6	16.18	68.40	43.71	40.00	103.75	24442.9	13.47	58.28	0.189701
2-12	40.000	0.6250	39	Butt	0.00	10,755	43.68	40.00	86.65	20501.8	16.58	69.89	36.09	80.00	71.38	11460.3	13.33	57.75	0.189701
3-12	40.000	0.5000	36	Butt	0.00	6,968	36.09	80.00	57.30	9265.7	17.20	72.18	28.50	120.00	45.09	4513.2	13.13	57.01	0.189701
4-12	19.000	0.4375	48	Butt	0.00	2,392	28.50	120.00	39.54	3975.5	15.31	65.15	24.90	139.00	34.46	2632.2	13.11	56.91	0.189701
5-12	11.000	0.1875	65	Butt	0.00	354	16.72	139.00	9.98	348.2	21.75	89.17	15.00	150.00	8.94	250.4	19.29	80.00	0.156364
				Shaft Weight		35,838													

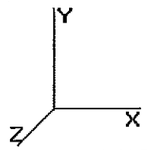
Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice CaAa Factor	Distance From Face (ft)	Vert Ecc (ft)
150.00	Andrew ETW200VS12UB	6	11.00	0.000	0.00	14.52	0.000	0.00	0.000	13.000
150.00	Concealment Canister	1	200.00	15.000	1.00	300.00	20.000	1.00	0.000	6.500
150.00	Ericsson RRUS 11	6	55.00	2.940	0.67	74.30	3.290	0.67	0.000	2.000
150.00	Flat Platform w/ Handrails	1	2000.00	42.400	1.00	2,450.00	48.400	1.00	0.000	0.000
150.00	KMW AM-X-CD-16-65-00T-	6	48.50	8.260	0.78	95.00	9.080	0.78	0.000	2.000
150.00	Powerwave 7770.00	3	35.00	5.880	0.76	67.75	6.530	0.76	0.000	2.000
150.00	Powerwave LGP21401	6	14.10	1.290	0.67	21.26	1.530	0.67	0.000	2.000
150.00	Raycap DC6-48-60-18-8F	1	20.00	1.260	1.00	35.10	1.460	1.00	0.000	2.000
150.00	RFS APX16DWV-16DWV-S-E-	3	39.60	0.000	0.00	69.38	0.000	0.00	0.000	13.000
142.00	RFS APXV18-206517LS-C	3	22.00	5.020	0.80	48.13	5.700	0.82	0.000	0.000
130.00	Allgon 7184	3	11.20	2.680	0.85	27.10	3.280	0.87	0.000	0.000
127.00	Allgon 7184	3	11.20	2.680	0.85	27.10	3.280	0.87	0.000	0.000
123.00	Allgon 7184	3	11.20	2.680	0.85	27.10	3.280	0.87	0.000	0.000
121.00	GPS	1	7.00	1.000	1.00	16.00	1.300	1.00	0.000	0.000
118.00	Andrew DB948F85E-M	6	8.50	3.267	0.79	27.56	3.811	0.81	0.000	0.000
118.00	Antel RWA-80014	6	14.30	5.250	0.79	46.00	5.740	0.80	0.000	0.000
118.00	Round Low Profile Platform	1	1500.00	21.700	1.00	1,700.00	27.200	1.00	0.000	0.000
106.00	72" x 12" Panel	3	45.00	8.400	0.75	92.28	9.230	0.75	0.000	0.000
96.00	Decibel 844G65VTZASX	12	16.00	5.890	0.84	55.00	6.500	0.85	0.000	0.000
96.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1,700.00	31.600	1.00	0.000	0.000
	Totals	75	6853.00			9,608.39			Number of Loadings :	20

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	No Ice Weight (lb/ft)	No Ice CaAa (sf/ft)	Ice Weight (lb/ft)	Ice CaAa (sf/ft)	Exposed To Wind
0.00	152.00	(12) 1 1/4" Coax	7.56	0.00	0.00	0.00	N
0.00	152.00	(1) 10 mm Cable	0.07	0.00	0.00	0.00	Y
0.00	152.00	(2) 19.7 mm Cable	1.18	0.00	0.00	0.00	Y
0.00	152.00	(1) 3" Conduit	7.58	0.35	8.80	0.40	Y
0.00	150.00	(12) 1 5/8" Coax	9.84	0.00	0.00	0.00	N
0.00	142.00	(6) 1 5/8" Coax	4.92	0.20	9.46	0.25	Y
0.00	130.00	(3) 1 5/8" Coax	2.46	0.00	0.00	0.00	N
0.00	127.00	(3) 1 5/8" Coax	2.46	0.00	0.00	0.00	N
0.00	123.00	(3) 1 5/8" Coax	2.46	0.20	4.73	0.25	Y
0.00	121.00	(1) 1/2" Coax	0.15	0.00	0.50	0.00	Y
0.00	118.00	(12) 1 5/8" Coax	9.84	0.40	18.93	0.50	Y
0.00	106.00	(4) 1 5/8" Coax	3.28	0.00	0.00	0.00	N
0.00	96.00	(6) 1 5/8" Coax	4.92	0.20	9.46	0.25	Y
0.00	96.00	(9) 1 5/8" Coax	7.38	0.00	0.00	0.00	N

Pole :	302483	Code: TIA/EIA-222 Rev F	4/20/2012 10:32:22 AM
Location :	Brin - Berlin, CT		Page: 2
Height :	150.0 (ft)		
Base Dia :	51.30 (in)		
Top Dia :	15.00 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.189701 (in/ft)		

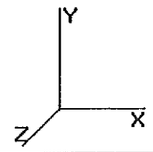


Total Weight	8,308.47 (lb)	6,465.11 (lb)

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



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	Fy (ksi)	Fb (ksi)	Weight (lb)
0.00		0.7500	51.300	122.078	39,816.6	16.18	68.40	42	33	0.0
5.00		0.7500	50.351	119.787	37,617.1	15.86	67.14	42	33	2,057.5
10.00		0.7500	49.403	117.497	35,500.1	15.51	65.87	42	33	2,018.6
15.00		0.7500	48.454	115.206	33,464.0	15.17	64.61	42	33	1,979.6
20.00		0.7500	47.506	112.916	31,507.4	14.83	63.34	42	33	1,940.6
25.00		0.7500	46.557	110.625	29,628.5	14.49	62.08	42	33	1,901.6
30.00		0.7500	45.609	108.334	27,825.8	14.15	60.81	42	33	1,862.7
35.00		0.7500	44.660	106.044	26,097.8	13.81	59.55	42	33	1,823.7
40.00	Top - Section 1	0.7500	43.712	103.753	24,442.9	13.47	58.28	42	33	1,784.7
40.00	Bot - Section 2	0.6250	43.680	86.648	20,501.8	16.58	69.89	39	31	
45.00		0.6250	42.731	84.739	19,176.5	16.18	68.37	39	31	1,458.0
50.00		0.6250	41.783	82.830	17,909.5	15.77	66.85	39	31	1,425.5
55.00		0.6250	40.834	80.922	16,699.7	15.36	65.34	39	31	1,393.0
60.00		0.6250	39.886	79.013	15,545.5	14.96	63.82	39	31	1,360.6
65.00		0.6250	38.937	77.104	14,445.8	14.55	62.30	39	31	1,328.1
70.00		0.6250	37.989	75.195	13,399.3	14.14	60.78	39	31	1,295.6
75.00		0.6250	37.040	73.286	12,404.5	13.74	59.26	39	31	1,263.1
80.00	Top - Section 2	0.6250	36.092	71.377	11,460.3	13.33	57.75	39	31	1,230.6
80.00	Bot - Section 3	0.5000	36.092	57.303	9,265.7	17.20	72.18	36	29	
85.00		0.5000	35.144	55.776	8,544.5	16.69	70.29	36	29	962.0
90.00		0.5000	34.195	54.249	7,861.7	16.18	68.39	36	29	936.0
95.00		0.5000	33.247	52.722	7,216.3	15.67	66.49	36	29	910.0
96.00		0.5000	33.057	52.417	7,091.6	15.57	66.11	36	29	178.9
100.0		0.5000	32.298	51.195	6,607.2	15.16	64.60	36	29	705.1
105.0		0.5000	31.350	49.668	6,033.4	14.66	62.70	36	29	858.0
106.0		0.5000	31.160	49.363	5,922.8	14.55	62.32	36	29	168.5
110.0		0.5000	30.401	48.141	5,493.9	14.15	60.80	36	29	663.6
115.0		0.5000	29.453	46.614	4,987.4	13.64	58.91	36	29	806.1
118.0		0.5000	28.884	45.698	4,699.1	13.34	57.77	36	29	471.2
120.0	Top - Section 3	0.5000	28.504	45.087	4,513.2	13.13	57.01	36	29	308.9
120.0	Bot - Section 4	0.4375	28.504	39.539	3,975.5	15.31	65.15	48	38	
121.0		0.4375	28.314	39.272	3,895.4	15.20	64.72	48	38	134.1
123.0		0.4375	27.935	38.737	3,738.5	14.97	63.85	48	38	265.4
125.0		0.4375	27.556	38.203	3,585.9	14.73	62.98	48	38	261.8
127.0		0.4375	27.176	37.668	3,437.5	14.50	62.12	48	38	258.2
130.0		0.4375	26.607	36.866	3,222.6	14.15	60.82	48	38	380.4
135.0		0.4375	25.659	35.530	2,884.8	13.57	58.65	48	38	615.9
139.0	Top - Section 4	0.4375	24.900	34.461	2,632.2	13.11	56.91	48	38	476.3
139.0	Bot - Section 5	0.1875	16.720	9.981	348.2	21.75	89.17	65	52	
140.0		0.1875	16.564	9.887	338.4	21.53	88.34	65	52	33.8
142.0		0.1875	16.251	9.698	319.4	21.08	86.67	65	52	66.6
145.0		0.1875	15.782	9.415	292.2	20.41	84.17	65	52	97.6
150.0		0.1875	15.000	8.943	250.4	19.29	80.00	65	52	156.2
										35,838.1

Pole :	302483	Code: TIA/EIA-222 Rev F	4/20/2012 10:32:22 AM
Location :	Brin - Berlin, CT		Page: 4
Height :	150.0 (ft)		
Base Dia :	51.30 (in)		
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Shape :	12 Sides		
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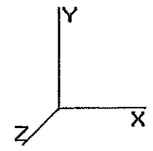


Load Case: No Ice — 80.00 mph Wind with No Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

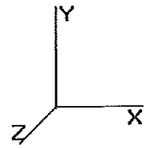
Shaft Segment Forces

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		0.00	1.00 16.384	27.68	341.99	1.030	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		0.00	1.00 16.384	27.68	335.67	1.030	0.000	5.00	21.177	21.81	604.0	0.0	2,057.5
10.00		0.00	1.00 16.384	27.68	329.35	1.030	0.000	5.00	20.782	21.41	592.7	0.0	2,018.6
15.00		0.00	1.00 16.384	27.68	323.02	1.030	0.000	5.00	20.387	21.00	581.4	0.0	1,979.6
20.00		0.00	1.00 16.384	27.68	316.70	1.030	0.000	5.00	19.992	20.59	570.2	0.0	1,940.6
25.00		0.00	1.00 16.384	27.68	310.38	1.030	0.000	5.00	19.597	20.18	558.9	0.0	1,901.6
30.00		0.00	1.00 16.384	27.68	304.05	1.030	0.000	5.00	19.201	19.78	547.6	0.0	1,862.7
35.00		0.00	1.01 16.662	28.15	300.24	1.030	0.000	5.00	18.806	19.37	545.4	0.0	1,823.7
40.00	Top - Section 1	0.00	1.05 17.310	29.25	299.53	1.030	0.000	5.00	18.411	18.96	554.7	0.0	1,784.7
45.00		0.00	1.09 17.902	30.25	297.78	1.030	0.000	5.00	18.002	18.54	561.0	0.0	1,458.0
50.00		0.00	1.12 18.449	31.17	295.58	1.030	0.000	5.00	17.607	18.14	565.4	0.0	1,425.5
55.00		0.00	1.15 18.959	32.04	292.83	1.030	0.000	5.00	17.212	17.73	568.0	0.0	1,393.0
60.00		0.00	1.18 19.436	32.84	289.61	1.030	0.000	5.00	16.817	17.32	568.9	0.0	1,360.6
65.00		0.00	1.21 19.885	33.60	285.97	1.030	0.000	5.00	16.422	16.91	568.4	0.0	1,328.1
70.00		0.00	1.24 20.311	34.32	281.98	1.030	0.000	5.00	16.026	16.51	566.6	0.0	1,295.6
75.00		0.00	1.26 20.715	35.00	277.66	1.030	0.000	5.00	15.631	16.10	563.6	0.0	1,263.1
80.00	Top - Section 2	0.00	1.28 21.101	35.66	273.06	1.030	0.000	5.00	15.236	15.69	559.6	0.0	1,230.6
85.00		0.00	1.31 21.469	36.28	268.19	1.030	0.000	5.00	14.841	15.29	554.6	0.0	962.0
90.00		0.00	1.33 21.823	36.88	263.10	1.030	0.000	5.00	14.446	14.88	548.7	0.0	936.0
95.00		0.00	1.35 22.163	37.45	257.78	1.030	0.000	5.00	14.050	14.47	542.0	0.0	910.0
96.00	Appertunance(s)	0.00	1.35 22.229	37.56	256.69	1.030	0.000	1.00	2.763	2.85	106.9	0.0	178.9
100.0		0.00	1.37 22.490	38.00	252.27	1.030	0.000	4.00	10.893	11.22	426.4	0.0	705.1
105.0		0.00	1.39 22.806	38.54	246.57	1.030	0.000	5.00	13.260	13.66	526.4	0.0	858.0
106.0	Appertunance(s)	0.00	1.39 22.867	38.64	245.41	1.030	0.000	1.00	2.605	2.68	103.7	0.0	168.5
110.0		0.00	1.41 23.111	39.05	240.71	1.030	0.000	4.00	10.260	10.57	412.8	0.0	663.6
115.0		0.00	1.42 23.406	39.55	234.68	1.030	0.000	5.00	12.470	12.84	508.0	0.0	806.1
118.0	Appertunance(s)	0.00	1.43 23.579	39.84	231.00	1.030	0.000	3.00	7.292	7.51	299.3	0.0	471.2
120.0	Top - Section 3	0.00	1.44 23.692	40.04	228.51	1.030	0.000	2.00	4.782	4.93	197.2	0.0	308.9
121.0	Appertunance(s)	0.00	1.45 23.749	40.13	227.26	1.030	0.000	1.00	2.367	2.44	97.9	0.0	134.1
123.0	Appertunance(s)	0.00	1.45 23.860	40.32	224.74	1.030	0.000	2.00	4.687	4.83	194.7	0.0	265.4
125.0		0.00	1.46 23.970	40.51	222.20	1.030	0.000	2.00	4.624	4.76	192.9	0.0	261.8
127.0	Appertunance(s)	0.00	1.47 24.079	40.69	219.63	1.030	0.000	2.00	4.561	4.70	191.2	0.0	258.2
130.0	Appertunance(s)	0.00	1.48 24.241	40.96	215.75	1.030	0.000	3.00	6.723	6.92	283.7	0.0	380.4
135.0		0.00	1.49 24.503	41.41	209.19	1.030	0.000	5.00	10.889	11.22	464.4	0.0	615.9
139.0	Top - Section 4	0.00	1.50 24.709	41.75	203.85	1.030	0.000	4.00	8.426	8.68	362.4	0.0	476.3
140.0		0.00	1.51 24.759	41.84	135.74	1.030	0.000	1.00	1.387	1.43	59.8	0.0	33.8
142.0	Appertunance(s)	0.00	1.51 24.860	42.01	133.45	1.030	0.000	2.00	2.735	2.82	118.3	0.0	66.6
145.0		0.00	1.52 25.009	42.26	129.98	1.030	0.000	3.00	4.004	4.12	174.3	0.0	97.6
150.0	Appertunance(s)	0.00	1.54 25.252	42.67	124.14	1.030	0.000	5.00	6.413	6.61	281.9	0.0	156.2
					Totals:			150.00			15,724.3	0.0	35,838.1

