

January 25, 2018

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

Re: **Notice of Exempt Modification – Facility Modification
12 Nepaug Road, Burlington, Connecticut**

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains twelve (12) antennas at the 99-foot level of the existing 120-foot tower at 12 Nepaug Road in Burlington, Connecticut (the “Property”). The tower is owned by Crown Atlantic Company LLC (“Crown”). The Council approved Cellco’s use of this tower in 2006. Cellco now intends to modify its facility by replacing six (6) of its antennas with three (3) model JAHH-65B-R3B, 700/850 MHz antennas and three (3) model JAHH-65B-R3B, 1900/2100 MHz antennas, all at the same level on the tower. Cellco also intends to install nine (9) remote radio heads (“RRHs”) and two (2) HYBRIFLEX™ fiber optic antenna cables. Included in Attachment 1 are specifications for Cellco’s replacement antennas, RRHs and HYBRIFLEX™ cables.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Theodore Shafer, First Selectman for the Town of Burlington; Abby Conroy, Burlington’s Zoning Enforcement Officer; Audrey S. Weaver, the owner of the Property; and Crown, the tower owner.

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

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco’s replacement antennas and RRHs will be installed at the same 99-foot level of the 120-foot tower.

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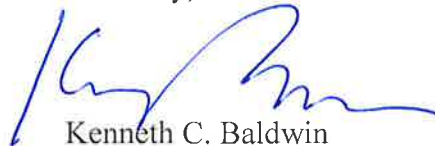
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2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the replacement antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative General Power Density table for Cellco's modified facility is included behind Attachment 2.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The tower and its foundation, with certain modifications described in the Structural Analysis Report included in Attachment 3, can support Cellco's proposed modifications.

A copy of the parcel map and owner information for the Property is included in Attachment 4. A Certificate of Mailing verifying that this filing was sent to municipal officials and the owner of the Property is included in Attachment 5.

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

Sincerely,



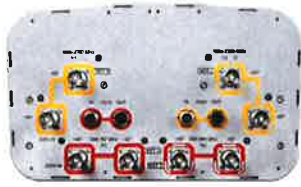
Kenneth C. Baldwin

Enclosures

Copy to:

Theodore Shafer, Burlington First Selectman
Abby Conroy, Burlington Zoning Enforcement Officer
Audrey S. Weaver
Crown Atlantic Company LLC
Tim Parks

ATTACHMENT 1



JAHH-65B-R3B

8-port sector antenna, 2x 698–787, 2x 824–894 and 4x 1695–2360 MHz, 65° HPBW, 3x RET and low bands have diplexers. Internal SBT's on first LB(Port 1) and first HB (Port 5).

- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- One RET for 700MHz, one RET for 850MHz, and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO
- Internal filter on low band and interleaved dipole technology providing for attractive, low wind load mechanical package
- Separate RS-485 RET input/output for low and high band

Electrical Specifications

| Frequency Band, MHz | 698–787 | 824–894 | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2360 |
|--------------------------------------|------------|------------|------------|------------|------------|------------|
| Gain, dBi | 14.5 | 15.8 | 18.0 | 18.4 | 18.5 | 18.8 |
| Beamwidth, Horizontal, degrees | 67 | 65 | 63 | 63 | 65 | 68 |
| Beamwidth, Vertical, degrees | 12.4 | 10.5 | 5.7 | 5.2 | 4.9 | 4.4 |
| Beam Tilt, degrees | 2–14 | 2–14 | 0–10 | 0–10 | 0–10 | 0–10 |
| USLS (First Lobe), dB | 18 | 18 | 20 | 20 | 21 | 23 |
| Front-to-Back Ratio at 180°, dB | 32 | 34 | 31 | 35 | 36 | 38 |
| Isolation, dB | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Intersystem, dB | 30 | 30 | 30 | 30 | 30 | 30 |
| VSWR Return Loss, dB | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 | -153 | -153 | -153 | -153 |
| Input Power per Port, maximum, watts | 350 | 350 | 350 | 350 | 350 | 300 |
| Polarization | ±45° | ±45° | ±45° | ±45° | ±45° | ±45° |
| Impedance | 50 ohm | 50 ohm | 50 ohm | 50 ohm | 50 ohm | 50 ohm |

Electrical Specifications, BASTA*

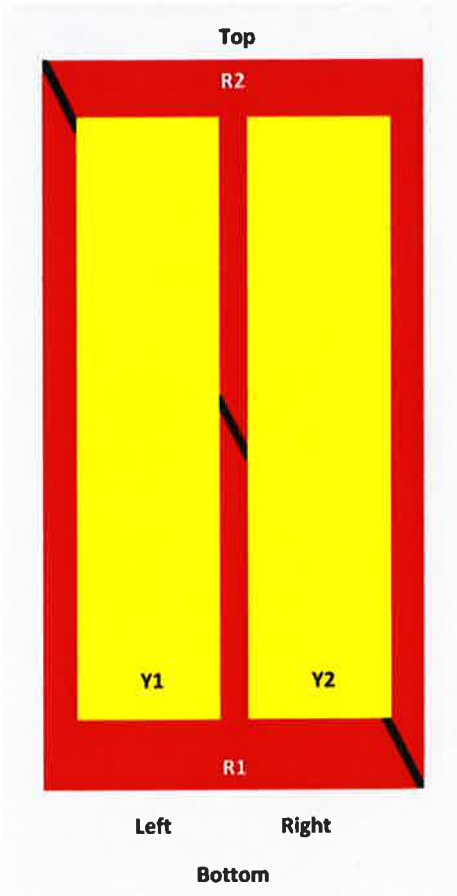
| Frequency Band, MHz | 698–787 | 824–894 | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2360 |
|---|------------|------------|------------|------------|------------|------------|
| Gain by all Beam Tilts, average, dBi | 14.3 | 14.9 | 17.6 | 18.1 | 18.2 | 18.5 |
| Gain by all Beam Tilts Tolerance, dB | ±0.3 | ±0.5 | ±0.6 | ±0.4 | ±0.5 | ±0.6 |
| Gain by Beam Tilt, average, dBi | 2° 14.3 | 2° 15.0 | 0° 17.2 | 0° 17.6 | 0° 17.7 | 0° 17.9 |
| | 8° 14.3 | 8° 14.9 | 5° 17.6 | 5° 18.2 | 5° 18.3 | 5° 18.7 |
| | 14° 14.3 | 14° 15.4 | 10° 17.6 | 10° 18.2 | 10° 18.3 | 10° 18.7 |
| Beamwidth, Horizontal Tolerance, degrees | ±1.2 | ±1.4 | ±4 | ±2.4 | ±2.9 | ±2.7 |
| Beamwidth, Vertical Tolerance, degrees | ±0.9 | ±0.5 | ±0.3 | ±0.2 | ±0.3 | ±0.1 |
| USLS, beampeak to 20° above beampeak, dB | 18 | 17 | 17 | 18 | 19 | 18 |
| Front-to-Back Total Power at 180° ± 30°, dB | 25 | 24 | 26 | 29 | 27 | 29 |
| CPR at Boresight, dB | 22 | 23 | 20 | 21 | 21 | 24 |
| CPR at Sector, dB | 11 | 12 | 11 | 11 | 11 | 8 |

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

JAHH-65B-R3B

Array Layout

JAHH-65A-R3B JAHH-65B-R3B JAHH-65C-R3B



| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|------------|-------|------------|------------------|
| R1 | 698-798 | 1-2 | 1 | ANXXXXXXXXXXXXX1 |
| R2 | 824-894 | 3-4 | 2 | ANXXXXXXXXXXXXX2 |
| Y1 | 1695-2360 | 5-6 | 3 | ANXXXXXXXXXXXXX3 |
| Y2 | 1695-2360 | 7-8 | | |

View from the front of the antenna

(Sizes of colored boxes are not true depictions of array sizes)

General Specifications

| | |
|--------------------------|---|
| Operating Frequency Band | 1695 – 2360 MHz 698 – 787 MHz 824 – 894 MHz |
| Antenna Type | Sector |
| Band | Multiband |
| Performance Note | Outdoor usage |

Mechanical Specifications

| | |
|----------------------------------|---------------|
| RF Connector Quantity, total | 8 |
| RF Connector Quantity, low band | 4 |
| RF Connector Quantity, high band | 4 |
| RF Connector Interface | 4.3-10 Female |

JAHH-65B-R3B

| | |
|-----------------------|--|
| Color | Light gray |
| Grounding Type | RF connector body grounded to reflector and mounting bracket |
| Radiator Material | Aluminum Low loss circuit board |
| Radome Material | Fiberglass, UV resistant |
| Reflector Material | Aluminum |
| RF Connector Location | Bottom |
| Wind Loading, frontal | 746.0 N @ 150 km/h 167.7 lbf @ 150 km/h |
| Wind Loading, lateral | 243.0 N @ 150 km/h 54.6 lbf @ 150 km/h |
| Wind Loading, rear | 776.0 N @ 150 km/h 174.5 lbf @ 150 km/h |
| Wind Speed, maximum | 241 km/h 150 mph |

Dimensions

| | |
|----------------------------------|---------------------|
| Length | 1828.0 mm 72.0 in |
| Width | 350.0 mm 13.8 in |
| Depth | 208.0 mm 8.2 in |
| Net Weight, without mounting kit | 28.7 kg 63.3 lb |

Remote Electrical Tilt (RET) Information

| | |
|---|-----------------------------------|
| Input Voltage | 10–30 Vdc |
| Internal Bias Tee | Port 1 Port 5 |
| Internal RET | High band (1) Low band (2) |
| Power Consumption, idle state, maximum | 2 W |
| Power Consumption, normal conditions, maximum | 13 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 2 female 2 male |

Packed Dimensions

| | |
|-----------------|---------------------|
| Length | 1975.0 mm 77.8 in |
| Width | 456.0 mm 18.0 in |
| Depth | 357.0 mm 14.1 in |
| Shipping Weight | 42.0 kg 92.6 lb |

Regulatory Compliance/Certifications

| | |
|----------------------------|--|
| Agency | Classification |
| RoHS 2011/65/EU | Compliant by Exemption |
| China RoHS SJ/T 11364-2006 | Above Maximum Concentration Value (MCV) |
| ISO 9001:2008 | Designed, manufactured and/or distributed under this quality management system |



JAHH-65B-R3B

Included Products

BSAMNT-1 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

ALCATEL-LUCENT B13 RRH4X30-4R

Alcatel-Lucent B13 Remote Radio Head 4x30-4R is the newest addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solutions, aimed at facilitating smooth RF site acquisition and related civil engineering.

Supporting 2Tx/4Tx MIMO and 4-way Rx diversity, Alcatel-Lucent B13 RRH4x30-4R allows operators to have a compact radio solution to deploy LTE in the 700U band (700 MHz, 3GPP band 13), providing them with the means to achieve high capacity, high quality and high coverage with minimum site requirements.

The Alcatel-Lucent B13 RRH4x30-4R product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x60 W or 4x30 W RF output power. It supports also 4-way Rx diversity and up to 10MHz instantaneous bandwidth.

The Alcatel-Lucent B13 RRH4x30-4R is a near zero-footprint solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

Its compactness and slim design makes the Alcatel-Lucent B13 RRH4x30-4R easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

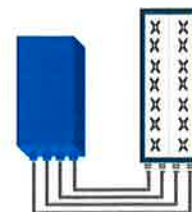


FEATURES

- Supporting LTE in 700 MHz band (700U, 3GPP band 13)
- LTE 2Tx or 4Tx MIMO (SW switchable)
- Output power: Up to 2x60W or 4x30W
- 10MHz LTE carrier with 4Rx Diversity
- Convection-cooled (fan-less)
- Supports AISG 2.0 ALD devices (RET, TMA) through RS485 or RF ports

BENEFITS

- Compact to reduce additional footprint when adding LTE in 700U band
- MIMO scheme operation selection (2Tx or 4Tx) by software only
- Improves downlink spectral efficiency through MIMO4
- Increases LTE coverage thanks to 4Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options: Pole or Wall



4x30W with 4T4R
or
2x60W with 2T4R

Can be switched between modes via SW w/o site visit

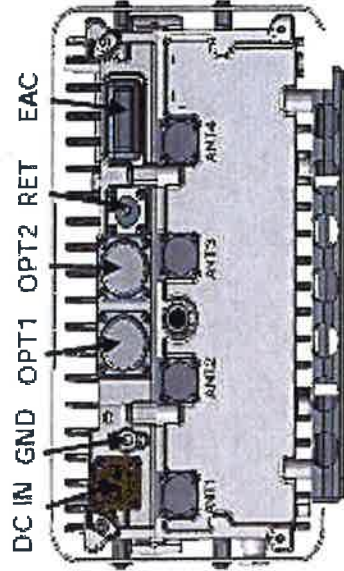
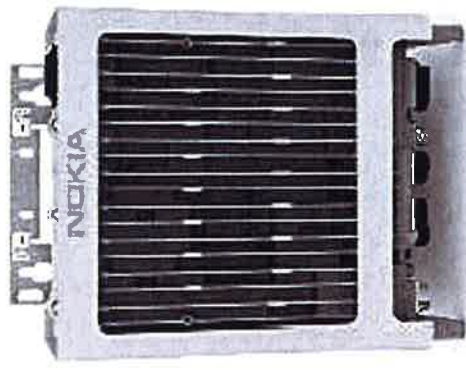
TECHNICAL SPECIFICATIONS

| Features & performance | |
|-------------------------------------|---|
| Number of TX/RX paths | 4 duplexed (either 4T4R or 2T4R by SW) |
| Frequency band | U700 (C) (3GPP bands 13): DL: 746 - 756 MHz / UL: 777 - 787 MHz |
| Instantaneous bandwidth - #carriers | 10MHz – 1 LTE carrier (in 10MHz occupied bandwidth) |
| LTE carrier bandwidth | 10 MHz |
| RF output power | 2x60W or 4x30W (by SW) |
| Noise figure – RX Diversity scheme | 2 dB typ. (<2.5 dB max) – 2 or 4 way Rx diversity |
| Sizes (HxWxD) in mm (In.) | 550 x 305 x 230 (21.6" x 12.0" x 9") (with solar shield) |
| Volume in L | 38 (with solar shield) |
| Weight in kg (lb) (w/o mounting HW) | 26 (57.2) (with solar shield) |
| DC voltage range | -40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption |
| DC power consumption | 550W typical @100% RF load (in 2Tx or 4TX mode) |
| Environmental conditions | -40°C (-40°F) /+55°C (+131°F) IP65 |
| Wind load (@150km/h or 93mph) | Frontal:<200N / Lateral :<150N |
| Antenna ports | 4 ports 7/16 DIN female (50 ohms) VSWR < 1.5 |
| CPRI ports | 2 CPRI ports (HW ready for Rate7, 9.8 Gbps) SFP single mode dual fiber |
| AISG interfaces | 1 AISG2.0 output (RS485) Integrated Smart Bias Tees (x2) |
| Misc. Interfaces | 4 external alarms (1 connector) – 4 RF Tx & 4 RF Rx monitor ports - 1 DC connector (2 pins) |
| Installation conditions | Pole and wall mounting |
| Regulatory compliance | 3GPP 36.141 / 3GPP 36.113 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27 |

