

**PULLMAN  
& COMLEY**  
ATTORNEYS

**CARRIE L. LARSON**  
90 State House Square  
Hartford, CT 06103-3702  
p (860) 424-4312  
f (860) 424-4370  
clarson@pullcom.com  
www.pullcom.com

October 22, 2010

**VIA FACSIMILE (860-827-2950) and ELECTRONIC MAIL**

Linda Roberts, Executive Director  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06051

**RECEIVED**  
OCT 22 2010  
CONNECTICUT  
SITING COUNCIL

**Re: Exempt Modifications, Pocket Wireless**

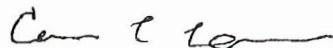
Dear Ms. Roberts:

Please be advised that this office represents Youghiogheny Communications-Northeast, LLC, doing business as Pocket Communications ("Pocket"). As you may be aware, Pocket has filed numerous exempt modifications with the Siting Council over the course of the last two years. As part of those exempt modification filings, Pocket had indicated that they may temporarily use microwave dishes and/or generators. The approval letters related to these exempt modifications requested additional information or follow up concerning the use of microwave dishes and/or generators. Please be advised that Pocket is no longer utilizing any microwave dishes or generators at any of the sites listed below and therefore Pocket believes that this additional information is unnecessary. This is applicable to list of sites below:

2577 Main Street, Glastonbury – EM 054-090710  
605 Willard Avenue, Newington – EM 094-090727  
99 Cedarwood Lane, Newington – EM 094-080922  
Turnpike Road, Willington – EM 160-090804  
1055 Wintergreen Avenue, Hamden – EM 062-090512  
310 Prestige Park, East Hartford – EM 043-090723  
371 Terryville Avenue, Bristol – EM 017-091112  
Bright Meadow Blvd, Enfield – EM 049-090728  
111 Trask Road, Willington – EM 160-090727

Please let me know if you have any questions.

Respectfully Submitted,



Carrie L. Larson

ACTIVE/72572.371/CLARSON/2278047v1



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](mailto:siting.council@ct.gov)

[www.ct.gov/csc](http://www.ct.gov/csc)

August 10, 2009

Carrie L. Larson, Esq.  
Pullman & Comley, LLC  
90 State House Square  
Hartford, CT 06103-3702

RE: **EM-POCKET-043-090723** – Youghiogheny Communications-Northeast, LLC d/b/a Pocket Communications notice of intent to modify an existing telecommunications facility located at 310 Prestige Park Road, (aka 2 Prestige Park Drive), East Hartford, Connecticut.

Dear Attorney Larson:

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:

- The applicant shall take steps to mitigate the generator noise and ensure compliance of applicable noise standards while the temporary generator is in place until permanent utility connections are installed; and
- An updated structural analysis taking into account the temporary microwave dish shall be submitted to the Council prior to the installation of such dish on the tower.

The proposed modifications are to be implemented as specified here and in your notice dated July 22, 2009, and additional correspondence dated July 24, 2009, including the placement of all necessary equipment and shelters within the tower compound. 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. Any

deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,



S. Derek Phelps  
Executive Director

SDP/CDM/laf

c: The Honorable Melody A. Currey, Mayor, Town of East Hartford  
Michael J. Dayton, Town Planner, Town of East Hartford  
American Tower Corporation

EM-POCKET-043-090723

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**ORIGINAL**  
**RECEIVED**  
JUL 27 2009

CONNECTICUT  
SITING COUNCIL

July 24, 2009

**Via Federal Express**

S. Derek Phelps, Executive Director  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06051

**Re: Notice of Exempt Modification – Relocated Compound  
American Tower Corporation Telecommunications Facility  
310 Prestige Park Road, (aka 2 Prestige Park Drive), East Hartford, Connecticut**

Dear Mr. Phelps:

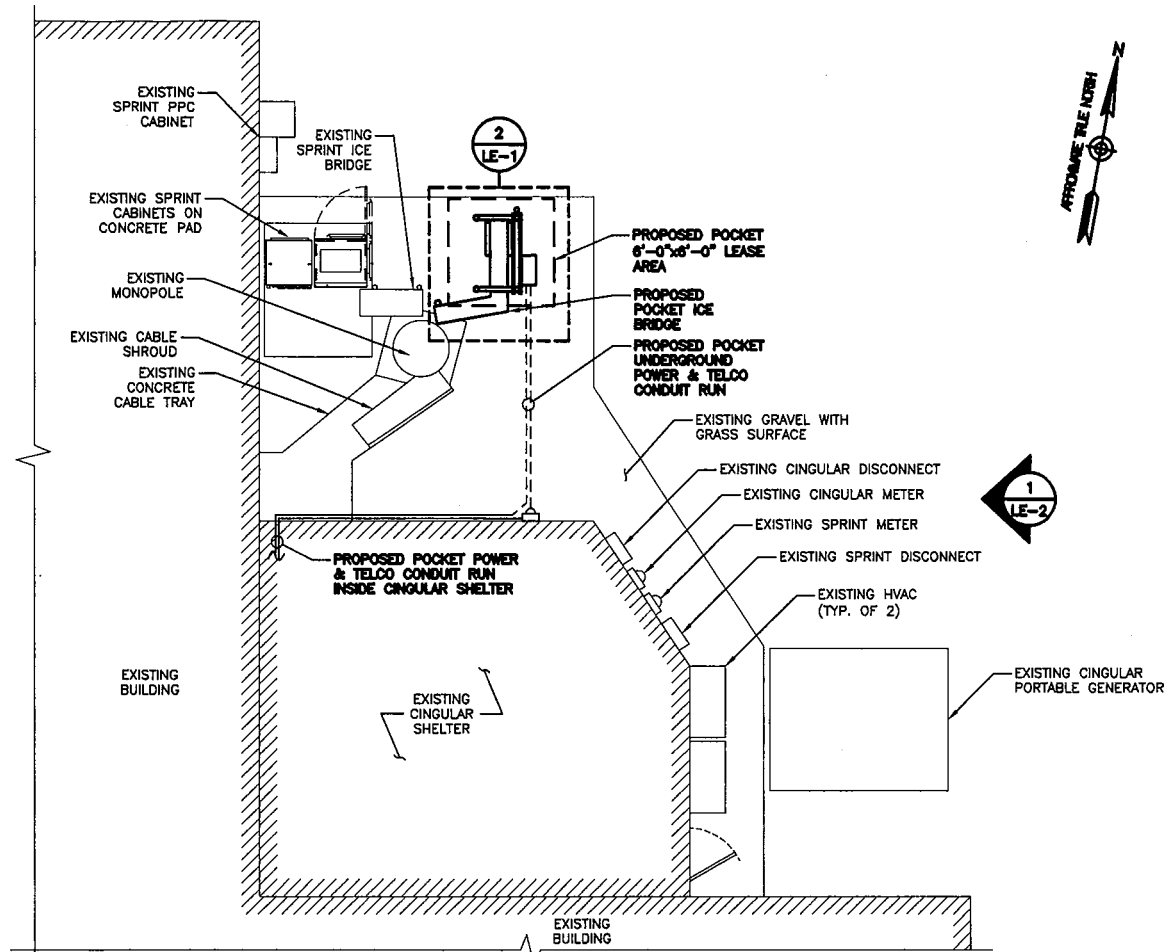
Youghiogheny Communications-Northeast, LLC, doing business as Pocket Communications (“Pocket”), filed a Notice of Exempt Modification with your office on July 22, 2009 for the above-referenced site, owned by American Tower Corporation (“ATC”) and located at 310 Prestige Park Road, (aka 2 Prestige Park Drive), East Hartford, Connecticut (“the Facility”). ATC has informed Pocket of it’s desire to move the Pocket six by six (6’ x 6’) lease area slightly to the south. Enclosed you will find the original drawing submitted with the original application (LE-1) as well as a new drawing from ATC (SP-1), showing the new location of the Pocket lease area. As you can see, the new area will move from just off the northeast side of the tower to just below the southeast side of the tower, approximately one foot away from the existing Cingular shelter. Everything else regarding the original Exempt Modification application remains the same. A copy of this letter has been sent to Melody A. Currey, Mayor, Town of East Hartford.

Respectfully Submitted,

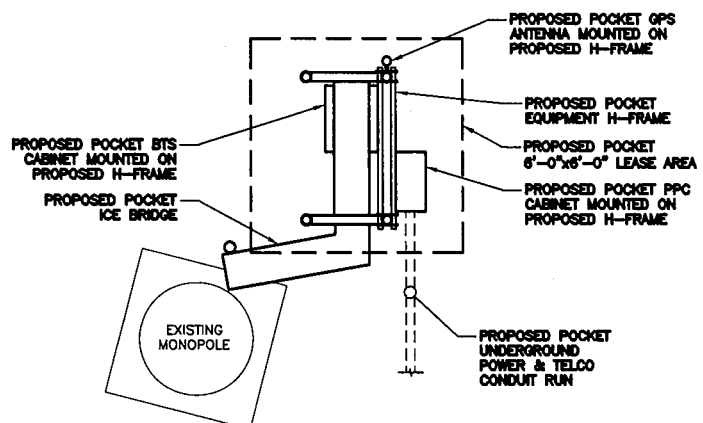


Carrie L. Larson

cc: Melody A. Currey, Mayor, Town of East Hartford  
Fremont Riverview, LLC, underlying property owner



**COMPOUND PLAN**  
SCALE: N.T.S. 1



**EQUIPMENT LAYOUT PLAN**  
SCALE: N.T.S. 2

APPROVALS	
SITE OWNER _____	DATE _____
CONSTRUCTION MANAGER _____	DATE _____
R.F. ENGINEER _____	DATE _____
SITE ACQUISITION _____	DATE _____

THE ABOVE DRAWING, SPECIFICATIONS, AND ALL OTHERS THEREON, SHALL BE THE PROPERTY OF BAY STATE DESIGN, INC. AND SHALL BE KEPT IN CONFIDENCE. NO PART OF THIS DRAWING OR SPECIFICATIONS SHALL BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF BAY STATE DESIGN, INC.

**BAY STATE DESIGN**

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Bay State Design, Inc.  
Architects • Engineers  
241 Boston Post Road West  
Marlborough, MA 01752  
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Fax: 508-485-5321

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PREPARED FOR:

**Packet Communications**  
P.O. Box 5936  
San Antonio, TX 78201

SITE NUMBER: <b>HFCT1536A</b>	DRAWN BY: <b>JRK</b>
SITE NAME: <b>EAST HARTFORD EAST HARTFORD, CT</b>	CHECKED BY: <b>JP</b>
SITE ADDRESS: <b>310 PRESTIGE PARK ROAD EAST HARTFORD, CT 06108</b>	DATE: <b>07/09/09</b>

PROJECT NUMBER: <b>2882.114</b>	SHEET: <b>LE-1</b>
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REV.	DESCRIPTION

SITE NUMBER:  
302473

SITE NAME:  
E H F R - PRESTIGE PARK  
CONNECTICUT

DRAWN BY:	E. L. SCHROEDER
DATE DRAWN:	06/02/2009
CUSTOMER:	
COLLOCATION NO.:	

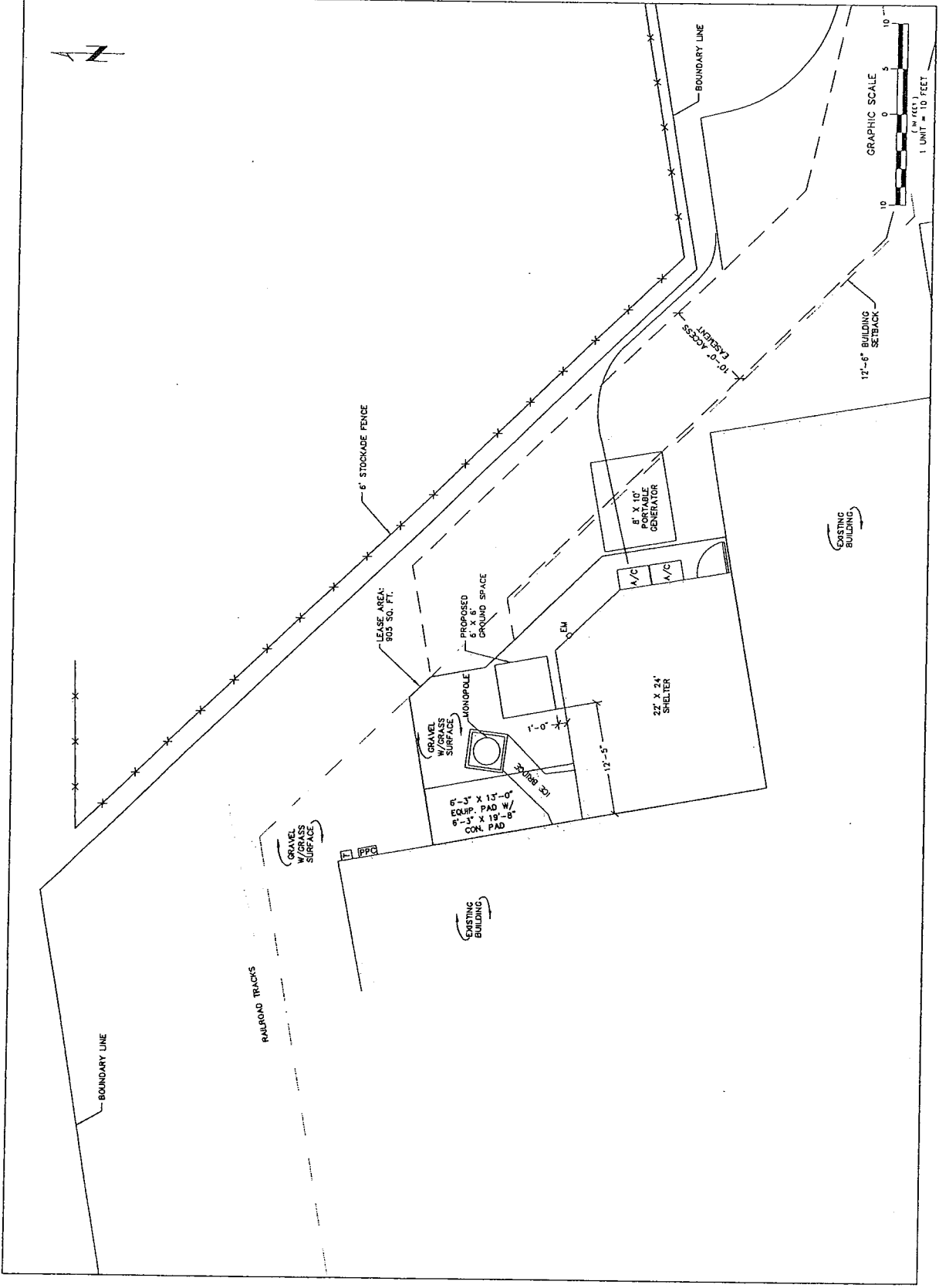
- LEGEND**
- ⊗ GROUNDING TEST WELL
  - A/C AIR CONDITIONING UNIT
  - B BOLLARD
  - C CABINET
  - CSC FIBER OPTIC CABINET
  - GEN GENERATOR
  - G GENERATOR SERVICE DISC.
  - H ICE BRIDGE
  - M METER RACK
  - PP POWER POLE
  - TRN TRANSFORMER
  - TD TELEPHONE HOOKUP
  - T TELEPHONE DEMARK
  - W WATER VALVE

DIMENSIONS NOT VERIFIED  
BY LICENSED SURVEYOR

SHEET TITLE:  
SITE PLAN LAYOUT

SHEET NUMBER:  
SP-1

REV. #  
1



**EM-POCKET-043-090723**

**CARRIE L. LARSON**  
90 State House Square  
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[www.pullcom.com](http://www.pullcom.com)

July 22, 2009

**ORIGINAL RECEIVED**  
JUL 23 2009

**Via Federal Express**

S. Derek Phelps, Executive Director  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06051

**CONNECTICUT  
SITING COUNCIL**

**Re: Notice of Exempt Modification  
American Tower Corporation Telecommunications Facility  
310 Prestige Park Road, (aka 2 Prestige Park Drive), East Hartford, Connecticut**

Dear Mr. Phelps:

Youghiogheny Communications-Northeast, LLC, doing business as Pocket Communications ("Pocket"), intends to install antennas and appurtenant equipment at the existing 150-foot monopole facility owned by **American Tower Corporation** and located at **310 Prestige Park Road, aka 2 Prestige Park Drive, East Hartford, Connecticut** ("Facility"). Pocket Communications provides prepaid, flat rate wireless voice and data services to more than a quarter of a million subscribers. Pocket is licensed by the Federal Communications Commission (FCC) to provide PCS wireless telecommunications service in the State of Connecticut, which includes the area to be served by the proposed installation. This installation constitutes an exempt modification pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes Section 16-50g et. seq. (PUESA), and Section 16-50j-72(b)(2) of the Regulations of the Connecticut State Agencies adopted pursuant to PUESA. In accordance with R.C.S.A. Section 16-50j-73, a copy of this notice has been sent to Melody A. Currey, Mayor, Town of East Hartford.

The existing Facility consists of a 150-foot self-supporting monopole tower capable of supporting multiple carriers within a fenced compound. The coordinates for the Facility are **Lat: 41°-47'-18"** and **Long: 72°-36'-04"**. The tower is located in the northwest portion of East Hartford, approximately 1000 feet north of Tolland Street, roughly one mile east of Ellington Road (Route 5), and roughly two miles east of the Connecticut River (see Site Map, attached as Exhibit A). The tower currently supports Sprint antennas at the one hundred thirty-eight foot (138') level centerline AGL (above ground level) and AT&T antennas at the one hundred fifty foot level (150') AGL. Pocket proposes to install three RFS APXV18-206517S-C flush mount antennas on the tower at the one hundred twenty-eight foot centerline (128') AGL, and a Nortel CDMA Micro BTS 3231 cabinet, mounted on an "H-Frame," contained within a six foot by six foot (6'-0" x 6'-0") lease area. A small GPS antenna will be mounted to an ice bridge which will

Page 2

run from the lease area to the tower. Utilities will be run via a proposed underground conduit from an existing utility backboard, within the compound (See Design Drawings and Equipment Specifications, attached as Exhibits B and C respectively). To accommodate Pocket's equipment on a temporary basis, a mobile, EPA approved generator and small microwave dish antenna (approximately 14" by 14") will be used at the site to provide electricity until permanent power can be established by the utility provider. Pocket anticipates that the temporary generator will be in use for a maximum of eight weeks from the time of approval. The specifications on this proposed temporary generator and microwave dish are included in the Equipment Specifications, attached as Exhibit C. Due to the temporary use and low emissions from the generator, no permit is required from the Department of Environmental Protection. Pocket would propose to refuel the generator every 48 hours.

For the following reasons, the proposed modifications to the Prestige Park Road (aka Prestige Park Drive) Facility meet the exempt modification criteria set forth in R.C.S.A. Section 16-50j-72(b)(2):

1. The proposed modification will not increase the height of the tower as Pocket's antennas will be installed at a center line height of approximately 128 feet.
2. The installation of Pocket's equipment and shelter will not require an extension of the site boundaries.
3. The proposed modifications will not increase the noise levels at the existing Facility by six decibels or more.
4. The operation of the additional antennas will not increase the total radio frequency (RF) power density, measured at the site boundary, to a level at or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. The worst-case RF power density calculations for the proposed Pocket antennas would be 25.45% of the FCC standard (see general power density calculations table, attached as Exhibit D).

Also attached, Exhibit E, is a structural analysis confirming that the tower can support the existing and proposed antennas and associated equipment.

For the foregoing reasons, Pocket respectfully submits that the proposed antenna installation and equipment at the East Hartford Facility constitutes an exempt modification under R.C.S.A. Section 16-50j-72(b)(2).



**PULLMAN & COMLEY, LLC**  
ATTORNEYS AT LAW

Page 3

Respectfully Submitted,



Carrie L. Larson

cc: Melody A. Currey, Mayor, Town of East Hartford  
Fremont Riverview, LLC, underlying property owner

