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June 29, 2018

VIA FEDERAL EXPRESS
Wayne Spenziero, Senior Building Inspector
Building Department
Town of Colonie
Public Operations Center
347 Old Niskayuna Road
Latham, New York 12210

VIA FEDERAL EXPRESS
Richard Comi
The Center for Municipal Solutions
70 Cambridge Drive
Glenmont, New York 12077

RE: Application for Special Use Permit - Verizon Wireless "Latham South" Communications Facility – Near 17 Elks Lane

Dear Mr. Spenziero and Mr. Comi:

Cellco Partnership d/b/a Verizon Wireless is proposing to construct a 70 foot stealth monopine telecommunications facility located 17 Elks Lane in the Town of Colonie (Tax Map No. 31.4-5-37). Enclosed is a copy of the application materials. They have also been e-mailed to you. We have previously established a review escrow for this site. I need to review with you whether the application fee is on file.

Please do not hesitate to contact me with any questions.

Very truly yours,

David C. Brennan

Encl.

cc: Cris Schrader, P.E. (via email only)
Sara Colman (via email only)

ZONING BOARD OF APPEALS
TOWN OF COLONIE, ALBANY COUNTY, NEW YORK

In the Matter of the Application of

CELLCO PARTNERSHIP
d/b/a Verizon Wireless

Lands n/f Colonie New York Lodge No. 2192 Benevolent and Protective Order of Elks of the United States of America, Inc.
Near 17 Elks Lane, Town of Colonie, New York 12110
Tax Map Parcel No. 31.4-5-37

STATEMENT OF INTENT
APPLICATION FOR SPECIAL USE PERMIT

Submitted by:

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Dated: June 28, 2018

ZONING BOARD OF APPEALS of the TOWN OF COLONIE
COUNTY OF ALBANY, STATE OF NEW YORK

In the Matter of the Application of

CELLCO PARTNERSHIP d/b/a Verizon Wireless

Premises: Lands n/f Colonie New York Lodge No. 2192
Benevolent and Protective Order of Elks
of the United States of America, Inc.
Near 17 Elks Lane, Town of Colonie, New York 12110
Tax Map Parcel No. 31.4-5-37

STATEMENT OF INTENT
APPLICATION FOR SPECIAL USE PERMIT

I. Introduction

CELLCO PARTNERSHIP d/b/a Verizon Wireless ("Verizon Wireless" or the "Applicant") proposes the construction of an unmanned public utility/personal wireless service facility (a "communications facility") within a 58' x 36' fenced compound on a portion of lands n/f owned by the Colonie New York Lodge No. 2192 Benevolent and Protective Order of Elks of the United States of America, Inc. a/k/a Colonie Elks Lodge, B.P.O.E. 2192 (the "premises"). The premises are located near 17 Elks Lane in the Town of Colonie, County of Albany, State of New York (Tax Map Parcel No. 31.4-5-37), in the SFR (Single Family Residential) District and PDD (Planned Development District) zones **[TABS 1 and 2; see also Zoning Site Plan of Costich Engineering, P.C. at TAB 14]**.

The proposed communications facility consists of a 70± ft. monopine[1] tower, one 9.3± ft. x 16± ft. equipment platform and all associated antennas, improvements and access/utilities. The project is an allowable land use subject to the Applicant obtaining Special Use Permit approval from the Town of Colonie Zoning Board of Appeals.

Verizon Wireless is considered a public utility under New York decisional law (*Cellular Telephone Company v. Rosenberg*, 82 N.Y.2d 364 (1993)) **[TAB 3]**, and a provider of "personal wireless services" under the federal Telecommunications Act of 1996 (the "TCA") **[TAB 4]**. Verizon Wireless' equipment will be in operation twenty-four (24) hours a day, seven (7) days a week, three hundred sixty-five (365) days a year. Copies of the applicable Verizon Wireless FCC licenses are included herewith **[TAB 5]**.

Public utility / personal wireless service facilities such as that proposed here are regulated in the Town of Colonie pursuant to Town Code Chapter 189 - Wireless Telecommunications Facilities Siting Law (Local Law No. 12 of 2009), and Town Code Chapter 190 - Land Use Law (Local Law

[1] A "monopine" is a monopole telecommunications facility that is camouflaged as a tree to help blend the facility in with the natural surroundings. There is an existing tree canopy of pine and other trees near and around the proposed facility.

No. 1 of 2007, as amended).

On May 17, 2016, Verizon Wireless entered the regulatory process by filing an Application for Commercial Zoning Verification as required by Land Use Law § 190-9[A]. On June 16, 2016, the Town of Colonie Building Department filed a determination that Verizon Wireless' project is in accordance with the Town of Colonie Land Use Law (Chapter 190), and referred the Applicant to the tower-specific Wireless Telecommunications Special Use Permit process in Chapter 189 of the Town Code. *See*, approved Commercial Zoning Verification attached hereto at the end of this Statement of Intent at **Exhibit A**.

II. Purpose of Latham South Communications Facility

The purpose of this project (referred to internally as "**Latham South**") is to provide an adequate and safe level of emergency and non-emergency Verizon Wireless communications services (in-building and mobile) to a densely developed suburban section of the Town of Colonie along State Route 155 (Watervliet Shaker Road), generally east of U.S. Route 9 (New Loudon Road), west of the City of Watervliet border, north of Spring Street, and south of the Hamlet of Latham and State Route 2. More specifically, the facility will offer significant improvements in both coverage and capacity along 1.2± miles of NY-155, 0.7± miles of Delatour Road and several linear miles along secondary and neighborhood roads in the area (including East Ridge Road, East Hills Boulevard, Dan Del Drive, Abedar Lane, Homestead Drive, etc.). The facility will also bring new and/or significantly improved Verizon Wireless 4G coverage and capacity (both voice and data) to numerous residences, housing developments, and places of business throughout this portion of Colonie.

The limited coverage currently in the eastern portion of the Town originates from Verizon Wireless' existing wireless telecommunications facilities called "Johnson Road" (located 2.3± miles north on the Town's 104 ft. water tank off Miller Road), "Watervliet WT" (located 1.4± miles northeast on the City of Watervliet 70 ft. tall water tank off Eastview Drive), "Loudon Rd" (located 1.0± mile southwest on the Town's 104 ft. tall water tank behind Colonie Town Hall), and "Latham Circle" (located 1.7± miles northwest on the 60 ft. monopole tower near Latham Circle). Although these facilities are relatively close by and are successful in providing coverage within their intended localized areas, they do not provide sufficient reliable 4G/LTE coverage along the targeted 1.2± mi. portion of NY-155 through eastern Colonie including to the residences, businesses, and the traveling public living, visiting or passing through this portion of Town.

Due to technological changes, increasing wireless usage patterns, a rapidly expanding Verizon Wireless subscriber base and other factors (e.g., distance, dense mature vegetation and rolling terrain), these facilities do not provide a suitable level of service to the Latham South area. Accordingly, construction of a new, locally-based communications facility near the intersection of Elks Lane and State Route 155 is required to provide a dominant (i.e., continuous) level of 4G wireless communications service (both voice and data) to the surrounding area. See, Site Selection Analysis prepared by Verizon Wireless' Radio Frequency (RF) Design Engineer and Site Acquisition Specialist, detailing the purpose and need for this facility **[TAB 6]**.

III. Description of Land Use

Verizon Wireless' proposed communications facility consists of the following general

components: a single 65± monopine tower (70± ft. when including simulated pine branches); one unmanned 9.3± ft. x 16± ft. equipment platform; six (6) panel antennas mounted at the 56± ft. centerline; utility services (power and landline telephone) and all associated fixtures and appurtenances. The project design also includes ground space for base station equipment and associated improvements for another carrier, if another carrier collocates on the proposed facility.

As there are no existing and/or available tall structures in the search area of sufficient height, structural capacity or availability to support Verizon Wireless' proposed communications facility, or existing tower sites that can be used for the "clustering" of a new tower **[Site Selection Analysis at TAB 6]**, a new communications tower at a new site is required.

The proposed facility will be a monopine tower design, meaning a self-supporting tubular steel structure, with stealth concealment branches, capable of supporting multiple wireless users. The proposed monopine tower, equipment platform and associated improvements will be located inside a 58± ft. x 36± ft. (2,088± sq. ft.) tower yard. A six (6) foot high chain link fence (with one foot of barbed wire) will be installed around the tower yard, to secure the tower site and protect Verizon Wireless' telecommunications equipment (and the equipment of other users) from unauthorized access.

The proposed facility is unmanned, equipped with backup emergency power, and will be visited for routine maintenance purposes approximately 2 - 3 times per year (only as-needed). As such, the project will not have any impact on existing water and sewage services. In addition, neither pedestrian nor vehicular access will be significantly impacted.

IV. Compliance with Wireless Telecommunications Facilities Siting Law and Land Use Law

The proposed communications facility complies in all material respects with the requirements of the Town of Colonie Wireless Telecommunications Facilities Siting Law (Chapter 189) (referred to herein as the "Telecommunications Facilities Regulations") and relevant provisions of the Land Use Law (Chapter 190):

A. COMMUNICATIONS FACILITY IS A PUBLIC NECESSITY

1. **Facility is Necessary (§ 189-7[C][6 and 7]):** The Applicant has provided expert proof, in the form of a written report and propagation studies prepared by its Radio Frequency (RF) Design Engineer, depicting the area within which the communications facility needs to be located in order to provide adequate and safe service to the Latham South area (the "search area"). This report clearly demonstrates that (i) there is an inadequate and unsafe level of service in the targeted area of the Town of Colonie, and (ii) a new communications facility near the intersection of State Route 155 (Watervliet Shaker Road) and Elks Lane is necessary to provide adequate and safe hand-held telephone service to this area **[TAB 6, Figure 1 and Exhibit 1]**.

2. **No Usable Towers or Other Structures on Town-Owned Property (First Priority):** In connection with this evaluation, the Applicant has retained the services of a real estate expert working in the telecommunications field to

assist in the evaluation of potential municipal tower sites or other municipal structures that might be used for collocation of the Latham South communications facility (*see,* § 189-8[A][1]; *see also* §§ 189-7[C][22] and 189-9[A]).

Based upon a thorough evaluation of the Latham South search area, the Applicant's real estate expert has determined that: (a) there are no existing Town of Colonie towers or other municipal structures in or near the search area that can be used by Verizon Wireless to provide an adequate and safe level of service to the targeted Latham South area; and (b) evaluation of other alternatives is required.

In this report, Verizon Wireless' RF Engineer specifically evaluates the possibility of modifying two existing municipal water tank collocations in the Town of Colonie: 534 Loudon Road (Loudon Road / Newtonville water tank, approximately 1 mile southwest of the Latham South search area); and at 76 Johnson Road (Miller Road water tank, approximately 2.3 miles to the north). Although effective for providing the desired level of wireless service to their respective intended coverage areas (i.e., areas within close proximity of each water tank site), these facilities are located well outside of the designated search area and do not provide adequate and safe service to the targeted Latham South area (i.e., signal coverage being reduced by distance, blocked by dense mature vegetation in the vicinity, or screened by hilly terrain) **[TAB 6, Exhibit 1]**. Accordingly, modification of antenna installations collocated at these existing Town-owned facilities (including any pending 4G modifications) will not improve the coverage at Latham South.

3. **Existing Towers or Other Structures on Other Property (Second Priority):** Verizon Wireless has also considered the possibility of collocating its communications facility on the rooftop of the Sisters of St. Joseph Provincial House, located at 385 Watervliet Shaker Road (Tax Map Parcel No. 31.2-3-80). Despite repeated attempts spanning several years, the Board of Trustees for the Society of the Sisters of St. Joseph has decided it is not interested in leasing space to Verizon Wireless (*see,* September 2, 2010 letter attached to report at **TAB 6**). Since a lease agreement could not be reached with the property owner, the site has been removed from consideration. In addition, the Applicant discussed collocation on the new, adjacent Colonie Senior Services Center, Inc.'s (CSSC) building. However, the CSSC building was not available to lease for collocation (*see,* March 17, 2017 letter attached to report at **TAB 6**).

No other existing towers or other tall structures of suitable height have been identified within or near the Latham South search area. Accordingly, based upon a thorough evaluation of the Latham South search area, the Applicant's experts have determined that: (a) there are no other existing towers or other tall structures in or near the search area that can be used by Verizon Wireless

to provide an adequate and safe level of service to the Latham South area; and (b) construction of a new tower is required.

4. **New Tower on Town-Owned Property (Third Priority):** Based upon a thorough evaluation of the Latham South search area, there are no Town-owned properties in or near the search area that can be used by Verizon Wireless to provide an adequate and safe level of service to the Latham South area. Accordingly, evaluation of other alternatives is required.

   As noted, Verizon Wireless' closest existing communications facility is a collocation on the Latham Water District/Town of Colonie water tank at Memorial Town Hall in Newtonville, approximately 1 mile southwest and outside of the search area. This facility does not provide adequate and safe service to the target area (i.e., signal coverage from this site is already blocked by dense mature vegetation in the vicinity, or screened by hilly terrain), and a new tower at this location would fare no better **[TAB 6, Exhibit 1]**.

   Similar results would follow from construction of a new tower at Verizon Wireless' next-closest communications facility, a second collocation at the Town of Colonie / Latham Water District Miller Road water tank facility. This site is too far outside of the search area (2.3± miles north) to overcome the terrain, distance and vegetative limitations described above, and a new tower at this location would fare no better **[TAB 6, Exhibit 1]**.

   Based upon the foregoing, it is clear that: (a) there are no suitable existing Town of Colonie tower sites that can be used for a new tower structure; and (b) evaluation of alternative properties (not owned by the Town of Colonie) is required in this case.

5. **New Tower in Industrial District (Fourth Priority):** Not applicable. The entire Latham South search area is located within the SFR (Single Family Residential) District **[TAB 6, Figure 4]**, and a new communications facility in the IND (Industrial) District is not capable of providing adequate and safe service to the Latham South area due to its location over 1.0 mile east of the proposed site.

6. **New Tower in Airport Business Area District (Fifth Priority):** Not applicable. The entire Latham South search area is located within the SFR District, and the nearest ABA (Airport Business Area) District is located in approximately 2.0 miles to the west (on the opposite side of I-87/Northway, US-9 and Latham Ridge) in a completely different section of Colonie. As a result, a new communications facility in the ABA District is not capable of providing adequate and safe service to the Latham South area.

7. **New Tower in Commercial Office District (Sixth Priority):** Not applicable. The entire Latham South search area is located within the SFR District, and the nearest CO (Commercial Office) District property is located approximately 2.5 miles to the west in a completely different section of

Colonie. As a result, a new communications facility in the CO District is not capable of providing adequate and safe service to the Latham South area.

8. **New Tower in HCOR, COR or NCOR District (Seventh Priority):** As noted, the entire Latham South search area is located within the SFR (Single Family Residential) District. The nearest HCOR (Highway Commercial Office Residential) District property is located well outside of the search area, approximately 1-¾ miles to the west / northwest of the proposed site. Due to distance outside of the search area and other factors, a new communications facility in the HCOR District is not capable of providing adequate and safe service to the Latham South area.

   Although a pocket of COR (Commercial Office Residential) property exists along State Route 2, the COR District sits outside of the search area in an area that would be blocked by terrain (e.g., Delatour Ridge), dense mature vegetation in the 50 - 70± ft. tall range, and existing build conditions to the south. Consequently, a new tower on COR property would not provide adequate and safe coverage to the Latham South area.

   The nearest NCOR (Neighborhood Commercial Office Residential) District property is located well outside of the search area, over 1 mile to the east at a lower ground elevation in the 230± ft. AMSL range (quickly dropping off to below 100 ft. moving further east).

   Accordingly, use of HCOR, COR or NCOR District property is not feasible in this case.

9. **New Tower in Office Residential District (Eighth Priority):** Not applicable. The nearest OR (Office Residential) District property is located well outside of the search area, approximately 2 miles to the west (adjacent to and extending north of I-87 Exit 5 / Watervliet Shaker Rd). As a result, a new communications facility in the OR District is not capable of providing adequate and safe coverage to the Latham South area.

10. **New Tower in Multi-Family Residential District (Ninth Priority):** Although pockets of MFR (Multi-Family Residential) District properties exist in lower-elevation areas east of Delatour Road, these areas are densely developed and located well outside of the search area, in areas that would be blocked by terrain (e.g., Delatour Ridge), dense mature vegetation in the 50 - 70± ft. tall range and existing build conditions to the south.

11. **New Tower in Single Family Residential District (Tenth Priority):** As noted, in **TAB 6, Figure 4**, the entire Latham South search area is located within the SFR (Single Family Residential) District. The Latham South search area, in turn, is constrained by a number of significant factors, including but not limited to: (a) existing land use patterns (including dense residential, neighborhood commercial and other development in the area); (b) terrain characteristics of the Hudson River Valley; (c) dense mature vegetation on site and in the surrounding community; and (d) the stringent

site design requirements in the Telecommunications Facilities Regulations (Town code Chapter 189).
Siting options are accordingly limited. For these reasons, the Verizon Wireless RF Design Engineer and real estate expert have focused their attention on a number of larger tracts with established institutional, religious, education or fraternal / private club land uses, which offer sufficient space and may otherwise be more suitable for the siting of an entirely new telecommunications tower facility.

In connection with this search, the Applicant's RF Design Engineer and real estate expert have investigated three different large parcels, located both inside and outside of the Latham South search area **[TAB 6, Figure 3]**:

- Latham Elks Club - The preferred location, approximately 20.37 acres in size. The project would be backdropped against dense mature vegetation in the 52-64± ft. tall range (south and east of the proposed tower yard), and further screened by a dense mature tree line in the 70-80± ft. tall range running along the rear of Abedar Lane (to the west). The site is at a ground elevation of 297± ft. AMSL, and will satisfy all applicable RF coverage objectives **[TAB 6, Exhibit 2]**. This site also has ample room to host a communications tower, and at the same time maintain significant separation from adjoining neighbors (including a minimum of 459± ft. from the closest residential dwelling along Abedar Lane) **[TABS 9 and 14]**.

- SW Pitts Hose Co. Inc. - This 2.5± acre parcel is located outside (west of) the search area, at ground elevation of approximately 300± ft. AMSL. Although not an ideal location due to its location approximately 2/3 mile west of the Delatour Ridgeline, this candidate was nonetheless evaluated as a potential backup candidate to the proposed Elks Club site. Due to a lack of landowner interest and potential challenges siting a communications tower on this irregularly-shaped and undersized lot, this candidate was removed from consideration. **[TAB 6, Figure 3]**.

- Shaker Junior / Senior High School - Three (3) large parcels total over 143± acres, and are located outside (west of) the search area at ground elevation in the range of 310-to-330± ft. AMSL. Given the size, ground elevation, and seemingly wide variety of tower siting options on this large property, the School District land was evaluated as a potential alternative to the Elks Club site. However, when inquiring about the possibility of leasing space for the proposed wireless facility, School District representatives expressed that they were not interested in leasing property to Verizon Wireless. Since a land lease deal could not be reached with the School District, this candidate was removed from consideration.

[TAB 6, Figure 3].

In conclusion, based upon a thorough evaluation of the Latham South search area and a thorough review of reasonable range of alternative sites, the Applicant has established that the subject site (located near 17 Elks Lane) is the most suitable location for the communications facility proposed. A propagation analysis prepared by the Verizon Wireless RF Engineer showing the adequate and safe coverage that will be achieved from this location and height is included at **TAB 6, Exhibit 2**. As noted above, a portion of the Elk's Club property was subdivided and re-zoned as a PDD for the CSSC Senior Housing project. The site plan approved during the PDD process includes the location for the proposed telecommunications facility.

B. COMPLIANCE WITH APPLICABLE TELECOMMUNICATIONS DESIGN REQUIREMENTS

1. **Site Plan:** The Applicant has provided a Zoning Site Plan that documents compliance with the Telecommunications Facilities Regulations (Chapter 189) and all applicable requirements of the Land Use Law (Chapter 190). *See,* Zoning Site Plan of Costich Engineering, P.C. at **TAB 14**.

2. **Tower-Specific Design Criteria:** The Applicant has designed its proposed facility in a manner that materially complies with all tower-specific design and siting criteria in the Town of Colonie Telecommunications Facilities Regulations, as set forth in Chapter 189 of the Town Code:

   - **COMPLIANCE WITH SITING PREFERENCES:** As noted above, the proposed location has been selected in accordance with the siting preferences set forth in Telecommunications Facilities Regulations (*see, e.g.,* §§ 189-8[A] and 189-9[A]).

   - **MINIMUM VISUAL IMPACT:** As also noted above, Verizon Wireless' facility has been sited to have a minimum possible visual effect on the surrounding community or neighborhood, including residential areas (*see, e.g.,* Telecommunications Facilities Regulations §§ 189-7[C][20 and 21] and 189-11[B and C]). The proposed monopine stealth design will limit visibility to neighboring properties and will blend in with existing vegetation.

   - **FAA MARKING/LIGHTING:** In accordance with Telecommunications Facilities Regulations §§ 189-10[B] and 189-11[A], Verizon Wireless has provided a TOWAIR Determination and a report from the FAA Notice Criteria Tool. These reports indicate that filing with the FAA is required due to the proximity to a navigation facility that may affect navigation signal reception. However, the filing is not related to the need for tower marking and/or lighting under Federal Aviation Administration (FAA) regulations **[TAB 8]**.

- **WATER, SEWER & TRAFFIC:** As noted, the proposed communications facility is unmanned, and will be visited for routine maintenance purposes approximately 2 - 3 times per year (only as needed). As such, the project will not have any impact on existing water and sewage services. In addition, neither pedestrian nor vehicular access will be significantly impacted (*see*, Engineering Report at **TAB 9**).

- **FENCING & SECURITY:** A six (6) foot high chain link fence with one (1) foot of barbed wire will be installed around the tower yard, to secure the tower site and protect Verizon Wireless' telecommunications equipment (and the equipment of other users) from unauthorized access (*see, e.g.*, Telecommunications Facilities Regulations § 189-12]). To make the monopine inaccessible to unauthorized individuals, climbing pegs will not be installed within 15' of grade (Telecommunications Facilities Regulations § 189-12[A]). All base station and related ground equipment will be installed inside a secure and remotely-monitored 9.3± ft. x 16± ft. equipment platform, located inside the fenced compound area (Telecommunications Facilities Regulations § 189-12][B]) (*see*, Engineering Report at **TAB 9** and Zoning Site Plan at **TAB 14**).

- **SITE LIGHTING:** The equipment platform will have a four 18 watt LED work lights, which will provide Network Operations personnel with adequate lighting in the event of nighttime emergencies or maintenance. To minimize the possibility of off-site impacts (which in any event remote due to distance and surrounding vegetation), the lights will be on a spring wound timer to shut them off after use.

- **LANDSCAPING:** The existing tree/brush line at the site (including mature deciduous and evergreen trees in the 52-64± ft. tall range on site, with some trees as tall as 70± ft.) will not be significantly disturbed, and therefore will screen Verizon Wireless' ground equipment from view. Due to the size of the 20.37± acre Elks Club property, existing vegetation, the significant distance to residential property boundaries and the monopine design for the tower, additional landscaping will not be required to screen the facility. However, additional plantings are proposed to shield the CSSC building from the equipment compound.

3. **Collocation Commitment - Waiver Request Item:** In accordance with Telecommunications Facilities Regulations §§ 189-7[B][6] and [C][11], Verizon Wireless agrees to construct a tower that is capable of supporting one (1) additional wireless provider having a panel antenna array comparable to that proposed in this application. **[TABS 9 and 10]**.

   Given the relatively low 65± ft. structural height proposed (total structure height of 70± ft.), design as a stealth tree and the number of FCC licensees available for the area, a waiver of the design requirement in Telecommunications Facilities Regulations §§ 189-7[B][6] for four (4)

additional wireless carriers is respectfully requested **[TAB 10]**.

Subject to applicable lease and land use requirements, Verizon Wireless agrees to negotiate in good faith with other licensed wireless service providers for future shared use of this space (*see*, Telecommunications Facilities Regulations §§ 189-7[B][7]). Any such shared use will be subject to the involved parties reaching agreement on reasonable terms and conditions, in accordance with all then-applicable standards, customs and procedures in the wireless industry, and there being adequate structural capacity and space to accommodate the equipment of the proposed tower user **[TAB 10]**.

4. **Radio Frequency (RF) Emissions:** In accordance with Telecommunications Facilities Regulations § 189-7[C][15], the Applicant has submitted completed a report prepared by a professional engineer licensed in the State of New York (Paul Dugan, P.E. of Millennium Engineering, P.C.) to document that the proposed facility will be: (a) in full compliance with the current FCC RF emissions guidelines (NIER); and (b) categorically excluded from local regulation under applicable federal law **[TAB 11; see also FCC Licenses at TAB 5]**.

5. **Non-Interference Letter:** The Applicant has submitted a letter from the Verizon Wireless RF Engineer documenting that the facility will not cause interference to nearby electronic devices. **[TAB 12]**.

6. **Removal Commitment:** The Applicant has submitted a letter of intent committing Verizon Wireless (or the then-current owner) to: (i) remove the communications facility and all related appurtenances if the facility becomes abandoned by all existing collocators for a period exceeding ninety (90) consecutive days, or a total of one hundred eighty (180) days in any three hundred sixty-five (365) day period (except for periods caused by force majeure or Acts of God, in which case repair or removal shall commence within 90 days); if such wireless telecommunications facilities fall into such a state of disrepair that it creates a health or safety hazard; or if such wireless telecommunications facilities have been located, constructed or modified without any required special use permit or any other necessary authorization (Telecommunications Facilities Regulations §§ 189-24); and (ii) post a performance bond in the amount of $75,000 to secure this obligation (Telecommunications Facilities Regulations §§ 189-18) **[TAB 13]**.

7. **Scale and Tower Height:** Verizon Wireless' RF Design Engineer has documented that rolling terrain, dense mature vegetation on the site and in the community generally (including trees in the 50 - 70± ft. or taller range), distance to adjoining cell sites and other factors necessitate a minimum tower height of 65± ft. (70± ft. when including simulated branches) to provide an adequate and safe level of Verizon Wireless service to the Latham South area **[TABS 6 and 7]**.

This height will provide space for collocation (shared use) by one (1)

additional wireless user having a panel antenna array similar to the installation proposed by Verizon Wireless, thereby furthering an important local objective in Telecommunications Facilities Regulations. **[TAB 14]**.

In this context, the 65± ft. monopine tower design fully complies with the competing interests of minimum tower height and space for collocation of other users, as set forth in the Town of Colonie Telecommunications Facilities Regulations.

8. **Minimum Visual Impact:** Sloping terrain, substantial mature vegetation on the site and in the area generally (including trees in the 70 - 80± ft. range along the western property boundary, and in the 50 - 70± ft. or taller range in the broader community) and other factors (e.g., existing build conditions) will serve to buffer and shield the tower from view to the immediately surrounding area and significant portions of the coverage area **[TAB 7]**.[2]

Moreover, Verizon Wireless has taken a number of practical steps to further mitigate potential visual impact(s) to the surrounding community:

- The proposed communications facility is located on a large (20.37± acre) tract, and will be set back from adjoining properties a significant distance **[see, Sheet CA110 at TAB 14]**;

- Verizon Wireless has limited the height of its communications facility to 65± ft. (70± ft. when including simulated branches), allowing the facility to accomplish applicable coverage objectives and clear most intervening terrain, structures and vegetation (50 - 70± ft. range or more in the broader area);

- The monopine tower will be designed with capacity for collocation (use) by one (1) additional wireless service provider, thereby furthering an important objective of the Town of Colonie Telecommunications Facilities Regulations;

- Verizon Wireless is proposing a site development plan that utilizes existing access and parking improvements, and minimizes the disturbance and/or removal of existing mature vegetation and brush to the maximum extent practicable, thus allowing these features to screen the tower base and/or significant portions of the tower from public view (*see,* Telecommunications Facilities Regulations § 190-10[E][14]); and

- So long as the height of the telecommunication tower is at or below 70 feet above ground level (AGL), tower marking and/or lighting

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[2] See Visual EAF Addendum, Viewshed Map and accompanying Photo Simulations, submitted herewith.

will not be required under Federal Aviation Administration (FAA) regulations **[TAB 8]**.

Due to the physics of radio frequency (RF) signal propagation, Verizon Wireless' antennas need to clear all natural and man-made objects to function properly **[TAB 6]**. This translates to a certain amount of unavoidable (but necessary) visual impact, which in this case has been appropriately mitigated and is primarily limited to a relatively small area to the north and west, within 1,500± feet of the project site **[TAB 7]**. As such, the Applicant respectfully submits that the proposed communications facility will not result in a significant level of visual impact to the surrounding community or neighborhood.

9. **Lot Size and Setbacks:** As noted, the proposed monopine tower complies with all existing setback requirements for the District (*see,* Land Use Law § 170-6[B]), and is located on a relatively large (20.37± acre) parcel that fully complies with all applicable tower design and setback criteria in the Telecommunications Facilities Regulations:

   - The monopine tower will be located a substantial distance from adjoining property lines, ranging from a minimum of 272± ft. to the east and a maximum of 1,114± ft. to the north; and

   - This location and layout substantially exceed the minimum setback from any property line equal to 110 percent of the height of the tower, or 105± ft. for a 70± ft. structure height (*see,* Telecommunications Facilities Regulations § 190-10[E][10]).

   See, **Sheet CA100 at TAB 14**.

   In this context, the proposed facility fully complies with all lot size and setback requirements in the Colonie Land Use Law (including the Telecommunications Facilities Regulations), and represents the least intrusive means of providing service to the Latham South area. *See, also,* discussion of minimal degree of potential visual impact, above.

Based upon the foregoing, Verizon Wireless respectfully submits that approval under the *Rosenberg* public utility standard is appropriate in this case. In addition, Verizon Wireless notes the following:

Public Necessity

As noted above and in **TABS 3 and 4**, Verizon Wireless is recognized as a public utility under New York law and a provider of personal wireless services under the federal Telecommunications Act of 1996. This project is a public necessity in that it is required to render adequate and safe coverage (mobile and in-building) to a significant portion of the Town of Colonie. This, combined with the federal mandate to expeditiously deploy advanced wireless services across

the nation and Verizon Wireless' FCC licenses to provide such services in the Town of Colonie, demonstrates that Verizon Wireless' facility is a public necessity. Without the construction of the communications facility proposed, the public would be deprived of an essential means of communication, which, in turn, would jeopardize the safety and welfare of the community and traveling public.

Compelling Reasons for Approval

As is demonstrated by the Applicant's Site Selection Analysis, the area within which Verizon Wireless can locate its facility and provide an adequate and safe level of service to the Latham South area is extremely limited. Moreover, an evaluation by the Applicant's real estate expert of potential alternative sites within the search area indicates that there are no existing communications towers or other tall structures that can be used to provide adequate and safe service to the Latham South area. This investigation also concludes that the subject site is the most suitable candidate for a new tower facility.

A minimum antenna centerline height of 56± ft. (overall tower height of 70± ft.) is required to provide adequate and safe coverage to Latham South area; this height will also provide suitable collocation space for use by one (1) additional wireless carrier, thereby furthering an important objective of the Town of Colonie Land Use Law.

The proposed communications facility is located on a large (20.37± acre) tract. This parcel allows for the placement of Verizon Wireless' facility a significant distance from adjoining properties, ranging from a minimum of 272± ft. from the eastern property line to a maximum of 1,114± ft. from the northern property line. This location, layout and proposed height will exceed the minimum setback from any property line equal to 110% of the height of the tower (or 77± ft. for a 70± structural height), and represents the least intrusive means of providing service to the target area.