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AHCA AirScale RRH 4T4R B5 160W

| | |
|--------------------------------|--|
| Supported Frequency bands | 3GPP band 5 |
| Frequencies | DL 869-894MHz, UL 824-849MHz |
| Number of TX/RX paths/pipes | 4TX/4RX |
| Instantaneous Bandwidth IBW | 25MHz (Full Band) |
| Occupied Bandwidth OBW | 25MHz (Full Band) |
| Output Power | 4T4R @ 40W / 2T4R @ 60W |
| RF Sharing | LTE, WCDMA, LTE + NB-IoT supported |
| 256 QAM Back Off | No backoff at 40W and 0.8dB at 60W. |
| Supply Voltage / Voltage Range | DC-48V / -36V to -60V |
| Typical Power Consumption | 365W (50% ETSI Busy Hour Load at 4TX @ 40W) |
| | 529W (100% RF Load at 4 TX @ 40W) |
| Antenna Ports | 574W (100% RF Load at 4 TX @ 40W with SBT and AISG ON) |
| Optical Ports | 4 Ports, 4.3-10+ |
| | 2x CPRI 9.8 Gbps |
| ALD Control Interfaces | AISG3.0 from ANT1, 2, 3, 4 and RET (power supply ANT1 and ANT3) |
| Other Interfaces | External Alarm MOR-26 Serial connector (4 inputs, 1 Output) DC Circular Power Connector |



| | |
|-------------------------------|--|
| Operational Temperature Range | -40°C to 55°C (with solar cover) |
| Dimensions (mm) | 337 x 295 x 165 (radio only) |
| Height x width x depth | 13.3" x 11.7" x 6.5" 428 x 324 x 208 (with bracket and enclosure) 16.9" x 12.8" x 8.2" |
| Volume (liters) | 16.5 |
| Weight (kg) | 16 / 35.3 lb - w/o bracket |
| Ingress protection class | IP65 |
| Installation options | Pole or wall, vertical or horizontal Book Mount |
| Surge protection | Class II 5UA |



ALCATEL-LUCENT B66A RRH4X45

The Alcatel-Lucent B66a Remote Radio Head 4x45 is the newest addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solutions, aimed at facilitating smooth RF site acquisition and related civil engineering. Its operational range covers beyond that of B4 (AWS) and B10 (AWS+).

Supporting 2Tx/4Tx MIMO and 2-way/4-way Rx diversity, the Alcatel-Lucent B66a RRH4x45 allows operators to have a compact radio solution to deploy LTE in the 2100 band (3GPP band 4, 10, and 66), providing them with the means to achieve high capacity, high quality, high reliability, large instantaneous bandwidth, and high coverage with minimum site requirements.

The Alcatel-Lucent B66a RRH4x45 product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x90W or 4x45W RF output power. It also supports 4-way Rx diversity at the 70 MHz instantaneous bandwidth.



The Alcatel-Lucent B66a RRH4x45 is a compact (near zero-footprint) solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

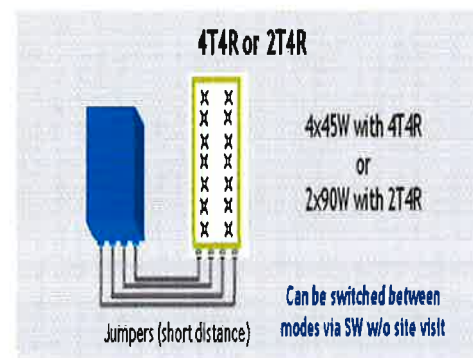
Its compactness and slim design makes the Alcatel-Lucent B66a RRH4x45 easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

FEATURES

- Supporting LTE in 2110 - 2180 MHz band/DL, 1710-1780MHz/UL (3GPP band 4, 10, and 66a)
- LTE 2Tx or 4Tx MIMO (SW selectable)
- Configuration: 2T2R/2T4R/4T4R
- Output power: Up to 2x90W or 4x45W (SW configurable)
- 70MHz LTE carrier with 4Rx Diversity
- Convection-cooled (fan-less)
- Supports AISG 2.0 ALD devices (RET, TMA) through RS485 or RF ports

BENEFITS

- Compact to reduce additional footprint when adding LTE in AWS 1-3 band
- Selection of MIMO configuration (2Tx or 4Tx) by software only
- Improves downlink spectral efficiency through 4Tx MIMO
- Increases LTE coverage thanks to 4Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options: Pole or Wall



TECHNICAL SPECIFICATIONS

| Features & Performance | |
|---|--|
| Number of TX/RX paths | 4 duplexed (either 4T4R or 2T4R selectable by SW) |
| Frequency band | AWS 1-3, B4/B66a DL: 2110-2180 MHz / UL: 1710-1780 MHz |
| Instantaneous bandwidth - #carriers | 70 MHz – 4 LTE MIMO carriers (in 70 MHz occupied bandwidth) |
| LTE carrier bandwidth | 5, 10, 15, 20 MHz |
| RF output power | 2x90W or 4x45W (selectable by SW) |
| Noise figure – RX Diversity scheme Receiver Sensitivity (FRC A1-3) | 2 dB typical (<2.5 dB max) – 2 or 4 way Rx diversity -104.5 dBm maximum |
| Sizes (HxWxD) in mm (in.) | 655x299x182 (25.8x11.8x7.2) (with solar shield) 640x290x160 (25.2x11.4x6.3) (without solar shield) |
| Volume in Liters | 35.5 (with solar shield) 29.7 (without solar shield) |
| Weight in kg (lb) (w/o mounting HW) | 25.8kg (56.8lb) (with solar shield) |
| DC voltage range | Nominal: -48V, -40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption |
| DC power consumption | 750W typical @100% RF load (in 2Tx or 4Tx mode); Add 58W for 2A*29V for AISG |
| Environmental conditions | -40°C (-40°F) / +55°C (+131°F) UL50E Type 4 Enclosure |
| Wind load (@150km/h or 93mph) | 250N (56lb) Frontal/150N (34lb) Lateral |
| Antenna ports | 4 ports 4.3-10 female (50 ohms) VSWR < 1.5 |
| CPRI ports | 2 CPRI ports (HW ready for Rate 7, 9.8 Gbps) SFP: SMDF (HW supports also SMSF and MMDF) |
| AISG interfaces | 1 AISG 2.0 output (RS485) Integrated Smart Bias Tees (x2) |
| Misc. Interfaces | 4 external alarms (1 connector) 1 DC connector (2 pins) |
| Installation conditions | Pole and wall mounting |
| Regulatory compliance | 3GPP 36.141 / 3GPP 36.113 / GR-487 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27 / FCC Part 15 / GR-3178-CORE |

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HYBRIFLEX™ RRH Hybrid Feeder Cabling Solution, 1-5/8", Single-Mode Fiber

Product Description

RFS' HYBRIFLEX Remote Radio Head (RRH) hybrid feeder cabling solution combines optical fiber and DC power for RRHs in a single lightweight aluminum corrugated cable, making it the world's most innovative solution for RRH deployments.

It was developed to reduce installation complexity and costs at Cellular sites. HYBRIFLEX allows mobile operators deploying an RRH architecture to standardize the RRH installation process and eliminate the need for and cost of cable grounding. HYBRIFLEX combines optical fiber (multi-mode or single-mode) and power in a single corrugated cable. It eliminates the need for junction boxes and can connect multiple RRHs with a single feeder. Standard RFS CELLFLEX® accessories can be used with HYBRIFLEX cable. Both pre-connectorized and on-site options are available.

Features/Benefits

- Aluminum corrugated armor with outstanding bending characteristics – minimizes installation time and enables mechanical protection and shielding
- Same accessories as 1 5/8" coaxial cable
- Outer conductor grounding – Eliminates typical grounding requirements and saves on installation costs
- Lightweight solution and compact design – Decreases tower loading
- Robust cabling – Eliminates need for expensive cable trays and ducts
- Installation of tight bundled fiber optic cable pairs directly to the RRH – Reduces CAPEX and wind load by eliminating need for interconnection
- Optical fiber and power cables housed in single corrugated cable – Saves CAPEX by standardizing RRH cable installation and reducing installation requirements
- Outdoor polyethylene jacket – Ensures long-lasting cable protection



Figure 1: HYBRIFLEX Series

Technical Specifications

| | | | |
|-----------------------|--------------------------------|---------|-------------|
| Outer Conductor Armor | Corrugated Aluminum | mm (in) | 46.5 (1.83) |
| Jacket | Polyethylene, PE | mm (in) | 50.3 (1.98) |
| UV-Protection | Individual and External Jacket | | Yes |

| | | | |
|--|--|--------------|------------------------|
| Weight, Approximate | | kg/m (lb/ft) | 1.9 (1.30) |
| Minimum Bending Radius, Single Bending | | mm (in) | 200 (8) |
| Minimum Bending Radius, Repeated Bending | | mm (in) | 500 (20) |
| Recommended/Maximum Clamp Spacing | | m (ft) | 1.0 / 1.2 (3.25 / 4.0) |

| | | | |
|--|--|-----------------|--------------|
| DC-Resistance Outer Conductor Armor | | Ω/km (Ω/1000ft) | 0.68 (0.205) |
| DC-Resistance Power Cable, 8.4mm² (8AWG) | | Ω/km (Ω/1000ft) | 2.1 (0.307) |

| | | | |
|---------------------------------------|-----------------------------------|------------|--|
| Version | Single-mode OM3 | | |
| Quantity, Fiber Count | 16 (8 pairs) | | |
| Core/Clad | μm | 50/125 | |
| Primary Coating (Acrylate) | μm | 245 | |
| Buffer Diameter, Nominal | μm | 900 | |
| Secondary Protection, Jacket, Nominal | mm (in) | 2.0 (0.08) | |
| Minimum Bending Radius | mm (in) | 104 (4.1) | |
| Insertion Loss @ wavelength 850nm | dB/km | 3.0 | |
| Insertion Loss @ wavelength 1310nm | dB/km | 1.0 | |
| Standards (Meets or exceeds) | UL94-V0, UL1666 RoHS Compliant | | |

| | | |
|----------------------------------|----------|--|
| Size (Power) | mm (AWG) | 8.4 (8) |
| Quantity, Wire Count (Power) | | 16 (8 pairs) |
| Size (Alarm) | mm (AWG) | 0.8 (18) |
| Quantity, Wire Count (Alarm) | | 4 (2 pairs) |
| Type | | UV protected |
| Strands | | 19 |
| Primary Jacket Diameter, Nominal | mm (in) | 6.8 (0.27) |
| Standards (Meets or exceeds) | | NFPA 130, IEC 60332-1, IEC 60332-3 UL Type XHHW-2, UL 44 UL-LS Limited Smoke, UL VW-1 IEEE-383 (1974), IEEE1202/FT4 RoHS Compliant |

| | | |
|--------------------------|---------|-------------------------|
| Installation Temperature | °C (°F) | -40 to +65 (-40 to 149) |
| Operation Temperature | °C (°F) | -40 to +65 (-40 to 149) |

* This data is provisional and subject to change

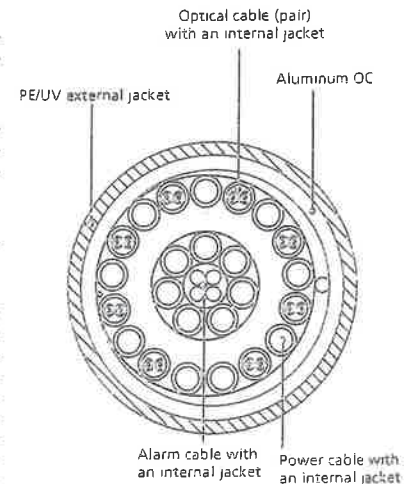


Figure 2: Construction Detail

All information contained in the present datasheet is subject to confirmation at time of ordering