Hartford/72572.2/JTP/380767v1

# **Exhibit A**

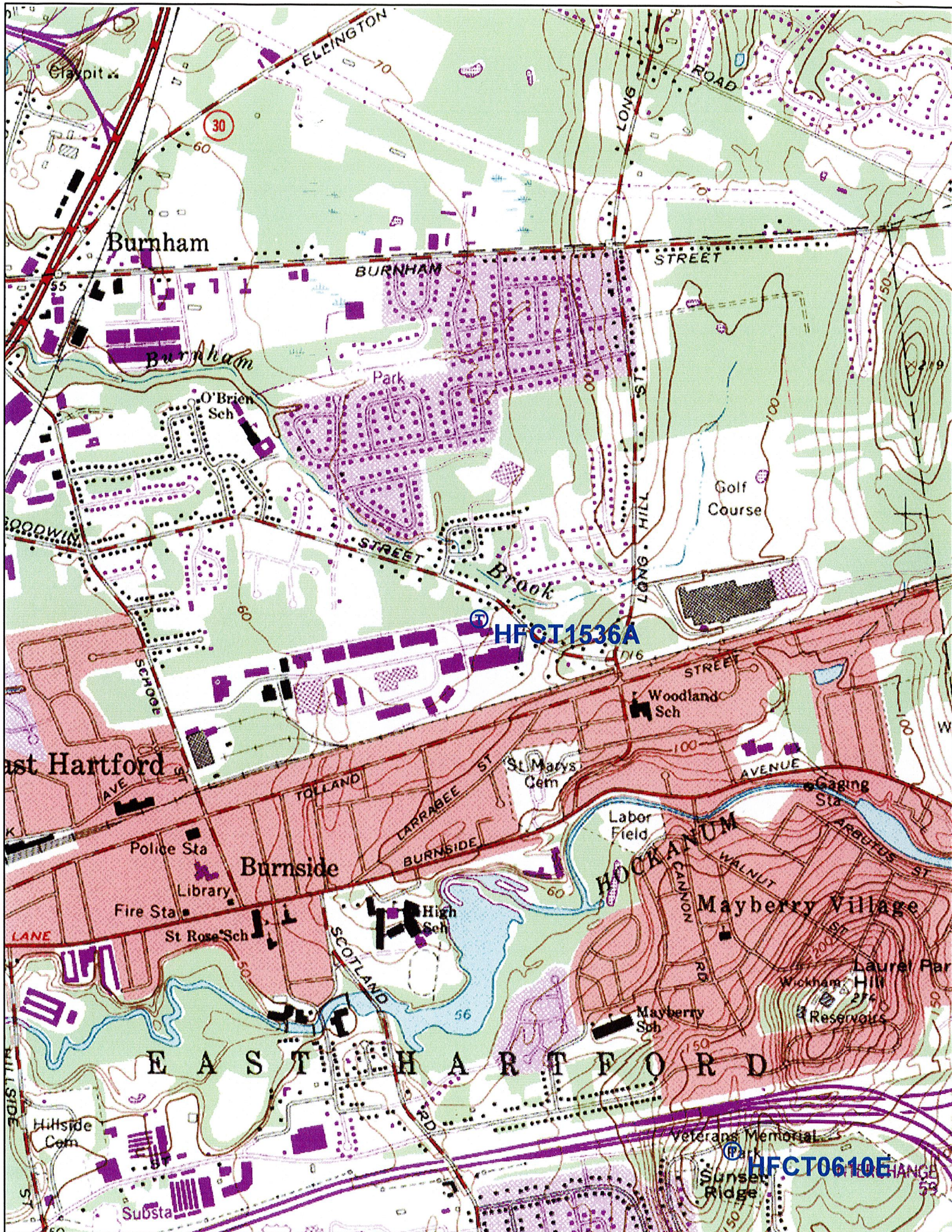
## **Site Map**

**Pocket Site HFCT1536A**

**310 Prestige Park Road**

**(aka 2 Prestige Park Drive)**

**East Hartford, Connecticut**



# **Exhibit B**

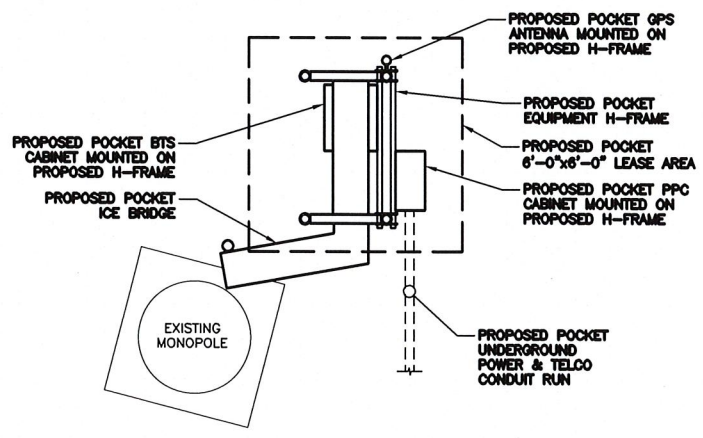
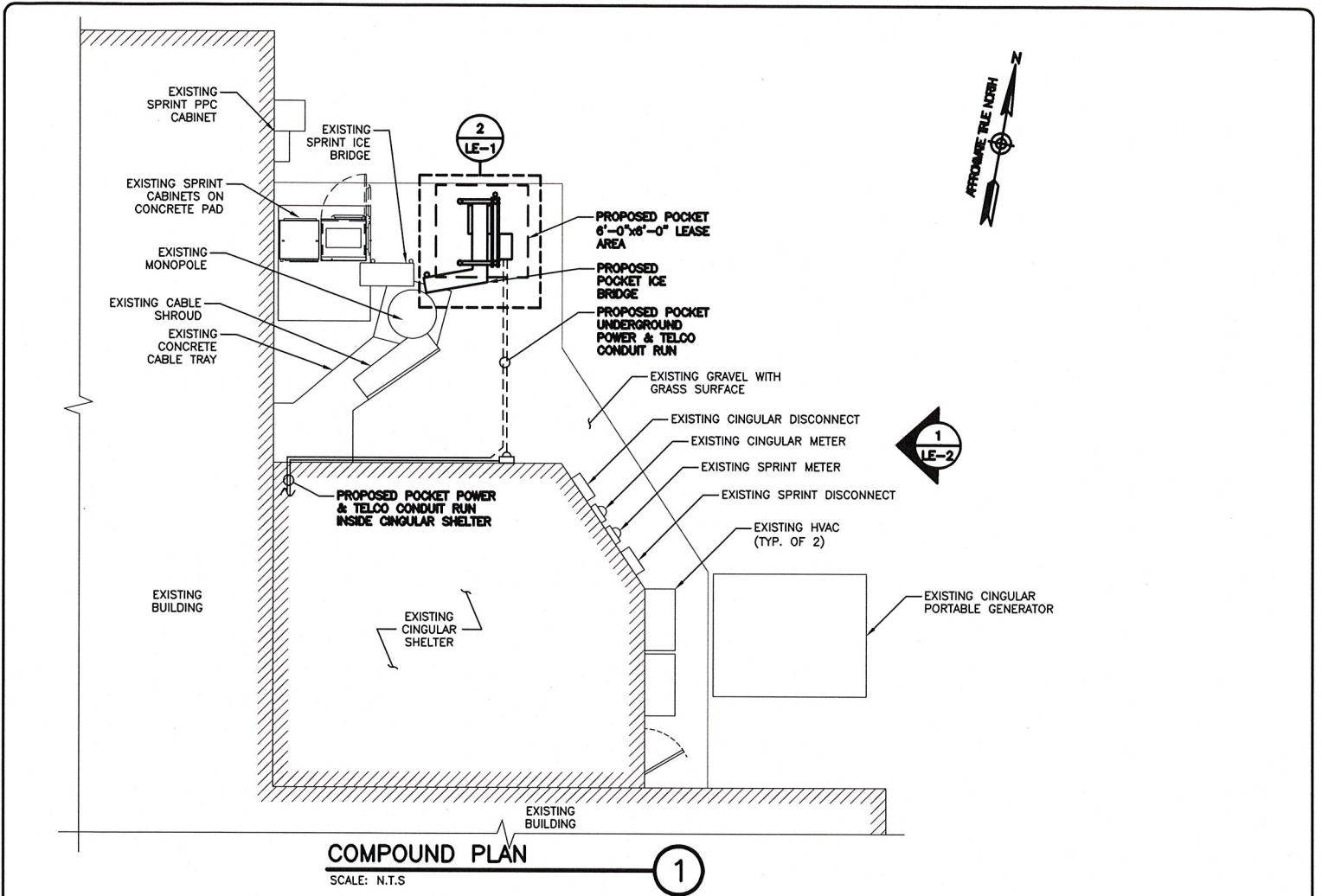
## **Design Drawings**

**Pocket Site HFCT1536A**

**310 Prestige Park Road**

**(aka 2 Prestige Park Drive)**

**East Hartford, Connecticut**



**EQUIPMENT LAYOUT PLAN**

SCALE: N.T.S.

**2**

APPROVALS	
SITE OWNER	DATE
CONSTRUCTION MANAGER	DATE
R.F. ENGINEER	DATE
SITE ACQUISITION	DATE

THE ABOVE PARTIES HEREBY APPROVE AND ACCEPT THESE DRAWINGS AND SPECIFICATIONS AND AGREE TO PROCEED WITH THE CONSTRUCTION OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS AND FOR OBTAINING ALL NECESSARY PERMITS.

**MAXTON**

50 Eastman St.  
South Easton, MA 02375  
Phone: (508) 636-6363  
Fax: (508) 636-6365

**BAY STATE DESIGN**

Bay State Design, Inc.  
Architects • Engineers  
241 Boston Post Road West  
Marlborough, MA 01752  
Phone: 508-229-4100  
Fax: 508-485-5321

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PREPARED FOR:

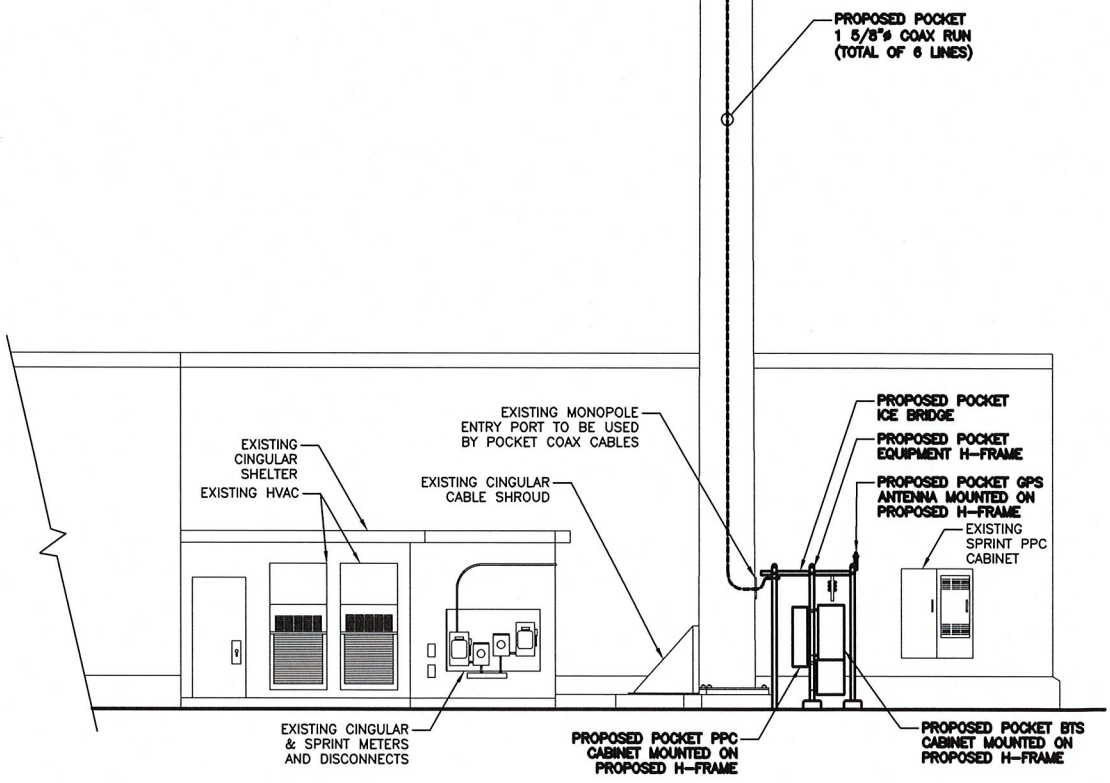
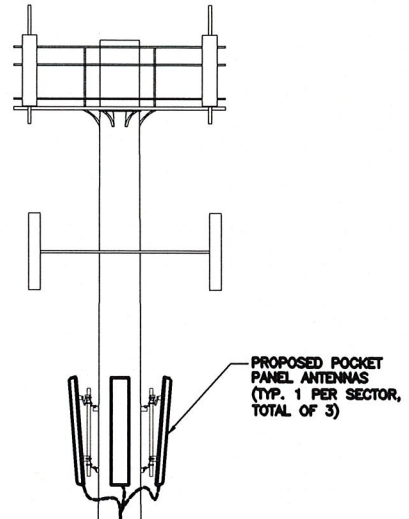
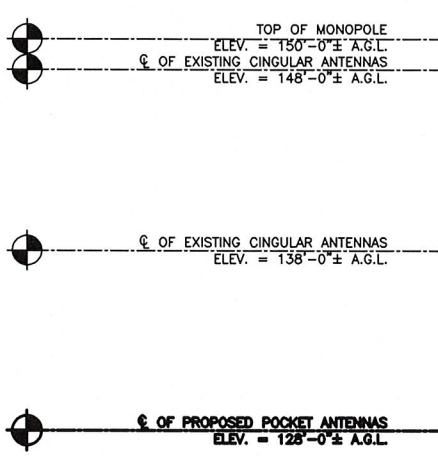
**POCKET**  
SMART WIRELESS

**Packet Communications**  
P.O. Box 5936  
San Antonio, TX 78201

SITE NUMBER:	<b>HFCT1536A</b>
SITE NAME:	<b>EAST HARTFORD EAST HARTFORD, CT</b>
SITE ADDRESS:	<b>310 PRESTIGE PARK ROAD EAST HARTFORD, CT 06108</b>

DRAWN BY:	<b>JRK</b>
CHECKED BY:	<b>JP</b>
DATE:	<b>07/09/09</b>

PROJECT NUMBER:	<b>2882.114</b>
SHEET:	<b>LE-1</b>



PROPOSED POCKET 1 5/8" COAX RUN (TOTAL OF 6 LINES)

**ELEVATION**

SCALE: N.T.S.

1

**APPROVALS**

SITE OWNER	DATE
CONSTRUCTION MANAGER	DATE
R.F. ENGINEER	DATE
SITE ACQUISITION	DATE

THE ABOVE PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AGENCIES AND ANY CHANGES OR MODIFICATIONS THEY MAY IMPOSE.

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**BAY STATE DESIGN**  
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Marlborough, MA 01752  
Phone: 508-229-4100  
Fax: 508-485-5321

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PREPARED FOR:

**pocket**  
SMART WIRELESS

**Pocket Communications**  
P.O. Box 5936  
San Antonio, TX 78201

SITE NUMBER:  
**HFCT1536A**

SITE NAME:  
**EAST HARTFORD  
EAST HARTFORD, CT**

SITE ADDRESS:  
**310 PRESTIGE PARK ROAD  
EAST HARTFORD, CT 06108**

DRAWN BY:  
**JRK**

CHECKED BY:  
**JP**

DATE:  
**07/09/09**

PROJECT NUMBER:  
**2882.114**

SHEET:  
**LE-2**

# **Exhibit C**

## **Equipment Specifications**

**Pocket Site HFCT1536A**

**310 Prestige Park Road**

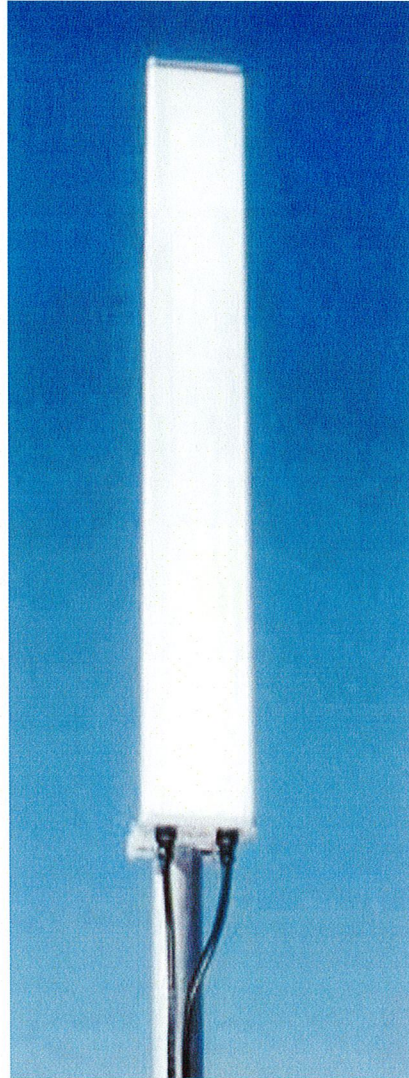
**(aka 2 Prestige Park Drive)**

**East Hartford, Connecticut**



**Product Description**

This variable tilt antenna provides exceptional suppression of all upper sidelobes at all downtilt angles. It also features null fill and a wide downtilt range with optional remote tilt.



**Features/Benefits**

- Variable electrical downtilt - provides enhanced precision in controlling intercell interference. The tilt is infield adjustable 0-10 deg.
- High Suppression of all Upper Sidelobes (Typically <-20dB).
- Optional remote tilt - can be retrofitted.
- Broadband design.
- Dual polarization.
- Low profile for low visual impact.

**Technical Features**

Frequency Band	3G/UMTS (Single, Broad, Dual and Triple-Band)
Horizontal Pattern	Directional
Antenna Type	Panel Dual Polarized
Electrical Down Tilt Option	Variable

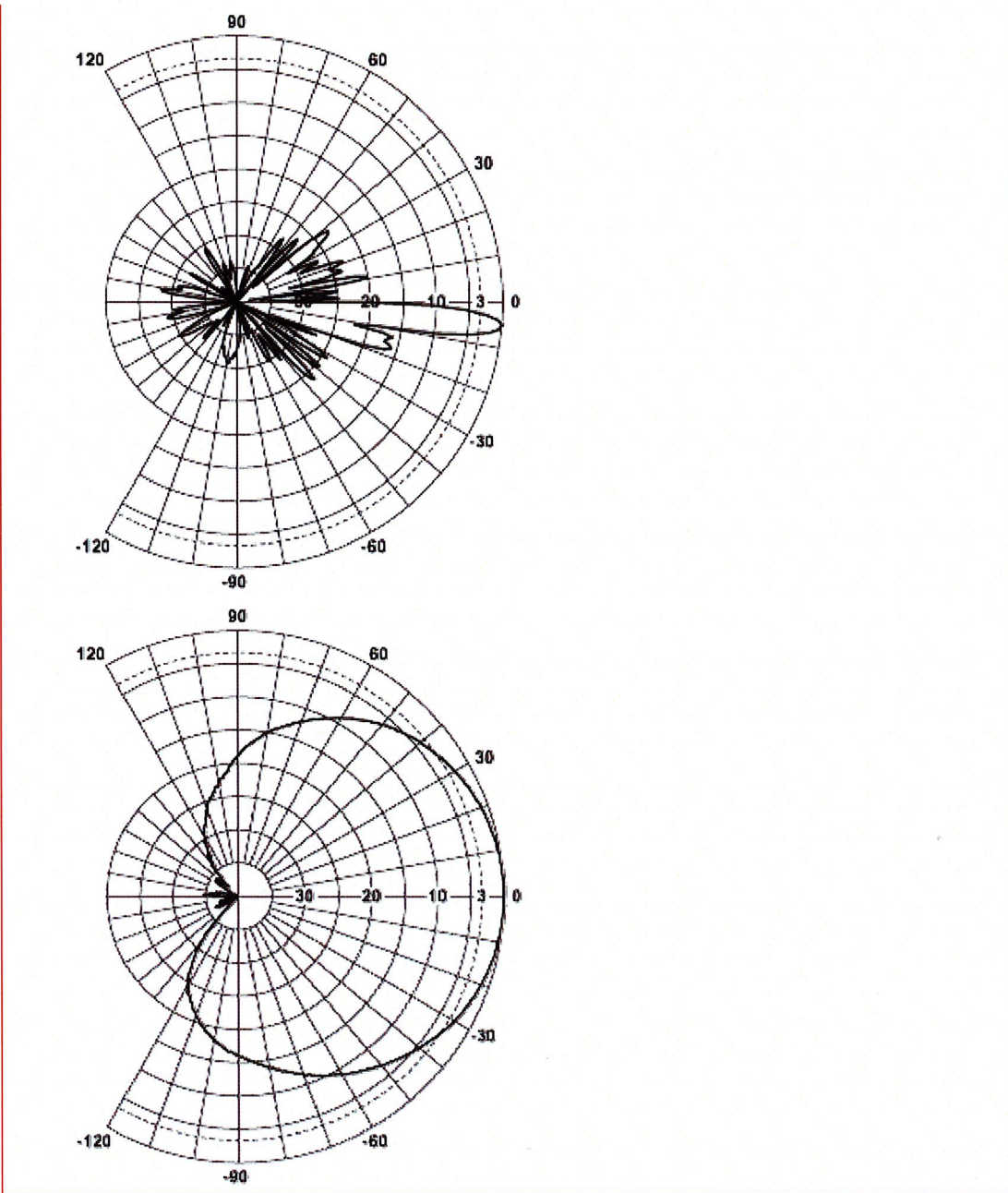


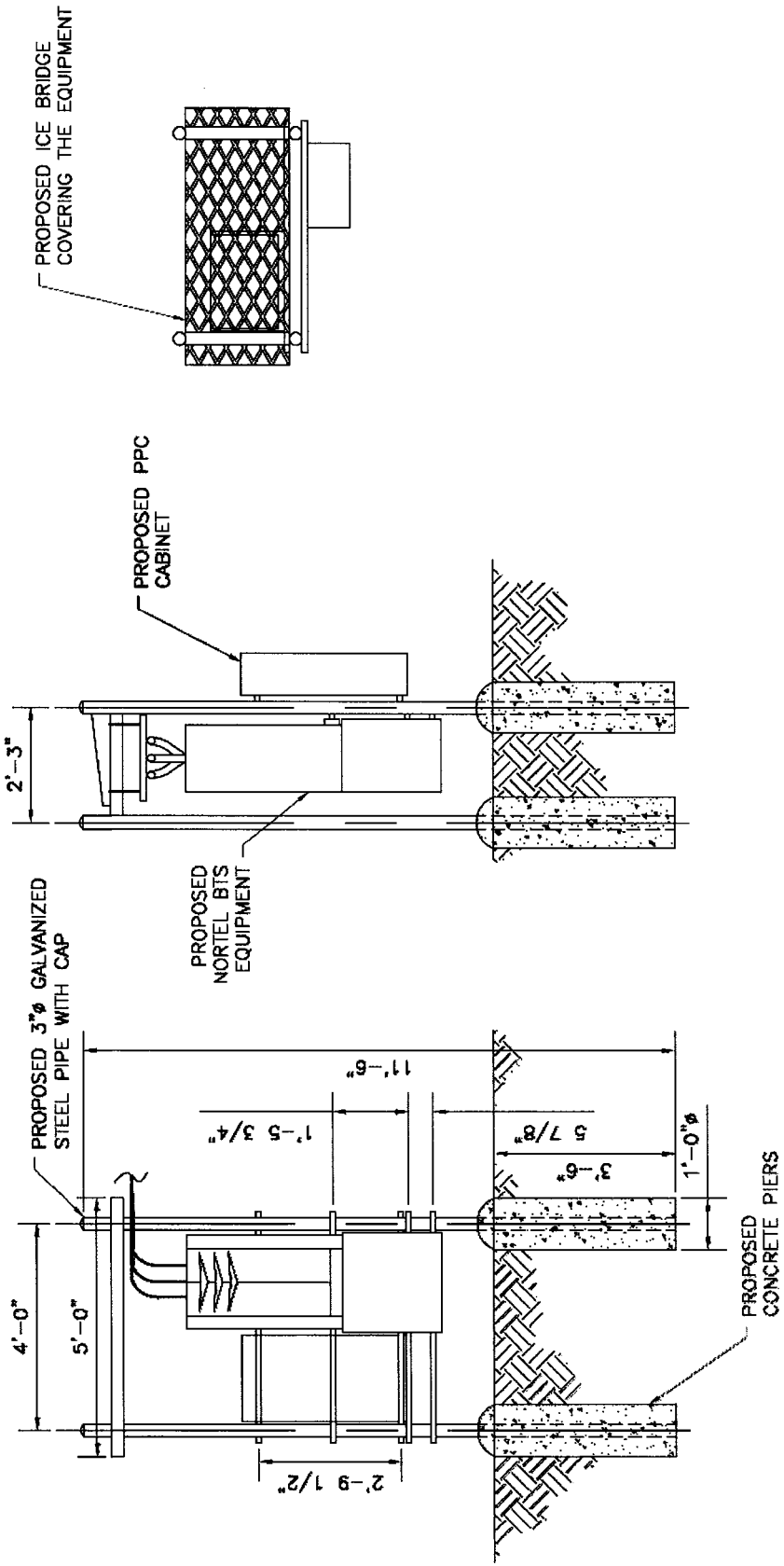


Gain, dBi (dBd)	18.8 (16.7) , 19.0 (16.9)
Frequency Range, MHz	1710-1900, 1900-2170
Connector Type	(2) 7-16 DIN Female
Connector Location	Bottom
Mount Type	Downtilt
Electrical Downtilt, deg	0-10
Horizontal Beamwidth, deg	67 , 63
Mounting Hardware	APM40-2
Rated Wind Speed, km/h (mph)	160 (100)
VSWR	< 1.5:1
Vertical Beamwidth, deg	5.0 , 4.6
Upper Sidelobe Suppression, dB	>17 , >18 all (Typically >20)
Polarization	Dual pol +/-45°
Front-To-Back Ratio, dB	>30
Maximum Power Input, W	300
Isolation between Ports, dB	>30
Lightning Protection	Direct Ground
3rd Order IMP @ 2 x 43 dBm, dBc	>150
7th Order IMP @ 2x46 dBm, dBc	>170
Impedance, Ohms	50
Overall Length, m (ft)	1.85 (6.06)
Mounting Hardware Weight, kg (lb)	3.4 (7.5)
Dimensions - HxWxD, mm (in)	1850 x 175 x 80 (72.0 x 6.8 x 3.15)
Weight w/o Mtg Hardware, kg (lb)	12 (26.4)
Weight w/ Mtg Hardware, kg (lb)	14.8 (32.5)
Radiating Element Material	Brass
Radome Color	Light Grey RAL7035
Radome Material	Fiberglass
Mounting Hardware Material	Diecasted Aluminum
Reflector Material	Aluminum
Max Wind Loading Area, m <sup>2</sup> (ft <sup>2</sup> )	0.31 (3.3)
Survival Wind Speed, km/h (mph)	200 (125)
Maximum Thrust @ Rated Wind, N (lbf)	558 (125)
Front Thrust @ Rated Wind, N (lbf)	558 (125)
Shipping Weight, kg (lb)	18.3 (39.8)
Packing Dimensions, HxWxD, mm (in)	2021 x 260 x 200 (79.5 x 10.2 x 7.8)
Packing Dimensions - HxWxD, m (ft)	2.0 x 0.26 x 0.2 (6.6 x 0.85 x 0.65)

**Notes**

For additional mounting information please click "External Document Link" below.





Pocket/Youghiogheny Communications – Northeast, LLC  
 Rack Detail



## CDMA BTS 3231 AWS 1.7/2.1 GHz (Outdoor/Indoor)

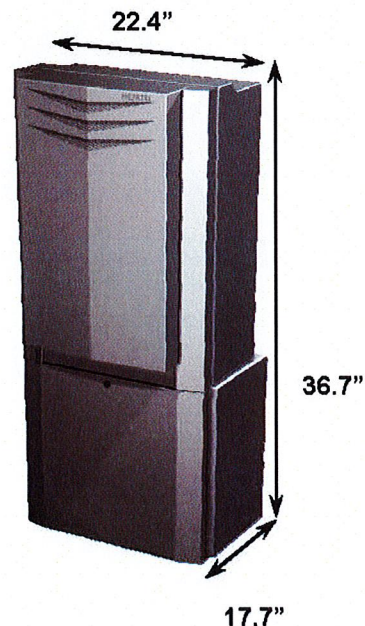
to transport to hard to reach locations such as the top of a high rise building.