Terrain and substantial mature vegetation (both on the premises and in the area generally) will serve to buffer and shield the monopine tower from view to the immediately surrounding area and significant portions of the coverage area. Moreover, the Applicant has implemented a number of additional measures, most notably camouflaging the tower as a monopine, that will serve to mitigate potential visual impact(s) to the maximum extent practicable, and no FAA marking and/or lighting will be necessary. In this context, the communications facility proposed has been sited to have the least practical adverse visual effect on the environment, and any resulting impact(s) may properly be considered as minimal in nature and scope.

As set forth above, the Applicant has proposed a facility that will enable Verizon Wireless and other wireless service providers to provide adequate and safe wireless services to an important area of the Town of Colonie in accordance with their FCC licenses. In this regard, the proposed communications facility will not give rise to an undue visual impact.

V. Conclusion

Approval of this project will enable Verizon Wireless to provide an adequate and safe level of hand-held wireless telephone service to a significant area of the Town of Colonie, within the confines of applicable technological limitations and substantially all land use requirements. Such

approval will also be in the public interest, in that it will allow Verizon Wireless to comply with its statutory mandate to build out its network and provide local businesses, residents and public service entities with safe and reliable wireless communications services. For the reasons set forth herein, Verizon Wireless respectfully submits that this project complies in all material respects with the Town of Colonie Telecommunication Special Use Permit standard, and all other applicable requirements of the Colonie Land Use Law, and any potential impact on the community created by approval of this project will be minimal and of no significant adverse effect.

Attached to this Application and Statement of Intent are the following:

- Signed Verification
- Appendix A addressing the remaining telecommunications code requirements;

A. Commercial Zoning Verification and Special Use Permit Application form;

B. List of addresses within 1,000 feet of the property;

1. Full Environmental Assessment Form ("Full EAF") prepared by Costich Engineering, P.C.;

2. Redacted Copy of Lease Agreement between the Colonie Elks and Verizon Wireless;

3. Documentation of Public Utility Status and Overview of the *Rosenberg* Decision;

4. Overview of Telecommunications Act of 1996;

5. Maintenance and Authorization Letter prepared by Kathy Pomponio, Real Estate Manager for Verizon Wireless, together with copies of Verizon Wireless' FCC Licenses for the Albany County NY area;

6. Site Selection Analysis and Radio Frequency (RF) Engineering Propagation Analyses prepared by the Verizon Wireless Network Engineering Department and site acquisition agent to Verizon Wireless;

7. Visual EAF Addendum, Viewshed Map and Photographic Simulations prepared by Costich Engineering, P.C.;

8. TOWAIR Determination and report from the FAA Notice Criteria Tool;

9. Tower Design Letter prepared by David Weisenreder, P.E. of Costich Engineering, P.C.

10. Tower Design and Collocation Commitment Letter prepared by Kathy Pomponio, Real Estate Manager for Verizon Wireless;

11. Radio Frequency (RF) Safety FCC Compliance Report of Millennium Engineering, P.C. (Paul Dugan, P.E.);

12. Non-Interference Letter prepared by Verizon Wireless Network Engineering Department;

13. Removal Commitment Letter prepared by Kathy Pomponio, Real Estate Manager for Verizon Wireless;

14. Zoning Site Plan Drawings prepared by Costich Engineering, P.C. and

15. Specification Sheets.

Kindly place this matter on the agenda for discussion at the next available meeting of the Town of Colonie Zoning Board of Appeals. In the meantime, if you should have any questions or require any additional information concerning this project, I can be reached at (518) 438-9907.

Thank you for your consideration.

Respectfully submitted,

CELLCO PARTNERSHIP d/b/a Verizon Wireless

David C. Brennan, Esq.
Regional Local Counsel

Dated: June 28, 2018

VERIFICATION

STATE OF NEW YORK)
: ss.:
COUNTY OF ALBANY)

DAVID C. BRENNAN, being duly sworn, deposes and says that he is the attorney of record for the Applicant, Cellco Partnership d/b/a Verizon Wireless, and is fully familiar with the factual information concerning this application; that he has read the foregoing application and knows the contents thereof; that the same is true to the best of deponent's knowledge, except as to the matters therein stated to be alleged upon information and belief, or matters based upon information or expert reports provided and/or completed by the Applicant, its authorized representatives, consultants and vendors, and other third parties (including but not limited to representatives of the owner of the subject tower facility).

DAVID C. BRENNAN

Sworn to before me this
28th day of June 2018

Notary Public

ROBERT A. PANASCI
Notary Public, State of New York
Qualified in Albany County
No. 02PA6071041
Commission Expires March 11, 2021

APPENDIX "A"
STANDARD APPLICATION INFORMATION
Latham South Communications Facility

Procedural Requirements

1. **§189-7[A][1]:** The Application for Zoning Verification submitted by Verizon Wireless and Determination of the Colonie Building Department are annexed hereto. See **Exhibit A**.

2. **§189-7[A][6]:** In accordance with Town of Colonie procedures, written notice to adjoining municipalities will be coordinated with the Colonie Building Department.

3. **§189-7[A][7]:** A site visit & pre-application meeting was held with the Town of Colonie Building Department and Town consultant (Center for Municipal Services) on June 23, 2016.

4. **§189-7[A][8]:** A visual impact "balloon test" assessment was held on June 24, 2017 on notice to the Town of Colonie Zoning Board of Appeals (ZBA) and public. Public notice of the "balloon test" was published on June 14, 2017 and June 21, 2017 in the *Colonie Spotlight*. Further notice was published on June 10, 2017 and June 17, 2017 in the *Time Union*. Visual EAF Addendum, Photo Simulations and the Visual Resource Evaluation are located at **TAB 7**.

5. **§189-7[A][10]:** The notification list for landowners within 1,000 ft. of any property line of the parcel on which the project is located is annexed as **Exhibit B**.

General Requirements

6. **§189-7[B][2]:** All Verizon Wireless telecommunications equipment will be constructed, operated and maintained in accordance with all applicable and permissible Town, County, State and Federal laws, rules and regulations **[TABS 5 and 9]**.

7. **§189-7[B][3]:** All utilities will be placed underground in a manner consistent with all applicable laws, rules and regulations **[TABS 5 and 14]**.

8. **§189-7[B][4]:** Verizon Wireless' communications facility will be unmanned and visited for routine maintenance purposes approximately 2 - 3 times per year (as-needed). Adequate parking and turnaround space exists in the compound area, and the existing and proposed access improvements at the site will be sufficient for emergency and service access. In this context, and no pedestrian, vehicular access or parking issues exist **[TABS 14]**.

9. **§189-7[B][6 and 7] (Partial Waiver Request):** Verizon Wireless agrees to construct a monopine tower capable of supporting one (1) additional user having a panel antenna array comparable to that proposed in this application. **[TABS 9, 10 and 14]**. Given the relatively low 65± ft. structural height (70 when including the simulated branches), and the number of FCC licensees available for the area, a waiver of the design requirement for four (4) additional wireless carriers in Telecommunications Facilities Regulations §189-7[B][6] is respectfully requested. Upon completion of construction, and subject to all applicable lease and land use requirements, Verizon Wireless agrees in accordance with Telecommunications Facilities Regulations §189-7[B][7] to negotiate in good faith with other licensed wireless service providers for future shared use of this space **[TAB 10]**.

Submission Requirements

10. **§189-7[C][1]:** The names, addresses and telephone/fax numbers of the engineering, legal and real estate personnel preparing this Application and Statement of Intent are listed on the application cover sheet. The name and address of the property owner is the Colonie New York Lodge No. 2192 Benevolent and Protective Order of Elks of the United States of America, Inc. a/k/a Colonie Elks Lodge, B.P.O.E. 2192 (hereinafter referred to as the "Colonie Elks"), 11 Elks Lane, Latham, New York 12110, telephone (518) 785-3557, facsimile (518) 261-6636. The name and address of the Applicant and tower owner is Cellco Partnership d/b/a Verizon Wireless, 1275 John Street, Suite 100, Rochester, New York 14586, telephone number (585) 321-5435, facsimile (585) 359-3503.

11. **§189-7[C][2]:** The postal address and tax map information for the premises are: 17 Elks Lane, Latham, New York 12110 (Tax Map Parcel No. 31.4-5-37).

12. **§189-7[C][3]:** Verizon Wireless is authorized to make this application by virtue of an Option and Land Lease Agreement with the Latham Elks dated as of March 7, 2008. A redacted copy of this Agreement is included at **TAB 2**.

13. **§189-7[C][4]:** The premises are located in the SFR (Single Family Residential) and PDD (Planned Development District) Zoning Districts.

14. **§189-7[C][5]:** VZW has annexed a statement from Kathy Pomponio, Real Estate Manager, committing the Applicant to maintain the facility in compliance with all applicable laws, rules and regulations, and documenting that the construction of the communications facility proposed is legally permissible **[TAB 5]**.

15. **§189-7[C][6 and 7]:** A Site Selection Analysis Report, prepared by Verizon Wireless' RF Design Engineer and Site Acquisition Specialist to demonstrate the purpose and need for the proposed facility, is included at **TAB 6**.

16. **§189-7[C][8 and 9]:** A site plan showing the proposed communications facility

and other associated improvements is included herewith **[Zoning Site Plan at TAB 14]**.

17. **§189-7[C][8][m]:** The location of the nearest residential structure measured in feet is ± ft. 459 west (lands n/f of Robert Monroe and Kenneth Monroe at 22 Abedar Lane).

18. **§189-7[C][10]:** The locations, size and height of all proposed Verizon Wireless antennas and appurtenant structures are:

- One (1) CommScope NHH-65C-R2B or equivalent (700/850/1900 MHz (LTE)) multi-band antenna per sector;
- One (1) CommScope NHH-65C-R2B or equivalent (700/850/2100 MHz (LTE)) multi-band antenna per sector;
- Two (2) Samsung Remote Radio Heads per sector
- One (1) Raycap RVZDC-6627-PF-48 over-voltage protector (OVP)
- Two hybrid fiberoptic cables (power and fiber) will connect the base station equipment to the remote radio heads; and
- The proposed direction (orientation) of the antenna sectors at the time of installation will be 30° (alpha), 150° (beta) and 280° (gamma).

See, Zoning Site Plan at **TAB 14** and Specification Sheets at **TAB 15**.

19. **§189-7[C][11 and 12] (Timing Waiver Request):** The exact make, model and manufacturer of the proposed monopine and final construction drawings are subject to completion of the local, state and/or federal zoning/land use and other permitting approval processes, and thereafter, completion of Verizon Wireless' internal design/bid process. To allow Verizon Wireless an opportunity to obtain all required permits and comply with its internal design/bid process, a timing waiver is requested with respect to these items, which the Applicant agrees will be produced at the time of its Application for Building Permit. As noted above, the tower will be designed to accommodate Verizon Wireless and one additional wireless carrier having a panel antenna comparable to Verizon Wireless' **[TABS 9 and 10]**. The locations of all structures (existing and proposed) on the premises leased by the Applicant are shown on the Zoning Site Plan prepared by Costich Engineering, P.C. **[TAB 14]**.

20. **§189-7[C][13]:** The frequency, modulation and class of service of Verizon Wireless' radio equipment will be:

Frequencies: <u>Cellular (B Band) – Legacy 3G Cellular; Future conversion to LTE</u>
Tx 880.020 – 889.98 and 891.51 - 893.970 MHz

Rx 835.020 – 844.98 and 846.51 - 848.970 MHz

Personal Communications Service (PCS LTE)
Tx 1980.00 – 1990.00 MHz
Rx 1900.00 – 1910.00 MHz

WU 700 MHz Upper Band (Block C)
Tx 746.00 – 757.00 MHz
Rx 776.00 – 787.00 MHz

Advanced Wireless Services (AWS-1) (Block F)
Tx 2145.00 – 2155.00 MHz
Rx 1745.00 – 1755.00 MHz

Modulation: Long Term Evolution (LTE)

Class of Service: Handheld Mobile Communications

See, FCC Licenses at **TAB 5** and Site Selection Analysis Report at **TAB 6**.

21. **§189-7[C][14]:** The transmission power levels of the antennas are discussed in the Site Selection Analysis Report at **TAB 6**.

22. **§189-7[C][15]:** An RF Safety FCC Compliance report completed by a New York State licensed professional engineer (Paul Dugan, P.E. of Millennium Engineering, P.C.) is included at **TAB 11** to document that the proposed communications facility will be: (a) in full compliance with the current FCC RF emissions guidelines (NIER); and (b) categorically excluded from local regulation under applicable federal law **[see, also TAB 4]**.

23. **§189-7[C][16]:** Copies of the applicable Verizon Wireless FCC licenses are included herewith **[TAB 5]**.

24. **§189-7[C][17] (Timing Waiver Request):** The geotechnical subsurface soils investigation and foundation design remain subject to completion of the local, state and/or federal zoning/land use and other permitting approval processes, and thereafter, completion of Verizon Wireless' internal design/bid process. To allow Verizon Wireless an opportunity to obtain all required permits and comply with its internal design/bid process, a timing waiver is requested with respect to these items, which the Applicant agrees will be produced at the time of its Application for Building Permit **[TABS 9 and 10]**.

25. **§189-7[C][18]:** Verizon Wireless has provided a TOWAIR Determination and a report from the FAA Notice Criteria Tool. These reports indicate that filing with the FAA is required due to the proximity to a navigation facility that may affect navigation signal reception. However, the filing is not related to the need for tower marking and/or lighting under Federal Aviation Administration (FAA)

regulations [**TAB 8**].

26. **§189-7[C][19] (Timing Waiver Request):** The structural certification remains subject to completion of the local, state and/or federal zoning/land use and other permitting approval processes, and thereafter, completion of Verizon Wireless' internal design/bid process. To allow Verizon Wireless an opportunity to obtain all required permits and comply with its internal design/bid process, a timing waiver is also requested with respect to this items, which the Applicant agrees will be produced at the time of its Application for Building Permit **[TABS 9 and 10]**.

27. **§189-7[C][20 and 21]:** The communications facility proposed will have the least practical adverse visual effect on the environment, visual viewshed and residences in the Town of Colonie, and any resultant visual impact is minimal in nature and scope. *See,* Telecommunications Facility Regulations, §189-7[C][20]. In further support of a finding of no significant visual impact(s), the Applicant notes as follows:

    a. **Zone of Visibility Map:** The "balloon test" and associated Viewshed Map completed by the Applicant document terrain, dense mature vegetation in the surrounding community in the 50-70± ft. tall range and/or existing build conditions will limit visibility of the project to a relatively small area within one mile of the project site. **[TAB 7]**. *See,* Telecommunications Facility Regulations, §189-7[C][21][a].

    b. **Pictorial Representations:** The Photographic Log and associated "before and after" photographic simulations of the proposed monopole at **TAB 7** demonstrate that in most instances, material portions of the proposed facility will be screened from view due to rolling terrain, dense mature vegetation and trees in the surrounding and and/or existing build conditions. *See,* Telecommunications Facility Regulations, §189-7[C][21][b].

    c. **Existing Vegetation; Site Screening:** Existing build conditions and mature vegetation at the site (including a stand of mature trees in the 52-64± ft. range near the project site, and trees and 70-80± ft. tall trees to the west at the rear of Abedar Drive) will not be significantly disturbed, and will therefore screen significant portions of the facility from public view.

28. **§189-7[C][22]:** A Site Selection Analysis prepared by Verizon Wireless' Radio Frequency (RF) Design Engineer and Site Acquisition Specialist, detailing the purpose and need for this facility, and meaningful efforts by the Applicant to secure shared use of existing towers or other tall structures, is included at **TAB 6**. Included in this report is the September 2, 2010 letter from the Sisters of St. Joseph of Carondelet, declining interest in leasing space to Verizon Wireless at the Sisters of St. Joseph Provincial House property at 385 Watervliet-Shaker Road (Route 155 and Delatour Road). Also included is a letter from the adjacent

Colonie Senior Services Center, Inc.'s (CSSC) facility indicating that the CSSC building was not available to lease for collocation.

29. **§189-7[C][23]:** Not applicable (applies to co-locations and/or modifications).

Other Application Requirements

30. **§189-8 (Location of Wireless Telecommunications Facilities)** – A Site Selection Analysis prepared by Verizon Wireless' Radio Frequency (RF) Design Engineer and Site Acquisition Specialist, detailing the purpose and need for this facility, is included at **TAB 6**. This report contains a detailed analysis of the Applicant's efforts to site the proposed facility in accordance with the siting priorities in Telecommunications Facility Regulations §189-8[A].

31. **§189-9 (Shared Use of Wireless Telecommunications Facilities and Other Structures)** – A Site Selection Analysis prepared by Verizon Wireless' Radio Frequency (RF) Design Engineer and Site Acquisition Specialist, detailing the purpose and need for this facility, and meaningful efforts by the Applicant to secure shared use of existing towers or other tall structures, is included at **TAB 6**. As noted, this report includes a September 2, 2010 letter from the Sisters of St. Joseph of Carondelet, declining interest in leasing space to Verizon Wireless at the Sisters of St. Joseph Provincial House property at 385 Watervliet-Shaker Road (Route 155 and Delatour Road). Also included is a letter from the adjacent Colonie Senior Services Center, Inc.'s (CSSC) facility indicating that the CSSC building was not available to lease for collocation.

32. **§189-10 (Height of Telecommunications Towers)** – A Site Selection Analysis prepared by Verizon Wireless' Radio Frequency (RF) Design Engineer and Site Acquisition Specialist, detailing the need for the proposed 65± ft. tall monopine structure (70± ft. when including the simulated branches), is included at **TAB 6**.

33. **§189-11 (Lighting and Visibility)** – As noted, Verizon Wireless has provided a TOWAIR Determination and a report from the FAA Notice Criteria Tool. These reports indicate that filing with the FAA is required due to the proximity to a navigation facility that may affect navigation signal reception. However, the filing is not related to the need for tower marking and/or lighting under Federal Aviation Administration (FAA) regulations [**TAB 8**].

The tower will be installed as a stealth monopine tower.

The equipment platform will have a four 18 watt LED work lights, which will provide Network Operations personnel with adequate lighting in the event of nighttime emergencies or maintenance. To minimize the possibility of off-site impacts (which in any event remote due to distance and surrounding vegetation), the lights will be on a spring wound timer to shut them off after use. [**TAB 1 at page 8**].

34. **§189-12 (Security)** - Verizon Wireless' telecommunications equipment will be located inside a secure equipment platform measuring approximately 9.3 ft. x 16 ft. in size. This equipment platform (and the ground installations of other users) will be enclosed within a 6 ft. chain link fence with one (1) foot of barbed wire, to secure the telecommunications equipment from unauthorized access. No climbing pegs are proposed within 15 ft. of grade to make the proposed monopole further inaccessible to potential trespassers **[TAB 14]**.

35. **§189-13 (Signage)** - Appropriate Applicant signage with required warnings and/or emergency contact information will be posted at the site.

36. **§189-14 (Lot Size and Setbacks)** - The proposed monopole is located on a large (21.2± acre) tract, and will be set back from adjoining properties a significant distance ranging from 272± ft. to the eastern property line to a maximum of 1,114± ft. from the northern property line **[see, TAB 14 at Sheet CA100]**. In this context, the proposed 70± ft. tall structure will comply with the 110% tower height setback requirement in Telecommunications Facility Regulations §189-14.

In addition, Verizon Wireless' equipment shelter will comply with all minimum setback requirements for the SFR District as set forth in the Town of Colonie Land Use Law (190 Attachment 2 - Dimensional Table at Chapter 190 of Town Code):

YARD REQUIREMENTS

FRONT SETBACK MINIMUM	SIDE SETBACK MINIMUM EACH SIDE/ TOTAL OF TWO SIDES (FEET)	REAR SETBACK MINIMUM (FEET)
40	10/25	25
Platform 284'±	Platform - right: 1,121'± Platform – left: 458'±	Platform: 370'±

See, **TAB 14 at Sheet CA100 "Dimension Table/Setback Requirements".**

37. **§189-18 (Performance Security) (Timing Waiver Request):** The Applicant will comply with the applicable bond requirements at the time of submitting its Application for Building Permit. **See TAB 13.**

38. **§189-20 (Liability Insurance) (Timing Waiver Request):** The Applicant will comply with the applicable liability insurance requirements at the time of submitting its Application for Building Permit.

39. **§189-21 (Indemnification):** The indemnification provision is not applicable as the project is not on Town property.

EXHIBIT A

Young / Sommer LLC

YOUNG SOMMER WARD RITZENBERG BAKER & MOORE LLC

COUNSELORS AT LAW

EXECUTIVE WOODS, FIVE PALISADES DRIVE, ALBANY, NY 12205
Phone: 518-438-9907 • Fax: 518-438-9914

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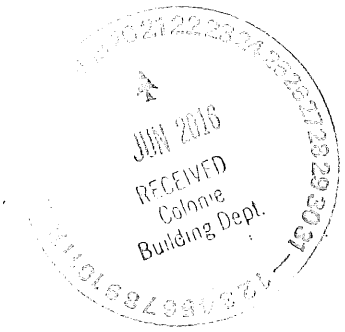
June 20, 2016



Via Hand Delivery
Wayne Spenziero, Sr. Building Inspector
Building Department
Town of Colonie
Public Operations Center
347 Old Niskayuna Road
Latham, NY 12110-2290

Elizabeth DelTorto, Town Clerk
Town of Colonie
Memorial Town Hall
534 Loudon Road
Newtonville, NY 12128

RE: Cellco Partnership d/b/a Verizon Wireless – Latham South Communications Facility – 11 Elks Lane, Town of Colonie

Dear Town Clerk DelTorto and Mr. Spenziero:

Enclosed for filing with your respective offices is a copy of a Commercial Zoning Verification issued for the above property. Kindly date-stamp the copies of the cover letter and Zoning Verification and return them to the courier.

I appreciate your assistance with this matter.

Very truly yours,

David C. Brennan

Encl.

Commercial Zoning Verification

Town of Colonie Building and Fire Services Department
Public Operations Center, 347 Old Niskayuna Road
Latham, New York 12110

Phone (518) 783-2706
www.colonie.org/building

Paula A. Mahan
Town Supervisor

THIS APPLICATION IS FOR ZONING VERIFICATION FOR ANY COMMERCIAL PROJECT, SUBMIT THIS TO THE BUILDING DEPARTMENT. NOT TO BE USED FOR A SUBDIVISION OF LAND

THIS FORM WILL BE ON FILE IN THE BUILDING DEPARTMENT FOR 1 YEAR

Any proposal which requires a Town of Colonie Building and Zoning Permit or an approval issued by the Town of Colonie Planning Board/Department must first be reviewed by the zoning enforcement officer of the Town of Colonie to determine whether the proposal violates any provision(s) of the Town of Colonie Zoning Laws. The Officer's determination is based solely upon the information submitted on/with this form and such determination is subject to review and change if the project is modified or further information becomes available at a subsequent date. The officer reserves the right to request further information as deemed necessary. A disapproval of the application by the zoning officer means the project, as designed, cannot proceed for the reasons provided. If you the applicant disagree with the zoning officer's determination you may appeal said determination to the Town of Colonie Zoning Board of Appeals. A new Application for Zoning Verification may need to be submitted if the applicable zoning laws change before the proposed action is completed.

1. GENERAL INFORMATION: CASE #Z 20160031S

Address of site of proposed action:

AKA 17

11	Elks Lane	Latham	NY	12110
Number	Street	City	State	Zip

Name of applicant Cellco Partnership d/b/a Verizon Wireless

Address 1275 (Number) John Street, Suite 100 (Street) West Henrietta (City) NY (State) 14586 (Zip)

Applicant's phone (W) 585-321-5435 (Cell) _____

Email Address kathy.pomponio@verizonwireless.com

Contact person David C. Brennan, Esq.

Email Address dbrennan@youngsommer.com

Phone number (W) 518-438-9907 (Cell) 518-229-8699

Property owner(s) Colonie New York Lodge No. 2192 B.P.O.E.

Address 11 (Number) Elks Lane (Street) Latham (City) NY (State) 12110 (Zip)

Approved Pending
Special Use Permit Granted by ZBA
JUN 16 2016
Town of Colonie Building Dept.

2. Describe the present use of the building and property. (If vacant, so note and list last prior use).
Elks club, recreational facilities and vacant woodlands; Approved site plan/PDD for senior housing.

3. APPLICANT'S PROPOSED ACTION:

A. Is the proposed action a:

☐ New building ☐ Addition ☐ Renovation ☐ Accessory Structure
☐ New tenant (business name)_____ ☐ (Including Alterations) ☐ (No Work)
☐ Change of use (new use)_____
☐ Temporary tent (Date tent will be erected)_____ (Date tent will be removed)_____
☒ Site change or other (describe below) Public utility/personal wireless service facility

B. Proposed use (check where applicable):

☐ Office	☐ Warehouse / Storage	☐ Motor Vehicle Repair Shop	☐ Supermarket
☐ Bank	☐ Fast Food Establishment	☐ Motor Vehicle Service Station	☐ Wholesale
☐ Retail	☐ Restaurant / Bar	☐ Motor Vehicle Sales	☐ Industrial
☐ Bakery	☐ Convenience Food Store	☐ Mini Mart	☐ Day Care Child / Adult
☐ Hotel	☐ Personal Service Business	☐ Multifamily Dwelling	☐ Nightclub
☐ School	☒ Wireless Telecom Facility	☐ Place of Worship	☐ Other

C. DESCRIBED THE PROPOSED USE IN DETAIL IN A COMPLETE DESCRIPTIVE NARRATIVE.

See "Description of Land Use" (included). In general, the proposed use is the addition of a 70+/- foot tall stealth monopole communications facility.

OVER

4. Parcel is located in a PDD zoning district (refer to Town of Colonie Zoning Map)

5. SITE INFORMATION: IF THE APPLICANT PROPOSES ONLY A TENANT CHANGE, THIS SECTION MAY NOT BE REQUIRED TO BE COMPLETED. HOWEVER, THIS SECTION MUST BE COMPLETED AND TWO (2) COPIES OF THE PROPOSED SITE PLAN MUST BE SUBMITTED FOR ANY PROPOSAL WHICH INCLUDES A CHANGE OF USE, TEMPORARY TENT, ADDITION, ACCESSORY STRUCTURE OR NEW BUILDING.

A. TEMPORARY TENT: Plan may be hand drawn by the applicant and must depict the existing structure(s), if any, the proposed structure/tent, the lot layout, and all new and existing building setbacks.

B. MAJOR / MINOR OR NONCONFORMING COMMERCIAL SITE OR USE: Plan must be drawn by a licensed N.Y.S. engineer, architect, surveyor or landscape architect and have upon it; the address of the property, all easements, area of the parcel, abutting public highways, frontage of the lot on public highway, all building setback dimensions, the proposed structure, parking, building heights, and all zoning districts within 300 feet of the site. In OR, COR, HCOR and NCOR zoning districts, the site plan must show existing buildings and front yard setback dimensions for abutting properties on each side.

NOTE: MAJOR/MINOR/NONCONFORMING USE Site Development Proposals are defined in the Town of Colonie Land Use Law Section 190-11(A)(B).

C. Area of Property: 20.37 acres and 887137.68 square feet Lot Size width 866 depth 1593
Length of property on a developed street 53 feet (Along Elks Lane)
Is this a corner lot? Yes ____ No x Frontage on each street ____ ft. ____ ft.
Is this a Through lot? Yes ____ No x Frontage on each street ____ ft. ____ ft.

Building setbacks:	Existing	Proposed (Platform)		Existing	Proposed
Front yard	71 ft.	284 ft.	Right side yard	297 ft.	1121 ft.
Rear/Front yard	135 ft.	370 ft.	Left side yard	650 ft.	458 t.

Existing Building Height (at peak) 19± ft. 1 stories (Ex. Elk's Lodge)
Proposed Building Height (at peak) ____ ft. n/a stories (Equipment Platform)
New Building Size: Length 11.5 ft. Width 16 ft.

Gross floor area: existing 23440± sq. ft. proposed ____ sq. ft. total ____ sq. ft. n/a

6. SIGNATURE OF APPLICANT Dal C Brennan
PRINTED OR TYPED APPLICANT NAME David C. Brennan, Esq. DATE 5/17/16

If DISAPPROVED "Such appeal shall be taken within sixty days after the filing in the town clerk's office of any order, requirement, decision, interpretation or determination of the administrative official charged with the enforcement of such ordinance or local law, from which the appeal is taken".

XXXXXXXXXXXXXXXXXXXXXXXX FOR OFFICIAL USE ONLY XXXXXXXXXXXXXXXXXXXXXXXX

I, Lorayne Spaziano zoning officer of the Town of Colonie do hereby find that the proposed action as described above and any attachments hereto,

IS IN ACCORDANCE _____ APPROVED DATE 6/16/16
SIGNATURE OF ZONING OFFICER

IS NC The application for the construction of a 70' ft. stealth monopole tower Wireless Telecommunications facility at 11 ____
AKA 17 Elks Lane with twelve (12) panel antennas mounted at the top of the tower and a 11'5" X 16' equipment
with shelter, a GPS antenna unit and all related ground equipment and utility services is approved for a Wireless ____
Telecommunications Special Use Permit (WTSUP) to the Zoning Board of Appeals as required under the Town of ____
Colonie Land Use Law 189-5A.

Approved Pending
Special Use Permit Granted by ZBA
JUN 16 2016
Town of Colonie Building Dept.

TO THE APPLICANT: THIS IS NOT A BUILDING AND ZONING PERMIT. IF YOU WISH TO PROCEED, PLEASE SUBMIT AN APPLICATION FOR THE FOLLOWING:

☐ BUILDING AND ZONING PERMIT APPLICATION (Building Department)
☐ APPLICATION FOR ZONING VARIANCE OR INTERPRETATION (Building Department)
☐ APPLICATION FOR PLANNING DEPT. APPROVAL (Planning and Economic Development)
☑ SPECIAL USE PERMIT USE ____

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX OFFICIAL USE ONLY XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Variance granted on property Yes ☑ No ☐
Variance # ____
Is existing use nonconforming Yes ☐ No ☑

Parcel in/near a wetland Yes ☑ No ☐
Parcel in/near a flood plain Yes ☐ No ☑
Watercourse on/near the property Yes ☐ No ☑

YES NO
☐ ☑ VIOLATION - CHAPTER 190-118 (BUILDING PERMITS REQUIRED)
CONSTRUCTION STARTED WITHOUT OBTAINING BUILDING AND ZONING PERMIT

Colonie Elks Lodge
#83-050 #80-039 #76-041
#86-067 #85-060 #77-032
#84-062 #82-028 #67-003
#81-028 #88-090

Jun-14

TOWN OF COLONIE
ZONING BOARD OF APPEALS

Public Operations Center
347 Old Niskayuna Road
Latham, New York 12110

Phone (518) 783-2706 Fax (518) 783-2772
www.colonie.org/building

APPLICATION FOR SPECIAL USE PERMIT

An approved "Application for Zoning Verification" and all attachments thereto, including any approved plan, must be submitted with this form. Also attach all required materials and justification pursuant to the Colonie Town Code § 190-57 and related provisions and a SEQR EAF form.