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



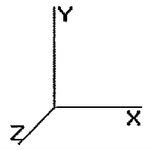
Load Case: No Ice — 80.00 mph Wind with No Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
96.00	Decibel	12	22.229	37.567	0.84	69.37	0.000	0.000	2,230.41	0.00	0.00	192.00
96.00	Flat Low Profile Pla	1	22.229	37.567	1.00	26.10	0.000	0.000	980.50	0.00	0.00	1,500.00
106.0	72" x 12" Panel	3	22.867	38.646	0.75	18.90	0.000	0.000	730.41	0.00	0.00	135.00
118.0	Andrew DB948F85E-M	6	23.579	39.848	0.79	15.49	0.000	0.000	617.08	0.00	0.00	51.00
118.0	Antel RWA-80014	6	23.579	39.848	0.79	24.89	0.000	0.000	991.63	0.00	0.00	85.80
118.0	Round Low Profile Pl	1	23.579	39.848	1.00	21.70	0.000	0.000	864.71	0.00	0.00	1,500.00
121.0	GPS	1	23.749	40.135	1.00	1.00	0.000	0.000	40.14	0.00	0.00	7.00
123.0	Allgon 7184	3	23.860	40.324	0.85	6.83	0.000	0.000	275.57	0.00	0.00	33.60
127.0	Allgon 7184	3	24.079	40.694	0.85	6.83	0.000	0.000	278.10	0.00	0.00	33.60
130.0	Allgon 7184	3	24.241	40.967	0.85	6.83	0.000	0.000	279.97	0.00	0.00	33.60
142.0	RFS APXV18-	3	24.860	42.013	0.80	12.05	0.000	0.000	506.17	0.00	0.00	66.00
150.0	Andrew	6	25.859	43.702	0.00	0.00	0.000	13.000	0.00	0.00	0.00	66.00
150.0	Concealment Canister	1	25.560	43.197	1.00	15.00	0.000	6.500	647.95	0.00	4,211.67	200.00
150.0	Ericsson RRUS 11	6	25.348	42.838	0.67	11.82	0.000	2.000	506.29	0.00	1,012.59	330.00
150.0	Flat Platform w/ Han	1	25.252	42.676	1.00	42.40	0.000	0.000	1,809.47	0.00	0.00	2,000.00
150.0	KMW AM-X-CD-16-65-	6	25.348	42.838	0.78	38.66	0.000	2.000	1,655.98	0.00	3,311.96	291.00
150.0	Powerwave 7770.00	3	25.348	42.838	0.75	13.23	0.000	2.000	566.75	0.00	1,133.49	105.00
150.0	Powerwave LGP21401	6	25.348	42.838	0.67	5.19	0.000	2.000	222.15	0.00	444.30	84.60
150.0	Raycap DC6-48-60-18-	1	25.348	42.838	1.00	1.26	0.000	2.000	53.98	0.00	107.95	20.00
150.0	RFS APX16DWV-	3	25.859	43.702	0.00	0.00	0.000	13.000	0.00	0.00	0.00	118.80
									13,257.25			6,853.00

Pole :	302483	Code: TIA/EIA-222 Rev F	4/20/2012 10:32:22 AM
Location :	Brin - Berlin, CT		Page: 6
Height :	150.0 (ft)		
Base Dia :	51.30 (in)		
Top Dia :	15.00 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.189701 (in/ft)		



Load Case: No Ice — 80.00 mph Wind with No Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Linear Appurtenance Segment Forces

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	F X (lb)	Dead Load (lb)
5.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	16.384	0.00	0.35
5.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	16.384	0.00	5.90
5.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	16.384	48.46	37.90
5.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
5.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	16.384	27.69	12.30
5.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	16.384	0.00	0.75
5.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	16.384	55.38	49.20
5.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
10.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	16.384	0.00	0.35
10.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	16.384	0.00	5.90
10.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	16.384	48.46	37.90
10.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
10.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	16.384	27.69	12.30
10.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	16.384	0.00	0.75
10.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	16.384	55.38	49.20
10.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
15.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	16.384	0.00	0.35
15.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	16.384	0.00	5.90
15.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	16.384	48.46	37.90
15.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
15.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	16.384	27.69	12.30
15.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	16.384	0.00	0.75
15.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	16.384	55.38	49.20
15.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
20.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	16.384	0.00	0.35
20.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	16.384	0.00	5.90
20.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	16.384	48.46	37.90
20.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
20.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	16.384	27.69	12.30
20.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	16.384	0.00	0.75
20.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	16.384	55.38	49.20
20.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
25.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	16.384	0.00	0.35
25.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	16.384	0.00	5.90
25.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	16.384	48.46	37.90
25.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
25.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	16.384	27.69	12.30
25.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	16.384	0.00	0.75
25.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	16.384	55.38	49.20
25.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
30.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	16.384	0.00	0.35
30.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	16.384	0.00	5.90
30.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	16.384	48.46	37.90
30.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
30.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	16.384	27.69	12.30
30.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	16.384	0.00	0.75
30.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	16.384	55.38	49.20
30.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
35.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	16.662	0.00	0.35
35.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	16.662	0.00	5.90
35.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	16.662	49.28	37.90

Pole :	302483			Code: TIA/EIA-222 Rev F			4/20/2012 10:32:22 AM	
Location :	Brin - Berlin, CT						Page: 7	
Height :	150.0 (ft)							
Base Dia :	51.30 (in)							
Top Dia :	15.00 (in)			Base Elev : 0.000 (ft)				
Shape :	12 Sides							
Taper :	0.189701 (in/ft)							

Load Case: No Ice — 80.00 mph Wind with No Ice — 22 Iterations

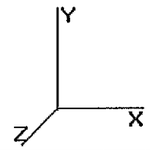
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

35.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.662	28.16	24.60
35.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	16.662	28.16	12.30
35.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	16.662	0.00	0.75
35.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	16.662	56.32	49.20
35.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.662	28.16	24.60
40.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	17.310	0.00	0.35
40.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	17.310	0.00	5.90
40.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	17.310	51.19	37.90
40.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	17.310	29.25	24.60
40.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	17.310	29.25	12.30
40.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	17.310	0.00	0.75
40.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	17.310	58.51	49.20
40.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	17.310	29.25	24.60
45.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	17.902	0.00	0.35
45.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	17.902	0.00	5.90
45.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	17.902	52.95	37.90
45.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	17.902	30.25	24.60
45.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	17.902	30.25	12.30
45.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	17.902	0.00	0.75
45.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	17.902	60.51	49.20
45.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	17.902	30.25	24.60
50.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	18.449	0.00	0.35
50.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	18.449	0.00	5.90
50.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	18.449	54.56	37.90
50.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	18.449	31.18	24.60
50.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	18.449	31.18	12.30
50.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	18.449	0.00	0.75
50.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	18.449	62.36	49.20
50.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	18.449	31.18	24.60
55.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	18.959	0.00	0.35
55.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	18.959	0.00	5.90
55.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	18.959	56.07	37.90
55.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	18.959	32.04	24.60
55.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	18.959	32.04	12.30
55.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	18.959	0.00	0.75
55.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	18.959	64.08	49.20
55.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	18.959	32.04	24.60
60.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	19.436	0.00	0.35
60.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	19.436	0.00	5.90
60.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	19.436	57.48	37.90
60.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	19.436	32.85	24.60
60.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	19.436	32.85	12.30
60.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	19.436	0.00	0.75
60.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	19.436	65.69	49.20
60.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	19.436	32.85	24.60
65.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	19.885	0.00	0.35
65.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	19.885	0.00	5.90
65.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	19.885	58.81	37.90
65.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	19.885	33.61	24.60
65.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	19.885	33.61	12.30
65.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	19.885	0.00	0.75
65.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	19.885	67.21	49.20
65.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	19.885	33.61	24.60
70.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	20.311	0.00	0.35
70.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	20.311	0.00	5.90
70.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	20.311	60.07	37.90
70.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	20.311	34.33	24.60

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: No Ice — 80.00 mph Wind with No Ice — 22 Iterations

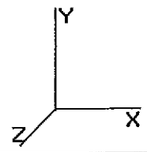
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

70.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	20.311	34.33	12.30
70.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	20.311	0.00	0.75
70.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	20.311	68.65	49.20
70.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	20.311	34.33	24.60
75.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	20.715	0.00	0.35
75.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	20.715	0.00	5.90
75.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	20.715	61.27	37.90
75.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	20.715	35.01	24.60
75.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	20.715	35.01	12.30
75.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	20.715	0.00	0.75
75.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	20.715	70.02	49.20
75.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	20.715	35.01	24.60
80.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	21.101	0.00	0.35
80.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	21.101	0.00	5.90
80.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	21.101	62.41	37.90
80.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	21.101	35.66	24.60
80.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	21.101	35.66	12.30
80.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	21.101	0.00	0.75
80.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	21.101	71.32	49.20
80.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	21.101	35.66	24.60
85.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	21.469	0.00	0.35
85.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	21.469	0.00	5.90
85.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	21.469	63.50	37.90
85.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	21.469	36.28	24.60
85.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	21.469	36.28	12.30
85.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	21.469	0.00	0.75
85.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	21.469	72.57	49.20
85.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	21.469	36.28	24.60
90.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	21.823	0.00	0.35
90.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	21.823	0.00	5.90
90.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	21.823	64.54	37.90
90.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	21.823	36.88	24.60
90.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	21.823	36.88	12.30
90.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	21.823	0.00	0.75
90.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	21.823	73.76	49.20
90.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	21.823	36.88	24.60
95.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	22.163	0.00	0.35
95.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	22.163	0.00	5.90
95.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	22.163	65.55	37.90
95.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	22.163	37.45	24.60
95.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	22.163	37.45	12.30
95.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	22.163	0.00	0.75
95.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	22.163	74.91	49.20
95.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	22.163	37.45	24.60
96.00	(1) 10 mm Cable	Yes	1.00	0.07	0.00	22.229	0.00	0.07
96.00	(2) 19.7 mm Cable	Yes	1.00	1.18	0.00	22.229	0.00	1.18
96.00	(1) 3" Conduit	Yes	1.00	7.58	0.35	22.229	13.15	7.58
96.00	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	22.229	7.51	4.92
96.00	(3) 1 5/8" Coax	Yes	1.00	2.46	0.20	22.229	7.51	2.46
96.00	(1) 1/2" Coax	Yes	1.00	0.15	0.00	22.229	0.00	0.15
96.00	(12) 1 5/8" Coax	Yes	1.00	9.84	0.40	22.229	15.03	9.84
96.00	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	22.229	7.51	4.92
100.0	(1) 10 mm Cable	Yes	4.00	0.07	0.00	22.490	0.00	0.28
100.0	(2) 19.7 mm Cable	Yes	4.00	1.18	0.00	22.490	0.00	4.72
100.0	(1) 3" Conduit	Yes	4.00	7.58	0.35	22.490	53.21	30.32
100.0	(6) 1 5/8" Coax	Yes	4.00	4.92	0.20	22.490	30.41	19.68
100.0	(3) 1 5/8" Coax	Yes	4.00	2.46	0.20	22.490	30.41	9.84

Pole : 302483
Location : Brln - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: No Ice — 80.00 mph Wind with No Ice — 22 Iterations

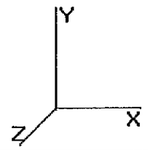
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

100.0	(1) 1/2" Coax	Yes	4.00	0.15	0.00	22.490	0.00	0.60
100.0	(12) 1 5/8" Coax	Yes	4.00	9.84	0.40	22.490	60.81	39.36
105.0	(1) 10 mm Cable	Yes	5.00	0.07	0.00	22.806	0.00	0.35
105.0	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	22.806	0.00	5.90
105.0	(1) 3" Conduit	Yes	5.00	7.58	0.35	22.806	67.45	37.90
105.0	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	22.806	38.54	24.60
105.0	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	22.806	38.54	12.30
105.0	(1) 1/2" Coax	Yes	5.00	0.15	0.00	22.806	0.00	0.75
105.0	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	22.806	77.08	49.20
106.0	(1) 10 mm Cable	Yes	1.00	0.07	0.00	22.867	0.00	0.07
106.0	(2) 19.7 mm Cable	Yes	1.00	1.18	0.00	22.867	0.00	1.18
106.0	(1) 3" Conduit	Yes	1.00	7.58	0.35	22.867	13.53	7.58
106.0	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	22.867	7.73	4.92
106.0	(3) 1 5/8" Coax	Yes	1.00	2.46	0.20	22.867	7.73	2.46
106.0	(1) 1/2" Coax	Yes	1.00	0.15	0.00	22.867	0.00	0.15
106.0	(12) 1 5/8" Coax	Yes	1.00	9.84	0.40	22.867	15.46	9.84
110.0	(1) 10 mm Cable	Yes	4.00	0.07	0.00	23.111	0.00	0.28
110.0	(2) 19.7 mm Cable	Yes	4.00	1.18	0.00	23.111	0.00	4.72
110.0	(1) 3" Conduit	Yes	4.00	7.58	0.35	23.111	54.68	30.32
110.0	(6) 1 5/8" Coax	Yes	4.00	4.92	0.20	23.111	31.25	19.68
110.0	(3) 1 5/8" Coax	Yes	4.00	2.46	0.20	23.111	31.25	9.84
110.0	(1) 1/2" Coax	Yes	4.00	0.15	0.00	23.111	0.00	0.60
110.0	(12) 1 5/8" Coax	Yes	4.00	9.84	0.40	23.111	62.49	39.36
115.0	(1) 10 mm Cable	Yes	5.00	0.07	0.00	23.406	0.00	0.35
115.0	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	23.406	0.00	5.90
115.0	(1) 3" Conduit	Yes	5.00	7.58	0.35	23.406	69.22	37.90
115.0	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	23.406	39.56	24.60
115.0	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	23.406	39.56	12.30
115.0	(1) 1/2" Coax	Yes	5.00	0.15	0.00	23.406	0.00	0.75
115.0	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	23.406	79.11	49.20
118.0	(1) 10 mm Cable	Yes	3.00	0.07	0.00	23.579	0.00	0.21
118.0	(2) 19.7 mm Cable	Yes	3.00	1.18	0.00	23.579	0.00	3.54
118.0	(1) 3" Conduit	Yes	3.00	7.58	0.35	23.579	41.84	22.74
118.0	(6) 1 5/8" Coax	Yes	3.00	4.92	0.20	23.579	23.91	14.76
118.0	(3) 1 5/8" Coax	Yes	3.00	2.46	0.20	23.579	23.91	7.38
118.0	(1) 1/2" Coax	Yes	3.00	0.15	0.00	23.579	0.00	0.45
118.0	(12) 1 5/8" Coax	Yes	3.00	9.84	0.40	23.579	47.82	29.52
120.0	(1) 10 mm Cable	Yes	2.00	0.07	0.00	23.692	0.00	0.14
120.0	(2) 19.7 mm Cable	Yes	2.00	1.18	0.00	23.692	0.00	2.36
120.0	(1) 3" Conduit	Yes	2.00	7.58	0.35	23.692	28.03	15.16
120.0	(6) 1 5/8" Coax	Yes	2.00	4.92	0.20	23.692	16.02	9.84
120.0	(3) 1 5/8" Coax	Yes	2.00	2.46	0.20	23.692	16.02	4.92
120.0	(1) 1/2" Coax	Yes	2.00	0.15	0.00	23.692	0.00	0.30
121.0	(1) 10 mm Cable	Yes	1.00	0.07	0.00	23.749	0.00	0.07
121.0	(2) 19.7 mm Cable	Yes	1.00	1.18	0.00	23.749	0.00	1.18
121.0	(1) 3" Conduit	Yes	1.00	7.58	0.35	23.749	14.05	7.58
121.0	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	23.749	8.03	4.92
121.0	(3) 1 5/8" Coax	Yes	1.00	2.46	0.20	23.749	8.03	2.46
121.0	(1) 1/2" Coax	Yes	1.00	0.15	0.00	23.749	0.00	0.15
123.0	(1) 10 mm Cable	Yes	2.00	0.07	0.00	23.860	0.00	0.14
123.0	(2) 19.7 mm Cable	Yes	2.00	1.18	0.00	23.860	0.00	2.36
123.0	(1) 3" Conduit	Yes	2.00	7.58	0.35	23.860	28.23	15.16
123.0	(6) 1 5/8" Coax	Yes	2.00	4.92	0.20	23.860	16.13	9.84
123.0	(3) 1 5/8" Coax	Yes	2.00	2.46	0.20	23.860	16.13	4.92
125.0	(1) 10 mm Cable	Yes	2.00	0.07	0.00	23.970	0.00	0.14
125.0	(2) 19.7 mm Cable	Yes	2.00	1.18	0.00	23.970	0.00	2.36
125.0	(1) 3" Conduit	Yes	2.00	7.58	0.35	23.970	28.36	15.16

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

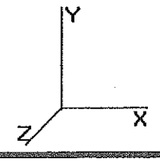


Load Case: No Ice — 80.00 mph Wind with No Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

125.0	(6) 1 5/8" Coax	Yes	2.00	4.92	0.20	23.970	16.20	9.84
127.0	(1) 10 mm Cable	Yes	2.00	0.07	0.00	24.079	0.00	0.14
127.0	(2) 19.7 mm Cable	Yes	2.00	1.18	0.00	24.079	0.00	2.36
127.0	(1) 3" Conduit	Yes	2.00	7.58	0.35	24.079	28.49	15.16
127.0	(6) 1 5/8" Coax	Yes	2.00	4.92	0.20	24.079	16.28	9.84
130.0	(1) 10 mm Cable	Yes	3.00	0.07	0.00	24.241	0.00	0.21
130.0	(2) 19.7 mm Cable	Yes	3.00	1.18	0.00	24.241	0.00	3.54
130.0	(1) 3" Conduit	Yes	3.00	7.58	0.35	24.241	43.01	22.74
130.0	(6) 1 5/8" Coax	Yes	3.00	4.92	0.20	24.241	24.58	14.76
135.0	(1) 10 mm Cable	Yes	5.00	0.07	0.00	24.503	0.00	0.35
135.0	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	24.503	0.00	5.90
135.0	(1) 3" Conduit	Yes	5.00	7.58	0.35	24.503	72.47	37.90
135.0	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	24.503	41.41	24.60
139.0	(1) 10 mm Cable	Yes	4.00	0.07	0.00	24.709	0.00	0.28
139.0	(2) 19.7 mm Cable	Yes	4.00	1.18	0.00	24.709	0.00	4.72
139.0	(1) 3" Conduit	Yes	4.00	7.58	0.35	24.709	58.46	30.32
139.0	(6) 1 5/8" Coax	Yes	4.00	4.92	0.20	24.709	33.41	19.68
140.0	(1) 10 mm Cable	Yes	1.00	0.07	0.00	24.759	0.00	0.07
140.0	(2) 19.7 mm Cable	Yes	1.00	1.18	0.00	24.759	0.00	1.18
140.0	(1) 3" Conduit	Yes	1.00	7.58	0.35	24.759	14.65	7.58
140.0	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	24.759	8.37	4.92
142.0	(1) 10 mm Cable	Yes	2.00	0.07	0.00	24.860	0.00	0.14
142.0	(2) 19.7 mm Cable	Yes	2.00	1.18	0.00	24.860	0.00	2.36
142.0	(1) 3" Conduit	Yes	2.00	7.58	0.35	24.860	29.41	15.16
142.0	(6) 1 5/8" Coax	Yes	2.00	4.92	0.20	24.860	16.81	9.84
145.0	(1) 10 mm Cable	Yes	3.00	0.07	0.00	25.009	0.00	0.21
145.0	(2) 19.7 mm Cable	Yes	3.00	1.18	0.00	25.009	0.00	3.54
145.0	(1) 3" Conduit	Yes	3.00	7.58	0.35	25.009	44.38	22.74
150.0	(1) 10 mm Cable	Yes	5.00	0.07	0.00	25.252	0.00	0.35
150.0	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	25.252	0.00	5.90
150.0	(1) 3" Conduit	Yes	5.00	7.58	0.35	25.252	74.68	37.90
						Totals:	5,781.63	3,977.31

