

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:

| | | |
|-------------------------------------|---|-----------------------|
| A PETITION OF CELLCO PARTNERSHIP | : | SUB-PETITION NO. 1133 |
| D/B/A VERIZON WIRELESS FOR A | : | 1 WESTERBERG DRIVE |
| DECLARATORY RULING FOR APPROVAL | : | FARMINGTON, CT |
| OF AN ELIGIBLE FACILITY REQUEST FOR | : | |
| MODIFICATIONS TO AN EXISTING | : | |
| TELECOMMUNICATIONS TOWER AT 1 | : | |
| WESTERBERG DRIVE, FARMINGTON, | : | |
| CONNECTICUT | : | MARCH 19, 2015 |

SUB-PETITION FOR DECLARATORY RULING:
ELIGIBLE FACILITIES REQUEST FOR MODIFICATIONS
THAT WILL NOT SUBSTANTIALLY CHANGE THE
PHYSICAL DIMENSIONS OF AN EXISTING TOWER

I. Introduction

Pursuant to Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, codified at 47 U.S.C. § 1455(a) (“Section 6409(a)”) and the October 21, 2014 Report and Order (FCC-14-533) issued by the Federal Communications Commission (“FCC”) (the “FCC Order”), Cellco Partnership d/b/a Verizon Wireless (“Cellco”) hereby petitions the Connecticut Siting Council (the “Council”) for a declaratory ruling (“Sub-Petition”) that the proposed modifications to the existing SBA telecommunications facility at 1 Westerberg Drive in Farmington, Connecticut constitutes an Eligible Facilities Request (“EFR”) under the FCC Order. Cellco has designated this cell site as its Farmington 2 Facility.

II. Factual Background

SBA maintains an existing 155-foot flagpole tower at the Town of Farmington Waste Water Treatment Facility at 1 Westerberg Drive in Farmington (the “Property”). The Council approved this tower in Docket No. 282. The Property is surrounded by commercial, agricultural

and open space uses. See Attachment 1 – Site Vicinity and Site Schematic Maps (Aerial Photograph). The existing tower is shared by AT&T Wireless, Sprint and T-Mobile. Equipment associated with the existing antennas is located on the ground near the base of the tower inside a fenced compound within a 100’ x 100’ leased area.

Cellco is licensed to provide wireless telecommunications services in the 850 MHz, 1900 MHz, 700 MHz and 2100 MHz frequency ranges in Farmington and throughout the State of Connecticut and intends to deploy its 700 MHz and 2100 MHz frequencies at the Farmington 2 Facility.

III. Proposed Farmington 2 Facility Modifications

At the Farmington 2 Facility, Cellco will install a total of three (3) antennas, inside the flagpole tower, at a height of 120 feet above ground level (“AGL”). Cellco will install its equipment inside an existing 12’ x 20’ shelter, recently abandoned by Nextel Communications, on a steel platform in the southeasterly corner of the fenced compound.¹ To accommodate its back-up power needs at this facility, Cellco plans to extend the existing steel platform and install a 35 kW propane-fueled generator adjacent to its shelter. Cellco will also install a 1,000 gallon propane tank at grade, to the north of the AT&T shelter. Power and telephone service will extend from the existing utility service at the tower site. Project Plans for the Farmington 2 Facility are included in Attachment 2. Specifications for Cellco’s antennas and back-up generator along with a Structural Analysis Report, confirming that the tower can accommodate Cellco’s proposed modifications are included in Attachment 3.

¹ All equipment associated with this wireless facility is elevated above the base flood elevation at the site.

IV. Discussion

A. The Proposed Modification Will Not Cause a Substantial Change to the Physical Dimensions of the Existing Base Station

Section 6409(a) provides, in relevant part, that “a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.” Pursuant to the FCC Order, the proposed modification does not substantially change the physical dimensions of the base station if the following criteria are satisfied.

1. *The proposed modified facility will not increase the height of the base station by more than ten (10) percent or ten (10) feet, whichever is greater.* Cellco proposes to install its antennas at the 120-foot level on the existing 155-foot flagpole tower and will not increase the height of the tower.
2. *The proposed facility will not protrude from the edge of the structure more than six (6) feet.* The proposed antennas will be installed inside the existing flagpole tower and will not protrude at all from the edge of the structure in any fashion.
3. *The proposed facility does not involve installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets.* Cellco intends to utilize Nextel’s abandoned 12’ x 20’ shelter to house its radio equipment. Cellco will also extend the steel mounting platform to accommodate a propane-fueled back-up generator. A 1,000 gallon propane tank will also be installed at grade in the northeast portion of the leased area.
4. *The proposed facility does not entail any excavation or deployment outside the current site of the base station.* All improvements developed as a part of this proposal will occur within the limits of the existing leased area.

5. *The proposed facility does not defeat the existing concealment elements of the base station.* Cellco's antennas will be concealed inside the flagpole tower.

6. *The proposed facility complies with conditions associated with the prior approval of construction or modification of the base station.* Cellco's shared use of the existing facility is consistent with all conditions in the Council's Decision and Order in Docket No. 282.

B. FCC Compliance

Radio frequency ("RF") emissions from Cellco's proposed installation will be far below the standards adopted by the FCC. Included in Attachment 4 is a worst-case cumulative RF emissions calculation for all existing and Cellco's proposed antennas.

C. Notice to the Town, Property Owner and Abutting Landowners

On March 19, 2015, a copy of this Sub-Petition was sent to Farmington's Town Manager, Kathleen Eagen. The Town of Farmington owns the Property. *See Attachment 5.* A copy of this Sub-Petition was also sent to each owner of land that abuts the Property. A sample abutter's cover letter and the list of those abutting landowners who were sent a copy of the Sub-Petition is included in Attachment 6.

V. Conclusion

Based on the information provided above, Cellco respectfully submits that the proposed modification of the existing base station at the Property constitutes an "eligible facilities request" under Section 6409(a) and the FCC Order.

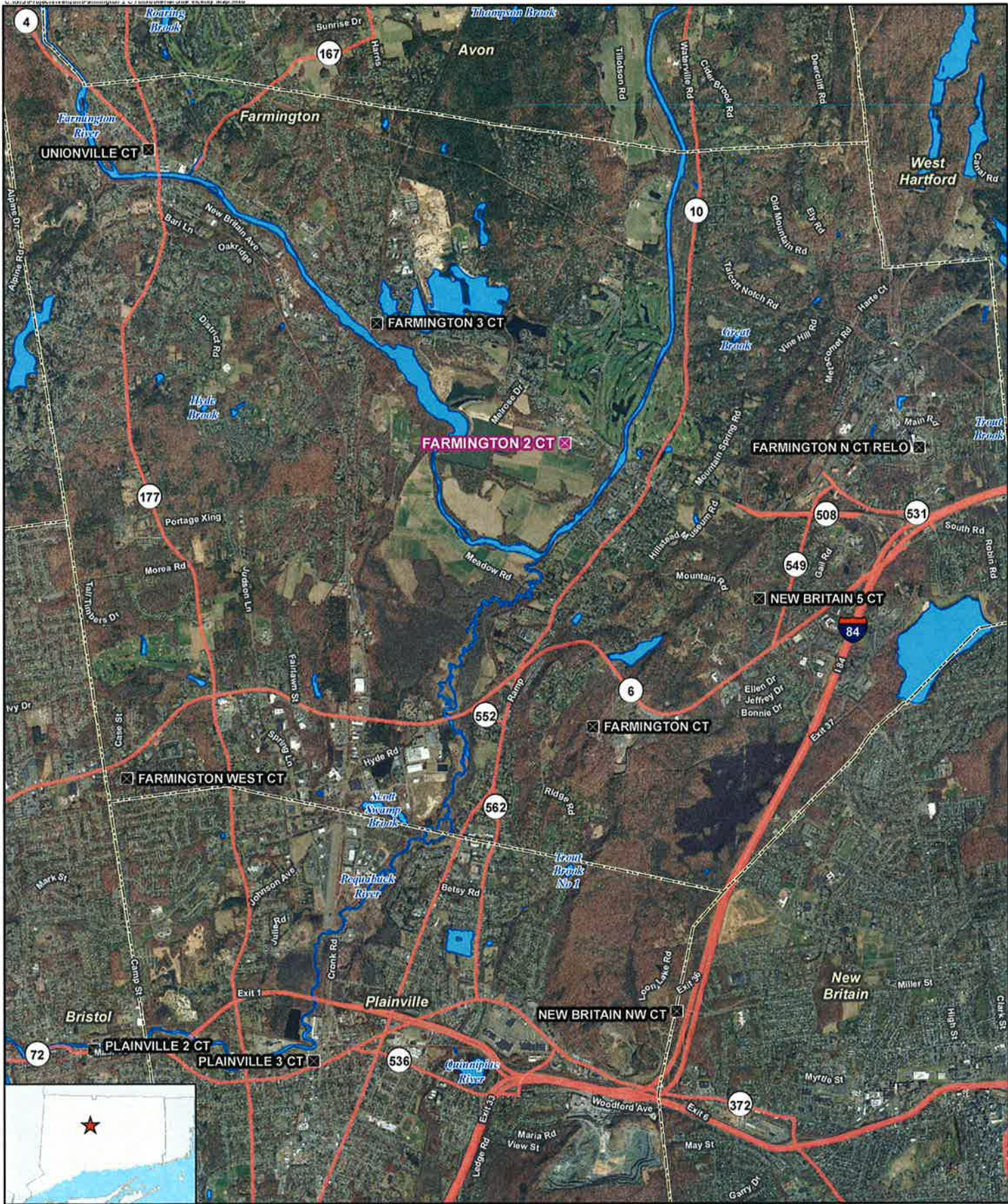
Respectfully submitted,

CELLCO PARTNERSHIP d/b/a VERIZON
WIRELESS

By  _____

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597
(860) 275-8200
Its Attorneys