### CDMA BTS 3231

---

#### *Industry's Highest Capacity AWS Micro BTS*

The CDMA BTS 3231 is the latest extension to Nortel Networks BTS (Base Transceiver Station) portfolio providing the ideal solution for urban, sub-urban and rural deployments. The CDMA BTS 3231 is a 3-carrier, 3-sector outdoor/indoor BTS operating at the AWS band of 1.7/2.1 GHz supporting IS-95, 1XRTT and 1xEV-DO simultaneously. BTS 3231 provides flexible deployments solutions including floor, rack, and wall mount options. The power consumption of BTS3231 is industry leading consuming only 630W for 3C3S. The BTS 3231 is also very light at 240lbs making it easy





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- Pumps
- Water Trailers

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• **GLOSSARY**

## MLG15 Lite Generator Interim Tier IV EPA Approved Engine

Magnum recognizes environmental responsibility and continues to meet emission regulations with the addition of their Interim Tier IV Generator line. The MLG15 generator is powered by a Mitsubishi diesel engine. Proven power you can trust, while maximizing fuel efficiency and high performance.

**Affordable, Reliable, Mobile**



**More Information**

**Manuals**

- [Operating & Parts](#)

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**Power**

The MLG15 diesel generator provides just the right combination of output, flexibility, ruggedness, efficiency and affordability for on-the-go, smaller-to-midsized, single phase power needs.

**Features**

**Tough**

- Full tubular steel frame, with lockable enclosure
- Durable, fade resistant, white baked on powder coat finish
- Stainless steel hinges, exterior hardware and pad lockable door latches

**Reliable**

- Key switch to preheat (glow plug), start & stop
- Automatic low oil level / high temp shutdown alerts
- 70A Start limit main breaker
- 2 year - 2,000 hour warranty
- Marathon voltage regulation within +/- 1%

**Ease for Your Users**

- Self-priming 4 cylinder Mitsubishi engine
- External convenience outlets with individual breaker switches
- External emergency stop switch

**Specifications**

**Output**

3 Phase - Standby <b>kW (kVA)</b>	N/A
Amps <b>480V (208V)</b>	N/A
3 Phase - Prime <b>kW (kVA)</b>	N/A
Amps <b>480V (208V)</b>	N/A
1 Phase - Standby <b>kW (kVA)</b>	14.0 (14.0)
Amps <b>240V</b>	58
1 Phase - Prime <b>kW (kVA)</b>	13.0 (13.0)
Amps <b>240V</b>	54
AC Voltage 1-phase	120, 240
AC Voltage 3-phase	N/A
Frequency <b>Hz</b>	60
Power Factor	1.0 (1 Phase)
Generator - Brand / Type / Insulation	Marathon / Brushless / F
Sound (dB(A) 23 ft @ prime)	68
<b>Size and Weight</b>	
Skid Mounted - L x W x H <b>in (m)</b>	N/A
Dry Weight <b>lbs (kg)</b>	N/A
Operating Weight <b>lbs (kg)</b>	N/A
Trailer Mounted - L x W x H <b>in (m)</b>	105 x 67 x 56 (2.67 x 1.70 x 1.42)
Dry Weight <b>lbs (kg)</b>	1425 (646)

*updated parts information before placing a parts order.*

**Tech. Specs.**

- [MLG15](#)

**Literature / Sales**

- [Generator Lit.](#)
- [Service Kit Lit.](#)
- [Sales Support](#)



- [Warranty Overview](#)
- [Warranty Claim Policy](#)

Operating Weight <b>lbs (kg)</b>	1823 (827)
<b>Engine</b>	
Type	Interim Tier IV
Brand	Mitsubishi
Aspiration	Natural
Power - Prime @ 1800 rpm <b>hp (kWm)</b>	22.3 (16.6)
Displacement <b>cubic in (L)</b>	107 (1.8)
Cylinders	4
Speed <b>rpm</b>	1800
Fuel Consumption - Prime <b>gph (Lph)</b>	1.30 (4.92)
<b>Capacities</b>	
Fuel Tank <b>gal (L)</b>	56 (212)
Approximate Run Time <b>hrs</b>	43
Coolant <b>qt (L)</b>	11.6 (11.0)
<b>Electrical Distribution</b>	
Battery - 12V	1 - 12V 440 CCA Wet Cell
Main Circuit Breaker Size <b>A</b>	70
Voltage Selection	N/A
Voltage Regulation	+/-1%
120V - 20A GFI Duplex Outlets - qty	2
240V - 30A Twist Lock Outlets - qty	2
240V - 50A Twist Lock Outlets - qty	2
<b>Trailer</b>	
Number of Axles	1
Capacity - Axle Rating <b>lbs (kg)</b>	2200 (998)
Tire Size <b>in</b>	15
Brakes	N/A
Hitch	2" Ball
Maximum Tire Pressure <b>psi</b>	50
<b>Options</b>	
Powertrain (Engine/Gen)	<ul style="list-style-type: none"> <li>• 60/40 Coolant</li> <li>• Heated Fuel Filter</li> <li>• Engine Heater - Lower Radiator Hose</li> <li>• Oil Drain Valve Kit</li> </ul>
Controls	<ul style="list-style-type: none"> <li>• Battery, 720 CCA Gel Cell</li> <li>• Battery, 720 CCA Wet Cell</li> <li>• Battery, 685 CCA Gel Cell</li> <li>• No Battery</li> <li>• Battery Disconnect, Lockable</li> <li>• Battery Charger, 2 Amp</li> <li>• Alternative Outlet Panel Options (Consult factory for details)</li> </ul>

**Cabinet/Fuel Tank**

- Interior Cabinet Light
- Level Indicator
- 56 Gallon Fuel Tank
- Fuel Tank Cap - Vent w/ Lanyard
- Spare Tire & Carrier
- Lift Structure
- Liquid Containment/Quiet Pack

**Trailer**

- Tube & Sleeve Jack
- Combo Hitch - 2.5" Ring/2" Ball
- 2.5" Ring
- 3" Ring
- 3" Ring (1.625 TH)
- Plug Adapter, 4 Flat to 6 Round
- Plug Adapter, 4 Flat to 7 Pin
- Plug Adapter, 4 Flat to 7 Round
- Spade
- Outrigger Package

**Product Images (click small image to pop-up larger version)**

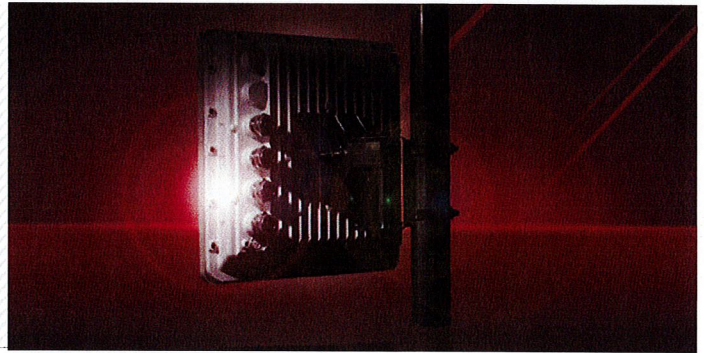


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## EX-5r Series



### All-Outdoor, Carrier-Class, Tri-Band 5 GHz TDD Radio System for Low, Medium and High Capacity Ethernet and TDM Applications

The EX-5r series of all-outdoor digital microwave radios is the first family of carrier-class, tri-band TDD radios available in the 5.2 – 5.8 GHz license-exempt bands. Radios in the EX-5r line support capacities ranging from 27 Mbps to an industry-leading 440 Mbps of aggregate user throughput, from zero to four T1/E1s and both 100BaseT and GbE interfaces. Featuring native TDM and native Ethernet transport and full software configurability and upgradeability, the EX-5r series was designed to meet demanding backhaul requirements of enterprise organizations and service providers seeking the performance benefits of an all-outdoor configuration.

**Carrier-class TDD.** The EX-5r series radios combine native TDM and native Ethernet transport with low, fixed latency to deliver guaranteed throughput and service quality. Capacity can be allocated variably between TDM and Ethernet via software, while the selectable throughput symmetry control feature enables radio capacity to efficiently match asymmetric traffic requirements.

**Industry-leading Spectrum Management.** The EX-5r radios include selectable channel bandwidth and 1 MHz tuning resolution,

yielding up to 54 non-overlapping frequency channels and up to 415 center frequencies of operation. These capabilities, combined with selectable modulation and superior system gain, provide unparalleled interference avoidance and transmission resiliency. A built-in spectrum analyzer is even included to accelerate deployment and simplify troubleshooting.

**ExaltSync Synchronization.** The ExaltSync technology embedded in the EX-5r series radios allows multiple radio systems to be collocated in close proximity without self-interference, minimizing antenna separation and ensuring reuse of scarce spectrum across all collocated systems.

**Security, Management and Data Networking.** The EX-5r radios deliver the highest data and management security available with optional 128- and 256-bit AES encryption and secure SNMP v3 management, together with enhanced fault management and diagnostic features. The 802.1Q VLAN option provides built-in network administration and security flexibility.

EX-5r series radios are available in both integrated antenna and external antenna (connectorized) versions.



Primary Specifications		EX-5r Lite / EX-5r-c Lite	EX-5r v3 / EX-5r-c v2	EX-5r GigE / EX-5r-c GigE
Maximum Capacity <sup>1</sup>	TDM		4xT1/E1	
	Ethernet (Aggregate)	100 Mbps	200 Mbps	440 Mbps
Frequency (GHz)		Tri-band: 5.250-5.350, 5.470-5.725, 5.725-5.850		
Range <sup>2</sup>		> 30 miles at 99.999% throughput availability		

<sup>1</sup> Please refer to the Exalt Throughput and Range Specification document for detailed capacity information.

<sup>2</sup> Distance based upon FCC regulations, average climate and terrain, 6' dish antennas, 3 dB transmission system losses at each end. Longer or shorter distances will apply for alternative antennas, country regulations, transmission system losses, path topologies and radio configurations. See Exalt's link budget and path planning tool to model your scenario.

## Specifications

## EX-5r Series

### System

Frequency Bands <sup>1</sup> (GHz)	5.250-5.350, 5.470-5.725, 5.725-5.850			
Tuning Resolution	1 MHz			
Output Power (full power)	+24 dBm QPSK; +21 dBm 16QAM			
5725-5850 MHz band	+13 dBm			
5250-5350 MHz band <sup>2</sup>	+13 dBm			
5470-5725 MHz band <sup>2</sup>	+13 dBm			
Output Power (min power)	Full power minus 20 dB			
Power Control Step Size	0.5 dB			
Receiver Threshold (BER=10 <sup>-6</sup> )	8 MHz	16 MHz	32 MHz	64 MHz
QPSK	-86	-83	-80	-77
16QAM	-78	-75	-72	-69
Non-overlapping Channels				
5.250-5.350 GHz	10	5	2	1
5.470-5.725 GHz	29	14	7	3
5.725-5.850 GHz	15	7	3	1
Maximum RSL	-25 dBm error-free 0 dBm no damage			
Throughput Symmetry Control	5 modes 20/80, 80/20, 35/65, 65/35, 50/50			
Error Floor	10 <sup>-12</sup>			
Latency (T1/E1)	1ms, typical			
Maximum Packet Size	All 1916 bytes except GigE 9728 bytes			

### System (continued)

Link Security	96-bit proprietary encryption 128-bit and 256-bit AES encryption <sup>3</sup>
Spectrum Analyzer	Embedded
VLAN	802.1Q
QoS	802.1p (GigE)
Management	HTTP GUI CLI/Telnet SNMP v1, 2c, v3
Compliance	FCC 15.247, FCC 15.407 EN 301-893, EN 302-502 EN 60-950, EN 301-489 IC RSS-210

### System Components

Complete Link	Two terminals, each with AC adapter & accessory kit
Single Terminal	One terminal with AC adapter & accessory kit
Accessory Kit	DC power connector, rack and grounding hardware (spare)
AC Adapter	AC adapter (spare)
Mounting Kits	Available for each product (spare)
ExaltSync GPS Sync Kit	GPS receiver and mounting bracket (optional)

## Specifications

### EX-5r Lite

### EX-5r-c Lite

### EX-5r v3

### EX-5r-c v2

### EX-5r GigE

### EX-5r-c GigE

### Physical

Physical Configuration	Outdoor Unit (ODU)					
Dimensions (H x W x D)	14 x 14 x 3.8 in 35.6 x 35.6 x 9.7 cm	14 x 14 x 2.5 in 35.6 x 35.6 x 6.4 cm	14 x 14 x 3.8 in 35.6 x 35.6 x 9.7 cm	14 x 14 x 2.5 in 35.6 x 35.6 x 6.4 cm	14 x 14 x 3.8 in 35.6 x 35.6 x 9.7 cm	14 x 14 x 2.5 in 35.6 x 35.6 x 6.4 cm
Antenna	Integrated	2x Type-N (F) Connector	Integrated	2x Type-N (F) Connector	Integrated	2x Type-N (F) Connector
Integrated Antenna						
Gain/3 dB Beamwidth	23 dBi / 9 degrees	-	23 dBi / 9 degrees	-	23 dBi / 9 degrees	-
Operating Temperature	-40 to +65 °C; -40 to +149 °F					
Full Spec Temperature	-40 to +60 °C; -40 to +140 °F					
Weight	14 lbs/6.4 kg	12 lbs/5.5 kg	14 lbs/6.4 kg	12 lbs/5.5 kg	14 lbs/6.4 kg	12 lbs/5.5 kg
Environmental	NEMA 4/IP56					
Altitude	15,000 ft; 4.6 km					
Humidity	100% condensing					

### Interfaces

RF	-	2x N-type (F), 50 ohm	-	2x N-type (F), 50 ohm	-	2x N-type (F), 50 ohm
TDM T1/E1 Interfaces	RJ48C/RJ45 (F) (x4)					
T1 Impedance	100 ohms, balanced					
T1 Line Code	AMI, B8ZS, selectable per channel					
T1 Data Rate	1.544 Mbps					
T1 Compliance	ANSI T1.102-1987; ITU-T; G.823; GR-499-CORE					
E1 Impedance	120 ohms, balanced					
E1 Line Code	HDB3					
E1 Data Rate	2.048 Mbps					
E1 Compliance	CEPT-1; G.703; ITU-T-G.703					
Loopback Modes	Remote Internal; Remote External; Local Line					
Ethernet	RJ45 (F)					
Interface Speed	10/100BaseT (POE)					
Duplex	Half, Full, Auto-MDIX					
Compliance	802.3					
ExaltSync Synchronization	RJ45 (F)					
	Input: 1pps (GPS)					
DC Power	48VDC, <50W					
AC Power Adapter						
Input	100-240VAC, 1.5A					
Output	48VDC, 1.5A, 72W (via power injector)					
	48VDC, 2.08A, 100W (via power injector)					

<sup>1</sup> Not all frequency bands are authorized or available for use in all countries.

<sup>2</sup> +24 dBm output power available in EX-5r v3 and EX-5r Lite. Consult Exalt for availability in other models.

<sup>3</sup> Software license key upgrade.

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## EX-5i Series



### All-Indoor, Carrier-Class, Tri-Band 5 GHz TDD Radio Systems for Low, Medium and High Capacity Ethernet and TDM Applications

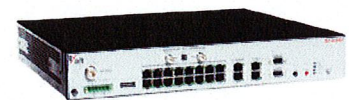
The EX-5i series of all-indoor digital microwave radios is the first family of carrier-class, tri-band TDD radios available in the 5.2 – 5.8 GHz license-exempt bands. The EX-5i line delivers up to 216 Mbps of aggregate user throughput and up to sixteen T1/E1s plus one DS3. Featuring native TDM and native Ethernet transport and full software configurability and upgradeability, the EX-5i series was designed to meet demanding backhaul requirements of enterprise organizations and service providers seeking the accessibility benefits of an all-indoor configuration.

**Carrier-class TDD.** The EX-5i series radios combine native TDM and native Ethernet transport with low, fixed latency to deliver guaranteed throughput and service quality. Capacity can be allocated variably between TDM and Ethernet via software, while the selectable throughput symmetry control feature enables radio capacity to efficiently match asymmetric traffic requirements. Optional 1+1 monitored hot standby (MHS) protection provides full hardware redundancy.

**Industry-leading Spectrum Management.** The EX-5i radios include selectable channel bandwidth and 1 MHz tuning resolution, yielding up to 54 non-overlapping frequency channels and up to 415 center frequencies of operation. These capabilities, combined with selectable modulation and superior system gain, provide unparalleled interference avoidance and transmission resiliency. A built-in spectrum analyzer is even included to accelerate deployment and simplify troubleshooting.

**ExaltSync™ Synchronization.** The ExaltSync technology embedded in the EX-5i series radios allows multiple radio systems to be collocated in close proximity without self-interference, minimizing antenna separation and ensuring reuse of scarce spectrum across all collocated systems.

**Security, Management and Data Networking.** The EX-5i radios deliver the highest data and management security available with optional 128- and 256-bit AES encryption and secure SNMP v3 management, together with enhanced fault management and diagnostic features. The 802.1Q VLAN option provides built-in network administration and security flexibility.



Primary Specifications		EX-5i Lite	EX-5i	EX-5i-16	EX-5i-DS3
Maximum Capacity <sup>1</sup>	TDM	4xT1/E1		16xT1/E1	16xT1/E1; 1xDS3
	Ethernet (Aggregate)	100 Mbps		200 Mbps	
Frequency (GHz)		Tri-band: 5.250-5.350, 5.470-5.725, 5.725-5.850			
Range <sup>2</sup>		> 30 miles at 99.999% throughput availability			

<sup>1</sup> Please refer to the Exalt Throughput and Range Specification document for detailed capacity information.

<sup>2</sup> Distance based upon FCC regulations, average climate and terrain, 6' dish antennas, 3 dB transmission system losses at each end. Longer or shorter distances will apply for alternative antennas, country regulations, transmission system losses, path topologies and radio configurations. See Exalt's path planning tool to model your scenario.

Specifications	EX-5i Series	Specifications	EX-5i Lite	EX-5i	EX-5i-16	EX-5i-DS3
<b>System</b>		<b>Physical</b>				
Frequency Bands <sup>1</sup> (GHz)	5.250-5.350 5.470-5.725 5.725-5.850	Dimensions (H x W x D)	1RU 1.75 x 17 x 14 in 4.5 x 43.2 x 35.6 cm		1.5RU 2.63 x 17 x 14 in 6.7 x 43.2 x 35.6 cm	
Tuning Resolution	1 MHz	Physical Configuration	Single-piece Indoor Unit (IDU)			
Output Power (full power)		Operating Temperature	-40 to +65 °C -40 to +149 °F			
5725-5850 MHz band	+24 dBm QPSK; +21 dBm 16QAM	Full Spec Temperature	-25 to +60 °C -13 to +140 °F			
5250-5350 MHz band <sup>2</sup>	+13 dBm	Weight	9.5 lbs / 4.3 kg		12 lbs / 5.5 kg	
5470-5725 MHz band <sup>2</sup>	+13 dBm	Environmental	GR-1089-CORE intra-building			
Output Power (min power)	Full power minus 20 dB	Altitude	15,000 ft; 4.6 km			
Power Control Step Size	0.5 dB	Humidity	95% non-condensing			
Receiver Threshold (BER=10 <sup>-6</sup> )	8 MHz 16 MHz 32 MHz 64 MHz <sup>3</sup>	<b>Interfaces</b>				
QPSK	-86 -83 -80 -77	RF	N-type(F), impedance 50 ohm			
16QAM	-78 -75 -72 -69	TDM T1/E1 Interfaces	RJ48C/RJ45 (F) (x4)		RJ48C/RJ45 (F) (x16)	
Non-overlapping Channels		T1 Impedance	100 ohms, balanced			
5.250-5.350 GHz	10 5 2 1	T1 Line Code	AMI, B8ZS, selectable per channel			
5.470-5.725 GHz	29 14 7 3	T1 Data Rate	1.544 Mbps			
5.725-5.850 GHz	15 7 3 1	T1 Compliance	ANSI T1.102-1987; ITU-T; G.823; GR-499-CORE			
Maximum RSL (QPSK)	-25 dBm error-free 0 dBm no damage	E1 Impedance	120 ohms, balanced			
Throughput Symmetry Control	5 modes 20/80, 80/20, 35/65, 65/35, 50/50	E1 Line Code	HDB3			
Error Floor	10 <sup>-12</sup>	E1 Data Rate	2.048 Mbps			
Latency (T1/E1)	1ms, typical	E1 Compliance	CEPT-1; G.703; ITU-T-G.703			
Link Security	96-bit proprietary encryption 128-bit and 256-bit AES encryption <sup>3</sup>	DS3 Impedance	- BNC (F) (2x) 75 ohms, unbalanced			
VLAN	802.1Q	DS3 Line Code	- B3ZS			
Management	HTTP GUI CLI/Telnet SNMP v1, 2c, v3	DS3 Data Rate	- 44.736 Mbps			
Compliance	FCC 15.247, FCC 15.407 EN 301-893, EN 302-502 EN 60-950, EN 301-489, IC RSS-210	DS3 Compliance	-ANSI T1.102-1993; GR-499-CORE			
<b>System Components</b>		Loopback Modes	Remote Internal; Remote External; Local Line			
Complete Link <sup>4</sup>	Two terminals, each with AC adapter and accessory kit	Ethernet	RJ45 (F) (x2), auto-MDIX			
Single terminal	One terminal with AC adapter and accessory kit	Interface Speed	10/100BaseT			
Accessory Kit	DC power connector, rack and grounding hardware (spare)	Duplex	Half, Full, Auto			
AC Adapter	AC adapter (spare)	Compliance	802.3			
Exalt Capacity Expansion Kit	For 6 GHz Part 101 links (optional accessory kit)	Console (Serial)	9-pin Sub-D (F)			
		Interface Speed	9600 bps			
		Compliance	EIA-574 (RS-232)			
		Alarm	9-pin Sub-D (F)			
		Inputs (2)	TTL/Closure			
		Outputs (2)	Relay (Form C)			
		ExaltSync	RJ45 (F)			
		Synchronization	Internal Sync 1pps (GPS)			
		DC Power	6-pin barrier strip		6-pin barrier strip	
		Input Voltage	±20-60VDC		±20-60VDC	
		Consumption	<38.5W (48V: <0.8A, 24V: <1.6A)		< 45W (48V: <0.9A, 24V: 1.8A)	
		AC Power Adapter	EIC to NEMA 5-15			
		Input	100-240VAC, 1.5A			
		Output	48VDC, 1.5A, 72W			

<sup>1</sup> Not all frequency bands are authorized or available for use in all countries.

<sup>2</sup> +24 dBm output power. Consult Exalt for availability.

<sup>3</sup> Software license key upgrade.

<sup>4</sup> Two complete links (4 terminals) required for MHS protection along with Exalt MHS kit and protection cabling. Consult your Exalt Sales representatives for MHS availability. (MHS is not available on EX-5i or EX-5i lite).



# **Exhibit D**

## **Power Density Calculations**

**Pocket Site HFCT1536A**

**310 Prestige Park Road**

**(aka 2 Prestige Park Drive)**

**East Hartford, Connecticut**



C Squared Systems, LLC  
920 Candia Road  
Manchester, NH 03109  
Phone: (603) 657 9702  
E-mail:

[support@csquaredsystems.com](mailto:support@csquaredsystems.com)

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## Calculated Radio Frequency Emissions



HFCT1536A

310 Prestige Park Rd (aka 2 Prestige Park Dr)

East Hartford, CT 06108

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## 1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed Pocket antennas to be installed on the existing tower at 310 Prestige Park Rd(aka 2 Prestige Park Dr), East Hartford, CT 06108.