Pole :	302483	Code: TIA/EIA-222 Rev F	4/20/2012 10:32:23 AM
Location :	Brin - Berlin, CT		Page: 11
Height :	150.0 (ft)		
Base Dia :	51.30 (in)		
Top Dia :	15.00 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.189701 (in/ft)		



Load Case: No Ice — 80.00 mph Wind with No Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

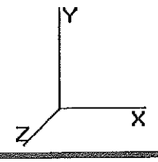
Applied Segment Forces Summary

Seg Elev (ft)		Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
5.00		790.87	2,378.04	0.00	0.00
10.00		779.60	2,339.06	0.00	0.00
15.00		768.33	2,300.09	0.00	0.00
20.00		757.06	2,261.12	0.00	0.00
25.00		745.79	2,222.15	0.00	0.00
30.00		734.51	2,183.17	0.00	0.00
35.00		735.50	2,144.20	0.00	0.00
40.00		752.20	2,105.23	0.00	0.00
45.00		765.21	1,778.48	0.00	0.00
50.00		775.91	1,746.01	0.00	0.00
55.00		784.28	1,713.53	0.00	0.00
60.00		790.66	1,681.05	0.00	0.00
65.00		795.27	1,648.58	0.00	0.00
70.00		798.31	1,616.10	0.00	0.00
75.00		799.95	1,583.62	0.00	0.00
80.00		800.33	1,551.14	0.00	0.00
85.00		799.54	1,282.46	0.00	0.00
90.00		797.69	1,256.48	0.00	0.00
95.00		794.87	1,230.50	0.00	0.00
96.00		3,368.53	1,934.98	0.00	0.00
100.0		601.26	912.34	0.00	0.00
105.0		748.00	1,117.04	0.00	0.00
106.0		878.53	355.29	0.00	0.00
110.0		592.42	857.65	0.00	0.00
115.0		735.50	1,048.67	0.00	0.00
118.0		2,910.19	2,253.53	0.00	0.00
120.0		257.29	386.28	0.00	0.00
121.0		168.11	179.77	0.00	0.00
123.0		530.74	376.11	0.00	0.00
125.0		237.51	333.95	0.00	0.00
127.0		514.04	363.91	0.00	0.00
130.0		631.24	514.87	0.00	0.00
135.0		578.31	771.62	0.00	0.00
139.0		454.29	600.93	0.00	0.00
140.0		82.78	64.95	0.00	0.00
142.0		670.72	194.94	0.00	0.00
145.0		218.69	176.25	0.00	0.00
150.0		5,819.13	3,502.72	0.00	10,221.96
	Totals:	34,763.16	50,966.80	0.00	10,221.96

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: No Ice — 80.00 mph Wind with No Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

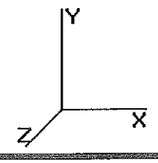
Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-34.815	-50.931	0.000	0.000	0.000	-3,318.944	0.000	0.000	0.000	0.000
5.00	-34.120	-48.485	0.000	0.000	0.000	-3,144.870	-0.062	0.000	0.062	-0.115
10.00	-33.426	-46.081	0.000	0.000	0.000	-2,974.273	-0.245	0.000	0.245	-0.231
15.00	-32.735	-43.718	0.000	0.000	0.000	-2,807.143	-0.550	0.000	0.550	-0.347
20.00	-32.046	-41.398	0.000	0.000	0.000	-2,643.471	-0.976	0.000	0.976	-0.463
25.00	-31.358	-39.120	0.000	0.000	0.000	-2,483.245	-1.523	0.000	1.523	-0.579
30.00	-30.674	-36.883	0.000	0.000	0.000	-2,326.455	-2.191	0.000	2.191	-0.694
35.00	-29.980	-34.689	0.000	0.000	0.000	-2,173.087	-2.980	0.000	2.980	-0.809
40.00	-29.261	-32.537	0.000	0.000	0.000	-2,023.189	-3.889	0.000	3.889	-0.923
45.00	-28.532	-30.710	0.000	0.000	0.000	-1,876.888	-4.917	0.000	4.917	-1.037
50.00	-27.789	-28.915	0.000	0.000	0.000	-1,734.232	-6.075	0.000	6.075	-1.171
55.00	-27.031	-27.157	0.000	0.000	0.000	-1,595.286	-7.373	0.000	7.373	-1.303
60.00	-26.257	-25.436	0.000	0.000	0.000	-1,460.135	-8.808	0.000	8.808	-1.433
65.00	-25.471	-23.753	0.000	0.000	0.000	-1,328.850	-10.378	0.000	10.378	-1.561
70.00	-24.675	-22.108	0.000	0.000	0.000	-1,201.495	-12.080	0.000	12.080	-1.685
75.00	-23.870	-20.500	0.000	0.000	0.000	-1,078.121	-13.910	0.000	13.910	-1.806
80.00	-23.057	-18.929	0.000	0.000	0.000	-958.773	-15.865	0.000	15.865	-1.923
85.00	-22.251	-17.628	0.000	0.000	0.000	-843.488	-17.940	0.000	17.940	-2.035
90.00	-21.444	-16.354	0.000	0.000	0.000	-732.232	-20.142	0.000	20.142	-2.166
95.00	-20.621	-15.129	0.000	0.000	0.000	-625.011	-22.478	0.000	22.478	-2.289
96.00	-17.191	-13.314	0.000	0.000	0.000	-604.390	-22.960	0.000	22.960	-2.313
100.0	-16.575	-12.398	0.000	0.000	0.000	-535.625	-24.937	0.000	24.937	-2.405
105.0	-15.792	-11.297	0.000	0.000	0.000	-452.753	-27.513	0.000	27.513	-2.511
106.0	-14.908	-10.968	0.000	0.000	0.000	-436.961	-28.042	0.000	28.042	-2.532
110.0	-14.293	-10.117	0.000	0.000	0.000	-377.330	-30.197	0.000	30.197	-2.610
115.0	-13.520	-9.087	0.000	0.000	0.000	-305.868	-32.978	0.000	32.978	-2.699
118.0	-10.511	-6.968	0.000	0.000	0.000	-265.308	-34.690	0.000	34.690	-2.748
120.0	-10.238	-6.590	0.000	0.000	0.000	-244.287	-35.847	0.000	35.847	-2.778
121.0	-10.064	-6.414	0.000	0.000	0.000	-234.049	-36.431	0.000	36.431	-2.794
123.0	-9.519	-6.059	0.000	0.000	0.000	-213.921	-37.608	0.000	37.608	-2.826
125.0	-9.268	-5.733	0.000	0.000	0.000	-194.884	-38.798	0.000	38.798	-2.857
127.0	-8.740	-5.390	0.000	0.000	0.000	-176.348	-40.001	0.000	40.001	-2.887
130.0	-8.087	-4.901	0.000	0.000	0.000	-150.129	-41.828	0.000	41.828	-2.927
135.0	-7.473	-4.154	0.000	0.000	0.000	-109.692	-44.925	0.000	44.925	-2.985
139.0	-6.990	-3.575	0.000	0.000	0.000	-79.799	-47.441	0.000	47.441	-3.022
140.0	-6.908	-3.507	0.000	0.000	0.000	-72.809	-48.075	0.000	48.075	-3.030
142.0	-6.235	-3.335	0.000	0.000	0.000	-58.994	-49.369	0.000	49.369	-3.141
145.0	-6.014	-3.157	0.000	0.000	0.000	-40.291	-51.387	0.000	51.387	-3.274
150.0	-5.819	0.000	0.000	0.000	0.000	-10.222	-54.893	0.000	54.893	-3.397

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: No Ice — 80.00 mph Wind with No Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

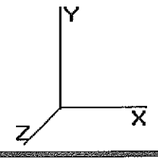
Calculated Stresses

Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)		Stress Ratio
0.00	0.42	0.58	0.00	0.00	0.00	26.56	27.00	33.4	0.0	0.807
5.00	0.40	0.58	0.00	0.00	0.00	26.15	26.57	33.4	0.0	0.795
10.00	0.39	0.58	0.00	0.00	0.00	25.71	26.12	33.4	0.0	0.781
15.00	0.38	0.58	0.00	0.00	0.00	25.25	25.65	33.4	0.0	0.767
20.00	0.37	0.58	0.00	0.00	0.00	24.76	25.14	33.4	0.0	0.752
25.00	0.35	0.58	0.00	0.00	0.00	24.24	24.61	33.4	0.0	0.736
30.00	0.34	0.58	0.00	0.00	0.00	23.69	24.05	33.4	0.0	0.719
35.00	0.33	0.57	0.00	0.00	0.00	23.10	23.45	33.4	0.0	0.701
40.00	0.31	0.57	0.00	0.00	0.00	22.47	22.81	33.4	0.0	0.682
40.00	0.38	0.69	0.00	0.00	0.00	26.78	27.18	31.4	0.0	0.867
45.00	0.36	0.68	0.00	0.00	0.00	25.98	26.37	31.4	0.0	0.841
50.00	0.35	0.68	0.00	0.00	0.00	25.13	25.51	31.4	0.0	0.813
55.00	0.34	0.68	0.00	0.00	0.00	24.23	24.59	31.4	0.0	0.784
60.00	0.32	0.68	0.00	0.00	0.00	23.27	23.62	31.4	0.0	0.753
65.00	0.31	0.67	0.00	0.00	0.00	22.25	22.59	31.4	0.0	0.720
70.00	0.29	0.67	0.00	0.00	0.00	21.16	21.48	31.4	0.0	0.685
75.00	0.28	0.66	0.00	0.00	0.00	20.00	20.31	31.4	0.0	0.648
80.00	0.27	0.66	0.00	0.00	0.00	18.76	19.06	31.4	0.0	0.608
80.00	0.33	0.82	0.00	0.00	0.00	23.20	23.57	28.7	0.0	0.821
85.00	0.32	0.81	0.00	0.00	0.00	21.55	21.91	28.7	0.0	0.763
90.00	0.30	0.80	0.00	0.00	0.00	19.78	20.13	28.7	0.0	0.701
95.00	0.29	0.79	0.00	0.00	0.00	17.89	18.23	28.7	0.0	0.635
96.00	0.25	0.67	0.00	0.00	0.00	17.50	17.79	28.7	0.0	0.620
100.00	0.24	0.66	0.00	0.00	0.00	16.26	16.55	28.7	0.0	0.576
105.00	0.23	0.65	0.00	0.00	0.00	14.61	14.88	28.7	0.0	0.518
106.00	0.22	0.61	0.00	0.00	0.00	14.28	14.54	28.7	0.0	0.506
110.00	0.21	0.60	0.00	0.00	0.00	12.97	13.22	28.7	0.0	0.460
115.00	0.19	0.59	0.00	0.00	0.00	11.22	11.46	28.7	0.0	0.399
118.00	0.15	0.47	0.00	0.00	0.00	10.13	10.31	28.7	0.0	0.359
120.00	0.15	0.46	0.00	0.00	0.00	9.58	9.76	28.7	0.0	0.340
120.00	0.17	0.53	0.00	0.00	0.00	10.88	11.08	38.1	0.0	0.291
121.00	0.16	0.52	0.00	0.00	0.00	10.57	10.77	38.1	0.0	0.283
123.00	0.16	0.50	0.00	0.00	0.00	9.93	10.12	38.1	0.0	0.266
125.00	0.15	0.49	0.00	0.00	0.00	9.30	9.49	38.1	0.0	0.249
127.00	0.14	0.47	0.00	0.00	0.00	8.66	8.84	38.1	0.0	0.232
130.00	0.13	0.45	0.00	0.00	0.00	7.70	7.87	38.1	0.0	0.207
135.00	0.12	0.43	0.00	0.00	0.00	6.06	6.22	38.1	0.0	0.163
139.00	0.10	0.41	0.00	0.00	0.00	4.69	4.85	38.1	0.0	0.127
139.00	0.36	1.42	0.00	0.00	0.00	23.80	24.28	52.0	0.0	0.467
140.00	0.35	1.42	0.00	0.00	0.00	22.13	22.62	52.0	0.0	0.435
142.00	0.34	1.31	0.00	0.00	0.00	18.64	19.12	52.0	0.0	0.368
145.00	0.34	1.30	0.00	0.00	0.00	13.52	14.03	52.0	0.0	0.270
150.00	0.00	1.32	0.00	0.00	0.00	3.80	4.44	52.0	0.0	0.085

Pole : 302483
Location : Brln - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



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Load Case: Ice — 69.28 mph Wind with Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

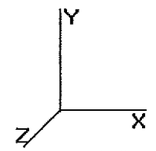
Shaft Segment Forces

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		0.00	1.00 12.287	20.76	296.17	1.030	0.500	0.00	0.000	0.00	0.0	0.0	0.0
5.00		0.00	1.00 12.287	20.76	290.69	1.030	0.500	5.00	21.594	22.24	461.9	159.2	2,216.7
10.00		0.00	1.00 12.287	20.76	285.21	1.030	0.500	5.00	21.199	21.83	453.4	156.2	2,174.8
15.00		0.00	1.00 12.287	20.76	279.74	1.030	0.500	5.00	20.804	21.43	445.0	153.3	2,132.8
20.00		0.00	1.00 12.287	20.76	274.26	1.030	0.500	5.00	20.408	21.02	436.5	150.3	2,090.9
25.00		0.00	1.00 12.287	20.76	268.79	1.030	0.500	5.00	20.013	20.61	428.1	147.3	2,049.0
30.00		0.00	1.00 12.287	20.76	263.31	1.030	0.500	5.00	19.618	20.21	419.6	144.3	2,007.0
35.00		0.00	1.01 12.496	21.11	260.01	1.030	0.500	5.00	19.223	19.80	418.1	141.4	1,965.1
40.00	Top - Section 1	0.00	1.05 12.982	21.93	259.39	1.030	0.500	5.00	18.828	19.39	425.4	138.4	1,923.1
45.00		0.00	1.09 13.426	22.69	257.88	1.030	0.500	5.00	18.419	18.97	430.5	135.3	1,593.3
50.00		0.00	1.12 13.836	23.38	255.98	1.030	0.500	5.00	18.024	18.56	434.1	132.4	1,557.9
55.00		0.00	1.15 14.218	24.02	253.59	1.030	0.500	5.00	17.629	18.16	436.3	129.4	1,522.4
60.00		0.00	1.18 14.576	24.63	250.80	1.030	0.500	5.00	17.233	17.75	437.3	126.4	1,487.0
65.00		0.00	1.21 14.913	25.20	247.65	1.030	0.500	5.00	16.838	17.34	437.1	123.5	1,451.5
70.00		0.00	1.24 15.232	25.74	244.19	1.030	0.500	5.00	16.443	16.94	436.0	120.5	1,416.1
75.00		0.00	1.26 15.536	26.25	240.45	1.030	0.500	5.00	16.048	16.53	434.0	117.5	1,380.6
80.00	Top - Section 2	0.00	1.28 15.825	26.74	236.47	1.030	0.500	5.00	15.653	16.12	431.2	114.6	1,345.2
85.00		0.00	1.31 16.101	27.21	232.26	1.030	0.500	5.00	15.257	15.72	427.6	111.6	1,073.5
90.00		0.00	1.33 16.366	27.65	227.84	1.030	0.500	5.00	14.862	15.31	423.4	108.6	1,044.6
95.00		0.00	1.35 16.621	28.09	223.24	1.030	0.500	5.00	14.467	14.90	418.6	105.6	1,015.6
96.00	Appertunance(s)	0.00	1.35 16.671	28.17	222.30	1.030	0.500	1.00	2.846	2.93	82.6	21.0	199.9
100.0		0.00	1.37 16.866	28.50	218.46	1.030	0.500	4.00	11.226	11.56	329.6	82.1	787.3
105.0		0.00	1.39 17.103	28.90	213.53	1.030	0.500	5.00	13.677	14.09	407.2	99.7	957.7
106.0	Appertunance(s)	0.00	1.39 17.150	28.98	212.53	1.030	0.500	1.00	2.688	2.77	80.2	19.8	188.3
110.0		0.00	1.41 17.332	29.29	208.45	1.030	0.500	4.00	10.594	10.91	319.6	77.4	741.0
115.0		0.00	1.42 17.554	29.66	203.23	1.030	0.500	5.00	12.886	13.27	393.7	93.8	899.8
118.0	Appertunance(s)	0.00	1.43 17.683	29.88	200.04	1.030	0.500	3.00	7.542	7.77	232.2	55.2	526.4
120.0	Top - Section 3	0.00	1.44 17.768	30.02	197.89	1.030	0.500	2.00	4.949	5.10	153.1	36.3	345.2
121.0	Appertunance(s)	0.00	1.45 17.811	30.10	196.80	1.030	0.500	1.00	2.451	2.52	76.0	18.0	152.1
123.0	Appertunance(s)	0.00	1.45 17.894	30.24	194.62	1.030	0.500	2.00	4.854	5.00	151.2	35.6	301.1
125.0		0.00	1.46 17.977	30.38	192.42	1.030	0.500	2.00	4.791	4.93	149.9	35.1	296.9
127.0	Appertunance(s)	0.00	1.47 18.058	30.51	190.20	1.030	0.500	2.00	4.728	4.87	148.6	34.7	292.8
130.0	Appertunance(s)	0.00	1.48 18.179	30.72	186.84	1.030	0.500	3.00	6.973	7.18	220.7	50.9	431.4
135.0		0.00	1.49 18.376	31.05	181.16	1.030	0.500	5.00	11.305	11.64	361.6	81.9	697.8
139.0	Top - Section 4	0.00	1.50 18.530	31.31	176.53	1.030	0.500	4.00	8.760	9.02	282.6	63.6	539.9
140.0		0.00	1.51 18.568	31.38	117.55	1.030	0.500	1.00	1.470	1.51	47.5	10.7	44.5
142.0	Appertunance(s)	0.00	1.51 18.644	31.50	115.56	1.030	0.500	2.00	2.901	2.99	94.2	21.0	87.6
145.0		0.00	1.52 18.755	31.69	112.56	1.030	0.500	3.00	4.254	4.38	138.9	30.6	128.1
150.0	Appertunance(s)	0.00	1.54 18.938	32.00	107.51	1.030	0.500	5.00	6.830	7.03	225.1	48.5	204.7
					Totals:			150.00			12,128.3	3,431.8	39,269.9