ATTACHMENT 1



- Legend**
- ✘ Proposed Verizon Wireless Facility
 - Surrounding Verizon Wireless Facilities
 - ▭ Municipal Boundary
 - Waterbody

Site Vicinity Map

Proposed Wireless Telecommunications Facility
 Farmington 2 CT
 1 Westerberg Drive
 Farmington, Connecticut

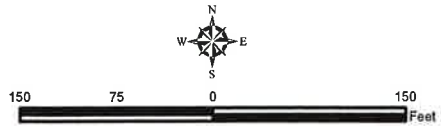
Base Map Source: 2012 Aerial Photograph (CTECO)
 Map Scale: 1 inch = 4,500 feet
 Map Date: March 2015





- Legend**
- Existing +/-155' Flagpole Tower
 - Proposed Verizon Equipment Layout
 - Owner's 50'x50' Fenced Compound
 - Owner's 100'x100' Lease Area
 - Subject Property
 - Approximate Parcel Boundary (CTDEEP GIS)

Map Notes:
 Base Map Source: 2012 Aerial Photograph (CT ECO)
 Map Scale: 1 inch = 150 feet
 Map Date: March 2015



Aerial Photograph
 Proposed Wireless Telecommunications Facility
 Farmington 2 CT
 1 Westerberg Drive
 Farmington, Connecticut



ATTACHMENT 2

Cellco Partnership

d.b.a. **verizon** wireless

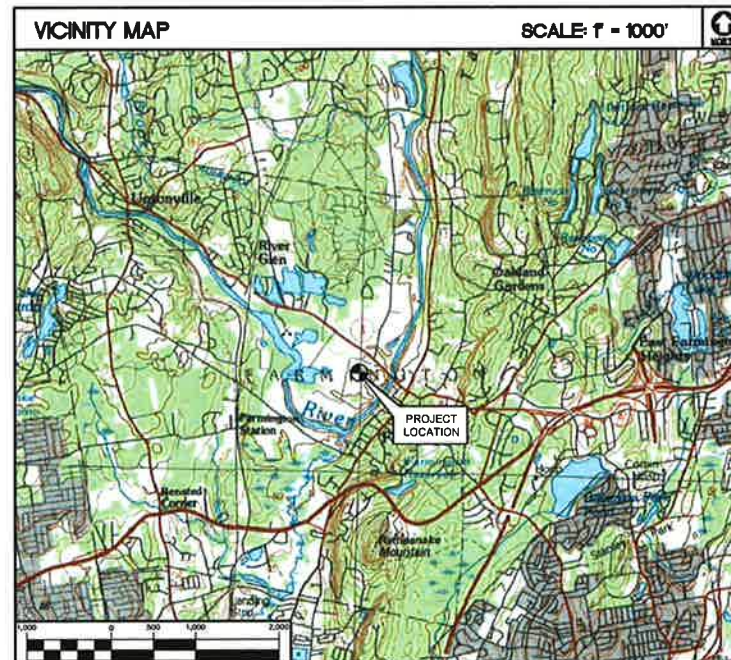
WIRELESS COMMUNICATIONS FACILITY

FARMINGTON 2 CT
1 WESTERBERG DRIVE
FARMINGTON, CT 06032

| SITE DIRECTIONS | | |
|--|---------|--|
| FROM | | TO |
| 99 EAST RIVER DRIVE EAST HARTFORD, CONNECTICUT | | 1 WESTERBERG DRIVE FARMINGTON, CT 06032 |
| 1. Head northeast on E River Dr toward Darlin St. | 0.3 mi | |
| 2. Turn left to stay on E River Dr | 0.8 mi | |
| 3. Take the first left onto CT Blvd/US-44 W | 0.1 mi | |
| 4. Merge onto I-84/US-6 W via the ramp on the left toward Hartford | 8.4 mi | |
| 5. Merge onto CT-50B/Farmington Ave via exit 39 toward CT-4/Farmington | 1.1 mi | |
| 6. Stay straight to go onto CT-4/Farmington | 1.4 mi | |
| 7. Turn left onto Round Hill Road | 0.08 mi | |
| 8. Take the first left onto Westerberg Drive | 0.08 mi | |

| GENERAL NOTES |
|--|
| 1. PROPOSED ANTENNA LOCATIONS AND HEIGHTS PROVIDED BY CELCO PARTNERSHIP. |

| PROJECT SCOPE |
|---|
| 1. THE PROPOSED SCOPE OF WORK GENERALLY INCLUDES THE ACQUISITION OF THE EXISTING 12' x 20' NEXTEL EQUIPMENT SHELTER BY CELCO PARTNERSHIP. THE EXISTING NEXTEL PLATFORM TO BE EXTENDED TO ACCOMMODATE CELCO PARTNERSHIP'S PROPOSED EMERGENCY BACKUP POWER GENERATOR. |
| 2. A TOTAL OF THREE (3) ANTENNAS ARE PROPOSED TO BE MOUNTED WITHIN EXISTING RF TRANSPARENT FLAGPOLE TOWER WITH AN ANTENNA CENTERLINE ELEVATION AT ±120' A.G.L. |
| 3. CELCO PARTNERSHIP TO ASSUME OWNERSHIP OF EXISTING UTILITY CONDUITS PRESENTLY ROUTED TO EXISTING ABANDONED NEXTEL SHELTER. |
| 4. THERE WILL NOT BE ANY LIGHTING UNLESS REQUIRED BY THE FCC OR THE FAA. |
| 5. THERE WILL NOT BE ANY SIGNS OR ADVERTISING ON THE ANTENNAS OR EQUIPMENT. |