These calculations assume that the antennas are operating at 100 percent capacity, that all antenna channels are transmitting simultaneously, and that the radio transmitters are operating at full power. Obstructions (trees, buildings etc.) that would normally attenuate the signal are not taken into account. As a result, the predicted signal levels are much more conservative (higher) than the actual signal levels will be from the finished installation.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ( $\text{mW}/\text{cm}^2$ ). The number of  $\text{mW}/\text{cm}^2$  emitted is called the power density. The general population exposure limit for the cellular band is 0.567-0.593  $\text{mW}/\text{cm}^2$ , and the general population exposure limit for the PCS/AWS band is 1.0  $\text{mW}/\text{cm}^2$ . Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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.

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 (through training), 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.

The FCC describes exposure to radio frequency (RF) energy in terms of percentage of maximum permissible exposure (MPE) with 100% being the maximum allowed. Rather than the FCC presenting the user specification in terms of complex power density figures over a specified surface area, this MPE measure is particularly useful, and even more so when considering that power density limits actually vary by frequency because of the different absorptive properties of the human body at different frequencies.

MPE limits are specified as time-averaged exposure limits. This means that exposure can be averaged over 30 minutes for general population / uncontrolled exposure (or 6 minutes for occupational / controlled exposure). However, for the case of exposure of the general public, time averaging is usually not applied because of uncertainties over exact exposure conditions and difficulty in controlling time of exposure. Therefore, the typical conservative approach is to assume that any RF exposure to the general public will be continuous.

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.



## 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 limits for Maximum Permissible Exposure (MPE) for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP), the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

Attachment B contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit. As shown in these excerpts, each frequency band has different exposure limits, requiring power density to be reported as a percent of Maximum Permissible Exposure (MPE) when dealing with carriers transmitting in different frequency bands.

## 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:

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

Where:

EIRP = Effective Isotropic Radiated Power

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

H = Horizontal Distance from antenna

V = Vertical Distance from bottom of antenna

1.6 = Ground Reflection Factor

## 4. Calculation Results

Table 1 below outlines the power density information for the site. All information for carriers other than Pocket is based on the current CSC database, except where otherwise noted.<sup>1</sup>

Carrier	Antenna Height (Feet)	Operating Frequency (MHz)	Number of Trans.	Effective Radiated Power (ERP) Per Transmitter (Watts)	Power Density (mw/cm <sup>2</sup> )	Limit	%MPE
Pagenet	157	900	5	500	0.036450	0.6000	6.08%
AT&T UMTS	152	1935	1	500	0.007778	1.0000	0.78%
AT&T TDMA	152	880	16	100	0.024888	0.5867	4.24%
AT&T GSM	152	880	2	296	0.009209	0.5867	1.57%
AT&T GSM	152	1930	2	427	0.013284	1.0000	1.33%
Sprint	138	1962.5	11	250.5	0.052000	1.0000	5.20%
AT&T	146	1945	4	250	0.016860	1.0000	1.69%
Pocket	128	2130-2133.75	3	631	0.045708	1.0000	4.57%
<b>Total</b>							<b>25.45%</b>

**Table 1: Proposed Carrier Information**

<sup>1</sup> According to the structural analysis report submitted on July 7, 2009 by the engineering firm of American Tower Corporation, there is no antenna at the 146' centerline. The CSC Database shows AT&T at this height but all of their antennas appear to have been consolidated to the top platform at the 152' centerline. However, the associated %MPE value reported in the current CSC database for this antenna was included in the total %MPE calculations and the composite value reported in Table 1 of this report. (Gray text denotes recommended changes to the CSC database based on the aforementioned details.)

## 5. Conclusion

The above analysis verifies that emissions from the proposed site will be well 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 the base of the tower is 25.45% of the FCC limit.

As noted in the introduction, 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 installation.

## 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/IEE Std. C95.1 and FCC OET Bulletin 65 Edition 97-01.



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Daniel I. Goulet  
C Squared Systems, LLC

July 14, 2009  
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

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

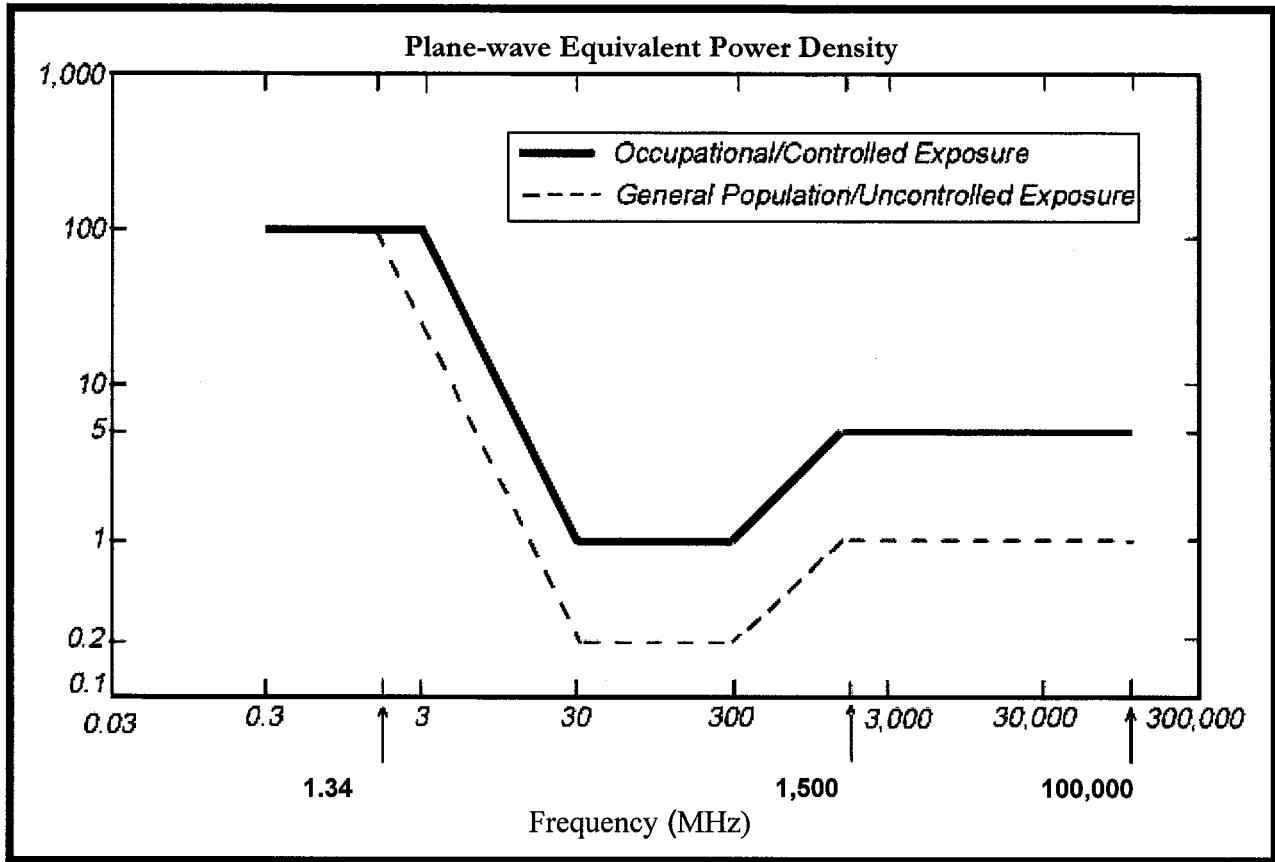
### (B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	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

**NOTE 1:** 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.

**NOTE 2:** 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 can not exercise control over their exposure.



• FCC Limits for Maximum Permissible Exposure (MPE)

# **Exhibit E**

## **Structural Analysis**

**Pocket Site HFCT1536A**

**310 Prestige Park Road**

**(aka 2 Prestige Park Drive)**

**East Hartford, Connecticut**





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CORPORATION

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## Structural Analysis Report

**Structure** : 150 ft. ITT Meyer monopole  
**ATC Site Name** : E H F R - Prestige Park, CT  
**ATC Site Number** : 302473  
**Proposed Carrier** : Youghiogheny  
**Carrier Site Name** : ATC  
**Carrier Site Number** : HFCT1536A  
**County** : Hartford  
**Eng. Number** : 43631523  
**Date** : July 16, 2009  
**Usage** : 98% Pole shaft, 95% Anchor bolts, 76%  
Base plate

Submitted by:  
Robert Keith  
Project Engineer

**American Tower Engineering Services**  
8505 Freeport Parkway  
Suite 135  
Irving, TX 75063  
Phone: 972-999-8900





**AMERICAN TOWER®**  
CORPORATION

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**Structural Analysis Report**

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Submitted by:  
Robert Keith  
Project Engineer

**American Tower Engineering Services**  
8505 Freeport Parkway  
Suite 135  
Irving, TX 75063  
Phone: 972-999-8900

**Introduction**

The purpose of this report is to summarize results of the structural analysis performed on the 150 ft. ITT Meyer monopole located at E H F R - Prestige Park, CT, Hartford County (ATC site # 302473). The tower was originally designed and manufactured by ITT Meyer (Drawing # Type "B").

**Analysis**

The existing tower was analyzed using Semaan Engineering Solutions, Inc., Software. The analysis assumes that the tower is in good, undamaged, and non-corroded condition. A 5% overstress is allowed in the existing structural members to account for program variances.

Basic Wind Speed: 95.0 mph (3-Second Gust)  
 Radial Ice: 50.0 mph (3-Second Gust) w/ 1" ice  
 Standard/Code: ANSI/TIA-222-G / 2003 IBC / 2005 & 2008 CT Supplement

**Antenna Loads**

The following antenna loads were used in the tower analysis.

**Existing Antennas**

Elev. (ft)	Qty	Antennas	Mount	Coax (I/O)	Carrier
150.0	3	Diplexer	Platform w/ Handrails	-	AT&T Mobility
	6	RCU		-	
	12	ADC CG-800DD		-	
	9	CSS DUO4-8670		(12) 7/8 (I)	
	1	6' Omni	Platform w/ Handrails	(1) 1 5/8 (I)	USA Mobility
138.0	9	Decibel DB980F65E-M	(3) T-Arm	(18) 1 5/8 (I)	Sprint Nextel
34.0	1	GPS	(1) Stand-off	(1) 1/2 (O)	
30.0	1	GPS	(1) Stand-off	(1) 1/2 (O)	AT&T Mobility

**Proposed Antennas**

Elev. (ft)	Qty	Antennas	Mount	Coax (I/O)	Carrier
128.0	3	RFS APXV18-206517S-C	Flush Mount	(6) 1 5/8 (O)	Youghiogheny

Note: (O) – Coax installed outside the pole shaft. (I) – Coax installed inside the pole shaft.

The existing and the proposed transmission lines were considered running inside or outside the pole shaft as indicated above. The proposed lines may be installed outside the pole.

**Results**

The existing 150 ft. ITT Meyer monopole with the existing and the proposed antennas is structurally acceptable per ANSI/TIA-222 Rev G standards. The maximum structure usage is: 98% Pole shaft, 95% Anchor bolts, 76% Base plate.

Additional exit and/or entry ports may be required to accommodate the running of the proposed lines to the proposed antennas. These additional ports may not be installed without installation drawings providing the location, size and welding requirements of each port.

To ensure compliance with all conditions of this structural analysis, port installation drawings shall be provided by American Tower's Engineering Department under a subsequent project.

Pole Reactions	Original Design Reactions	Original Design Reactions w/ 1.35 Multiplier*	Current Analysis Reactions	% Of Design
Moment (ft-kips)	1,197.0	1,616.0	1,746.4	108.1
Shear (kips)	13.1	17.7	17.1	96.7

\* The original design reaction is factored by 1.35 per TIA-EIA Rev G section 15.5.1

The structure base reactions resulting from this analysis exceed the ones shown on the original structural drawings. However, upon reviewing the foundation and the soil documents, the existing foundation was found to be adequate to resist the new reactions. Therefore, no modification to the existing foundation is required.

**Conclusion**

The existing monopole and its foundation were found to be adequate to support the existing and proposed antennas with the transmission line distribution as described above while meeting the requirements of the code or standard as specified in this report.

If you have any questions or require additional information, please call (972) 999-8900.

## **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:

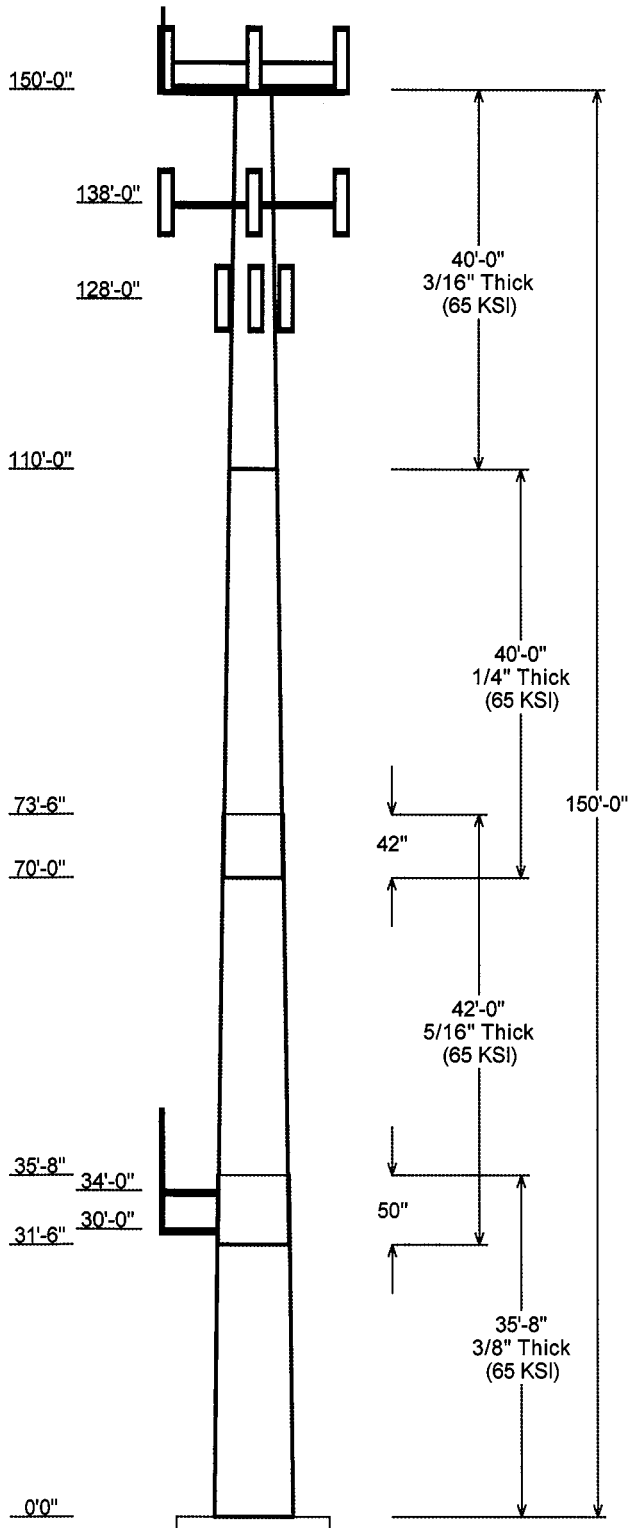
- Information supplied by the client regarding the structure itself, the antenna and feed line loading on the structure and its components, or other relevant information.
  
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements 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.

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Job Information			
Pole :	302473	Code:	ANSI/TIA-222 Rev G
Description :	150' ITT Meyer Type "B" Monopole	Struct Class :	II
Client :	Youghioghney	Exposure :	B
Location :	E H F R - Prestige Park, CT	Topo :	1
Shape :	12 Sides	Base Elev (ft):	0.00
Height :	150.00 (ft)	Taper:	0.156700(in/ft)

Sections Properties								
Shaft Section	Length (ft)	Diameter (in)		Thick Joint (in)	Overlap Length (in)	Taper (in/ft)	Steel Grade	
		Across Flats Top	Across Flats Bottom					
1	35.667	31.79	37.38	0.375	0.000	0.156700	65	
2	42.000	26.48	33.06	0.313 Slip Joint	50.000	0.156700	65	
3	40.000	21.26	27.53	0.250 Slip Joint	42.000	0.156700	65	
4	40.000	15.00	21.26	0.188 Butt Joint	0.000	0.156700	65	

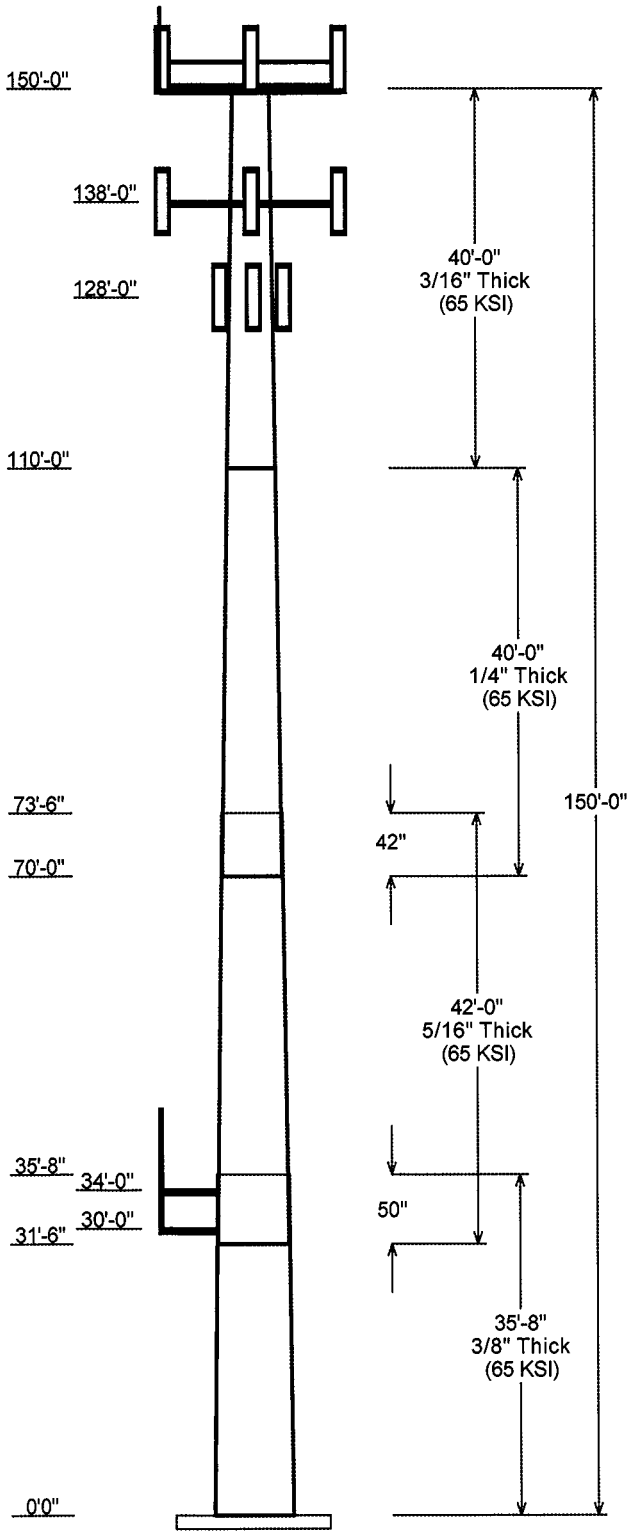
Discrete Appurtenance				
Attach Elev (ft)	Force Elev (ft)	Qty	Description	
150.000	150.000	3	Diplexer	
150.000	150.000	6	RCU	
150.000	150.000	12	ADC CG-800DD	
150.000	153.000	9	CSS DUO4-8670	
150.000	152.000	1	6' Omni	
150.000	150.000	1	Platform w/ Handrails	
138.000	138.000	9	Decibel DB980F65E-M	
138.000	138.000	3	Round T-Arm	
128.000	128.000	1	Flush Mounts	
128.000	128.000	3	RFS APXV18-206517S-C	
34.000	34.000	1	Stand-off	
34.000	34.250	1	GPS	
30.000	30.000	1	Stand-off	
30.000	30.250	1	GPS	

Linear Appurtenance				
Elev (ft)		Description	Exposed To Wind	
From	To			
0.000	30.000	1/2" Coax	Yes	
0.000	34.000	1/2" Coax	Yes	
0.000	128.0	1 5/8" Coax	Yes	
0.000	138.0	1 5/8" Coax	No	
0.000	150.0	1 5/8" Coax	No	
0.000	150.0	7/8" Coax	No	

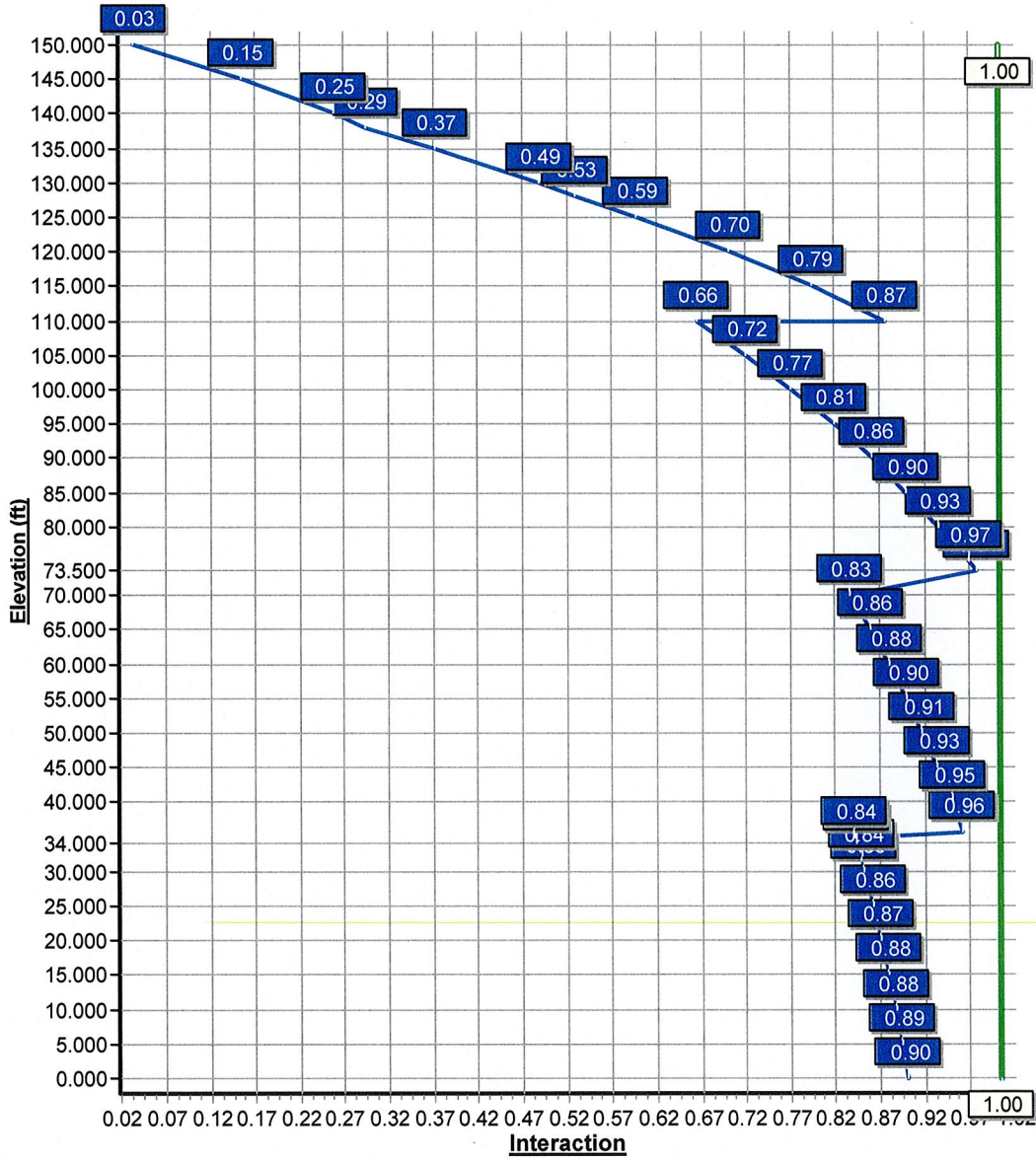
Load Cases		
1.2D + 1.6W		95.00 mph with No Ice
0.9D + 1.6W		95.00 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi		50.00 mph with 1.00 in Radial Ice
1.0D + 1.0W		60.00 mph Serviceability