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



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Load Case: Ice — 69.28 mph Wind with Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

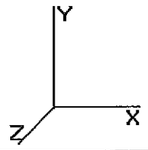
Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
96.00	Decibel	12	16.671	28.174	0.85	66.30	0.000	0.000	1,867.92	0.00	0.00	660.00
96.00	Flat Low Profile Pla	1	16.671	28.174	1.00	31.60	0.000	0.000	890.29	0.00	0.00	1,700.00
106.0	72" x 12" Panel	3	17.150	28.983	0.75	20.77	0.000	0.000	601.90	0.00	0.00	276.84
118.0	Andrew DB948F85E-M	6	17.683	29.885	0.81	18.52	0.000	0.000	553.51	0.00	0.00	165.34
118.0	Antel RWA-80014	6	17.683	29.885	0.80	27.55	0.000	0.000	823.38	0.00	0.00	276.00
118.0	Round Low Profile Pl	1	17.683	29.885	1.00	27.20	0.000	0.000	812.86	0.00	0.00	1,700.00
121.0	GPS	1	17.811	30.100	1.00	1.30	0.000	0.000	39.13	0.00	0.00	15.00
123.0	Allgon 7184	3	17.894	30.241	0.87	8.56	0.000	0.000	258.88	0.00	0.00	81.29
127.0	Allgon 7184	3	18.058	30.519	0.87	8.56	0.000	0.000	261.26	0.00	0.00	81.29
130.0	Allgon 7184	3	18.179	30.723	0.87	8.56	0.000	0.000	263.01	0.00	0.00	81.29
142.0	RFS APXV18-	3	18.644	31.508	0.82	14.02	0.000	0.000	441.81	0.00	0.00	144.39
150.0	Andrew	6	19.393	32.774	0.00	0.00	0.000	13.000	0.00	0.00	0.00	87.12
150.0	Concealment Canister	1	19.169	32.396	1.00	20.00	0.000	6.500	647.91	0.00	4,211.42	300.00
150.0	Ericsson RRUS 11	6	19.010	32.127	0.67	13.23	0.000	2.000	424.90	0.00	849.80	445.80
150.0	Flat Platform w/ Han	1	18.938	32.005	1.00	48.40	0.000	0.000	1,549.05	0.00	0.00	2,450.00
150.0	KMW AM-X-CD-16-65-	6	19.010	32.127	0.78	42.49	0.000	2.000	1,365.20	0.00	2,730.40	570.00
150.0	Powerwave 7770.00	3	19.010	32.127	0.76	14.89	0.000	2.000	478.31	0.00	956.63	203.24
150.0	Powerwave LGP21401	6	19.010	32.127	0.67	6.15	0.000	2.000	197.60	0.00	395.20	127.56
150.0	Raycap DC6-48-60-18-	1	19.010	32.127	1.00	1.46	0.000	2.000	46.90	0.00	93.81	35.10
150.0	RFS APX16DWV-	3	19.393	32.774	0.00	0.00	0.000	13.000	0.00	0.00	0.00	208.14
									11,523.82			9,608.39

Pole : 302483
Location : Brln - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Ice — 69.28 mph Wind with Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Linear Appurtenance Segment Forces

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	FX (lb)	Dead Load (lb)
5.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
5.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
5.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	12.287	41.53	44.00
5.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
5.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	12.287	25.96	23.65
5.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	12.287	0.00	2.50
5.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	12.287	51.91	94.65
5.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
10.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
10.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
10.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	12.287	41.53	44.00
10.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
10.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	12.287	25.96	23.65
10.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	12.287	0.00	2.50
10.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	12.287	51.91	94.65
10.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
15.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
15.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
15.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	12.287	41.53	44.00
15.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
15.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	12.287	25.96	23.65
15.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	12.287	0.00	2.50
15.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	12.287	51.91	94.65
15.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
20.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
20.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
20.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	12.287	41.53	44.00
20.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
20.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	12.287	25.96	23.65
20.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	12.287	0.00	2.50
20.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	12.287	51.91	94.65
20.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
25.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
25.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
25.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	12.287	41.53	44.00
25.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
25.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	12.287	25.96	23.65
25.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	12.287	0.00	2.50
25.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	12.287	51.91	94.65
25.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
30.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
30.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
30.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	12.287	41.53	44.00
30.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
30.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	12.287	25.96	23.65
30.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	12.287	0.00	2.50
30.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	12.287	51.91	94.65
30.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
35.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	12.496	0.00	0.00
35.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	12.496	0.00	0.00
35.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	12.496	42.24	44.00

Pole :	302483			Code: TIA/EIA-222 Rev F			4/20/2012 10:32:23 AM	
Location :	Brln - Berlin, CT						Page: 17	
Height :	150.0 (ft)							
Base Dia :	51.30 (in)							
Top Dia :	15.00 (in)			Base Elev : 0.000 (ft)				
Shape :	12 Sides							
Taper :	0.189701 (in/ft)							

Load Case: Ice — 69.28 mph Wind with Ice — 22 Iterations

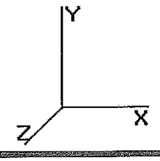
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

35.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.496	26.40	47.30
35.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	12.496	26.40	23.65
35.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	12.496	0.00	2.50
35.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	12.496	52.79	94.65
35.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.496	26.40	47.30
40.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	12.982	0.00	0.00
40.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	12.982	0.00	0.00
40.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	12.982	43.88	44.00
40.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.982	27.42	47.30
40.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	12.982	27.42	23.65
40.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	12.982	0.00	2.50
40.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	12.982	54.85	94.65
40.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.982	27.42	47.30
45.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	13.426	0.00	0.00
45.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	13.426	0.00	0.00
45.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	13.426	45.38	44.00
45.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	13.426	28.36	47.30
45.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	13.426	28.36	23.65
45.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	13.426	0.00	2.50
45.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	13.426	56.72	94.65
45.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	13.426	28.36	47.30
50.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	13.836	0.00	0.00
50.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	13.836	0.00	0.00
50.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	13.836	46.77	44.00
50.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	13.836	29.23	47.30
50.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	13.836	29.23	23.65
50.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	13.836	0.00	2.50
50.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	13.836	58.46	94.65
50.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	13.836	29.23	47.30
55.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	14.218	0.00	0.00
55.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	14.218	0.00	0.00
55.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	14.218	48.06	44.00
55.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	14.218	30.04	47.30
55.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	14.218	30.04	23.65
55.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	14.218	0.00	2.50
55.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	14.218	60.07	94.65
55.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	14.218	30.04	47.30
60.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	14.576	0.00	0.00
60.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	14.576	0.00	0.00
60.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	14.576	49.27	44.00
60.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	14.576	30.79	47.30
60.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	14.576	30.79	23.65
60.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	14.576	0.00	2.50
60.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	14.576	61.58	94.65
60.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	14.576	30.79	47.30
65.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	14.913	0.00	0.00
65.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	14.913	0.00	0.00
65.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	14.913	50.41	44.00
65.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	14.913	31.50	47.30
65.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	14.913	31.50	23.65
65.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	14.913	0.00	2.50
65.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	14.913	63.01	94.65
65.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	14.913	31.50	47.30
70.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	15.232	0.00	0.00
70.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	15.232	0.00	0.00
70.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	15.232	51.49	44.00
70.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	15.232	32.18	47.30

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Ice — 69.28 mph Wind with Ice — 22 Iterations

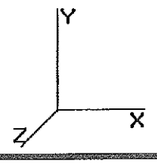
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

70.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	15.232	32.18	23.65
70.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	15.232	0.00	2.50
70.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	15.232	64.36	94.65
70.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	15.232	32.18	47.30
75.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	15.536	0.00	0.00
75.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	15.536	0.00	0.00
75.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	15.536	52.51	44.00
75.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	15.536	32.82	47.30
75.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	15.536	32.82	23.65
75.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	15.536	0.00	2.50
75.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	15.536	65.64	94.65
75.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	15.536	32.82	47.30
80.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	15.825	0.00	0.00
80.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	15.825	0.00	0.00
80.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	15.825	53.49	44.00
80.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	15.825	33.43	47.30
80.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	15.825	33.43	23.65
80.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	15.825	0.00	2.50
80.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	15.825	66.86	94.65
80.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	15.825	33.43	47.30
85.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	16.101	0.00	0.00
85.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	16.101	0.00	0.00
85.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	16.101	54.42	44.00
85.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	16.101	34.01	47.30
85.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	16.101	34.01	23.65
85.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	16.101	0.00	2.50
85.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	16.101	68.03	94.65
85.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	16.101	34.01	47.30
90.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	16.366	0.00	0.00
90.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	16.366	0.00	0.00
90.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	16.366	55.32	44.00
90.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	16.366	34.57	47.30
90.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	16.366	34.57	23.65
90.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	16.366	0.00	2.50
90.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	16.366	69.15	94.65
90.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	16.366	34.57	47.30
95.00	(1) 10 mm Cable	Yes	5.00	0.00	0.00	16.621	0.00	0.00
95.00	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	16.621	0.00	0.00
95.00	(1) 3" Conduit	Yes	5.00	8.80	0.40	16.621	56.18	44.00
95.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	16.621	35.11	47.30
95.00	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	16.621	35.11	23.65
95.00	(1) 1/2" Coax	Yes	5.00	0.50	0.00	16.621	0.00	2.50
95.00	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	16.621	70.22	94.65
95.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	16.621	35.11	47.30
96.00	(1) 10 mm Cable	Yes	1.00	0.00	0.00	16.671	0.00	0.00
96.00	(2) 19.7 mm Cable	Yes	1.00	0.00	0.00	16.671	0.00	0.00
96.00	(1) 3" Conduit	Yes	1.00	8.80	0.40	16.671	11.27	8.80
96.00	(6) 1 5/8" Coax	Yes	1.00	9.46	0.25	16.671	7.04	9.46
96.00	(3) 1 5/8" Coax	Yes	1.00	4.73	0.25	16.671	7.04	4.73
96.00	(1) 1/2" Coax	Yes	1.00	0.50	0.00	16.671	0.00	0.50
96.00	(12) 1 5/8" Coax	Yes	1.00	18.93	0.50	16.671	14.09	18.93
96.00	(6) 1 5/8" Coax	Yes	1.00	9.46	0.25	16.671	7.04	9.46
100.0	(1) 10 mm Cable	Yes	4.00	0.00	0.00	16.866	0.00	0.00
100.0	(2) 19.7 mm Cable	Yes	4.00	0.00	0.00	16.866	0.00	0.00
100.0	(1) 3" Conduit	Yes	4.00	8.80	0.40	16.866	45.61	35.20
100.0	(6) 1 5/8" Coax	Yes	4.00	9.46	0.25	16.866	28.50	37.84
100.0	(3) 1 5/8" Coax	Yes	4.00	4.73	0.25	16.866	28.50	18.92

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



4/20/2012 10:32:23 AM

Load Case: Ice — 69.28 mph Wind with Ice — 22 Iterations

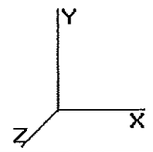
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

100.0	(1) 1/2" Coax	Yes	4.00	0.50	0.00	16.866	0.00	2.00
100.0	(12) 1 5/8" Coax	Yes	4.00	18.93	0.50	16.866	57.01	75.72
105.0	(1) 10 mm Cable	Yes	5.00	0.00	0.00	17.103	0.00	0.00
105.0	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	17.103	0.00	0.00
105.0	(1) 3" Conduit	Yes	5.00	8.80	0.40	17.103	57.81	44.00
105.0	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	17.103	36.13	47.30
105.0	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	17.103	36.13	23.65
105.0	(1) 1/2" Coax	Yes	5.00	0.50	0.00	17.103	0.00	2.50
105.0	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	17.103	72.26	94.65
106.0	(1) 10 mm Cable	Yes	1.00	0.00	0.00	17.150	0.00	0.00
106.0	(2) 19.7 mm Cable	Yes	1.00	0.00	0.00	17.150	0.00	0.00
106.0	(1) 3" Conduit	Yes	1.00	8.80	0.40	17.150	11.59	8.80
106.0	(6) 1 5/8" Coax	Yes	1.00	9.46	0.25	17.150	7.25	9.46
106.0	(3) 1 5/8" Coax	Yes	1.00	4.73	0.25	17.150	7.25	4.73
106.0	(1) 1/2" Coax	Yes	1.00	0.50	0.00	17.150	0.00	0.50
106.0	(12) 1 5/8" Coax	Yes	1.00	18.93	0.50	17.150	14.49	18.93
110.0	(1) 10 mm Cable	Yes	4.00	0.00	0.00	17.332	0.00	0.00
110.0	(2) 19.7 mm Cable	Yes	4.00	0.00	0.00	17.332	0.00	0.00
110.0	(1) 3" Conduit	Yes	4.00	8.80	0.40	17.332	46.87	35.20
110.0	(6) 1 5/8" Coax	Yes	4.00	9.46	0.25	17.332	29.29	37.84
110.0	(3) 1 5/8" Coax	Yes	4.00	4.73	0.25	17.332	29.29	18.92
110.0	(1) 1/2" Coax	Yes	4.00	0.50	0.00	17.332	0.00	2.00
110.0	(12) 1 5/8" Coax	Yes	4.00	18.93	0.50	17.332	58.58	75.72
115.0	(1) 10 mm Cable	Yes	5.00	0.00	0.00	17.554	0.00	0.00
115.0	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	17.554	0.00	0.00
115.0	(1) 3" Conduit	Yes	5.00	8.80	0.40	17.554	59.33	44.00
115.0	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	17.554	37.08	47.30
115.0	(3) 1 5/8" Coax	Yes	5.00	4.73	0.25	17.554	37.08	23.65
115.0	(1) 1/2" Coax	Yes	5.00	0.50	0.00	17.554	0.00	2.50
115.0	(12) 1 5/8" Coax	Yes	5.00	18.93	0.50	17.554	74.16	94.65
118.0	(1) 10 mm Cable	Yes	3.00	0.00	0.00	17.683	0.00	0.00
118.0	(2) 19.7 mm Cable	Yes	3.00	0.00	0.00	17.683	0.00	0.00
118.0	(1) 3" Conduit	Yes	3.00	8.80	0.40	17.683	35.86	26.40
118.0	(6) 1 5/8" Coax	Yes	3.00	9.46	0.25	17.683	22.41	28.38
118.0	(3) 1 5/8" Coax	Yes	3.00	4.73	0.25	17.683	22.41	14.19
118.0	(1) 1/2" Coax	Yes	3.00	0.50	0.00	17.683	0.00	1.50
118.0	(12) 1 5/8" Coax	Yes	3.00	18.93	0.50	17.683	44.83	56.79
120.0	(1) 10 mm Cable	Yes	2.00	0.00	0.00	17.768	0.00	0.00
120.0	(2) 19.7 mm Cable	Yes	2.00	0.00	0.00	17.768	0.00	0.00
120.0	(1) 3" Conduit	Yes	2.00	8.80	0.40	17.768	24.02	17.60
120.0	(6) 1 5/8" Coax	Yes	2.00	9.46	0.25	17.768	15.01	18.92
120.0	(3) 1 5/8" Coax	Yes	2.00	4.73	0.25	17.768	15.01	9.46
120.0	(1) 1/2" Coax	Yes	2.00	0.50	0.00	17.768	0.00	1.00
121.0	(1) 10 mm Cable	Yes	1.00	0.00	0.00	17.811	0.00	0.00
121.0	(2) 19.7 mm Cable	Yes	1.00	0.00	0.00	17.811	0.00	0.00
121.0	(1) 3" Conduit	Yes	1.00	8.80	0.40	17.811	12.04	8.80
121.0	(6) 1 5/8" Coax	Yes	1.00	9.46	0.25	17.811	7.52	9.46
121.0	(3) 1 5/8" Coax	Yes	1.00	4.73	0.25	17.811	7.52	4.73
121.0	(1) 1/2" Coax	Yes	1.00	0.50	0.00	17.811	0.00	0.50
123.0	(1) 10 mm Cable	Yes	2.00	0.00	0.00	17.894	0.00	0.00
123.0	(2) 19.7 mm Cable	Yes	2.00	0.00	0.00	17.894	0.00	0.00
123.0	(1) 3" Conduit	Yes	2.00	8.80	0.40	17.894	24.19	17.60
123.0	(6) 1 5/8" Coax	Yes	2.00	9.46	0.25	17.894	15.12	18.92
123.0	(3) 1 5/8" Coax	Yes	2.00	4.73	0.25	17.894	15.12	9.46
125.0	(1) 10 mm Cable	Yes	2.00	0.00	0.00	17.977	0.00	0.00
125.0	(2) 19.7 mm Cable	Yes	2.00	0.00	0.00	17.977	0.00	0.00
125.0	(1) 3" Conduit	Yes	2.00	8.80	0.40	17.977	24.30	17.60