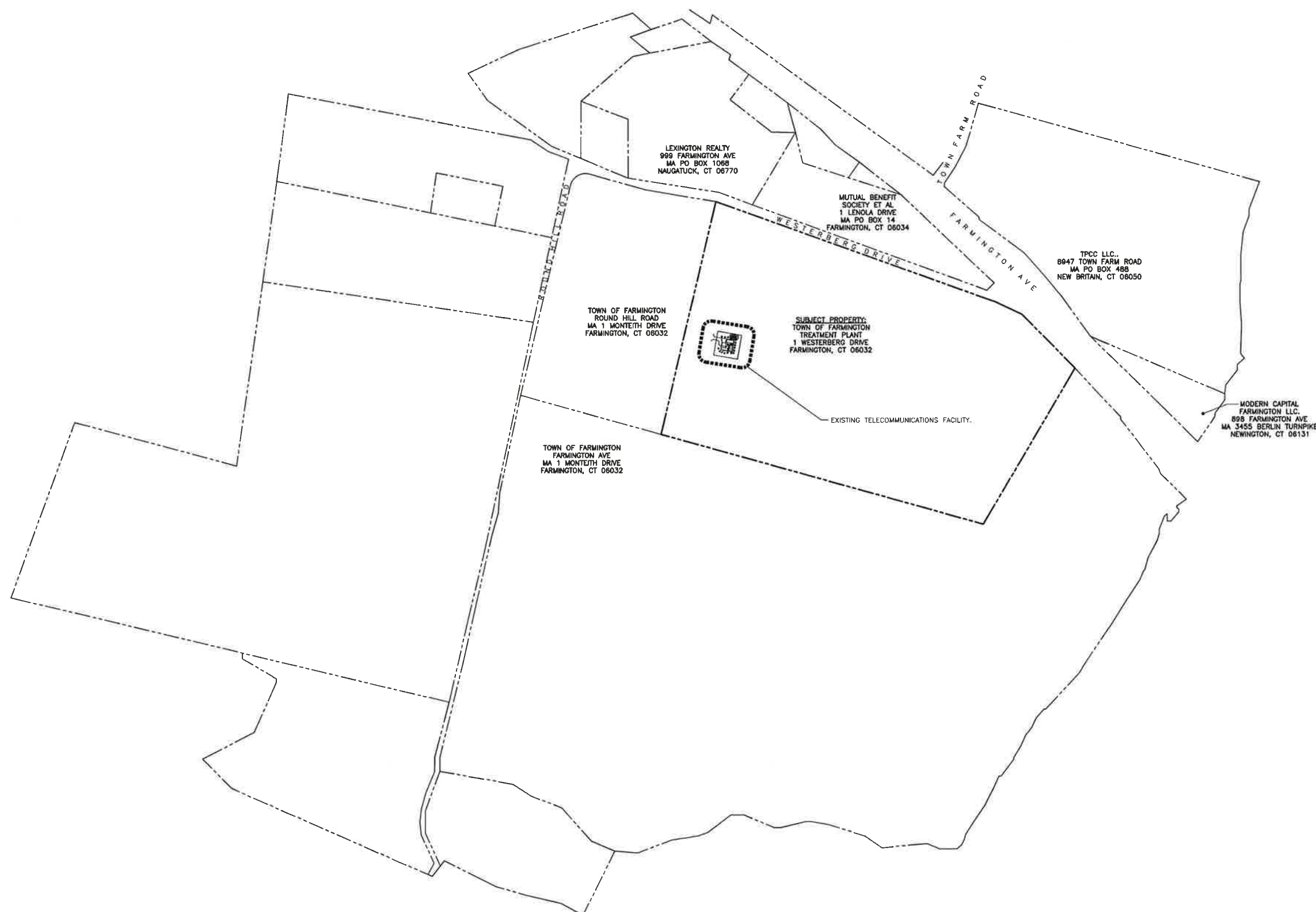


| PROJECT SUMMARY | |
|-----------------------------------|--|
| SITE NAME: | FARMINGTON 2 CT |
| SITE ADDRESS: | 1 WESTERBERG DRIVE FARMINGTON, CT 06032 |
| PROPERTY OWNER: | 109 FEDERAL ROAD LLC 2 STONY HILL ROAD SUITE 201 BETHEL, CT 06801 |
| APPLICANT: | CELCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108 |
| VERIZON SITE ACQUISITION CONTACT: | STEVE SCHADLER CELCO PARTNERSHIP (508) 887-0357 |
| LEGAL/REGULATORY COUNSEL: | KENNETH C. BALDWIN, ESQ. ROBINSON & COLE (800) 275-8345 |
| TOWER COORDINATES: | LATITUDE: 41°-43'-49.77" N LONGITUDE: 72°-50'-7.75" W GROUND ELEVATION: ±183 A.M.S.L. |
| | COORDINATES AND GROUND ELEVATION REFERENCED FROM CSC WEB LOG |

| SHEET INDEX | | |
|-------------|-------------------------------------|----------|
| SHT. NO. | DESCRIPTION | REV. NO. |
| T-1 | TITLE SHEET | 2 |
| C-0 | ABUTTERS MAP | 2 |
| C-1 | PLAN, ELEVATION AND ANTENNA CONFIG. | 2 |

| | |
|---|-----------|
| | |
| | |
| 2031 488-0590 (203) 488-6597 Fax 632 North Branford Road Branford, CT 06405 www.CentekEng.com | |
| Cellco Partnership d/b/a Verizon Wireless FARMINGTON 2 CT 1 WESTERBERG DRIVE FARMINGTON, CT 06032 | |
| DATE: | 03/09/15 |
| SCALE: | AS NOTED |
| JOB NO. | 14182.000 |
| TITLE SHEET | |
| T-1 | |
| Sheet No. 1 of 3 | |

| REV. | DATE | BY | CHKD BY | DESCRIPTION |
|------|----------|-----|---------|-------------------------------------|
| 2 | 03/18/15 | KAF | | ISSUED FOR CSC - ADDED ABUTTERS MAP |
| 1 | 03/12/15 | KAF | | ISSUED FOR CSC |
| 0 | 03/09/15 | KAF | | ISSUED FOR CSC-CLIENT REVIEW |



LEXINGTON REALTY
999 FARMINGTON AVE
MA PO BOX 1068
NAUGATUCK, CT 06770

MUTUAL BENEFIT
SOCIETY ET AL
1 LENOLA DRIVE
MA PO BOX 14
FARMINGTON, CT 06034

TPCC LLC.
6847 TOWN FARM ROAD
MA PO BOX 488
NEW BRITAIN, CT 06050

TOWN OF FARMINGTON
ROUND HILL ROAD
MA 1 MONTEITH DRIVE
FARMINGTON, CT 06032

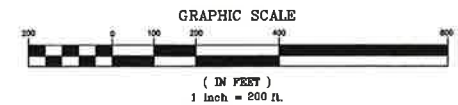
SUBJECT PROPERTY:
TOWN OF FARMINGTON
TREATMENT PLANT
1 WESTERBERG DRIVE
FARMINGTON, CT 06032

MODERN CAPITAL
FARMINGTON LLC.
899 FARMINGTON AVE.
MA 3455 BERLIN TURNPIKE
NEWINGTON, CT 06131

TOWN OF FARMINGTON
FARMINGTON AVE
MA 1 MONTEITH DRIVE
FARMINGTON, CT 06032

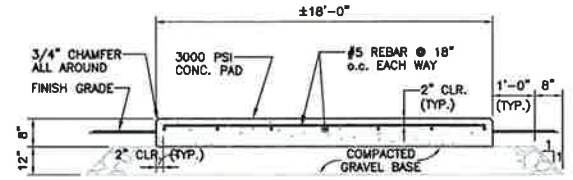
EXISTING TELECOMMUNICATIONS FACILITY.

1 ABUTTERS MAP
C-0 SCALE: 1" = 200'



| | |
|--|-----------|
| <p>PROFESSIONAL ENGINEER SEAL</p> | |
| <p>Cellco Partnership d.b.a. Verizon Wireless</p> | |
| <p>CENITEK engineering Contractors & Engineers 203 488-0590 203 488-6597 Fax 65-2 North Branford Road Branford, CT 06405 www.CenitekEng.com</p> | |
| <p>Cellco Partnership d/b/a Verizon Wireless WIRELESS COMMUNICATIONS FACILITY FARMINGTON 2 CT 1 WESTERBERG DRIVE FARMINGTON, CT 06032</p> | |
| DATE: | 03/09/15 |
| SCALE: | AS NOTED |
| JOB NO. | 14182.000 |
| <p>PLAN ELEVATION AND ANTENNA CONFIG.</p> | |
| <p>C-1</p> | |
| <p>Sheet No. 2 of 3</p> | |

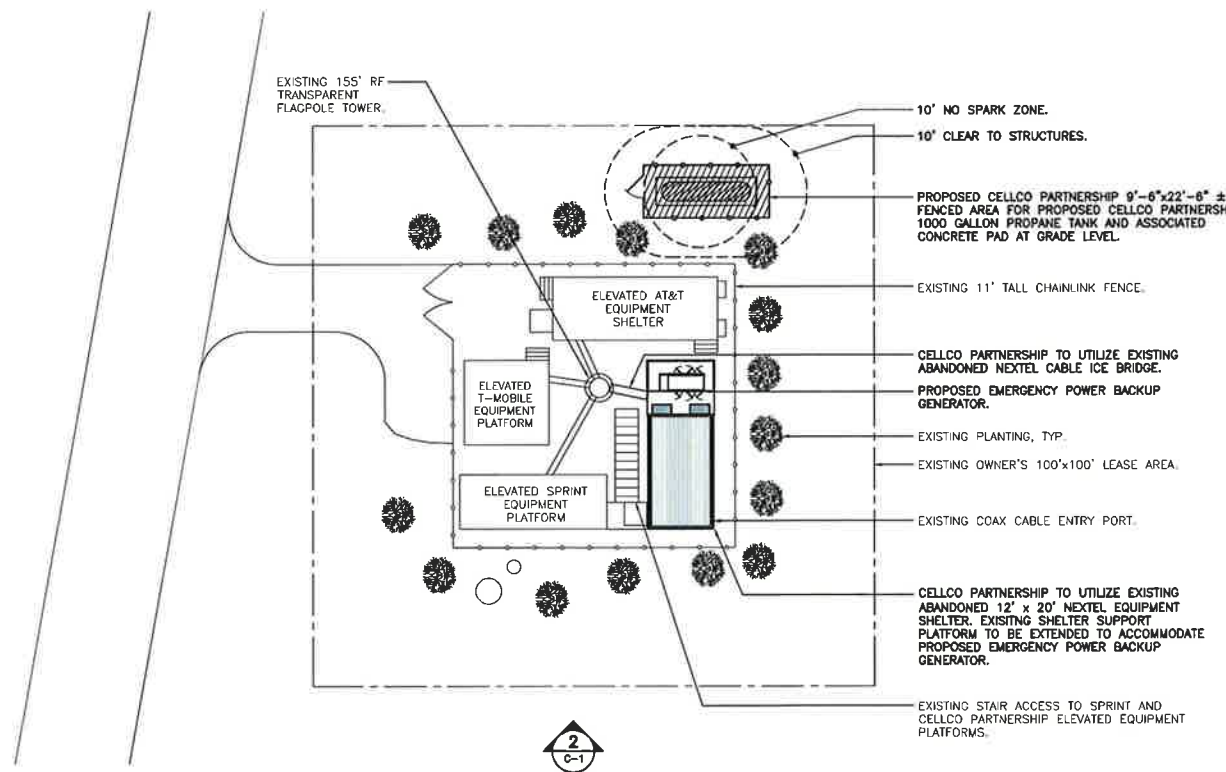
| REV. | DATE | BY | DESCRIPTION |
|------|----------|-----|-------------------------------------|
| 2 | 03/16/15 | KMF | ISSUED FOR CSC - ADDED ABUTTERS MAP |
| 1 | 03/12/15 | KMF | ISSUED FOR CSC |
| 0 | 03/09/15 | KMF | ISSUED FOR CSC-CLIENT REVIEW |