ADDRESS OF SITE: 17 (Number) Elks Lane (Street)

Colonie New York Lodge No. 2192 ~~Benevolent And Protective Order Of~~ Elks Of The United States Of America, Inc. (Name Of Business/Tenant)

Cellco Partnership d/b/a Verizon Wireless
APPLICANT'S NAME*

Date 6/28/18

David C. Brennan, Esq., Local Regional Counsel
APPLICANT'S SIGNATURE* PRINT OR TYPE NAME SIGNED

* Applicant must be either the owner of the property to be developed or used, or be a party with a purchase agreement for the property. A copy of the purchase agreement must be attached.

Address 1275 (Number) John Street, Suite 100 (Street) West Henrietta (City) NY (State) 14586 (Zip)

Phone No. (585) 321-5435 Fax #: (585) 359-3503 Email:

CONTACT PERSON: David C. Brennan, Esq., Young/Sommer LLC

Address 5 (Number) Palisades Drive, Suite 300 (Street) Albany (City) NY (State) 12205 (Zip)

Phone No. (518) 438-9907 Fax #: (518) 438-99174 Email: dbrennan@youngsommer.com

NAME OF PRESENT PROPERTY OWNER: Colonie New York Lodge No. 2192 ~~Of The United States Of America, Inc.~~ ~~Benevolent And Protective Order Of Elk~~

Address 11 (Number) Elks Lane (Street) Latham (City) NY (State) 12110 (Zip)

DESIGN PROFESSIONAL (NYS Licensed) David A. Weisenreder, P.E.

Check One Engineer X Surveyor ____ Architect ____ Landscape Architect ____

Address 217 (Number) Lake Avenue (Street) Rochester (City) NY (State) 14608 (Zip)

Phone No. (585) 458-3020 Fax #: (585) 458-2731 Email: dweisenreder@costich.com

DESCRIBE PRESENT USE OF THE BUILDING AND PROPERTY (IF VACANT, SO NOTE AND LIST LAST USE):
Elks club, recreational facilities and vacant woodlands; Approved site plan/PDD for senior housing.

If change of tenant: Name of previous tenant/business:

DESCRIBE PROPOSED USE IN DETAIL IN A COMPLETE DESCRIPTIVE NARRATIVE:
See "Description of Land Use" (included). In general, the proposed use is the addition of a 70+/- foot tall stealth monopole communications facility.

Parcel is located in a PDD zoning district (refer to Town of Colonie zoning map).

Area of Property: 20.37 acres and 887137.68 square feet Lot Size width 866 depth 1593

Length of property on a developed street 53 ft. (Along Elks Lane)

Is this a corner lot? Yes ____ No X Frontage on each street ____ ft. ____ ft.

Is this a Through lot? Yes ____ No X Frontage on each street ____ ft. ____ ft.

Building setbacks:	Existing	Proposed		Existing	Proposed
Front yard	71 ft.	284 ft.	Right side yard	297 ft.	1121 ft.
Rear/Front yard	135 ft.	370 ft.	Left side yard	650 ft.	458 ft.

Existing Building Height (at peak) 19+/- ft. stories 1 (Existing Elks Lodge)

Proposed Building Height (at peak) ____ ft. stories N/A (Equipment Platform)

New Building Size: Length 11.5 ft. Width 16 ft.

Gross floor area: existing sq. ft. 23440+/- proposed sq. ft. total N/C sq. ft.

Access to Town Highway? Yes ____ No X County Highway? Yes ____ No X State Highway? Yes X No ____

Fee Amount: ____ Date Paid: ____ Receipt #: ____

___ APPROVED ___ CONDITIONALLY APPROVED ___ DENIED

☐ Per Zoning Board of Appeals Decision on ____

Signature of Building Department Official: ____ Date: ____

OFFICIAL USE ONLY Approval Shall be Valid Until ____

EXHIBIT B

VZW - LATHAM SOUTH
LIST OF ADJOINERS WITHIN 1000' OF TA# 31.4-5-37

CE#4530
9/21/2017

TA #	OWNER NAME	MAILING ADDRESS		
31.2-3-66	DENISE M CORSARO	18 GLORIA DR	LATHAM, NY	121104716
31.2-3-68	ROBERT F DROZD	9 GLORIA DR	LATHAM, NY	121104715
31.2-3-69	THOMAS F WALDBILLIG	7 GLORIA DR	LATHAM, NY	121104715
31.2-3-70	III EDWARD M MONTHIE	5 GLORIA DR	LATHAM, NY	121104715
31.2-3-71	BARBARA A SOUTHWELL	3 GLORIA DR	LATHAM, NY	121104715
31.2-3-72	KENNETH C WEAFER	1 GLORIA DR	LATHAM, NY	121104715
31.2-3-73	TIMOTHY M KANE	6 DEBORAH DR	LATHAM, NY	121104710
31.2-3-74	JOSEPH RESCINITI	8 DEB	COL NY	12110
31.2-3-75	MATTHEW RYAN	11 DEBORAH DR	LATHAM, NY	12110
31.2-3-76	DONALD J MOONEY	9 DEBORAH DR	LATHAM, NY	121104709
31.2-3-77	KAREN COMOLLI	7 DEBORAH DR	LATHAM, NY	12110
31.2-3-78	ALFRED H PICHE JR (LE)	5 DEBORAH DR	LATHAM, NY	121104709
31.2-3-79	CITY OF WATERVLIET	2 15TH ST	WATERVLIET, NY	12189
31.2-3-80	SOCIETY OF SISTERS ST JOSEPH	385 WATERVLIET SHAKER RD	LATHAM, NY	121104741
31.4-4-5	ELIZABETH J PLOUMAN	425 WATERVLIET SHAKER RD	LATHAM, NY	12110
31.4-4-6	BARBARA SCHWEIGHAUSER	423 WATERVLIET SHAKER RD	LATHAM, NY	121104733
31.4-4-7	SCOTT R LAMMON	2 HOEFER ST	LATHAM, NY	121104718
31.4-4-8	NATHANAEL CRACHI	4 HOEFER STREET	LATHAM NY	12110
31.4-4-9	REUEL K LANGSTON(LE)	185 HAMPTON LAKE CROSSING	BLUFFTON, SC	29910
31.4-4-10	EUGENE W BEAUDOIN	8 HOEFER ST	LATHAM, NY	121104718
31.4-4-11	EUGENE W BEAUDOIN	8 HOEFER ST	LATHAM, NY	121104718
31.4-4-12	FRANK A BORYSEWICZ	11 HOEFER ST	LATHAM, NY	121104717
31.4-4-13	LOIS C BYRD-RONDEAU	7 HOEFER ST	LATHAM, NY	121104717
31.4-4-14	MATTHEW SINDONI	5 HOEFER ST	LATHAM, NY	12110
31.4-4-15	CHRISTOPHER M. MIRABILE	3 HOEFER STREET	LATHAM NY	12110
31.4-4-16	LINDA MILLER VANWIE	411 WATERVLIET SHAKER RD	LATHAM, NY	12110
31.4-4-17	ERICA A KEHN	2 DAN DEL DR	LATHAM, NY	12110
31.4-4-18	LARRY W BROWN	4 DAN-DEL DR	LATHAM, NY	121104708
31.4-4-19	EUGENE C HANCHETT	6 DAN-DEL DR	LATHAM, NY	121104708
31.4-4-20	TIMOTHY E WHITELAW	8 DAN-DEL DR	LATHAM, NY	121104708
31.4-4-21	KAELA A. FARAONE	10 DAN DEL DRIVE	LATHAM NY	12110
31.4-4-22	JOHN B ZETO	12 DAN-DEL DR	LATHAM, NY	121104708
31.4-4-23	RICHARD D YURKON	13 DAN-DEL DR	LATHAM, NY	121104707
31.4-4-24	MARY HUGHES (LE)	11 DAN-DEL DR	LATHAM, NY	121104707
31.4-4-25	SAJID BASHIR RAMAY	9 DAN-DEL DR	LATHAM, NY	12110
31.4-4-26	PHYLLIS CARAYNOFF	7 DAN-DEL DR	LATHAM, NY	121104707

VZW - LATHAM SOUTH
LIST OF ADJOINERS WITHIN 1000' OF TA# 31.4-5-37

CE#4530
9/21/2017

31.4-4-27	JESSE M CASURAS	5 DAN-DEL DR	LATHAM, NY	121104707
31.4-4-28	MARK L. REZEY	3 DAN-DEL DRIVE	LATHAM NY	12110
31.4-4-29	CATHERINE M LAVOIE	407 WATERVLIET SHAKER RD	LATHAM, NY	121104731
31.4-4-30	PATRICK J QUACKENBUSH	16 GLORIA DR	LATHAM, NY	121104716
31.4-4-31	JOHN COPPOLA	14 GLORIA DR	LATHAM, NY	121104716
31.4-4-32	JAMES P TETRAULT JR	12 GLORIA DR	LATHAM, NY	121104716
31.4-4-33	DANE FORSLAND	10 GLORIA DR	LATHAM, NY	121104716
31.4-4-34	MARK WELLS	8 GLORIA DR	LATHAM, NY	12110
31.4-4-35	WILLIAM S SZOSTAK	6 GLORIA DR	LATHAM, NY	121104716
31.4-4-36	JAMES E SICKLES	4 GLORIA DR	LATHAM, NY	121104716
31.4-4-37	HENRY J JAKUCEWICZ	2 DEBORAH DR	LATHAM, NY	121104747
31.4-4-38	GHADA M JAOUNI	3 DEBORAH DR	LATHAM, NY	12110
31.4-4-39	JOHN AUTREY	1 DEBORAH DRIVE	LATHAM NY	12110
31.4-4-40	VICTOR M MAHONEY	483 LOUDON RD	LOUDONVILLE, NY	12211
31.4-5-1	CENTRAL SCHOOL DISTRICT #5	91 FIDDLERS LN	LATHAM, NY	121105349
31.4-5-2	KEVIN A CRANDALL	95 FIDDLERS LN	LATHAM, NY	12110
31.4-5-3	ROBYN L SANDERS	174 OAKWOOD AVE	TROY, NY	12180
31.4-5-4	BLEDAR HOXHA	99 FIDDLERS LANE	LATHAM NY	12110
31.4-5-5	HERBERT A ALSTON		LATHAM, NY	12110
31.4-5-6	MARK W BRATE	426 WATERVLIET SHAKER RD	LATHAM, NY	12110
31.4-5-7	JOSEPH J HALLER JR	424 WATERVLIET SHAKER RD	LATHAM, NY	121104732
31.4-5-8	SCHOOL DISTRICT #5 CENTRA	91 FIDDLERS LN	LATHAM, NY	12110
31.4-5-9	JASON E QUINN	418 WATERVLIET SHAKER RD	LATHAM, NY	12110
31.4-5-10	MICHELLE ANDERSEN	416 WATERVLIET SHAKER RD	LATHAM, NY	121104732
31.4-5-11	JOY RENEE MITCHELL	414 WATERVLIET SHAKER RD	LATHAM, NY	121104732
31.4-5-12	MARK J GARZIA	412 WATERVLIET SHAKER RD	LATHAM, NY	121104732
31.4-5-13.1	THOMAS J & ALICIA M MEIN	410 WATERVLIET SHAKER RD	LATHAM, NY	12110
31.4-5-13.2	REGINALD L DAIGLE	408 WATERVLIET SHAKER RD	LATHAM, NY	12110
31.4-5-14.1	JOSEPH E IANNOTTI	406 WATERVLIET SHAKER RD	LATHAM, NY	12110
31.4-5-15	JUERGEN DAVID	3 ABEDAR LN	LATHAM, NY	121104701
31.4-5-16	KAREN A RHOADES	5 ABEDAR LN	LATHAM, NY	12110
31.4-5-17	BARBARA S SHERWOOD	7 ABEDAR LN	LATHAM, NY	12110
31.4-5-18	BRUCE M HYATT	9 ABEDAR LN	LATHAM, NY	12110
31.4-5-19	WILLIAM H RAHM	11 ABEDAR LN	LATHAM, NY	12110
31.4-5-20	YUXIAN ZHOU	200 BROADWAY	TROY, NY	12180
31.4-5-21	TAHNYA A BROWN	15 ABEDAR LN	LATHAM, NY	12110
31.4-5-22	ROBERT D HOWELLS	17 ABEDAR LN	LATHAM, NY	12110

VZW - LATHAM SOUTH
LIST OF ADJOINERS WITHIN 1000' OF TA# 31.4-5-37

CE#4530
9/21/2017

31.4-5-23	JOHN T GILCHRIST	19 ABEDAR LN	LATHAM, NY	121104701
31.4-5-24	ROBERT J/JOAN R MONROE	26 ABEDAR LN	LATHAM, NY	12110
31.4-5-25	EDWARD J SUSKO	24 ABEDAR LN	LATHAM, NY	121104702
31.4-5-26	KEVIN NEIL BRYANT	22 ABEDAR LN	LATHAM, NY	12110
31.4-5-27	BRIAN M HAMEL	20 ABEDAR LN	LATHAM, NY	121104702
31.4-5-28	NANCY E BRUCE	18 ABEDAR LN	LATHAM, NY	121104702
31.4-5-29	JEREMIAH C HAMEL	16 ABEDAR LN	LATHAM, NY	121104702
31.4-5-30	CHRISTIAN D SALISBURY	14 ABEDAR LN	LATHAM, NY	12110
31.4-5-31	ANTHONY F MANTELLO JR	12 ABEDAR LN	LATHAM, NY	121104702
31.4-5-32	LINDSAY WINTERBOURNE	10 ABEDAR LANE	LATHAM NY	12110
31.4-5-33	JAMES L MURRAY	8 ABEDAR LN	LATHAM, NY	121104702
31.4-5-34	JOSEPH BRIAN/MARGARE MCNA	6 ABEDAR LN	LATHAM, NY	12110
31.4-5-35	REVOC TRUST ANNE M SAGE	4 ABEDAR LN	LATHAM, NY	12110
31.4-5-36	ROY E MARSH III	2 ABEDAR LN	LATHAM, NY	121104702
31.4-5-38	COLONIE NY LODGE 2192	11 ELK LN	LATHAM, NY	121104743
31.4-5-39	SCHUYLER MEADOWS COUNTRY CLUE	17 SCHUYLER MEADOWS CLUB RD	LOUDONVILLE, NY	12211
31.4-5-40	LINDA LEE LUPIAN	386 WATERVLIET SHAKER RD	LATHAM, NY	121104730
31.4-5-41	GORDON TENNANT WALMER A	378 WATERVLIET SHAKER RD	LATHAM, NY	12110
31.4-5-42	FLORENCE C DECOTIS	374 WATERVLIET SHAKER RD	LATHAM, NY	121104730
31.4-5-43.1	KEVIN KRONE	372 WATERVLIET SHAKER RD	LATHAM, NY	121104730
31.4-5-43.2	JOHN A DECOTIS	374 WATERVLIET SHAKER RD	LATHAM, NY	121104730
31.4-5-44	PAUL L SIEGEL	370 WATERVLIET SHAKER RD	LATHAM, NY	121104730
31.4-5-45	JOSEPH D LENNOX	368 WATERVLIET SHAKER RD	LATHAM, NY	12110
31.4-5-46.1	MARY C MC CULLOCH	366 WATERVLIET SHAKER RD	WATERVLIET, NY	121893413
31.4-5-46.2	LARRY J WYLES		LATHAM, NY	121100059
31.4-6-11	MARIE M HILL (LE)	4 STARLIGHT RD	LATHAM, NY	12110
31.4-6-12	CROSS KEVIN J LA	6 STARLIGHT RD	LATHAM, NY	121104728
31.4-6-13	RICHARD F/SHARON A S (LE)	8 STARLIGHT RD	LATHAM, NY	121104728
31.4-6-14	THOMAS G MAGUIRE	10 STARLIGHT RD	LATHAM, NY	121104728
31.4-6-15	MICHAEL T STAPLETON	12 STARLIGHT RD	LATHAM, NY	121104728
31.4-6-16	TIMOTHY J HOULE	14 STARLIGHT DR	LATHAM, NY	121104728
31.4-6-17	HENRY J BRYK	16 STARLIGHT RD	LATHAM, NY	121104728
31.4-6-18	MARCHEL S BURKE	18 STARLIGHT RD	LATHAM, NY	121104728
31.4-6-19	BRIAN T FITZPATRICK	20 STARLIGHT DR	LATHAM, NY	12110
31.4-6-20	LORETTA A SMITH	22 STARLIGHT RD	LATHAM, NY	121104728
31.4-6-21	JR THOMAS J LEACH	24 STARLIGHT RD	LATHAM, NY	121104728
31.4-6-22	MICHELLE ADAMS	5 STARLIGHT DR	LATHAM, NY	121104727

VZW - LATHAM SOUTH
LIST OF ADJOINERS WITHIN 1000' OF TA# 31.4-5-37

CE#4530
9/21/2017

31.4-6-23	PROPERTIES, LLC PTL	57 MEADOWBROOK ROAD	WATERVLIET NY	12189
31.4-6-24	THOMAS F WALDBILLIG	1 STARLIGHT RD	LATHAM, NY	12110
31.4-6-25	JULIE MARK COHEN	7 STARLIGHT RD	LATHAM, NY	12110
31.4-6-26	MICHELE M BENEDICT	23 ALVA DR	LATHAM, NY	12110
31.4-6-27	PAUL H RUDNICK	21 ALVA DR	LATHAM, NY	121104738
31.4-6-28	DIANE M MOLINARI (LE)	19 ALVA DR	LATHAM, NY	121104738
31.4-6-29	DAVID P MURRAY	17 ALVA DR	LATHAM, NY	121104738
31.4-6-30	DAVID J. ROTHAUPT AND SUSAN C. RC	15 ALVA DRIVE	LATHAM NY	12110
31.4-6-31	JOHN J MORRONE (LE)	17 IMPERIAL DR	NISKAYUNA, NY	12309
31.4-6-32	JOSEPH DEANGELIS	2 NANCY LN	LATHAM, NY	121104724
31.4-6-33	RICHARD J STROHL	10 EBERLE RD	LATHAM, NY	121104700
31.4-6-34	JAMES K FRASER JR	12 EBERLE RD	LATHAM, NY	12110
31.4-6-35	ANTHONY L DAVEY (LE)	14 EBERLE RD	LATHAM, NY	121104700
31.4-6-36	GREGORY A GRASSO	16 EBERLE RD	LATHAM, NY	121104700
31.4-6-37	ROBERT M GORDON	61 EBERLE RD	LATHAM, NY	121104736
31.4-6-38	MARY A DUNDON	59 EBERLE RD	LATHAM, NY	121104736
31.4-6-39	BRIAN K STUMBAUGH	57 EBERLE RD	LATHAM, NY	12110
31.4-6-40	BENJAMIN G BOND	55 EBERLE RD	LATHAM, NY	12110
31.4-6-41	KUMAR R CHAWLA	53 EBERLE RD, POB 862	LATHAM, NY	121102001
31.4-6-42	JOHN DEANS	51 EBERLE RD	LATHAM, NY	12110
31.4-6-43	EDWARD A RINELLA	107 BENTLEY DR	LATHAM, NY	121104705
31.4-6-44	WILFRED W SCHOLZ	105 BENTLEY DR	LATHAM, NY	121104705
31.4-6-45	MARY A FARRELL	103 BENTLEY DR	LATHAM, NY	121104705
31.4-6-46	SUSHILA BHATT	101 BENTLEY DR	LATHAM, NY	121104705
31.4-6-47	JOHN H STODDARD	99 BENTLEY DR	LATHAM, NY	121104705
31.4-6-48	FREDERICK W KAKUMBA	97 BENTLEY DR	LATHAM, NY	121104705
31.4-6-49	GRACE HSIAO MEI YANG (LE)	95 BENTLEY DR	LATHAM, NY	121104705
31.4-6-50	MARIA C ENGLERT	93 BENTLEY DR	LATHAM, NY	121104705
31.4-6-51	MAUREEN W WELDON	91 BENTLEY DR	LATHAM, NY	121104705
31.4-6-52	LOAN SERVICING BAYVIEW	4425 PONCE DELEON BLVD	CORAL GABLES, FL	33146
31.4-6-53	JEAN-CLAUDE THIROLLE	108 BENTLEY DR	LATHAM, NY	121104706
31.4-6-54	SEAN T SMITH	49 EBERLE RD	LATHAM, NY	12110
31.4-6-55	SEAN P HUME	47 EBERLE RD	LATHAM, NY	121104737
31.4-6-56	ALPHONSE L PALLADINO	45 EBERLE RD	LATHAM, NY	121104737
31.4-6-57	EDWARD L FARLEY	43 EBERLE RD	LATHAM, NY	121104737
31.4-6-58	PHYLLIS ANN KAPELEWS (LE)	41 EBERLE RD	LATHAM, NY	12110
31.4-6-59	DANIEL P POLLAY	39 EBERLE RD	COLONIE, NY	12110

VZW - LATHAM SOUTH **CE#4530**

LIST OF ADJOINERS WITHIN 1000' OF TA# 31.4-5-37 **9/21/2017**

31.4-6-60	FRED J CURLEY	37 EBERLE RD	LATHAM, NY	12110
31.4-6-61	GREGORY N. VALENZUELA	35 EBERLE ROAD	LATHAM NY	12110
31.4-6-62	GARY A JOHNSTON	22 EBERLE RD	LATHAM, NY	121104735
31.4-6-63	NICHOLAS P KOLAK	24 EBERLE RD	LATHAM, NY	121104735
31.4-6-64	SLEET ERIC J VAN	26 EBERLE RD	LATHAM, NY	121104735
31.4-6-65	DAVID T LOFFREDO	28 EBERLE RD	LATHAM, NY	121104735
31.4-6-66	ROBERT AJAMIAN	30 EBERLE RD	LATHAM, NY	121104735
31.4-6-67	SHANNON MICHELE MURRAY	32 EBERLE RD	LATHAM, NY	121104735
31.4-6-68	STANLEY S PREISS	34 EBERLE RD	LATHAM, NY	121104735
31.4-6-69	GLENN SCOTT PAROWER	36 EBERLE RD	LATHAM, NY	121104735
31.4-6-70	MICHAEL G WASHBURN	20 EBERLE RD	LATHAM, NY	12110
31.4-7-13	SCHUYLER MEADOWS GOLF CLUB	17 SCHUYLER MEADOWS CLUB RD	LOUDONVILLE, NY	12211
31.4-7-14	JENNIFER S KOLAK	33 EBERLE RD	LATHAM, NY	12110
31.4-7-15	AMANDA L MALLEY	31 EBERLE RD	LATHAM, NY	121104737
31.4-7-16	DONALD BRUCE A MAC	29 EBERLE RD	LATHAM, NY	121104737
31.4-7-17	MARY A MORRIS (LE)	27 EBERLE RD	LATHAM, NY	121104737
31.4-7-19	STEVEN J PARDO	23 EBERLE RD	LATHAM, NY	121104737
31.4-7-20	KATHLEEN BALFE	52 RUTLAND ST	ALBANY, NY	12209
31.4-7-21	JEFFREY GUNNING	19 EBERLE RD	LATHAM, NY	121104713
31.4-7-22	ERIKA L JOHNSON	17 EBERLE RD	LATHAM, NY	121104713
31.4-7-23	WILIAM H EDWARDS III	15 EBERLE RD	LATHAM, NY	121104713
31.4-10-4	RICHARD OSTROFF	104 THORNDALE ROAD	SLINGERLANDS NY	12159
31.4-10-5	DALE M THUILLEZ	42 EAST RIDGE RD	LOUDONVILLE, NY	12211
32.3-1-1.1	SOCIETY OF SISTERS ST JOSEPH	385 WATERVLIET SHAKER RD	LATHAM, NY	12110
43.2-1-12.1	SIENA COLLEGE	515 LOUDON RD	LOUDONVILLE, NY	12211
43.2-1-25.1	SCHUYLER MEADOWS GOLF CLUB	17 SCHUYLER MEADOWS CLUB RD	LOUDONVILLE, NY	12211

TAB 1

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Sponsor Information.

Name of Action or Project: Cellco Partnership d/b/a Verizon Wireless Latham South Telecommunications Facility		
Project Location (describe, and attach a general location map): Near 17 Elks Lane, Town of Colonie, County of Albany, NY		
Brief Description of Proposed Action (include purpose or need): Cellco Partnership d/b/a Verizon Wireless is proposing the construction of a wireless telecommunications facility. The facility will consist of a 70'+/- monopine that will contain an antenna array at 56' AGL, and an 9.33' x16' equipment platform with roof within a 36' x 58' stone yard enclosed by a 6' tall chain link fence. The compound, proposed telco cabinet, proposed meter board, and proposed transformer are all located within a 100'x100' lease area. Landscaping will screen the proposed senior living facility to the north of the proposed compound. Access to the site will utilize Elks Lane off of Watervliet Shaker Road (SR 155) and a proposed 24' wide Ingress/Egress easement over the proposed senior housing driveway and parking lot.		
Name of Applicant/Sponsor: Cellco Partnership d/b/a Verizon Wireless Attn: Kathy Pomponio	Telephone: 585-321-5435 E-Mail: kathy.pomponio@verizonwireless.com	
Address: 1275 John Street, Suite 100		
City/PO: West Henrietta	State: NY	Zip Code: 14586
Project Contact (if not same as sponsor; give name and title/role): David C. Brennan, Esq. - Young Sommer LLC	Telephone: 518-438-9907 Ext. 224 E-Mail: DBrennan@youngsommer.com	
Address: Executive Woods, Five Palisades Drive		
City/PO: Albany	State: NY	Zip Code: 12205
Property Owner (if not same as sponsor): Elks B.P.O Colonie Lodge Attn: Michael Cronin	Telephone: 518-785-5714 E-Mail: n/a	
Address: 11 Elks Lane		
City/PO: Latham	State: NY	Zip Code: 12110

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, or Village Board of Trustees ☐Yes☐No		
b. City, Town or Village Planning Board or Commission ☑Yes☐No	Town of Colonie PEDD-minor site plan review	?
c. City Council, Town or Village Zoning Board of Appeals ☑Yes☐No	Town of Colonie Zoning Board of Appeals - Special Permit	?
d. Other local agencies ☐Yes☐No		?
e. County agencies ☐Yes☐No		
f. Regional agencies ☐Yes☐No		
g. State agencies ☐Yes☐No		
h. Federal agencies ☐Yes☐No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes☑No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes☐No

If Yes, identify the plan(s):

NYS Heritage Areas:Mohawk Valley Heritage Corridor

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes☑No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
Planned Development District (PDD)

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? North Colonie Central Schools

b. What police or other public protection forces serve the project site?
Colonie Police Department

c. Which fire protection and emergency medical services serve the project site?
Colonie EMS, Station 5: Peak Unit - Latham Fire Department Station 2

d. What parks serve the project site?
Newtonville Park - 1 mile from project site, Alleghany Park - 1.3 miles from project site, Veteran's Memorial Park - 2 miles from project site

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Public Utility - Personal Wireless service facility

b. a. Total acreage of the site of the proposed action? 20.37± acres
b. Total acreage to be physically disturbed? 0.31± acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 1.04± acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 3 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? ☐Yes ☑No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				
At completion of all phases				

g. Does the proposed action include new non-residential construction (including expansions)? ☑Yes ☐No

If Yes,

i. Total number of structures 2: (1) 70'+/- Monopine and (1) 9.33'x 16' equipment platform

ii. Dimensions (in feet) of largest proposed structure: 70' height; 9.33' width; and 16' length

iii. Approximate extent of building space to be heated or cooled: 0 square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐Yes ☑No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐Other specify: _____

iii. If other than water, identify the type of impounded/contained liquids and their source. _____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? ☐Yes ☑No
(Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)

If Yes:

i. What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____

iv. Will there be onsite dewatering or processing of excavated materials? ☐Yes ☐No
If yes, describe. _____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐Yes ☐No

ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐Yes ☑No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

_____

_____

_____

_____

iii. Will proposed action cause or result in disturbance to bottom sediments? ☐Yes☐No

If Yes, describe: _____

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation? ☐Yes☐No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

_____

- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

_____

c. Will the proposed action use, or create a new demand for water? ☐Yes☑No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐Yes☐No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐Yes☐No
- Is the project site in the existing district? ☐Yes☐No
- Is expansion of the district needed? ☐Yes☐No
- Do existing lines serve the project site? ☐Yes☐No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐Yes☐No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

_____

vi. If water supply will be from wells (public or private), maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☐Yes☑No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

_____

_____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☐Yes☐No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐Yes☐No
- Is the project site in the existing district? ☐Yes☐No
- Is expansion of the district needed? ☐Yes☐No

- Do existing sewer lines serve the project site? ☐Yes ☐No
- Will line extension within an existing district be necessary to serve the project? ☐Yes ☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes ☐No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

_____

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☐Yes ☑No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. _____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

_____

- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? ☐Yes ☐No

iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☐Yes ☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☑Yes ☐No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

N/A

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

N/A

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

Standby Generator

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes ☑No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes ☐No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of semi-trailer truck trips/day: _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☑Yes ☐No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

70,000 kwh/year

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

Local Utility

iii. Will the proposed action require a new, or an upgrade to, an existing substation? ☐Yes ☑No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 7:00 AM - 7:00 PM
- Saturday: 7:00 AM - 7:00 PM
- Sunday: N/A
- Holidays: N/A

ii. During Operations:

- Monday - Friday: 24 Hours
- Saturday: 24 Hours
- Sunday: 24 Hours
- Holidays: 24 Hours

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☐ Yes ☑ No

If yes:

i. Provide details including sources, time of day and duration:

ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe:

n.. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

(4) 18w LED service lights on spring wound timer located on equipment platform for use by technician when necessary.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe:

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally describe proposed storage facilities:

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☑ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction:
- Operation:

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction:
- Operation:

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☐ Commercial ☑ Residential (suburban) ☐ Rural (non-farm)
☑ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): Elks Club - Recreational Facilities/Entertainment; senior housing

ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	3.99±	4.22±	+0.23±
• Forested	7.20±	7.15±	-0.05±
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	5.68±	5.50±	-0.18±
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	0.24±	-	-
• Wetlands (freshwater or tidal)	3.26±	-	-
• Non-vegetated (bare rock, earth or fill)	0	-	-
• Other Describe: _____			

c. Is the project site presently used by members of the community for public recreation? ☐Yes ☑No

i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑Yes ☐No

If Yes,

i. Identify Facilities:

We Care Child Care Center - 91 Fiddlers Lane, North Colonie K-Care Program - 91 Fiddlers Lane, Proposed Senior Housing Building on Subject Parcel

e. Does the project site contain an existing dam? ☐Yes ☑No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐Yes ☑No

If Yes:

i. Has the facility been formally closed? ☐Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐Yes ☑No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐Yes ☑ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐Yes ☐No

☐ Yes – Spills Incidents database — Provide DEC ID number(s): _____

☐ Yes – Environmental Site Remediation database — Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐Yes ☑No

If yes, provide DEC ID number(s): _____

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

v. Is the project site subject to an institutional control limiting property uses? ☐Yes ☑No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐Yes ☐No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? > 6.6 feet

b. Are there bedrock outcroppings on the project site? ☐Yes ☑No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site: NuB Nunda silt loam 100 %
_____ %
_____ %

d. What is the average depth to the water table on the project site? Average: 1.5' -2' feet

e. Drainage status of project site soils: ☐ Well Drained: _____% of site
☑ Moderately Well Drained: 100 % of site
☐ Poorly Drained _____% of site

f. Approximate proportion of proposed action site with slopes: ☐ 0-10%: _____% of site
☑ 10-15%: 100 % of site
☐ 15% or greater: _____% of site

g. Are there any unique geologic features on the project site? ☐Yes ☑No
If Yes, describe: _____

h. Surface water features.
i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☑Yes ☐No
ii. Do any wetlands or other waterbodies adjoin the project site? ☑Yes ☐No
If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.
iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑Yes ☐No
iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal Waters Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐Yes ☑No
If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐Yes ☑No

j. Is the project site in the 100 year Floodplain? ☐Yes ☑No

k. Is the project site in the 500 year Floodplain? ☐Yes ☑No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☑Yes ☐No
If Yes:
i. Name of aquifer: Principal Aquifer

m. Identify the predominant wildlife species that occupy or use the project site:
Birds Small Mammals

n. Does the project site contain a designated significant natural community? ☐Yes ☑No
If Yes:
i. Describe the habitat/community (composition, function, and basis for designation):
ii. Source(s) of description or evaluation:
iii. Extent of community/habitat:
- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☐Yes ☑No

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐Yes ☑No

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐Yes ☑No
If yes, give a brief description of how the proposed action may affect that use:

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐Yes ☑No
If Yes, provide county plus district name/number:

b. Are agricultural lands consisting of highly productive soils present? ☐Yes ☑No
i. If Yes: acreage(s) on project site?
ii. Source(s) of soil rating(s):

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐Yes ☑No
If Yes:
i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent:

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐Yes ☑No
If Yes:
i. CEA name:
ii. Basis for designation:
iii. Designating agency and date:

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places? ☑ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☑ Historic Building or District

ii. Name: Goodrich School -located 1350' +/- northwest of project site

iii. Brief description of attributes on which listing is based:

National Register Information Sysyem ID: 00001156, National Register of Historic Places Collection, Classic Revival Architecture

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

If Yes:

i. Identify resource: Mohawk Towpath Scenic Byway

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Scenic Byway

iii. Distance between project and resource: 4.9 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☑ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Cellco Partnership d/b/a Verizon Wireless Date 6/15/2018

Signature David Weisenreder Title Costich Engineering, D.P.C - Engineer for Applicant

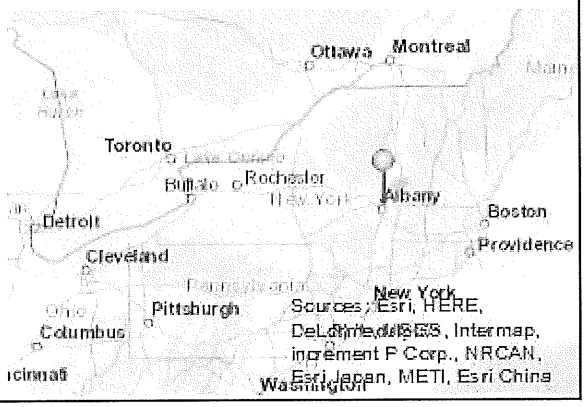
DAVID WEISENREDER

PRINT FORM

EAF Mapper Summary Report

Wednesday, April 20, 2016 3:42 PM

Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYS Heritage Areas:Mohawk Valley Heritage Corridor
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer

E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National Register of Historic Places]	Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook.
E.3.e.ii [National Register of Historic Places - Name]	Goodrich School
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

Agency Use Only [If applicable]

Project :

Date :

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer "**Yes**" to a numbered question, please complete all the questions that follow in that section.
- If you answer "**No**" to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "Moderate to large impact may occur."
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the "whole action".
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land ☐NO ☐YES

Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1)

If "Yes", answer questions a - j. If "No", move on to Section 2.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	☐	☐
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	☐	☐
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	☐	☐
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	☐	☐
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	☐	☐
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	☐	☐
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	☐	☐
h. Other impacts: _____ _____		☐	☐

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g) ☐ NO ☐ YES

If "Yes", answer questions a - c. If "No", move on to Section 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____ _____	E2g	☐	☐
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	☐	☐
c. Other impacts: _____ _____		☐	☐

3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h) ☐ NO ☐ YES

If "Yes", answer questions a - l. If "No", move on to Section 4.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	☐	☐
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	☐	☐
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	☐	☐
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	☐	☐
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	☐	☐
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	☐	☐
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	☐	☐
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	☐	☐
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	☐	☐
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	☐	☐
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	☐	☐

l. Other impacts: _____ _____		☐	☐

4. Impact on groundwater

The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t) ☐NO ☐YES

If "Yes", answer questions a - h. If "No", move on to Section 5.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	☐	☐
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	☐	☐
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	☐	☐
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	☐	☐
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	☐	☐
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	☐	☐
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	☐	☐
h. Other impacts: _____ _____		☐	☐

5. Impact on Flooding

The proposed action may result in development on lands subject to flooding. (See Part 1. E.2) ☐NO ☐YES

If "Yes", answer questions a - g. If "No", move on to Section 6.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	☐	☐
b. The proposed action may result in development within a 100 year floodplain.	E2j	☐	☐
c. The proposed action may result in development within a 500 year floodplain.	E2k	☐	☐
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	☐	☐
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	☐	☐
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	☐	☐

g. Other impacts: _____ _____		☐	☐

6. Impacts on Air

The proposed action may include a state regulated air emission source. (See Part 1. D.2.f., D,2,h, D.2.g) ☐NO ☐YES

If "Yes", answer questions a - f. If "No", move on to Section 7.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. More than 1000 tons/year of carbon dioxide (CO_2)	D2g	☐	☐
ii. More than 3.5 tons/year of nitrous oxide (N_2O)	D2g	☐	☐
iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D2g	☐	☐
iv. More than .045 tons/year of sulfur hexafluoride (SF_6)	D2g	☐	☐
v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions	D2g	☐	☐
vi. 43 tons/year or more of methane	D2h	☐	☐
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	☐	☐
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	☐	☐
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	☐	☐
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	☐	☐
f. Other impacts: _____ _____		☐	☐

7. Impact on Plants and Animals

The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) ☐NO ☐YES

If "Yes", answer questions a - j. If "No", move on to Section 8.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	☐	☐
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	☐	☐
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	☐	☐
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	☐	☐

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	☐	☐
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	☐	☐
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	☐	☐
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____ _____	E1b	☐	☐
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	☐	☐
j. Other impacts: _____ _____		☐	☐

8. Impact on Agricultural Resources

The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) ☐NO ☐YES

If "Yes", answer questions a - h. If "No", move on to Section 9.

	Relevant Part I Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	☐	☐
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, E1b	☐	☐
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	☐	☐
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	☐	☐
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	E1 a, E1b	☐	☐
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	☐	☐
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	☐	☐
h. Other impacts: _____		☐	☐

9. Impact on Aesthetic Resources
The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) ☐NO ☐YES
If "Yes", answer questions a - g. If "No", go to Section 10.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	☐	☐
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	☐	☐
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	☐ ☐	☐ ☐
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	☐ ☐	☐ ☐
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	☐	☐
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile ½ -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	☐	☐
g. Other impacts: _____ _____		☐	☐

10. Impact on Historic and Archeological Resources
The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.) ☐NO ☐YES
If "Yes", answer questions a - e. If "No", go to Section 11.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places.	E3e	☐	☐
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	☐	☐
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	☐	☐

d. Other impacts: _____ _____		☐	☐
e. If any of the above (a-d) are answered "Moderate to large impact may occur", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	☐	☐
ii. The proposed action may result in the alteration of the property's setting or integrity.	E3e, E3f, E3g, E1a, E1b	☐	☐
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	☐	☐

11. Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan.
(See Part 1. C.2.c, E.1.c., E.2.q.)
If "Yes", answer questions a - e. If "No", go to Section 12.

☐ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	☐	☐
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	☐	☐
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	☐	☐
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	☐	☐
e. Other impacts: _____ _____		☐	☐

12. Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d)
If "Yes", answer questions a - c. If "No", go to Section 13.

☐ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	☐	☐
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	☐	☐
c. Other impacts: _____ _____		☐	☐

13. Impact on Transportation
The proposed action may result in a change to existing transportation systems. ☐NO ☐YES
(See Part 1. D.2.j)
If "Yes", answer questions a - f. If "No", go to Section 14.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	☐	☐
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	☐	☐
c. The proposed action will degrade existing transit access.	D2j	☐	☐
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	☐	☐
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	☐	☐
f. Other impacts: _____ _____		☐	☐

14. Impact on Energy
The proposed action may cause an increase in the use of any form of energy. ☐NO ☐YES
(See Part 1. D.2.k)
If "Yes", answer questions a - e. If "No", go to Section 15.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	☐	☐
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	☐	☐
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	☐	☐
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	☐	☐
e. Other Impacts: _____ _____		☐	☐

15. Impact on Noise, Odor, and Light
The proposed action may result in an increase in noise, odors, or outdoor lighting. ☐NO ☐YES
(See Part 1. D.2.m., n., and o.)
If "Yes", answer questions a - f. If "No", go to Section 16.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	☐	☐
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	☐	☐
c. The proposed action may result in routine odors for more than one hour per day.	D2o	☐	☐

d. The proposed action may result in light shining onto adjoining properties.	D2n	☐	☐
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	☐	☐
f. Other impacts: _____ _____		☐	☐

16. Impact on Human Health
The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.) ☐ NO ☐ YES
If "Yes", answer questions a - m. If "No", go to Section 17.

	Relevant Part I Question(s)	No,or small impact may occur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	☐	☐
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	☐	☐
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	☐	☐
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	☐	☐
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	☐	☐
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	☐	☐
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	☐	☐
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	☐	☐
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	☐	☐
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	☐	☐
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	☐	☐
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	☐	☐
m. Other impacts: _____ _____		☐	☐

17. Consistency with Community Plans

The proposed action is not consistent with adopted land use plans. ☐ NO ☐ YES
(See Part 1. C.1, C.2. and C.3.)
If "Yes", answer questions a - h. If "No", go to Section 18.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	☐	☐
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	☐	☐
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	☐	☐
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	☐	☐
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, E1b	☐	☐
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	☐	☐
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	☐	☐
h. Other: _____ _____		☐	☐

18. Consistency with Community Character

The proposed project is inconsistent with the existing community character. ☐ NO ☐ YES
(See Part 1. C.2, C.3, D.2, E.3)
If "Yes", answer questions a - g. If "No", proceed to Part 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	☐	☐
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	☐	☐
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	☐	☐
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	☐	☐
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	☐	☐
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	☐	☐
g. Other impacts: _____ _____		☐	☐

PRINT FULL FORM

Agency Use Only [IfApplicable]

Project :

Date :

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts and Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: ☐ Type 1 ☐ Unlisted

Identify portions of EAF completed for this Project: ☐ Part 1 ☐ Part 2 ☐ Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information

_____

_____

_____

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the _____ as lead agency that:

☐ A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

☐ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

_____

_____

_____

_____

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.d).

☐ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action:
Name of Lead Agency:
Name of Responsible Officer in Lead Agency:
Title of Responsible Officer:

Signature of Responsible Officer in Lead Agency:	Date:
Signature of Preparer (if different from Responsible Officer)	Date:

For Further Information:

Contact Person:

Address:

Telephone Number:

E-mail:

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)
Other involved agencies (if any)
Applicant (if any)
Environmental Notice Bulletin: http://www.dec.ny.gov/enb/enb.html

PRINT FULL FORM

TAB 2

SITE NAME: Latham South
SITE NUMBER: NYALB791
ATTY/DATE: MEC/12/21/07

OPTION AND LAND LEASE AGREEMENT

This Agreement made this 7th day of March, 2008, between **COLONIE NEW YORK LODGE NO. 2192 BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE UNITED STATES OF AMERICA, INC. a/k/a COLONIE ELKS LODGE, B.P.O.E. 2192 a/k/a BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE USA 2192 COLONIE** with an address of 11 Elks Lane, Latham, New York 12110, Tax ID # 14-1461227, hereinafter designated LESSOR and **CELLCO PARTNERSHIP** d/b/a Verizon Wireless, with its principal office located at One Verizon Way, Mail Stop 4AW100, Basking Ridge, New Jersey 07920, hereinafter designated LESSEE. The LESSOR and LESSEE are at times collectively referred to hereinafter as the "Parties" or individually as the "Party".

LESSOR is the owner of that certain real property located at 11 Elks Lane, Town of Colonie, County of Albany, State of New York, as shown on the Tax Map of the Town of Colonie as Tax Map No. 31.4-5-37 and being further described in Deeds Book 1907 at Page 428 and Deeds Book 2338 at Page 583 as recorded in the Office of the Albany County Clerk (the entirety of LESSOR's property is referred to hereinafter as the "Property"). LESSEE desires to obtain an option to lease a portion of said Property, being described as a 100' by 100' parcel containing 10,000 square feet (the "Land Space"), together with the non-exclusive right (the "Rights of Way") for ingress and egress, seven (7) days a week twenty-four (24) hours a day, on foot or motor vehicle, including trucks over or along a thirty (30') foot wide right-of-way extending from the nearest public right-of-way, Elks Lane, to the Land Space, and for the installation and maintenance of utility wires, poles, cables, conduits, and pipes over, under, or along one or more rights of way from the Land Space, said Land Space and Rights of Way (hereinafter collectively referred to as the "Premises") being substantially as described herein in Exhibit "A" attached hereto and made a part hereof. LESSEE will use best efforts to have any and all utilities installed underground on the Property.

NOW THEREFORE, in consideration of the nonrefundable sum of [redacted], to be paid by LESSEE to the LESSOR, which LESSEE will provide upon its execution of this Agreement, the LESSOR hereby grants to LESSEE the right and option to lease said Premises, for the term and in accordance with the covenants and conditions set forth herein.

The option may be exercised at any time on or prior to six (6) months after the date of this Agreement ("Initial Option Term"). If the option has not been so exercised, it shall be automatically extended for six months ("First Extension"), unless LESSEE gives written notice to the LESSOR of the intent not to extend prior to the end of the initial option period, as long as LESSEE makes an additional nonrefundable payment of [redacted] to LESSOR prior to the expiration of the Initial Option Term. If the option has not been exercised during the First Extension, it shall be automatically extended for an additional period of six months ("Second Extension"), unless LESSEE gives written notice to the LESSOR of the intent not to extend prior to the end of the First Extension period, as long as LESSEE makes an additional nonrefundable payment of [redacted] to

LESSOR prior to the expiration of the First Extension period. The time during which the option may be exercised may be further extended by mutual agreement in writing. If during said option period, or during the term of the lease, if the option is exercised, the LESSOR decides to subdivide, sell or change the status of the Property or his property contiguous thereto he shall immediately notify LESSEE in writing so that LESSEE can take steps necessary to protect LESSEE's interest in the Premises.

This option may be sold, assigned or transferred by the LESSEE without any approval or consent of the LESSOR to the LESSEE's principal, affiliates, subsidiaries of its principal; to any entity which acquires all or substantially all of LESSEE's assets in the market defined by the Federal Communications Commission in which the Property is located by reason of a merger, acquisition or other business reorganization; or to any entity which acquires or receives an interest in the majority of communication towers of the LESSEE in the market defined by the Federal Communications Commission in which the Property is located. As to other parties, this Agreement may not be sold, assigned or transferred without the written consent of the LESSOR, which such consent will not be unreasonably withheld, delayed or conditioned. No change of stock ownership, partnership interest or control of LESSEE or transfer upon partnership or corporate dissolution of LESSEE shall constitute an assignment hereunder.

Should LESSEE fail to exercise this option or any extension thereof within the time herein limited, all rights and privileges granted hereunder shall be deemed completely surrendered, this option terminated, and LESSOR shall retain all money paid for the option, and no additional money shall be payable by either Party to the other.

LESSOR shall cooperate with LESSEE in its effort to obtain all certificates, permits and other approvals that may be required by any Federal, State or Local authorities which will permit LESSEE use of the Premises. LESSOR shall take no action which would adversely affect the status of the Property with respect to the proposed use by LESSEE.

The LESSOR shall permit LESSEE, during the option period, free ingress and egress to the Premises to conduct such surveys, inspections, structural strength analysis, subsurface soil tests, and other activities of a similar nature as LESSEE may deem necessary, at the sole cost of LESSEE. LESSEE shall at its sole cost and expense restore the Property and Premises to substantially the same condition immediately following any such surveys, inspections, analysis, tests and activities.

LESSOR agrees to execute a Memorandum of this Option to Lease Agreement which LESSEE may record with the appropriate Recording Officer. The date set forth in the Memorandum of Option to Lease is for recording purposes only and bears no reference to commencement of either term or rent payments.

Notice of the exercise of the option shall be given by LESSEE to the LESSOR in writing by certified mail, return receipt requested. Notice shall be deemed effective on the date it is posted. On the date of such notice the following agreement shall take effect:

Upon the execution of this Agreement, LESSEE shall pay a one-time non-refundable fee in an amount not to exceed [redacted] for LESSOR's consultant's fees in connection with the negotiation and preparation of this Agreement.

LAND LEASE AGREEMENT

This Agreement ("Agreement"), made this _____ day of _____, 2008, between **COLONIE NEW YORK LODGE NO. 2192 BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE UNITED STATES OF AMERICA, INC. a/k/a COLONIE ELKS LODGE, B.P.O.E. 2192 a/k/a BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE USA 2192 COLONIE**, Tax ID #14-1461227, hereinafter designated LESSOR and **CELLCO PARTNERSHIP** d/b/a Verizon Wireless, with its principal office located at One Verizon Way, Mail Stop 4AW100, Basking Ridge, New Jersey 07920, hereinafter designated LESSEE. The LESSOR and LESSEE are at times collectively referred to hereinafter as the "Parties" or individually as the "Party".

1. PREMISES. LESSOR hereby leases to LESSEE a portion of that certain parcel of property (the entirety of LESSOR's property is referred to hereinafter as the "Property"), located at 11 Elks Lane, Town of Colonie, County of Albany, State of New York, and being described as a 100± ft. by 100± ft. parcel containing 10,000± square feet (the "Land Space"), together with the non-exclusive right (the "Rights of Way") for ingress and egress, seven (7) days a week twenty-four (24) hours a day, on foot or motor vehicle, including trucks over or along a thirty (30±) foot wide right-of-way extending from the nearest public right-of-way, Elks Lane, to the Land Space, and for the installation and maintenance of utility wires, poles, cables, conduits, and pipes over, under, or along one or more rights of way from the Land Space, said Land Space and Rights of Way (hereinafter collectively referred to as the "Premises") being substantially as described herein in Exhibit "A" attached hereto and made a part hereof. The Property is also shown on the Tax Map of the Town of Colonie as Tax Map Parcel No. 31.4-5-37 and is further described in Deeds Book 1907 at Page 428 and Deeds Book 2338 at Page 583 as recorded in the Office of the Albany County Clerk.

In the event any public utility is unable to use the Rights of Way, the LESSOR hereby agrees to grant an additional right-of-way either to the LESSEE or to the public utility at no cost to the LESSEE.

2. SURVEY. LESSOR also hereby grants to LESSEE the right to survey the Property and/or the Premises. The drawing at Exhibit "A" may be replaced by a site plan or survey showing the Premises and the location of LESSEE's improvements thereon, which site plan LESSEE shall submit to LESSOR for LESSOR's written approval prior to LESSEE's commencement of construction, which approval shall not be unreasonably withheld, conditioned or delayed. In the event that LESSOR does not furnish LESSEE with such written approval or its specific reasons for disapproval within thirty (30) days after the date of submission of the site plan to LESSOR, LESSOR will be deemed to have approved it. Said site plan or survey shall then become Exhibit "B" which shall be attached hereto and made a part hereof and shall control in the event of boundary and access discrepancies between it and Exhibit "A". Cost for such work shall be borne by the LESSEE.

3. TERM; UTILITIES. This Agreement shall have an initial term of five (5) years and shall commence on the Commencement Date (as hereinafter defined) at which time rental payments shall commence and be due at a total annual rental of [redacted] to be paid in equal monthly installments on the first day of the month, in advance, to **BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE USA 2192 COLONIE** or to such other person, firm or place as LESSOR may, from time to time, designate in writing at least thirty (30) days in advance of any rental payment date by notice given in accordance with Paragraph 22 below. Upon agreement of the Parties, LESSEE may pay rent by electronic funds transfer and in such event, LESSOR agrees to provide to LESSEE bank routing information for such purpose upon request of LESSEE. The Agreement shall commence upon notice of exercise of the option, as set forth above, by LESSEE to the LESSOR in writing by certified mail, return receipt requested and shall be deemed effective on the date it is posted. In the event the date LESSEE gives notice of the exercise of the option is between the 1st and 15th of the month, the Agreement shall commence on the 1st of that month and if the notice is given between the 16th and 31st of the month, then the Agreement shall commence on the 1st day of the following month (either the "Commencement Date").

LESSEE agrees to furnish and install separate electrical service (inclusive of a separate meter) to the site for its intended purpose, provided that such installation is permitted by the local utility company. In the event that the local utility company determines that separate electrical service is not permitted or it is determined by LESSEE that a separate service installation is an impracticable means of service, LESSEE agrees to furnish and install an electrical sub-meter at the Property for the measurement of electrical power used by the LESSEE's installation. LESSOR agrees to allow such installation by LESSEE and upon installation of an electrical sub-meter, LESSOR agrees to be responsible for reading the sub-meter on a quarterly basis and for providing LESSEE with an invoice which includes a copy of the electric invoice from utility and the sub-meter readings. LESSOR shall send its invoice to LESSEE at Verizon Wireless, Accounts Payable-Cellsites, 175 Calkins Road, Rochester, NY 14623. LESSEE agrees to promptly reimburse LESSOR for such electrical costs which shall not be construed to be rent. The parties agree that LESSEE shall be relieved of its obligation to reimburse LESSOR for electrical usage which has not been properly invoiced and sent to LESSEE at the above address within one (1) year of the initial invoicing from the utility company to the LESSOR.

4. EXTENSIONS. This Agreement shall automatically be extended for four (4) additional five (5) year terms unless LESSEE terminates it at the end of the then current term by giving LESSOR written notice of the intent to terminate at least six (6) months prior to the end of the then current term. The initial term and all extensions shall be collectively referred to herein as the "Term".

5. ANNUAL RENTAL INCREASES. The annual rental for the second year and every year thereafter shall increase by [redacted] of the previous year's rental.

6. INTENTIONALLY DELETED

7. USE; GOVERNMENTAL APPROVALS. LESSEE shall use the Premises for the purpose of constructing, maintaining, repairing and operating a communications facility and uses incidental thereto. LESSEE shall install a wood stockade fence around the perimeter of the communications facility lined with a single row of evergreen trees not to exceed six feet (6') in height but not less than four feet (4') in height (not including the Right of Way). All improvements, equipment, antennas and conduits shall be at LESSEE's expense and their installation shall be at the discretion and option of LESSEE. The tower shall be of monopole design, unless any Federal, State or Local authorities require LESSEE to install a different type of Tower. In a manner consistent with this Agreement, LESSEE shall have the right to replace, repair, add or otherwise modify its utilities, equipment, antennas and/or conduits or any portion thereof and the frequencies over which the equipment operates, whether the equipment, antennas, conduits or frequencies are specified or not on any exhibit attached hereto, during the Term. LESSEE will maintain the Premises in a good condition reasonable wear and tear excepted. LESSOR will maintain the Property, excluding the Premises, in good condition, reasonable wear and tear excepted. It is understood and agreed that LESSEE's ability to use the Premises is contingent upon its obtaining after the execution date of this Agreement all of the certificates, permits and other approvals (collectively the "Governmental Approvals") that may be required by any Federal, State or Local authorities as well as satisfactory soil boring tests which will permit LESSEE use of the Premises as set forth above. LESSOR shall cooperate with LESSEE in its effort to obtain such approvals and shall take no action which would adversely affect the status of the Property with respect to the proposed use thereof by LESSEE. In the event that (i) any of such applications for such Governmental Approvals should be finally rejected without fault of LESSEE; (ii) any Governmental Approval issued to LESSEE is canceled, expires, lapses, or is otherwise withdrawn or terminated by governmental authority without fault of LESSEE; (iii) LESSEE determines that such Governmental Approvals may not be obtained in a timely manner; (iv) LESSEE determines that any soil boring tests are unsatisfactory; (v) LESSEE determines that the Premises is no longer technically compatible for its use, or (vi) LESSEE, in its sole discretion, determines that it will be unable to use the Premises for its intended purposes, LESSEE shall have the right to terminate this Agreement. Provided, however, that if Lessee terminates this Agreement during the initial term or during any extension term as set forth in paragraph 4 pursuant to provision (iii), (iv), (v) or (vi), then LESSEE shall pay a termination fee to LESSOR in an amount equal to the lesser of the following: (A) the rent remaining on the then current five (5) year term or (B) one (1) year's rent at the then current rate. Notice of LESSEE's exercise of its right to terminate shall be given to LESSOR in writing by certified mail, return receipt requested, and shall be effective upon the mailing of such notice by LESSEE, or upon such later date as designated by LESSEE. All rentals paid to said termination date shall be retained by LESSOR. Upon such termination, this Agreement shall be of no further force or effect except to the extent of the representations, warranties and indemnities made by each Party to the other hereunder. Otherwise, the LESSEE shall have no further obligations for the payment of rent to LESSOR except as set forth above.

8. INDEMNIFICATION. Subject to Paragraph 9 below, each Party shall indemnify and hold the other harmless against any claim of liability or loss from personal injury or property damage resulting from or arising out of the negligence or willful misconduct of the indemnifying Party, its employees, contractors or agents, except to the extent such claims or damages may be due

to or caused by the negligence or willful misconduct of the other Party, or its employees, contractors or agents.

9. INSURANCE.

a. Intentionally deleted.

b. The Parties each agree that at its own cost and expense, each will maintain commercial general liability insurance with limits not less than $1,000,000 for injury to or death of one or more persons in any one occurrence and $500,000 for damage or destruction to property in any one occurrence. LESSOR and LESSEE will provide the other party with a certificate of insurance evidencing the above coverage upon request.

10. LIMITATION OF LIABILITY. Except for indemnification pursuant to paragraphs 8 and 28, neither Party shall be liable to the other, or any of their respective agents, representatives, employees for any lost revenue, lost profits, loss of technology, rights or services, incidental, punitive, indirect, special or consequential damages, loss of data, or interruption or loss of use of service, even if advised of the possibility of such damages, whether under theory of contract, tort (including negligence), strict liability or otherwise.

11. ANNUAL TERMINATION. Notwithstanding anything to the contrary contained herein, provided LESSEE is not in default hereunder beyond applicable notice and cure periods, LESSEE shall have the right to terminate this Agreement upon the annual anniversary of the Commencement Date provided that three (3) months prior notice is given to LESSOR. In the event LESSEE terminates this Agreement during the initial term or during any extension term as set forth in paragraph 4, and the termination is not the result of: (i) the act or omission of LESSOR; or (ii) LESSOR's default hereunder; then LESSEE shall pay a termination fee to LESSOR equal to the lesser of (i) the monthly rent remaining on the then current five (5) year term or (ii) one (1) year's rent for the then current year.

12. INTERFERENCE. LESSEE agrees to install equipment of the type and frequency which will not cause harmful interference which is measurable in accordance with then existing industry standards to any equipment of LESSOR or other lessees of the Property which existed on the Property prior to the date this Agreement is executed by the Parties. In the event any after-installed LESSEE's equipment causes such interference, and after LESSOR has notified LESSEE in writing of such interference, LESSEE will take all commercially reasonable steps necessary to correct and eliminate the interference, including but not limited to, at LESSEE's option, powering down such equipment and later powering up such equipment for intermittent testing. In no event will LESSOR be entitled to terminate this Agreement or relocate the equipment as long as LESSEE is making a good faith effort to remedy the interference issue. LESSOR agrees that LESSOR and/or any other tenants of the Property who currently have or in the future take possession of the Property will be permitted to install only such equipment that is of the type and frequency which will not cause harmful interference which is measurable in accordance with then existing industry standards to the then existing equipment of LESSEE. The Parties acknowledge that there will not be an adequate remedy at law for noncompliance with the provisions of this Paragraph and

therefore, either Party shall have the right to equitable remedies, such as, without limitation, injunctive relief and specific performance.

13. REMOVAL AT END OF TERM. LESSEE shall, upon expiration of the Term, or within sixty (60) days after any earlier termination of the Agreement, remove its building(s), antenna structure(s) (and footings to the depth of three feet (3') below grade level), equipment, conduits, fixtures and all personal property and restore the Premises to its original condition, reasonable wear and tear and casualty damage excepted. LESSOR agrees and acknowledges that all of the equipment, conduits, fixtures and personal property of LESSEE shall remain the personal property of LESSEE and LESSEE shall have the right to remove the same at any time during the Term, whether or not said items are considered fixtures and attachments to real property under applicable Laws (as defined in Paragraph 32 below). If such time for removal causes LESSEE to remain on the Premises after termination of this Agreement, LESSEE shall pay rent at the then existing monthly rate or on the existing monthly pro-rata basis if based upon a longer payment term, until such time as the removal of the building, antenna structure, fixtures and all personal property are completed.

14. HOLDOVER. LESSEE has no right to retain possession of the Premises or any part thereof beyond the expiration of that removal period set forth in Paragraph 13 herein, unless the Parties are negotiating a new lease or lease extension in good faith. In the event that the Parties are not in the process of negotiating a new lease or lease extension in good faith, LESSEE holds over in violation of Paragraph 13 and this Paragraph 14, then the rent then in effect payable from and after the time of the expiration or earlier removal period set forth in Paragraph 13 shall be increased to [redacted] of the rent applicable during the month immediately preceding such expiration or earlier termination.

15. RIGHT OF FIRST REFUSAL. If LESSOR elects, during the Term to grant to a third party by easement or other legal instrument an interest in and to that portion of the Property occupied by LESSEE, or a larger portion thereof, for the purpose of operating and maintaining communications facilities or the management thereof, with or without an assignment of this Agreement to such third party, LESSEE shall have the right of first refusal to meet any bona fide offer of transfer on the same terms and conditions of such offer. If LESSEE fails to meet such bona fide offer within thirty (30) days after written notice thereof from LESSOR, LESSOR may grant the easement or interest in the Property or portion thereof to such third person in accordance with the terms and conditions of such third party offer.

16. RIGHTS UPON SALE. Should LESSOR, at any time during the Term decide (i) to sell or transfer all or any part of the Property to a purchaser other than LESSEE, or (ii) to grant to a third party by easement or other legal instrument an interest in and to that portion of the Property occupied by LESSEE, or a larger portion thereof, for the purpose of operating and maintaining communications facilities or the management thereof, such sale or grant of an easement or interest therein shall be under and subject to this Agreement and any such purchaser or transferee shall recognize LESSEE's rights hereunder under the terms of this Agreement. To the extent that LESSOR grants to a third party by easement or other legal instrument an interest in and to that portion of the Property occupied by LESSEE for the purpose of operating and maintaining

communications facilities or the management thereof and in conjunction therewith, assigns this Agreement to said third party, LESSOR shall not be released from its obligations to LESSEE under this Agreement, and LESSEE shall have the right to look to LESSOR and the third party for the full performance of this Agreement.

17. QUIET ENJOYMENT. LESSOR covenants that LESSEE, on paying the rent and performing the covenants herein, shall peaceably and quietly have, hold and enjoy the Premises.

18. TITLE. LESSOR represents and warrants to LESSEE as of the execution date of this Agreement, and covenants during the Term that LESSOR is seized of good and sufficient title and interest to the Property and has full authority to enter into and execute this Agreement. LESSOR further covenants during the Term that there are no liens, judgments or impediments of title on the Property, or affecting LESSOR's title to the same and that there are no covenants, easements or restrictions which prevent or adversely affect the use or occupancy of the Premises by LESSEE as set forth above.