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

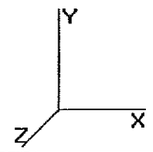


Load Case: Ice — 69.28 mph Wind with Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

125.0	(6) 1 5/8" Coax	Yes	2.00	9.46	0.25	17.977	15.19	18.92
127.0	(1) 10 mm Cable	Yes	2.00	0.00	0.00	18.058	0.00	0.00
127.0	(2) 19.7 mm Cable	Yes	2.00	0.00	0.00	18.058	0.00	0.00
127.0	(1) 3" Conduit	Yes	2.00	8.80	0.40	18.058	24.42	17.60
127.0	(6) 1 5/8" Coax	Yes	2.00	9.46	0.25	18.058	15.26	18.92
130.0	(1) 10 mm Cable	Yes	3.00	0.00	0.00	18.179	0.00	0.00
130.0	(2) 19.7 mm Cable	Yes	3.00	0.00	0.00	18.179	0.00	0.00
130.0	(1) 3" Conduit	Yes	3.00	8.80	0.40	18.179	36.87	26.40
130.0	(6) 1 5/8" Coax	Yes	3.00	9.46	0.25	18.179	23.04	28.38
135.0	(1) 10 mm Cable	Yes	5.00	0.00	0.00	18.376	0.00	0.00
135.0	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	18.376	0.00	0.00
135.0	(1) 3" Conduit	Yes	5.00	8.80	0.40	18.376	62.11	44.00
135.0	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	18.376	38.82	47.30
139.0	(1) 10 mm Cable	Yes	4.00	0.00	0.00	18.530	0.00	0.00
139.0	(2) 19.7 mm Cable	Yes	4.00	0.00	0.00	18.530	0.00	0.00
139.0	(1) 3" Conduit	Yes	4.00	8.80	0.40	18.530	50.11	35.20
139.0	(6) 1 5/8" Coax	Yes	4.00	9.46	0.25	18.530	31.32	37.84
140.0	(1) 10 mm Cable	Yes	1.00	0.00	0.00	18.568	0.00	0.00
140.0	(2) 19.7 mm Cable	Yes	1.00	0.00	0.00	18.568	0.00	0.00
140.0	(1) 3" Conduit	Yes	1.00	8.80	0.40	18.568	12.55	8.80
140.0	(6) 1 5/8" Coax	Yes	1.00	9.46	0.25	18.568	7.85	9.46
142.0	(1) 10 mm Cable	Yes	2.00	0.00	0.00	18.644	0.00	0.00
142.0	(2) 19.7 mm Cable	Yes	2.00	0.00	0.00	18.644	0.00	0.00
142.0	(1) 3" Conduit	Yes	2.00	8.80	0.40	18.644	25.21	17.60
142.0	(6) 1 5/8" Coax	Yes	2.00	9.46	0.25	18.644	15.75	18.92
145.0	(1) 10 mm Cable	Yes	3.00	0.00	0.00	18.755	0.00	0.00
145.0	(2) 19.7 mm Cable	Yes	3.00	0.00	0.00	18.755	0.00	0.00
145.0	(1) 3" Conduit	Yes	3.00	8.80	0.40	18.755	38.04	26.40
150.0	(1) 10 mm Cable	Yes	5.00	0.00	0.00	18.938	0.00	0.00
150.0	(2) 19.7 mm Cable	Yes	5.00	0.00	0.00	18.938	0.00	0.00
150.0	(1) 3" Conduit	Yes	5.00	8.80	0.40	18.938	64.01	44.00
						Totals:	5,273.26	6,447.51

Pole :	302483	Code: TIA/EIA-222 Rev F	4/20/2012 10:32:24 AM
Location :	Brin - Berlin, CT		Page: 21
Height :	150.0 (ft)		
Base Dia :	61.30 (in)		
Top Dia :	15.00 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.189701 (in/ft)		



Load Case: Ice — 69.28 mph Wind with Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

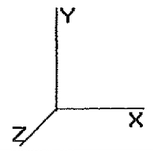
Applied Segment Forces Summary

Seg Elev (ft)		Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
5.00		633.18	2,641.03	0.00	0.00
10.00		624.73	2,599.09	0.00	0.00
15.00		616.27	2,557.14	0.00	0.00
20.00		607.82	2,515.20	0.00	0.00
25.00		599.37	2,473.26	0.00	0.00
30.00		590.91	2,431.32	0.00	0.00
35.00		592.34	2,389.38	0.00	0.00
40.00		606.44	2,347.43	0.00	0.00
45.00		617.65	2,017.62	0.00	0.00
50.00		627.01	1,982.18	0.00	0.00
55.00		634.53	1,946.73	0.00	0.00
60.00		640.48	1,911.28	0.00	0.00
65.00		645.04	1,875.84	0.00	0.00
70.00		648.36	1,840.39	0.00	0.00
75.00		650.58	1,804.94	0.00	0.00
80.00		651.80	1,769.50	0.00	0.00
85.00		652.12	1,497.85	0.00	0.00
90.00		651.59	1,468.90	0.00	0.00
95.00		650.30	1,439.95	0.00	0.00
96.00		2,887.28	2,644.75	0.00	0.00
100.0		489.21	1,059.36	0.00	0.00
105.0		609.51	1,297.84	0.00	0.00
106.0		722.72	533.17	0.00	0.00
110.0		483.64	999.92	0.00	0.00
115.0		601.40	1,223.54	0.00	0.00
118.0		2,547.41	2,861.92	0.00	0.00
120.0		207.12	436.86	0.00	0.00
121.0		142.20	212.94	0.00	0.00
123.0		464.51	472.96	0.00	0.00
125.0		189.41	378.10	0.00	0.00
127.0		449.54	455.28	0.00	0.00
130.0		543.58	627.00	0.00	0.00
135.0		462.57	876.07	0.00	0.00
139.0		363.98	682.58	0.00	0.00
140.0		67.92	80.15	0.00	0.00
142.0		676.92	303.33	0.00	0.00
145.0		176.92	206.74	0.00	0.00
150.0		4,999.03	4,762.65	0.00	9,237.26
	Totals:	28,925.38	59,624.18	0.00	9,237.26

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



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Page: 22

Load Case: Ice — 69.28 mph Wind with Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

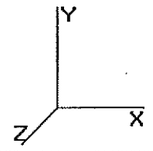
Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-28.977	-59.599	0.000	0.000	0.000	-2,807.350	0.000	0.000	0.000	0.000
5.00	-28.439	-56.910	0.000	0.000	0.000	-2,662.467	-0.053	0.000	0.053	-0.098
10.00	-27.900	-54.265	0.000	0.000	0.000	-2,520.275	-0.208	0.000	0.208	-0.196
15.00	-27.362	-51.663	0.000	0.000	0.000	-2,380.775	-0.465	0.000	0.465	-0.294
20.00	-26.823	-49.106	0.000	0.000	0.000	-2,243.968	-0.826	0.000	0.826	-0.392
25.00	-26.285	-46.592	0.000	0.000	0.000	-2,109.854	-1.290	0.000	1.290	-0.490
30.00	-25.746	-44.123	0.000	0.000	0.000	-1,978.434	-1.856	0.000	1.856	-0.589
35.00	-25.198	-41.697	0.000	0.000	0.000	-1,849.704	-2.526	0.000	2.526	-0.686
40.00	-24.629	-39.316	0.000	0.000	0.000	-1,723.713	-3.297	0.000	3.297	-0.784
45.00	-24.050	-37.263	0.000	0.000	0.000	-1,600.572	-4.170	0.000	4.170	-0.881
50.00	-23.461	-35.245	0.000	0.000	0.000	-1,480.322	-5.154	0.000	5.154	-0.995
55.00	-22.856	-33.266	0.000	0.000	0.000	-1,363.019	-6.257	0.000	6.257	-1.108
60.00	-22.237	-31.325	0.000	0.000	0.000	-1,248.741	-7.477	0.000	7.477	-1.219
65.00	-21.606	-29.424	0.000	0.000	0.000	-1,137.558	-8.813	0.000	8.813	-1.328
70.00	-20.964	-27.561	0.000	0.000	0.000	-1,029.530	-10.261	0.000	10.261	-1.435
75.00	-20.313	-25.737	0.000	0.000	0.000	-924.712	-11.820	0.000	11.820	-1.539
80.00	-19.653	-23.953	0.000	0.000	0.000	-823.150	-13.486	0.000	13.486	-1.639
85.00	-18.998	-22.440	0.000	0.000	0.000	-724.886	-15.254	0.000	15.254	-1.735
90.00	-18.341	-20.958	0.000	0.000	0.000	-629.897	-17.133	0.000	17.133	-1.848
95.00	-17.664	-19.521	0.000	0.000	0.000	-538.194	-19.125	0.000	19.125	-1.953
96.00	-14.703	-16.964	0.000	0.000	0.000	-520.530	-19.537	0.000	19.537	-1.974
100.0	-14.201	-15.901	0.000	0.000	0.000	-461.719	-21.225	0.000	21.225	-2.053
105.0	-13.558	-14.614	0.000	0.000	0.000	-390.717	-23.425	0.000	23.425	-2.145
106.0	-12.826	-14.098	0.000	0.000	0.000	-377.160	-23.876	0.000	23.876	-2.163
110.0	-12.321	-13.102	0.000	0.000	0.000	-325.856	-25.718	0.000	25.718	-2.230
115.0	-11.684	-11.892	0.000	0.000	0.000	-264.251	-28.095	0.000	28.095	-2.307
118.0	-9.028	-9.130	0.000	0.000	0.000	-229.200	-29.558	0.000	29.558	-2.349
120.0	-8.806	-8.699	0.000	0.000	0.000	-211.145	-30.548	0.000	30.548	-2.376
121.0	-8.658	-8.489	0.000	0.000	0.000	-202.340	-31.047	0.000	31.047	-2.389
123.0	-8.178	-8.032	0.000	0.000	0.000	-185.024	-32.054	0.000	32.054	-2.417
125.0	-7.976	-7.659	0.000	0.000	0.000	-168.669	-33.072	0.000	33.072	-2.444
127.0	-7.511	-7.219	0.000	0.000	0.000	-152.717	-34.101	0.000	34.101	-2.469
130.0	-6.946	-6.611	0.000	0.000	0.000	-130.184	-35.664	0.000	35.664	-2.505
135.0	-6.449	-5.752	0.000	0.000	0.000	-95.454	-38.314	0.000	38.314	-2.554
139.0	-6.057	-5.084	0.000	0.000	0.000	-69.657	-40.469	0.000	40.469	-2.587
140.0	-5.990	-5.001	0.000	0.000	0.000	-63.601	-41.011	0.000	41.011	-2.594
142.0	-5.409	-4.715	0.000	0.000	0.000	-51.621	-42.119	0.000	42.119	-2.691
145.0	-5.232	-4.506	0.000	0.000	0.000	-35.395	-43.850	0.000	43.850	-2.807
150.0	-4.999	0.000	0.000	0.000	0.000	-9.237	-46.858	0.000	46.858	-2.916

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Ice — 69.28 mph Wind with Ice — 22 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

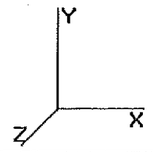
Calculated Stresses

Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)		Stress Ratio
0.00	0.49	0.48	0.00	0.00	0.00	22.47	22.97	33.4	0.0	0.687
5.00	0.48	0.48	0.00	0.00	0.00	22.14	22.63	33.4	0.0	0.677
10.00	0.46	0.48	0.00	0.00	0.00	21.79	22.26	33.4	0.0	0.666
15.00	0.45	0.48	0.00	0.00	0.00	21.41	21.88	33.4	0.0	0.654
20.00	0.43	0.48	0.00	0.00	0.00	21.02	21.47	33.4	0.0	0.642
25.00	0.42	0.48	0.00	0.00	0.00	20.59	21.03	33.4	0.0	0.629
30.00	0.41	0.48	0.00	0.00	0.00	20.14	20.57	33.4	0.0	0.615
35.00	0.39	0.48	0.00	0.00	0.00	19.66	20.07	33.4	0.0	0.600
40.00	0.38	0.48	0.00	0.00	0.00	19.15	19.54	33.4	0.0	0.585
40.00	0.45	0.58	0.00	0.00	0.00	22.81	23.29	31.4	0.0	0.743
45.00	0.44	0.58	0.00	0.00	0.00	22.15	22.62	31.4	0.0	0.721
50.00	0.43	0.58	0.00	0.00	0.00	21.45	21.90	31.4	0.0	0.698
55.00	0.41	0.57	0.00	0.00	0.00	20.70	21.14	31.4	0.0	0.674
60.00	0.40	0.57	0.00	0.00	0.00	19.90	20.32	31.4	0.0	0.648
65.00	0.38	0.57	0.00	0.00	0.00	19.05	19.45	31.4	0.0	0.620
70.00	0.37	0.57	0.00	0.00	0.00	18.13	18.52	31.4	0.0	0.591
75.00	0.35	0.56	0.00	0.00	0.00	17.15	17.53	31.4	0.0	0.559
80.00	0.34	0.56	0.00	0.00	0.00	16.10	16.47	31.4	0.0	0.525
80.00	0.42	0.70	0.00	0.00	0.00	19.92	20.37	28.7	0.0	0.709
85.00	0.40	0.69	0.00	0.00	0.00	18.52	18.96	28.7	0.0	0.660
90.00	0.39	0.69	0.00	0.00	0.00	17.02	17.45	28.7	0.0	0.607
95.00	0.37	0.68	0.00	0.00	0.00	15.40	15.82	28.7	0.0	0.551
96.00	0.32	0.57	0.00	0.00	0.00	15.07	15.43	28.7	0.0	0.537
100.00	0.31	0.56	0.00	0.00	0.00	14.02	14.36	28.7	0.0	0.500
105.00	0.29	0.55	0.00	0.00	0.00	12.61	12.94	28.7	0.0	0.451
106.00	0.29	0.53	0.00	0.00	0.00	12.33	12.64	28.7	0.0	0.440
110.00	0.27	0.52	0.00	0.00	0.00	11.20	11.51	28.7	0.0	0.401
115.00	0.26	0.51	0.00	0.00	0.00	9.69	9.99	28.7	0.0	0.348
118.00	0.20	0.40	0.00	0.00	0.00	8.75	8.98	28.7	0.0	0.313
120.00	0.19	0.40	0.00	0.00	0.00	8.28	8.50	28.7	0.0	0.296
120.00	0.22	0.45	0.00	0.00	0.00	9.40	9.66	38.1	0.0	0.254
121.00	0.22	0.45	0.00	0.00	0.00	9.14	9.38	38.1	0.0	0.246
123.00	0.21	0.43	0.00	0.00	0.00	8.59	8.83	38.1	0.0	0.232
125.00	0.20	0.42	0.00	0.00	0.00	8.05	8.28	38.1	0.0	0.218
127.00	0.19	0.41	0.00	0.00	0.00	7.50	7.72	38.1	0.0	0.203
130.00	0.18	0.38	0.00	0.00	0.00	6.68	6.89	38.1	0.0	0.181
135.00	0.16	0.37	0.00	0.00	0.00	5.27	5.47	38.1	0.0	0.144
139.00	0.15	0.36	0.00	0.00	0.00	4.09	4.29	38.1	0.0	0.113
139.00	0.51	1.23	0.00	0.00	0.00	20.78	21.39	52.0	0.0	0.411
140.00	0.51	1.23	0.00	0.00	0.00	19.34	19.96	52.0	0.0	0.384
142.00	0.49	1.13	0.00	0.00	0.00	16.31	16.91	52.0	0.0	0.325
145.00	0.48	1.13	0.00	0.00	0.00	11.87	12.51	52.0	0.0	0.241
150.00	0.00	1.14	0.00	0.00	0.00	3.44	3.96	52.0	0.0	0.076