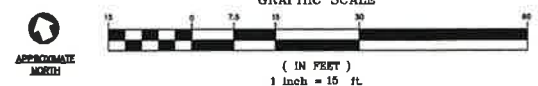
4 PROPANE TANK PAD DETAIL
C-1 NOT TO SCALE



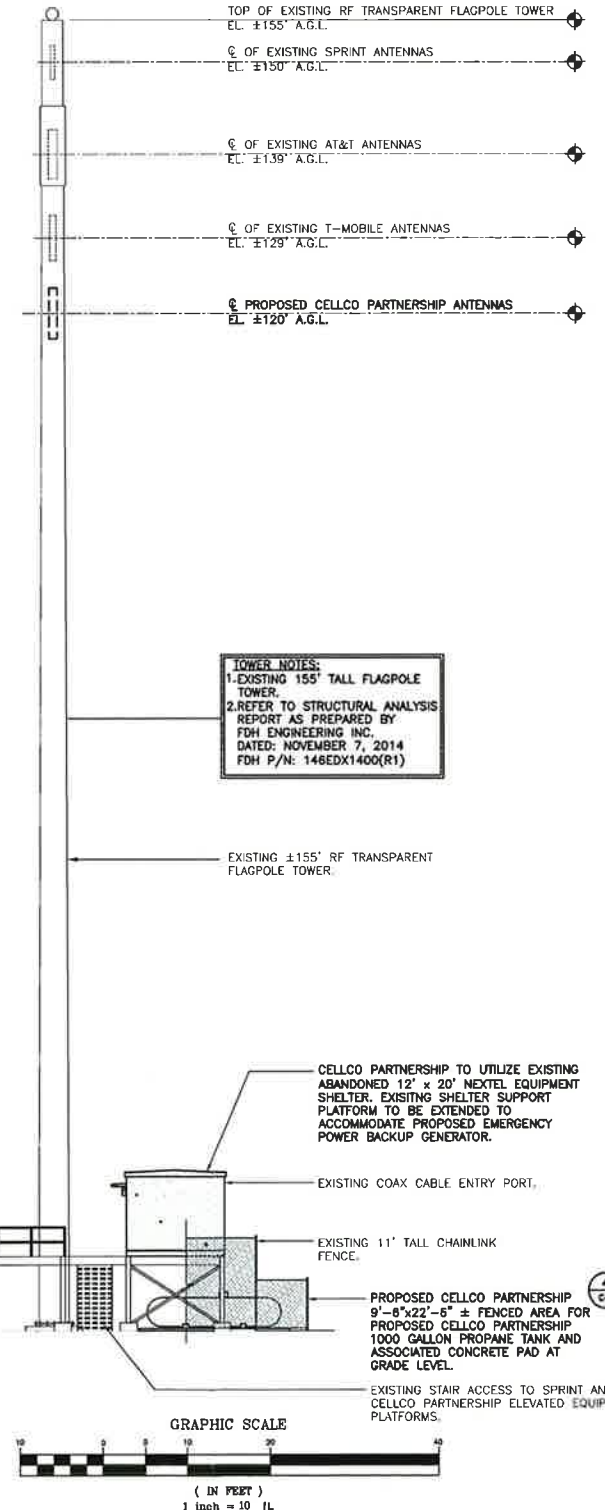
3 TYP. ANTENNA MOUNTING CONFIGURATION
C-1 NOT TO SCALE



1 PARTIAL SITE PLAN
C-1 SCALE: 1" = 15'



2 TOWER ELEVATION
C-1 SCALE: 1" = 10'



PROFESSIONAL ENGINEER SEAL

Cellco Partnership
d.b.a. Verizon Wireless

CENITEK engineering
Central or Satellite

(203) 488-0590
(203) 488-6597 Fax
63-2 North Branford Road
Branford, CT 06405
www.CenitekEng.com

Cellco Partnership d/b/a Verizon Wireless
FARMINGTON 2 CT
1 WEBSTERBERG DRIVE
FARMINGTON, CT 06032

DATE: 03/09/15
SCALE: AS NOTED
JOB NO. 14182.000

PLAN
ELEVATION AND
ANTENNA CONFIG.

C-1

Sheet No. 3 of 3

| REV. | DATE | DRAWN BY | CHECK BY | DESCRIPTION |
|------|----------|----------|----------|-------------------------------------|
| 2 | 03/18/15 | KAW | DMD | ISSUED FOR CSC - ADDED ABUTTERS MAP |
| 1 | 03/12/15 | KAW | DMD | ISSUED FOR CSC |
| 0 | 03/09/15 | KAW | DMD | ISSUED FOR CSC-CLIENT REVIEW |

ATTACHMENT 3

Product Specifications



SBNHH-1D65B

Andrew® Tri-band Antenna, 698–896 and 2 x 1710–2360 MHz, 65° horizontal beamwidth, internal RET. Both high bands share the same electrical tilt.

POWERED BY



Electrical Specifications

| Frequency Band, MHz | 698–806 | 806–896 | 1710–1880 | 1850–1990 | 1920–2180 | 2300–2360 |
|--------------------------------------|------------|------------|------------|------------|------------|------------|
| Gain, dBi | 14.9 | 14.7 | 17.7 | 18.2 | 18.6 | 18.6 |
| Beamwidth, Horizontal, degrees | 68 | 66 | 69 | 66 | 63 | 58 |
| Beamwidth, Vertical, degrees | 12.1 | 10.7 | 5.6 | 5.2 | 5.0 | 4.5 |
| Beam Tilt, degrees | 0–14 | 0–14 | 0–7 | 0–7 | 0–7 | 0–7 |
| USLS, dB | 14 | 13 | 15 | 15 | 15 | 13 |
| Front-to-Back Ratio at 180°, dB | 27 | 29 | 28 | 28 | 28 | 27 |
| CPR at Boresight, dB | 20 | 23 | 20 | 20 | 17 | 21 |
| CPR at Sector, dB | 14 | 10 | 12 | 10 | 9 | 1 |
| 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° |

Electrical Specifications, BASTA*

| Frequency Band, MHz | 698–806 | 806–896 | 1710–1880 | 1850–1990 | 1920–2180 | 2300–2360 |
|---|-------------|-------------|------------|------------|------------|------------|
| Gain by all Beam Tilts, average, dBi | 14.5 | 14.3 | 17.4 | 17.9 | 18.2 | 18.3 |
| Gain by all Beam Tilts Tolerance, dB | ±0.5 | ±0.8 | ±0.4 | ±0.3 | ±0.5 | ±0.3 |
| Gain by Beam Tilt, average, dBi | 0 ° 14.6 | 0 ° 14.5 | 0 ° 17.4 | 0 ° 17.8 | 0 ° 18.1 | 0 ° 18.2 |
| | 7 ° 14.6 | 7 ° 14.4 | 3 ° 17.5 | 3 ° 17.9 | 3 ° 18.3 | 3 ° 18.4 |
| | 14 ° 14.2 | 14 ° 13.6 | 7 ° 17.4 | 7 ° 17.9 | 7 ° 18.2 | 7 ° 18.4 |
| Beamwidth, Horizontal Tolerance, degrees | ±2.2 | ±3.4 | ±2 | ±4.6 | ±5.7 | ±4.3 |
| Beamwidth, Vertical Tolerance, degrees | ±0.8 | ±1 | ±0.3 | ±0.2 | ±0.3 | ±0.2 |
| USLS, dB | 16 | 14 | 16 | 16 | 16 | 15 |
| Front-to-Back Total Power at 180° ± 30°, dB | 25 | 26 | 27 | 26 | 26 | 26 |
| CPR at Boresight, dB | 22 | 23 | 21 | 20 | 20 | 22 |
| CPR at Sector, dB | 13 | 11 | 16 | 12 | 11 | 4 |