ATTACHMENT 2

| Site Name: Burlington W Tower Height: 120' | | General | | Power | | Density | | | | | |
|---|------------|-------------|-----------|------------------|-------------|--------------------|---------------|--------------|--|--|--|
| CARRIER | # OF CHAN. | WATTS ERP | HEIGHT | CALC. POWER DENS | FREQ. | MAX. PERMISS. EXP. | FRACTION MPE | Total | | | |
| *Sprint | 2 | 531 | 110 | 850 | 0.0353 | 0.5667 | 0.62% | | | | |
| *Sprint | 2 | 817 | 110 | 1900 | 0.0543 | 1.0000 | 0.54% | | | | |
| *Sprint | 2 | 1634 | 110 | 1900 | 0.1087 | 1.0000 | 1.09% | | | | |
| *AT&T | 2 | 565 | 119 | 880 | 0.0318 | 0.5867 | 0.54% | | | | |
| *AT&T | 2 | 875 | 119 | 1900 | 0.0493 | 1.0000 | 0.49% | | | | |
| *AT&T | 1 | 1313 | 119 | 734 | 0.0370 | 0.4893 | 0.76% | | | | |
| *AT&T | 4 | 525 | 119 | 1900 | 0.0591 | 1.0000 | 0.59% | | | | |
| *AT&T | 1 | 283 | 119 | 880 | 0.0080 | 0.5867 | 0.14% | | | | |
| *T-Mobile | 2 | 2334 | 90 | 2100 | 0.2379 | 1.0000 | 2.38% | | | | |
| *T-Mobile | 2 | 1167 | 90 | 1950 | 0.1190 | 1.0000 | 1.19% | | | | |
| *T-Mobile | 1 | 865 | 90 | 700 | 0.0441 | 0.4667 | 0.94% | | | | |
| Verizon PCS | 1 | 5000 | 99 | 0.1834 | 1970 | 1.0000 | 18.34% | | | | |
| Verizon Cellular | 1 | 3050 | 99 | 0.1119 | 869 | 0.5793 | 19.32% | | | | |
| Verizon Cellular | 3 | 389 | 99 | 0.0428 | 880 | 0.5866 | 7.30% | | | | |
| Verizon AWS | 1 | 7400 | 99 | 0.2715 | 2145 | 1.0000 | 27.15% | | | | |
| Verizon 700 | 1 | 2200 | 99 | 0.0807 | 746 | 0.4973 | 16.23% | | | | |
| | | | | | | | | 97.6% | | | |
| * Source: Siting Council | | | | | | | | | | | |

ATTACHMENT 3

Date: July 19, 2017

Marianne Dunst
Crown Castle
3530 Toringdon Way, Suite 300
Charlotte, NC 28277
(704) 405-6580



GPD Engineering and Architecture
Professional Corporation
520 South Main Street Suite 2531
Akron, Ohio 44311
(216) 927-8663
dpalkovic@gpdgroup.com

Subject: Structural Analysis Report

Carrier Designation: Verizon Co-Locate
Carrier Site Number: 118016
Carrier Site Name: Burlington West CT

Crown Castle Designation: Crown Castle BU Number: 845993
Crown Castle Site Name: BURLINGTON-NEPAUG ROAD
Crown Castle JDE Job Number: 419584
Crown Castle Work Order Number: 1430310
Crown Castle Application Number: 377565 Rev. 5

Engineering Firm Designation: GPD Project Number: 2017777.845993.02

Site Data: 12 Nepaug Road, Burlington, Hartford County, CT 06013
Latitude 41° 46' 56.86", Longitude -72° 59' 22.68"
120 Foot – Monopole Tower

Dear Marianne Dunst,

We are pleased to submit this "Structural Analysis Report" to determine the structural integrity of the above mentioned tower. This analysis has been performed in accordance with the Crown Castle Structural 'Statement of Work' and the terms of Crown Castle Purchase Order Number 1058501, in accordance with application 377565, revision 5.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:



LC7: Existing + Reserved + Proposed Equipment **Sufficient Capacity**
Note: See Table I and Table II for the proposed and existing/reserved loading, respectively.

This analysis has been performed in accordance with the 2016 Connecticut State Building Code based upon an ultimate 3-second gust wind speed of 120 mph converted to a nominal 3-second gust wind speed of 93 mph per Section 1609.3 and Appendix N as required for use in the TIA-222-G Standard per Exception #5 of Section 1609.1.1. Exposure Category B and Risk Category II were used in this analysis.

We appreciate the opportunity of providing our continuing professional services to you and Crown Castle. If you have any questions or need further assistance on this or any other projects please give us a call.

Structural analysis prepared by: Raymond Faber

Respectfully submitted by:

7/19/17

Christopher J. Scheks, P.E.
Connecticut #: 0030026

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1) INTRODUCTION

The existing monopole consists of three major sections connected by slip joints. The tower has an 18-sided cross section that is evenly tapered from 51.04" (flat-flat) at the base to 22.69" (flat-flat) at the top. The structure is galvanized and has no tower lighting.

The original tower drawings were not readily available at the time of this structural analysis. All tower geometry information was modeled per the tower mapping report by FDH (Job #: 16BBND1500, dated 02/10/2016). The original design date, code and wind speed are unknown.

2) ANALYSIS CRITERIA

This analysis has been performed in accordance with the 2016 Connecticut State Building Code based upon an ultimate 3-second gust wind speed of 120 mph converted to a nominal 3-second gust wind speed of 93 mph per Section 1609.3 and Appendix N as required for use in the TIA-222-G Standard per Exception #5 of Section 1609.1.1. Exposure Category B and Risk Category II were used in this analysis.

Table 1 - Proposed Antenna and Cable Information

| Mounting Level (ft) | Center Line Elevation (ft) | Number of Antennas | Antenna Manufacturer | Antenna Model | Number of Feed Lines | Feed Line Size (in) | Note |
|---------------------|----------------------------|--------------------|----------------------|---------------------------|----------------------|---------------------|------|
| 99.0 | 99.0 | 6 | Commscope | JAHH-65B-R3B | 2 | 1-5/8 | 1 |
| | | 3 | Alcatel Lucent | RRH2x60-700 | | | |
| | | 3 | Alcatel Lucent | RRH4X45-AWS4 B66 | | | |
| | | 3 | Nokia | AIRSCALE RRH 4T4R B5 160W | | | |
| | | 2 | RFS Celwave | DB-T1-6Z-8AB-0Z | | | |

Notes:

- 1) See Appendix B for the proposed coax layout.

Table 2 - Existing and Reserved Antenna and Cable Information

| Mounting Level (ft) | Center Line Elevation (ft) | Number of Antennas | Antenna Manufacturer | Antenna Model | Number of Feed Lines | Feed Line Size (in) | Note |
|---------------------|----------------------------|--------------------|----------------------|----------------------------|----------------------|---------------------|------|
| 119.0 | 119.0 | 3 | KMW Communications | AM-X-CD-16-65-00T-RET | 12 2 2 | 1-5/8 7/8 1/2 | |
| | | 6 | Powerwave | 7770.00 | | | |
| | | 6 | Powerwave | LGP13519 | | | |
| | | 6 | Powerwave | LGP21401 | | | |
| | | 3 | Ericsson | RRUS-11 | | | |
| | | 1 | Raycap | DC6-48-60-18-8F | | | |
| | | 1 | GPS | GPS_A | | | |
| | | 1 | | Platform Mount [LP 1201-1] | | | |
| 109.0 | 110.0 | 3 | RFS Celwave | APXVSPP18-C-A20 | 6 6 | 5/16 1-5/8 | 2 |
| | | 3 | RFS Celwave | FD9R6004/1C-3L | | | |
| | 109.0 | 1 | | Platform Mount [LP 1201-1] | | | |
| 99.0 | 99.0 | 3 | Antel | BXA-171085-8BF-EDIN-2 | 6 6 | 1-5/8 1-5/8 | 1 |
| | | 3 | Antel | BXA-70063-6CF-2 | | | |
| | | 6 | RFS Celwave | FD9R6004/2C-3L | | | |
| | | 6 | Antel | LPA-80080/4CF | | | |
| | | 1 | | Platform Mount [LP 1201-1] | | | |
| 88.0 | 90.0 | 3 | Commscope | LNX-6515DS-A1M | 7 | 1-5/8 | |
| | | 3 | Ericsson | ERICSSON AIR 21 B2A B4P | | | |
| | | 3 | Ericsson | ERICSSON AIR 21 B4A B2P | | | |
| | | 1 | | T-Arm Mount [TA 602-3] | | | |

Notes:

- 1) Equipment to be removed; Not considered in this analysis.
- 2) Reserved equipment; Considered in this analysis.

Table 3 - Design Antenna and Cable Information

| Mounting Level (ft) | Center Line Elevation (ft) | Number of Antennas | Antenna Manufacturer | Antenna Model | Number of Feed Lines | Feed Line Size (in) |
|---------------------|----------------------------|--------------------|----------------------|---------------|----------------------|---------------------|
| Not Available | | | | | | |

3) ANALYSIS PROCEDURE

Table 4 - Documents Provided

| Document | Remarks | Reference | Source |
|-------------------------------|---|-----------|----------|
| Geotechnical Reports | JCI Project #: 04143G | 4551029 | CCISITES |
| Tower Foundation Calculations | URS Project #: CW1-057 | 5072131 | CCISITES |
| Tower Foundation NDT | FDH Job #: 16BBNP1500, dated 03/18/2016 | 6171674 | CCISITES |
| Tower Mapping Report | FDH Job #: 16BBND1500, dated 02/10/2016 | 6172249 | CCISITES |

3.1) Analysis Method

tnxTower (version 7.0.7.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

- 1) Tower and structures were built in accordance with the manufacturer's specifications.
- 2) The tower and structures have been maintained in accordance with the manufacturer's specification.

This analysis may be affected if any assumptions are not valid or have been made in error. GPD should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 5 - Section Capacity (Summary)

| Section No. | Elevation (ft) | Component Type | Size | Critical Element | P (K) | SF*P_allow (K) | % Capacity | Pass / Fail |
|-------------|----------------|----------------|------------------------|------------------|--------|----------------|------------|-------------|
| L1 | 120 - 97 | Pole | TP28.93x22.69x0.1875 | 1 | -7.91 | 1079.70 | 16.1 | Pass |
| L2 | 97 - 48 | Pole | TP39.7x27.5729x0.25 | 2 | -20.74 | 1957.24 | 50.9 | Pass |
| L3 | 48 - 0 | Pole | TP51.04x38.0569x0.3125 | 3 | -33.02 | 3154.51 | 52.9 | Pass |
| | | | | | | | Summary | |
| | | | | | | Pole (L3) | 52.9 | Pass |
| | | | | | | Rating = | 52.9 | Pass |

Table 6 - Tower Component Stresses vs. Capacity – LC7

| Notes | Component | Elevation (ft) | % Capacity | Pass / Fail |
|-------|----------------------------------|----------------|------------|-------------|
| 1 | Anchor Rods | 0 | 46.1 | Pass |
| 1 | Base Plate | 0 | 36.2 | Pass |
| 1 | Base Foundation Reinforcement | 0 | 44.3 | Pass |
| 1 | Base Foundation Soil Interaction | 0 | 34.7 | Pass |

| | |
|---|--------------|
| Structure Rating (max from all components) = | 52.9% |
|---|--------------|

Notes:

- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.

4.1) Recommendations

The tower has sufficient capacity to carry the proposed load configuration. Modifications will not be required to bring the tower into compliance with the TIA-222-G standard for the proposed load configuration.

5) DISCLAIMER OF WARRANTIES

GPD has not performed a site visit to the tower to verify the member sizes or antenna/coax loading. If the existing conditions are not as represented on the tower elevation contained in this report, we should be contacted immediately to evaluate the significance of the discrepancy. This is not a condition assessment of the tower or foundation. This report does not replace a full tower inspection. The tower and foundations are assumed to have been properly fabricated, erected, maintained, in good condition, twist free, and plumb.

The engineering services rendered by GPD in connection with this Structural Analysis are limited to a computer analysis of the tower structure and theoretical capacity of its main structural members. No allowance was made for any damaged, bent, missing, loose, or rusted members (above and below ground). No allowance was made for loose bolts or cracked welds.

This analysis is limited to the designated maximum wind and seismic conditions per the governing tower standards and code. Wind forces resulting in tower vibrations near the structure's resonant frequencies were not considered in this analysis and are outside the scope of this analysis. Lateral loading from any dynamic response was not evaluated under a time-domain based fatigue analysis.

GPD does not analyze the fabrication of the structure (including welding). It is not possible to have all the very detailed information needed to perform a thorough analysis of every structural sub-component and connection of an existing tower. GPD provides a limited scope of service in that we cannot verify the adequacy of every weld, plate connection detail, etc. The purpose of this report is to assess the capability of adding appurtenances usually accompanied by transmission lines to the structure.

It is the owner's responsibility to determine the amount of ice accumulation in excess of the code specified amount, if any, that should be considered in the structural analysis.

The attached sketches are a schematic representation of the analyzed tower. If any material is fabricated from these sketches, the contractor shall be responsible for field verifying the existing conditions, proper fit, and clearance in the field. Any mentions of structural modifications are reasonable estimates and should not be used as a precise construction document. Precise modification drawings are obtainable from GPD, but are beyond the scope of this report.

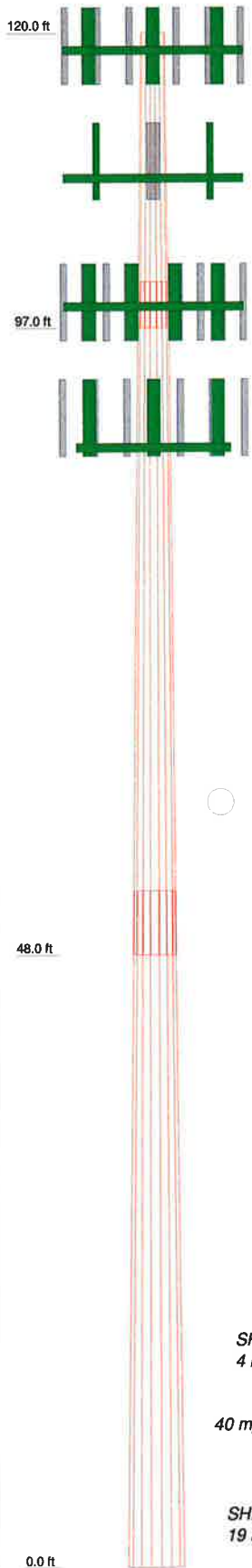
Miscellaneous items such as antenna mounts, etc., have not been designed or detailed as a part of our work. We recommend that material of adequate size and strength be purchased from a reputable tower manufacturer.