19. INTEGRATION. It is agreed and understood that this Agreement contains all agreements, promises and understandings between LESSOR and LESSEE and that no verbal or oral agreements, promises or understandings shall be binding upon either LESSOR or LESSEE in any dispute, controversy or proceeding at law, and any addition, variation or modification to this Agreement shall be void and ineffective unless made in writing signed by the Parties or in a written acknowledgment in the case provided in Paragraph 3. In the event any provision of the Agreement is found to be invalid or unenforceable, such finding shall not affect the validity and enforceability of the remaining provisions of this Agreement. The failure of either Party to insist upon strict performance of any of the terms or conditions of this Agreement or to exercise any of its rights under the Agreement shall not waive such rights and such Party shall have the right to enforce such rights at any time and take such action as may be lawful and authorized under this Agreement, in law or in equity.

20. GOVERNING LAW. This Agreement and the performance thereof shall be governed, interpreted, construed and regulated by the Laws of the State in which the Property is located.

21. ASSIGNMENT.

(a) This Agreement may be sold, assigned or transferred by the LESSEE without any approval or consent of the LESSOR to the LESSEE's principal, affiliates, subsidiaries of its principal or to any entity which acquires all or substantially all of LESSEE's assets in the market defined by the Federal Communications Commission in which the Property is located by reason of a merger, acquisition or other business reorganization. As to other parties, this Agreement may not be sold, assigned or transferred without the written consent of the LESSOR, which such consent will not be unreasonably withheld, delayed or conditioned. No change of stock ownership, partnership interest or control of LESSEE or transfer upon partnership or corporate dissolution of LESSEE shall constitute an assignment hereunder. LESSEE may sublet or sublicense the Premises within its sole discretion, upon notice to LESSOR. Any sublease or sublicense that is entered into

by LESSEE shall be subject to the provisions of this Agreement and shall be binding upon the successors, assigns, heirs and legal representatives of the respective Parties hereto.

(b) LESSEE may, in its sole discretion, sublet, license or otherwise allow the use of all or any part of the Premises without any prior approval or consent of the LESSOR, upon the payment of [redacted] of the rent to be received by LESSEE per month (hereinafter "Collocation Fee") per additional tower user beyond LESSEE, payable by such sublessee, licensee or other user (hereinafter, a "user") directly to LESSOR. In no event shall the Collocation Fee be less than $300.00 per month per user.

(i) Notwithstanding any other provision of this Agreement: (1) no additional payment shall be due to LESSOR where such sublease, license or other use is required, ordered or negotiated as a condition of approval by or with any governmental authority having jurisdiction over LESSEE or the Premises, for governmental, emergency services or other public service use; and (2) LESSEE shall not be required to obtain approval from the LESSOR for such use.

(ii) LESSEE shall have the sole right to determine whether it will sublet, license or otherwise allow the use of any portion of the Premises or whether it will sublet, license or enter into any other usage agreement with any specific user. LESSEE shall have no liability of any nature to LESSOR for failure to sublet, license or otherwise allow the user of all or any part of the Premises to any or all potential user(s).

(iii) LESSEE shall not be responsible to LESSOR for the collection or payment of rents by any user to LESSOR hereunder, and shall have no liability to LESSOR in the event of failure of payment by any such user.

(iv) Any user agreement that is entered into by LESSEE shall be subject to the provisions of this Agreement and shall be binding upon the successors, assigns, heirs and legal representatives of the respective Parties hereto. LESSEE shall have the right to require, in its sole discretion, that any such user(s) enter into a three-party agreement with LESSOR and LESSEE to confirm the direct payment obligation to LESSOR hereunder, document LESSOR's consent to said agreement and otherwise memorialize said user's agreement to all terms and conditions of this Agreement.

(v) It is understood and agreed by the Parties that the additional payment hereunder shall only apply if LESSEE is able to accommodate all of the third-party user's facilities within the Premises. If LESSEE is unable to accommodate any or part of said user's facilities within the Premises, then LESSOR may enter into an agreement with the user for a portion of the property that said user requires to locate its facilities. In this event, LESSEE shall receive 100% of the rental for that portion of the facilities that are

located within the limits of the Premises and LESSOR shall receive 100% of the rental, negotiated by the LESSOR and said user, for the portion of user's facilities that are located on the property outside LESSEE's Premises.

22. NOTICES. All notices hereunder must be in writing and shall be deemed validly given if sent by certified mail, return receipt requested or by commercial courier, provided the courier's regular business is delivery service and provided further that it guarantees delivery to the addressee by the end of the next business day following the courier's receipt from the sender, addressed as follows (or any other address that the Party to be notified may have designated to the sender by like notice):

LESSOR: **COLONIE NEW YORK LODGE NO. 2192 BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE UNITED STATES OF AMERICA, INC.**
11 Elks Lane
Latham, New York 12110
ATTENTION: Exalted Ruler

LESSEE: **CELLCO PARTNERSHIP**
d/b/a Verizon Wireless
180 Washington Valley Road
Bedminster, New Jersey 07921
Attention: Network Real Estate

Notice shall be effective upon actual receipt or refusal as shown on the receipt obtained pursuant to the foregoing.

23. SUCCESSORS. This Agreement shall extend to and bind the heirs, personal representative, successors and assigns of the Parties hereto.

24. SUBORDINATION AND NON-DISTURBANCE. LESSOR shall make reasonable efforts to obtain not later than thirty (30) days following the execution of this Agreement, a Non-Disturbance Agreement and, if required by the Mortgage, as defined below, a written consent, from its existing mortgagee(s), ground lessors and master lessors, if any, of the Property.

25. RECORDING. LESSOR agrees to execute a Memorandum of this Agreement which LESSEE may record with the appropriate recording officer. The date set forth in the Memorandum of Lease is for recording purposes only and bears no reference to commencement of either the Term or rent payments.

26. DEFAULT.

a. In the event there is a breach by LESSEE with respect to any of the provisions of this Agreement or its obligations under it, including the payment of rent, LESSOR shall give LESSEE written notice of such breach. After receipt of such written notice, LESSEE shall have fifteen (15) days in which to cure any monetary breach and thirty (30) days in which to

cure any non monetary breach, provided LESSEE shall have such extended period as may be required beyond the thirty (30) days if the nature of the cure is such that it reasonably requires more than thirty (30) days and LESSEE commences the cure within the thirty (30) day period and thereafter continuously and diligently pursues the cure to completion. LESSOR may not maintain any action or effect any remedies for default against LESSEE unless and until LESSEE has failed to cure the breach within the time periods provided in this Paragraph.

b. In the event there is a breach by LESSOR with respect to any of the provisions of this Agreement or its obligations under it, LESSEE shall give LESSOR written notice of such breach. After receipt of such written notice, LESSOR shall have thirty (30) days in which to cure any such breach, provided LESSOR shall have such extended period as may be required beyond the thirty (30) days if the nature of the cure is such that it reasonably requires more than thirty (30) days and LESSOR commences the cure within the thirty (30) day period and thereafter continuously and diligently pursues the cure to completion. LESSEE may not maintain any action or effect any remedies for default against LESSOR unless and until LESSOR has failed to cure the breach within the time periods provided in this Paragraph. Notwithstanding the foregoing to the contrary, it shall be a default under this Agreement if LESSOR fails, within five (5) days after receipt of written notice of such breach, to perform an obligation required to be performed by LESSOR if the failure to perform such an obligation interferes with LESSEE's ability to conduct its business on the Property; provided, however, that if the nature of LESSOR's obligation is such that more than five (5) days after such notice is reasonably required for its performance, then it shall not be a default under this Agreement if performance is commenced within such five (5) day period and thereafter diligently pursued to completion.

27. REMEDIES. Upon a default, the non-defaulting Party may at its option (but without obligation to do so), perform the defaulting Party's duty or obligation on the defaulting Party's behalf, including but not limited to the obtaining of reasonably required insurance policies. The costs and expenses of any such performance by the non-defaulting Party shall be due and payable by the defaulting Party upon invoice therefor. In the event of a default by either Party with respect to a material provision of this Agreement, without limiting the non-defaulting Party in the exercise of any right or remedy which the non-defaulting Party may have by reason of such default, the non-defaulting Party may terminate the Agreement and/or pursue any remedy now or hereafter available to the non-defaulting Party under the Laws or judicial decisions of the state in which the Premises are located; provided, however, the parties shall use reasonable efforts to mitigate their damages in connection with a default. If either party so performs any of the other party's obligations hereunder, the full amount of the reasonable and actual cost and expense incurred by that party shall immediately be owing by the defaulting Party, and the defaulting party shall pay upon demand the full undisputed amount thereof with interest thereon from the date of payment at the greater of (i) [redacted] per annum, or (ii) the highest rate permitted by applicable Laws. Notwithstanding the foregoing, LESSOR shall have no right to carry out any repairs or maintenance with respect to any of LESSEE's communication facilities.

28. ENVIRONMENTAL.

a. LESSOR will be responsible for all obligations of compliance with any and all environmental and industrial hygiene laws, including any regulations, guidelines, standards, or policies of any governmental authorities regulating or imposing standards of liability or standards of conduct with regard to any environmental or industrial hygiene conditions or concerns as may now or at any time hereafter be in effect, that are or were in any way related to activity now conducted in, on, or in any way related to the Property, unless such conditions or concerns are caused by the specific activities of LESSEE in the Premises.

b. LESSOR shall hold LESSEE harmless and indemnify LESSEE from and assume all duties, responsibility and liability at LESSOR's sole cost and expense, for all duties, responsibilities, and liability (for payment of penalties, sanctions, forfeitures, losses, costs, or damages) and for responding to any action, notice, claim, order, summons, citation, directive, litigation, investigation or proceeding which is in any way related to: a) failure to comply with any environmental or industrial hygiene law, including without limitation any regulations, guidelines, standards, or policies of any governmental authorities regulating or imposing standards of liability or standards of conduct with regard to any environmental or industrial hygiene concerns or conditions as may now or at any time hereafter be in effect, unless such non-compliance results from conditions caused by LESSEE; and b) any environmental or industrial hygiene conditions arising out of or in any way related to the condition of the Property or activities conducted thereon, unless such environmental conditions are caused by LESSEE.

29. CASUALTY. In the event of damage by fire or other casualty to the Premises that cannot reasonably be expected to be repaired within ninety (90) days following same or, if the Property is damaged by fire or other casualty so that such damage may reasonably be expected to disrupt LESSEE's operations at the Premises for more than ninety (90) days, then LESSEE may, at any time following such fire or other casualty, provided LESSOR has not completed the restoration required to permit LESSEE to resume its operation at the Premises, terminate this Agreement upon thirty (30) days prior written notice to LESSOR. Any such notice of termination shall cause this Agreement to expire with the same force and effect as though the date set forth in such notice were the date originally set as the expiration date of this Agreement and the Parties shall make an appropriate adjustment, as of such termination date, with respect to payments due to the other under this Agreement.

30. CONDEMNATION. In the event of any condemnation of all or any portion of the Property, this Agreement shall terminate as to the part so taken as of the date the condemning authority takes title or possession, whichever occurs first. If as a result of a partial condemnation of the Premises or Property, LESSEE, in LESSEE's sole discretion, is unable to use the Premises for the purposes intended hereunder, or if such condemnation may reasonably be expected to disrupt LESSEE's operations at the Premises for more than forty-five (45) days, LESSEE may, at LESSEE's option, to be exercised in writing within fifteen (15) days after LESSOR shall have given LESSEE written notice of such taking (or in the absence of such notice, within fifteen (15) days after the condemning authority shall have taken possession) terminate this Agreement as of the date the condemning authority takes such possession. LESSEE may on its own behalf make a

claim in any condemnation proceeding involving the Premises for losses related to the equipment, conduits, fixtures, its relocation costs and its damages and losses (but not for the loss of its leasehold interest). Any such notice of termination shall cause this Agreement to expire with the same force and effect as though the date set forth in such notice were the date originally set as the expiration date of this Agreement and the Parties shall make an appropriate adjustment as of such termination date with respect to payments due to the other under this Agreement. If LESSEE does not terminate this Agreement in accordance with the foregoing, this Agreement shall remain in full force and effect as to the portion of the Premises remaining, except that the rent shall be reduced in the same proportion as the rentable area of the Premises taken bears to the total rentable area of the Premises. In the event that this Agreement is not terminated by reason of such condemnation, LESSOR shall promptly repair any damage to the Premises caused by such condemning authority.

31. SUBMISSION OF AGREEMENT/PARTIAL INVALIDITY/AUTHORITY. The submission of this Agreement for examination does not constitute an offer to lease the Premises and this Agreement becomes effective only upon the full execution of this Agreement by the Parties. If any provision herein is invalid, it shall be considered deleted from this Agreement and shall not invalidate the remaining provisions of this Agreement. Each of the Parties hereto warrants to the other that the person or persons executing this Agreement on behalf of such Party has the full right, power and authority to enter into and execute this Agreement on such Party's behalf and that no consent from any other person or entity is necessary as a condition precedent to the legal effect of this Agreement.

32. APPLICABLE LAWS. During the Term, LESSOR shall maintain the Property in compliance with all applicable laws, rules, regulations, ordinances, directives, covenants, easements, zoning and land use regulations, and restrictions of record, permits, building codes, and the requirements of any applicable fire insurance underwriter or rating bureau, now in effect or which may hereafter come into effect (including, without limitation, the Americans with Disabilities Act and laws regulating hazardous substances) (collectively "Laws"). LESSEE shall, in respect to the condition of the Premises and at LESSEE's sole cost and expense, comply with (a) all Laws relating solely to LESSEE's specific and unique nature of use of the Premises (other than general office use); and (b) all building codes requiring modifications to the Premises due to the improvements being made by LESSEE in the Premises.

33. SURVIVAL. The provisions of the Agreement relating to indemnification from one Party to the other Party shall survive any termination or expiration of this Agreement. Additionally, any provisions of this Agreement which require performance subsequent to the termination or expiration of this Agreement shall also survive such termination or expiration.

34. CAPTIONS. The captions contained in this Agreement are inserted for convenience only and are not intended to be part of the Agreement. They shall not affect or be utilized in the construction or interpretation of the Agreement.

35. REAL ESTATE TAXES BASED UPON LESSEE'S IMPROVEMENTS. LESSEE shall pay as additional rent any documented increase in real estate taxes levied against the Premises which are directly attributable to the improvements constructed by LESSEE. LESSOR shall

provide to LESSEE a copy of any notice, assessment or billing relating to real estate taxes for which LESSEE is responsible under this Agreement within thirty (30) days of receipt of the same by LESSOR. LESSEE shall have no obligation to make payment of any real estate taxes until LESSEE has received the notice, assessment or billing relating to such payment as set forth in the preceding sentence. In the event LESSOR fails to provide to LESSEE a copy of any real estate tax notice, assessment or billing within the thirty (30) day period set forth herein, LESSEE shall be relieved of any obligation or responsibility to make payment of real estate taxes referred to in the notice, assessment or billing which was not timely delivered by LESSOR to LESSEE.

LESSEE shall have the right, at its sole option and at its sole cost and expense, to appeal, challenge or seek modification of any real estate tax assessment or billing for which LESSEE is wholly or partly responsible for payment under this Agreement. LESSOR shall reasonably cooperate with LESSEE in filing, prosecuting and perfecting any appeal or challenge to real estate taxes as set forth in the preceding sentence, including but not limited to, executing any consent to appeal or other similar document.

IN WITNESS WHEREOF, the Parties hereto have set their hands and affixed their respective seals the day and year written below.

LESSOR: **COLONIE NEW YORK LODGE NO. 2192 BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE UNITED STATES OF AMERICA, INC. a/k/a COLONIE ELKS LODGE, B.P.O.E. 2192 a/k/a BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE USA**

BY: John A Kochan Jr.
Name: John A. Kochan Jr. , Exalted Ruler

LESSEE: **CELLCO PARTNERSHIP d/b/a Verizon Wireless**

BY: _____
David R. Heverling
Vice President, Network – Northeast Area
3708

ACKNOWLEDGEMENTS

STATE OF NEW YORK)
)ss.:
COUNTY OF ALBANY)

On the 8 day of JANUARY, 2008, before me, the undersigned, JOHN A. KOCHAN SR. personally appeared personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, that by his/her signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument, and that such individual made such appearance before the undersigned in the TOWN of COLONIE, County of ALBANY, State of New York.

Notary Public

WILLIAM M. HOBLOCK
Notary Public, State of New York
No. 02HO5075015
Qualified in Albany County
Commission Expires March 24, 11

COMMONWEALTH OF MASSACHUSETTS)
)ss.:
COUNTY OF WORCESTER)

On the 7 day of March, 2008, before me, the undersigned, personally appeared **David R. Heverling**, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, that by his signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument, and that such individual made such appearance before the undersigned in the Town of Worcester, County of Worcester, Commonwealth of Massachusetts.

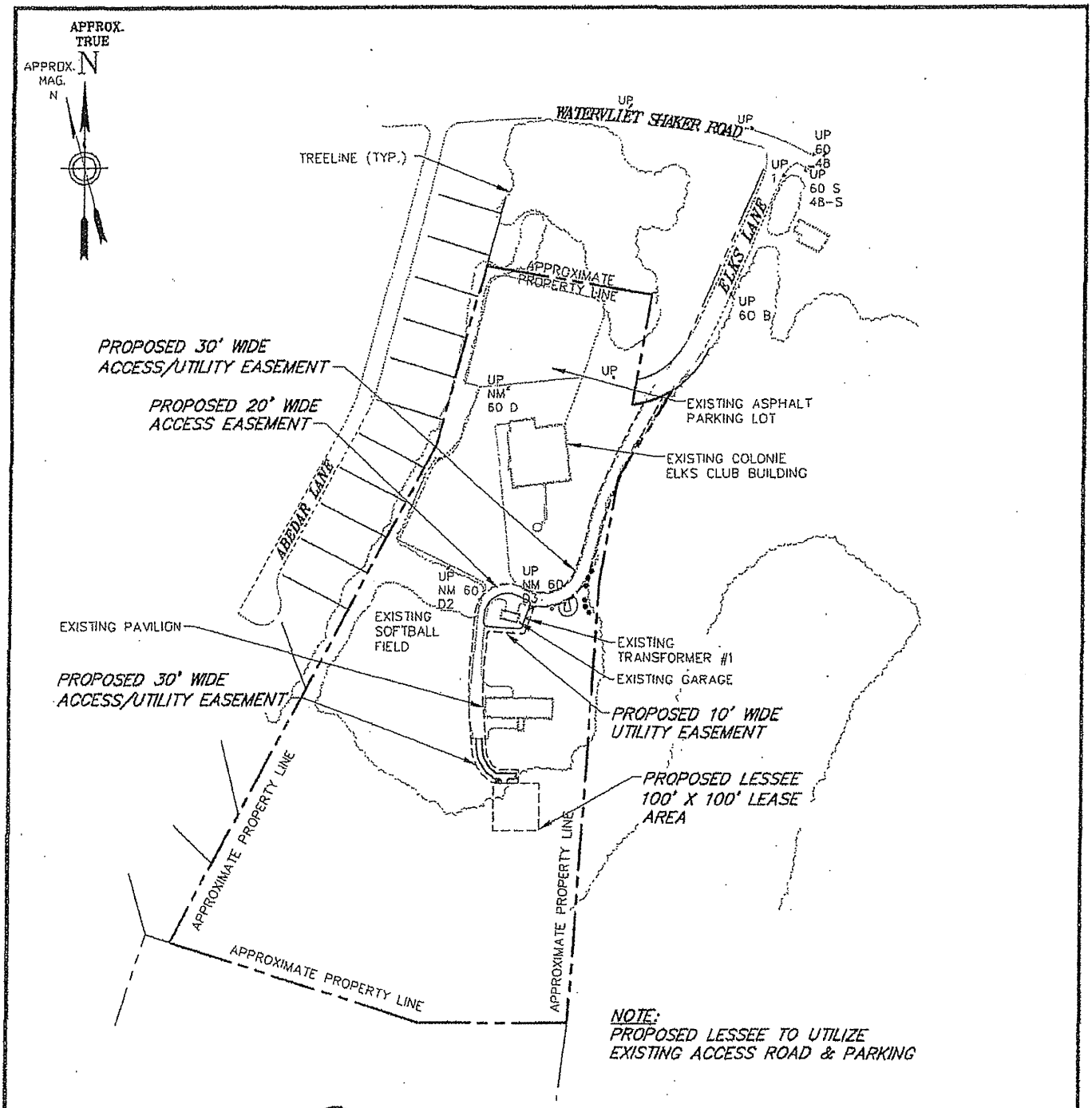
Notary Public

DIANE GAZZOLA
NOTARY PUBLIC
COMMONWEALTH OF MASSACHUSETTS
MY COMMISSION EXPIRES
NOVEMBER 13, 2009

SITE NAME: Latham South
SITE NUMBER: NYALB791
ATTY/DATE: MEC/12/21/07

Exhibit "A"

(Sketch of Premises within Property)



1 / LE-1 COMPREHENSIVE SITE PLAN

GRAPHIC SCALE

300 0 150 300

IN FEET

LESSOR John A. Koelsch Jr.

LEASE EXHIBIT

SCALE: 1" = 300'
JANUARY 25, 2008

1 OF 1

REVISION NUMBER 2

CHA
CLOUGH HARBOUR & ASSOCIATES LLP
III Winners Circle, PO Box 5269 - Albany, NY 12205-0269
Main: (516) 453-4500 - www.coughharbour.com
CHA PROJECT: 14089-1060-1601

verizonwireless
225 JORDAN ROAD
TROY, NY 12180

CELLCO PARTNERSHIP
d/b/a VERIZON WIRELESS
LATHAM SOUTH
SITE # NYALB791 / 2006193119
ELKS LANE
TOWN OF COLONIE, ALBANY COUNTY, NEW YORK

696

Record & Return to:
ROWLANDS & LEBROU, PLLC
11 BRITISH AMERICAN BLVD.
LATHAM, NY 12110
518-250-4264

MEMORANDUM OF LEASE AGREEMENT

for a
communications facility
located at:

Facility:	NYALB791 Latham South
Street Address:	11 Elks Lane
Municipality:	Town of Colonie
County:	Albany County
State:	New York
Tax Map No.:	31.4-5-.37
Index Against:	COLONIE NEW YORK LODGE NO. 2192 BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE UNITED STATES OF AMERICA, INC. a/k/a COLONIE ELKS LODGE, B.P.O.E. 2192 a/k/a BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE USA Deeds Book 1907 at Page 428 Deeds Book 2338 at Page 583

between

COLONIE NEW YORK LODGE NO. 2192 BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE UNITED STATES OF AMERICA, INC.
11 Elks Lane
Latham, New York 12110
("LESSOR")

and

CELLCO PARTNERSHIP
d/b/a Verizon Wireless
One Verizon Way
Mail Stop 4AW100
Basking Ridge, New Jersey 07920
("LESSEE")

NYALB791 Latham South

MEMORANDUM OF LEASE AGREEMENT

This **MEMORANDUM OF LEASE AGREEMENT** made as of the 16th day of May, 2016 (the "Second Amendment"), by and between **COLONIE NEW YORK LODGE NO. 2192 BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE UNITED STATES OF AMERICA, INC. a/k/a COLONIE ELKS LODGE, B.P.O.E. 2192 a/k/a BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE USA** with an address of 11 Elks Lane, Latham, New York 12110, hereinafter designated LESSOR and **CELLCO PARTNERSHIP** d/b/a Verizon Wireless, with principal offices located at One Verizon Way, Mail Stop 4AW100, Basking Ridge, New Jersey 07920, hereinafter designated LESSEE. The LESSOR and LESSEE are at times collectively referred to hereinafter as the "Parties" or individually as the "Party".

W I T N E S S E T H:

1. LESSOR is the owner of a certain real property situate at 11 Elks Lane, in the Town of Colonie, County of Albany, State of New York, and more particularly described as portion of the premises referenced in the instrument recorded in the Albany County Clerk's Office in Deeds Book 1907 at Page 428 and Deeds Book 2338 at Page 583 (Tax Map Parcel No. 31.4-5-37) (the entirety of LESSOR's property being hereinafter referred to as the "Property").

2. LESSOR and LESSEE entered into the Option and Land Lease Agreement dated the 7th day of March, 2008 as amended by the Amendment and Memorandum of Lease, dated the 7th day of March, 2008 as recorded in the Albany County Clerk's Office in Deeds Book 2956 at Page 830, the Amendment and Memorandum of Option of Lease Agreement, dated the 24th day of June, 2009 as recorded in the Albany County Clerk's Office in Deeds Book 2952 at Page 1041, and the Second Amendment to Lease Agreement dated as of the date hereof (collectively referred to as the "Agreement"), by which LESSOR has leased to LESSEE a portion of the Property being described as a 100± ft. by 100± ft. parcel containing 10,000± square feet (the "Land Space"), together with the non-exclusive right (the "Rights of Way") for ingress and egress, seven (7) days a week twenty-four (24) hours a day, on foot or motor vehicle, including trucks, over or along a thirty (30±) foot wide right-of-way extending from the nearest public right-of-way, Elks Lane, to the Land Space, and for the installation and maintenance of utility wires, poles, cables, conduits, and pipes over, under, or along one or more rights of way from the Land Space (said Land Space and Rights of Way being hereinafter collectively referred to as the "Premises").

3. A description of the Premises leased by LESSOR to LESSEE pursuant to the Agreement is set forth in Exhibit "A-1", attached hereto and made a part hereof. The description set forth in this Memorandum is intended to supersede the description set forth in the Amendment and Memorandum of Lease, dated the dated the 7th day of March, 2008 as recorded in the Albany County Clerk's Office in Deeds Book 2956 at Page 830.

4. The terms, covenants and provisions of the Agreement (as amended) shall extend to and be binding upon the respective executors, administrators, heirs, successors and assigns of LESSOR and LESSEE.

IN WITNESS WHEREOF, the Parties hereto have set their hands and seals as of the date set forth above.

LESSOR: **COLONIE NEW YORK LODGE NO. 2192 BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE UNITED STATES OF AMERICA, INC. a/k/a COLONIE ELKS LODGE, B.P.O.E. 2192 a/k/a BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE USA**

By: _____
Name: _____, Exalted Ruler

LESSEE: **CELLCO PARTNERSHIP d/b/a Verizon Wireless**

By: Richard Polatas
Richard Polatas
Director Network Field Engineering

ACKNOWLEDGEMENTS

STATE OF NEW YORK)
)ss.:
COUNTY OF)

On the ____ day of _____, 2016, before me, the undersigned, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, that by his/her signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument, and that such individual made such appearance before the undersigned in the _____ of _____, County of _____, State of New York.

_____
Notary Public

STATE OF NEW YORK)
)ss.:
COUNTY OF MONROE)

On the 20th day of May, 2016, before me, the undersigned, personally appeared **Richard Polatas**, personally known to me or proved to me on the basis of satisfactory evidence to be the Director Network Field Engineering of Cellco Partnership d/b/a Verizon Wireless, the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, that by his signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument, and that such individual made such appearance before the undersigned in the Town of West Henrietta, County of Monroe, State of New York.

COURTNEY LANNON WASHINGTON
Notary Public, State of New York
No. 01WA6293603
Qualified in Monroe County
Commission Expires December 16, 2017

Notary Public

4. The terms, covenants and provisions of the Agreement (as amended) shall extend to and be binding upon the respective executors, administrators, heirs, successors and assigns of LESSOR and LESSEE.

IN WITNESS WHEREOF, the Parties hereto have set their hands and seals as of the date set forth above.

LESSOR: **COLONIE NEW YORK LODGE NO. 2192 BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE UNITED STATES OF AMERICA, INC. a/k/a COLONIE ELKS LODGE, B.P.O.E. 2192 a/k/a BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE USA**

By: _____
Name: Josh Mathis, Exalted Ruler

LESSEE: **CELLCO PARTNERSHIP d/b/a Verizon Wireless**

By: _____
Lynn Ramsey
Vice President Field Network

ACKNOWLEDGEMENTS

STATE OF NEW YORK)
)ss.:
COUNTY OF ALBANY)

On the 18th day of APRIL, 2016, before me, the undersigned, personally appeared JOSH MERTENS, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, that by his/her signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument, and that such individual made such appearance before the undersigned in the TOWN of COLONIE, County of ALBANY, State of New York.

William Hoblock
Notary Public

WILLIAM J. HOBLOCK
Notary Public, State of New York
Qualified in Albany County
Commission Expires 9/30/17

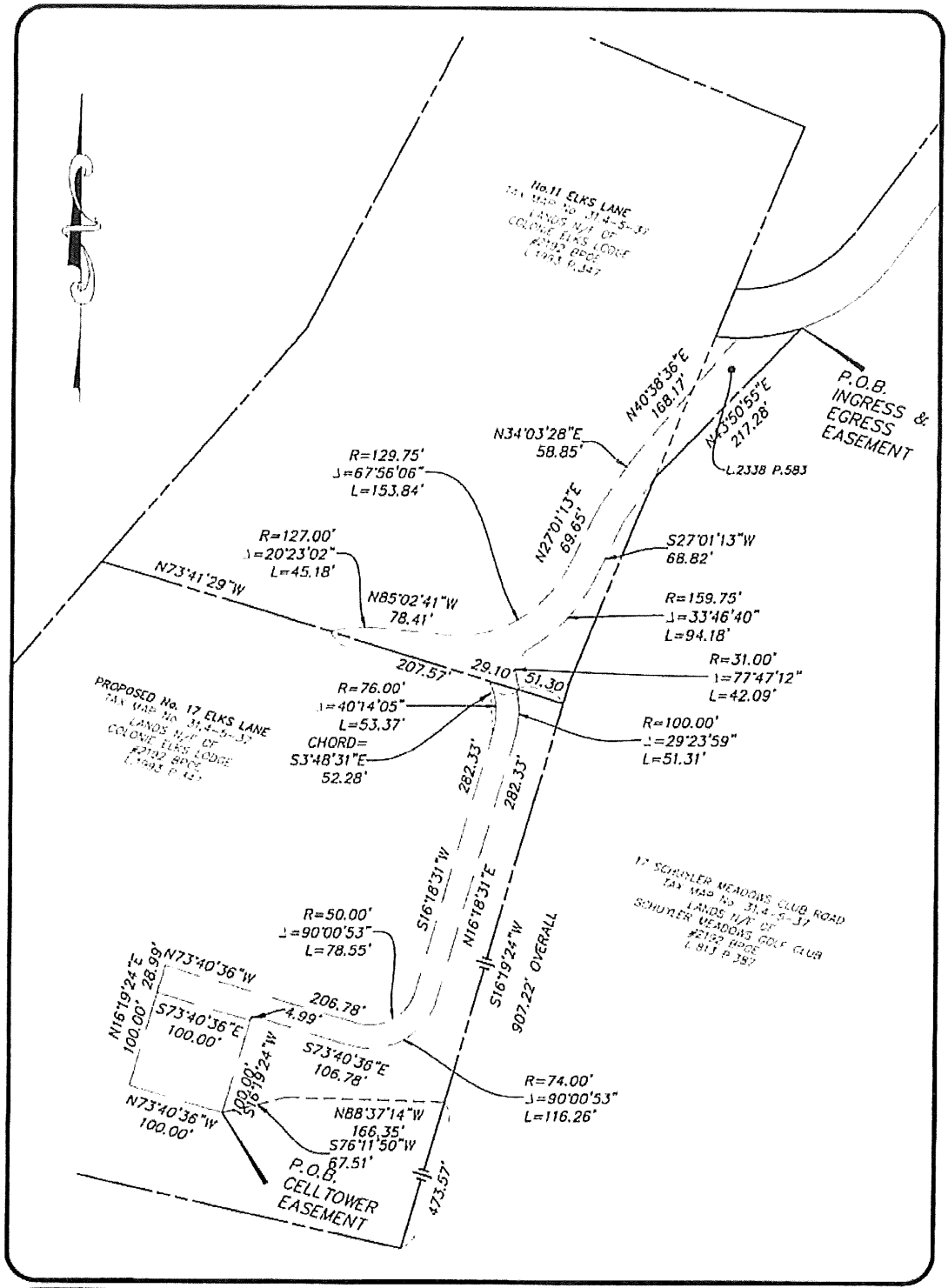
STATE OF ILLINOIS)
)ss.:
COUNTY OF COOK)

On the ____ day of _____, 2016, before me, the undersigned, personally appeared **Lynn Ramsey**, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, that by his/her signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument, and that such individual made such appearance before the undersigned in the Town of Schaumburg, County of Cook, State of Illinois.