* 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.](#)

Mechanical Specifications

| | |
|---|--|
| Color Radome Material | Light gray Fiberglass, UV resistant |
| Connector Interface Location Quantity | 7-16 DIN Female Bottom 6 |
| Wind Loading, maximum | 617.7 N @ 150 km/h 138.9 lbf @ 150 km/h |
| Wind Speed, maximum | 241.4 km/h 150.0 mph |
| Antenna Dimensions, L x W x D | 1828.0 mm x 301.0 mm x 181.0 mm 72.0 in x 11.9 in x 7.1 in |
| Net Weight | 18.4 kg 40.6 lb |

GENERAC®

INDUSTRIAL POWER

SG035

5.4L

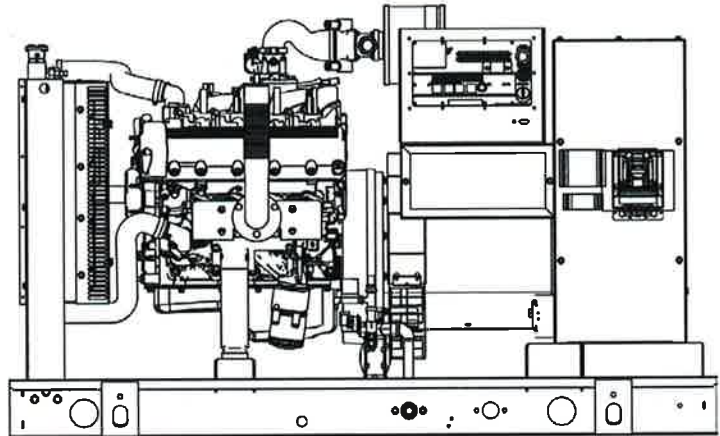
Industrial Spark-Ignited Generator Set

EPA Certified Stationary Emergency

SG035 35 kW

Standby Power Rating
35 kW 44 kVA 60 Hz

Prime Power Rating*
32 kW 39 kVA 60 Hz



*EPA Certified Prime ratings are not available in the U.S. or its Territories

Image used for illustration purposes only

Codes and Standards

Generac products are designed to the following standards:



UL2200, UL508, UL142, UL498



NFPA70, 99, 110, 37



NEC700, 701, 702, 708



ISO9001, 8528, 3046, 7637, Pluses #2b, 4



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41



osHPD

IBC 2009, CBC 2010, IBC 2012, ASCE 7-05,
ASCE 7-10, ICC-ES AC-156 (2012)

Powering Ahead

For over 50 years, Generac has led the industry with innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac's gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial application under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

SG035

Standard Features

ENGINE SYSTEM

General

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel flexible exhaust connection
- Critical Exhaust Silencer (enclosed only)
- Factory Filled Oil
- Radiator duct adapter (open set only)

Fuel System

- Primary and Secondary Fuel Shutoff
- Flexible Fuel Line - NPT Connection

Cooling System

- Closed Coolant Recovery System
- UV/Ozone resistant hoses
- Factory-installed Radiator
- Radiator drain extension
- 50/50 Ethylene glycol antifreeze

Engine Electrical System

- Battery charging alternator
- Battery Cables
- Battery Tray
- Solenoid activated starter motor
- Rubber-booted engine electrical connections

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- Class H insulation material
- 2/3 Pitch
- Skewed Stator
- Brushless Excitation
- Sealed Bearings
- Amortisseur winding
- Full load capacity alternator

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Warranty (Prime rated units)
- Silencer mounted in the discharge hood (enclosed only)

ENCLOSURE (if selected)

- Rust-proof fasteners with nylon washers to protect finish
- High performance sound-absorbing material
- Gasketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

CONTROL SYSTEM



Control Panel

- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)
- Power Factor
- kW Hours, Total & Last Run

- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus protocol
- Predictive Maintenance algorithm
- Sealed Boards
- Password parameter adjustment protection

- Single point ground
- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display

Alarms

- Oil Pressure (Pre-programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed Shutdown)
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & warnings
- Alarms and warnings spelled out (no alarm codes)

SG035

Configurable Options

ENGINE SYSTEM

- General
 - Engine Block Heater
 - Oil Heater
 - Air Filter Restriction Indicator
 - Stone Guard (Open Set Only)
 - Critical Exhaust Silencer (Open Set Only / Standard on Ultra Low Emissions Option)
- Engine Electrical System
 - 10A UL battery charger
 - 2.5A UL battery charger
 - Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical coating
- Permanent Magnet Excitation

CONTROL SYSTEM

- 21-Light Remote Annunciator
- Remote Relay Panel (8 or 16)
- Oil Temperature Sender with Indication Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- Remote Communication - Modem
- Remote Communication - Ethernet
- 10A Run Relay
- Ground fault indication and protection functions

GENERATOR SET

- Gen-Link Communications Software (English Only)
- Extended Factory Testing (3 Phase Only)
- IBC Seismic Certification
- 8 Position Load Center
- 2 Year Extended Warranty
- 5 Year Warranty
- 5 Year Extended Warranty

CIRCUIT BREAKER OPTIONS

- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

ENCLOSURE

- Standard Enclosure
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Steel Enclosure
- Aluminum Enclosure
- 150 MPH Wind Kit
- 12 VDC Enclosure Lighting Kit
- 120 VAC Enclosure Lighting Kit
- AC/DC Enclosure Lighting Kit
- Door Alarm Switch

Engineered Options

ENGINE SYSTEM

- Coolant heater ball valves
- Fluid containment pans

ALTERNATOR SYSTEM

- 3rd Breaker Systems

GENERATOR SET

- Special Testing
- Battery Box

ENCLOSURE

- Motorized Dampers
- Enclosure Ambient Heaters

CONTROL SYSTEM

- Spare inputs (x4) / outputs (x4) - H Panel Only
- Battery Disconnect Switch

Rating Definitions

Standby – Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

Prime – Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications.

Power ratings in accordance with ISO 8528-1, Second Edition dated 2005-06-01, definitions for Prime Power (PRP) and Emergency Standby Power (ESP).

SG035

application and engineering data

ENGINE SPECIFICATIONS

General

| | |
|--------------------------|---------------------|
| Make | Generac |
| Cylinder # | 8 |
| Type | V |
| Displacement - L (Cu In) | 5.4 (329.53) |
| Bore - mm (in) | 90.17 (3.55) |
| Stroke - mm (in) | 105.92 (4.17) |
| Compression Ratio | 9:1 |
| Intake Air Method | Naturally Aspirated |
| Number of Main Bearings | 4 |
| Connecting Rods | Forged |
| Cylinder Head | Aluminum |
| Cylinder Liners | No |
| Ignition | Single Fire |
| Pistons | Aluminum Alloy |
| Crankshaft | Nodular Iron |
| Lifter Type | Hydraulic |
| Intake Valve Material | Steel Alloy |
| Exhaust Valve Material | Hardened Steel |
| Hardened Valve Seats | Yes |

Engine Governing

| | |
|-------------------------------------|------------|
| Governor | Electronic |
| Frequency Regulation (Steady State) | +/- 0.25% |

Lubrication System

| | |
|------------------------------|-----------------------------|
| Oil Pump Type | Gear |
| Oil Filter Type | Full-flow spin-on cartridge |
| Crankcase Capacity - L (qts) | 5.7 (6) |

Cooling System

| | |
|---------------------------------|-----------------------------|
| Cooling System Type | Pressurized Closed Recovery |
| Water Pump Flow - gpm (lpm) | 38 (144) |
| Fan Type | Pusher |
| Fan Speed (rpm) | 2143 |
| Fan Diameter mm (in) | 508 (20) |
| Coolant Heater Wattage | 1500 |
| Coolant Heater Standard Voltage | 120 V |