Reactions			
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W	1746.39	17.07	24.38
0.9D + 1.6W	1714.41	17.06	18.27
1.2D + 1.0Di + 1.0Wi	504.48	4.34	45.59
1.0D + 1.0W	431.80	4.25	20.35

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



**Load Case : 1.2D + 1.6W**  
**Max Ratio 97.48% at 73.5ft**



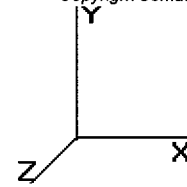


Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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Base Elev : 0.000 (ft)



**Shaft Section Properties**

Sect Num	Length (ft)	Thick (in)	Fv (ksi)	Joint Type	Slip		Bottom						Top						
					Joint Len (in)	Weight (lb)	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Taper (in/ft)
1	35.667	0.3750	65		0.00	5,014	37.38	0.000	44.68	7810.1	24.57	99.68	31.79	35.66	37.93	4778.9	20.57	84.78	0.15670
2	42.000	0.3125	65	Slip Joint	50.00	4,237	33.06	31.50	32.96	4514.2	26.21	105.8	26.48	73.50	26.34	2303.3	20.57	84.76	0.15670
3	40.000	0.2500	65	Slip Joint	42.00	2,646	27.53	70.00	21.97	2087.4	27.37	110.1	21.26	110.0	16.92	954.0	20.65	85.07	0.15670
4	40.000	0.1875	65	Butt Joint	0.00	1,475	21.26	110.0	12.73	721.9	28.25	113.4	15.00	150.0	8.94	250.5	19.29	80.00	0.15670
					Shaft Weight	13,372													

**Discrete Appurtenance Properties**

Attach Elev (ft)	Description	Qty	Weight (lb)	No Ice CaAa (sf)	CaAa Factor	Weight (lb)	Ice CaAa (sf)	CaAa Factor	Distance From Face (ft)	Vert Ecc (ft)
150.0	Diplexer	3	5.00	0.700	0.50	9.65	1.351	0.50	0.000	0.000
150.0	RCU	6	1.00	0.160	0.50	1.93	0.309	0.50	0.000	0.000
150.0	ADC CG-800DD	12	13.90	1.250	0.50	26.84	2.413	0.50	0.000	0.000
150.0	CSS DUO4-8670	9	38.50	6.590	0.82	278.61	7.246	0.82	0.000	3.000
150.0	6' Omni	1	35.00	1.770	1.00	67.58	3.417	1.00	0.000	2.000
150.0	Platform w/ Handrails	1	1800.00	33.000	1.00	3475.41	63.716	1.00	0.000	0.000
138.0	Decibel DB980F65E-M	9	10.00	3.750	0.75	144.28	5.163	0.75	0.000	0.000
138.0	Round T-Arm	3	250.00	9.700	0.67	526.92	20.623	0.67	0.000	0.000
128.0	Flush Mounts	1	200.00	3.500	1.00	658.07	8.310	1.00	0.000	0.000
128.0	RFS APXV18-206517S-C	3	26.40	5.160	0.73	195.39	6.825	0.73	0.000	0.000
34.00	Stand-off	1	50.00	2.000	1.00	90.12	3.605	1.00	0.000	0.000
34.00	GPS	1	1.50	0.600	1.00	2.70	1.081	1.00	0.000	0.250
30.00	Stand-off	1	50.00	2.000	1.00	89.62	3.585	1.00	0.000	0.000
30.00	GPS	1	1.50	0.600	1.00	2.69	1.075	1.00	0.000	0.250
Totals		52	3591.50			5399.19			Number of Loadings : 14	

**Linear Appurtenance Properties**

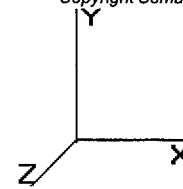
Elev From (ft)	Elev To (ft)	Description	Exposed Width (in)	Exposed To Wind
0.00	150.00	(1) 1 5/8" Coax	0.00	N
0.00	150.00	(12) 7/8" Coax	0.00	N
0.00	138.00	(18) 1 5/8" Coax	0.00	N
0.00	128.00	(6) 1 5/8" Coax	1.98	Y
0.00	34.00	(1) 1/2" Coax	0.63	Y
0.00	30.00	(1) 1/2" Coax	0.63	Y

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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 Page: 2



**Segment Properties** (Max Len : 5 ft)

Seq Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in <sup>2</sup> )	Ix (in <sup>4</sup> )	W/t Ratio	D/t Ratio	F'y (ksi)	S (in <sup>3</sup> )	Weight (lb)
0.00		0.3750	37.380	44.684	7,810.1	24.57	99.68	65.0	403.6	0.0
5.00		0.3750	36.597	43.737	7,324.4	24.01	97.59	65.0	386.6	752.2
10.00		0.3750	35.813	42.791	6,859.3	23.45	95.50	65.0	370.0	736.1
15.00		0.3750	35.029	41.845	6,414.3	22.89	93.41	65.0	353.7	720.0
20.00		0.3750	34.246	40.899	5,989.0	22.33	91.32	65.0	337.8	703.9
25.00		0.3750	33.462	39.953	5,583.0	21.77	89.23	65.0	322.3	687.8
30.00		0.3750	32.679	39.007	5,195.7	21.21	87.14	65.0	307.1	671.7
31.50	Bot - Section 2	0.3750	32.444	38.723	5,083.1	21.04	86.52	65.0	302.7	198.4
34.00		0.3750	32.052	38.250	4,899.1	20.76	85.47	65.0	295.3	606.0
35.00		0.3750	31.895	38.061	4,826.7	20.65	85.05	65.0	292.3	240.4
35.67	Top - Section 1	0.3125	32.416	32.304	4,249.6	25.65	103.73	65.0	253.3	159.7
40.00		0.3125	31.737	31.621	3,985.6	25.07	101.56	65.0	242.6	471.3
45.00		0.3125	30.953	30.833	3,694.9	24.40	99.05	65.0	230.6	531.3
50.00		0.3125	30.170	30.044	3,418.6	23.73	96.54	65.0	218.9	517.9
55.00		0.3125	29.386	29.256	3,156.5	23.05	94.04	65.0	207.5	504.5
60.00		0.3125	28.603	28.467	2,908.1	22.38	91.53	65.0	196.4	491.0
65.00		0.3125	27.819	27.679	2,673.1	21.71	89.02	65.0	185.6	477.6
70.00		0.3125	27.036	26.891	2,451.2	21.04	86.52	65.0	175.1	464.2
70.00	Bot - Section 3	0.3125	27.036	26.890	2,451.1	21.04	86.52	65.0	175.1	0.0
73.50	Top - Section 2	0.2500	26.987	21.524	1,964.0	26.78	107.95	65.0	140.6	575.9
75.00		0.2500	26.752	21.335	1,912.7	26.53	107.01	65.0	138.1	109.4
80.00		0.2500	25.969	20.704	1,748.0	25.69	103.88	65.0	130.0	357.6
85.00		0.2500	25.185	20.073	1,593.1	24.85	100.74	65.0	122.2	346.9
90.00		0.2500	24.402	19.442	1,447.6	24.01	97.61	65.0	114.6	336.2
95.00		0.2500	23.618	18.812	1,311.2	23.17	94.47	65.0	107.2	325.4
100.00		0.2500	22.835	18.181	1,183.7	22.33	91.34	65.0	100.1	314.7
105.00		0.2500	22.051	17.550	1,064.7	21.49	88.21	65.0	93.3	304.0
110.00		0.2500	21.268	16.919	954.0	20.65	85.07	65.0	86.7	293.2
110.00	Top - Section 3	0.2500	21.268	16.919	954.0	20.65	85.07	65.0	86.7	0.0
110.00	Bot - Section 4	0.1875	21.268	12.727	721.9	28.25	113.43	65.0	65.6	
115.00		0.1875	20.484	12.254	644.4	27.13	109.25	65.0	60.8	212.5
120.00		0.1875	19.701	11.781	572.6	26.01	105.07	65.0	56.1	204.5
125.00		0.1875	18.917	11.308	506.4	24.89	100.89	65.0	51.7	196.4
128.00		0.1875	18.447	11.024	469.2	24.22	98.39	65.0	49.1	114.0
130.00		0.1875	18.134	10.835	445.4	23.77	96.71	65.0	47.5	74.4
135.00		0.1875	17.350	10.362	389.6	22.65	92.54	65.0	43.4	180.3
138.00		0.1875	16.880	10.078	358.5	21.98	90.03	65.0	41.0	104.3
140.00		0.1875	16.567	9.889	338.6	21.53	88.36	65.0	39.5	67.9
145.00		0.1875	15.783	9.416	292.3	20.41	84.18	65.0	35.8	164.2
150.00		0.1875	15.000	8.943	250.5	19.29	80.00	65.0	32.3	156.2

13,372.1

Pole : 302473  
 Location : E H R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

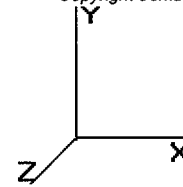
Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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Load Case: 1.2D + 1.6W

95.00 mph with No Ice

30 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Wind Load Factor : 1.60

### Shaft Segment Forces (Factored)

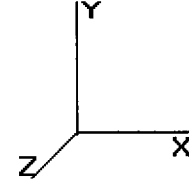
Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	15.364	16.90	256.32	1.000	0.00	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	15.364	16.90	250.95	1.000	0.00	5.00	15.955	15.96	431.4	0.0	902.6
10.00		1.00	0.70	15.364	16.90	245.57	1.000	0.00	5.00	15.617	15.62	422.3	0.0	883.3
15.00		1.00	0.70	15.364	16.90	240.20	1.000	0.00	5.00	15.279	15.28	413.2	0.0	864.0
20.00		1.00	0.70	15.364	16.90	234.83	1.000	0.00	5.00	14.942	14.94	404.0	0.0	844.7
25.00		1.00	0.70	15.364	16.90	229.45	1.000	0.00	5.00	14.604	14.60	394.9	0.0	825.4
30.00	Appertunance(s)	1.00	0.70	15.377	16.91	224.18	1.000	0.00	5.00	14.266	14.27	386.1	0.0	806.1
31.50	Bot - Section 2	1.00	0.71	15.593	17.15	224.12	1.000	0.00	1.50	4.215	4.21	115.7	0.0	238.1
34.00	Appertunance(s)	1.00	0.72	15.937	17.53	223.84	1.000	0.00	2.50	7.089	7.09	198.8	0.0	727.3
35.00		1.00	0.73	16.070	17.67	223.67	1.000	0.00	1.00	2.812	2.81	79.5	0.0	288.5
35.67	Top - Section 1	1.00	0.73	16.156	17.77	223.54	1.000	0.00	0.67	1.868	1.87	53.1	0.0	191.6
40.00		1.00	0.76	16.694	18.36	226.85	1.000	0.00	4.33	11.991	11.99	352.3	0.0	565.5
45.00		1.00	0.78	17.266	18.99	225.00	1.000	0.00	5.00	13.521	13.52	410.9	0.0	637.5
50.00		1.00	0.81	17.793	19.57	222.63	1.000	0.00	5.00	13.183	13.18	412.9	0.0	621.4
55.00		1.00	0.83	18.285	20.11	219.82	1.000	0.00	5.00	12.845	12.85	413.4	0.0	605.4
60.00		1.00	0.85	18.745	20.61	216.64	1.000	0.00	5.00	12.507	12.51	412.6	0.0	589.3
65.00		1.00	0.87	19.179	21.09	213.13	1.000	0.00	5.00	12.169	12.17	410.8	0.0	573.2
70.00		1.00	0.89	19.589	21.54	209.33	1.000	0.00	5.00	11.831	11.83	407.9	0.0	557.1
70.00	Bot - Section 3	1.00	0.89	19.589	21.54	209.33	1.000	0.00	0.00	0.001	0.00	0.0	0.0	0.0
73.50	Top - Section 2	1.00	0.90	19.864	21.85	206.52	1.000	0.00	3.50	8.232	8.23	287.8	0.0	691.1
75.00		1.00	0.91	19.979	21.97	209.19	1.000	0.00	1.50	3.476	3.48	122.2	0.0	131.2
80.00		1.00	0.92	20.351	22.38	204.94	1.000	0.00	5.00	11.371	11.37	407.3	0.0	429.1
85.00		1.00	0.94	20.706	22.77	200.49	1.000	0.00	5.00	11.033	11.03	402.1	0.0	416.3
90.00		1.00	0.95	21.047	23.15	195.84	1.000	0.00	5.00	10.695	10.70	396.2	0.0	403.4
95.00		1.00	0.97	21.375	23.51	191.02	1.000	0.00	5.00	10.357	10.36	389.6	0.0	390.5
100.00		1.00	0.98	21.690	23.86	186.05	1.000	0.00	5.00	10.019	10.02	382.5	0.0	377.6
105.00		1.00	1.00	21.995	24.19	180.92	1.000	0.00	5.00	9.681	9.68	374.8	0.0	364.8
110.00		1.00	1.01	22.289	24.51	175.65	1.000	0.00	5.00	9.343	9.34	366.5	0.0	351.9
110.00	Top - Section 3	1.00	1.01	22.289	24.51	175.65	1.000	0.00	0.00	0.001	0.00	0.0	0.0	0.0
115.00		1.00	1.02	22.574	24.83	170.26	1.000	0.00	5.00	9.005	9.00	357.8	0.0	255.0
120.00		1.00	1.04	22.850	25.13	164.75	1.000	0.00	5.00	8.667	8.67	348.6	0.0	245.4
125.00		1.00	1.05	23.118	25.43	159.12	1.000	0.00	5.00	8.329	8.33	338.9	0.0	235.7
128.00	Appertunance(s)	1.00	1.06	23.276	25.60	155.69	1.007 *	0.00	3.00	4.835	4.87	199.5	0.0	136.8
130.00		1.00	1.06	23.379	25.71	153.39	1.000	0.00	2.00	3.156	3.16	129.9	0.0	89.3
135.00		1.00	1.07	23.632	25.99	147.55	1.000	0.00	5.00	7.653	7.65	318.3	0.0	216.4
138.00	Appertunance(s)	1.00	1.08	23.781	26.15	144.01	1.000	0.00	3.00	4.430	4.43	185.4	0.0	125.2
140.00		1.00	1.08	23.879	26.26	141.62	1.000	0.00	2.00	2.886	2.89	121.3	0.0	81.5
145.00		1.00	1.09	24.120	26.53	135.60	1.000	0.00	5.00	6.977	6.98	296.2	0.0	197.1
150.00	Appertunance(s)	1.00	1.11	24.355	26.79	129.50	1.000	0.00	5.00	6.639	6.64	284.6	0.0	187.4
* = Cf Adjusted By Linear Load Ra Effect								Totals:		150.00		11,429.3	0.0	16,046.5

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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**Load Case:** 1.2D + 1.6W      95.00 mph with No Ice      30 Iterations  
 Gust Response Factor : 1.10      Wind Importance Factor : 1.00  
 Dead Load Factor : 1.20  
 Wind Load Factor : 1.60

**Discrete Appurtenance Segment Forces (Factored)**

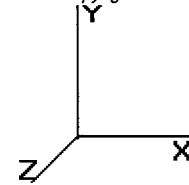
Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
30.00	Stand-off	1	15.377	16.915	1.00	1.00	2.00	0.000	0.000	54.13	0.00	0.00	60.00
30.00	GPS	1	15.414	16.955	1.00	1.00	0.60	0.000	0.250	16.28	0.00	4.07	1.80
34.00	Stand-off	1	15.937	17.531	1.00	1.00	2.00	0.000	0.000	56.10	0.00	0.00	60.00
34.00	GPS	1	15.970	17.567	1.00	1.00	0.60	0.000	0.250	16.86	0.00	4.22	1.80
128.0	Flush Mounts	1	23.276	25.603	1.00	1.00	3.50	0.000	0.000	143.38	0.00	0.00	240.00
128.0	RFS APXV18-206517S-	3	23.276	25.603	0.73	1.00	11.30	0.000	0.000	462.92	0.00	0.00	95.04
138.0	Decibel DB980F65E-M	9	23.781	26.159	0.60	0.80	20.25	0.000	0.000	847.56	0.00	0.00	108.00
138.0	Round T-Arm	3	23.781	26.159	0.50	0.75	14.62	0.000	0.000	612.03	0.00	0.00	900.00
150.0	Diplexer	3	24.355	26.790	0.50	1.00	1.05	0.000	0.000	45.01	0.00	0.00	18.00
150.0	RCU	6	24.355	26.790	0.50	1.00	0.48	0.000	0.000	20.57	0.00	0.00	7.20
150.0	ADC CG-800DD	12	24.355	26.790	0.38	0.75	5.63	0.000	0.000	241.11	0.00	0.00	200.16
150.0	CSS DUO4-8670	9	24.493	26.942	0.62	0.75	36.48	0.000	3.000	1,572.37	0.00	4,717.10	415.80
150.0	6' Omni	1	24.447	26.892	1.00	1.00	1.77	0.000	2.000	76.16	0.00	152.31	42.00
150.0	Platform w/ Handrail	1	24.355	26.790	1.00	1.00	33.00	0.000	0.000	1,414.52	0.00	0.00	2,160.00
										5,578.99			4,309.80

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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**Load Case:** 1.2D + 1.6W      95.00 mph with No Ice      30 Iterations  
 Gust Response Factor : 1.10      Wind Importance Factor : 1.00  
 Dead Load Factor : 1.20  
 Wind Load Factor : 1.60

**Linear Appurtenance Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
5.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.085	0.000	0.00	29.52
5.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.085	0.000	0.00	0.90
5.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.085	0.000	0.00	0.90
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.086	0.000	0.00	29.52
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.086	0.000	0.00	0.90
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.086	0.000	0.00	0.90
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.088	0.000	0.00	29.52
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.088	0.000	0.00	0.90
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.088	0.000	0.00	0.90
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.090	0.000	0.00	29.52
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.090	0.000	0.00	0.90
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.090	0.000	0.00	0.90
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.092	0.000	0.00	29.52
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.092	0.000	0.00	0.90
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.092	0.000	0.00	0.90
30.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.377	0.095	0.000	0.00	29.52
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.377	0.095	0.000	0.00	0.90
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.377	0.095	0.000	0.00	0.90
31.50	(6) 1 5/8" Coax	Yes	1.50	0.000	1.98	0.25	0.00	15.593	0.077	0.000	0.00	8.86
31.50	(1) 1/2" Coax	Yes	1.50	0.000	0.63	0.08	0.00	15.593	0.077	0.000	0.00	0.27
34.00	(6) 1 5/8" Coax	Yes	2.50	0.000	1.98	0.41	0.00	15.937	0.078	0.000	0.00	14.76
34.00	(1) 1/2" Coax	Yes	2.50	0.000	0.63	0.13	0.00	15.937	0.078	0.000	0.00	0.45
35.00	(6) 1 5/8" Coax	Yes	1.00	0.000	1.98	0.17	0.00	16.070	0.060	0.000	0.00	5.90
35.67	(6) 1 5/8" Coax	Yes	0.67	0.000	1.98	0.11	0.00	16.156	0.060	0.000	0.00	3.94
40.00	(6) 1 5/8" Coax	Yes	4.33	0.000	1.98	0.71	0.00	16.694	0.060	0.000	0.00	25.58
45.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	17.266	0.061	0.000	0.00	29.52
50.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	17.793	0.063	0.000	0.00	29.52
55.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	18.285	0.064	0.000	0.00	29.52
60.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	18.745	0.066	0.000	0.00	29.52
65.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	19.179	0.068	0.000	0.00	29.52
70.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	19.589	0.070	0.000	0.00	29.52
70.00	(6) 1 5/8" Coax	Yes	0.00	0.000	1.98	0.00	0.00	19.589	0.071	0.000	0.00	0.00
73.50	(6) 1 5/8" Coax	Yes	3.50	0.000	1.98	0.58	0.00	19.864	0.071	0.000	0.00	20.66
75.00	(6) 1 5/8" Coax	Yes	1.50	0.000	1.98	0.25	0.00	19.979	0.071	0.000	0.00	8.85
80.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	20.351	0.073	0.000	0.00	29.52
85.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	20.706	0.075	0.000	0.00	29.52
90.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.047	0.077	0.000	0.00	29.52
95.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.375	0.080	0.000	0.00	29.52
100.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.690	0.082	0.000	0.00	29.52
105.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.995	0.085	0.000	0.00	29.52
110.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.289	0.088	0.000	0.00	29.52
110.0	(6) 1 5/8" Coax	Yes	0.00	0.000	1.98	0.00	0.00	22.289	0.090	0.000	0.00	0.00
115.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.574	0.092	0.000	0.00	29.51
120.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.850	0.095	0.000	0.00	29.52
125.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	23.118	0.099	0.000	0.00	29.52
128.0	(6) 1 5/8" Coax	Yes	3.00	0.000	1.98	0.50	0.00	23.276	0.102	1.007	0.00	17.71
<b>Totals:</b>											<b>0.00</b>	<b>767.14</b>

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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**Load Case:** 1.2D + 1.6W      95.00 mph with No Ice      30 Iterations  
 Gust Response Factor : 1.10      Wind Importance Factor : 1.00  
 Dead Load Factor : 1.20  
 Wind Load Factor : 1.60

**Applied Segment Forces Summary**

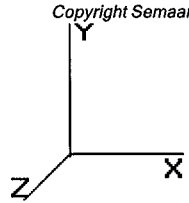
Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	431.45	1,051.18	0.00	0.00
10.00	422.31	1,031.86	0.00	0.00
15.00	413.17	1,012.54	0.00	0.00
20.00	404.03	993.23	0.00	0.00
25.00	394.89	973.91	0.00	0.00
30.00	456.48	1,016.40	0.00	4.07
31.50	115.67	282.41	0.00	0.00
34.00	271.81	862.87	0.00	4.22
35.00	79.54	317.81	0.00	0.00
35.67	53.13	211.19	0.00	0.00
40.00	352.32	692.68	0.00	0.00
45.00	410.88	784.29	0.00	0.00
50.00	412.85	768.19	0.00	0.00
55.00	413.37	752.10	0.00	0.00
60.00	412.63	736.00	0.00	0.00
65.00	410.77	719.90	0.00	0.00
70.00	407.91	703.81	0.00	0.00
70.00	0.03	0.05	0.00	0.00
73.50	287.79	793.85	0.00	0.00
75.00	122.24	175.24	0.00	0.00
80.00	407.28	575.89	0.00	0.00
85.00	402.08	563.01	0.00	0.00
90.00	396.18	550.13	0.00	0.00
95.00	389.64	537.25	0.00	0.00
100.0	382.49	524.38	0.00	0.00
105.0	374.77	511.50	0.00	0.00
110.0	366.53	498.62	0.00	0.00
110.0	0.02	0.03	0.00	0.00
115.0	357.76	401.74	0.00	0.00
120.0	348.57	392.11	0.00	0.00
125.0	338.91	382.45	0.00	0.00
128.0	805.79	559.87	0.00	0.00
130.0	129.86	136.15	0.00	0.00
135.0	318.33	333.62	0.00	0.00
138.0	1,645.00	1,203.54	0.00	0.00
140.0	121.27	93.01	0.00	0.00
145.0	296.20	225.75	0.00	0.00
150.0	3,654.33	3,059.26	0.00	4,869.42
<b>Totals:</b>	<b>17,008.28</b>	<b>24,427.82</b>	<b>0.00</b>	<b>4,877.70</b>

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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**Load Case:** 1.2D + 1.6W      95.00 mph with No Ice      30 Iterations  
**Gust Response Factor:** 1.10      **Wind Importance Factor:** 1.00  
**Dead Load Factor:** 1.20  
**Wind Load Factor:** 1.60