Towers are designed to carry gravity, wind, and ice loads. All members, legs, diagonals, struts, and redundant members provide structural stability to the tower with little redundancy. Absence or removal of a member can trigger catastrophic failure unless a substitute is provided before any removal. Legs carry axial loads and derive their strength from shorter unbraced lengths by the presence of redundant members and their connection to the diagonals with bolts or welds. If the bolts or welds are removed without providing any substitute to the frame, the leg is subjected to a higher unbraced length that immediately reduces its load carrying capacity. If a diagonal is also removed in addition to the connection, the unbraced length of the leg is greatly increased, jeopardizing its load carrying capacity. Failure of one leg can result in a tower collapse because there is no redundancy. Redundant members and diagonals are critical to the stability of the tower.

GPD makes no warranties, expressed and/or implied, in connection with this report and disclaims any liability arising from material, fabrication, and erection of this tower. GPD will not be responsible whatsoever for, or on account of, consequential or incidental damages sustained by any person, firm, or organization as a result of any data or conclusions contained in this report. The maximum liability of GPD pursuant to this report will be limited to the total fee received for preparation of this report.

APPENDIX A
TNXTOWER OUTPUT

| | | | | | | | | |
|---------|-------------|-----------------|----------------|--------------------|--------------|--------------|---------|------------|
| Section | Length (ft) | Number of Sides | Thickness (in) | Socket Length (ft) | Top Dia (in) | Bot Dia (in) | Grade | Weight (K) |
| 1 | 23.00 | 18 | 0.1875 | 3.62 | 22.6900 | 28.9300 | A572-65 | 1.2 |
| 2 | 52.62 | 18 | 0.2500 | 4.96 | 27.5729 | 39.7000 | A572-65 | 4.7 |
| 3 | 52.86 | 18 | 0.3125 | 38.0569 | 51.0400 | | A572-65 | 7.9 |
| | | | | | | | | 13.8 |



DESIGNED APPURTENANCE LOADING

| TYPE | ELEVATION | TYPE | ELEVATION |
|--|-----------|--|-----------|
| AM-X-CD-16-65-00T-RET w/ Mount Pipe | 119 | (3) 6' x 2" Mount Pipe | 109 |
| AM-X-CD-16-65-00T-RET w/ Mount Pipe | 119 | Platform Mount [LP 1201-1] | 109 |
| AM-X-CD-16-65-00T-RET w/ Mount Pipe | 119 | (2) LPA-80080/4CF w/ Mount Pipe | 99 |
| (2) 7770.00 w/ Mount Pipe | 119 | (2) LPA-80080/4CF w/ Mount Pipe | 99 |
| (2) 7770.00 w/ Mount Pipe | 119 | (2) JAHH-65B-R3B w/ Mount Pipe | 99 |
| (2) LGP13519 | 119 | (2) JAHH-65B-R3B w/ Mount Pipe | 99 |
| (2) LGP13519 | 119 | (2) JAHH-65B-R3B w/ Mount Pipe | 99 |
| (2) LGP21401 | 119 | (2) DB-T1-6Z-8AB-0Z | 99 |
| (2) LGP21401 | 119 | RRH2x60-700 | 99 |
| (2) LGP21401 | 119 | RRH2x60-700 | 99 |
| RRUS-11 | 119 | RRH2x60-700 | 99 |
| RRUS-11 | 119 | RRH4X45-AWS4 B66 | 99 |
| RRUS-11 | 119 | RRH4X45-AWS4 B66 | 99 |
| DC6-48-60-18-8F Surge Suppression Unit | 119 | RRH4X45-AWS4 B66 | 99 |
| GPS_A | 119 | RRH4X45-AWS4 B66 | 99 |
| 6' x 2" Mount Pipe | 119 | RRUS-11 | 119 |
| 6' x 2" Mount Pipe | 119 | RRUS-11 | 119 |
| 6' x 2" Mount Pipe | 119 | RRUS-11 | 119 |
| 4' x 3" Pipe Mount | 119 | DC6-48-60-18-8F Surge Suppression Unit | 119 |
| 4' x 3" Pipe Mount | 119 | GPS_A | 119 |
| 4' x 3" Pipe Mount | 119 | 6' x 2" Mount Pipe | 119 |
| Platform Mount [LP 1201-1] | 119 | 6' x 2" Mount Pipe | 119 |
| APXVSP18-C-A20 w/ Mount Pipe | 109 | 4' x 3" Pipe Mount | 119 |
| APXVSP18-C-A20 w/ Mount Pipe | 109 | 4' x 3" Pipe Mount | 119 |
| APXVSP18-C-A20 w/ Mount Pipe | 109 | Platform Mount [LP 1201-1] | 119 |
| FD9R6004/1C-3L | 109 | APXVSP18-C-A20 w/ Mount Pipe | 109 |
| FD9R6004/1C-3L | 109 | APXVSP18-C-A20 w/ Mount Pipe | 109 |
| FD9R6004/1C-3L | 109 | FD9R6004/1C-3L | 109 |
| FD9R6004/1C-3L | 109 | FD9R6004/1C-3L | 109 |
| (3) 6' x 2" Mount Pipe | 109 | FD9R6004/1C-3L | 109 |
| (3) 6' x 2" Mount Pipe | 109 | (3) 6' x 2" Mount Pipe | 109 |
| | | (3) 6' x 2" Mount Pipe | 109 |

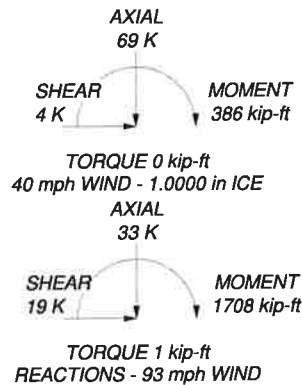
MATERIAL STRENGTH

| GRADE | Fy | Fu | GRADE | Fy | Fu |
|---------|--------|--------|-------|----|----|
| A572-65 | 65 ksi | 80 ksi | | | |

TOWER DESIGN NOTES

1. Tower is located in Hartford County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-G Standard.
3. Tower designed for a 93 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 40 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Structure Class II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 52.9%

ALL REACTIONS ARE FACTORED



GPD
520 South Main Street Suite 2531
Akron, Ohio 44311
Phone: (330) 572-2100
FAX: (330) 572-2101

| | | | |
|----------|--|-----------|---------------------|
| Job: | BURLINGTON-NEPAUG ROAD / BU #: 8459 | | |
| Project: | 2017777.845993.02 | | |
| Client: | Crown Castle USA, Inc. | Drawn by: | RFaber App'd: |
| Code: | TIA-222-G | Date: | 07/19/17 Scale: NTS |
| Path: | T:\Crown\845993\02\Rev. 0\InxTower845993.rvt | | |
| | | | Dwg No. E-1 |

0' - 120'

Round

Flat

App In Face

App Out Face

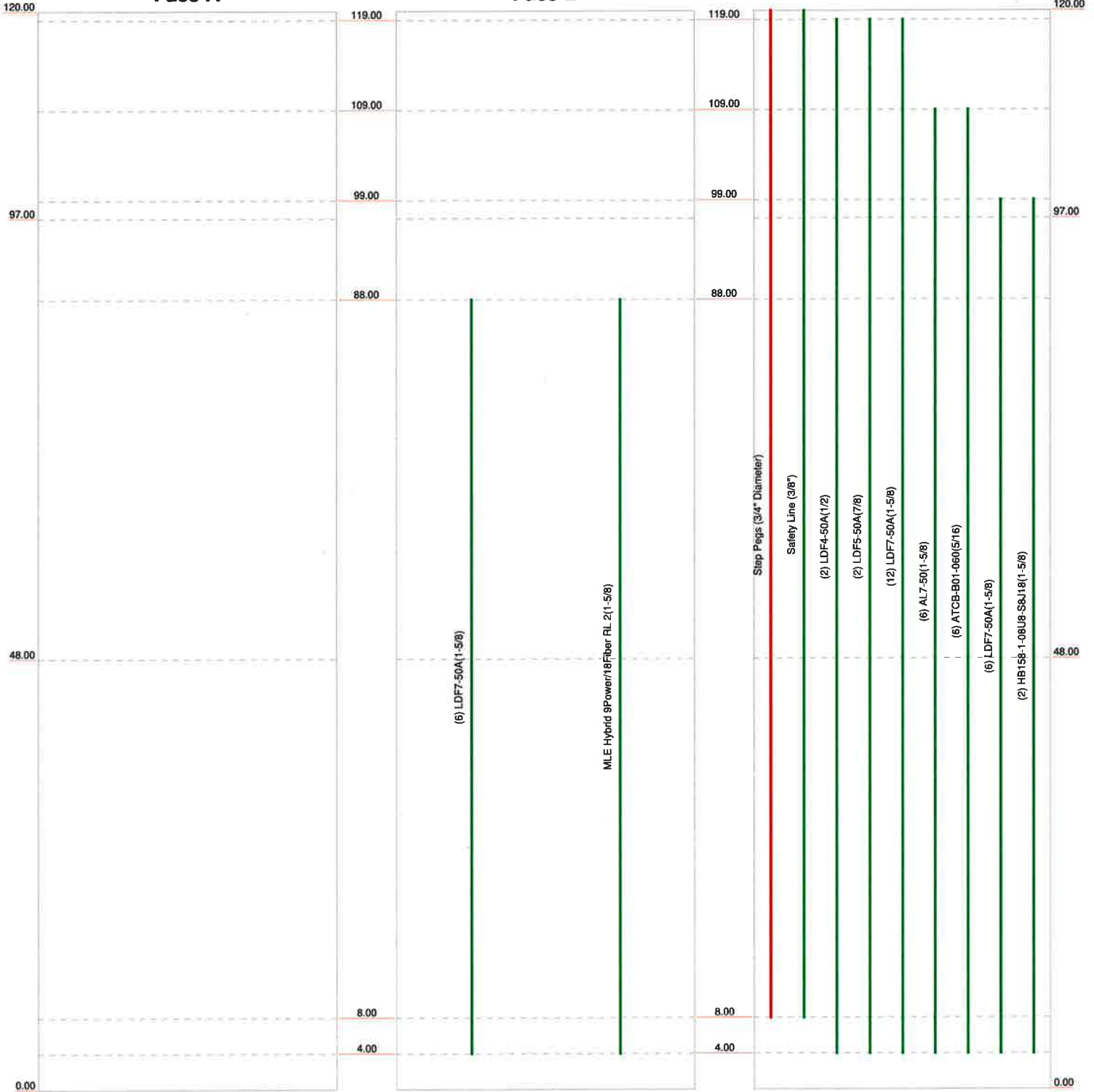
Truss Leg


Face A

Face B

Face C

Elevation (ft)



| | | | | | |
|--|----------------------------------|--|---|-------------------------|-------------------|
|  GPD | GPD | | Job: BURLINGTON-NEPAUG ROAD / BU #: 8459 | | |
| | 520 South Main Street Suite 2531 | | Project: 2017777.845993.02 | | |
| | Akron, Ohio 44311 | | Client: Crown Castle USA, Inc. | Drawn by: RFaber | App'd: |
| | Phone: (330) 572-2100 | | Code: TIA-222-G | Date: 07/19/17 | Scale: NTS |
| | FAX: (330) 572-2101 | | Path: T:\Crown\845993\02\Rev. 0\InzTower845993.dwg | Dwg No. E-7 | |

| | | |
|--|---|----------------------------------|
| tnxTower GPD 520 South Main Street Suite 2531 Akron, Ohio 44311 Phone: (330) 572-2100 FAX: (330) 572-2101 | Job BURLINGTON-NEPAUG ROAD / BU #: 845993 | Page 1 of 8 |
| | Project 2017777.845993.02 | Date 17:38:29 07/19/17 |
| | Client Crown Castle USA, Inc. | Designed by RFaber |

Tower Input Data

There is a pole section.

This tower is designed using the TIA-222-G standard.

The following design criteria apply:

Tower is located in Hartford County, Connecticut.

Basic wind speed of 93 mph.

Structure Class II.

Exposure Category B.

Topographic Category 1.

Crest Height 0.00 ft.