Fuel System

| | |
|--------------------------|----------------------------|
| Fuel Type | Natural Gas, Propane Vapor |
| Carburetor | Down Draft |
| Secondary Fuel Regulator | Standard |
| Fuel Shut Off Solenoid | Standard |
| Operating Fuel Pressure | 7" - 11" H ₂ O |

Engine Electrical System

| | |
|-----------------------------|---------------------------------|
| System Voltage | 12 VDC |
| Battery Charging Alternator | Standard |
| Battery Size | See Battery Index 0161970SBY |
| Battery Voltage | 12 VDC |
| Ground Polarity | Negative |

ALTERNATOR SPECIFICATIONS

| | |
|-------------------------------------|---------------|
| Standard Model | 390 |
| Poles | 4 |
| Field Type | Revolving |
| Insulation Class - Rotor | H |
| Insulation Class - Stator | H |
| Total Harmonic Distortion | <5% |
| Telephone Interference Factor (TIF) | <50 |
| Standard Excitation | Brushless |
| Bearings | Sealed Ball |
| Coupling | Flexible Disc |
| Prototype Short Circuit Test | Yes |

| | |
|------------------------------------|--------------|
| Voltage Regulator Type | Full Digital |
| Number of Sensed Phases | All |
| Regulation Accuracy (Steady State) | +/- 0.25% |

SG035

operating data

POWER RATINGS

| | Natural Gas | | Propane Vapor | |
|---------------------------------|-------------|-----------|---------------|-----------|
| Single-Phase 120/240 VAC @1.0pf | 35 kW | Amps: 146 | 35 kW | Amps: 146 |
| Three-Phase 120/208 VAC @0.8pf | 35 kW | Amps: 121 | 35 kW | Amps: 121 |
| Three-Phase 120/240 VAC @0.8pf | 35 kW | Amps: 105 | 35 kW | Amps: 105 |
| Three-Phase 277/480 VAC @0.8pf | 35 kW | Amps: 53 | 35 kW | Amps: 53 |
| Three-Phase 346/600 VAC @0.8pf | 35 kW | Amps: 42 | 35 kW | Amps: 42 |

STARTING CAPABILITIES (sKVA)

| | | sKVA vs. Voltage Dip | | | | | | | | | | | |
|------------|----|----------------------|-----|-----|-----|-----|-----|-------------|-----|-----|-----|-----|-----|
| | | 480 VAC | | | | | | 208/240 VAC | | | | | |
| Alternator | kW | 10% | 15% | 20% | 25% | 30% | 35% | 10% | 15% | 20% | 25% | 30% | 35% |
| Standard | 35 | 24 | 36 | 48 | 60 | 72 | 84 | 18 | 27 | 36 | 45 | 54 | 63 |
| Upsize 1 | 40 | 27 | 41 | 54 | 68 | 81 | 95 | 20 | 31 | 41 | 51 | 61 | 71 |
| Upsize 2 | 50 | 34 | 52 | 69 | 86 | 103 | 120 | 26 | 39 | 52 | 65 | 77 | 90 |
| Upsize 3 | 60 | 42 | 63 | 83 | 104 | 125 | 146 | 32 | 47 | 62 | 78 | 94 | 110 |

FUEL CONSUMPTION RATES*

| Natural Gas – ft ³ /hr (m ³ /hr) | | Propane Vapor – ft ³ /hr (m ³ /hr) | |
|--|------------|--|-------------|
| Percent Load | Standby | Percent Load | Standby |
| 25% | 239 (6.8) | 25% | 69.8 (2.0) |
| 50% | 409 (11.6) | 50% | 119.7 (3.4) |
| 75% | 553 (15.7) | 75% | 161.6 (4.6) |
| 100% | 682 (19.3) | 100% | 219.8 (6.2) |

*Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

| | | Standby |
|--|--|-------------|
| Air Flow (inlet air combustion and radiator) | ft ³ /min (m ³ /min) | 2460 (69.7) |
| Coolant Flow per Minute | gpm (lpm) | 38 (144) |
| Coolant System Capacity | gal (L) | 3 (11.36) |
| Heat Rejection to Coolant | BTU/hr | 144,000 |
| Max. Operating Air Temp on Radiator | °F (°C) | 122 (50) |
| Max. Operating Ambient Temperature (before derate) | °F (°C) | 110 (43.3) |
| Maximum Radiator Backpressure | in H ₂ O | 0.5 |

COMBUSTION AIR REQUIREMENTS

| Flow at Rated Power | Standby |
|---------------------------|----------|
| cfm (m ³ /min) | 87 (2.5) |

ENGINE

| | | Standby |
|--------------------------|----------------|------------|
| Rated Engine Speed | rpm | 1800 |
| Horsepower at Rated kW** | hp | 54 |
| Piston Speed | ft/min (m/min) | 1251 (381) |
| BMEP | psi | 72 |

** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

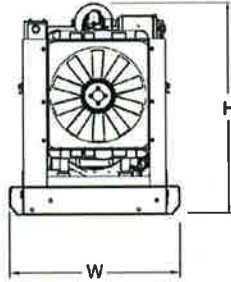
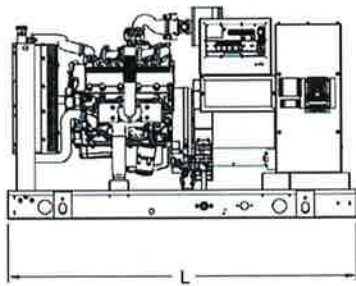
EXHAUST

| | | Standby |
|-----------------------------------|---------------------------|-----------------------------|
| Exhaust Flow (Rated Output) | cfm (m ³ /min) | 260 (7.4) |
| Maximum Recommended Back Pressure | inHg | 1.5 |
| Exhaust Temp (Rated Output) | °F (°C) | 900 (482) |
| Exhaust Outlet Size (Open Set) | in | 2.5" I.D. Flex (No muffler) |

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

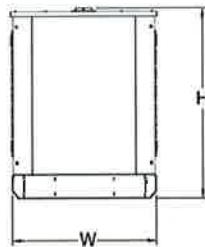
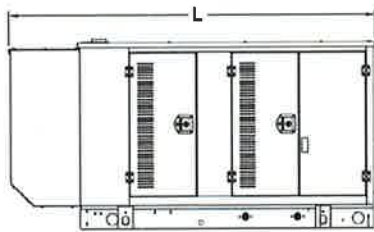
SG035

dimensions and weights



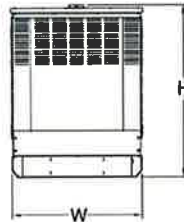
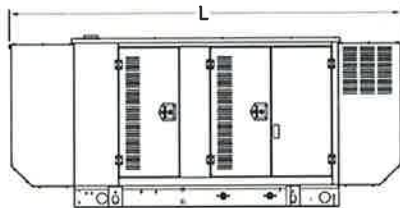
OPEN SET (Includes Exhaust Flex)

| | |
|-------------------|--|
| L x W x H in (mm) | 76 (1930) x 37.4 (949.9) x 47 (1193.8) |
| Weight lbs (kg) | 1575 (714) |



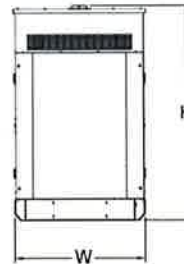
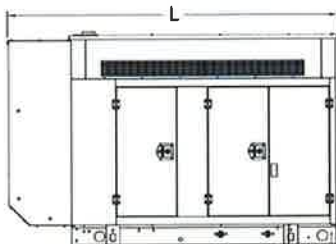
STANDARD ENCLOSURE

| | |
|-------------------|--|
| L x W x H in (mm) | 94.8 (2408.9) x 38 (965.1) x 49.5 (1258.1) |
| Weight lbs (kg) | Steel: 2100 (952) Aluminum: 1754 (795) |



LEVEL 1 ACOUSTIC ENCLOSURE

| | |
|-------------------|---|
| L x W x H in (mm) | 112.5 (2857.1) x 38 (965.1) x 49.5 (1258.1) |
| Weight lbs (kg) | Steel: 2140 (970) Aluminum: 1767 (801) |



LEVEL 2 ACOUSTIC ENCLOSURE

| | |
|-------------------|--|
| L x W x H in (mm) | 94.8 (2407) x 38 (965.1) x 62 (1573.9) |
| Weight lbs (kg) | Steel: 2328 (1056) Aluminum: 1831 (830) |

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

Generac Power Systems, Inc. • S45 W29290 HWY. 59, Waukesha, WI 53189 • generac.com

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FDH Engineering, Inc., 6521 Meridien Drive Raleigh, NC 27616, Ph. 919.755.1012