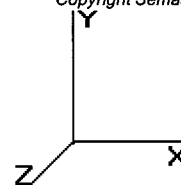
**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-24.38	-17.07	0.00	-1,746.39	0.00	1,746.39	2,613.99	1,306.99	3,984.35	1,967.72	0.00	0.00	0.897
5.00	-23.24	-16.77	0.00	-1,661.02	0.00	1,661.02	2,558.64	1,279.32	3,816.59	1,884.87	0.17	-0.31	0.890
10.00	-22.12	-16.46	0.00	-1,577.19	0.00	1,577.19	2,503.30	1,251.65	3,652.43	1,803.80	0.66	-0.62	0.883
15.00	-21.02	-16.15	0.00	-1,494.89	0.00	1,494.89	2,447.95	1,223.98	3,491.89	1,724.51	1.48	-0.94	0.876
20.00	-19.95	-15.84	0.00	-1,414.15	0.00	1,414.15	2,392.60	1,196.30	3,334.95	1,647.01	2.64	-1.27	0.867
25.00	-18.90	-15.53	0.00	-1,334.95	0.00	1,334.95	2,337.26	1,168.63	3,181.62	1,571.28	4.14	-1.59	0.858
30.00	-17.84	-15.11	0.00	-1,257.30	0.00	1,257.30	2,281.91	1,140.96	3,031.90	1,497.34	5.99	-1.92	0.848
31.50	-17.52	-15.03	0.00	-1,234.63	0.00	1,234.63	2,265.31	1,132.65	2,987.68	1,475.50	6.61	-2.02	0.845
34.00	-16.64	-14.76	0.00	-1,197.07	0.00	1,197.07	2,237.64	1,118.82	2,914.73	1,439.47	7.71	-2.20	0.839
35.00	-16.31	-14.68	0.00	-1,182.31	0.00	1,182.31	2,226.57	1,113.28	2,885.79	1,425.19	8.18	-2.26	0.837
35.67	-16.06	-14.67	0.00	-1,172.52	0.00	1,172.52	1,889.79	944.90	2,499.95	1,234.63	8.50	-2.31	0.958
40.00	-15.30	-14.38	0.00	-1,108.97	0.00	1,108.97	1,849.82	924.91	2,394.82	1,182.71	10.73	-2.60	0.946
45.00	-14.44	-14.03	0.00	-1,037.08	0.00	1,037.08	1,803.70	901.85	2,276.32	1,124.19	13.66	-2.99	0.931
50.00	-13.60	-13.66	0.00	-966.96	0.00	966.96	1,757.58	878.79	2,160.82	1,067.15	16.99	-3.37	0.914
55.00	-12.79	-13.29	0.00	-898.64	0.00	898.64	1,711.46	855.73	2,048.33	1,011.59	20.73	-3.76	0.896
60.00	-12.00	-12.91	0.00	-832.19	0.00	832.19	1,665.34	832.67	1,938.85	957.53	24.88	-4.15	0.877
65.00	-11.22	-12.52	0.00	-767.64	0.00	767.64	1,619.22	809.61	1,832.38	904.94	29.43	-4.54	0.855
70.00	-10.52	-12.09	0.00	-705.03	0.00	705.03	1,573.10	786.55	1,728.91	853.84	34.39	-4.93	0.833
70.00	-10.49	-12.12	0.00	-705.02	0.00	705.02	1,573.09	786.55	1,728.90	853.84	34.39	-4.93	0.833
73.50	-9.68	-11.80	0.00	-662.61	0.00	662.61	1,259.14	629.57	1,387.79	685.38	38.11	-5.21	0.975
75.00	-9.46	-11.71	0.00	-644.92	0.00	644.92	1,248.07	624.03	1,363.39	673.33	39.76	-5.33	0.966
80.00	-8.83	-11.32	0.00	-586.38	0.00	586.38	1,211.17	605.59	1,283.60	633.92	45.58	-5.79	0.933
85.00	-8.23	-10.92	0.00	-529.80	0.00	529.80	1,174.27	587.14	1,206.22	595.71	51.88	-6.25	0.897
90.00	-7.65	-10.53	0.00	-475.19	0.00	475.19	1,137.38	568.69	1,131.25	558.68	58.65	-6.69	0.858
95.00	-7.08	-10.13	0.00	-422.55	0.00	422.55	1,100.48	550.24	1,058.68	522.84	65.88	-7.14	0.815
100.00	-6.54	-9.73	0.00	-371.91	0.00	371.91	1,063.58	531.79	988.52	488.19	73.56	-7.57	0.768
105.00	-6.02	-9.33	0.00	-323.25	0.00	323.25	1,026.69	513.34	920.76	454.73	81.69	-7.98	0.717
110.00	-5.55	-8.92	0.00	-276.58	0.00	276.58	989.79	494.89	855.40	422.45	90.24	-8.38	0.661
110.00	-5.52	-8.94	0.00	-276.57	0.00	276.57	989.79	494.89	855.40	422.45	90.24	-8.38	0.661
110.00	-5.52	-8.94	0.00	-276.57	0.00	276.57	989.79	494.89	855.40	422.45	90.24	-8.38	0.873
115.00	-5.11	-8.56	0.00	-231.88	0.00	231.88	716.88	358.44	599.87	296.25	99.19	-8.76	0.790
120.00	-4.71	-8.19	0.00	-189.07	0.00	189.07	689.20	344.60	554.25	273.72	108.58	-9.23	0.698
125.00	-4.35	-7.82	0.00	-148.10	0.00	148.10	661.53	330.77	510.43	252.08	118.43	-9.65	0.595
128.00	-3.91	-6.94	0.00	-124.64	0.00	124.64	644.93	322.46	485.00	239.53	124.54	-9.88	0.527
130.00	-3.77	-6.81	0.00	-110.75	0.00	110.75	633.86	316.93	468.41	231.33	128.69	-10.02	0.485
135.00	-3.47	-6.45	0.00	-76.70	0.00	76.70	606.19	303.09	428.21	211.47	139.29	-10.32	0.369
138.00	-2.58	-4.62	0.00	-57.36	0.00	57.36	589.58	294.79	404.95	199.99	145.79	-10.47	0.291
140.00	-2.50	-4.49	0.00	-48.12	0.00	48.12	578.51	289.26	389.80	192.51	150.17	-10.55	0.255
145.00	-2.32	-4.16	0.00	-25.67	0.00	25.67	550.84	275.42	353.20	174.43	161.25	-10.70	0.152
150.00	0.00	-3.65	0.00	-4.87	0.00	4.87	523.17	261.58	318.40	157.25	172.44	-10.78	0.031

Pole : 302473  
 Location : E H R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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Base Elev : 0.000 (ft)

**Load Case:** 0.9D + 1.6W

95.00 mph with No Ice (Reduced DL)

30 Iterations

Gust Response Factor : 1.10  
 Dead Load Factor : 0.90  
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

**Shaft Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Kzt	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		1.00	0.70	15.364	16.90	256.32	1.000	0.00	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	15.364	16.90	250.95	1.000	0.00	5.00	15.955	15.96	431.4	0.0	677.0
10.00		1.00	0.70	15.364	16.90	245.57	1.000	0.00	5.00	15.617	15.62	422.3	0.0	662.5
15.00		1.00	0.70	15.364	16.90	240.20	1.000	0.00	5.00	15.279	15.28	413.2	0.0	648.0
20.00		1.00	0.70	15.364	16.90	234.83	1.000	0.00	5.00	14.942	14.94	404.0	0.0	633.5
25.00		1.00	0.70	15.364	16.90	229.45	1.000	0.00	5.00	14.604	14.60	394.9	0.0	619.0
30.00	Appertunance(s)	1.00	0.70	15.377	16.91	224.18	1.000	0.00	5.00	14.266	14.27	386.1	0.0	604.5
31.50	Bot - Section 2	1.00	0.71	15.593	17.15	224.12	1.000	0.00	1.50	4.215	4.21	115.7	0.0	178.6
34.00	Appertunance(s)	1.00	0.72	15.937	17.53	223.84	1.000	0.00	2.50	7.089	7.09	198.8	0.0	545.4
35.00		1.00	0.73	16.070	17.67	223.67	1.000	0.00	1.00	2.812	2.81	79.5	0.0	216.3
35.67	Top - Section 1	1.00	0.73	16.156	17.77	223.54	1.000	0.00	0.67	1.868	1.87	53.1	0.0	143.7
40.00		1.00	0.76	16.694	18.36	226.85	1.000	0.00	4.33	11.991	11.99	352.3	0.0	424.1
45.00		1.00	0.78	17.266	18.99	225.00	1.000	0.00	5.00	13.521	13.52	410.9	0.0	478.2
50.00		1.00	0.81	17.793	19.57	222.63	1.000	0.00	5.00	13.183	13.18	412.9	0.0	466.1
55.00		1.00	0.83	18.285	20.11	219.82	1.000	0.00	5.00	12.845	12.85	413.4	0.0	454.0
60.00		1.00	0.85	18.745	20.61	216.64	1.000	0.00	5.00	12.507	12.51	412.6	0.0	441.9
65.00		1.00	0.87	19.179	21.09	213.13	1.000	0.00	5.00	12.169	12.17	410.8	0.0	429.9
70.00		1.00	0.89	19.589	21.54	209.33	1.000	0.00	5.00	11.831	11.83	407.9	0.0	417.8
70.00	Bot - Section 3	1.00	0.89	19.589	21.54	209.33	1.000	0.00	0.00	0.001	0.00	0.0	0.0	0.0
73.50	Top - Section 2	1.00	0.90	19.864	21.85	206.52	1.000	0.00	3.50	8.232	8.23	287.8	0.0	518.3
75.00		1.00	0.91	19.979	21.97	209.19	1.000	0.00	1.50	3.476	3.48	122.2	0.0	98.4
80.00		1.00	0.92	20.351	22.38	204.94	1.000	0.00	5.00	11.371	11.37	407.3	0.0	321.9
85.00		1.00	0.94	20.706	22.77	200.49	1.000	0.00	5.00	11.033	11.03	402.1	0.0	312.2
90.00		1.00	0.95	21.047	23.15	195.84	1.000	0.00	5.00	10.695	10.70	396.2	0.0	302.5
95.00		1.00	0.97	21.375	23.51	191.02	1.000	0.00	5.00	10.357	10.36	389.6	0.0	292.9
100.00		1.00	0.98	21.690	23.86	186.05	1.000	0.00	5.00	10.019	10.02	382.5	0.0	283.2
105.00		1.00	1.00	21.995	24.19	180.92	1.000	0.00	5.00	9.681	9.68	374.8	0.0	273.6
110.00		1.00	1.01	22.289	24.51	175.65	1.000	0.00	5.00	9.343	9.34	366.5	0.0	263.9
110.00	Top - Section 3	1.00	1.01	22.289	24.51	175.65	1.000	0.00	0.00	0.001	0.00	0.0	0.0	0.0
115.00		1.00	1.02	22.574	24.83	170.26	1.000	0.00	5.00	9.005	9.00	357.8	0.0	191.3
120.00		1.00	1.04	22.850	25.13	164.75	1.000	0.00	5.00	8.667	8.67	348.6	0.0	184.0
125.00		1.00	1.05	23.118	25.43	159.12	1.000	0.00	5.00	8.329	8.33	338.9	0.0	176.8
128.00	Appertunance(s)	1.00	1.06	23.276	25.60	155.69	1.000 *	0.00	3.00	4.835	4.84	198.1	0.0	102.6
130.00		1.00	1.06	23.379	25.71	153.39	1.000	0.00	2.00	3.156	3.16	129.9	0.0	66.9
135.00		1.00	1.07	23.632	25.99	147.55	1.000	0.00	5.00	7.653	7.65	318.3	0.0	162.3
138.00	Appertunance(s)	1.00	1.08	23.781	26.15	144.01	1.000	0.00	3.00	4.430	4.43	185.4	0.0	93.9
140.00		1.00	1.08	23.879	26.26	141.62	1.000	0.00	2.00	2.886	2.89	121.3	0.0	61.2
145.00		1.00	1.09	24.120	26.53	135.60	1.000	0.00	5.00	6.977	6.98	296.2	0.0	147.8
150.00	Appertunance(s)	1.00	1.11	24.355	26.79	129.50	1.000	0.00	5.00	6.639	6.64	284.6	0.0	140.6
* = Cf Adjusted By Linear Load Ra Effect								Totals:	150.00			11,427.9	0.0	12,034.9

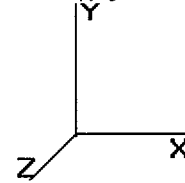


Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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**Load Case:** 0.9D + 1.6W

95.00 mph with No Ice (Reduced DL)

30 Iterations

Gust Response Factor : 1.10  
 Dead Load Factor : 0.90  
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

**Discrete Appurtenance Segment Forces (Factored)**

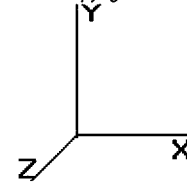
Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
30.00	Stand-off	1	15.377	16.915	1.00	1.00	2.00	0.000	0.000	54.13	0.00	0.00	45.00
30.00	GPS	1	15.414	16.955	1.00	1.00	0.60	0.000	0.250	16.28	0.00	4.07	1.35
34.00	Stand-off	1	15.937	17.531	1.00	1.00	2.00	0.000	0.000	56.10	0.00	0.00	45.00
34.00	GPS	1	15.970	17.567	1.00	1.00	0.60	0.000	0.250	16.86	0.00	4.22	1.35
128.0	Flush Mounts	1	23.276	25.603	1.00	1.00	3.50	0.000	0.000	143.38	0.00	0.00	180.00
128.0	RFS APXV18-206517S-	3	23.276	25.603	0.73	1.00	11.30	0.000	0.000	462.92	0.00	0.00	71.28
138.0	Decibel DB980F65E-M	9	23.781	26.159	0.60	0.80	20.25	0.000	0.000	847.56	0.00	0.00	81.00
138.0	Round T-Arm	3	23.781	26.159	0.50	0.75	14.62	0.000	0.000	612.03	0.00	0.00	675.00
150.0	Diplexer	3	24.355	26.790	0.50	1.00	1.05	0.000	0.000	45.01	0.00	0.00	13.50
150.0	RCU	6	24.355	26.790	0.50	1.00	0.48	0.000	0.000	20.57	0.00	0.00	5.40
150.0	ADC CG-800DD	12	24.355	26.790	0.38	0.75	5.63	0.000	0.000	241.11	0.00	0.00	150.12
150.0	CSS DUO4-8670	9	24.493	26.942	0.62	0.75	36.48	0.000	3.000	1,572.37	0.00	4,717.10	311.85
150.0	6' Omni	1	24.447	26.892	1.00	1.00	1.77	0.000	2.000	76.16	0.00	152.31	31.50
150.0	Platform w/ Handrail	1	24.355	26.790	1.00	1.00	33.00	0.000	0.000	1,414.52	0.00	0.00	1,620.00
										5,578.99			3,232.35

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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**Load Case:** 0.9D + 1.6W      95.00 mph with No Ice (Reduced DL)      30 Iterations  
**Gust Response Factor:** 1.10      **Wind Importance Factor:** 1.00  
**Dead Load Factor:** 0.90  
**Wind Load Factor:** 1.60

**Linear Appurtenance Segment Forces (Factored)**

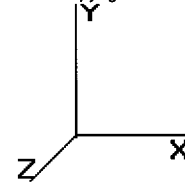
Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	F X (lb)	Dead Load (lb)
5.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.085	0.000	0.00	22.14
5.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.085	0.000	0.00	0.68
5.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.085	0.000	0.00	0.68
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.086	0.000	0.00	22.14
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.086	0.000	0.00	0.68
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.086	0.000	0.00	0.68
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.088	0.000	0.00	22.14
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.088	0.000	0.00	0.68
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.088	0.000	0.00	0.68
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.090	0.000	0.00	22.14
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.090	0.000	0.00	0.68
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.090	0.000	0.00	0.68
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.364	0.092	0.000	0.00	22.14
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.092	0.000	0.00	0.68
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.364	0.092	0.000	0.00	0.68
30.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	15.377	0.095	0.000	0.00	22.14
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.377	0.095	0.000	0.00	0.68
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	15.377	0.095	0.000	0.00	0.68
31.50	(6) 1 5/8" Coax	Yes	1.50	0.000	1.98	0.25	0.00	15.593	0.077	0.000	0.00	6.64
31.50	(1) 1/2" Coax	Yes	1.50	0.000	0.63	0.08	0.00	15.593	0.077	0.000	0.00	0.20
34.00	(6) 1 5/8" Coax	Yes	2.50	0.000	1.98	0.41	0.00	15.937	0.078	0.000	0.00	11.07
34.00	(1) 1/2" Coax	Yes	2.50	0.000	0.63	0.13	0.00	15.937	0.078	0.000	0.00	0.34
35.00	(6) 1 5/8" Coax	Yes	1.00	0.000	1.98	0.17	0.00	16.070	0.060	0.000	0.00	4.43
35.67	(6) 1 5/8" Coax	Yes	0.67	0.000	1.98	0.11	0.00	16.156	0.060	0.000	0.00	2.95
40.00	(6) 1 5/8" Coax	Yes	4.33	0.000	1.98	0.71	0.00	16.694	0.060	0.000	0.00	19.18
45.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	17.266	0.061	0.000	0.00	22.14
50.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	17.793	0.063	0.000	0.00	22.14
55.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	18.285	0.064	0.000	0.00	22.14
60.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	18.745	0.066	0.000	0.00	22.14
65.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	19.179	0.068	0.000	0.00	22.14
70.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	19.589	0.070	0.000	0.00	22.14
70.00	(6) 1 5/8" Coax	Yes	0.00	0.000	1.98	0.00	0.00	19.589	0.071	0.000	0.00	0.00
73.50	(6) 1 5/8" Coax	Yes	3.50	0.000	1.98	0.58	0.00	19.864	0.071	0.000	0.00	15.50
75.00	(6) 1 5/8" Coax	Yes	1.50	0.000	1.98	0.25	0.00	19.979	0.071	0.000	0.00	6.64
80.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	20.351	0.073	0.000	0.00	22.14
85.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	20.706	0.075	0.000	0.00	22.14
90.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.047	0.077	0.000	0.00	22.14
95.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.375	0.080	0.000	0.00	22.14
100.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.690	0.082	0.000	0.00	22.14
105.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	21.995	0.085	0.000	0.00	22.14
110.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.289	0.088	0.000	0.00	22.14
110.0	(6) 1 5/8" Coax	Yes	0.00	0.000	1.98	0.00	0.00	22.289	0.090	0.000	0.00	0.00
115.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.574	0.092	0.000	0.00	22.14
120.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.850	0.095	0.000	0.00	22.14
125.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	23.118	0.099	0.000	0.00	22.14
128.0	(6) 1 5/8" Coax	Yes	3.00	0.000	1.98	0.50	0.00	23.276	0.102	1.007	0.00	13.28
<b>Totals:</b>											0.00	575.35

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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**Load Case:** 0.9D + 1.6W

95.00 mph with No Ice (Reduced DL)

30 Iterations

Gust Response Factor : 1.10  
 Dead Load Factor : 0.90  
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

**Applied Segment Forces Summary**

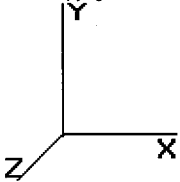
Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	431.45	788.38	0.00	0.00
10.00	422.31	773.90	0.00	0.00
15.00	413.17	759.41	0.00	0.00
20.00	404.03	744.92	0.00	0.00
25.00	394.89	730.43	0.00	0.00
30.00	456.48	762.30	0.00	4.07
31.50	115.67	211.80	0.00	0.00
34.00	271.81	647.15	0.00	4.22
35.00	79.54	238.36	0.00	0.00
35.67	53.13	158.39	0.00	0.00
40.00	352.32	519.51	0.00	0.00
45.00	410.88	588.22	0.00	0.00
50.00	412.85	576.15	0.00	0.00
55.00	413.37	564.07	0.00	0.00
60.00	412.63	552.00	0.00	0.00
65.00	410.77	539.93	0.00	0.00
70.00	407.91	527.86	0.00	0.00
70.00	0.03	0.04	0.00	0.00
73.50	287.79	595.39	0.00	0.00
75.00	122.24	131.43	0.00	0.00
80.00	407.28	431.91	0.00	0.00
85.00	402.08	422.26	0.00	0.00
90.00	396.18	412.60	0.00	0.00
95.00	389.64	402.94	0.00	0.00
100.0	382.49	393.28	0.00	0.00
105.0	374.77	383.63	0.00	0.00
110.0	366.53	373.97	0.00	0.00
110.0	0.02	0.02	0.00	0.00
115.0	357.76	301.30	0.00	0.00
120.0	348.57	294.08	0.00	0.00
125.0	338.91	286.84	0.00	0.00
128.0	804.38	419.91	0.00	0.00
130.0	129.86	102.11	0.00	0.00
135.0	318.33	250.21	0.00	0.00
138.0	1,645.00	902.65	0.00	0.00
140.0	121.27	69.75	0.00	0.00
145.0	296.20	169.31	0.00	0.00
150.0	3,654.33	2,294.44	0.00	4,869.42
<b>Totals:</b>	<b>17,006.88</b>	<b>18,320.86</b>	<b>0.00</b>	<b>4,877.70</b>

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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**Load Case:** 0.9D + 1.6W      95.00 mph with No Ice (Reduced DL)      30 Iterations  
 Gust Response Factor : 1.10      Wind Importance Factor : 1.00  
 Dead Load Factor : 0.90  
 Wind Load Factor : 1.60