_____
Notary Public

EXHIBIT "A-1"

Site Plan/Survey of Premises



HERSHBERG & HERSHBERG

Consulting Engineers and Land Surveyors

19 Calvin Avenue
Albany, New York 12206

MAP SHOWING RELOCATED CELL TOWER EASEMENT & PROPOSED INGRESS & EGRESS AT

PROPOSED No. 17 ELKS LANE

TOWN OF COLONIE, COUNTY OF ALBANY, STATE OF NEW YORK

REVISIONS: 1/21/16

DATE 11/13/15 | SCALE: 1"=100' | BY: NGJ | CHK: GRT | MAP No.: 130112E5

A-1-5

TAB 3

DOCUMENTATION OF PUBLIC UTILITY STATUS
and
OVERVIEW OF ROSENBERG DECISION

In *Cellular Tel. Co. v. Rosenberg*, 82 N.Y.2d 364 (1993), the New York Court of Appeals determined that cellular telephone companies are public utilities. The Court held that proposed cellular telephone installations are to be reviewed by zoning boards pursuant to the traditional standard afforded to public utilities, rather than the standards generally required for the necessary approvals:

> It has long been held that a zoning board may not exclude a utility from a community where the utility has shown a need for its facilities. There can be no question of [the carrier's] need to erect the cell site to eliminate service gaps in its cellular telephone service area. The proposed cell site will also improve the transmission and reception of existing service. Application of our holding in *Matter of Consolidated Edison* to sitings of cellular telephone companies, such as [the applicant], permits those companies to construct structures necessary for their operation which are prohibited because of existing zoning laws and to provide the desired services to the surrounding community. . . . Moreover, the record supports the conclusion that [the applicant] sustained its burden of proving the requisite public necessity. [The applicant] established that the erection of the cell site would enable it to remedy gaps in its service area that currently prevent it from providing adequate service to its customers in the . . . area.

Rosenberg, 82 N.Y.2d at 372-74 (citing *Consolidated Edison Co. v. Hoffman*, 43 N.Y.2d 598 (1978)).

This special treatment of a public utility stems from the essential nature of its service, and the fact that a public utility transmitting facility must be located in a particular area in order to provide service. For instance, water towers, electric switching stations, water pumping stations and telephone poles must be in particular locations (including within residential districts) in order to provide the utility to a specific area:

> [Public] utility services are needed in all districts; the service can be provided only if certain facilities (for example, substations) can be located in commercial and even in residential districts. To exclude such use would result in an impairment of an essential service.

Anderson, New York Zoning Law Practice, 3d ed., p. 411 (1984) (hereafter "Anderson"). See also, *Cellular Tel. Co. v. Rosenberg*, 82 N.Y.2d 364 (1993); *Payne v. Taylor*, 178 A.D.2d 979 (4th Dep't 1991).

Accordingly, the law in New York is that a municipality may not prohibit facilities, including towers, necessary for the transmission of a public utility. In *Rosenberg*, 82 N.Y.2d at 371, the court found that "the construction of an antenna tower... to facilitate the supply of cellular telephone service is a 'public utility building' within the meaning of a zoning ordinance." See also *Long Island Lighting Co. v. Griffin*, 272 A.D. 551 (2d Dep't 1947) (a municipal corporation may not prohibit the expansion of a public utility where such expansion is necessary to the maintenance of essential services).

In the present case, Verizon Wireless does not have reliable service coverage in areas of the Town of Colonie. The communications facility proposed is necessary to remedy this service problem and to provide adequate and reliable wireless telecommunications service coverage to this area. Therefore, Verizon Wireless satisfies the requisite showing of need for the facility under applicable New York law.

TAB 4

DOCUMENTATION OF PERSONAL WIRELESS SERVICE FACILITY STATUS and FEDERAL TELECOMMUNICATIONS ACT OF 1996

In addition to being considered a public utility under New York decisional law, Verizon Wireless is classified as a provider of "personal wireless services" under the federal Telecommunications Act of 1996 (the "TCA").

As stated in the long title of the Act, the goal of the TCA is to "promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies." *Telecommunications Act of 1996, Pub. LA. No. 104-104, 110 Stat. 56 (1996).*

The TCA mandates a process designed to achieve competitive telecommunications markets. In keeping with the central goals of the TCA, the authors specify in Section 253(a) that "[n]o State or local statute or regulation...may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service." *TCA Section 253(a), emphasis added.*

Section 332(c) of the TCA preserves the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction and modification of personal wireless service facilities, subject to several important limitations:

- the "regulation of the placement...of personal wireless service facilities by any State or local government or instrumentality thereof shall not unreasonably discriminate among providers of functionally equivalent services" (*TCA §332(c)(7)(B)(i)(I)*);

- the "regulation of the placement...of personal wireless service facilities by any State or local government or instrumentality thereof shall not prohibit or have the effect of prohibiting the provision of personal wireless services" (*TCA §332(c)(7)(B)(i)(II)*);

- Applications must be processed within a reasonable period of time, and any decision to deny a request for placement of personal wireless service facilities must be in writing and supported by substantial evidence contained in a written record (*TCA §§332(c)(7)(B)(ii) and (iii)*); and

- regulations based upon the perceived environmental effects of radio frequency emissions are prohibited, so long as the proposed personal wireless service facility complies with FCC regulations concerning such emissions (*TCA §332(c)(7)(B)(iv)*).

A reference copy of the Telecommunications Act of 1996 is included herewith.

104TH CONGRESS
2d Session
HOUSE OF REPRESENTATIVES
REPORT
104–458

TELECOMMUNICATIONS ACT OF 1996

JANUARY 31, 1996. Ordered to be printed

Mr. BLILEY, from the committee of conference, submitted the following

CONFERENCE REPORT

[To accompany S. 652]

The committee of conference on the disagreeing votes of the two Houses on the amendments of the House to the bill (S. 652), to provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the Senate recede from its disagreement to the amendment of the House to the text of the bill and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the House amendment, insert the following:

SECTION 1. SHORT TITLE; REFERENCES.

(a) SHORT TITLE.—This Act may be cited as the "Telecommunications Act of 1996".

(b) REFERENCES.—Except as otherwise expressly provided, whenever in this Act an amendment or repeal is expressed in terms of an amendment to, or repeal of, a section or other provision, the reference shall be considered to be made to a section or other provision of the Communications Act of 1934 (47 U.S.C. 151 et seq.).

SEC. 2. TABLE OF CONTENTS.

The table of contents for this Act is as follows:

22–327

[redacted] *tity that has obtained an attachment to such conduit or right-of-way so that such entity may have a reasonable opportunity to add to or modify its existing attachment. Any entity that adds to or modifies its existing attachment after receiving such notification shall bear a proportionate share of the costs incurred by the owner in making such pole, duct, conduit, or right-of-way accessible.*

[redacted] *right-of-way shall not be required to bear any of the costs of rearranging or replacing its attachment, if such rearrangement or replacement is required as a result of an additional attachment or the modification of an existing attachment sought by any other entity [redacted]*

SEC. 704. FACILITIES SITING; RADIO FREQUENCY EMISSION STANDARDS.

(a) NATIONAL WIRELESS TELECOMMUNICATIONS SITING POLICY.—Section 332(c) (47 U.S.C. 332(c)) is amended by adding at the end the following new paragraph:

"(7) PRESERVATION OF LOCAL ZONING AUTHORITY.—

"(A) GENERAL AUTHORITY.—Except as provided in this paragraph, nothing in this Act shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.

"(B) LIMITATIONS.—

"(i) The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof—

"(I) shall not unreasonably discriminate among providers of functionally equivalent services; and

"(II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services.

"(ii) A State or local government or instrumentality thereof shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request.

"(iii) Any decision by a State or local government or instrumentality thereof to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record.

"(iv) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.

"(v) Any person adversely affected by any final action or failure to act by a State or local government or any instrumentality thereof that is inconsistent with this subparagraph may, within 30 days after such action or failure to act, commence an action in any court of competent jurisdiction. The court shall hear and decide such action on an expedited basis. Any person adversely affected by an act or failure to act by a State or local government or any instrumentality thereof that is inconsistent with clause (iv) may petition the Commission for relief.

"(C) DEFINITIONS.—For purposes of this paragraph—

"(i) the term 'personal wireless services' means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services;

"(ii) the term 'personal wireless service facilities' means facilities for the provision of personal wireless services; and

"(iii) the term 'unlicensed wireless service' means the offering of telecommunications services using duly authorized devices which do not require individual licenses, but does not mean the provision of direct-to-home satellite services (as defined in section 303(v)).".

(b) RADIO FREQUENCY EMISSIONS.—Within 180 days after the enactment of this Act, the Commission shall complete action in ET Docket 93–62 to prescribe and make effective rules regarding the environmental effects of radio frequency emissions.

(c) AVAILABILITY OF PROPERTY.—Within 180 days of the enactment of this Act, the President or his designee shall prescribe procedures by which Federal departments and agencies may make available on a fair, reasonable, and nondiscriminatory basis, property, rights-of-way, and easements under their control for the placement of new telecommunications services that are dependent, in whole or in part, upon the utilization of Federal spectrum rights for the transmission or reception of such services. These procedures may establish a presumption that requests for the use of property, rights-of-way, and easements by duly authorized providers should be granted absent unavoidable direct conflict with the department or agency's mission, or the current or planned use of the property, rights-of-way, and easements in question. Reasonable fees may be charged to providers of such telecommunications services for use of property, rights-of-way, and easements. The Commission shall provide technical support to States to encourage them to make property, rights-of-way, and easements under their jurisdiction available for such purposes.

[redacted]

RIERS.

Section 332(c) (47 U.S.C. 332(c)) is amended by adding at the end the following new paragraph:

"(8) MOBILE SERVICES ACCESS.—A person engaged in the provision of commercial mobile services, insofar as such person is so engaged, shall not be required to provide equal access to

[redacted]

portionate share of the costs incurred by the owner in making such conduit or right-of-way accessible.

Conference agreement

The conference agreement adopts the Senate provision with modifications. The conference agreement amends section 224 of the Communications Act by adding new subsection (e)(1) to allow parties to negotiate the rates, terms, and conditions for attaching to poles, ducts, conduits, and rights-of-way owned or controlled by utilities. New subsection 224(e)(2) establishes a new rate formula charged to telecommunications carriers for the non-useable space of each pole. Such rate shall be based upon the number of attaching entities. The conferees also agree to three additional provisions from the House amendment. First, subsection (g) requires utilities that engage in the provision of telecommunications services or cable services to impute to its costs of providing such service an equal amount to the pole attachment rate for which such company would be liable under section 224. Second, new subsection 224(h) requires utilities to provide written notification to attaching entities of any plans to modify or alter its poles, ducts, conduit, or rights-of-way. New subsection 224(h) also requires any attaching entity that takes advantage of such opportunity to modify its own attachments shall bear a proportionate share of the costs of such alterations. Third, new subsection 224(i) prevents a utility from imposing the cost of rearrangements to other attaching entities if done solely for the benefit of the utility.

SECTION 704—FACILITIES SITING; RADIO FREQUENCY EMISSION STANDARDS

Senate bill

No provision.

House amendment

Section 108 of the House amendment required the Commission to issue regulations within 180 days of enactment for siting of CMS. A negotiated rulemaking committee comprised of State and local governments, public safety agencies and the affected industries were to have attempted to develop a uniform policy to propose to the Commission for the siting of wireless tower sites.

The House amendment also required the Commission to complete its pending Radio Frequency (RF) emission exposure standards within 180 days of enactment. The siting of facilities could not be denied on the basis of RF emission levels for facilities that were in compliance with the Commission standard.

The House amendment also required that to the greatest extent possible the Federal government make available to use of Federal property, rights-of-way, easements and any other physical instruments in the siting of wireless telecommunications facilities.

Conference agreement

The conference agreement creates a new section 704 which prevents Commission preemption of local and State land use decisions and preserves the authority of State and local governments over

zoning and land use matters except in the limited circumstances set forth in the conference agreement. The conference agreement also provides a mechanism for judicial relief from zoning decisions that fail to comply with the provisions of this section. It is the intent of the conferees that other than under section 332(c)(7)(B)(iv) of the Communications Act of 1934 as amended by this Act and section 704 of the Telecommunications Act of 1996 the courts shall have exclusive jurisdiction over all other disputes arising under this section. Any pending Commission rulemaking concerning the preemption of local zoning authority over the placement, construction or modification of CMS facilities should be terminated.

When utilizing the term "functionally equivalent services" the conferees are referring only to personal wireless services as defined in this section that directly compete against one another. The intent of the conferees is to ensure that a State or local government does not in making a decision regarding the placement, construction and modification of facilities of personal wireless services described in this section unreasonably favor one competitor over another. The conferees also intend that the phrase "unreasonably discriminate among providers of functionally equivalent services" will provide localities with the flexibility to treat facilities that create different visual, aesthetic, or safety concerns differently to the extent permitted under generally applicable zoning requirements even if those facilities provide functionally equivalent services. For example, the conferees do not intend that if a State or local government grants a permit in a commercial district, it must also grant a permit for a competitor's 50-foot tower in a residential district.

Actions taken by State or local governments shall not prohibit or have the effect of prohibiting the placement, construction or modification of personal wireless services. It is the intent of this section that bans or policies that have the effect of banning personal wireless services or facilities not be allowed and that decisions be made on a case-by-case basis.

Under subsection (c)(7)(B)(ii), decisions are to be rendered in a reasonable period of time, taking into account the nature and scope of each request. If a request for placement of a personal wireless service facility involves a zoning variance or a public hearing or comment process, the time period for rendering a decision will be the usual period under such circumstances. It is not the intent of this provision to give preferential treatment to the personal wireless service industry in the processing of requests, or to subject their requests to any but the generally applicable time frames for zoning decision.

The phrase "substantial evidence contained in a written record" is the traditional standard used for judicial review of agency actions.

The conferees intend section 332(c)(7)(B)(iv) to prevent a State or local government or its instrumentalities from basing the regulation of the placement, construction or modification of CMS facilities directly or indirectly on the environmental effects of radio frequency emissions if those facilities comply with the Commission's regulations adopted pursuant to section 704(b) concerning such emissions.

The limitations on the role and powers of the Commission under this subparagraph relate to local land use regulations and are not intended to limit or affect the Commission's general authority over radio telecommunications, including the authority to regulate the construction, modification and operation of radio facilities.

The conferees intend that the court to which a party appeals a decision under section 332(c)(7)(B)(v) may be the Federal district court in which the facilities are located or a State court of competent jurisdiction, at the option of the party making the appeal, and that the courts act expeditiously in deciding such cases. The term "final action" of that new subparagraph means final administrative action at the State or local government level so that a party can commence action under the subparagraph rather than waiting for the exhaustion of any independent State court remedy otherwise required.

With respect to the availability of Federal property for the use of wireless telecommunications infrastructure sites under section 704(c), the conferees generally adopt the House provisions, but substitute the President or his designee for the Commission.

It should be noted that the provisions relating to telecommunications facilities are not limited to commercial mobile radio licensees, but also will include other Commission licensed wireless common carriers such as point to point microwave in the extremely high frequency portion of the electromagnetic spectrum which rely on line of sight for transmitting communication services.

SECTION 705—MOBILE SERVICE DIRECT ACCESS TO LONG DISTANCE CARRIERS

Senate bill

Subsection (b) of section 221 of the Senate bill, as passed, states that notwithstanding the MFJ or any other consent decree, no CMS provider will be required by court order or otherwise to provide long distance equal access. The Commission may only order equal access if a CMS provider is subject to the interconnection obligations of section 251 and if the Commission finds that such a requirement is in the public interest. CMS providers shall ensure that its subscribers can obtain unblocked access to the interexchange carrier of their choice through the use of interexchange carrier identification codes, except that the unblocking requirement shall not apply to mobile satellite services unless the Commission finds it is in the public interest.

House amendment

Under section 109 of the House amendment, the Commission shall require providers of two-way switched voice CMS to allow their subscribers to access the telephone toll services provider of their choice through the use of carrier identification codes. The Commission rules will supersede the equal access, balloting and prescription requirements imposed by the MFJ and the AT&T-McCaw consent decree. The Commission may exempt carriers or classes of carriers from the requirements of this section if it is consistent with the public interest, convenience, and necessity, and the

TAB 5

verizon

Network Engineering - UPNY
1275 John Street, Suite 100
West Henrietta, New York 14586

June 6, 2018

Town of Colonie
347 Old Niskayuna Road
Latham, New York 12110

RE: **Latham South Communications Facility (Colonie Elk's Club)** – Application of Cellco Partnership d/b/a Verizon Wireless

Ladies and Gentlemen:

With respect to the above application, and in accordance with the Town of Colonie "Telecommunications Facilities Law," this statement will verify that all equipment to be located at the Colonie Elk's Club site described above will be maintained in a safe manner and in compliance with all applicable and permissible codes, ordinances and regulations, including any and all applicable Town, County, State and Federal laws, rules and regulations.

In accordance with Telecommunications Facilities Law, Verizon Wireless' proposed communications facility is unmanned, and will be visited by Network Operations personnel for routine maintenance and inspection purposes approximately 2–3 times per year. A records log is kept at the site to keep track of any issues identified at these site visits.

By virtue of the Federal Communications Commission (FCC) licenses included with this application, and in accordance with Telecommunications Facilities Law the construction, operation and maintenance of the proposed communications facility is legally permissible, including but not limited to the fact that Cellco Partnership d/b/a Verizon Wireless is authorized to do business in the County of Albany and State of New York.

Thank you for considering our application.

Sincerely,

Kathy Pomponio

Kathy Pomponio
Real Estate Manager

Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
1120 SANCTUARY PKWY, #150 GASA5REG
ALPHARETTA, GA 30009-7630

Call Sign	File Number
KNKA246	0006672353
Radio Service CL - Cellular	
Market Numer CMA044	**Channel Block** B
Sub-Market Designator 0	

FCC Registration Number (FRN): 0003290673

Market Name
Albany-Schenectady-Troy, NY

Grant Date	Effective Date	Expiration Date	Five Yr Build-Out Date	Print Date
04-14-2015	04-14-2015	05-15-2025		04-14-2015

Site Information:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
2	43-08-54.3 N	073-47-03.4 W	215.0		

Address: SARATOGA: KINGS STATION ROAD
City: GREENFIELD **County:** SARATOGA **State:** NY **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	41.400	174.700	188.400	175.600	172.800	110.000	-41.500	-71.300
Transmitting ERP (watts)	100.000	57.540	7.760	0.630	0.160	0.630	7.760	57.540
Antenna: 2 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	41.500	174.700	188.400	175.600	172.800	110.000	-41.500	-71.000
Transmitting ERP (watts)	1.450	19.500	79.430	95.500	36.310	3.240	0.160	0.160
Antenna: 3 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	41.500	174.700	188.400	175.600	172.800	110.000	-41.500	-71.300
Transmitting ERP (watts)	1.450	0.160	0.160	3.240	36.310	95.500	79.430	19.500

Conditions:
Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

FCC 601-C
August 2007

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKA246 **File Number:** 0006672353 **Print Date:** 04-14-2015

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
3	42-37-39.4 N	074-00-37.4 W	554.7	46.3	

Address: THACHER PARK: 5 MILES SOUTHWEST OF CAMP PINNACLE ROAD
City: New Scotland **County:** ALBANY **State:** NY **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	479.100	506.400	512.200	439.300	211.900	133.200	261.500	223.800
Transmitting ERP (watts)	75.080	2.650	1.000	1.000	1.000	7.850	122.830	257.550
Antenna: 2 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	479.100	506.400	512.200	439.300	211.900	133.200	261.500	223.800
Transmitting ERP (watts)	37.050	79.470	71.390	28.640	1.470	0.930	0.930	1.810
Antenna: 3 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	479.100	506.400	512.200	439.300	211.900	133.200	261.500	223.800
Transmitting ERP (watts)	1.000	1.000	6.450	98.460	230.900	140.000	15.040	1.000

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
4	42-54-41.3 N	074-29-08.6 W	239.9	58.9	

Address: PALATINE BRIDGE: MORNING ROAD, 1.1 MILE NORTH OF ROUTE 90
City: PALATINE **County:** MONTGOMERY **State:** NY **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	1.800	113.800	153.300	-16.900	9.400	64.300	128.700	51.600
Transmitting ERP (watts)	79.850	41.860	4.450	0.990	0.990	0.990	24.680	85.260
Antenna: 2 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	1.800	113.800	153.300	-16.900	9.400	64.300	128.700	51.600
Transmitting ERP (watts)	1.060	62.500	403.500	403.500	71.750	2.380	0.990	0.990
Antenna: 3 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	1.800	113.800	153.300	-16.900	9.400	64.300	128.700	51.600
Transmitting ERP (watts)	0.990	0.990	0.990	6.230	129.570	368.520	230.740	26.950

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKA246 **File Number:** 0006672353 **Print Date:** 04-14-2015

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
5	43-10-40.3 N	073-55-44.5 W	469.7		

Address: ALPINE: LOCATED OFF ORMSBEE ROAD
City: GREENFIELD **County:** SARATOGA **State:** NY **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.800	242.900	307.900	353.300	310.900	80.200	60.700	59.100
Transmitting ERP (watts)	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
7	42-36-20.3 N	073-27-36.4 W			

Address: Fire Tower Road
City: Stephentown **County:** RENSSELAER **State:** NY **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	87.100	103.400	86.700	194.400	253.100	332.400	345.400	279.800
Transmitting ERP (watts)	44.000	75.960	35.390	2.610	0.290	12.190	72.680	58.030

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
8	42-58-16.3 N	074-40-50.5 W	352.4		

Address: MINDEN: 0.41 MILES FROM THE INTERSECTION OF ROUTE 5S AND SANDERS ROAD BEARING 4
City: MINDEN **County:** MONTGOMERY **State:** NY **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	5.500	-53.300	88.400	168.300	75.300	-3.700	45.400	124.100
Transmitting ERP (watts)	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
9	42-51-27.9 N	073-23-22.8 W	368.2	93.9	

Address: Le Barron Hill Rd.
City: Hoosick **County:** RENSSELAER **State:** NY **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	248.400	267.300	167.000	111.500	70.400	85.300	293.500	276.100
Transmitting ERP (watts)	72.440	19.050	7.240	20.420	81.280	97.720	97.720	95.500

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKA246 **File Number:** 0006672353 **Print Date:** 04-14-2015

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
10	42-17-05.3 N	074-15-53.9 W	911.7	34.8	

Address: Windham Ski Area - Base Lodge
City: Windham **County:** GREENE **State:** NY **Construction Deadline:** 10-27-2009

Antenna: 1 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	310.800	465.300	318.700	266.900	255.100	310.100	350.200	327.100
Transmitting ERP (watts)	116.240	92.730	14.970	0.620	0.620	0.620	16.420	99.360
Antenna: 2 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	310.800	465.300	318.700	266.900	255.100	310.100	350.200	327.100
Transmitting ERP (watts)	0.800	39.870	112.180	115.180	66.580	4.670	0.620	0.620
Antenna: 3 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	310.800	465.300	318.700	266.900	255.100	310.100	350.200	327.100
Transmitting ERP (watts)	0.780	0.620	0.620	4.890	70.940	115.560	109.620	35.530

Control Points:

Control Pt. No. 1

Address: 500 W Dove Rd
City: Southlake **County:** TARRANT **State:** TX **Telephone Number:** (800)264-6620

Waivers/Conditions:

License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
1120 SANCTUARY PKWY, #150 GASA5REG
ALPHARETTA, GA 30009-7630

Call Sign	File Number
WQCS418	0006668604
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
04-23-2015	04-23-2015	05-13-2025	04-24-2015

Market Number	Channel Block	Sub-Market Designator
BTA007	C	6

Market Name
Albany-Schenectady, NY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
05-13-2010			

Waivers/Conditions:

License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

Conditions:
Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at http://wireless.fcc.gov/uls/index.htm?job=home and select "License Search". Follow the instructions on how to search for license information.

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
1120 SANCTUARY PKWY, #150 GASA5REG
ALPHARETTA, GA 30009-7630

Call Sign	File Number
WQEM928	0007057132
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
03-11-2016	03-11-2016	03-08-2026	03-12-2016

Market Number	Channel Block	Sub-Market Designator
BTA007	C	5

Market Name
Albany-Schenectady, NY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
03-08-2011			

Waivers/Conditions:

Grant of the request to update licensee name is conditioned on it not reflecting an assignment or transfer of control (see Rule 1.948); if an assignment or transfer occurred without proper notification or FCC approval, the grant is void and the station is licensed under the prior name.

License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

Conditions:
Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at http://wireless.fcc.gov/uls/index.htm?job=home and select "License Search". Follow the instructions on how to search for license information.

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
1120 SANCTUARY PKWY, #150 GASA5REG
ALPHARETTA, GA 30009-7630

Call Sign	File Number
WQJQ689	
Radio Service	
WU - 700 MHz Upper Band (Block C)	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
11-26-2008	03-26-2013	06-13-2019	

Market Number	Channel Block	Sub-Market Designator
REA001	C	0

Market Name
Northeast

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
06-13-2013	06-13-2019		

Waivers/Conditions:

If the facilities authorized herein are used to provide broadcast operations, whether exclusively or in combination with other services, the licensee must seek renewal of the license either within eight years from the commencement of the broadcast service or within the term of the license had the broadcast service not been provided, whichever period is shorter in length. See 47 CFR §27.13(b).

This authorization is conditioned upon compliance with section 27.16 of the Commission's rules

Conditions:
Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

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Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
1120 SANCTUARY PKWY, #150 GASA5REG
ALPHARETTA, GA 30009-7630

Call Sign	File Number
WQGA715	0006015570
Radio Service	
AW - AWS, 1710-1755/2110-2155 MHz bands	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
11-29-2006	03-12-2014	11-29-2021	05-09-2014

Market Number	Channel Block	Sub-Market Designator
REA001	F	11

Market Name
Northeast

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

This authorization is conditioned upon the licensee, prior to initiating operations from any base or fixed station, making reasonable efforts to coordinate frequency usage with known co-channel and adjacent channel incumbent federal users operating in the 1710-1755 MHz band whose facilities could be affected by the proposed operations. See, e.g., FCC and NTIA Coordination Procedures in the 1710-1755 MHz Band, Public Notice, FCC 06-50, WTB Docket No. 02-353, rel. April 20, 2006.

AWS operations must not cause harmful interference across the Canadian or Mexican Border. The authority granted herein is subject to future international agreements with Canada or Mexico, as applicable.

Conditions:
Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at http://wireless.fcc.gov/uls/index.htm?job=home and select "License Search". Follow the instructions on how to search for license information.

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
1120 SANCTUARY PKWY, #150 GASA5REG
ALPHARETTA, GA 30009-7630

Call Sign	File Number
WQGA902	0006150136
Radio Service	
AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
11-29-2006	12-28-2013	11-29-2021	02-14-2014

Market Number	Channel Block	Sub-Market Designator
BEA005	B	5

Market Name
Albany-Schenectady-Troy, NY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

This authorization is conditioned upon the licensee, prior to initiating operations from any base or fixed station, making reasonable efforts to coordinate frequency usage with known co-channel and adjacent channel incumbent federal users operating in the 1710-1755 MHz band whose facilities could be affected by the proposed operations. See, e.g., FCC and NTIA Coordination Procedures in the 1710-1755 MHz Band, Public Notice, FCC 06-50, WTB Docket No. 02-353, rel. April 20, 2006.

AWS operations must not cause harmful interference across the Canadian or Mexican Border. The authority granted herein is subject to future international agreements with Canada or Mexico, as applicable.

Conditions:
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This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at http://wireless.fcc.gov/uls/index.htm?job=home and select "License Search". Follow the instructions on how to search for license information.

FCC 601-MB
April 2009

TAB 6

verizon

CELLCO PARTNERSHIP D/B/A
VERIZON WIRELESS

LATHAM SOUTH (COLONIE ELKS)

Near 17 Elks Lane
Town of Colonie
Albany County

RF JUSTIFICATION AND SITE SELECTION ANALYSIS
JUNE 25, 2018

RF JUSTIFICATION AND SITE SELECTION ANALYSIS

CELLCO PARTNERSHIP d/b/a Verizon Wireless ("Verizon Wireless") submits this RF analysis in association with its proposed "Latham South" wireless communications facility. As proposed, Verizon Wireless plans to install and operate a new wireless telecommunications facility, including associated antennas, equipment platform and related appurtenances, on property owned by the Colonie Elks Lodge B.P.O.E. 2192, located at near 17 Elks Lane, in the Town of Colonie, Albany County NY. The tower will be located behind the new Colonie Senior Service Center (CSSC) along the south property boundary. This facility (known internally as "Latham South") is specifically designed to address a significant coverage gap and improve network capacity in the Verizon Wireless network.

1. QUALIFICATIONS

This report was prepared by Verizon Wireless' in-house RF Engineering Department, which consists of experienced and properly credentialed radio frequency engineers. The RF Engineering Department designs Verizon Wireless' nationwide network to provide adequate and effective wireless communications services in compliance with all FCC requirements, including Verizon Wireless' licensure requirements. The RF Design Engineers use proprietary software and tools in addition to industry-standard RF propagation modeling and network performance simulation programs to identify network coverage, performance and capacity deficiencies, and develop and implement solutions based on these analyses with the goal of maximize network performance and efficiency.

2. WIRELESS TELECOMMUNICATIONS SYSTEMS

The FCC licenses a specific amount of RF spectrum to wireless service providers and stipulates that each carrier efficiently use that spectrum to provide adequate wireless communication to emergency services, businesses and individuals in the licensed areas. Wireless carriers achieve this mandate by continuously reusing the allocated radio frequencies throughout their licensed service area. This is accomplished by building small radio base stations, or cell sites, in a particular pattern (also known as a grid). The application of the grid concept affords a wireless carrier the ability to effectively and efficiently plan the reuse of radio frequencies. Indeed, it is the only way a cellular system can adequately function. Following proper planning techniques (as originally defined by Bell Labs and further refined by the wireless industry), the same radio frequency is reused at reasonably close intervals throughout the licensed area, without causing harmful interference (noisy or dropped calls or the inability to originate a call are typical manifestations of harmful interference), but only if placed properly. There is extremely limited flexibility as to where a cell site can be located, and limited flexibility as to the proper height.