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



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Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 21 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

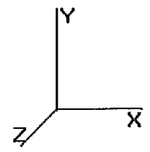
Shaft Segment Forces

Seg Top Elev (ft)	Description		Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		0.00	1.00	6.400	10.81	213.75	1.030	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		0.00	1.00	6.400	10.81	209.79	1.030	0.000	5.00	21.177	21.81	235.9	0.0	2,057.5
10.00		0.00	1.00	6.400	10.81	205.84	1.030	0.000	5.00	20.782	21.41	231.5	0.0	2,018.6
15.00		0.00	1.00	6.400	10.81	201.89	1.030	0.000	5.00	20.387	21.00	227.1	0.0	1,979.6
20.00		0.00	1.00	6.400	10.81	197.94	1.030	0.000	5.00	19.992	20.59	222.7	0.0	1,940.6
25.00		0.00	1.00	6.400	10.81	193.98	1.030	0.000	5.00	19.597	20.18	218.3	0.0	1,901.6
30.00		0.00	1.00	6.400	10.81	190.03	1.030	0.000	5.00	19.201	19.78	213.9	0.0	1,862.7
35.00		0.00	1.01	6.509	10.99	187.65	1.030	0.000	5.00	18.806	19.37	213.1	0.0	1,823.7
40.00	Top - Section 1	0.00	1.05	6.762	11.42	187.20	1.030	0.000	5.00	18.411	18.96	216.7	0.0	1,784.7
45.00		0.00	1.09	6.993	11.81	186.11	1.030	0.000	5.00	18.002	18.54	219.1	0.0	1,458.0
50.00		0.00	1.12	7.207	12.17	184.74	1.030	0.000	5.00	17.607	18.14	220.9	0.0	1,425.5
55.00		0.00	1.15	7.406	12.51	183.02	1.030	0.000	5.00	17.212	17.73	221.9	0.0	1,393.0
60.00		0.00	1.18	7.592	12.83	181.00	1.030	0.000	5.00	16.817	17.32	222.2	0.0	1,360.6
65.00		0.00	1.21	7.768	13.12	178.73	1.030	0.000	5.00	16.422	16.91	222.0	0.0	1,328.1
70.00		0.00	1.24	7.934	13.40	176.23	1.030	0.000	5.00	16.026	16.51	221.3	0.0	1,295.6
75.00		0.00	1.26	8.092	13.67	173.54	1.030	0.000	5.00	15.631	16.10	220.2	0.0	1,263.1
80.00	Top - Section 2	0.00	1.28	8.242	13.93	170.66	1.030	0.000	5.00	15.236	15.69	218.6	0.0	1,230.6
85.00		0.00	1.31	8.387	14.17	167.62	1.030	0.000	5.00	14.841	15.29	216.7	0.0	962.0
90.00		0.00	1.33	8.525	14.40	164.43	1.030	0.000	5.00	14.446	14.88	214.4	0.0	936.0
95.00		0.00	1.35	8.657	14.63	161.11	1.030	0.000	5.00	14.050	14.47	211.7	0.0	910.0
96.00	Appertunance(s)	0.00	1.35	8.683	14.67	160.43	1.030	0.000	1.00	2.763	2.85	41.8	0.0	178.9
100.0		0.00	1.37	8.785	14.84	157.67	1.030	0.000	4.00	10.893	11.22	166.6	0.0	705.1
105.0		0.00	1.39	8.908	15.05	154.11	1.030	0.000	5.00	13.260	13.66	205.6	0.0	858.0
106.0	Appertunance(s)	0.00	1.39	8.933	15.09	153.38	1.030	0.000	1.00	2.605	2.68	40.5	0.0	168.5
110.0		0.00	1.41	9.028	15.25	150.44	1.030	0.000	4.00	10.260	10.57	161.2	0.0	663.6
115.0		0.00	1.42	9.143	15.45	146.67	1.030	0.000	5.00	12.470	12.84	198.5	0.0	806.1
118.0	Appertunance(s)	0.00	1.43	9.211	15.56	144.37	1.030	0.000	3.00	7.292	7.51	116.9	0.0	471.2
120.0	Top - Section 3	0.00	1.44	9.255	15.64	142.82	1.030	0.000	2.00	4.782	4.93	77.0	0.0	308.9
121.0	Appertunance(s)	0.00	1.45	9.277	15.67	142.03	1.030	0.000	1.00	2.367	2.44	38.2	0.0	134.1
123.0	Appertunance(s)	0.00	1.45	9.320	15.75	140.46	1.030	0.000	2.00	4.687	4.83	76.0	0.0	265.4
125.0		0.00	1.46	9.363	15.82	138.87	1.030	0.000	2.00	4.624	4.76	75.4	0.0	261.8
127.0	Appertunance(s)	0.00	1.47	9.406	15.89	137.27	1.030	0.000	2.00	4.561	4.70	74.7	0.0	258.2
130.0	Appertunance(s)	0.00	1.48	9.469	16.00	134.84	1.030	0.000	3.00	6.723	6.92	110.8	0.0	380.4
135.0		0.00	1.49	9.572	16.17	130.74	1.030	0.000	5.00	10.889	11.22	181.4	0.0	615.9
139.0	Top - Section 4	0.00	1.50	9.652	16.31	127.40	1.030	0.000	4.00	8.426	8.68	141.6	0.0	476.3
140.0		0.00	1.51	9.672	16.34	84.840	1.030	0.000	1.00	1.387	1.43	23.3	0.0	33.8
142.0	Appertunance(s)	0.00	1.51	9.711	16.41	83.407	1.030	0.000	2.00	2.735	2.82	46.2	0.0	66.6
145.0		0.00	1.52	9.769	16.51	81.242	1.030	0.000	3.00	4.004	4.12	68.1	0.0	97.6
150.0	Appertunance(s)	0.00	1.54	9.864	16.67	77.592	1.030	0.000	5.00	6.413	6.61	110.1	0.0	156.2
						Totals:			150.00			6,142.3	0.0	35,838.1

Pole : 302483
Location : Brln - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 21 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

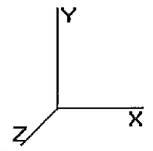
Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
96.00	Decibel	12	8.683	14.675	0.84	59.37	0.000	0.000	871.25	0.00	0.00	192.00
96.00	Flat Low Profile Pla	1	8.683	14.675	1.00	26.10	0.000	0.000	383.01	0.00	0.00	1,500.00
106.0	72" x 12" Panel	3	8.933	15.096	0.75	18.90	0.000	0.000	285.32	0.00	0.00	135.00
118.0	Andrew DB948F85E-M	6	9.211	15.566	0.79	15.49	0.000	0.000	241.05	0.00	0.00	51.00
118.0	Antel RWA-80014	6	9.211	15.566	0.79	24.89	0.000	0.000	387.36	0.00	0.00	85.80
118.0	Round Low Profile Pl	1	9.211	15.566	1.00	21.70	0.000	0.000	337.78	0.00	0.00	1,500.00
121.0	GPS	1	9.277	15.678	1.00	1.00	0.000	0.000	15.68	0.00	0.00	7.00
123.0	Allgon 7184	3	9.320	15.751	0.85	6.83	0.000	0.000	107.65	0.00	0.00	33.60
127.0	Allgon 7184	3	9.406	15.896	0.85	6.83	0.000	0.000	108.63	0.00	0.00	33.60
130.0	Allgon 7184	3	9.469	16.003	0.85	6.83	0.000	0.000	109.36	0.00	0.00	33.60
142.0	RFS APXV18-	3	9.711	16.411	0.80	12.05	0.000	0.000	197.72	0.00	0.00	66.00
150.0	Andrew	6	10.101	17.071	0.00	0.00	0.000	13.000	0.00	0.00	0.00	66.00
150.0	Concealment Canister	1	9.984	16.874	1.00	15.00	0.000	6.500	253.11	0.00	1,645.18	200.00
150.0	Ericsson RRUS 11	6	9.902	16.734	0.67	11.82	0.000	2.000	197.77	0.00	395.54	330.00
150.0	Flat Platform w/ Han	1	9.864	16.670	1.00	42.40	0.000	0.000	706.82	0.00	0.00	2,000.00
150.0	KMW AM-X-CD-16-65-	6	9.902	16.734	0.78	38.66	0.000	2.000	646.87	0.00	1,293.74	291.00
150.0	Powerwave 7770.00	3	9.902	16.734	0.75	13.23	0.000	2.000	221.39	0.00	442.77	105.00
150.0	Powerwave LGP21401	6	9.902	16.734	0.67	5.19	0.000	2.000	86.78	0.00	173.55	84.60
150.0	Raycap DC6-48-60-18-	1	9.902	16.734	1.00	1.26	0.000	2.000	21.08	0.00	42.17	20.00
150.0	RFS APX16DWV-	3	10.101	17.071	0.00	0.00	0.000	13.000	0.00	0.00	0.00	118.80
									5,178.61			6,853.00

Pole : 302483
Location : Brln - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Twist/Sway — 60.00 mph Wind with No Ice — 21 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

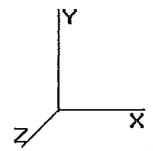
Linear Appurtenance Segment Forces

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	FX (lb)	Dead Load (lb)
5.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	6.400	0.00	0.35
5.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	6.400	0.00	5.90
5.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	6.400	18.93	37.90
5.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
5.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	6.400	10.82	12.30
5.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	6.400	0.00	0.75
5.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	6.400	21.63	49.20
5.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
10.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	6.400	0.00	0.35
10.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	6.400	0.00	5.90
10.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	6.400	18.93	37.90
10.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
10.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	6.400	10.82	12.30
10.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	6.400	0.00	0.75
10.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	6.400	21.63	49.20
10.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
15.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	6.400	0.00	0.35
15.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	6.400	0.00	5.90
15.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	6.400	18.93	37.90
15.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
15.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	6.400	10.82	12.30
15.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	6.400	0.00	0.75
15.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	6.400	21.63	49.20
15.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
20.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	6.400	0.00	0.35
20.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	6.400	0.00	5.90
20.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	6.400	18.93	37.90
20.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
20.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	6.400	10.82	12.30
20.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	6.400	0.00	0.75
20.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	6.400	21.63	49.20
20.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
25.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	6.400	0.00	0.35
25.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	6.400	0.00	5.90
25.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	6.400	18.93	37.90
25.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
25.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	6.400	10.82	12.30
25.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	6.400	0.00	0.75
25.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	6.400	21.63	49.20
25.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
30.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	6.400	0.00	0.35
30.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	6.400	0.00	5.90
30.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	6.400	18.93	37.90
30.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
30.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	6.400	10.82	12.30
30.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	6.400	0.00	0.75
30.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	6.400	21.63	49.20
30.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
35.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	6.509	0.00	0.35
35.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	6.509	0.00	5.90
35.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	6.509	19.25	37.90

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 21 Iterations

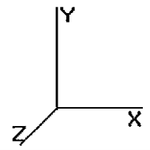
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

35.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.509	11.00	24.60
35.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	6.509	11.00	12.30
35.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	6.509	0.00	0.75
35.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	6.509	22.00	49.20
35.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.509	11.00	24.60
40.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	6.762	0.00	0.35
40.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	6.762	0.00	5.90
40.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	6.762	20.00	37.90
40.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.762	11.43	24.60
40.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	6.762	11.43	12.30
40.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	6.762	0.00	0.75
40.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	6.762	22.85	49.20
40.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.762	11.43	24.60
45.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	6.993	0.00	0.35
45.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	6.993	0.00	5.90
45.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	6.993	20.68	37.90
45.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.993	11.82	24.60
45.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	6.993	11.82	12.30
45.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	6.993	0.00	0.75
45.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	6.993	23.64	49.20
45.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.993	11.82	24.60
50.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	7.207	0.00	0.35
50.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	7.207	0.00	5.90
50.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	7.207	21.31	37.90
50.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.207	12.18	24.60
50.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	7.207	12.18	12.30
50.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	7.207	0.00	0.75
50.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	7.207	24.36	49.20
50.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.207	12.18	24.60
55.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	7.406	0.00	0.35
55.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	7.406	0.00	5.90
55.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	7.406	21.90	37.90
55.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.406	12.52	24.60
55.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	7.406	12.52	12.30
55.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	7.406	0.00	0.75
55.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	7.406	25.03	49.20
55.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.406	12.52	24.60
60.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	7.592	0.00	0.35
60.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	7.592	0.00	5.90
60.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	7.592	22.45	37.90
60.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.592	12.83	24.60
60.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	7.592	12.83	12.30
60.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	7.592	0.00	0.75
60.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	7.592	25.66	49.20
60.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.592	12.83	24.60
65.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	7.768	0.00	0.35
65.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	7.768	0.00	5.90
65.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	7.768	22.97	37.90
65.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.768	13.13	24.60
65.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	7.768	13.13	12.30
65.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	7.768	0.00	0.75
65.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	7.768	26.25	49.20
65.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.768	13.13	24.60
70.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	7.934	0.00	0.35
70.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	7.934	0.00	5.90
70.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	7.934	23.46	37.90
70.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.934	13.41	24.60

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 21 Iterations

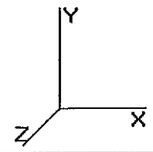
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

70.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	7.934	13.41	12.30
70.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	7.934	0.00	0.75
70.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	7.934	26.82	49.20
70.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.934	13.41	24.60
75.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	8.092	0.00	0.35
75.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	8.092	0.00	5.90
75.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	8.092	23.93	37.90
75.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.092	13.68	24.60
75.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	8.092	13.68	12.30
75.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	8.092	0.00	0.75
75.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	8.092	27.35	49.20
75.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.092	13.68	24.60
80.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	8.242	0.00	0.35
80.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	8.242	0.00	5.90
80.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	8.242	24.38	37.90
80.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.242	13.93	24.60
80.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	8.242	13.93	12.30
80.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	8.242	0.00	0.75
80.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	8.242	27.86	49.20
80.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.242	13.93	24.60
85.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	8.387	0.00	0.35
85.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	8.387	0.00	5.90
85.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	8.387	24.80	37.90
85.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.387	14.17	24.60
85.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	8.387	14.17	12.30
85.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	8.387	0.00	0.75
85.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	8.387	28.35	49.20
85.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.387	14.17	24.60
90.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	8.525	0.00	0.35
90.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	8.525	0.00	5.90
90.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	8.525	25.21	37.90
90.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.525	14.41	24.60
90.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	8.525	14.41	12.30
90.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	8.525	0.00	0.75
90.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	8.525	28.81	49.20
90.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.525	14.41	24.60
95.00	(1) 10 mm Cable	Yes	5.00	0.07	0.00	8.657	0.00	0.35
95.00	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	8.657	0.00	5.90
95.00	(1) 3" Conduit	Yes	5.00	7.58	0.35	8.657	25.60	37.90
95.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.657	14.63	24.60
95.00	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	8.657	14.63	12.30
95.00	(1) 1/2" Coax	Yes	5.00	0.15	0.00	8.657	0.00	0.75
95.00	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	8.657	29.26	49.20
95.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.657	14.63	24.60
96.00	(1) 10 mm Cable	Yes	1.00	0.07	0.00	8.683	0.00	0.07
96.00	(2) 19.7 mm Cable	Yes	1.00	1.18	0.00	8.683	0.00	1.18
96.00	(1) 3" Conduit	Yes	1.00	7.58	0.35	8.683	5.14	7.58
96.00	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	8.683	2.93	4.92
96.00	(3) 1 5/8" Coax	Yes	1.00	2.46	0.20	8.683	2.93	2.46
96.00	(1) 1/2" Coax	Yes	1.00	0.15	0.00	8.683	0.00	0.15
96.00	(12) 1 5/8" Coax	Yes	1.00	9.84	0.40	8.683	5.87	9.84
96.00	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	8.683	2.93	4.92
100.0	(1) 10 mm Cable	Yes	4.00	0.07	0.00	8.785	0.00	0.28
100.0	(2) 19.7 mm Cable	Yes	4.00	1.18	0.00	8.785	0.00	4.72
100.0	(1) 3" Conduit	Yes	4.00	7.58	0.35	8.785	20.79	30.32
100.0	(6) 1 5/8" Coax	Yes	4.00	4.92	0.20	8.785	11.88	19.68
100.0	(3) 1 5/8" Coax	Yes	4.00	2.46	0.20	8.785	11.88	9.84

Pole : 302483
Location : Brln - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 16.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Twist/Sway 50.00 mph Wind with No Ice 21 Iterations

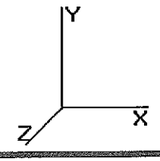
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