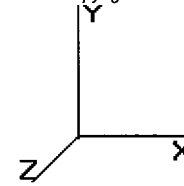
**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-18.27	-17.06	0.00	-1,714.41	0.00	1,714.41	2,613.99	1,306.99	3,984.35	1,967.72	0.00	0.00	0.878
5.00	-17.40	-16.72	0.00	-1,629.14	0.00	1,629.14	2,558.64	1,279.32	3,816.59	1,884.87	0.16	-0.30	0.871
10.00	-16.54	-16.38	0.00	-1,545.56	0.00	1,545.56	2,503.30	1,251.65	3,652.43	1,803.80	0.65	-0.61	0.864
15.00	-15.70	-16.04	0.00	-1,463.68	0.00	1,463.68	2,447.95	1,223.98	3,491.89	1,724.51	1.45	-0.92	0.855
20.00	-14.87	-15.70	0.00	-1,383.48	0.00	1,383.48	2,392.60	1,196.30	3,334.95	1,647.01	2.59	-1.24	0.846
25.00	-14.07	-15.37	0.00	-1,304.97	0.00	1,304.97	2,337.26	1,168.63	3,181.62	1,571.28	4.06	-1.56	0.837
30.00	-13.26	-14.94	0.00	-1,228.11	0.00	1,228.11	2,281.91	1,140.96	3,031.90	1,497.34	5.87	-1.88	0.826
31.50	-13.02	-14.85	0.00	-1,205.70	0.00	1,205.70	2,265.31	1,132.65	2,987.68	1,475.50	6.47	-1.98	0.823
34.00	-12.36	-14.58	0.00	-1,168.58	0.00	1,168.58	2,237.64	1,118.82	2,914.73	1,439.47	7.56	-2.15	0.818
35.00	-12.11	-14.50	0.00	-1,154.00	0.00	1,154.00	2,226.57	1,113.28	2,885.79	1,425.19	8.01	-2.22	0.815
35.67	-11.91	-14.48	0.00	-1,144.33	0.00	1,144.33	1,889.79	944.90	2,499.95	1,234.63	8.33	-2.26	0.933
40.00	-11.32	-14.17	0.00	-1,081.60	0.00	1,081.60	1,849.82	924.91	2,394.82	1,182.71	10.51	-2.55	0.921
45.00	-10.66	-13.80	0.00	-1,010.76	0.00	1,010.76	1,803.70	901.85	2,276.32	1,124.19	13.38	-2.92	0.905
50.00	-10.02	-13.42	0.00	-941.76	0.00	941.76	1,757.58	878.79	2,160.82	1,067.15	16.64	-3.30	0.888
55.00	-9.40	-13.04	0.00	-874.65	0.00	874.65	1,711.46	855.73	2,048.33	1,011.59	20.29	-3.68	0.870
60.00	-8.79	-12.65	0.00	-809.46	0.00	809.46	1,665.34	832.67	1,938.85	957.53	24.34	-4.05	0.851
65.00	-8.20	-12.25	0.00	-746.22	0.00	746.22	1,619.22	809.61	1,832.38	904.94	28.78	-4.44	0.830
70.00	-7.67	-11.83	0.00	-684.96	0.00	684.96	1,573.10	786.55	1,728.91	853.84	33.63	-4.82	0.807
70.00	-7.64	-11.85	0.00	-684.95	0.00	684.95	1,573.09	786.55	1,728.90	853.84	33.63	-4.82	0.807
73.50	-7.04	-11.53	0.00	-643.49	0.00	643.49	1,259.14	629.57	1,387.79	685.38	37.25	-5.09	0.945
75.00	-6.86	-11.43	0.00	-626.19	0.00	626.19	1,248.07	624.03	1,363.39	673.33	38.87	-5.20	0.936
80.00	-6.38	-11.04	0.00	-569.03	0.00	569.03	1,211.17	605.59	1,283.60	633.92	44.55	-5.65	0.903
85.00	-5.92	-10.64	0.00	-513.84	0.00	513.84	1,174.27	587.14	1,206.22	595.71	50.69	-6.09	0.868
90.00	-5.48	-10.24	0.00	-460.65	0.00	460.65	1,137.38	568.69	1,131.25	558.68	57.29	-6.52	0.830
95.00	-5.05	-9.85	0.00	-409.44	0.00	409.44	1,100.48	550.24	1,058.68	522.84	64.33	-6.95	0.788
100.00	-4.64	-9.45	0.00	-360.21	0.00	360.21	1,063.58	531.79	988.52	488.19	71.82	-7.37	0.743
105.00	-4.25	-9.06	0.00	-312.96	0.00	312.96	1,026.69	513.34	920.76	454.73	79.73	-7.77	0.693
110.00	-3.90	-8.66	0.00	-267.67	0.00	267.67	989.79	494.89	855.40	422.45	88.05	-8.16	0.638
110.00	-3.87	-8.67	0.00	-267.67	0.00	267.67	989.79	494.89	855.40	422.45	88.05	-8.16	0.638
110.00	-3.87	-8.67	0.00	-267.67	0.00	267.67	989.79	494.89	855.40	422.45	88.05	-8.16	0.843
115.00	-3.57	-8.30	0.00	-224.33	0.00	224.33	716.88	358.44	599.87	296.25	96.77	-8.53	0.763
120.00	-3.27	-7.93	0.00	-182.85	0.00	182.85	689.20	344.60	554.25	273.72	105.91	-8.98	0.673
125.00	-3.00	-7.57	0.00	-143.19	0.00	143.19	661.53	330.77	510.43	252.08	115.49	-9.38	0.573
128.00	-2.70	-6.71	0.00	-120.49	0.00	120.49	644.93	322.46	485.00	239.53	121.43	-9.60	0.508
130.00	-2.59	-6.58	0.00	-107.06	0.00	107.06	633.86	316.93	468.41	231.33	125.47	-9.74	0.467
135.00	-2.38	-6.23	0.00	-74.17	0.00	74.17	606.19	303.09	428.21	211.47	135.78	-10.03	0.355
138.00	-1.77	-4.46	0.00	-55.47	0.00	55.47	589.58	294.79	404.95	199.99	142.10	-10.17	0.281
140.00	-1.71	-4.33	0.00	-46.56	0.00	46.56	578.51	289.26	389.80	192.51	146.36	-10.26	0.245
145.00	-1.59	-4.01	0.00	-24.92	0.00	24.92	550.84	275.42	353.20	174.43	157.13	-10.41	0.146
150.00	0.00	-3.65	0.00	-4.87	0.00	4.87	523.17	261.58	318.40	157.25	168.01	-10.48	0.031

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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**Load Case:** 1.2D + 1.0Di + 1.0Wi      50.00 mph with 1.00 in Radial Ice      30 Iterations  
**Gust Response Factor:** 1.10      **Ice Dead Load Factor:** 1.00      **Wind Importance Factor:** 1.00  
**Dead Load Factor:** 1.20      **Ice Importance Factor:** 1.00  
**Wind Load Factor:** 1.00

**Shaft Segment Forces (Factored)**

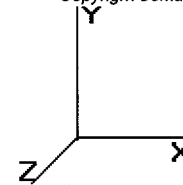
Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	4.256	4.682	0.000	1.200	0.00	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	4.256	4.682	0.000	1.200	1.65	5.00	17.335	20.80	97.4	410.0	1,312.6
10.00		1.00	0.70	4.256	4.682	0.000	1.200	1.77	5.00	17.097	20.52	96.0	431.8	1,315.1
15.00		1.00	0.70	4.256	4.682	0.000	1.200	1.84	5.00	16.820	20.18	94.5	441.1	1,305.1
20.00		1.00	0.70	4.256	4.682	0.000	1.200	1.90	5.00	16.527	19.83	92.8	444.9	1,289.6
25.00		1.00	0.70	4.256	4.682	0.000	1.200	1.94	5.00	16.225	19.47	91.1	445.6	1,271.0
30.00	Appertunance(s)	1.00	0.70	4.260	4.686	0.000	1.200	1.98	5.00	15.916	19.10	89.5	444.2	1,250.3
31.50	Bot - Section 2	1.00	0.71	4.319	4.751	0.000	1.200	1.99	1.50	4.712	5.65	26.9	133.1	371.2
34.00	Appertunance(s)	1.00	0.72	4.415	4.856	0.000	1.200	2.00	2.50	7.925	9.51	46.2	225.0	952.3
35.00		1.00	0.73	4.451	4.897	0.000	1.200	2.01	1.00	3.148	3.78	18.5	89.9	378.3
35.67	Top - Section 1	1.00	0.73	4.475	4.923	0.000	1.200	2.01	0.67	2.092	2.51	12.4	59.9	251.5
40.00		1.00	0.76	4.625	5.087	0.000	1.200	2.03	4.33	13.463	16.16	82.2	386.0	951.5
45.00		1.00	0.78	4.783	5.261	0.000	1.200	2.06	5.00	15.240	18.29	96.2	440.6	1,078.1
50.00		1.00	0.81	4.929	5.422	0.000	1.200	2.08	5.00	14.921	17.90	97.1	434.9	1,056.4
55.00		1.00	0.83	5.065	5.572	0.000	1.200	2.10	5.00	14.599	17.52	97.6	428.7	1,034.0
60.00		1.00	0.85	5.193	5.712	0.000	1.200	2.12	5.00	14.277	17.13	97.9	421.9	1,011.1
65.00		1.00	0.87	5.313	5.844	0.000	1.200	2.14	5.00	13.953	16.74	97.8	414.6	987.8
70.00		1.00	0.89	5.426	5.969	0.000	1.200	2.15	5.00	13.628	16.35	97.6	407.0	964.0
70.00	Bot - Section 3	1.00	0.89	5.426	5.969	0.000	1.200	2.15	0.00	0.001	0.00	0.0	0.0	0.1
73.50	Top - Section 2	1.00	0.90	5.502	6.053	0.000	1.200	2.16	3.50	9.496	11.39	69.0	285.9	977.0
75.00		1.00	0.91	5.534	6.088	0.000	1.200	2.17	1.50	4.019	4.82	29.4	121.8	253.0
80.00		1.00	0.92	5.637	6.201	0.000	1.200	2.18	5.00	13.192	15.83	98.2	397.7	826.9
85.00		1.00	0.94	5.736	6.309	0.000	1.200	2.19	5.00	12.865	15.44	97.4	389.2	805.4
90.00		1.00	0.95	5.830	6.413	0.000	1.200	2.21	5.00	12.538	15.05	96.5	380.3	783.7
95.00		1.00	0.97	5.921	6.513	0.000	1.200	2.22	5.00	12.210	14.65	95.4	371.3	761.8
100.00		1.00	0.98	6.008	6.609	0.000	1.200	2.23	5.00	11.881	14.26	94.2	362.0	739.6
105.00		1.00	1.00	6.093	6.702	0.000	1.200	2.24	5.00	11.552	13.86	92.9	352.5	717.3
110.00		1.00	1.01	6.174	6.792	0.000	1.200	2.25	5.00	11.223	13.47	91.5	342.9	694.7
110.00	Top - Section 3	1.00	1.01	6.174	6.792	0.000	1.200	2.25	0.00	0.001	0.00	0.0	0.0	0.0
115.00		1.00	1.02	6.253	6.879	0.000	1.200	2.26	5.00	10.893	13.07	89.9	333.0	588.0
120.00		1.00	1.04	6.330	6.963	0.000	1.200	2.27	5.00	10.564	12.68	88.3	323.0	568.4
125.00		1.00	1.05	6.404	7.044	0.000	1.200	2.28	5.00	10.233	12.28	86.5	312.9	548.6
128.00	Appertunance(s)	1.00	1.06	6.448	7.092	0.000	1.200 *	2.29	3.00	5.981	7.18	50.9	184.0	320.8
130.00		1.00	1.06	6.476	7.124	0.000	1.200	2.29	2.00	3.921	4.70	33.5	121.0	210.3
135.00		1.00	1.07	6.546	7.201	0.000	1.200	2.30	5.00	9.572	11.49	82.7	292.2	508.5
138.00	Appertunance(s)	1.00	1.08	6.588	7.246	0.000	1.200	2.30	3.00	5.584	6.70	48.6	171.5	296.7
140.00		1.00	1.08	6.615	7.276	0.000	1.200	2.31	2.00	3.656	4.39	31.9	112.6	194.2
145.00		1.00	1.09	6.681	7.350	0.000	1.200	2.31	5.00	8.910	10.69	78.6	270.9	468.0
150.00	Appertunance(s)	1.00	1.11	6.746	7.421	0.000	1.200	2.32	5.00	8.579	10.29	76.4	260.2	447.6
* = Cf Adjusted By Linear Load Ra Effect								<b>Totals:</b>		150.00		2,763.4	11,444.1	27,490.6

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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**Load Case:** 1.2D + 1.0Di + 1.0Wi      50.00 mph with 1.00 in Radial Ice      30 Iterations  
 Gust Response Factor : 1.10      Ice Dead Load Factor : 1.00      Wind Importance Factor : 1.00  
 Dead Load Factor : 1.20      Ice Importance Factor : 1.00  
 Wind Load Factor : 1.00

**Discrete Appurtenance Segment Forces (Factored)**

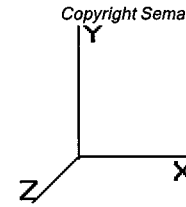
Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
30.00	Stand-off	1	4.260	4.686	1.00	1.00	3.58	0.000	0.000	16.80	0.00	0.00	74.62
30.00	GPS	1	4.270	4.697	1.00	1.00	1.08	0.000	0.250	5.05	0.00	1.26	0.99
34.00	Stand-off	1	4.415	4.856	1.00	1.00	3.60	0.000	0.000	17.51	0.00	0.00	75.12
34.00	GPS	1	4.424	4.866	1.00	1.00	1.08	0.000	0.250	5.26	0.00	1.32	1.00
128.0	Flush Mounts	1	6.448	7.092	1.00	1.00	8.31	0.000	0.000	58.93	0.00	0.00	598.07
128.0	RFS APXV18-206517S-	3	6.448	7.092	0.73	1.00	14.95	0.000	0.000	106.01	0.00	0.00	602.00
138.0	Decibel DB980F65E-M	9	6.588	7.246	0.60	0.80	27.88	0.000	0.000	202.04	0.00	0.00	1,316.48
138.0	Round T-Arm	3	6.588	7.246	0.50	0.75	31.09	0.000	0.000	225.28	0.00	0.00	1,538.75
150.0	Diplexer	3	6.746	7.421	0.50	1.00	2.03	0.000	0.000	15.04	0.00	0.00	25.96
150.0	RCU	6	6.746	7.421	0.50	1.00	0.93	0.000	0.000	6.88	0.00	0.00	6.78
150.0	ADC CG-800DD	12	6.746	7.421	0.38	0.75	10.86	0.000	0.000	80.60	0.00	0.00	265.42
150.0	CSS DUO4-8670	9	6.785	7.463	0.62	0.75	40.11	0.000	3.000	299.32	0.00	897.97	2,576.82
150.0	6' Omni	1	6.772	7.449	1.00	1.00	3.42	0.000	2.000	25.46	0.00	50.92	57.58
150.0	Platform w/ Handrail	1	6.746	7.421	1.00	1.00	63.72	0.000	0.000	472.84	0.00	0.00	3,135.41
										1,537.02			10,275.00

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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Base Elev : 0.000 (ft)



**Load Case:** 1.2D + 1.0Di + 1.0Wi      50.00 mph with 1.00 in Radial Ice      30 Iterations  
 Gust Response Factor : 1.10      Ice Dead Load Factor : 1.00      Wind Importance Factor : 1.00  
 Dead Load Factor : 1.20      Ice Importance Factor : 1.00  
 Wind Load Factor : 1.00

**Linear Appurtenance Segment Forces (Factored)**

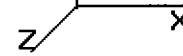
Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	F X (lb)	Dead Load (lb)
5.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.21	0.00	4.256	0.085	0.000	0.00	132.59
5.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.64	0.00	4.256	0.085	0.000	0.00	21.88
5.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.64	0.00	4.256	0.085	0.000	0.00	21.88
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.30	0.00	4.256	0.086	0.000	0.00	140.58
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.74	0.00	4.256	0.086	0.000	0.00	24.66
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.74	0.00	4.256	0.086	0.000	0.00	24.66
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.37	0.00	4.256	0.088	0.000	0.00	145.60
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.80	0.00	4.256	0.088	0.000	0.00	26.46
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.80	0.00	4.256	0.088	0.000	0.00	26.46
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.41	0.00	4.256	0.090	0.000	0.00	149.32
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.85	0.00	4.256	0.090	0.000	0.00	27.83
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.85	0.00	4.256	0.090	0.000	0.00	27.83
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.45	0.00	4.256	0.092	0.000	0.00	152.32
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.88	0.00	4.256	0.092	0.000	0.00	28.95
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.88	0.00	4.256	0.092	0.000	0.00	28.95
30.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.48	0.00	4.260	0.095	0.000	0.00	154.83
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.91	0.00	4.260	0.095	0.000	0.00	29.89
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	1.91	0.00	4.260	0.095	0.000	0.00	29.89
31.50	(6) 1 5/8" Coax	Yes	1.50	0.000	1.98	0.75	0.00	4.319	0.077	0.000	0.00	46.66
31.50	(1) 1/2" Coax	Yes	1.50	0.000	0.63	0.58	0.00	4.319	0.077	0.000	0.00	9.05
34.00	(6) 1 5/8" Coax	Yes	2.50	0.000	1.98	1.25	0.00	4.415	0.078	0.000	0.00	78.28
34.00	(1) 1/2" Coax	Yes	2.50	0.000	0.63	0.97	0.00	4.415	0.078	0.000	0.00	15.28
35.00	(6) 1 5/8" Coax	Yes	1.00	0.000	1.98	0.50	0.00	4.451	0.060	0.000	0.00	31.40
35.67	(6) 1 5/8" Coax	Yes	0.67	0.000	1.98	0.33	0.00	4.475	0.060	0.000	0.00	20.98
40.00	(6) 1 5/8" Coax	Yes	4.33	0.000	1.98	2.19	0.00	4.625	0.060	0.000	0.00	137.72
45.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.54	0.00	4.783	0.061	0.000	0.00	160.64
50.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.56	0.00	4.929	0.063	0.000	0.00	162.20
55.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.58	0.00	5.065	0.064	0.000	0.00	163.64
60.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.59	0.00	5.193	0.066	0.000	0.00	164.96
65.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.61	0.00	5.313	0.068	0.000	0.00	166.20
70.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.62	0.00	5.426	0.070	0.000	0.00	167.35
70.00	(6) 1 5/8" Coax	Yes	0.00	0.000	1.98	0.00	0.00	5.426	0.071	0.000	0.00	0.01
73.50	(6) 1 5/8" Coax	Yes	3.50	0.000	1.98	1.84	0.00	5.502	0.071	0.000	0.00	117.68
75.00	(6) 1 5/8" Coax	Yes	1.50	0.000	1.98	0.79	0.00	5.534	0.071	0.000	0.00	50.52
80.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.65	0.00	5.637	0.073	0.000	0.00	169.46
85.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.66	0.00	5.736	0.075	0.000	0.00	170.43
90.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.67	0.00	5.830	0.077	0.000	0.00	171.35
95.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.68	0.00	5.921	0.080	0.000	0.00	172.23
100.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.69	0.00	6.008	0.082	0.000	0.00	173.07
105.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.70	0.00	6.093	0.085	0.000	0.00	173.87
110.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.70	0.00	6.174	0.088	0.000	0.00	174.64
110.0	(6) 1 5/8" Coax	Yes	0.00	0.000	1.98	0.00	0.00	6.174	0.090	0.000	0.00	0.01
115.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.71	0.00	6.253	0.092	0.000	0.00	175.37
120.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.72	0.00	6.330	0.095	0.000	0.00	176.10
125.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.73	0.00	6.404	0.099	0.000	0.00	176.79
128.0	(6) 1 5/8" Coax	Yes	3.00	0.000	1.98	1.64	0.00	6.448	0.102	1.007	0.00	106.31
<b>Totals:</b>											<b>0.00</b>	<b>4,526.75</b>

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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**Load Case:** 1.2D + 1.0Di + 1.0Wi      50.00 mph with 1.00 in Radial Ice      30 Iterations  
 Gust Response Factor : 1.10      Ice Dead Load Factor : 1.00      Wind Importance Factor : 1.00  
 Dead Load Factor : 1.20      Ice Importance 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	97.39	1,606.22	0.00	0.00
10.00	96.05	1,622.19	0.00	0.00
15.00	94.49	1,620.83	0.00	0.00
20.00	92.85	1,611.84	0.00	0.00
25.00	91.15	1,598.42	0.00	0.00
30.00	111.34	1,657.70	0.00	1.26
31.50	26.87	462.06	0.00	0.00
34.00	68.95	1,180.56	0.00	1.32
35.00	18.50	433.19	0.00	0.00
35.67	12.36	288.13	0.00	0.00
40.00	82.18	1,190.86	0.00	0.00
45.00	96.22	1,355.98	0.00	0.00
50.00	97.08	1,335.81	0.00	0.00
55.00	97.61	1,314.89	0.00	0.00
60.00	97.85	1,293.32	0.00	0.00
65.00	97.85	1,271.21	0.00	0.00
70.00	97.62	1,248.62	0.00	0.00
70.00	0.01	0.08	0.00	0.00
73.50	68.97	1,176.77	0.00	0.00
75.00	29.36	338.68	0.00	0.00
80.00	98.17	1,113.56	0.00	0.00
85.00	97.41	1,093.08	0.00	0.00
90.00	96.49	1,072.30	0.00	0.00
95.00	95.43	1,051.24	0.00	0.00
100.0	94.23	1,029.93	0.00	0.00
105.0	92.91	1,008.38	0.00	0.00
110.0	91.47	986.60	0.00	0.00
110.0	0.01	0.07	0.00	0.00
115.0	89.91	880.59	0.00	0.00
120.0	88.26	861.71	0.00	0.00
125.0	86.51	842.59	0.00	0.00
128.0	215.84	1,697.53	0.00	0.00
130.0	33.52	257.18	0.00	0.00
135.0	82.72	625.77	0.00	0.00
138.0	475.88	3,222.27	0.00	0.00
140.0	31.92	205.65	0.00	0.00
145.0	78.58	496.69	0.00	0.00
150.0	976.53	6,544.21	0.00	948.88
<b>Totals:</b>	<b>4,300.45</b>	<b>45,596.73</b>	<b>0.00</b>	<b>951.46</b>

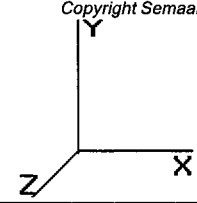


Pole : 302473  
 Location : E H R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.00 in Radial Ice	30 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

**Calculated Forces**

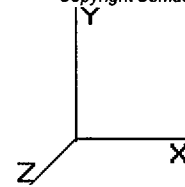
Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-45.59	-4.34	0.00	-504.48	0.00	504.48	2,613.99	1,306.99	3,984.35	1,967.72	0.00	0.00	0.274
5.00	-43.98	-4.31	0.00	-482.80	0.00	482.80	2,558.64	1,279.32	3,816.59	1,884.87	0.05	-0.09	0.273
10.00	-42.35	-4.28	0.00	-461.27	0.00	461.27	2,503.30	1,251.65	3,652.43	1,803.80	0.19	-0.18	0.273
15.00	-40.72	-4.24	0.00	-439.89	0.00	439.89	2,447.95	1,223.98	3,491.89	1,724.51	0.43	-0.28	0.272
20.00	-39.11	-4.21	0.00	-418.68	0.00	418.68	2,392.60	1,196.30	3,334.95	1,647.01	0.77	-0.37	0.271
25.00	-37.50	-4.17	0.00	-397.65	0.00	397.65	2,337.26	1,168.63	3,181.62	1,571.28	1.21	-0.47	0.269
30.00	-35.84	-4.08	0.00	-376.82	0.00	376.82	2,281.91	1,140.96	3,031.90	1,497.34	1.75	-0.57	0.267
31.50	-35.38	-4.07	0.00	-370.70	0.00	370.70	2,265.31	1,132.65	2,987.68	1,475.50	1.93	-0.60	0.267
34.00	-34.19	-4.01	0.00	-360.51	0.00	360.51	2,237.64	1,118.82	2,914.73	1,439.47	2.26	-0.65	0.266
35.00	-33.76	-4.00	0.00	-356.50	0.00	356.50	2,226.57	1,113.28	2,885.79	1,425.19	2.40	-0.67	0.265
35.67	-33.47	-4.02	0.00	-353.83	0.00	353.83	1,889.79	944.90	2,499.95	1,234.63	2.49	-0.68	0.304
40.00	-32.27	-3.98	0.00	-336.43	0.00	336.43	1,849.82	924.91	2,394.82	1,182.71	3.15	-0.77	0.302
45.00	-30.91	-3.92	0.00	-316.55	0.00	316.55	1,803.70	901.85	2,276.32	1,124.19	4.02	-0.89	0.299
50.00	-29.57	-3.87	0.00	-296.93	0.00	296.93	1,757.58	878.79	2,160.82	1,067.15	5.01	-1.01	0.295
55.00	-28.25	-3.80	0.00	-277.61	0.00	277.61	1,711.46	855.73	2,048.33	1,011.59	6.13	-1.13	0.291
60.00	-26.95	-3.74	0.00	-258.59	0.00	258.59	1,665.34	832.67	1,938.85	957.53	7.38	-1.25	0.286
65.00	-25.67	-3.66	0.00	-239.91	0.00	239.91	1,619.22	809.61	1,832.38	904.94	8.75	-1.37	0.281
70.00	-24.42	-3.56	0.00	-221.60	0.00	221.60	1,573.10	786.55	1,728.91	853.84	10.24	-1.49	0.275
70.00	-24.42	-3.58	0.00	-221.60	0.00	221.60	1,573.09	786.55	1,728.90	853.84	10.24	-1.49	0.275
73.50	-23.24	-3.50	0.00	-209.07	0.00	209.07	1,259.14	629.57	1,387.79	685.38	11.37	-1.58	0.324
75.00	-22.90	-3.50	0.00	-203.81	0.00	203.81	1,248.07	624.03	1,363.39	673.33	11.87	-1.62	0.321
80.00	-21.78	-3.43	0.00	-186.30	0.00	186.30	1,211.17	605.59	1,283.60	633.92	13.64	-1.76	0.312
85.00	-20.68	-3.35	0.00	-169.17	0.00	169.17	1,174.27	587.14	1,206.22	595.71	15.57	-1.91	0.302
90.00	-19.60	-3.26	0.00	-152.44	0.00	152.44	1,137.38	568.69	1,131.25	558.68	17.64	-2.05	0.290
95.00	-18.55	-3.17	0.00	-136.13	0.00	136.13	1,100.48	550.24	1,058.68	522.84	19.86	-2.19	0.277
100.00	-17.52	-3.08	0.00	-120.27	0.00	120.27	1,063.58	531.79	988.52	488.19	22.23	-2.33	0.263
105.00	-16.51	-2.98	0.00	-104.87	0.00	104.87	1,026.69	513.34	920.76	454.73	24.74	-2.47	0.247
110.00	-15.52	-2.87	0.00	-89.95	0.00	89.95	989.79	494.89	855.40	422.45	27.40	-2.60	0.229
110.00	-15.52	-2.88	0.00	-89.95	0.00	89.95	989.79	494.89	855.40	422.45	27.40	-2.60	0.229
110.00	-15.52	-2.88	0.00	-89.95	0.00	89.95	989.79	494.89	855.40	422.45	27.40	-2.60	0.302
115.00	-14.63	-2.79	0.00	-75.54	0.00	75.54	716.88	358.44	599.87	296.25	30.18	-2.72	0.275
120.00	-13.77	-2.69	0.00	-61.60	0.00	61.60	689.20	344.60	554.25	273.72	33.11	-2.87	0.245
125.00	-12.93	-2.59	0.00	-48.14	0.00	48.14	661.53	330.77	510.43	252.08	36.19	-3.01	0.211
128.00	-11.24	-2.29	0.00	-40.38	0.00	40.38	644.93	322.46	485.00	239.53	38.11	-3.08	0.186
130.00	-10.99	-2.26	0.00	-35.80	0.00	35.80	633.86	316.93	468.41	231.33	39.41	-3.13	0.172
135.00	-10.36	-2.15	0.00	-24.51	0.00	24.51	606.19	303.09	428.21	211.47	42.74	-3.22	0.133
138.00	-7.17	-1.50	0.00	-18.05	0.00	18.05	589.58	294.79	404.95	199.99	44.78	-3.27	0.102
140.00	-6.97	-1.46	0.00	-15.05	0.00	15.05	578.51	289.26	389.80	192.51	46.15	-3.30	0.090
145.00	-6.48	-1.36	0.00	-7.74	0.00	7.74	550.84	275.42	353.20	174.43	49.63	-3.35	0.056
150.00	0.00	-0.98	0.00	-0.95	0.00	0.95	523.17	261.58	318.40	157.25	53.15	-3.37	0.006