Nominal ice thickness of 1.0000 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

A wind speed of 40 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

Stress ratio used in pole design is 1.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification √ Use Code Stress Ratios √ Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile Include Bolts In Member Capacity Leg Bolts Are At Top Of Section Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) SR Members Have Cut Ends SR Members Are Concentric | <ul style="list-style-type: none"> Distribute Leg Loads As Uniform Assume Legs Pinned √ Assume Rigid Index Plate √ Use Clear Spans For Wind Area Use Clear Spans For KL/r Retension Guys To Initial Tension √ Bypass Mast Stability Checks √ Use Azimuth Dish Coefficients √ Project Wind Area of Appurt. Autocalc Torque Arm Areas Add IBC .6D+W Combination √ Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Treat Feed Line Bundles As Cylinder | <ul style="list-style-type: none"> Use ASCE 10 X-Brace Ly Rules Calculate Redundant Bracing Forces Ignore Redundant Members in FEA SR Leg Bolts Resist Compression All Leg Panels Have Same Allowable Offset Girt At Foundation √ Consider Feed Line Torque Include Angle Block Shear Check Use TIA-222-G Bracing Resist. Exemption Use TIA-222-G Tension Splice Exemption <li style="text-align: center;">Poles √ Include Shear-Torsion Interaction Always Use Sub-Critical Flow Use Top Mounted Sockets |
|--|--|--|

Tapered Pole Section Geometry

| Section | Elevation | Section Length | Splice Length | Number of Sides | Top Diameter | Bottom Diameter | Wall Thickness | Bend Radius | Pole Grade |
|---------|--------------|----------------|---------------|-----------------|--------------|-----------------|----------------|-------------|---------------------|
| | ft | ft | ft | | in | in | in | in | |
| L1 | 120.00-97.00 | 23.00 | 3.62 | 18 | 22.6900 | 28.9300 | 0.1875 | 0.7500 | A572-65 (65 ksi) |
| L2 | 97.00-48.00 | 52.62 | 4.96 | 18 | 27.5729 | 39.7000 | 0.2500 | 1.0000 | A572-65 (65 ksi) |
| L3 | 48.00-0.00 | 52.96 | | 18 | 38.0569 | 51.0400 | 0.3125 | 1.2500 | A572-65 (65 ksi) |

| | | |
|--|---|----------------------------------|
| tnxTower GPD 520 South Main Street Suite 2531 Akron, Ohio 44311 Phone: (330) 572-2100 FAX: (330) 572-2101 | Job BURLINGTON-NEPAUG ROAD / BU #: 845993 | Page 2 of 8 |
| | Project 2017777.845993.02 | Date 17:38:29 07/19/17 |
| | Client Crown Castle USA, Inc. | Designed by RFaber |

Tapered Pole Properties

| Section | Tip Dia. in | Area in ² | I in ⁴ | r in | C in | I/C in ³ | J in ⁴ | I/Q in ² | w in | w/t |
|---------|----------------|-------------------------|----------------------|---------|---------|------------------------|----------------------|------------------------|---------|--------|
| L1 | 23.0400 | 13.3918 | 856.7181 | 7.9884 | 11.5265 | 74.3258 | 1714.5635 | 6.6972 | 3.6634 | 19.538 |
| | 29.3763 | 17.1054 | 1785.3331 | 10.2036 | 14.6964 | 121.4807 | 3573.0155 | 8.5543 | 4.7617 | 25.396 |
| L2 | 28.8454 | 21.6807 | 2044.8606 | 9.6996 | 14.0070 | 145.9882 | 4092.4119 | 10.8424 | 4.4128 | 17.651 |
| | 40.3124 | 31.3036 | 6154.9624 | 14.0048 | 20.1676 | 305.1906 | 12318.0236 | 15.6548 | 6.5472 | 26.189 |
| L3 | 39.8787 | 37.4377 | 6738.3194 | 13.3993 | 19.3329 | 348.5416 | 13485.5052 | 18.7224 | 6.1480 | 19.674 |
| | 51.8274 | 50.3153 | 16357.7954 | 18.0083 | 25.9283 | 630.8853 | 32737.1149 | 25.1625 | 8.4330 | 26.986 |

| Tower Elevation | Gusset Area (per face) | Gusset Thickness | Gusset Grade | Adjust. Factor A _f | Adjust. Factor A _r | Weight Mult. | Double Angle Stitch Bolt Spacing Diagonals | Double Angle Stitch Bolt Spacing Horizontals | Double Angle Stitch Bolt Spacing Redundants |
|-----------------|---------------------------|------------------|--------------|----------------------------------|----------------------------------|--------------|---|---|--|
| ft | ft ² | in | | | | | in | in | in |
| L1 120.00-97.00 | | | | 1 | 1 | 1 | | | |
| L2 97.00-48.00 | | | | 1 | 1 | 1 | | | |
| L3 48.00-0.00 | | | | 1 | 1 | 1 | | | |

Feed Line/Linear Appurtenances - Entered As Round Or Flat

| Description | Sector | Component Type | Placement | Total Number | Number Per Row | Start/End Position | Width or Diameter | Perimeter | Weight |
|---------------------------|--------|-------------------|---------------|--------------|----------------|--------------------|-------------------|-----------|--------|
| | | | ft | | | | in | in | plf |
| Step Pegs (3/4" Diameter) | C | Surface Ar (CaAa) | 120.00 - 8.00 | 1 | 1 | -0.250 0.250 | 0.7500 | | 1.50 |

Feed Line/Linear Appurtenances - Entered As Area

| Description | Face or Leg | Allow Shield | Component Type | Placement | Total Number | C _A A _A | Weight | |
|---------------------------|-------------|--------------|--------------------|---------------|--------------|-------------------------------|--------|------|
| | | | | ft | | ft ² /ft | plf | |
| Safety Line (3/8") | C | No | CaAa (Out Of Face) | 120.00 - 8.00 | 1 | No Ice | 0.04 | 0.22 |
| | | | | | | 1/2" Ice | 0.14 | 0.75 |
| | | | | | | 1" Ice | 0.24 | 1.28 |
| LDF4-50A(1/2) | C | No | Inside Pole | 119.00 - 4.00 | 2 | No Ice | 0.00 | 0.15 |
| | | | | | | 1/2" Ice | 0.00 | 0.15 |
| | | | | | | 1" Ice | 0.00 | 0.15 |
| LDF5-50A(7/8) | C | No | Inside Pole | 119.00 - 4.00 | 2 | No Ice | 0.00 | 0.33 |
| | | | | | | 1/2" Ice | 0.00 | 0.33 |
| | | | | | | 1" Ice | 0.00 | 0.33 |
| LDF7-50A(1-5/8) | C | No | Inside Pole | 119.00 - 4.00 | 12 | No Ice | 0.00 | 0.82 |
| | | | | | | 1/2" Ice | 0.00 | 0.82 |
| | | | | | | 1" Ice | 0.00 | 0.82 |
| AL7-50(1-5/8) | C | No | Inside Pole | 109.00 - 4.00 | 6 | No Ice | 0.00 | 0.52 |
| | | | | | | 1/2" Ice | 0.00 | 0.52 |
| | | | | | | 1" Ice | 0.00 | 0.52 |
| ATCB-B01-060(5/16) | C | No | Inside Pole | 109.00 - 4.00 | 6 | No Ice | 0.00 | 0.06 |
| | | | | | | 1/2" Ice | 0.00 | 0.06 |
| | | | | | | 1" Ice | 0.00 | 0.06 |
| LDF7-50A(1-5/8) | C | No | Inside Pole | 99.00 - 4.00 | 6 | No Ice | 0.00 | 0.82 |
| | | | | | | 1/2" Ice | 0.00 | 0.82 |
| | | | | | | 1" Ice | 0.00 | 0.82 |
| HB158-1-08U8-S8J18(1-5/8) | C | No | Inside Pole | 99.00 - 4.00 | 2 | No Ice | 0.00 | 1.30 |
| | | | | | | 1/2" Ice | 0.00 | 1.30 |
| | | | | | | 1" Ice | 0.00 | 1.30 |
| LDF7-50A(1-5/8) | B | No | Inside Pole | 88.00 - 4.00 | 6 | No Ice | 0.00 | 0.82 |
| | | | | | | 1/2" Ice | 0.00 | 0.82 |

| | | |
|--|---|----------------------------------|
| tnxTower GPD 520 South Main Street Suite 2531 Akron, Ohio 44311 Phone: (330) 572-2100 FAX: (330) 572-2101 | Job BURLINGTON-NEPAUG ROAD / BU #: 845993 | Page 3 of 8 |
| | Project 2017777.845993.02 | Date 17:38:29 07/19/17 |
| | Client Crown Castle USA, Inc. | Designed by RFaber |

| Description | Face or Leg | Allow Shield | Component Type | Placement ft | Total Number | CAAA | | Weight |
|---------------------------------------|-------------|--------------|----------------|-----------------|--------------|---------------------|------|--------|
| | | | | | | ft ² /ft | plf | |
| MLE Hybrid 9Power/18Fiber RL 2(1-5/8) | B | No | Inside Pole | 88.00 - 4.00 | 1 | 1" Ice | 0.00 | 0.82 |
| | | | | | | No Ice | 0.00 | 1.07 |
| | | | | | | 1/2" Ice | 0.00 | 1.07 |
| | | | | | | 1" Ice | 0.00 | 1.07 |

Discrete Tower Loads

| Description | Face or Leg | Offset Type | Offsets: | | Azimuth Adjustment ° | Placement ft | CAAA | | Weight K |
|-------------------------------------|-------------|-------------|--------------------|------------|-------------------------|-----------------|--------------------------|-------------------------|-------------|
| | | | Horz Lateral ft | Vert ft | | | Front ft ² | Side ft ² | |
| AM-X-CD-16-65-00T-RET w/ Mount Pipe | A | From Face | 4.00 | 0.0000 | 119.00 | No Ice | 8.26 | 6.30 | 0.07 |
| | | | | | | 1/2" Ice | 8.82 | 7.48 | 0.14 |
| | | | | | | 1" Ice | 9.35 | 8.37 | 0.21 |
| AM-X-CD-16-65-00T-RET w/ Mount Pipe | B | From Face | 4.00 | 0.0000 | 119.00 | No Ice | 8.26 | 6.30 | 0.07 |
| | | | | | | 1/2" Ice | 8.82 | 7.48 | 0.14 |
| | | | | | | 1" Ice | 9.35 | 8.37 | 0.21 |
| AM-X-CD-16-65-00T-RET w/ Mount Pipe | C | From Face | 4.00 | 0.0000 | 119.00 | No Ice | 8.26 | 6.30 | 0.07 |
| | | | | | | 1/2" Ice | 8.82 | 7.48 | 0.14 |
| | | | | | | 1" Ice | 9.35 | 8.37 | 0.21 |
| (2) 7770.00 w/ Mount Pipe | A | From Face | 4.00 | 0.0000 | 119.00 | No Ice | 5.84 | 4.35 | 0.06 |
| | | | | | | 1/2" Ice | 6.32 | 5.20 | 0.11 |
| | | | | | | 1" Ice | 6.77 | 5.92 | 0.16 |
| (2) 7770.00 w/ Mount Pipe | B | From Face | 4.00 | 0.0000 | 119.00 | No Ice | 5.84 | 4.35 | 0.06 |
| | | | | | | 1/2" Ice | 6.32 | 5.20 | 0.11 |
| | | | | | | 1" Ice | 6.77 | 5.92 | 0.16 |
| (2) 7770.00 w/ Mount Pipe | C | From Face | 4.00 | 0.0000 | 119.00 | No Ice | 5.84 | 4.35 | 0.06 |
| | | | | | | 1/2" Ice | 6.32 | 5.20 | 0.11 |
| | | | | | | 1" Ice | 6.77 | 5.92 | 0.16 |
| (2) LGP13519 | A | From Face | 4.00 | 0.0000 | 119.00 | No Ice | 0.29 | 0.18 | 0.01 |
| | | | | | | 1/2" Ice | 0.36 | 0.24 | 0.01 |
| | | | | | | 1" Ice | 0.44 | 0.31 | 0.01 |
| (2) LGP13519 | B | From Face | 4.00 | 0.0000 | 119.00 | No Ice | 0.29 | 0.18 | 0.01 |
| | | | | | | 1/2" Ice | 0.36 | 0.24 | 0.01 |
| | | | | | | 1" Ice | 0.44 | 0.31 | 0.01 |
| (2) LGP13519 | C | From Face | 4.00 | 0.0000 | 119.00 | No Ice | 0.29 | 0.18 | 0.01 |
| | | | | | | 1/2" Ice | 0.36 | 0.24 | 0.01 |
| | | | | | | 1" Ice | 0.44 | 0.31 | 0.01 |
| (2) LGP21401 | A | From Face | 4.00 | 0.0000 | 119.00 | No Ice | 1.10 | 0.35 | 0.01 |
| | | | | | | 1/2" Ice | 1.24 | 0.44 | 0.02 |
| | | | | | | 1" Ice | 1.38 | 0.54 | 0.03 |
| (2) LGP21401 | B | From Face | 4.00 | 0.0000 | 119.00 | No Ice | 1.10 | 0.35 | 0.01 |
| | | | | | | 1/2" Ice | 1.24 | 0.44 | 0.02 |
| | | | | | | 1" Ice | 1.38 | 0.54 | 0.03 |
| (2) LGP21401 | C | From Face | 4.00 | 0.0000 | 119.00 | No Ice | 1.10 | 0.35 | 0.01 |
| | | | | | | 1/2" Ice | 1.24 | 0.44 | 0.02 |
| | | | | | | 1" Ice | 1.38 | 0.54 | 0.03 |
| RRUS-11 | A | From Leg | 1.00 | 0.0000 | 119.00 | No Ice | 2.78 | 1.19 | 0.05 |
| | | | | | | 1/2" Ice | 2.99 | 1.33 | 0.07 |
| | | | | | | 1" Ice | 3.21 | 1.49 | 0.09 |
| RRUS-11 | B | From Leg | 1.00 | 0.0000 | 119.00 | No Ice | 2.78 | 1.19 | 0.05 |
| | | | | | | 1/2" Ice | 2.99 | 1.33 | 0.07 |
| | | | | | | 1" Ice | 3.21 | 1.49 | 0.09 |
| RRUS-11 | C | From Leg | 1.00 | 0.0000 | 119.00 | No Ice | 2.78 | 1.19 | 0.05 |
| | | | | | | 1/2" Ice | 2.99 | 1.33 | 0.07 |
| | | | | | | 1" Ice | 3.21 | 1.49 | 0.09 |

| | | | | | | |
|--|----------------|--|---------------------------------------|--|--------------------|-------------------|
| tnxTower GPD 520 South Main Street Suite 2531 Akron, Ohio 44311 Phone: (330) 572-2100 FAX: (330) 572-2101 | Job | | BURLINGTON-NEPAUG ROAD / BU #: 845993 | | Page | 4 of 8 |
| | Project | | 2017777.845993.02 | | Date | 17:38:29 07/19/17 |
| | Client | | Crown Castle USA, Inc. | | Designed by | RFaber |