When designing a wireless network, an RF Design Engineer starts with a theoretical grid pattern and applies it to the licensed area. Each licensed area has many variables that can affect the design and must be considered. These variables include terrain features, use of existing structures, traffic distribution, and many others. In order to provide effective coverage while maintaining an appropriate frequency reuse plan, the RF Design Engineer must perform a balancing test of all applicable technological variables. The primary variables that the engineer must balance/take into consideration are location, and the overall height of the cell sites. Sites located too close to one another will result in unacceptable network interference. If the sites are too far apart, service will significantly degrade in the area where the signal does not reach,

ultimately resulting in the potential for dropped calls or ineffective connection attempts. If a cell site is too high, it will have increased coverage but will cause interference throughout the rest of the wireless network, thereby significantly affecting network efficiency. If a cell site is too low, it will not provide effective coverage to the target area.

Therefore, a properly designed wireless network begins with strategically located cell sites. A common denominator for each cell site involves a tall structure, typically a building, tower, water tank or other structure on which antennas are mounted. Typically, radio-transmitting equipment (base station) is located at the base of the structure. Radio signals leave the base station and travel through transmission lines to the antennas or to fiber optic cable to the remote radio head (RRH) at the top of structure and then to the antennas. Radio signals are broadcast through the antennas and travel to the customer's wireless device, thereby establishing a connection between the wireless network and the end user of the wireless device. When a wireless device transmits back to the cell site, the signals are received by the antennas, travel down the transmission line and into the base station receiver. The base station converts the signal into digital data and combines it with all the other wireless calls and digital traffic at that cell site. This data is then sent over fiber optic digital lines to the main switching computer. The main switching computer or Mobile Switching Center (MSC) is interconnected to the national Public Switched Telephone Network (PSTN) and Internet service providers where calls are routed to other wireless or land-line phones, or Internet locations.

As this technology enables mobile calling, once a wireless call is originated and the customer travels away from the cell site of origination, the system tracks the changes and begins a process of determining if there is a better serving cell site (a "dominant server"). Upon determination of a stronger serving site, the system automatically switches the wireless customer over to the new cell site. This process is known as a handover and allows for seamless coverage within a wireless carrier's service area. By design, this process is supposed to happen so quickly, the wireless customer does not perceive it. If the network is designed properly, there is no interruption of service and connection quality remains adequate. Proper, effective RF design requires the location (and height) of cell sites in fairly rigid parameters to ensure that the above-described process works in an adequate manner.

3. PERFORMANCE METRICS

(a) Coverage

The critical issue for Verizon Wireless is the provision of "adequate and substantial" Radio Frequency (RF) service to serve its wireless customers. The wireless industry is governed by the Rules of the FCC. The FCC mandates in CFR 47, Parts §22.940 and §24.16 that each carrier must provide "substantial service" in its licensed service area, or risk having their license revoked. The FCC defines "substantial service" as service which is sound, favorable, and substantially above a level of mediocre service. Similarly, New York State law, recognizing the importance of deploying the infrastructure for wireless communications, has deemed cellular transmitting facilities to be public utilities for purposes of zoning. As such, the facilities must be permitted in order to provide "safe and effective" service.

A metric called Reference Signal Received Power ("RSRP") is used to specify the coverage capabilities of wireless networks. This standard best represents the Long-Term Evolution ("LTE") data technology (also known as 4G) being utilized as well as the Voice-Over LTE ("VoLTE") technology, which is being deployed on 4G to augment and ultimately replace Verizon Wireless' legacy Third Generation (3G) voice services and capacity. RSRP is the average received power measured across an LTE broadband channel.

RSRP is measured in units of "decibels" referenced against 1 milliwatt, or dBm. The decibel is a logarithmic unit that allows ratios to be added or subtracted. The definition formula for decibels referenced against 1 milliwatt is $dBm = 10\log(P / 1mW)$ with P measured in milliwatts. So 10 mW would be 10 dBm, 100 mW would be 20 dBm, etc.

The service boundary of a 4G site is defined using a RSRP equating to an acceptable receiver signal threshold. This value is derived from industry standards, 4G receive signal levels and quality and acceptable signal to noise ratios, along with statistically quantifiable variations in terrain. This threshold must also take into account additional losses associated with location of the mobile user.

Verizon Wireless must provide adequate service to all of its users. In order to account for users within buildings, additional margin must be added to RSRP so that adequate coverage exists inside. Industry and Verizon Wireless engineering standards include an additional 10dB of margin to RSRP to be used for light suburban areas, with increasing values for higher density land usage. This additional margin is also required for in-vehicle service specifically to account for increased attenuation associated with the use of hands-free headsets, where the phone is typically placed on the seat or in the center console.

An industry standard RF computer-aided engineering tool is used in the design of wireless networks. This tool is used to generate a plot of RSRP that shows underlying geographic data (highways, arterial roads, etc.). The propagation map is drawn showing the region where the RSRP equates to the minimally acceptable received signal level for adequate service, as measured at the device's receiver. The propagation map depicts the RSRP of the surrounding environment including the attenuation of in-building and in-vehicle use of service and visually demonstrates existing coverage patterns. Plots can also be generated to demonstrate proposed coverage patterns.

With the preceding in mind, Verizon Wireless' Albany New York area network standard for reliable 4G LTE wireless service for moderate-density suburban settings is -95 dBm RSRP. Network reliability and accessibility decreases dramatically for mobile devices operating in or traveling into RF environments outside (or weaker than) the -95 dBm RSRP coverage boundary (represented as white space in the provided coverage plots). Additionally, -95 dBm RSRP is used in areas where additional signal strength is needed to penetrate into buildings (e.g., suburban communities, commercial and industrial type environs). Since the overall environment for the Latham South facility and associated targeted coverage improvement area is a combination of apartment buildings, suburban housing communities and residential neighborhoods, the -95 dBm RSRP signal strength standard was applied.

Lastly, in addition to the sites shown on a propagation map, and toward the edges of these maps, there may be coverage from other more-distant sites but these sites are eliminated from this report as they do not affect the area surrounding the subject location.

(b) Capacity

Significant deficiencies in service can occur in Verizon Wireless' telecommunication network in and around the existing sites. These deficiencies can be a result of capacity demands that are taxing the surrounding sites in the Verizon Wireless network. The FCC mandates in CFR 47 Part §22.940 that when a Commercial Mobile Radio Service ("CMRS") licensee (i.e. "wireless carrier") is up for renewal, the carrier must demonstrate its proposal for expanding system capacity in a coordinated manner in order to meet anticipated increasing demand for both local and roamer service, or be at risk of license revocation.

Verizon Wireless regularly monitors customer traffic on each site in its network and identifies which sites are reaching 4G capacity limits or are projected to reach these limits over a rolling four-year window. Capacity is defined as the amount of customer data traffic (voice and data) a given site can process before significant performance degradation occurs. Performance issues include an inability to access the network (make a call), calls being abruptly dropped from the network (dropped calls), or poor call or data throughput performance while connected to the network (delayed upload or download speeds). Data volume, or throughput, is the main factor used to determine the existing 4G capacity for a given site and to project when that site is expected to run out of capacity (i.e., reach a point where it can no longer process the volume of data requested by local wireless devices). Capacity relief solutions, typically development of additional sites capable of "offloading" the "loaded" sites, are then required to solve the problem.

Forward Data Volume ("FDV"), a measure of usage (data throughput) on a particular site over a given period of time, is the performance metric used to evaluate the capacity of an existing facility. The "forward link" is used since there is generally more data being downloaded[1] (or transmitted) from a given site to the mobile devices within its coverage area, than uploaded. Therefore, it is the "forward link", not the "reverse link" that is used to determine the capacity limitations. Spikes resulting from anomalies such as seasonal events (tourist spikes, major outdoor concert venues or sporting events, etc.), college breaks, holiday sales events or celebrations, and major accidents or emergencies are accounted for as they can inflate the capacity demand and result in a premature capacity offload prediction. Trending actual and recorded throughput data over time for a site and comparing it to the theoretical maximum throughput capabilities for that site determines when that site will require capacity relief.

The above are some of the concepts and parameters used when determining adequacy of the existing network.

(c) Network Metrics

Verizon Wireless is in the process of "sun-setting" (decommissioning) its legacy Third Generation (3G) network with projected completion in the 2020 timeframe. Once complete, any remaining 3G only phones or devices will no longer operate on what will be Verizon's 100% 4G network (or possibly a combination of 4G and 5G).

Verizon Wireless began the 3G phase out process in 2014, at which time it no longer purchased or deployed 3G base station radio equipment in its new wireless facilities. In fact, over 500 new 4G-only wireless facilities (macro cells, micro cells, in-building systems, etc.) have been deployed across upstate NY since 2014. As this information indicates, Verizon's transition to a 100% 4G LTE network is well underway.

Currently 97% of all wireless traffic (voice and data) is commingled and carried on Verizon's 4G LTE network and 67% of all voice traffic (i.e., traditional phone calls) are made on the 4G network (i.e., VoLTE, or Voice over LTE phone calls). The process has begun of converting portions of the 850 MHz cellular band (which was the primary set of frequency channels used by the 3G network) to 4G.

Usage on the Verizon Wireless 4G network is more than doubling year-over-year, and this trend is expected to continue for the foreseeable future due to exploding demand for high speed data services along with the provision of traditional voice services. Without the transition to 4G technologies, it would not be possible for Verizon to satisfy the evolving network usage (capacity) demand, or provide the wireless network architecture capable of supporting the

[1] By comparison, the reverse link, or information transmitted from mobile devices to an associated wireless facility, generally carries in the order of 1/10th of the data volume as the forward or downlink path.

countless applications and features (including many used and implemented by all forms of Emergency Services) developed exclusively for use on modern 4G networks.

4. PERFORMANCE SOLUTIONS

When the Verizon Wireless Radio Frequency Engineer identifies coverage gaps in the system or sites that have or will reach data capacity exhaustion, they issue a "search area." A search area is a geographical area located within the inadequately serviced area, and it is designed such that if a wireless telecommunications facility is located within the search area, and at an appropriate height, it will likely provide the required coverage. For the most part, locations outside of the search area will fail to provide adequate service to the cell. Due to technological constraints, there is limited flexibility as to where a new facility can be located, and still function properly. The goal of the search area is to define the permissible location for placement of a cell site that will provide adequate service in the subject cell, and also work properly as part of the overall network.

5. VERIZON WIRELESS SERVICE AND PROPOSED SOLUTION IN THE LATHAM SOUTH CELL

(a) New Facility Need and Targeted 4G Wireless Network Performance Improvement Area in Colonie

The purpose of the Latham South communications facility is to provide an adequate and safe level of emergency and non-emergency Verizon Wireless communications service (in-building and mobile) to State Route 155 (NY-155 / Watervliet Shaker Road) in the Town of Colonie. The targeted coverage and capacity improvement area is generally east of U.S. Route 9 (US-9 / New Loudon Road) and west of the City of Watervliet border, and the developed suburban areas north of Spring Street and south of the Hamlet of Latham and State Route 2. More specifically, the facility will offer significant improvements in both coverage and capacity along 1.2± miles of NY-155, 0.7± miles of Delatour Road and several linear miles along secondary and neighborhood roads in the area (including East Ridge Road, East Hills Boulevard, Dan Del Drive, Abedar Lane, Homestead Drive, etc.). The facility will also bring new and/or significantly improved Verizon Wireless 4G coverage and capacity to numerous residences, housing developments, and places of business throughout this portion of Colonie.

Existing 4G/LTE service across the targeted network performance improvement area is limited and insufficient due to lack of a dedicated cell site to provide service to the area, relatively low antenna centerlines on surrounding facilities in Colonie, rolling terrain, and the localized dense vegetation bordering the Colonie Elks property and extending into the surrounding area. The current level of inadequate 4G wireless service and network capacity in the eastern portion of Town originates from existing Verizon Wireless communications facilities called "Johnson Rd" (located 2.3± miles north of the proposed facility on the Town's 104 ft. water tank off Miller Rd.), "Watervliet WT" (1.4± miles northeast on the City of Watervliet 70 ft. tall water tank off Eastview Dr.), "Loudon Rd" (1.0± mile southwest on the Town's 104 ft. tall water tank behind Colonie Town Hall), and "Latham Circle" (1.7± miles northwest on the 60 ft. monopole tower near Latham Circle). Although these facilities are relatively close by and are successful in providing coverage within their intended localized areas, they do not provide sufficient reliable 4G/LTE coverage along the targeted 1.2± mi. portion of NY-155 through

eastern Colonie including to the residences, businesses, and the traveling public living, visiting or passing through this portion of Town.

To demonstrate the current (and inadequate) level of 4G/LTE service in/around the proposed Latham South facility, a propagation analysis using Verizon Wireless' -95 dBm RSRP 4G design standard signal level threshold is provided at **Exhibit 1** attached to this report[2]. When viewing the results in **Exhibit 1**, areas of Blue indicate reliable coverage from Verizon Wireless' existing facilities whereas areas NOT covered in Blue are lacking sufficient 4G coverage and/or capacity. As the results in **Exhibit 1** demonstrate, coverage is currently deficient to the roads and neighborhoods surrounding the Colonie Elks property in the eastern portion of the Town of Colonie. In order to resolve these 4G network deficiencies, deployment of a new wireless facility is required.

It is important to note that additional sporadic and unreliable service can be found in the Latham South area from a number of distant cell sites not located in Albany County. This is because the Latham South area sits on a ridge line adjacent to the Hudson River Valley, between the lower elevation areas along the Hudson River (to the east), and higher elevation areas to the west along U.S. Route 9. Due to this hillside location, the Latham South area has exposure to a mixture of signals from multiple transmitters located both inside and outside of Albany County, including facilities located across the Hudson River in the adjoining County of Rensselaer. These distant Rensselaer County based wireless facilities with line-of-site radio paths into all or a portion of eastern Colonie include Verizon Wireless' Troy site (4.5± miles east of the proposed site); Sycaway (5.6± miles east); Mt. Rafinesque/Brunswick (6.7± miles northeast); Wynantskill (7.0± miles southeast); and even sites as far away as Cropseyville (11.3± miles east); West Sand Lake (10.2± miles east) and Averill Park (14.2± miles east).

The situation described above -- where weak coverage contributions from a number of distant cell sites are providing unreliable service to a given area -- is referred to in the wireless industry as "pilot (or PCI) - pollution." Pilot pollution is characterized by the presence of service from too many (usually remote) cell sites, which together result in sporadic and inconsistent coverage to a given area (in this case, the hillside communities and roads in the Latham South area). [3]

Mobile devices operating in pilot-polluted areas experience a number of coverage- and capacity- related deficiencies, including but not limited to: excessive interference; being forced to operate at significantly higher power than is appropriate (which maximizes interference into surrounding cells while minimizing the amount of capacity available in the area); and unacceptable network performance (including lost or dropped calls, the inability to access the network, and slow data speeds). These coverage deficiencies are particularly worrisome in times of emergencies, and are most prevalent during network busy hours, when distant cell sites are busy servicing other local areas and are not available to serve the Latham South area.

To resolve the current pilot pollution scenario, and area-wide poor 4G wireless network performance in general, a new locally-based wireless facility is required to provide a dominant

[2] All propagation studies in this report were developed using Verizon Wireless' in-house radio frequency propagation prediction tool called "Atoll".

[3] In this context, pilot pollution is the antithesis of local coverage, as it is the result of smaller coverage contributions from numerous adjacent and/or distant cell sites that are not intended to serve the area in question, and therefore, do not provide adequate and safe local coverage.

and close wireless signal ("close" in this sense referring to adding a dominant serving site in close proximity to the majority of wireless customers in eastern Colonie and within the coverage footprint of the proposed Latham South facility). By adding a local dominant serving site, the interfering distant signals are overcome, and coverage, reliability, and capacity in the area are restored and maximized.

(b) Proposed Latham South Wireless Facility Search Area and Candidate Analysis

Once Verizon Wireless determines that a particular geographic area cannot be adequately served by the existing communications facilities in the surrounding network (i.e., coverage is deficient and/or calling capacity provided by existing neighboring facilities is reaching upper limits), a new wireless facility "search area" is developed. The "search area" is created by a qualified in–house Radio Frequency (RF) engineer and is a definitive geographic area where a cell site needs to be located in order to satisfy a site's coverage and/or capacity objectives. The search area for the proposed Latham South facility is provided in the topographical map at **Figure 1** below, where the Blue polygon is the search ring and the Blue dot in the southern end of the ring is the proposed site location on the Colonie Elks property.

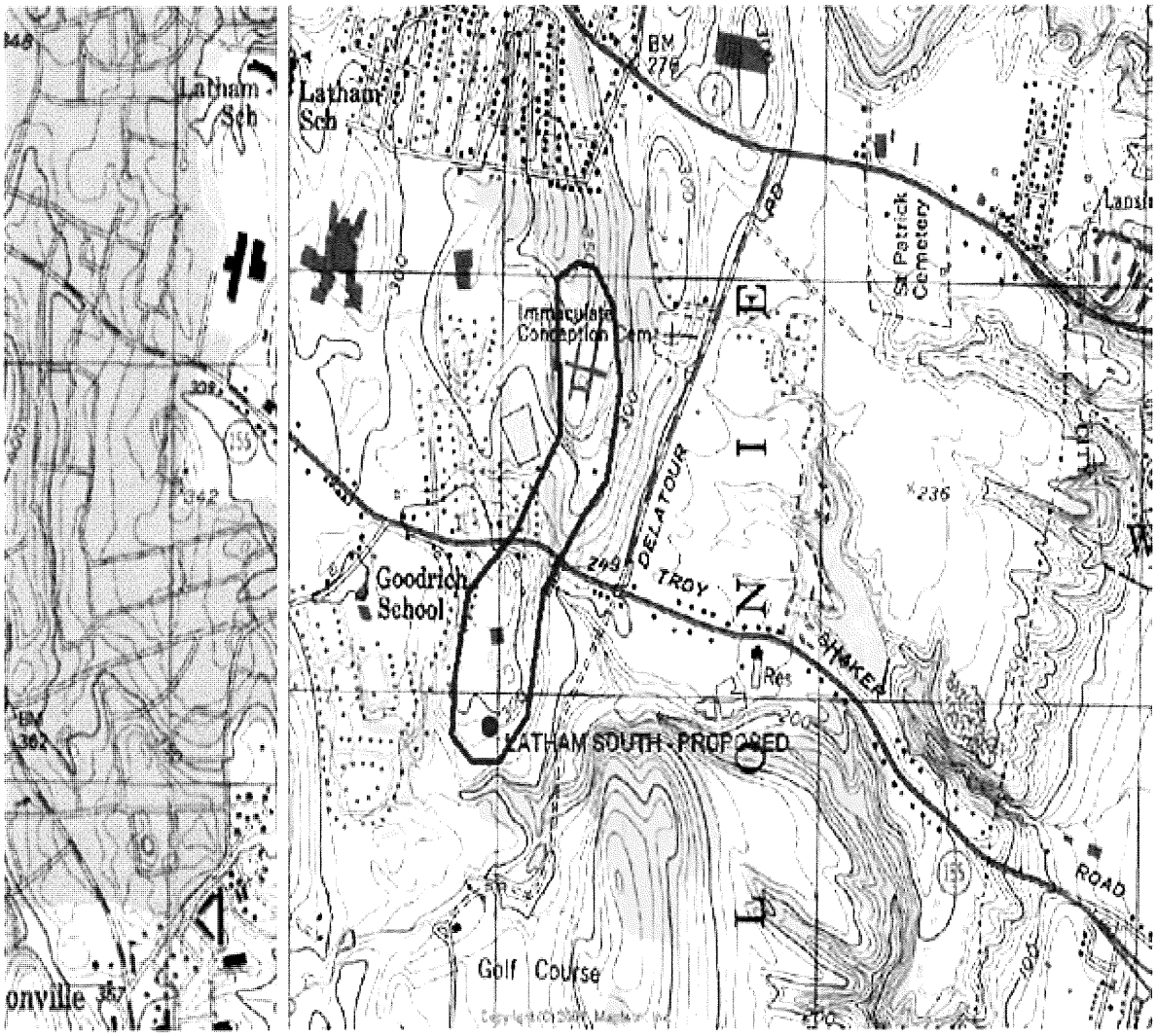


Figure 1
Latham South Search Ring Area and Proposed Wireless Facility Location

The Latham South search area is located entirely within the Town of Colonie, and targets the natural ridgeline west of and paralleling Delatour Road. The search area spans approximately ¾ mile and encompasses the Colonie Elks and Sisters of St. Joseph Provincial House. This ridgeline (referenced herein as the "Delatour Ridgeline") was specifically selected as a tower at minimal height above the local surrounding tree canopy could effectively provide coverage east and west along State Route 155, south along East Ridge Road and East Hills Boulevard, and to the surrounding vicinity.

If the site were shifted a significant distance east or west off the Delatour Ridgeline, tower height would need to increase significantly to "see" over the ridgeline and provide the necessary coverage to the adjoining side. Similarly, terrain and thick tree cover prevent site locations north and south of the target search area from providing adequate and safe coverage to the targeted section of NY-155 without adding significant antenna height. Lastly, shifting too

far from the targeted search area (which is approximately central to the gap Verizon Wireless is attempting to serve) would ultimately result in weaker coverage from only a single sector of the proposed facility, which is far less effective in combating (and could actually add to) the pilot pollution problem in eastern Colonie.

As a final topic on the chosen search area location, it is important from a network performance perspective to keep the proposed facility near the center of the coverage gap so that beneficial new and uniform coverage is provided from each of the site's three antenna sectors. Placing the proposed facility near the center of the poor coverage and network performance area also allows coverage objectives to be satisfied from a relatively low antenna height, which prevents the site from covering too far, and adding excessive interference to other surrounding areas of the Verizon Wireless network. The Colonie Elks site was carefully selected because these objectives, on balance, could be satisfied.

(c) Site Analysis Summary

The Latham South search area was analyzed to determine potential locations for the proposed facility. The entire search area is densely developed, and zoned SFR (Single Family Residential). Surrounding land uses consist primarily of single family residential development, with a mixture of multi-family land uses and several institutional, religious, educational, commercial and private club uses on larger tracts.

Terrain Discussion

The ground elevation across the search area is generally around 300 ft. above mean sea level (AMSL), rising to approximately 350 ft. AMSL at the northern tip of the search area. Terrain in the vicinity of the search area is hilly, characterized by a river valley that generally slopes downward west to east toward the Hudson River, approximately 2.0 miles east. A prominent north-south ridge ("Latham Ridge"), running parallel to U.S. Route 9, ranges in elevations from 350 - 400± ft. AMSL. Moving east, terrain decreases to 200 - 220± ft. AMSL along NY-155 approximately ¾ miles east of Delatour Rd. Thereafter, terrain decreases further to lower river valley areas near Watervliet at ground elevation of only 50 - 100± ft. AMSL, and 20± ft. AMSL at the shoreline of the Hudson River.

This sloping terrain, coupled with areas of dense mature vegetation, require that Verizon Wireless' facility be placed at a location and height that are sufficient to meet the coverage objectives described above. Careful consideration must also be given to sites where tower height can be kept to a minimum, in order to reduce interference to the surrounding area while still satisfying established local coverage objectives. Shifting the site too far from the search area, or reducing the proposed tower height to the point of ineffectiveness, would result in coverage gap(s) in the target area and would not satisfy the -95 dBm signal level design requirement. A three-dimensional pictorial view of the area is provided at **Figure 2**, to illustrate the terrain features that the site must overcome to provide the necessary level of coverage:

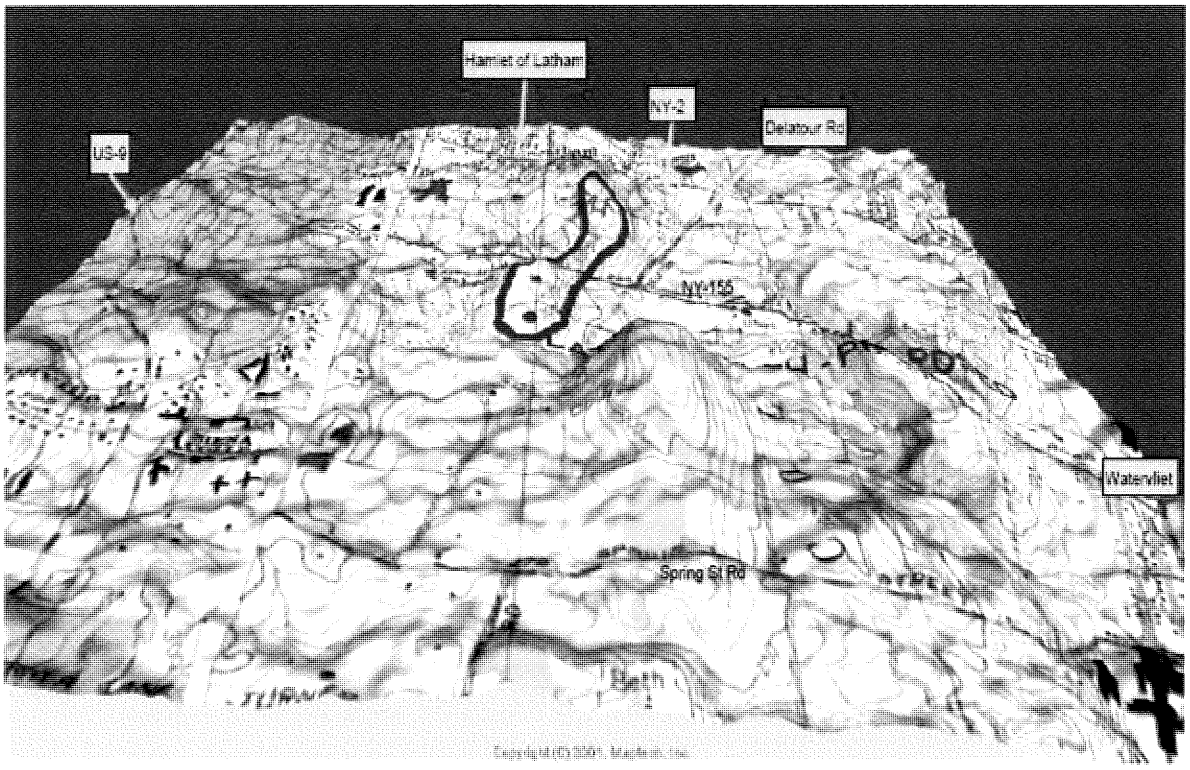


Figure 2
Latham South Search Area
Three Dimensional View Looking North Over Spring St Rd

Due to the physics of radio frequency (RF) signal propagation, Verizon Wireless' antennas need to clear these terrain features (and any associated buildings and vegetation) to function properly. Without limitation, the Latham South area is characterized by areas of dense mature deciduous and non-deciduous vegetation (including brush, primary growth and trees in the 50 – 70± ft. tall range), which can pose potentially significant interference issues for Verizon Wireless' radio transmissions.

Alternative Site Analysis

In arriving at its decision to place a communications facility at the Colonie Elks Lodge B.P.O.E. 2192 property, Verizon Wireless completed a thorough analysis of the search area. An effort was made to identify potential locations that would be both technically appropriate and sensible from a zoning and land use perspective.

Not all locations within a search area will provide adequate and safe coverage, and a computer model must be used to analyze each prospective site to determine if it meets the applicable coverage objectives. The siting priorities set forth in § 189-8[A] of the Town of Colonie Wireless Telecommunications Facilities Siting Law (Chapter 189 of the Colonie Town Code, referred to herein as the "Telecommunications Facilities Regulations") were specifically considered in the selection process. A map illustrating the location of the alternative sites considered is provided at **Figure 3**:

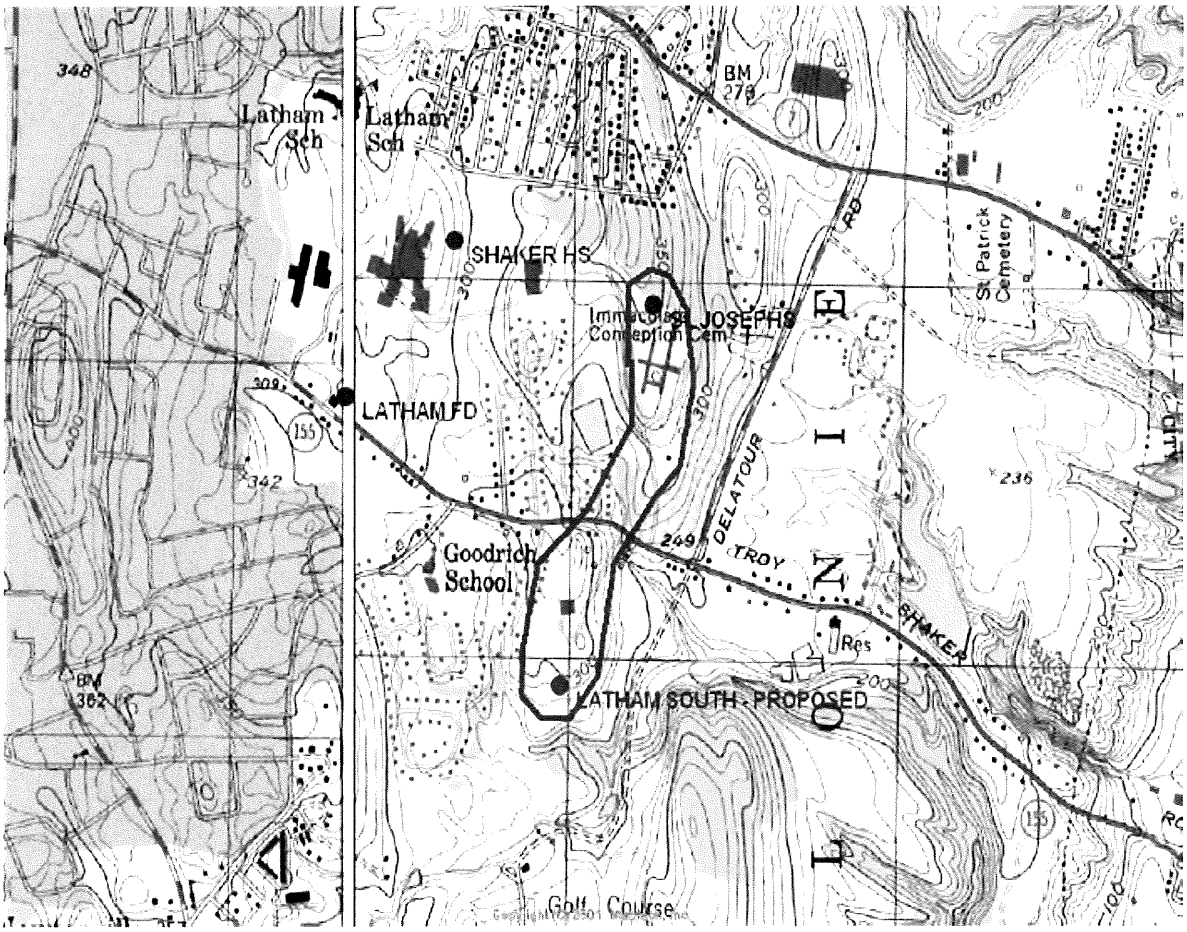


Figure 3 – Alternative Sites Considered
Latham South Search Area

Priority 1 - Existing Towers or Other Structures on Town-Owned Property (§ 189-8[A][1])

Based upon a thorough review of the Latham South search area, it has been determined that: (a) there are no existing towers or other structures on Town-owned properties in or near the search area that can be used by Verizon Wireless to provide an adequate and safe level of service to the targeted Latham South area; and (b) evaluation of other alternatives is required.