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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**Load Case:** 1.0D + 1.0W

60.00 mph Serviceability

29 Iterations

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

Wind Importance Factor : 1.00

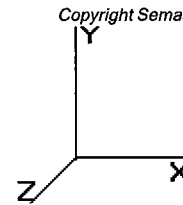
**Shaft Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Kzt	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		1.00	0.70	6.129	6.742	161.88	1.000	0.00	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	6.129	6.742	158.49	1.000	0.00	5.00	15.955	15.96	107.6	0.0	752.2
10.00		1.00	0.70	6.129	6.742	155.10	1.000	0.00	5.00	15.617	15.62	105.3	0.0	736.1
15.00		1.00	0.70	6.129	6.742	151.70	1.000	0.00	5.00	15.279	15.28	103.0	0.0	720.0
20.00		1.00	0.70	6.129	6.742	148.31	1.000	0.00	5.00	14.942	14.94	100.7	0.0	703.9
25.00		1.00	0.70	6.129	6.742	144.92	1.000	0.00	5.00	14.604	14.60	98.4	0.0	687.8
30.00	Appertunance(s)	1.00	0.70	6.134	6.747	141.58	1.000	0.00	5.00	14.266	14.27	96.3	0.0	671.7
31.50	Bot - Section 2	1.00	0.71	6.220	6.842	141.55	1.000	0.00	1.50	4.215	4.21	28.8	0.0	198.4
34.00	Appertunance(s)	1.00	0.72	6.357	6.993	141.37	1.000	0.00	2.50	7.089	7.09	49.6	0.0	606.0
35.00		1.00	0.73	6.410	7.051	141.27	1.000	0.00	1.00	2.812	2.81	19.8	0.0	240.4
35.67	Top - Section 1	1.00	0.73	6.445	7.089	141.18	1.000	0.00	0.67	1.868	1.87	13.2	0.0	159.7
40.00		1.00	0.76	6.659	7.325	143.27	1.000	0.00	4.33	11.991	11.99	87.8	0.0	471.3
45.00		1.00	0.78	6.887	7.576	142.11	1.000	0.00	5.00	13.521	13.52	102.4	0.0	531.3
50.00		1.00	0.81	7.098	7.807	140.61	1.000	0.00	5.00	13.183	13.18	102.9	0.0	517.9
55.00		1.00	0.83	7.294	8.023	138.83	1.000	0.00	5.00	12.845	12.85	103.1	0.0	504.5
60.00		1.00	0.85	7.477	8.225	136.82	1.000	0.00	5.00	12.507	12.51	102.9	0.0	491.0
65.00		1.00	0.87	7.650	8.415	134.61	1.000	0.00	5.00	12.169	12.17	102.4	0.0	477.6
70.00		1.00	0.89	7.814	8.595	132.21	1.000	0.00	5.00	11.831	11.83	101.7	0.0	464.2
70.00	Bot - Section 3	1.00	0.89	7.814	8.595	132.21	1.000	0.00	0.00	0.001	0.00	0.0	0.0	0.0
73.50	Top - Section 2	1.00	0.90	7.924	8.716	130.43	1.000	0.00	3.50	8.232	8.23	71.7	0.0	575.9
75.00		1.00	0.91	7.969	8.766	132.12	1.000	0.00	1.50	3.476	3.48	30.5	0.0	109.4
80.00		1.00	0.92	8.118	8.930	129.43	1.000	0.00	5.00	11.371	11.37	101.5	0.0	357.6
85.00		1.00	0.94	8.260	9.086	126.62	1.000	0.00	5.00	11.033	11.03	100.2	0.0	346.9
90.00		1.00	0.95	8.396	9.235	123.69	1.000	0.00	5.00	10.695	10.70	98.8	0.0	336.2
95.00		1.00	0.97	8.526	9.379	120.64	1.000	0.00	5.00	10.357	10.36	97.1	0.0	325.4
100.00		1.00	0.98	8.652	9.517	117.50	1.000	0.00	5.00	10.019	10.02	95.4	0.0	314.7
105.00		1.00	1.00	8.774	9.651	114.26	1.000	0.00	5.00	9.681	9.68	93.4	0.0	304.0
110.00		1.00	1.01	8.891	9.780	110.94	1.000	0.00	5.00	9.343	9.34	91.4	0.0	293.2
110.00	Top - Section 3	1.00	1.01	8.891	9.780	110.94	1.000	0.00	0.00	0.001	0.00	0.0	0.0	0.0
115.00		1.00	1.02	9.005	9.905	107.53	1.000	0.00	5.00	9.005	9.00	89.2	0.0	212.5
120.00		1.00	1.04	9.115	10.02	104.05	1.000	0.00	5.00	8.667	8.67	86.9	0.0	204.5
125.00		1.00	1.05	9.222	10.14	100.49	1.000	0.00	5.00	8.329	8.33	84.5	0.0	196.4
128.00	Appertunance(s)	1.00	1.06	9.284	10.21	98.335	1.000 *	0.00	3.00	4.835	4.84	49.4	0.0	114.0
130.00		1.00	1.06	9.326	10.25	96.878	1.000	0.00	2.00	3.156	3.16	32.4	0.0	74.4
135.00		1.00	1.07	9.427	10.36	93.194	1.000	0.00	5.00	7.653	7.65	79.4	0.0	180.3
138.00	Appertunance(s)	1.00	1.08	9.486	10.43	90.954	1.000	0.00	3.00	4.430	4.43	46.2	0.0	104.3
140.00		1.00	1.08	9.525	10.47	89.449	1.000	0.00	2.00	2.886	2.89	30.2	0.0	67.9
145.00		1.00	1.09	9.621	10.58	85.647	1.000	0.00	5.00	6.977	6.98	73.8	0.0	164.2
150.00	Appertunance(s)	1.00	1.11	9.715	10.68	81.790	1.000	0.00	5.00	6.639	6.64	71.0	0.0	156.2
* = Cf Adjusted By Linear Load Ra Effect								Totals:		150.00		2,849.1	0.0	13,372.1

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)



**Load Case:** 1.0D + 1.0W

60.00 mph Serviceability

29 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.00

Wind Load Factor : 1.00

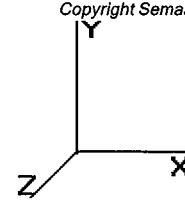
**Discrete Appurtenance Segment Forces (Factored)**

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
30.00	Stand-off	1	6.134	6.747	1.00	1.00	2.00	0.000	0.000	13.49	0.00	0.00	50.00
30.00	GPS	1	6.148	6.763	1.00	1.00	0.60	0.000	0.250	4.06	0.00	1.01	1.50
34.00	Stand-off	1	6.357	6.993	1.00	1.00	2.00	0.000	0.000	13.99	0.00	0.00	50.00
34.00	GPS	1	6.370	7.008	1.00	1.00	0.60	0.000	0.250	4.20	0.00	1.05	1.50
128.0	Flush Mounts	1	9.284	10.213	1.00	1.00	3.50	0.000	0.000	35.75	0.00	0.00	200.00
128.0	RFS APXV18-206517S-	3	9.284	10.213	0.73	1.00	11.30	0.000	0.000	115.41	0.00	0.00	79.20
138.0	Decibel DB980F65E-M	9	9.486	10.435	0.60	0.80	20.25	0.000	0.000	211.30	0.00	0.00	90.00
138.0	Round T-Arm	3	9.486	10.435	0.50	0.75	14.62	0.000	0.000	152.58	0.00	0.00	750.00
150.0	Diplexer	3	9.715	10.686	0.50	1.00	1.05	0.000	0.000	11.22	0.00	0.00	15.00
150.0	RCU	6	9.715	10.686	0.50	1.00	0.48	0.000	0.000	5.13	0.00	0.00	6.00
150.0	ADC CG-800DD	12	9.715	10.686	0.38	0.75	5.63	0.000	0.000	60.11	0.00	0.00	166.80
150.0	CSS DUO4-8670	9	9.770	10.747	0.62	0.75	36.48	0.000	3.000	392.00	0.00	1,176.01	346.50
150.0	6' Omni	1	9.752	10.727	1.00	1.00	1.77	0.000	2.000	18.99	0.00	37.97	35.00
150.0	Platform w/ Handrail	1	9.715	10.686	1.00	1.00	33.00	0.000	0.000	352.65	0.00	0.00	1,800.00
										1,390.88			3,591.50

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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**Load Case:** 1.0D + 1.0W      60.00 mph Serviceability      29 Iterations  
**Gust Response Factor:** 1.10      **Wind Importance Factor:** 1.00  
**Dead Load Factor:** 1.00  
**Wind Load Factor:** 1.00

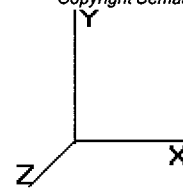
**Linear Appurtenance Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
5.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.129	0.085	0.000	0.00	24.60
5.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.129	0.085	0.000	0.00	0.75
5.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.129	0.085	0.000	0.00	0.75
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.129	0.086	0.000	0.00	24.60
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.129	0.086	0.000	0.00	0.75
10.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.129	0.086	0.000	0.00	0.75
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.129	0.088	0.000	0.00	24.60
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.129	0.088	0.000	0.00	0.75
15.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.129	0.088	0.000	0.00	0.75
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.129	0.090	0.000	0.00	24.60
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.129	0.090	0.000	0.00	0.75
20.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.129	0.090	0.000	0.00	0.75
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.129	0.092	0.000	0.00	24.60
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.129	0.092	0.000	0.00	0.75
25.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.129	0.092	0.000	0.00	0.75
30.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.134	0.095	0.000	0.00	24.60
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.134	0.095	0.000	0.00	0.75
30.00	(1) 1/2" Coax	Yes	5.00	0.000	0.63	0.26	0.00	6.134	0.095	0.000	0.00	0.75
31.50	(6) 1 5/8" Coax	Yes	1.50	0.000	1.98	0.25	0.00	6.220	0.077	0.000	0.00	7.38
31.50	(1) 1/2" Coax	Yes	1.50	0.000	0.63	0.08	0.00	6.220	0.077	0.000	0.00	0.23
34.00	(6) 1 5/8" Coax	Yes	2.50	0.000	1.98	0.41	0.00	6.357	0.078	0.000	0.00	12.30
34.00	(1) 1/2" Coax	Yes	2.50	0.000	0.63	0.13	0.00	6.357	0.078	0.000	0.00	0.37
35.00	(6) 1 5/8" Coax	Yes	1.00	0.000	1.98	0.17	0.00	6.410	0.060	0.000	0.00	4.92
35.67	(6) 1 5/8" Coax	Yes	0.67	0.000	1.98	0.11	0.00	6.445	0.060	0.000	0.00	3.28
40.00	(6) 1 5/8" Coax	Yes	4.33	0.000	1.98	0.71	0.00	6.659	0.060	0.000	0.00	21.32
45.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.887	0.061	0.000	0.00	24.60
50.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	7.098	0.063	0.000	0.00	24.60
55.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	7.294	0.064	0.000	0.00	24.60
60.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	7.477	0.066	0.000	0.00	24.60
65.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	7.650	0.068	0.000	0.00	24.60
70.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	7.814	0.070	0.000	0.00	24.60
70.00	(6) 1 5/8" Coax	Yes	0.00	0.000	1.98	0.00	0.00	7.814	0.071	0.000	0.00	0.00
73.50	(6) 1 5/8" Coax	Yes	3.50	0.000	1.98	0.58	0.00	7.924	0.071	0.000	0.00	17.22
75.00	(6) 1 5/8" Coax	Yes	1.50	0.000	1.98	0.25	0.00	7.969	0.071	0.000	0.00	7.38
80.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	8.118	0.073	0.000	0.00	24.60
85.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	8.260	0.075	0.000	0.00	24.60
90.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	8.396	0.077	0.000	0.00	24.60
95.00	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	8.526	0.080	0.000	0.00	24.60
100.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	8.652	0.082	0.000	0.00	24.60
105.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	8.774	0.085	0.000	0.00	24.60
110.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	8.891	0.088	0.000	0.00	24.60
110.0	(6) 1 5/8" Coax	Yes	0.00	0.000	1.98	0.00	0.00	8.891	0.090	0.000	0.00	0.00
115.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	9.005	0.092	0.000	0.00	24.60
120.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	9.115	0.095	0.000	0.00	24.60
125.0	(6) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	9.222	0.099	0.000	0.00	24.60
128.0	(6) 1 5/8" Coax	Yes	3.00	0.000	1.98	0.50	0.00	9.284	0.102	1.007	0.00	14.76
<b>Totals:</b>											0.00	639.28

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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**Load Case:** 1.0D + 1.0W      60.00 mph Serviceability      29 Iterations  
**Gust Response Factor:** 1.10      **Wind Importance Factor:** 1.00  
**Dead Load Factor:** 1.00  
**Wind Load Factor:** 1.00

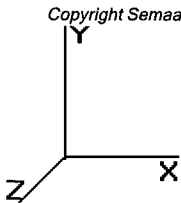
**Applied Segment Forces Summary**

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	107.56	875.98	0.00	0.00
10.00	105.29	859.88	0.00	0.00
15.00	103.01	843.79	0.00	0.00
20.00	100.73	827.69	0.00	0.00
25.00	98.45	811.59	0.00	0.00
30.00	113.80	847.00	0.00	1.01
31.50	28.84	235.34	0.00	0.00
34.00	67.76	719.06	0.00	1.05
35.00	19.83	264.84	0.00	0.00
35.67	13.25	175.99	0.00	0.00
40.00	87.84	577.24	0.00	0.00
45.00	102.44	653.58	0.00	0.00
50.00	102.93	640.16	0.00	0.00
55.00	103.06	626.75	0.00	0.00
60.00	102.87	613.33	0.00	0.00
65.00	102.41	599.92	0.00	0.00
70.00	101.69	586.51	0.00	0.00
70.00	0.01	0.04	0.00	0.00
73.50	71.75	661.54	0.00	0.00
75.00	30.48	146.03	0.00	0.00
80.00	101.54	479.90	0.00	0.00
85.00	100.24	469.17	0.00	0.00
90.00	98.77	458.44	0.00	0.00
95.00	97.14	447.71	0.00	0.00
100.0	95.36	436.98	0.00	0.00
105.0	93.43	426.25	0.00	0.00
110.0	91.38	415.52	0.00	0.00
110.0	0.01	0.03	0.00	0.00
115.0	89.19	334.78	0.00	0.00
120.0	86.90	326.76	0.00	0.00
125.0	84.49	318.71	0.00	0.00
128.0	200.54	466.56	0.00	0.00
130.0	32.37	113.46	0.00	0.00
135.0	79.36	278.02	0.00	0.00
138.0	410.11	1,002.95	0.00	0.00
140.0	30.23	77.50	0.00	0.00
145.0	73.84	188.13	0.00	0.00
150.0	911.05	2,549.38	0.00	1,213.98
<b>Totals:</b>	<b>4,239.94</b>	<b>20,356.51</b>	<b>0.00</b>	<b>1,216.05</b>

Pole : 302473  
 Location : E H F R - Prestige Park, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156700 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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**Load Case:** 1.0D + 1.0W      60.00 mph Serviceability      29 Iterations  
**Gust Response Factor:** 1.10      **Wind Importance Factor:** 1.00  
**Dead Load Factor:** 1.00  
**Wind Load Factor:** 1.00

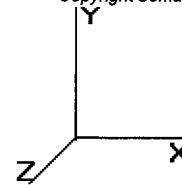
**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-20.35	-4.25	0.00	-431.80	0.00	431.80	2,613.99	1,306.99	3,984.35	1,967.72	0.00	0.00	0.227
5.00	-19.47	-4.17	0.00	-410.54	0.00	410.54	2,558.64	1,279.32	3,816.59	1,884.87	0.04	-0.08	0.225
10.00	-18.61	-4.09	0.00	-389.68	0.00	389.68	2,503.30	1,251.65	3,652.43	1,803.80	0.16	-0.15	0.223
15.00	-17.76	-4.01	0.00	-369.23	0.00	369.23	2,447.95	1,223.98	3,491.89	1,724.51	0.37	-0.23	0.221
20.00	-16.93	-3.93	0.00	-349.19	0.00	349.19	2,392.60	1,196.30	3,334.95	1,647.01	0.65	-0.31	0.219
25.00	-16.11	-3.85	0.00	-329.55	0.00	329.55	2,337.26	1,168.63	3,181.62	1,571.28	1.02	-0.39	0.217
30.00	-15.26	-3.74	0.00	-310.32	0.00	310.32	2,281.91	1,140.96	3,031.90	1,497.34	1.48	-0.47	0.214
31.50	-15.02	-3.72	0.00	-304.71	0.00	304.71	2,265.31	1,132.65	2,987.68	1,475.50	1.63	-0.50	0.213
34.00	-14.30	-3.65	0.00	-295.41	0.00	295.41	2,237.64	1,118.82	2,914.73	1,439.47	1.91	-0.54	0.212
35.00	-14.04	-3.63	0.00	-291.76	0.00	291.76	2,226.57	1,113.28	2,885.79	1,425.19	2.02	-0.56	0.211
35.67	-13.86	-3.63	0.00	-289.34	0.00	289.34	1,889.79	944.90	2,499.95	1,234.63	2.10	-0.57	0.242
40.00	-13.28	-3.55	0.00	-273.62	0.00	273.62	1,849.82	924.91	2,394.82	1,182.71	2.65	-0.64	0.239
45.00	-12.62	-3.46	0.00	-255.85	0.00	255.85	1,803.70	901.85	2,276.32	1,124.19	3.38	-0.74	0.235
50.00	-11.97	-3.37	0.00	-238.53	0.00	238.53	1,757.58	878.79	2,160.82	1,067.15	4.20	-0.83	0.230
55.00	-11.34	-3.28	0.00	-221.67	0.00	221.67	1,711.46	855.73	2,048.33	1,011.59	5.12	-0.93	0.226
60.00	-10.73	-3.18	0.00	-205.27	0.00	205.27	1,665.34	832.67	1,938.85	957.53	6.15	-1.02	0.221
65.00	-10.12	-3.09	0.00	-189.36	0.00	189.36	1,619.22	809.61	1,832.38	904.94	7.27	-1.12	0.216
70.00	-9.54	-2.98	0.00	-173.92	0.00	173.92	1,573.10	786.55	1,728.91	853.84	8.50	-1.22	0.210
70.00	-9.53	-2.99	0.00	-173.92	0.00	173.92	1,573.09	786.55	1,728.90	853.84	8.50	-1.22	0.210
73.50	-8.87	-2.91	0.00	-163.47	0.00	163.47	1,259.14	629.57	1,387.79	685.38	9.42	-1.29	0.246
75.00	-8.72	-2.89	0.00	-159.11	0.00	159.11	1,248.07	624.03	1,363.39	673.33	9.82	-1.32	0.243
80.00	-8.24	-2.79	0.00	-144.68	0.00	144.68	1,211.17	605.59	1,283.60	633.92	11.26	-1.43	0.235
85.00	-7.77	-2.69	0.00	-130.74	0.00	130.74	1,174.27	587.14	1,206.22	595.71	12.82	-1.54	0.226
90.00	-7.31	-2.59	0.00	-117.28	0.00	117.28	1,137.38	568.69	1,131.25	558.68	14.49	-1.65	0.216
95.00	-6.86	-2.50	0.00	-104.31	0.00	104.31	1,100.48	550.24	1,058.68	522.84	16.28	-1.76	0.206
100.00	-6.42	-2.40	0.00	-91.83	0.00	91.83	1,063.58	531.79	988.52	488.19	18.18	-1.87	0.194
105.00	-5.99	-2.30	0.00	-79.83	0.00	79.83	1,026.69	513.34	920.76	454.73	20.19	-1.97	0.181
110.00	-5.58	-2.20	0.00	-68.32	0.00	68.32	989.79	494.89	855.40	422.45	22.31	-2.07	0.167
110.00	-5.58	-2.21	0.00	-68.32	0.00	68.32	989.79	494.89	855.40	422.45	22.31	-2.07	0.167
110.00	-5.58	-2.21	0.00	-68.32	0.00	68.32	989.79	494.89	855.40	422.45	22.31	-2.07	0.221
115.00	-5.24	-2.11	0.00	-57.29	0.00	57.29	716.88	358.44	599.87	296.25	24.53	-2.16	0.201
120.00	-4.92	-2.02	0.00	-46.73	0.00	46.73	689.20	344.60	554.25	273.72	26.86	-2.28	0.178
125.00	-4.60	-1.93	0.00	-36.61	0.00	36.61	661.53	330.77	510.43	252.08	29.30	-2.38	0.152
128.00	-4.14	-1.72	0.00	-30.81	0.00	30.81	644.93	322.46	485.00	239.53	30.81	-2.44	0.135
130.00	-4.03	-1.68	0.00	-27.38	0.00	27.38	633.86	316.93	468.41	231.33	31.84	-2.47	0.125
135.00	-3.75	-1.59	0.00	-18.97	0.00	18.97	606.19	303.09	428.21	211.47	34.47	-2.55	0.096
138.00	-2.77	-1.14	0.00	-14.18	0.00	14.18	589.58	294.79	404.95	199.99	36.09	-2.58	0.076
140.00	-2.69	-1.11	0.00	-11.90	0.00	11.90	578.51	289.26	389.80	192.51	37.17	-2.60	0.066
145.00	-2.50	-1.03	0.00	-6.35	0.00	6.35	550.84	275.42	353.20	174.43	39.92	-2.64	0.041
150.00	0.00	-0.91	0.00	-1.21	0.00	1.21	523.17	261.58	318.40	157.25	42.70	-2.66	0.008

**Pole :** 302473  
**Location :** E H F R - Prestige Park, CT  
**Height :** 150.0 (ft)  
**Shape :** 12 Sides  
**Base Dia :** 37.38 (in)  
**Top Dia :** 15.00 (in)  
**Taper :** 0.156700 (in/ft)

**Code:** ANSI/TIA-222 Rev G  
**Struct Class :** II  
**Exposure Category :** B  
**Topographic Category :** 1

**Base Elev :** 0.000 (ft)



**Analysis Summary**

Load Case	Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.6W	17.07	0.00	24.38	0.00	0.00	1746.39	73.50	0.97
0.9D + 1.6W	17.06	0.00	18.27	0.00	0.00	1714.41	73.50	0.94
1.2D + 1.0Di + 1.0Wi	4.34	0.00	45.59	0.00	0.00	504.48	73.50	0.32
1.0D + 1.0W	4.25	0.00	20.35	0.00	0.00	431.80	73.50	0.25