100.0	(1) 1/2" Coax	Yes	4.00	0.15	0.00	8.785	0.00	0.60
100.0	(12) 1 5/8" Coax	Yes	4.00	9.84	0.40	8.785	23.75	39.36
105.0	(1) 10 mm Cable	Yes	5.00	0.07	0.00	8.908	0.00	0.35
105.0	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	8.908	0.00	5.90
105.0	(1) 3" Conduit	Yes	5.00	7.58	0.35	8.908	26.35	37.90
105.0	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.908	15.06	24.60
105.0	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	8.908	15.06	12.30
105.0	(1) 1/2" Coax	Yes	5.00	0.15	0.00	8.908	0.00	0.75
105.0	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	8.908	30.11	49.20
106.0	(1) 10 mm Cable	Yes	1.00	0.07	0.00	8.933	0.00	0.07
106.0	(2) 19.7 mm Cable	Yes	1.00	1.18	0.00	8.933	0.00	1.18
106.0	(1) 3" Conduit	Yes	1.00	7.58	0.35	8.933	5.28	7.58
106.0	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	8.933	3.02	4.92
106.0	(3) 1 5/8" Coax	Yes	1.00	2.46	0.20	8.933	3.02	2.46
106.0	(1) 1/2" Coax	Yes	1.00	0.15	0.00	8.933	0.00	0.15
106.0	(12) 1 5/8" Coax	Yes	1.00	9.84	0.40	8.933	6.04	9.84
110.0	(1) 10 mm Cable	Yes	4.00	0.07	0.00	9.028	0.00	0.28
110.0	(2) 19.7 mm Cable	Yes	4.00	1.18	0.00	9.028	0.00	4.72
110.0	(1) 3" Conduit	Yes	4.00	7.58	0.35	9.028	21.36	30.32
110.0	(6) 1 5/8" Coax	Yes	4.00	4.92	0.20	9.028	12.21	19.68
110.0	(3) 1 5/8" Coax	Yes	4.00	2.46	0.20	9.028	12.21	9.84
110.0	(1) 1/2" Coax	Yes	4.00	0.15	0.00	9.028	0.00	0.60
110.0	(12) 1 5/8" Coax	Yes	4.00	9.84	0.40	9.028	24.41	39.36
115.0	(1) 10 mm Cable	Yes	5.00	0.07	0.00	9.143	0.00	0.35
115.0	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	9.143	0.00	5.90
115.0	(1) 3" Conduit	Yes	5.00	7.58	0.35	9.143	27.04	37.90
115.0	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	9.143	15.45	24.60
115.0	(3) 1 5/8" Coax	Yes	5.00	2.46	0.20	9.143	15.45	12.30
115.0	(1) 1/2" Coax	Yes	5.00	0.15	0.00	9.143	0.00	0.75
115.0	(12) 1 5/8" Coax	Yes	5.00	9.84	0.40	9.143	30.90	49.20
118.0	(1) 10 mm Cable	Yes	3.00	0.07	0.00	9.211	0.00	0.21
118.0	(2) 19.7 mm Cable	Yes	3.00	1.18	0.00	9.211	0.00	3.54
118.0	(1) 3" Conduit	Yes	3.00	7.58	0.35	9.211	16.34	22.74
118.0	(6) 1 5/8" Coax	Yes	3.00	4.92	0.20	9.211	9.34	14.76
118.0	(3) 1 5/8" Coax	Yes	3.00	2.46	0.20	9.211	9.34	7.38
118.0	(1) 1/2" Coax	Yes	3.00	0.15	0.00	9.211	0.00	0.45
118.0	(12) 1 5/8" Coax	Yes	3.00	9.84	0.40	9.211	18.68	29.52
120.0	(1) 10 mm Cable	Yes	2.00	0.07	0.00	9.255	0.00	0.14
120.0	(2) 19.7 mm Cable	Yes	2.00	1.18	0.00	9.255	0.00	2.36
120.0	(1) 3" Conduit	Yes	2.00	7.58	0.35	9.255	10.95	15.16
120.0	(6) 1 5/8" Coax	Yes	2.00	4.92	0.20	9.255	6.26	9.84
120.0	(3) 1 5/8" Coax	Yes	2.00	2.46	0.20	9.255	6.26	4.92
120.0	(1) 1/2" Coax	Yes	2.00	0.15	0.00	9.255	0.00	0.30
121.0	(1) 10 mm Cable	Yes	1.00	0.07	0.00	9.277	0.00	0.07
121.0	(2) 19.7 mm Cable	Yes	1.00	1.18	0.00	9.277	0.00	1.18
121.0	(1) 3" Conduit	Yes	1.00	7.58	0.35	9.277	5.49	7.58
121.0	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	9.277	3.14	4.92
121.0	(3) 1 5/8" Coax	Yes	1.00	2.46	0.20	9.277	3.14	2.46
121.0	(1) 1/2" Coax	Yes	1.00	0.15	0.00	9.277	0.00	0.15
123.0	(1) 10 mm Cable	Yes	2.00	0.07	0.00	9.320	0.00	0.14
123.0	(2) 19.7 mm Cable	Yes	2.00	1.18	0.00	9.320	0.00	2.36
123.0	(1) 3" Conduit	Yes	2.00	7.58	0.35	9.320	11.03	15.16
123.0	(6) 1 5/8" Coax	Yes	2.00	4.92	0.20	9.320	6.30	9.84
123.0	(3) 1 5/8" Coax	Yes	2.00	2.46	0.20	9.320	6.30	4.92
125.0	(1) 10 mm Cable	Yes	2.00	0.07	0.00	9.363	0.00	0.14
125.0	(2) 19.7 mm Cable	Yes	2.00	1.18	0.00	9.363	0.00	2.36
125.0	(1) 3" Conduit	Yes	2.00	7.58	0.35	9.363	11.08	15.16

Pole : 302483
Location : Brln - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



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Load Case: Twist/Sway 50.00 mph Wind with No Ice 21 Iterations

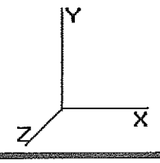
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

125.0	(6) 1 5/8" Coax	Yes	2.00	4.92	0.20	9.363	6.33	9.84
127.0	(1) 10 mm Cable	Yes	2.00	0.07	0.00	9.406	0.00	0.14
127.0	(2) 19.7 mm Cable	Yes	2.00	1.18	0.00	9.406	0.00	2.36
127.0	(1) 3" Conduit	Yes	2.00	7.58	0.35	9.406	11.13	15.16
127.0	(6) 1 5/8" Coax	Yes	2.00	4.92	0.20	9.406	6.36	9.84
130.0	(1) 10 mm Cable	Yes	3.00	0.07	0.00	9.469	0.00	0.21
130.0	(2) 19.7 mm Cable	Yes	3.00	1.18	0.00	9.469	0.00	3.54
130.0	(1) 3" Conduit	Yes	3.00	7.58	0.35	9.469	16.80	22.74
130.0	(6) 1 5/8" Coax	Yes	3.00	4.92	0.20	9.469	9.60	14.76
135.0	(1) 10 mm Cable	Yes	5.00	0.07	0.00	9.572	0.00	0.35
135.0	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	9.572	0.00	5.90
135.0	(1) 3" Conduit	Yes	5.00	7.58	0.35	9.572	28.31	37.90
135.0	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	9.572	16.18	24.60
139.0	(1) 10 mm Cable	Yes	4.00	0.07	0.00	9.652	0.00	0.28
139.0	(2) 19.7 mm Cable	Yes	4.00	1.18	0.00	9.652	0.00	4.72
139.0	(1) 3" Conduit	Yes	4.00	7.58	0.35	9.652	22.84	30.32
139.0	(6) 1 5/8" Coax	Yes	4.00	4.92	0.20	9.652	13.05	19.68
140.0	(1) 10 mm Cable	Yes	1.00	0.07	0.00	9.672	0.00	0.07
140.0	(2) 19.7 mm Cable	Yes	1.00	1.18	0.00	9.672	0.00	1.18
140.0	(1) 3" Conduit	Yes	1.00	7.58	0.35	9.672	5.72	7.58
140.0	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	9.672	3.27	4.92
142.0	(1) 10 mm Cable	Yes	2.00	0.07	0.00	9.711	0.00	0.14
142.0	(2) 19.7 mm Cable	Yes	2.00	1.18	0.00	9.711	0.00	2.36
142.0	(1) 3" Conduit	Yes	2.00	7.58	0.35	9.711	11.49	15.16
142.0	(6) 1 5/8" Coax	Yes	2.00	4.92	0.20	9.711	6.56	9.84
145.0	(1) 10 mm Cable	Yes	3.00	0.07	0.00	9.769	0.00	0.21
145.0	(2) 19.7 mm Cable	Yes	3.00	1.18	0.00	9.769	0.00	3.54
145.0	(1) 3" Conduit	Yes	3.00	7.58	0.35	9.769	17.34	22.74
150.0	(1) 10 mm Cable	Yes	5.00	0.07	0.00	9.864	0.00	0.35
150.0	(2) 19.7 mm Cable	Yes	5.00	1.18	0.00	9.864	0.00	5.90
150.0	(1) 3" Conduit	Yes	5.00	7.58	0.35	9.864	29.17	37.90
						Totals:	2,258.45	3,977.31

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev: 0.000 (ft)



Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 21 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

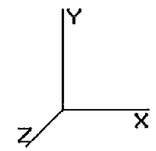
Applied Segment Forces Summary

Seg Elev (ft)		Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
5.00		308.93	2,378.04	0.00	0.00
10.00		304.53	2,339.06	0.00	0.00
15.00		300.13	2,300.09	0.00	0.00
20.00		295.73	2,261.12	0.00	0.00
25.00		291.32	2,222.15	0.00	0.00
30.00		286.92	2,183.17	0.00	0.00
35.00		287.31	2,144.20	0.00	0.00
40.00		293.83	2,105.23	0.00	0.00
45.00		298.91	1,778.48	0.00	0.00
50.00		303.09	1,746.01	0.00	0.00
55.00		306.36	1,713.53	0.00	0.00
60.00		308.85	1,681.05	0.00	0.00
65.00		310.65	1,648.58	0.00	0.00
70.00		311.84	1,616.10	0.00	0.00
75.00		312.48	1,583.62	0.00	0.00
80.00		312.63	1,551.14	0.00	0.00
85.00		312.32	1,282.46	0.00	0.00
90.00		311.60	1,256.48	0.00	0.00
95.00		310.49	1,230.50	0.00	0.00
96.00		1,315.83	1,934.98	0.00	0.00
100.0		234.87	912.34	0.00	0.00
105.0		292.19	1,117.04	0.00	0.00
106.0		343.17	355.29	0.00	0.00
110.0		231.41	857.65	0.00	0.00
115.0		287.30	1,048.67	0.00	0.00
118.0		1,136.79	2,253.53	0.00	0.00
120.0		100.50	386.28	0.00	0.00
121.0		65.67	179.77	0.00	0.00
123.0		207.32	376.11	0.00	0.00
125.0		92.78	333.95	0.00	0.00
127.0		200.80	363.91	0.00	0.00
130.0		246.58	514.87	0.00	0.00
135.0		225.90	771.62	0.00	0.00
139.0		177.46	600.93	0.00	0.00
140.0		32.34	64.95	0.00	0.00
142.0		262.00	194.94	0.00	0.00
145.0		85.42	176.25	0.00	0.00
150.0		2,273.10	3,502.72	0.00	3,992.95
	Totals:	13,579.36	50,966.80	0.00	3,992.95

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 21 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

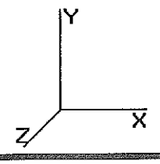
Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-13.599	-50.961	0.000	0.000	0.000	-1,296.816	0.000	0.000	0.000	0.000
5.00	-13.327	-48.573	0.000	0.000	0.000	-1,228.822	-0.024	0.000	0.024	-0.045
10.00	-13.057	-46.224	0.000	0.000	0.000	-1,162.186	-0.096	0.000	0.096	-0.090
15.00	-12.787	-43.914	0.000	0.000	0.000	-1,096.904	-0.215	0.000	0.215	-0.136
20.00	-12.518	-41.644	0.000	0.000	0.000	-1,032.971	-0.381	0.000	0.381	-0.181
25.00	-12.249	-39.413	0.000	0.000	0.000	-970.384	-0.595	0.000	0.595	-0.226
30.00	-11.982	-37.222	0.000	0.000	0.000	-909.138	-0.856	0.000	0.856	-0.271
35.00	-11.711	-35.070	0.000	0.000	0.000	-849.228	-1.164	0.000	1.164	-0.316
40.00	-11.431	-32.958	0.000	0.000	0.000	-790.671	-1.520	0.000	1.520	-0.361
45.00	-11.146	-31.172	0.000	0.000	0.000	-733.519	-1.921	0.000	1.921	-0.405
50.00	-10.857	-29.419	0.000	0.000	0.000	-677.788	-2.374	0.000	2.374	-0.458
55.00	-10.561	-27.698	0.000	0.000	0.000	-623.505	-2.881	0.000	2.881	-0.509
60.00	-10.259	-26.011	0.000	0.000	0.000	-570.702	-3.442	0.000	3.442	-0.560
65.00	-9.953	-24.357	0.000	0.000	0.000	-519.407	-4.055	0.000	4.055	-0.610
70.00	-9.642	-22.737	0.000	0.000	0.000	-469.645	-4.721	0.000	4.721	-0.659
75.00	-9.328	-21.149	0.000	0.000	0.000	-421.436	-5.436	0.000	5.436	-0.706
80.00	-9.011	-19.595	0.000	0.000	0.000	-374.798	-6.200	0.000	6.200	-0.752
85.00	-8.696	-18.310	0.000	0.000	0.000	-329.745	-7.011	0.000	7.011	-0.795
90.00	-8.382	-17.051	0.000	0.000	0.000	-286.264	-7.872	0.000	7.872	-0.847
95.00	-8.060	-15.821	0.000	0.000	0.000	-244.356	-8.785	0.000	8.785	-0.895
96.00	-6.720	-13.904	0.000	0.000	0.000	-236.296	-8.974	0.000	8.974	-0.904
100.0	-6.479	-12.992	0.000	0.000	0.000	-209.418	-9.747	0.000	9.747	-0.940
105.0	-6.173	-11.877	0.000	0.000	0.000	-177.023	-10.754	0.000	10.754	-0.981
106.0	-5.828	-11.526	0.000	0.000	0.000	-170.850	-10.960	0.000	10.960	-0.990
110.0	-5.588	-10.669	0.000	0.000	0.000	-147.539	-11.803	0.000	11.803	-1.020
115.0	-5.286	-9.623	0.000	0.000	0.000	-119.601	-12.890	0.000	12.890	-1.055
118.0	-4.109	-7.390	0.000	0.000	0.000	-103.743	-13.560	0.000	13.560	-1.074
120.0	-4.003	-7.005	0.000	0.000	0.000	-95.525	-14.012	0.000	14.012	-1.086
121.0	-3.935	-6.826	0.000	0.000	0.000	-91.522	-14.240	0.000	14.240	-1.092
123.0	-3.722	-6.453	0.000	0.000	0.000	-83.652	-14.700	0.000	14.700	-1.105
125.0	-3.624	-6.120	0.000	0.000	0.000	-76.209	-15.166	0.000	15.166	-1.117
127.0	-3.417	-5.760	0.000	0.000	0.000	-68.961	-15.636	0.000	15.636	-1.128
130.0	-3.162	-5.249	0.000	0.000	0.000	-58.709	-16.351	0.000	16.351	-1.144
135.0	-2.923	-4.481	0.000	0.000	0.000	-42.897	-17.561	0.000	17.561	-1.167
139.0	-2.733	-3.883	0.000	0.000	0.000	-31.207	-18.545	0.000	18.545	-1.181
140.0	-2.701	-3.818	0.000	0.000	0.000	-28.473	-18.793	0.000	18.793	-1.184
142.0	-2.439	-3.626	0.000	0.000	0.000	-23.071	-19.299	0.000	19.299	-1.228
145.0	-2.352	-3.450	0.000	0.000	0.000	-15.755	-20.088	0.000	20.088	-1.280
150.0	-2.273	0.000	0.000	0.000	0.000	-3.993	-21.460	0.000	21.460	-1.328

Pole : 302483
Location : Brin - Berlin, CT
Height : 150.0 (ft)
Base Dia : 51.30 (in)
Top Dia : 15.00 (in)
Shape : 12 Sides
Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