| Description | Face or Leg | Offset Type | Offsets: | | Azimuth Adjustment | Placement | C _{AA} | | Weight | |
|--|-------------|-------------|----------|---------|--------------------|-----------|-----------------|-----------------|--------|------|
| | | | Horz | Lateral | | | Front | Side | | |
| | | | Vert | | | | | | | |
| | | | ft | ft | ° | ft | ft ² | ft ² | K | |
| | | | ft | | | | | | | |
| DC6-48-60-18-8F Surge Suppression Unit | B | From Face | 4.00 | | 0.0000 | 119.00 | No Ice | 0.92 | 0.92 | 0.02 |
| | | | 0.00 | | | | 1/2" Ice | 1.46 | 1.46 | 0.04 |
| | | | 0.00 | | | | 1" Ice | 1.64 | 1.64 | 0.06 |
| GPS_A | B | From Face | 4.00 | | 0.0000 | 119.00 | No Ice | 0.26 | 0.26 | 0.00 |
| | | | 0.00 | | | | 1/2" Ice | 0.32 | 0.32 | 0.00 |
| | | | 0.00 | | | | 1" Ice | 0.39 | 0.39 | 0.01 |
| 6' x 2" Mount Pipe | A | From Face | 4.00 | | 0.0000 | 119.00 | No Ice | 1.43 | 1.43 | 0.02 |
| | | | 0.00 | | | | 1/2" Ice | 1.92 | 1.92 | 0.03 |
| | | | 0.00 | | | | 1" Ice | 2.29 | 2.29 | 0.05 |
| 6' x 2" Mount Pipe | B | From Face | 4.00 | | 0.0000 | 119.00 | No Ice | 1.43 | 1.43 | 0.02 |
| | | | 0.00 | | | | 1/2" Ice | 1.92 | 1.92 | 0.03 |
| | | | 0.00 | | | | 1" Ice | 2.29 | 2.29 | 0.05 |
| 6' x 2" Mount Pipe | C | From Face | 4.00 | | 0.0000 | 119.00 | No Ice | 1.43 | 1.43 | 0.02 |
| | | | 0.00 | | | | 1/2" Ice | 1.92 | 1.92 | 0.03 |
| | | | 0.00 | | | | 1" Ice | 2.29 | 2.29 | 0.05 |
| 4' x 3" Pipe Mount | A | From Leg | 0.50 | | 0.0000 | 119.00 | No Ice | 1.00 | 1.00 | 0.03 |
| | | | 0.00 | | | | 1/2" Ice | 1.25 | 1.25 | 0.04 |
| | | | 0.00 | | | | 1" Ice | 1.50 | 1.50 | 0.05 |
| 4' x 3" Pipe Mount | B | From Leg | 0.50 | | 0.0000 | 119.00 | No Ice | 1.00 | 1.00 | 0.03 |
| | | | 0.00 | | | | 1/2" Ice | 1.25 | 1.25 | 0.04 |
| | | | 0.00 | | | | 1" Ice | 1.50 | 1.50 | 0.05 |
| 4' x 3" Pipe Mount | C | From Leg | 0.50 | | 0.0000 | 119.00 | No Ice | 1.00 | 1.00 | 0.03 |
| | | | 0.00 | | | | 1/2" Ice | 1.25 | 1.25 | 0.04 |
| | | | 0.00 | | | | 1" Ice | 1.50 | 1.50 | 0.05 |
| Platform Mount [LP 1201-1] | B | None | | | 0.0000 | 119.00 | No Ice | 23.10 | 23.10 | 2.10 |
| | | | | | | | 1/2" Ice | 26.80 | 26.80 | 2.50 |
| | | | | | | | 1" Ice | 30.50 | 30.50 | 2.90 |
| APXVSP18-C-A20 w/ Mount Pipe | A | From Leg | 4.00 | | 0.0000 | 109.00 | No Ice | 8.02 | 6.71 | 0.08 |
| | | | 0.00 | | | | 1/2" Ice | 8.48 | 7.66 | 0.14 |
| | | | 1.00 | | | | 1" Ice | 8.94 | 8.49 | 0.22 |
| APXVSP18-C-A20 w/ Mount Pipe | B | From Leg | 4.00 | | 0.0000 | 109.00 | No Ice | 8.02 | 6.71 | 0.08 |
| | | | 0.00 | | | | 1/2" Ice | 8.48 | 7.66 | 0.14 |
| | | | 1.00 | | | | 1" Ice | 8.94 | 8.49 | 0.22 |
| APXVSP18-C-A20 w/ Mount Pipe | C | From Leg | 4.00 | | 0.0000 | 109.00 | No Ice | 8.02 | 6.71 | 0.08 |
| | | | 0.00 | | | | 1/2" Ice | 8.48 | 7.66 | 0.14 |
| | | | 1.00 | | | | 1" Ice | 8.94 | 8.49 | 0.22 |
| FD9R6004/1C-3L | A | From Leg | 4.00 | | 0.0000 | 109.00 | No Ice | 0.31 | 0.08 | 0.00 |
| | | | 0.00 | | | | 1/2" Ice | 0.39 | 0.12 | 0.00 |
| | | | 1.00 | | | | 1" Ice | 0.47 | 0.17 | 0.01 |
| FD9R6004/1C-3L | B | From Leg | 4.00 | | 0.0000 | 109.00 | No Ice | 0.31 | 0.08 | 0.00 |
| | | | 0.00 | | | | 1/2" Ice | 0.39 | 0.12 | 0.00 |
| | | | 1.00 | | | | 1" Ice | 0.47 | 0.17 | 0.01 |
| FD9R6004/1C-3L | C | From Leg | 4.00 | | 0.0000 | 109.00 | No Ice | 0.31 | 0.08 | 0.00 |
| | | | 0.00 | | | | 1/2" Ice | 0.39 | 0.12 | 0.00 |
| | | | 1.00 | | | | 1" Ice | 0.47 | 0.17 | 0.01 |
| (3) 6' x 2" Mount Pipe | A | From Leg | 4.00 | | 0.0000 | 109.00 | No Ice | 1.43 | 1.43 | 0.02 |
| | | | 0.00 | | | | 1/2" Ice | 1.92 | 1.92 | 0.03 |
| | | | 0.00 | | | | 1" Ice | 2.29 | 2.29 | 0.05 |
| (3) 6' x 2" Mount Pipe | B | From Leg | 4.00 | | 0.0000 | 109.00 | No Ice | 1.43 | 1.43 | 0.02 |
| | | | 0.00 | | | | 1/2" Ice | 1.92 | 1.92 | 0.03 |
| | | | 0.00 | | | | 1" Ice | 2.29 | 2.29 | 0.05 |
| (3) 6' x 2" Mount Pipe | C | From Leg | 4.00 | | 0.0000 | 109.00 | No Ice | 1.43 | 1.43 | 0.02 |
| | | | 0.00 | | | | 1/2" Ice | 1.92 | 1.92 | 0.03 |
| | | | 0.00 | | | | 1" Ice | 2.29 | 2.29 | 0.05 |
| Platform Mount [LP 1201-1] | B | None | | | 0.0000 | 109.00 | No Ice | 23.10 | 23.10 | 2.10 |
| | | | | | | | 1/2" Ice | 26.80 | 26.80 | 2.50 |
| | | | | | | | 1" Ice | 30.50 | 30.50 | 2.90 |

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|--|---|----------------------------------|
| tnxTower GPD 520 South Main Street Suite 2531 Akron, Ohio 44311 Phone: (330) 572-2100 FAX: (330) 572-2101 | Job BURLINGTON-NEPAUG ROAD / BU #: 845993 | Page 5 of 8 |
| | Project 2017777.845993.02 | Date 17:38:29 07/19/17 |
| | Client Crown Castle USA, Inc. | Designed by RFaber |

| Description | Face or Leg | Offset Type | Offsets: | | Azimuth Adjustment | Placement | C _A A | | Weight |
|---------------------------------|-------------|-------------|----------|---------|--------------------|-----------|------------------|-----------------|--------|
| | | | Horz | Lateral | | | Front | Side | |
| | | | Vert | | | | | | |
| | | | ft | ft | ° | ft | ft ² | ft ² | K |
| | | | ft | | | | | | |
| (2) LPA-80080/4CF w/ Mount Pipe | A | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 2.86 | 6.57 | 0.03 |
| | | | 0.00 | | | 1/2" Ice | 3.22 | 7.19 | 0.08 |
| | | | 0.00 | | | 1" Ice | 3.59 | 7.84 | 0.13 |
| (2) LPA-80080/4CF w/ Mount Pipe | B | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 2.86 | 6.57 | 0.03 |
| | | | 0.00 | | | 1/2" Ice | 3.22 | 7.19 | 0.08 |
| | | | 0.00 | | | 1" Ice | 3.59 | 7.84 | 0.13 |
| (2) LPA-80080/4CF w/ Mount Pipe | C | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 2.86 | 6.57 | 0.03 |
| | | | 0.00 | | | 1/2" Ice | 3.22 | 7.19 | 0.08 |
| | | | 0.00 | | | 1" Ice | 3.59 | 7.84 | 0.13 |
| (2) JAHH-65B-R3B w/ Mount Pipe | A | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 9.35 | 7.65 | 0.09 |
| | | | 0.00 | | | 1/2" Ice | 9.92 | 8.83 | 0.16 |
| | | | 0.00 | | | 1" Ice | 10.46 | 9.73 | 0.25 |
| (2) JAHH-65B-R3B w/ Mount Pipe | B | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 9.35 | 7.65 | 0.09 |
| | | | 0.00 | | | 1/2" Ice | 9.92 | 8.83 | 0.16 |
| | | | 0.00 | | | 1" Ice | 10.46 | 9.73 | 0.25 |
| (2) JAHH-65B-R3B w/ Mount Pipe | C | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 9.35 | 7.65 | 0.09 |
| | | | 0.00 | | | 1/2" Ice | 9.92 | 8.83 | 0.16 |
| | | | 0.00 | | | 1" Ice | 10.46 | 9.73 | 0.25 |
| (2) DB-T1-6Z-8AB-0Z | B | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 4.80 | 2.00 | 0.04 |
| | | | 0.00 | | | 1/2" Ice | 5.07 | 2.19 | 0.08 |
| | | | 0.00 | | | 1" Ice | 5.35 | 2.39 | 0.12 |
| RRH2x60-700 | A | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 3.50 | 1.82 | 0.06 |
| | | | 0.00 | | | 1/2" Ice | 3.76 | 2.05 | 0.08 |
| | | | 0.00 | | | 1" Ice | 4.03 | 2.29 | 0.11 |
| RRH2x60-700 | B | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 3.50 | 1.82 | 0.06 |
| | | | 0.00 | | | 1/2" Ice | 3.76 | 2.05 | 0.08 |
| | | | 0.00 | | | 1" Ice | 4.03 | 2.29 | 0.11 |
| RRH2x60-700 | C | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 3.50 | 1.82 | 0.06 |
| | | | 0.00 | | | 1/2" Ice | 3.76 | 2.05 | 0.08 |
| | | | 0.00 | | | 1" Ice | 4.03 | 2.29 | 0.11 |
| RRH4X45-AWS4 B66 | A | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 2.66 | 1.59 | 0.06 |
| | | | 0.00 | | | 1/2" Ice | 2.88 | 1.77 | 0.08 |
| | | | 0.00 | | | 1" Ice | 3.10 | 1.96 | 0.11 |
| RRH4X45-AWS4 B66 | B | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 2.66 | 1.59 | 0.06 |
| | | | 0.00 | | | 1/2" Ice | 2.88 | 1.77 | 0.08 |
| | | | 0.00 | | | 1" Ice | 3.10 | 1.96 | 0.11 |
| RRH4X45-AWS4 B66 | C | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 2.66 | 1.59 | 0.06 |
| | | | 0.00 | | | 1/2" Ice | 2.88 | 1.77 | 0.08 |
| | | | 0.00 | | | 1" Ice | 3.10 | 1.96 | 0.11 |
| AIRSCALE RRH 4T4R B5 160W | A | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 1.29 | 0.72 | 0.04 |
| | | | 0.00 | | | 1/2" Ice | 1.43 | 0.83 | 0.05 |
| | | | 0.00 | | | 1" Ice | 1.58 | 0.96 | 0.06 |
| AIRSCALE RRH 4T4R B5 160W | B | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 1.29 | 0.72 | 0.04 |
| | | | 0.00 | | | 1/2" Ice | 1.43 | 0.83 | 0.05 |
| | | | 0.00 | | | 1" Ice | 1.58 | 0.96 | 0.06 |
| AIRSCALE RRH 4T4R B5 160W | C | From Face | 4.00 | 0.0000 | 99.00 | No Ice | 1.29 | 0.72 | 0.04 |
| | | | 0.00 | | | 1/2" Ice | 1.43 | 0.83 | 0.05 |
| | | | 0.00 | | | 1" Ice | 1.58 | 0.96 | 0.06 |
| Platform Mount [LP 1201-1] | B | None | | 0.0000 | 99.00 | No Ice | 23.10 | 23.10 | 2.10 |
| | | | | | | 1/2" Ice | 26.80 | 26.80 | 2.50 |
| | | | | | | 1" Ice | 30.50 | 30.50 | 2.90 |
| LNX-6515DS-A1M w/ Mount Pipe | A | From Face | 4.00 | 0.0000 | 88.00 | No Ice | 11.68 | 9.84 | 0.08 |
| | | | 0.00 | | | 1/2" Ice | 12.40 | 11.37 | 0.17 |
| | | | 2.00 | | | 1" Ice | 13.14 | 12.91 | 0.27 |
| LNX-6515DS-A1M w/ Mount Pipe | B | From Face | 4.00 | 0.0000 | 88.00 | No Ice | 11.68 | 9.84 | 0.08 |
| | | | 0.00 | | | 1/2" Ice | 12.40 | 11.37 | 0.17 |
| | | | 2.00 | | | 1" Ice | 13.14 | 12.91 | 0.27 |