**Structural Analysis for
SBA Network Services, Inc.**

155' Monopole Tower

**SBA Site Name: Water Treatment Plant 2, CT
SBA Site ID: CT46141-A-00
Verizon Site Name: Farmington 2**

FDH Project Number 146EDX1400(R1)

Analysis Results

| | | |
|------------------|-------|------------|
| Tower Components | 78.3% | Sufficient |
| Foundation | 36.4% | Sufficient |

Prepared By:

Jeffrey B. Ray, EI
Project Engineer

Reviewed By:

Bradley R. Newman, PE
Senior Project Engineer
CT PE License No. 29630

FDH Engineering, Inc.
6521 Meridien Drive
Raleigh, NC 27616
(919) 755-1012
info@fdh-inc.com



November 7, 2014

Prepared pursuant to TIA/EIA-222-F Structural Standards for Steel Antenna Towers and Antenna Supporting Structures

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EXECUTIVE SUMMARY

At the request of SBA Network Services, Inc., FDH Engineering, Inc. performed a structural analysis of the monopole located in Farmington, CT to determine whether the tower is structurally adequate to support both the existing and proposed loads pursuant to the *Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, TIA/EIA-222-F*. Information pertaining to the existing/proposed antenna loading, current tower geometry, geotechnical data, foundation dimensions, and member sizes was obtained from:

- Clarence Welti Associates, Inc. (Site No. CT33XC579) Geotechnical Study for Proposed Sprint Communications Tower dated June 18, 2004
- Sabre Communications Corporation (Job No. 05-07054) Structural Design Report dated September 2, 2004
- Stealth Concealment Solutions, Inc. (Job No. SABR-41059H-00) concealment cylinder design dated September 23, 2004
- Stealth Concealment Solutions, Inc. (Job No. AT12-00957W-05R1) concealment cylinder modification design dated September 18, 2012
- SBA Network Services, Inc.

The *basic design wind speed* per the *TIA/EIA-222-F* standards is 80 mph without ice and 38 mph with 1" radial ice. Ice is considered to increase in thickness with height.

Conclusions

With the existing and proposed antennas from Verizon in place at 120 ft, the tower meets the requirements of the *TIA/EIA-222-F* standards provided the **Recommendation** listed below is satisfied. Furthermore, provided the foundation was constructed per the original design drawings (see Sabre Job No. 05-07054) and given the existing soil parameters (see CWA1 Site No. CT33XC579), the foundation should have the necessary capacity to support both the proposed and existing loading. For a more detailed description of the analysis of the tower, see the **Results** section of this report.

Our structural analysis has been performed assuming all information provided to FDH Engineering, Inc. is accurate (i.e., the steel data, tower layout, existing antenna loading, and proposed antenna loading) and that the tower has been properly erected and maintained per the original design drawings.

Recommendation

To ensure the requirements of the *TIA/EIA-222-F* standards are met with the existing and proposed loading in place, we have the following recommendation:

1. The proposed coax should be installed inside the pole's shaft.

APPURTENANCE LISTING

The proposed and existing antennas with their corresponding cables/coax lines are shown in **Table 1**. *If the actual layout determined in the field deviates from the layout, FDH Engineering, Inc. should be contacted to perform a revised analysis.*

Table 1 - Appurtenance Loading

Existing Loading:

| Antenna Elevation (ft) | Description | Coax and Lines | Carrier | Mount Elevation (ft) | Mount Type |
|------------------------|---|----------------|----------|----------------------|-----------------------------|
| 150 | (3) RFS APXVSP18-C-A20 (4) RFS ACU-A20-N | (12) 1-5/8" | Sprint | 150 | Inside Concealment Cylinder |
| 139 | (3) Powerwave P65-17-XLH-RR (3) CCI DTMABP7819VG12A | (6) 1-5/8" | AT&T | 139 | |
| 129 | (3) RFS APX18-206517S-C-A20 (3) RFS ATMAA1412D-1A20 ¹ (3) Ericsson KRY112 144/1 ¹ | (6) 1-5/8" | T-Mobile | 129 | |

1. T-Mobile's (3) RFS ATMAA1412D-1A20 TMAs, and (3) Ericsson KRY112 144/1 TMAs are to be ground mounted but may be mounted on the tower provided they fit inside the concealment cylinder.

Proposed Carrier Final Loading:

| Antenna Elevation (ft) | Description | Coax and Lines | Carrier | Mount Elevation (ft) | Mount Type |
|------------------------|---------------------------|----------------|---------|----------------------|-----------------------------|
| 120 | (3) Commscope SBNHH-1D65B | (12) 1-5/8" | Verizon | 120 | Inside Concealment Cylinder |

RESULTS

The following yield strength of steel for individual members was used for analysis:

Table 2 - Material Strength

| Member Type | Yield Strength |
|----------------------|----------------------------|
| Tower Shaft Sections | 35ksi , 65 ksi, and 75 ksi |
| Flange Plate | 50 ksi |
| Flange Bolts | 55 ksi |
| Base Plate | 60 ksi |
| Anchor Bolts | 75 ksi |

Table 3 displays the summary of the ratio (as a percentage) of force in the member to their capacities. Values greater than 100% indicate locations where the maximum force in the member exceeds its capacity. *Note: Capacities up to 105% are considered acceptable.* **Table 4** displays the maximum foundation reactions.

If the assumptions outlined in this report differ from actual field conditions, FDH Engineering, Inc. should be contacted to perform a revised analysis. Furthermore, as no information pertaining to the allowable twist and sway requirements for the existing or proposed appurtenances was provided, deflection and rotation were not taken into consideration when performing this analysis.

See the **Appendix** for detailed modeling information

Table 3 - Summary of Working Percentage of Structural Components

| Section No. | Elevation ft | Component Type | Size | % Capacity* | Pass Fail |
|-------------|------------------|----------------|-------------------------|-------------|-----------|
| L1 | 155 – 135.375 | Pole | TP5x5x0.625 | 41.6 | Pass |
| | | Flange Bolts | (6) 1.125"Ø w/ 21.5" BC | 11.4 | Pass |
| | | Flange Plate | PL 27.125"Ø x 1.5" thk. | 17.2 | Pass |
| L4 | 135.375 - 115.75 | Pole | TP8x8x1 | 60.8 | Pass |
| | | Flange Bolts | (6) 1.5"Ø w/ 23.5" BC | 22.4 | Pass |
| | | Flange Plate | PL 29.125"Ø x 3" thk. | 76.2 | Pass |
| L7 | 115.75 - 97.75 | Pole | TP32.25x30x0.25 | 15.6 | Pass |
| L8 | 97.75 - 48.25 | Pole | TP38.02x31.243x0.25 | 42.2 | Pass |
| L9 | 48.25 - 0 | Pole | TP43.67x36.9183x0.25 | 78.3 | Pass |
| -- | -- | Anchor Bolts | (8) 2.25"Ø w/ 50" BC | 67.3 | Pass |
| -- | -- | Base Plate | SQ PL 47" x 2.25" thk. | 70.3 | Pass |

*Capacities include 1.33 allowable stress increase for wind per TIA/EIA-222-F.

Table 4 - Maximum Base Reactions

| Base Reactions | Current Analysis* (TIA/EIA-222-F) |
|----------------|--------------------------------------|
| Axial | 23 k |
| Shear | 14 k |
| Moment | 1,117 k-ft |

*Foundation determined to be adequate per independent analysis.

GENERAL COMMENTS

This engineering analysis is based upon the theoretical capacity of the structure. It is not a condition assessment of the tower and its foundation. It is the responsibility of SBA Network Services, Inc. to verify that the tower modeled and analyzed is the correct structure (with accurate antenna loading information) modeled. If there are substantial modifications to be made or the assumptions made in this analysis are not accurate, FDH Engineering, Inc. should be notified immediately to perform a revised analysis.

LIMITATIONS

All opinions and conclusions are considered accurate to a reasonable degree of engineering certainty based upon the evidence available at the time of this report. All opinions and conclusions are subject to revision based upon receipt of new or additional/updated information. All services are provided exercising a level of care and diligence equivalent to the standard and care of our profession. No other warranty or guarantee, expressed or implied, is offered. Our services are confidential in nature and we will not release this report to any other party without the client's consent. The use of this engineering work is limited to the express purpose for which it was commissioned and it may not be reused, copied, or distributed for any other purpose without the written consent of FDH Engineering, Inc.