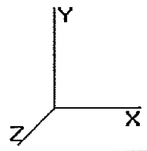
Load Case: Twist/Sway 50.00 mph Wind with No Ice 21 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)		Stress Ratio
0.00	0.42	0.23	0.00	0.00	0.00	10.38	10.80	33.4	0.0	0.323
5.00	0.41	0.23	0.00	0.00	0.00	10.22	10.63	33.4	0.0	0.318
10.00	0.39	0.23	0.00	0.00	0.00	10.05	10.45	33.4	0.0	0.312
15.00	0.38	0.23	0.00	0.00	0.00	9.87	10.25	33.4	0.0	0.307
20.00	0.37	0.23	0.00	0.00	0.00	9.67	10.05	33.4	0.0	0.301
25.00	0.36	0.22	0.00	0.00	0.00	9.47	9.84	33.4	0.0	0.294
30.00	0.34	0.22	0.00	0.00	0.00	9.26	9.61	33.4	0.0	0.287
35.00	0.33	0.22	0.00	0.00	0.00	9.03	9.37	33.4	0.0	0.280
40.00	0.32	0.22	0.00	0.00	0.00	8.78	9.11	33.4	0.0	0.272
40.00	0.38	0.27	0.00	0.00	0.00	10.46	10.85	31.4	0.0	0.346
45.00	0.37	0.27	0.00	0.00	0.00	10.15	10.53	31.4	0.0	0.336
50.00	0.36	0.27	0.00	0.00	0.00	9.82	10.19	31.4	0.0	0.325
55.00	0.34	0.27	0.00	0.00	0.00	9.47	9.82	31.4	0.0	0.313
60.00	0.33	0.26	0.00	0.00	0.00	9.10	9.44	31.4	0.0	0.301
65.00	0.32	0.26	0.00	0.00	0.00	8.70	9.02	31.4	0.0	0.288
70.00	0.30	0.26	0.00	0.00	0.00	8.27	8.59	31.4	0.0	0.274
75.00	0.29	0.26	0.00	0.00	0.00	7.82	8.12	31.4	0.0	0.259
80.00	0.27	0.26	0.00	0.00	0.00	7.33	7.62	31.4	0.0	0.243
80.00	0.34	0.32	0.00	0.00	0.00	9.07	9.43	28.7	0.0	0.328
85.00	0.33	0.32	0.00	0.00	0.00	8.42	8.77	28.7	0.0	0.305
90.00	0.31	0.31	0.00	0.00	0.00	7.73	8.07	28.7	0.0	0.281
95.00	0.30	0.31	0.00	0.00	0.00	6.99	7.31	28.7	0.0	0.255
96.00	0.27	0.26	0.00	0.00	0.00	6.84	7.12	28.7	0.0	0.248
100.00	0.25	0.26	0.00	0.00	0.00	6.36	6.63	28.7	0.0	0.231
105.00	0.24	0.25	0.00	0.00	0.00	5.71	5.97	28.7	0.0	0.208
106.00	0.23	0.24	0.00	0.00	0.00	5.58	5.83	28.7	0.0	0.203
110.00	0.22	0.24	0.00	0.00	0.00	5.07	5.31	28.7	0.0	0.185
115.00	0.21	0.23	0.00	0.00	0.00	4.39	4.61	28.7	0.0	0.161
118.00	0.16	0.18	0.00	0.00	0.00	3.96	4.13	28.7	0.0	0.144
120.00	0.16	0.18	0.00	0.00	0.00	3.75	3.92	28.7	0.0	0.136
120.00	0.18	0.21	0.00	0.00	0.00	4.25	4.45	38.1	0.0	0.117
121.00	0.17	0.20	0.00	0.00	0.00	4.13	4.32	38.1	0.0	0.113
123.00	0.17	0.20	0.00	0.00	0.00	3.88	4.06	38.1	0.0	0.107
125.00	0.16	0.19	0.00	0.00	0.00	3.64	3.81	38.1	0.0	0.100
127.00	0.15	0.18	0.00	0.00	0.00	3.39	3.55	38.1	0.0	0.093
130.00	0.14	0.17	0.00	0.00	0.00	3.01	3.17	38.1	0.0	0.083
135.00	0.13	0.17	0.00	0.00	0.00	2.37	2.51	38.1	0.0	0.066
139.00	0.11	0.16	0.00	0.00	0.00	1.83	1.97	38.1	0.0	0.052
139.00	0.39	0.56	0.00	0.00	0.00	9.31	9.74	52.0	0.0	0.187
140.00	0.39	0.56	0.00	0.00	0.00	8.66	9.09	52.0	0.0	0.175
142.00	0.37	0.51	0.00	0.00	0.00	7.29	7.72	52.0	0.0	0.148
145.00	0.37	0.51	0.00	0.00	0.00	5.29	5.72	52.0	0.0	0.110
150.00	0.00	0.52	0.00	0.00	0.00	1.49	1.73	52.0	0.0	0.033

Pole :	302483	Code: TIA/EIA-222 Rev F	4/20/2012 10:32:25 AM
Location :	Brin - Berlin, CT		Page: 34
Height :	150.0 (ft)		
Base Dia :	51.30 (in)		
Top Dia :	15.00 (in)	Base Elev : 0.000 (ft)	
Shape :	12 Sides		
Taper :	0.189701 (in/ft)		



Analysis Summary

	Reactions						Max Stresses			
Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Combined Stress (ksi)	Allowable Stress (ksi)	Elev (ft)	Stress Ratio
No Ice	34.8	0.00	50.93	0.00	0.00	3318.94	27.18	31.4	40.00	0.867
Ice	29.0	0.00	59.60	0.00	0.00	2807.35	23.29	31.4	40.00	0.743
Twist/Sway	13.6	0.00	50.96	0.00	0.00	1296.82	10.85	31.4	40.00	0.346

Base/Flange Plate		
Plate Type	*Baseplate*	
Pole Diameter	37.38	in
Pole Thickness		in
Plate Length	62	in
Plate Thickness	2	in
Plate Fy	60	ksi
Weld Length	0.25	in
Allowable	664.01	k-in
Applied	490.27	k-in

Stiffeners		
#	*0*	

Bolts		
#	*8*	
Bolt Circle	44	in
(R)adial / (S)quare	S	
Bolt Gap	6	in
Diameter	2.25	in
Hole Diameter	2.375	in
Type	#18J	
Fy	75	ksi
Fu	100	ksi
Allowable	194.86	k
Applied	130.91	k

Reinforcement ⊗		
#	*0*	

Extra Bolts ○		
#	*12*	
Bolt Circle	55.5	in
(R)adial / (S)quare	S	
Bolt Gap	6	in
Offset Angle	30	°
Diameter	1.5	in
Type	A325	
Fy	92	ksi
Fu	120	ksi
Allowable	103.67	k
Applied	86.47	k

Code Rev.	*F*	Date	4/20/2012
A.S.I.	1.33	Engineer	EM
		Site #	302483
Moment *	2157.6 k-ft	Carrier	AT&T Mobility
Axial *	33.5 k		

* Factored by 0.65, see attached calcs

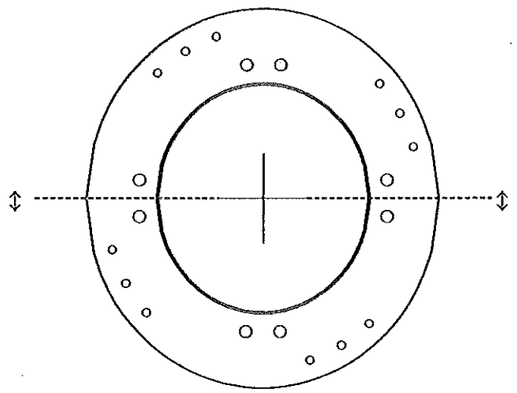


Plate Stress Ratio:
0.74 (Pass)

Bolt Stress Ratio:
0.67 (Pass)

Extra Bolt Stress Ratio:
0.83 (Pass)

Quick Calculation of Face Width, Area, Moment of Inertia & Radius of Gyration

# of Sides: 12 E_M: 29000 ksi

Original Tower

Elevation (ft)	Diameter (in)	Thickness (in)	F_y (ksi)	Area (in^2)	Inertia (in^4)	S_{min} (in^3)	F_{cr} (ksi)	$M_{Capacity}$ (k-in)	θ (radians)
0	37.38	0.375	65	44.6	7821.2	404.2	65.0	26274	0.000116
5	36.60	0.375	65	43.7	7339.9	387.4	65.0	25179	0.000118
10	35.83	0.375	65	42.8	6878.8	370.9	65.0	24108	0.000121
15	35.05	0.375	65	41.8	6437.5	354.8	65.0	23060	0.000124
20	34.28	0.375	65	40.9	6015.4	339.0	65.0	22035	0.000126
25	33.50	0.375	65	39.9	5612.2	323.6	65.0	21034	0.000129
30	32.73	0.375	65	39.0	5227.4	308.6	65.0	20056	0.000132
35	31.95	0.375	65	38.1	4860.7	293.9	65.0	19101	0.000136
40	31.77	0.3125	65	31.6	4005.6	243.5	65.0	15830	0.000136
45	30.99	0.3125	65	30.8	3715.1	231.6	65.0	15051	0.000140
50	30.21	0.3125	65	30.0	3439.0	219.9	65.0	14292	0.000143
55	29.44	0.3125	65	29.3	3176.9	208.5	65.0	13553	0.000147
60	28.66	0.3125	65	28.5	2928.5	197.4	65.0	12833	0.000151
65	27.88	0.3125	65	27.7	2693.4	186.7	65.0	12133	0.000155
70	27.10	0.3125	65	26.9	2471.3	176.2	65.0	11453	0.000160
75	26.82	0.25	65	21.4	1929.0	139.0	65.0	9033	0.000161
80	26.02	0.25	65	20.7	1760.9	130.7	65.0	8498	0.000166
85	25.23	0.25	65	20.1	1602.9	122.8	65.0	7979	0.000172
90	24.43	0.25	65	19.4	1454.7	115.0	65.0	7477	0.000177
95	23.64	0.25	65	18.8	1315.9	107.6	65.0	6991	0.000183
100	22.84	0.25	65	18.2	1186.2	100.3	65.0	6522	0.000190
105	22.05	0.25	65	17.5	1065.3	93.4	65.0	6068	0.000196
110	21.25	0.1875	65	12.7	721.1	65.6	64.5	4227	0.000202
115	20.47	0.1875	65	12.2	643.8	60.8	65.0	3949	0.000212
120	19.69	0.1875	65	11.8	572.2	56.1	65.0	3650	0.000220
125	18.91	0.1875	65	11.3	506.2	51.7	65.0	3362	0.000229
130	18.13	0.1875	65	10.8	445.4	47.5	65.0	3086	0.000239
135	17.34	0.1875	65	10.3	389.7	43.4	65.0	2821	0.000250
139	16.72	0.1875	65	10.0	348.6	40.3	65.0	2619	0.000259
140	16.56	0.1875	65	9.9	338.9	39.5	65.0	2569	0.000261
145	15.78	0.1875	65	9.4	292.6	35.8	65.0	2329	0.000274
150	15.00	0.1875	65	8.9	250.8	32.3	65.0	2100	0.000289

Sleeve

Elevation (ft)	Diameter (in)	Thickness (in)	F_y (ksi)	Area (in^2)	Inertia (in^4)	S_{min} (in^3)	F_{cr} (ksi)	$M_{Capacity}$ (k-in)	θ (radians)
0	51.30	0.375	65	61.4	20382.8	767.6	58.3	44764	0.000076
5	50.55	0.375	65	60.5	19495.4	745.0	58.8	43842	0.000078
10	49.80	0.375	65	59.6	18634.2	722.9	59.4	42916	0.000079
15	49.05	0.375	65	58.7	17798.8	701.0	59.9	41987	0.000081
20	48.30	0.375	65	57.8	16988.7	679.5	60.4	41055	0.000083
25	47.55	0.375	65	56.9	16203.5	658.3	60.9	40121	0.000085
30	46.80	0.375	65	56.0	15443.0	637.5	61.5	39186	0.000087
35	46.05	0.375	65	55.1	14706.6	617.0	62.0	38249	0.000090
40	45.50	0.3125	65	45.4	11867.0	503.9	56.0	28220	0.000082
45	44.75	0.3125	65	44.7	11285.9	487.2	56.6	27595	0.000084
50	44.00	0.3125	65	43.9	10724.0	470.8	57.3	26965	0.000087
55	43.25	0.3125	65	43.1	10181.2	454.8	57.9	26330	0.000089
60	42.50	0.3125	65	42.4	9657.0	439.0	58.5	25692	0.000092
65	41.75	0.3125	65	41.6	9151.0	423.4	59.2	25050	0.000094
70	41.00	0.3125	65	40.9	8663.1	408.2	59.8	24406	0.000097
75	40.25	0.3125	65	40.1	8192.8	393.2	60.4	23759	0.000100
80	39.70	0.25	65	31.7	6317.0	307.4	52.5	16151	0.000088
85	38.94	0.25	65	31.1	5957.8	295.6	53.3	15767	0.000091
90	38.18	0.25	65	30.5	5612.4	284.0	54.1	15378	0.000094
95	37.41	0.25	65	29.9	5280.7	272.7	54.9	14982	0.000098
100	36.65	0.25	65	29.3	4962.3	261.6	55.7	14581	0.000101
105	35.89	0.25	65	28.6	4656.9	250.7	56.5	14175	0.000105
110	35.13	0.25	65	28.0	4364.4	240.0	57.3	13765	0.000109
115	34.36	0.25	65	27.4	4084.3	229.6	58.1	13352	0.000113
120	27.30	0.25	65	21.7	2036.5	144.1	65.0	9367	0.000159
125	26.67	0.25	65	21.2	1897.2	137.4	65.0	8933	0.000162
130	26.04	0.25	65	20.7	1764.4	130.9	65.0	8509	0.000166
135	25.41	0.25	65	20.2	1637.9	124.5	65.0	8096	0.000170
139	24.90	0.25	65	19.8	1541.2	119.6	65.0	7772	0.000174

Combined Section Strength Assuming Composite Strength

Elevation	Diameter	Thickness	F_y	Area	Inertia	S_{min}	F_{cr}	$M_{Capacity}$
(ft)	(in)	(in)	(ksi)	(in^2)	(in^4)	(in^3)	(ksi)	(k-in)
0	51.30	0.75	65	121.9	39878.2	1501.7	65.0	97612
5	50.55	0.75	65	120.1	38129.6	1457.2	65.0	94717
10	49.80	0.75	65	118.3	36433.0	1413.3	65.0	91866
15	49.05	0.75	65	116.5	34787.4	1370.1	65.0	89057
20	48.30	0.75	65	114.7	33192.2	1327.6	65.0	86293
25	47.55	0.75	65	112.9	31646.5	1285.7	65.0	83572
30	46.80	0.75	65	111.1	30149.5	1244.5	65.0	80895
35	46.05	0.75	65	109.2	28700.5	1204.0	65.0	78261
40	45.50	0.625	65	90.2	23248.4	987.1	65.0	64161
45	44.75	0.625	65	88.7	22102.2	954.2	65.0	62020
50	44.00	0.625	65	87.2	20994.4	921.8	65.0	59915
55	43.25	0.625	65	85.7	19924.2	890.0	65.0	57847
60	42.50	0.625	65	84.2	18891.1	858.7	65.0	55815
65	41.75	0.625	65	82.6	17894.2	828.0	65.0	53820
70	41.00	0.625	65	81.1	16933.1	797.9	65.0	51861
75	40.25	0.5625	65	71.8	14473.9	694.7	65.0	45155
80	39.70	0.5	65	63.0	12396.9	603.2	65.0	39211
85	38.94	0.5	65	61.8	11687.6	579.9	65.0	37691
90	38.18	0.5	66	60.6	11005.8	556.9	66.0	36759
95	37.41	0.5	67	59.3	10351.1	534.5	67.0	35811
100	36.65	0.5	68	58.1	9722.8	512.5	68.0	34850
105	35.89	0.5	69	56.9	9120.6	491.0	69.0	33877
110	35.13	0.4375	70	48.8	7515.9	413.4	70.0	28936
115	34.36	0.4375	71	47.7	7031.1	395.3	71.0	28065
120	27.30	0.4375	72	37.8	3491.0	247.0	72.0	17787
125	26.67	0.4375	73	36.9	3250.5	235.5	73.0	17189
130	26.04	0.4375	74	36.0	3021.4	224.2	74.0	16589
135	25.41	0.4375	75	35.1	2803.3	213.2	75.0	15987
139	24.90	0.4375	76	34.4	2636.5	204.6	76.0	15546

Actual Combined Section Strength

Elevation	$\Sigma M_{Capacity}$	Ori. Str.	2_{nd} Str.	Eq. F_{cr}	$M_{Capacity}$	Average Fy
(ft)	(k-in)	Red. Ratio	Red. Ratio	(ksi)	(k-in)	(ksi)
0	61941	0.65	0.63	41.2	61941	
5	60348	0.66	0.64	41.4	60348	
10	58759	0.66	0.64	41.6	58759	
15	57173	0.66	0.64	41.7	57173	
20	55592	0.66	0.64	41.9	55592	
25	54018	0.66	0.65	42.0	54018	
30	52450	0.66	0.65	42.1	52450	
35	50891	0.66	0.65	42.3	50891	
40	37745	0.60	0.59	38.2	37745	41.8
45	36678	0.60	0.59	38.4	36678	
50	35612	0.61	0.59	38.6	35612	
55	34546	0.61	0.60	38.8	34546	
60	33483	0.61	0.60	39.0	33483	
65	32423	0.61	0.60	39.2	32423	
70	31368	0.61	0.60	39.3	31368	
75	29353	0.62	0.65	42.3	29353	
80	20653	0.53	0.53	34.2	20653	39.2
85	20010	0.53	0.53	34.5	20010	
90	19363	0.53	0.53	34.8	19363	
95	18715	0.53	0.52	35.0	18715	
100	18066	0.53	0.52	35.3	18066	
105	17418	0.53	0.51	35.5	17418	
110	16040	0.54	0.55	38.8	16040	
115	15457	0.53	0.55	39.1	15457	
120	11999	0.72	0.67	48.6	11999	35.9
125	11316	0.71	0.66	48.1	11316	
130	10657	0.70	0.64	47.5	10657	
135	10022	0.68	0.63	47.0	10022	
139	9530	0.67	0.61	46.6	9530	47.6

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

April 27, 2012

The Honorable Adam P. Salina
Mayor
Town of Berlin
240 Kensington Road
Kensington, CT 06037

RE: **EM-AT&T-007-120427A** – AT&T Mobility notice of intent to modify an existing telecommunications facility located at 260 Beckley Road, Berlin, Connecticut.

Dear Mayor Salina:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by May 11, 2012.

Thank you for your cooperation and consideration.

Very truly yours,

Linda Roberts

Linda Roberts
Executive Director

LR/cm

Enclosure: Notice of Intent

c: Denise McNair, Town Manager, Town of Berlin
Hellyn Riggins, Town Planner, Town of Berlin