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| tnxTower GPD 520 South Main Street Suite 2531 Akron, Ohio 44311 Phone: (330) 572-2100 FAX: (330) 572-2101 | Job BURLINGTON-NEPAUG ROAD / BU #: 845993 | Page 6 of 8 |
| | Project 2017777.845993.02 | Date 17:38:29 07/19/17 |
| | Client Crown Castle USA, Inc. | Designed by RFaber |

| Description | Face or Leg | Offset Type | Offsets: | | Azimuth Adjustment | Placement | C _A A _A Front | C _A A _A Side | Weight |
|---------------------------------------|-------------|-------------|----------|---------|--------------------|-----------|-------------------------------------|------------------------------------|--------|
| | | | Horz | Lateral | | | | | |
| LNX-6515DS-A1M w/ Mount Pipe | C | From Face | 4.00 | 0.0000 | 88.00 | No Ice | 11.68 | 9.84 | 0.08 |
| | | | 0.00 | | | 1/2" Ice | 12.40 | 11.37 | 0.17 |
| | | | 2.00 | | | 1" Ice | 13.14 | 12.91 | 0.27 |
| ERICSSON AIR 21 B2A B4P w/ Mount Pipe | A | From Face | 4.00 | 0.0000 | 88.00 | No Ice | 6.41 | 5.72 | 0.11 |
| | | | 0.00 | | | 1/2" Ice | 6.89 | 6.57 | 0.17 |
| | | | 2.00 | | | 1" Ice | 7.35 | 7.30 | 0.24 |
| ERICSSON AIR 21 B2A B4P w/ Mount Pipe | B | From Face | 4.00 | 0.0000 | 88.00 | No Ice | 6.41 | 5.72 | 0.11 |
| | | | 0.00 | | | 1/2" Ice | 6.89 | 6.57 | 0.17 |
| | | | 2.00 | | | 1" Ice | 7.35 | 7.30 | 0.24 |
| ERICSSON AIR 21 B2A B4P w/ Mount Pipe | C | From Face | 4.00 | 0.0000 | 88.00 | No Ice | 6.41 | 5.72 | 0.11 |
| | | | 0.00 | | | 1/2" Ice | 6.89 | 6.57 | 0.17 |
| | | | 2.00 | | | 1" Ice | 7.35 | 7.30 | 0.24 |
| ERICSSON AIR 21 B4A B2P w/ Mount Pipe | A | From Face | 4.00 | 0.0000 | 88.00 | No Ice | 6.41 | 5.72 | 0.11 |
| | | | 0.00 | | | 1/2" Ice | 6.89 | 6.57 | 0.17 |
| | | | 2.00 | | | 1" Ice | 7.35 | 7.30 | 0.24 |
| ERICSSON AIR 21 B4A B2P w/ Mount Pipe | B | From Face | 4.00 | 0.0000 | 88.00 | No Ice | 6.41 | 5.72 | 0.11 |
| | | | 0.00 | | | 1/2" Ice | 6.89 | 6.57 | 0.17 |
| | | | 2.00 | | | 1" Ice | 7.35 | 7.30 | 0.24 |
| ERICSSON AIR 21 B4A B2P w/ Mount Pipe | C | From Face | 4.00 | 0.0000 | 88.00 | No Ice | 6.41 | 5.72 | 0.11 |
| | | | 0.00 | | | 1/2" Ice | 6.89 | 6.57 | 0.17 |
| | | | 2.00 | | | 1" Ice | 7.35 | 7.30 | 0.24 |
| T-Arm Mount [TA 602-3] | B | None | | 0.0000 | 88.00 | No Ice | 11.59 | 11.59 | 0.77 |
| | | | | | | 1/2" Ice | 15.44 | 15.44 | 0.99 |
| | | | | | | 1" Ice | 19.29 | 19.29 | 1.21 |

Maximum Tower Deflections - Service Wind

| Section No. | Elevation ft | Horz. Deflection in | Gov. Load Comb. | Tilt ° | Twist ° |
|-------------|-----------------|------------------------|-----------------|-----------|------------|
| L1 | 120 - 97 | 10.613 | 41 | 0.7317 | 0.0015 |
| L2 | 100.62 - 48 | 7.692 | 41 | 0.6944 | 0.0012 |
| L3 | 52.96 - 0 | 2.112 | 41 | 0.3714 | 0.0003 |

Critical Deflections and Radius of Curvature - Service Wind

| Elevation ft | Appurtenance | Gov. Load Comb. | Deflection in | Tilt ° | Twist ° | Radius of Curvature ft |
|-----------------|-------------------------------------|-----------------|------------------|-----------|------------|---------------------------|
| 119.00 | AM-X-CD-16-65-00T-RET w/ Mount Pipe | 41 | 10.460 | 0.7305 | 0.0015 | 62149 |
| 109.00 | APXVSP18-C-A20 w/ Mount Pipe | 41 | 8.937 | 0.7162 | 0.0013 | 28249 |
| 99.00 | (2) LPA-80080/4CF w/ Mount Pipe | 41 | 7.457 | 0.6885 | 0.0012 | 15139 |
| 88.00 | LNX-6515DS-A1M w/ Mount Pipe | 41 | 5.921 | 0.6343 | 0.0010 | 10784 |

| | | |
|--|---|----------------------------------|
| tnxTower GPD 520 South Main Street Suite 2531 Akron, Ohio 44311 Phone: (330) 572-2100 FAX: (330) 572-2101 | Job BURLINGTON-NEPAUG ROAD / BU #: 845993 | Page 7 of 8 |
| | Project 2017777.845993.02 | Date 17:38:29 07/19/17 |
| | Client Crown Castle USA, Inc. | Designed by RFaber |

Maximum Tower Deflections - Design Wind

| Section No. | Elevation ft | Horz. Deflection in | Gov. Load Comb. | Tilt ° | Twist ° |
|-------------|-----------------|------------------------|-----------------|-----------|------------|
| L1 | 120 - 97 | 45.820 | 6 | 3.1593 | 0.0057 |
| L2 | 100.62 - 48 | 33.218 | 6 | 2.9987 | 0.0047 |
| L3 | 52.96 - 0 | 9.122 | 6 | 1.6048 | 0.0011 |

Critical Deflections and Radius of Curvature - Design Wind

| Elevation ft | Appurtenance | Gov. Load Comb. | Deflection in | Tilt ° | Twist ° | Radius of Curvature ft |
|-----------------|-------------------------------------|-----------------|------------------|-----------|------------|---------------------------|
| 119.00 | AM-X-CD-16-65-00T-RET w/ Mount Pipe | 6 | 45.159 | 3.1542 | 0.0057 | 14555 |
| 109.00 | APXVSP18-C-A20 w/ Mount Pipe | 6 | 38.590 | 3.0925 | 0.0052 | 6615 |
| 99.00 | (2) LPA-80080/4CF w/ Mount Pipe | 6 | 32.203 | 2.9734 | 0.0046 | 3542 |
| 88.00 | LNX-6515DS-A1M w/ Mount Pipe | 6 | 25.572 | 2.7396 | 0.0037 | 2514 |

Compression Checks

Pole Design Data

| Section No. | Elevation ft | Size | L ft | L _u ft | KI/r | A in ² | P _u K | φP _n K | Ratio P _u / φP _n |
|-------------|-----------------|------------------------|---------|----------------------|------|----------------------|---------------------|----------------------|---|
| L1 | 120 - 97 (1) | TP28.93x22.69x0.1875 | 23.00 | 0.00 | 0.0 | 16.5209 | -7.91 | 1079.70 | 0.007 |
| L2 | 97 - 48 (2) | TP39.7x27.5729x0.25 | 52.62 | 0.00 | 0.0 | 30.3965 | -20.74 | 1957.24 | 0.011 |
| L3 | 48 - 0 (3) | TP51.04x38.0569x0.3125 | 52.96 | 0.00 | 0.0 | 50.3153 | -33.02 | 3154.51 | 0.010 |

Pole Bending Design Data

| Section No. | Elevation ft | Size | M _{ux} kip-ft | φM _{ux} kip-ft | Ratio M _{ux} / φM _{ux} | M _{uy} kip-ft | φM _{uy} kip-ft | Ratio M _{uy} / φM _{uy} |
|-------------|-----------------|------------------------|---------------------------|----------------------------|---|---------------------------|----------------------------|---|
| L1 | 120 - 97 (1) | TP28.93x22.69x0.1875 | 94.86 | 617.02 | 0.154 | 0.00 | 617.02 | 0.000 |
| L2 | 97 - 48 (2) | TP39.7x27.5729x0.25 | 768.65 | 1543.79 | 0.498 | 0.00 | 1543.79 | 0.000 |
| L3 | 48 - 0 (3) | TP51.04x38.0569x0.3125 | 1708.02 | 3296.10 | 0.518 | 0.00 | 3296.10 | 0.000 |

Pole Shear Design Data

| Section No. | Elevation ft | Size | Actual V _u K | φV _n K | Ratio V _u / φV _n | Actual T _u kip-ft | φT _n kip-ft | Ratio T _u / φT _n |
|-------------|-----------------|------------------------|----------------------------|----------------------|---|---------------------------------|---------------------------|---|
| L1 | 120 - 97 (1) | TP28.93x22.69x0.1875 | 6.80 | 539.85 | 0.013 | 0.00 | 1235.55 | 0.000 |
| L2 | 97 - 48 (2) | TP39.7x27.5729x0.25 | 16.25 | 978.62 | 0.017 | 0.00 | 3091.35 | 0.000 |
| L3 | 48 - 0 (3) | TP51.04x38.0569x0.3125 | 19.21 | 1577.25 | 0.012 | 0.00 | 6600.26 | 0.000 |

| | | |
|--|---|----------------------------------|
| tnxTower GPD 520 South Main Street Suite 2531 Akron, Ohio 44311 Phone: (330) 572-2100 FAX: (330) 572-2101 | Job BURLINGTON-NEPAUG ROAD / BU #: 845993 | Page 8 of 8 |
| | Project 2017777.845993.02 | Date 17:38:29 07/19/17 |
| | Client Crown Castle USA, Inc. | Designed by RFaber |

Pole Interaction Design Data

| Section No. | Elevation ft | Ratio | Ratio | Ratio | Ratio | Ratio | Comb. Stress Ratio | Allow. Stress Ratio | Criteria |
|-------------|-----------------|------------|---------------|---------------|------------|------------|-----------------------|---------------------------|----------|
| | | P_u | M_{ux} | M_{uy} | V_u | T_u | | | |
| | | ϕP_n | ϕM_{nx} | ϕM_{ny} | ϕV_n | ϕT_n | | | |
| L1 | 120 - 97 (1) | 0.007 | 0.154 | 0.000 | 0.013 | 0.000 | 0.161 ✓ | 1.000 | 4.8.2 ✓ |
| L2 | 97 - 48 (2) | 0.011 | 0.498 | 0.000 | 0.017 | 0.000 | 0.509 ✓ | 1.000 | 4.8.2 ✓ |
| L3 | 48 - 0 (3) | 0.010 | 0.518 | 0.000 | 0.012 | 0.000 | 0.529 ✓ | 1.000 | 4.8.2 ✓ |

Section Capacity Table

| Section No. | Elevation ft | Component Type | Size | Critical Element | P K | ϕP_{allow} K | % Capacity | Pass Fail |
|-------------|-----------------|-------------------|------------------------|---------------------|--------|-----------------------|---------------|--------------|
| L1 | 120 - 97 | Pole | TP28.93x22.69x0.1875 | 1 | -7.91 | 1079.70 | 16.1 | Pass |
| L2 | 97 - 48 | Pole | TP39.7x27.5729x0.25 | 2 | -20.74 | 1957.24 | 50.9 | Pass |
| L3 | 48 - 0 | Pole | TP51.04x38.0569x0.3125 | 3 | -33.02 | 3154.51 | 52.9 | Pass |
| Summary | | | | | | | ELC: | LC7 |
| Pole (L3) | | | | | | | 52.9 | Pass |
| Rating = | | | | | | | 52.9 | Pass |

APPENDIX B
BASE LEVEL DRAWING

APPENDIX C
ADDITIONAL CALCULATIONS

Stiffened or Unstiffened, UngROUTED, Circular Base Plate - Any Rod Material

TIA Rev G Assumption: Clear space between bottom of leveling nut and top of concrete **not** exceeding (1)*(Rod Diameter)

| Site Data | |
|--------------------|---------------------|
| BU#: | 845993 |
| Site Name: | BURLINGTON-NEPAUG R |
| App #: | 377565 Rev. 5 |
| Pole Manufacturer: | Other |

| Anchor Rod Data | | |
|-----------------|--------|-----|
| Qty: | 12 | |
| Diam: | 2.25 | in |
| Rod Material: | A615-J | |
| Strength (Fu): | 100 | ksi |
| Yield (Fy): | 75 | ksi |
| Bolt Circle: | 60 | in |

| Plate Data | | |
|-------------------|-------|-----|
| Diam: | 74 | in |
| Thick: | 2.25 | in |
| Grade: | 60 | ksi |
| Single-Rod B-eff: | 13.50 | in |

| Stiffener Data (Welding at both sides) | | |
|--|---|---------------|
| Config: | 0 | * |
| Weld Type: | | |
| Groove Depth: | | in ** |
| Groove Angle: | | degrees |
| Fillet H. Weld: | | <-- Disregard |
| Fillet V. Weld: | | in |
| Width: | | in |
| Height: | | in |
| Thick: | | in |
| Notch: | | in |
| Grade: | | ksi |
| Weld str.: | | ksi |

| Pole Data | | |
|--------------------|--------|--------------|
| Diam: | 51.04 | in |
| Thick: | 0.3125 | in |
| Grade: | 65 | ksi |
| # of Sides: | 18 | "0" IF Round |
| Fu | 80 | ksi |
| Reinf. Fillet Weld | 0 | "0" if None |

| Reactions | | |
|---------------|---------|------------------|
| Mu: | 1708.02 | ft-kips |
| Axial, Pu: | 33.02 | kips |
| Shear, Vu: | 19.21 | kips |
| Eta Factor, η | 0.5 | TIA G (Fig. 4-4) |

If No stiffeners, Criteria: AISC LRFD <-Only Applicable to Unstiffened Cases

Anchor Rod Results
 Max Rod (Cu+ Vu/r): 119.8 Kips
 Allowable Axial, $\Phi \cdot Fu \cdot Anet$: 260.0 Kips
 Anchor Rod Stress Ratio: 46.1% **Pass**

| |
|-----------------|
| Non-Rigid |
| AISC LRFD |
| $\phi \cdot Tn$ |

Base Plate Results
 Base Plate Stress: 19.5 ksi
 Allowable Plate Stress: 54.0 ksi
 Base Plate Stress Ratio: 36.2% **Pass**