APPENDIX

| | | | | | | |
|--------------------|--------|--------|---------------------------|---------|---------|----------|
| Section | 1 | 2 | 3 | 4 | 5 | 155.0 ft |
| Length (ft) | 19.50 | 19.75 | 17.75 | 53.50 | 53.25 | 135.5 ft |
| Number of Sides | 0 | 0 | 16 | 16 | 16 | 115.8 ft |
| Thickness (in) | 0.6250 | 1.0000 | 0.2500 | 0.2500 | 0.2500 | 98.0 ft |
| Socket Length (ft) | | | 4.00 | 4.75 | | 48.5 ft |
| Top Dia (in) | 5.0000 | 8.0000 | 30.0000 | 31.2430 | 36.9183 | 0.0 ft |
| Bot Dia (in) | 5.0000 | 8.0000 | 32.2500 | 38.0200 | 43.8700 | |
| Grade | | | ASTM A519 Type 1026 (HFS) | A572-65 | | |
| Weight (K) | 0.6 | 1.5 | 1.5 | 5.0 | 5.8 | |
| | | | ASTM A513 Type 5 (DOM) | | | |



DESIGNED APPURTENANCE LOADING

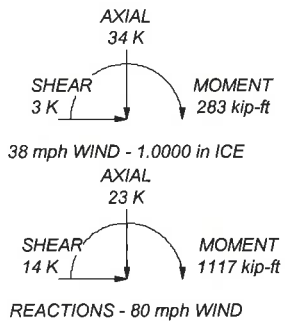
| TYPE | ELEVATION | TYPE | ELEVATION |
|-----------------------------|-----------|-----------------------------------|-----------|
| Truck Ball | 155.75 | Canister Load3 | 135.375 |
| Canister Load1 | 155 | APX18-206517S-C-A20 w/ Mount Pipe | 129 |
| APXVSP18-C-A20 w/Mount Pipe | 150 | KRY 112 144/1 | 129 |
| (2) ACU-A20-N RET | 150 | KRY 112 144/1 | 129 |
| ACU-A20-N RET | 150 | KRY 112 144/1 | 129 |
| ACU-A20-N RET | 150 | ATMAA1412D-1A20 TMA | 129 |
| APXVSP18-C-A20 w/Mount Pipe | 150 | ATMAA1412D-1A20 TMA | 129 |
| APXVSP18-C-A20 w/Mount Pipe | 150 | ATMAA1412D-1A20 TMA | 129 |
| Canister Load2 | 145.188 | APX18-206517S-C-A20 w/ Mount Pipe | 129 |
| Flag | 145 | APX18-206517S-C-A20 w/ Mount Pipe | 129 |
| DTMABP7819VG12A TMA | 139 | Canister Load4 | 125.563 |
| DTMABP7819VG12A TMA | 139 | SBNHH-1D65B w/ Mount Pipe | 123 |
| P65-17-XLH-RR w/Mount Pipe | 139 | SBNHH-1D65B w/ Mount Pipe | 123 |
| P65-17-XLH-RR w/Mount Pipe | 139 | SBNHH-1D65B w/ Mount Pipe | 123 |
| P65-17-XLH-RR w/Mount Pipe | 139 | Canister Load5 | 115.75 |
| DTMABP7819VG12A TMA | 139 | | |

MATERIAL STRENGTH

| GRADE | Fy | Fu | GRADE | Fy | Fu |
|---------------------|--------|--------|---------|--------|--------|
| A513 Type 5 (DOM) | 75 ksi | 85 ksi | A572-65 | 65 ksi | 80 ksi |
| ASTM A519 Type 1026 | 47 ksi | 70 ksi | | | |

TOWER DESIGN NOTES

1. Tower is located in Hartford County, Connecticut.
2. Tower designed for a 80 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 38 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 50 mph wind.
5. TOWER RATING: 78.3%



| | |
|--|--|
| <p>FDH Engineering, Inc. 6521 Meridian Drive, Suite 107 Raleigh, North Carolina Phone: 9197551012 FAX: 9197551031</p> | <p>Job: Water Treatment Plant 2, CT46141-A-00</p> |
| | <p>Project: 146EDX1400</p> |
| | <p>Client: SBA Network Services, Inc.</p> |
| | <p>Code: TIA/EIA-222-F</p> |
| | <p>Path:</p> |
| <p>Drawn by: Jeffrey B. Ray</p> | <p>App'd:</p> |
| <p>Date: 11/07/14</p> | <p>Scale: NTS</p> |
| <p>Dwg No: E-1</p> | |

ATTACHMENT 4

ATTACHMENT 5

March 19, 2015

Via Certified Mail, Return Receipt Requested

Kathleen A. Eagen, Town Manager
Town of Farmington
1 Monteith Drive
Farmington, CT 06032

**Re: Proposed Telecommunications Facility Modification at 1 Westerberg Drive,
Farmington, Connecticut**

Dear Ms. Eagen:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”). Today, Cellco filed a Sub-Petition for Declaratory Ruling (“Sub-Petition”) with the Connecticut Siting Council (“Council”) seeking approval to modify the existing telecommunications facility at 1 Westerberg Drive in Farmington (the “Property”). Cellco plans to install three (3) antennas inside the existing flagpole tower at the 120-foot level on the tower. Equipment associated with Cellco’s antennas will be located inside the existing 12’ x 20’ shelter located near the base of the tower, recently abandoned by Nextel Communications. Cellco will be the fourth wireless carrier to install antennas inside the flagpole tower, joining Sprint, AT&T and T-Mobile.

As presented in the Sub-Petition, the proposed facility improvements at the Property constitute an “eligible facility request” pursuant to Section 6409(a) of the Federal Middle Class Tax Relief and Job Creation act of 2012 (47 U.S.C. § 1455(a)) and the October 21, 2014 Order of the Federal Communications Commission (FCC-14-533). A copy of the full Sub-Petition is attached for your review. Landowners who own property that abuts the Property were also sent notice of this filing along with a copy of the Sub-Petition.

Pursuant to its recent decision in Petition No. 1133, comments and/or concerns regarding this facility modification proposal should be submitted to the Council within thirty (30) days of the date of the attached Sub-Petition.

Robinson+Cole

Kathleen A. Eagen
March 19, 2015
Page 2

Please contact me if you have any questions regarding this proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kenneth C. Baldwin

Attachment

Copy to:

Anthony R. Befera

ATTACHMENT 6

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts

March 19, 2015

Via Certified Mail, Return Receipt Requested

«Name_and_Address»

**Re: Proposed Telecommunications Facility Modification at 1 Westerberg Drive,
Farmington, Connecticut**

Dear «Salutation»:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”). Today, Cellco filed a Sub-Petition for Declaratory Ruling (“Sub-Petition”) with the Connecticut Siting Council (“Council”) seeking approval to modify the existing telecommunications facility at 1 Westerberg Drive in Farmington (the “Property”). Cellco plans to install three (3) antennas inside the existing flagpole tower at the 120-foot level. Equipment associated with Cellco’s antennas will be located inside the existing 12’ x 20’ shelter located near the base of the tower, recently abandoned by Nextel Communications. Cellco will be the fourth wireless carrier to install antennas inside the flagpole tower, joining Sprint, AT&T and T-Mobile.

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March 19, 2015
Page 2

This notice is being sent to you because you are listed as an owner of land that abuts the Property. If you have any questions regarding the Sub-Petition, the Council's process for reviewing the Sub-Petition or the details of the filing itself, please feel free to contact me at the number listed above. You may also contact the Council directly at 860-827-2935.

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kenneth C. Baldwin

Attachment

Copy to:

Anthony R. Befera

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

**ABUTTERS LIST
MAP 78/LOT 38**


**1 WESTERBERG DRIVE
FARMINGTON, CONNECTICUT**

| | <u>Map/Lot</u> | <u>Property Address</u> | <u>Owner and Mailing Address</u> |
|----|---------------------|------------------------------|--|
| 1. | 78/37 | Farmington Avenue | Town of Farmington 1 Monteith Drive Farmington, CT 06032 |
| 2. | 78/1 | 902 and 89 Farmington Avenue | Modern Capital Farmington LLC 3455 Berlin Turnpike Newington, CT 06131 |
| 3. | 78/2 Golf Course | Town Farm Road | TPCC LLC P.O. Box 488 New Britain, CT 06050 |
| 4. | 77/36 | 1 Lenola Drive | Mutual Benefit Society Et Al P.O. Box 14 Farmington, CT 06034 |
| 5. | 77/31 and 33A | 999 Farmington Avenue | Lexington Realty LLC P.O. Box 1068 Naugatuck, CT 06770 |
| 6. | 77/39 | Round Hill Road | Town of Farmington 1 Monteith Drive Farmington, CT 06032 |

CERTIFICATION OF SERVICE

I hereby certify that a copy of the foregoing letter and full Sub-Petition was sent by certified mail, return receipt requested, to each of the parties on the attached list of abutting landowners.

3-19-15
Date


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

Attorneys for CELLCO PARTNERSHIP d/b/a
VERIZON WIRELESS