Flexural Check
 Y.L. Length: 31.54

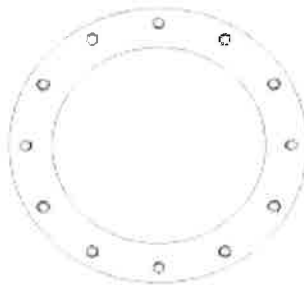
| |
|-----------------|
| Non-Rigid |
| AISC LRFD |
| $\phi \cdot Fy$ |
| Y.L. Length: |
| 31.54 |

n/a

Stiffener Results
 Horizontal Weld : n/a
 Vertical Weld: n/a
 Plate Flex+Shear, $fb/Fb+(fv/Fv)^2$: n/a
 Plate Tension+Shear, $ft/Ft+(fv/Fv)^2$: n/a
 Plate Comp. (AISC Bracket): n/a

Pole Results

Pole Punching Shear Check: n/a



* 0 = none, 1 = every bolt, 2 = every 2 bolts, 3 = 2 per bolt

** Note: for complete joint penetration groove welds the groove depth must be exactly 1/2 the stiffener thickness for calculation purposes



Mat Foundation Analysis
BURLINGTON-NEPAUG ROAD / BU #: 845993
2017777.845993.02

| General Info | |
|-------------------------|--------------|
| Foundation Criteria | Crown Castle |
| TIA Code | TIA-222-G |
| Soil Code | AASHTO 2012 |
| Concrete Code | ACI 318-11 |
| Seismic Design Category | B |
| Tower Height | 120 ft |
| Bearing On | Soil |
| Foundation Type | Monopole Pad |
| Pier Type | Square |
| Reinforcing Known | Yes |

| Tower Reactions | |
|-----------------|--------------|
| Moment, M | 1708.02 k-ft |
| Axial, P | 33.02 k |
| Shear, V | 19.21 k |

| Pad & Pier Geometry | |
|------------------------|-----------|
| Pier Width, ϕ | 7 ft |
| Pad Length, L [y] | 25 ft |
| Pad Width, W [x] | 25 ft |
| Pad Thickness, t | 3 ft |
| Depth, D | 5 ft |
| Height Above Grade, HG | 1 ft |
| Tower Centroid, X | 12.5 ft |
| Tower Centroid, Y | 12.5 ft |
| Tower Eccentricity | 0.0000 ft |

| Pad & Pier Reinforcing | |
|------------------------------|--------|
| Rebar Fy | 60 ksi |
| Concrete F'c | 4 ksi |
| Pier Reinforcing Clear Cover | 3 in |
| Shear Rebar Type | T10 |
| Shear Rebar Size | # 4 |
| Pad Reinforcing Clear Cover | 3 in |
| Reinforced Top & Bottom? | Yes |
| Pad Reinforcing Size | # 8 |
| Pad Quantity Per Layer | 22 |
| Pier Rebar Size | # 8 |
| Pier Quantity of Rebar | 30 |

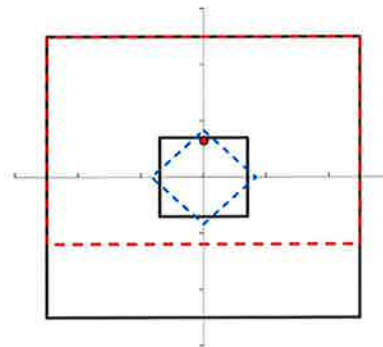
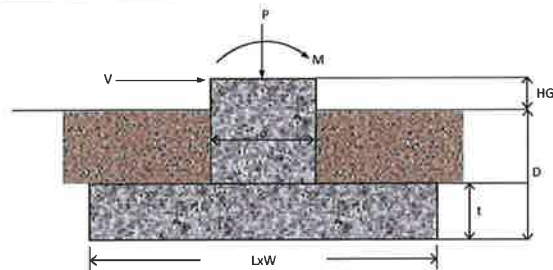
| Soil Properties | |
|---------------------------------------|----------|
| Soil Type | Granular |
| Soil Unit Weight | 120 pcf |
| Angle of Friction, ϕ | 30 |
| Base Friction Coeff. Provided in Geo? | Yes |
| Base Friction Coefficient, μ | 0.45 |
| Bearing Type | Net |
| Ultimate Bearing | 12 ksf |
| Water Table Depth | 4 ft |
| Frost Depth | 3.33 ft |

| Bearing Summary | | | | | |
|-----------------------------|---------------|-----------------------|-------------|--------------|-----------|
| Case | Demand/Limits | Capacity/Availability | Check | Eccentricity | Load Case |
| Q _x max | 1.52 ksf | 9.40 ksf | OK, <= 110% | L/7.6 | 1.2D+1.6W |
| Q _y max | 1.52 ksf | 9.40 ksf | OK, <= 110% | W/7.6 | 1.2D+1.6W |
| Q _{max} @ 45° | 1.22 ksf | 9.40 ksf | OK, <= 110% | W/11.3 | 1.2D+1.6W |
| Controlling Capacity | | 16.2% | Pass | | |

| Overturning Summary | | | | | |
|-----------------------------|---------------|-----------------------|-------------|-----------|--|
| Case | Demand/Limits | Capacity/Availability | Check | Load Case | |
| O _{vtx} | 1679.0 k-ft | 4838.1 k-ft | 34.7% OK | 0.9D+1.6W | |
| O _{vty} | 1679.0 k-ft | 4838.1 k-ft | 34.7% OK | 0.9D+1.6W | |
| O _{vby} | 1138.8 k-ft | 4838.1 k-ft | 23.5% OK | 0.9D+1.6W | |
| Controlling Capacity | | 34.7% | Pass | | |

| Sliding Summary | | | | | |
|-----------------------------|---------------|-----------------------|-------------|-----------|--|
| Case | Demand/Limits | Capacity/Availability | Check | Load Case | |
| Sliding _x | 19.2 k | 153.3 k | 12.5% OK | 0.9D+1.6W | |
| Sliding _y | 19.2 k | 153.3 k | 12.5% OK | 0.9D+1.6W | |
| Controlling Capacity | | 12.5% | Pass | | |

| Reinforcement Summary | | | | | |
|-----------------------------|---------------|-----------------------|-------------|-----------|--|
| Component | Demand/Limits | Capacity/Availability | Check | Load Case | |
| Pad Flexural Bending | 24.3 k-ft | 96.9 k-ft | 25.1% OK | 1.2D+1.6W | |
| One-Way Shear in Pad | 94.0 k | 896.5 k | 10.5% OK | 1.2D+1.6W | |
| Two-Way Shear in Pad | 261.5 k | 2761.2 k | 9.5% OK | 0.9D+1.6W | |
| Compression on Pier | 59.5 k | 28788.5 k | 0.2% OK | 1.2D+1.6W | |
| Moment on Pier | 1765.7 k-ft | 3983.5 k-ft | 44.3% OK | 1.2D+1.6W | |
| As Min Pad Met? | 1.39 sq. in. | 0.25 sq. in. | Yes | | |
| As Min Pier Met? | 23.70 sq. in. | 35.28 sq. in. | No | | |
| Controlling Capacity | | 44.3% | Pass | | |



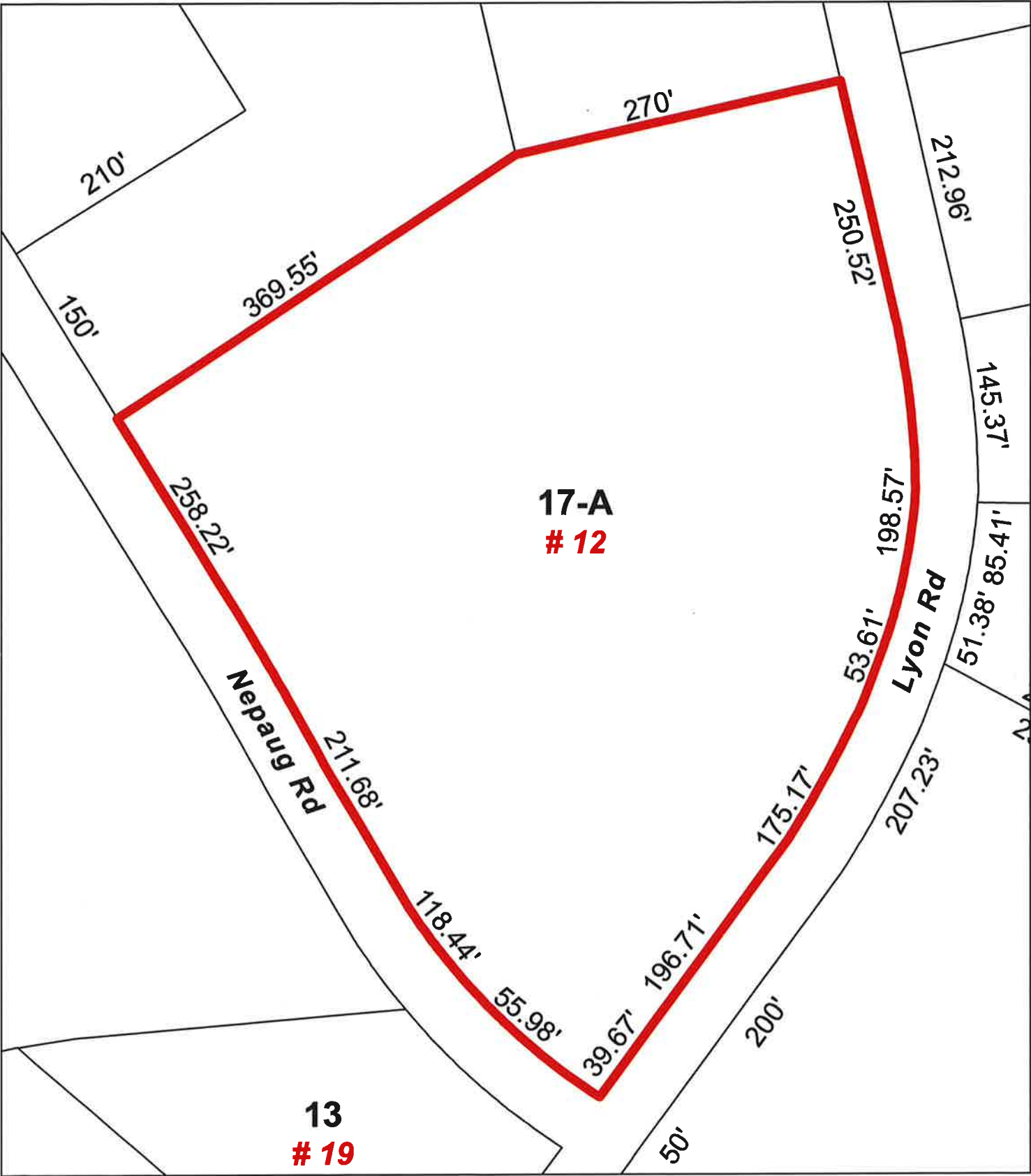
ATTACHMENT 4



Town of Burlington, Connecticut. Assessment Parcel Map

Map-Block-Lot 5-11-17-A

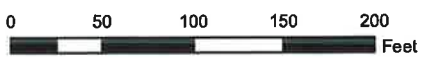
Address: 12 NEPAUG RD



17-A
12

13
19

1 inch = 100 feet



Disclaimer: This map is for informational purposes only. All information is subject to verification by any user. The Town of Burlington and its mapping contractors assume no legal responsibility for the information contained herein.

Map Produced: July 2017



Property Information

| | |
|-------------------|--|
| Property Location | 12 NEPAUG RD |
| Owner | WEAVER AUDREY S TR AND HERBERT F EST OF |
| Co-Owner | CO MELINDA BELCHER |
| Mailing Address | 35 BEAR RUN WOODBURY CT 06798 |
| Land Use | 3900 Com Vacant |
| Land Class | C |
| Zoning Code | R44 |
| Census Tract | 4101 |

| | |
|------------------|-------------|
| Neighborhood | 3000 |
| Acreage | 7.17 |
| Utilities | Well,Septic |
| Lot Setting/Desc | Urban Level |
| Additional Info | |

Photo



Sketch

Primary Construction Details

| | |
|--------------------|--|
| Year Built | |
| Stories | |
| Building Style | |
| Building Use | |
| Building Condition | |
| Floors | |
| Total Rooms | |

| | |
|----------------|--|
| Bedrooms | |
| Full Bathrooms | |
| Half Bathrooms | |
| Bath Style | |
| Kitchen Style | |
| Roof Style | |
| Roof Cover | |

| | |
|-------------------|--|
| Exterior Walls | |
| Interior Walls | |
| Heating Type | |
| Heating Fuel | |
| AC Type | |
| Gross Bldg Area | |
| Total Living Area | |

ATTACHMENT 5



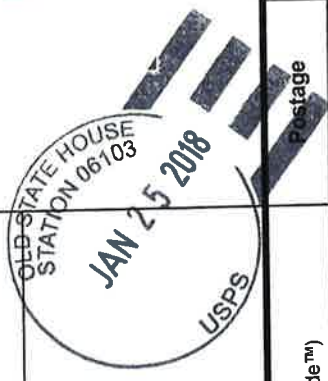
Certificate of Mailing — Firm

Name and Address of Sender

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103

Affix Stamp Here
Postmark with Date of Receipt.

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01/25/2018
US POSTAGE \$002.48
ZIP 06103
041112006389



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3

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USPS® Tracking Number
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1. Theodore Shafer, First Selectman
Town of Burlington
200 Spielman Highway
Burlington, CT 06013

2. Abby Conroy, Zoning Enforcement Officer
Town of Burlington
200 Spielman Highway
Burlington, CT 06013

3. Audrey and Herbert Weaver Estate
c/o Melinda Belcher
35 Bear Run
Woodbury, CT 06798-3448

4.

5.

6.

Parcel Airlift

Special Handling

Fee

Postage