In connection with this review, Verizon Wireless has considered its proposed modifications to the closest existing communications facilities, which happen to be Town-owned water tank structures located well outside of the designated search area: 534 Loudon Road (Newtonville municipal water tank, approximately 1 mile southwest of the Latham South search area); and at 76 Miller Road (Miller Road municipal water tank, approximately 2.3 miles to the north). Although effective for providing the desired level of wireless service to their respective intended coverage areas (i.e., areas within close proximity of each water tank site), these facilities do not provide adequate and safe service to the targeted Latham South area (i.e., signal coverage being reduced by distance, blocked by dense mature vegetation in the vicinity,

or screened by hilly terrain). Accordingly, modification of antenna installations at these existing co-location facilities will not improve the coverage at Latham South.

Priority 2 – Existing Towers or Other Structures on Other Property (§ 189-8[A][2])

Verizon Wireless has considered the potential co-location of a new communications facility on the rooftop of the Sisters of St. Joseph Provincial House, located at 385 Watervliet Shaker Road (Tax Map Parcel No. 31.2-3-80). This 86± acre parcel encompasses the northern section of the search area, and is appealing since it contains the highest elevation portion of the Delatour Ridgeline at ground elevation of approximately 350± ft. AMSL. Unfortunately after repeated attempts spanning several years the Board of Trustees for the Society of the Sisters of St. Joseph decided it was not interested in leasing space to Verizon Wireless (September 2, 2010 letter attached). Since a lease agreement could not be reached with the property owner, the site was removed from consideration.

The Applicant discussed collocation on the new, adjacent Colonie Senior Services Center, Inc.'s (CSSC) building. However, the CSSC building was not available to lease for collocation (March 17, 2017 letter attached).

Based upon a thorough review of the Latham South search area, it has been determined that: (a) there are no other existing towers or tall structures in or near the search area that can be used by Verizon Wireless to provide an adequate and safe level of service to the target area; and (b) construction of a new tower is required.

Priority 3 – New Tower on Town-Owned Property (§ 189-8[A][3])

Based upon a comprehensive evaluation of the Latham South search area, Verizon Wireless has also determined that there are no Town-owned properties that can be used as a new tower site to provide adequate and safe coverage to the targeted area.

As noted, Verizon Wireless' closest existing communications facilities are located well outside of the Latham South search area, at two Town of Colonie water tank sites: 534 Loudon Road (Newtonville municipal water tank, approximately 1 mile southwest of the Latham South search area); and at 76 Miller Road (Miller Road municipal water tank, approximately 2.3 miles to the north). Although these facilities provide effective wireless service to their intended coverage areas (i.e., the areas within close proximity of each site), these co-location facilities do not provide adequate and safe coverage to the Latham South area (i.e., signal coverage being reduced by distance, blocked by dense mature vegetation in the vicinity, or screened by hilly terrain) (see, e.g., **Exhibit A**). A new tower at either location will fare no better, as distance, terrain and dense mature vegetation coupled with the placement of these surrounding sites relative to the target area would deem these facilities comparably as ineffective as the currently operating facilities. For these reasons, "clustering" of a new Verizon Wireless tower at either existing water tank site is not feasible in this case.

New Tower on Private Property (§§ 189-8[A][4] through [10])

Priorities "4" through "10" in Telecommunications Facilities Regulations § 189-8[A] involve an analysis of the various zoning districts in the Town of Colonie as potential areas for a new communications tower. As demonstrated in **Figure 4**, the entire Latham South search area is zoned SFR (Single Family Residential):

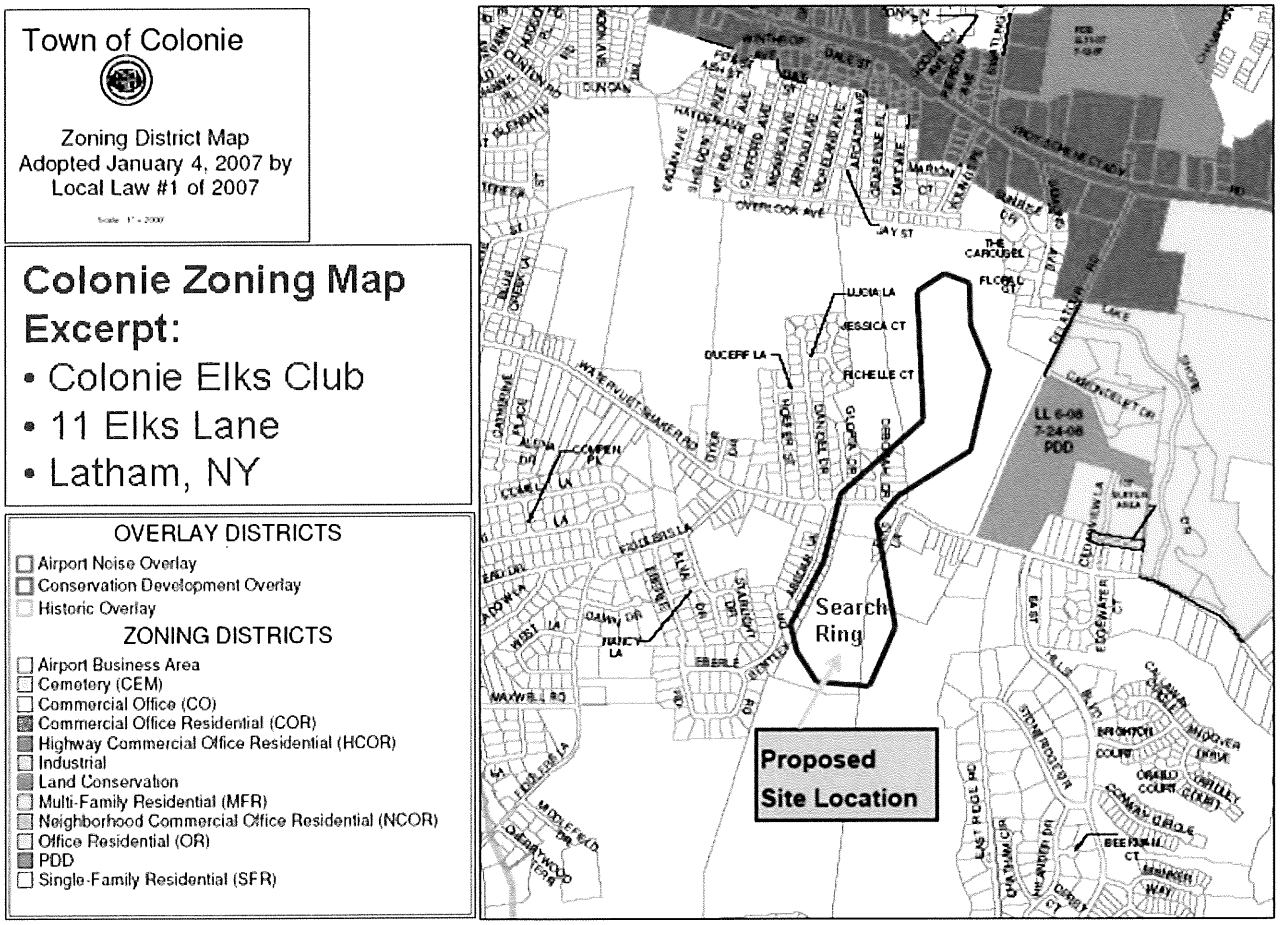


Figure 4 – Town of Colonie Zoning Map Excerpt
Latham South Search Area

Pockets of PDD (Planned Development District) and MFR (Multi Family Residential) are located outside the search area to the east, with an area zoned COR (Commercial Office Residential) along State Route 2 north of the Latham South search area. The PDD and MFR areas are not feasible for use due to significantly lower ground elevations in the 230± ft. AMSL range (as compared to 293.5± ft. AMSL at the project site) and the corresponding inability to "see" over the Delatour Ridgeline and Sisters of St. Joseph facility to western and southern portions of the Latham South coverage area.

The COR zoned properties are too far north of the targeted Latham South coverage area, on properties that would be blocked by terrain (e.g., Delatour Ridgeline), dense mature vegetation in the 50 - 70± ft. tall range and existing build conditions to the south. Consequently, a new tower on COR property would not provide adequate and safe coverage to the Latham South area.

Priority 4 – New Tower in Industrial District (§ 189-8[A][4])

Not applicable. As noted in **Figure 4**, the entire Latham South search area is zoned SFR (Single Family Residential). For the technical reasons explained in the "Latham South Search Area" section of this report, Verizon Wireless' new communications facility needs to be located within the specified search area to function properly. The closest area zoned IND (Industrial) is located well outside of the search area, over 1 mile east of the proposed site between the National Grid high tension power lines and the Watervliet Arsenal property. As a result, a new communications facility in the IND District is not capable of providing adequate and safe service to the Latham South area.

Priority 5 – New Tower in Airport Business Area District (§ 189-8[A][5])

Not applicable. As noted in **Figure 4**, the entire Latham South search area is zoned SFR (Single Family Residential). For the technical reasons explained in the "Latham South Search Area" section of this report, Verizon Wireless' new communications facility needs to be located within the specified search area to function properly. The ABA (Airport Business Area) District is located over 2 miles west (beyond US-9 and I-87), in a completely different geographic area of the Town of Colonie. As a result, a new communications facility in the ABA District is not capable of providing adequate and safe service to the Latham South area.

Priority 6 – New Tower in Commercial Office District (§ 189-8[A][6])

Not applicable. As noted in **Figure 4**, the entire Latham South search area is zoned SFR (Single Family Residential). For the technical reasons explained in the "Latham South Search Area" section of this report, Verizon Wireless' new communications facility needs to be located within the specified search area to function properly. The nearest CO (Commercial Office) District property is located approximately 2.5 miles to the west, in a completely different section of the Town of Colonie. As a result, new communications facility in the CO District is not capable of providing adequate and safe service to the Latham South area.

Priority 7 – New Tower in HCOR, COR or NCOR District (§ 189-8[A][7])

Not applicable. As noted in **Figure 4**, the entire Latham South search area is zoned SFR (Single Family Residential). Although a pocket of COR (Commercial Office Residential) property exists along NY- 2, the COR properties are located outside of the search area, in areas that would be blocked by terrain (e.g., Delatour Ridgeline), dense mature vegetation in the 50 - 65± ft. tall range and existing build conditions to the south. Consequently, a new tower on COR property would not provide adequate and safe coverage to the Latham South area. Also, Verizon Wireless already has a site along NY-2 in the COR District called "Watervliet WT" (1.4± miles northeast on the City of Watervliet 70 ft. tall water tank off Eastview Dr.). Coverage from this facility is included in the coverage map at **Exhibit A**, and although successful in providing coverage to the NY-2 area of Colonie and portions of the City of Watervliet, it does not cover into the Latham South area.

The nearest NCOR (Neighborhood Commercial Office Residential) District property is located well outside of the search area, over 1 mile to the east at a lower ground elevation in the 230± ft. AMSL range (quickly dropping off to below 100 ft. moving further east). As noted, Verizon Wireless has collocated its "Watervliet WT" facility on the City of Watervliet water tank in this general area.

The nearest HCOR (Highway Commercial Office Residential) District property is located well outside of the search area, approximately 1-¾ miles to the west / northwest (starting at the Latham Circle Mall and Verizon Wireless' "Latham Circle" site and extending north to Century Hill Drive). Due to distance outside of the search area, the presence of Verizon Wireless' existing "Latham Circle" facility and other factors, a new communications facility in the HCOR District is not capable of providing adequate and safe service to the Latham South area.

Based upon the foregoing, use of HCOR, COR or NCOR District property is not feasible in this case.

Priority 8 – New Tower in Office Residential District (§ 189-8[A][8])

Not applicable. As noted in **Figure 4**, the entire Latham South search area is zoned SFR (Single Family Residential). For the technical reasons explained in the "Latham South Search Area" section of this report, Verizon Wireless' new communications facility needs to be located within the specified search area to function properly. The nearest OR (Office Residential) District property is located well outside of the search area, approximately 2 miles to the west (adjacent to and extending north of I-87 Exit 5 / Watervliet Shaker Rd). As a result, new communications facility in the OR District is not capable of providing adequate and safe service to the Latham South area.

Priority 9 – New Tower in Multi-Family Residential District (§ 189-8[A][9])

Not applicable. Although pockets of MFR (Multi-Family Residential) District property exist in areas east of Delatour Road, these locations are densely developed and sit well outside of the search area, in lower elevation areas that would be blocked by terrain (e.g., Delatour Ridgeline), dense mature vegetation in the 50 - 70± ft. tall range and existing build conditions to the south. As noted, Verizon Wireless' "Watervliet WT" facility on the City of Watervliet water tank is located in this general area., which, as shown in the coverage map at **Exhibit 1**, does not provide coverage into the proposed Latham South facility area. Consequently, a new tower in the MFR District would not provide adequate and safe coverage to the Latham South area.

Priority 10 – New Tower in Single Family Residential District (§ 189-8[A][10])

As noted in **Figure 4**, the entire Latham South search area (and the surrounding area of Colonie) is densely developed and zoned SFR (Single Family Residential). To meet applicable setbacks and other site design criteria in the Colonie Land Use Law (Town Code Chapter 190) and also comply with the tower-specific design criteria in the Wireless Telecommunications Facilities Siting Law (Town Code Chapter 189), Verizon Wireless' search for feasible new tower candidates in the SFR District focused on larger tracts in higher elevation areas not dedicated to residential land use. In general, these parcels provide increased flexibility for tower siting, typically offering more opportunities to minimize structural height and also place the facility a reasonable distance from neighboring homes and other uses. As a result, the following larger

properties were investigated (both inside and outside the designated search area) as potential candidates before ultimately pursuing the proposed facility on the Colonie Elks property:

- **Colonie Elks Site (Tax Map Parcel No. 31.4-5-37)** – This large (20.37± acre) tract is located inside the search area, and has sufficient size to meet all applicable zoning and tower design criteria in Chapter 189 (Wireless Telecommunications Facilities Siting Law) and Chapter 190 (Land Use Law). The south end of the property contains the Colonie Senior Service Centers, Inc. (CSSC) building, the center portions are open field and parking areas, and the northern portion closest to NY-155 is the Elks Lodge building. A new wireless facility can be placed along the property's southern boundary behind the new CSSC building and away from all daily activities on the property, while maintaining a minimum of 526± ft. from the closest residential dwelling along Abedar Lane. The facility would not be significantly visible from NY-155 and is well hidden behind the CSSC building. The proposed 70 ft. tall stealth monopine tower would also be backdropped against a stand of dense mature vegetation in the 52-64± ft. tall range, and screened by an additional tree line to the west behind Abedar Lane in the 70-80± ft. tall range. Minimal tree clearing and grading is required to develop and access the facility, thereby allowing these features to significantly buffer and shield lower portions of the facility from view.

  Since this property offers several advantageous features in a portion of the Town with limited options for wireless facility development, The Colonie Elks property was selected as the targeted property for the proposed Latham South facility.

  From a technical standpoint, the proposed site is located at approximately 297 ft. AMSL, positioned roughly ¾ of the way up the Delatour Ridgeline described previously. A new wireless facility at this location exhibits potential to satisfy the majority of applicable RF coverage objectives from a minimal antenna height of 56± ft. AGL (70± ft. overall "monopine" height when including a 65± ft. support structure and 5± ft. ornamental cap). Importantly, coverage will be provided along the central portions of the ridge (along NY-155 and Delatour Road), without spreading significant interference to lower elevations along the Hudson River and points east and higher elevation areas along US-9, I-87 and points west. A propagation study demonstrating the satisfactory level of coverage that would result from antennas at 56± ft. AGL from this location is attached as **Exhibit B**.

For completeness, two additional parcels located outside of the designated search ring were investigated and ultimately removed from consideration, as described in further detail below:

- **SW Pitts Hose Co. Inc. (Tax Map No. 31.2-3-13)** – This 2.5± acre parcel is located outside (west of) the search area, at ground elevation of approximately 300± ft. AMSL. Although not an ideal location due to its location approximately 2/3 mile west of the Delatour Ridgeline, this candidate was nonetheless evaluated as a potential backup candidate to the proposed Elks Club site. Due to a lack of landowner interest and potential challenges siting a communications tower on this irregularly-shaped and undersized lot, this candidate was removed from consideration.

- **North Colonie Central School District (Tax Map Nos. 31.2-3-11, 15 and 18)** – These three (3) large parcels total over 143± acres, and are located outside (west of) the search area at ground elevation in the range of 310-to-330± ft. AMSL. Given the size,

ground elevation, and seemingly wide variety of tower siting options on this large property, the School District land was evaluated as a potential alternative to the Elks Club site. However, when inquiring about the possibility of leasing space for the proposed wireless facility, School District representatives expressed that they were not interested in leasing property to Verizon Wireless. Since a land lease deal could not be reached with the School District, this candidate was removed from consideration.

Based upon the foregoing, Verizon Wireless respectfully submits that the Elks Club property is the most appropriate site for the proposed communications facility, and that no reasonable alternative sites exist for the propose facility.

(d) Height Justification

As noted above, Verizon Wireless' antennas broadcast at extremely low power levels and need to clear surrounding terrain and all natural and man-made objects to function properly. In this case, there are no existing towers or other tall structures located in or near the search area that can be used by the Applicant to provide adequate and safe service to the target area, and the search area is extremely constrained due to existing land use patterns and other factors. As such, Verizon Wireless' options for the Latham South search area are very limited and include a relatively small number of truly feasible choices.

As also noted, the project site is located at an elevation of approximately 297 ft. AMSL. Terrain in the vicinity of the search area is that of a river valley, and generally slopes downward, west to east, from higher elevations west of 350 - 400± ft. AMSL in the Town of Colonie, to lower elevations of 20 - 100 ft. AMSL to the east at the shore of the Hudson River and in the City of Watervliet. The project site is also adjacent to dense mature vegetation with an average height in the 52 - 64± ft. tall range, and includes trees in the 70 - 80± ft. range to the west behind Abedar Lane. In conjunction with comparably tall vegetation in the 50 - 70± ft. tall range throughout the Latham area, this vegetation can result in unacceptable levels of signal interference if antennas are placed too close to the local treetops.

An RF Engineering rule-of-thumb states (based on the physics behind radio wave propagation and diffraction) that an antenna height of 15 ft. above the local tree canopy is the breaking point for signal and coverage degradation. Implementing this rule-of-thumb would result in the need to place Verizon Wireless' antennas in the range of 90 ft. to 100 ft. above ground level, to clear some of the surrounding tree canopy extending to 80 ft. tall. However, in an attempt to lessen the potential for opposition against the project, Verizon Wireless, working in conjunction with the Town's wireless consultant, agreed to propose a stealth mono-pine structure with the top of the mono-pine similar in height to the tree line behind and adjacent to the tower. As planned, the proposed structure would have minimal-to-no aesthetic impact (as verified by photo simulations of the project) on the surrounding communities in Colonie or properties neighboring the Colonie Elks parcel.

Against this background, Verizon Wireless is proposing a minimal height mono-pine structure that will blend in with surrounding vegetation (and is in fact shorter than the 70 - 80± ft. trees to the west) yet still provides Verizon Wireless with a reasonable amount of coverage in the Latham South targeted network performance improvement area. On the negative side of reducing the tower height to where the antennas are placed below the surrounding tree canopy, it is unlikely that colocation on to tower would be useful to AT&T, T-Mobile or Sprint. And since

Verizon Wireless' antennas would be placed well below the 70 - 80± ft. tree line to the west, reliable coverage is not expected to reach northwest to Shaker High School and Shaker Junior High School. As a result, additional future wireless facilities will likely be needed in the next 3 to 5 years to fill in the remaining coverage gaps and provide additional network capacity in and around NY-155 in the Shaker High School area.

6. TECHNICAL INFORMATION

Frequency / Modulation / Type of Service

The frequency, modulation and class of service of Verizon Wireless' radio equipment will be:

Frequencies:	Cellular (B Band) – Legacy 3G Cellular; Future conversion to LTE Tx 880.020 – 889.98 and 891.51 - 893.970 MHz Rx 835.020 – 844.98 and 846.51 - 848.970 MHz Personal Communications Service (PCS LTE) Tx 1980.00 – 1990.00 MHz Rx 1900.00 – 1910.00 MHz WU 700 MHz Upper Band (Block C) Tx 746.00 – 757.00 MHz Rx 776.00 – 787.00 MHz Advanced Wireless Services (AWS-1) (Block F) Tx 2145.00 – 2155.00 MHz Rx 1745.00 – 1755.00 MHz
Modulation:	Long Term Evolution (LTE)
Class of Service:	Handheld Mobile Communications

Transmission Power Levels

Verizon Wireless will operate one 850 MHz LTE channel at a maximum of 60 watts at the transmitter (i.e., before cable loss / antenna gain), which equates to an ERP of less than 400 watts at the antennas (maximum federal emissions standard is 500 Watts ERP). 700 MHz LTE will operate on one channel at 120 watts (maximum power) at the transmitter, which equates to approximately 600 watts ERP (also well below the FCC maximum 1000 watts ERP limit). AWS frequencies will use 45 Watts maximum power output, which equates to approximately 480 watts ERP (well below the 1000 Watt ERP limit). Lastly, Verizon Wireless will operate a single LTE 1900 MHz PCS channel at a maximum of 60 watts at the transmitter, which equates to approximately 580 watts (well below the maximum federal emission standards of 1,000 watts EIRP per channel for 1900 MHz).

Categorical Exclusion / Maximum Permitted Exposure (MPE)

A completed report entitled "RF Safety FCC Compliance of Proposed Communications Facility," prepared by a professional engineer licensed by the State of New York (Paul Dugan, P.E. of Millennium Engineering, P.C.) is included with this application at **TAB 11** to document

that the proposed communications facility will be: (a) in full compliance with the current FCC RF emissions guidelines (NIER); and (b) categorically excluded from local regulation under applicable federal law.

Conclusion

Verizon Wireless operates a combined legacy cellular (3G) and 4G LTE wireless communications network providing reliable, high quality, wireless communications services to over 150 million Americans where they live, work and travel. This network is evolving to provide enhanced state-of-the-art fourth generation (4G) LTE (Long Term Evolution) communications services, using Verizon Wireless' federally-licensed LTE (Long Term Evolution), PCS (Personal Communications Service, and AWS (Advanced Wireless Services) frequencies, and will begin rolling out its first commercially-available 5G networks in select cities in the 2nd half of 2018.

Verizon Wireless experiences high demand for its mobile services, and a critical and growing use of wireless services is for public safety purposes. According to the National Emergency Number Association, more than 240 million 911 calls are placed from mobile phones nationally each year (approximately 650,000 911 calls per day), more than three-quarters of which – over 80% -- are made from mobile telephones.[4] Also, according to the United States Government Accountability Office (GAO) in their Next Generation 911 Report to Congressional Requesters (GAO-18-252, dated January 2018), "... states and localities—the primary providers of 911 services through approximately 6,000 call centers nationwide—are working to upgrade their 911 systems to the next generation of services, commonly known as Next Generation 911 (NG911). .... Call centers using NG911 will be able to receive voice calls and accept various forms of data, such as text messages, images, video, and vehicle crash data. Such information can help to facilitate quick and accurate dispatch of emergency responders (such as police, firefighters, and ambulance crews) and can be beneficial in situations where a 911 caller is unable to speak."[5] In order for existing and future wireless-generated 911 calls, texts, videos, etc. to function properly, a reliable high quality wireless network must exist for persons in emergency situations as well as emergency responders to effectively communicate with the 911 call center serving the area.

Also, the percentage of homes in the United States that depend solely on cell phones (i.e., have "cut the cord" from traditional landline telephone service) has surpassed 50%. This information is tracked by the Centers for Disease Control and Prevention, National Center for Health Statistics, and their data indicates that as of December 4, 2016, 50.8% of all homes use only cell phones for voice services, 39.4% use both cell phones and a landline, and only 6.5% of homes rely on a landline only. By comparison, at the end of 2007 less than 20% of homes had cut the cord from traditional landline telephone service. As the percentage of homes that utilize only cell phones continues to increase, it has become increasingly important for Verizon Wireless (and other wireless carriers) to provide reliable seamless coverage both inside homes and across residential neighborhoods and communities.

As a final note on how wireless technology and the way we use it continues to evolve,

[4] The National Emergency Number Association is a nonprofit organization focused on 911 policy, standards development, technology, operations, and education.
[5] According to consumer groups, other benefits of NG911 are enhanced communications options and accessibility to emergency services for individuals in the deaf and hard-of hearing community who may use alternatives to traditional telephones for communication.

voice and data usage on Verizon Wireless' 4G network continues to more than double, year-over-year, with no foreseeable end in sight. This exploding demand has placed significant capacity constraints on Verizon Wireless' 4G network, which in turn affects coverage. The ability to offer sufficient capacity, as well as reliable coverage, is necessary for each 4G wireless facility to keep pace with the increase in network usage demand, and enable each cell site to provide the data speeds required to support 4G LTE voice services (called VoLTE, or Voice over LTE), including the ability for real-time video calling, video conferencing, location tracking, etc., as well as the unlimited number of data-intensive apps commonly used by Government, Emergency Services and the public alike on Verizon Wireless' 4G wireless network.

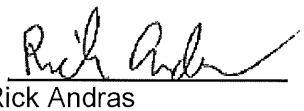
Due to these technological advances, increasing wireless usage patterns, a rapidly expanding Verizon Wireless subscriber base and other factors such as distance to adjoining cell sites, dense mature vegetation in the community, existing build conditions and the variable terrain of the Hudson River Valley, a significant gap in the Verizon Wireless network exists in the Latham South area. In order to fill this coverage gap and provide additional network capacity to the target area, Verizon Wireless' RF Design Engineer has identified a ¾ mile "search area" that targets the natural ridgeline west of and paralleling Delatour Road.

Verizon Wireless has completed a comprehensive evaluation of the Latham South search area in an effort to identify suitable candidates for its proposed communications facility. In completing this work, the siting priorities in § 189-8[A] of the Telecommunications Facilities Regulations were specifically considered, with the intent of locating site candidates that provide adequate and safe coverage to the Latham South area and best match the town's siting priorities. The results of this search document that: (a) there are no existing towers or other tall structures within or near the Latham South search area that will provide adequate and safe coverage to the target area; and (b) there are no viable new tower candidates in siting priority classes (3) through (9) that will provide adequate and safe coverage to the Latham South area. Without limitation, the entire search area is zoned SFR (Single Family Residential), and surrounding areas are densely developed and zoned SFR or other (MFR/PDD) residential.

Since there are no viable locations in categories (1) through (9), category (10) (SFR District) is applicable. Accordingly, Verizon Wireless is proposing to construct a new communications tower at the Colonie Elks property at 11 Elks Lane in the Town of Colonie. As proposed, the new wireless telecommunications facility will be constructed at a minimal height of 65± ft. AGL (70± ft. including 5± ft. ornamental cap on the monopine structure) and will enable Verizon Wireless to provide adequate and safe mobile communications service to the Latham South area.

Verizon Wireless believes that the proposed site, being "stealthed", well-screened and located in an isolated portion of a large (20.37± acre) parcel, is the most appropriate location for the proposed facility. A facility at this location will meet the majority of the required coverage objectives, and comply with all applicable requirements of the Town of Colonie Wireless Telecommunications Facilities Siting Law and Land Use Law. Upon completion, Verizon Wireless' communications facility will enhance the public welfare by providing government, businesses and individuals with a modern, more efficient system of communications for police, fire and other emergency or non-emergency use.

Prepared by:



Rick Andras
Radio Frequency (RF) Design Engineer
Verizon Wireless

Sara Colman
Real Estate Specialist
Airosmith Development

Exhibit 1. Existing Verizon Wireless 4G Coverage in Central Colonie

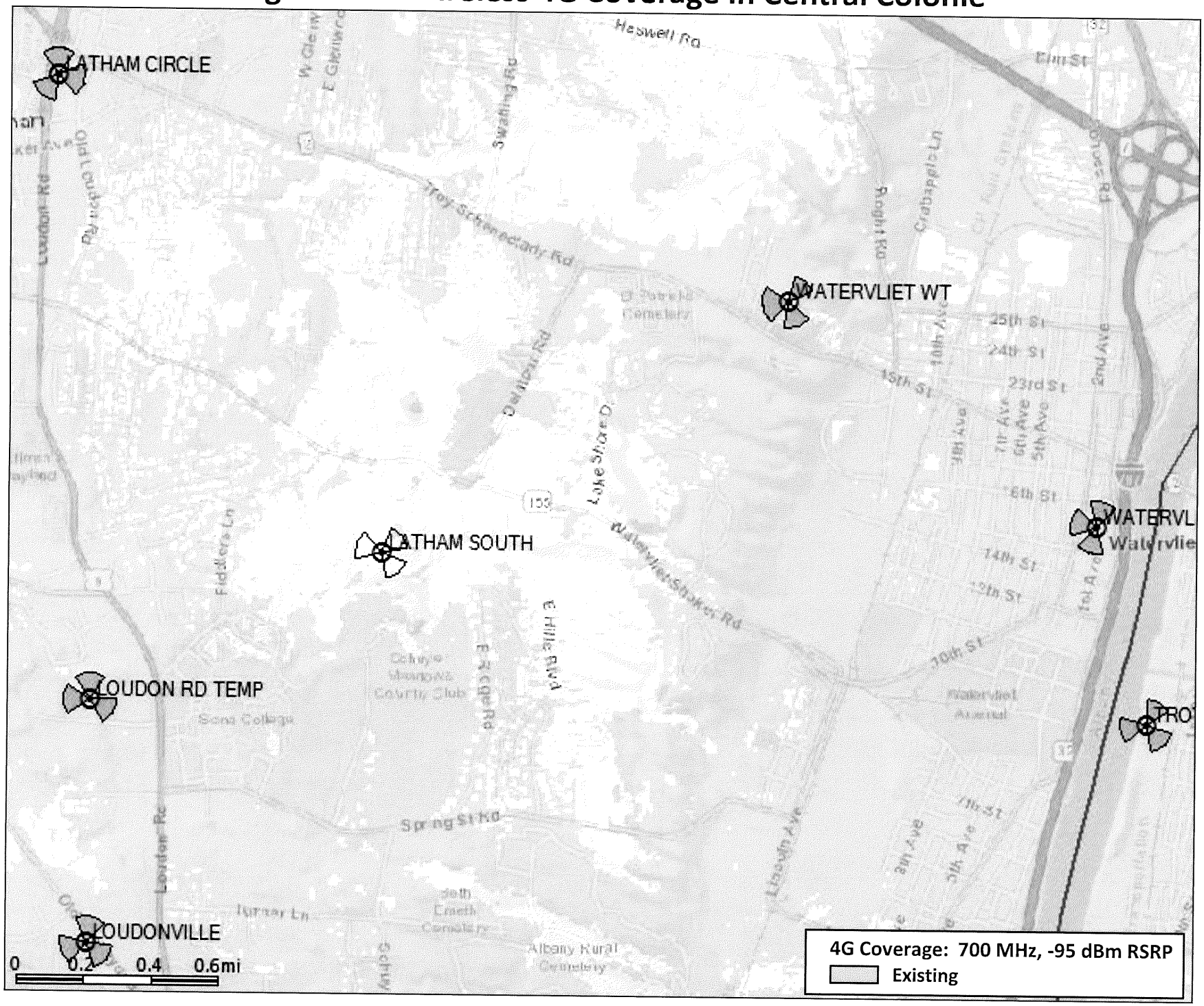
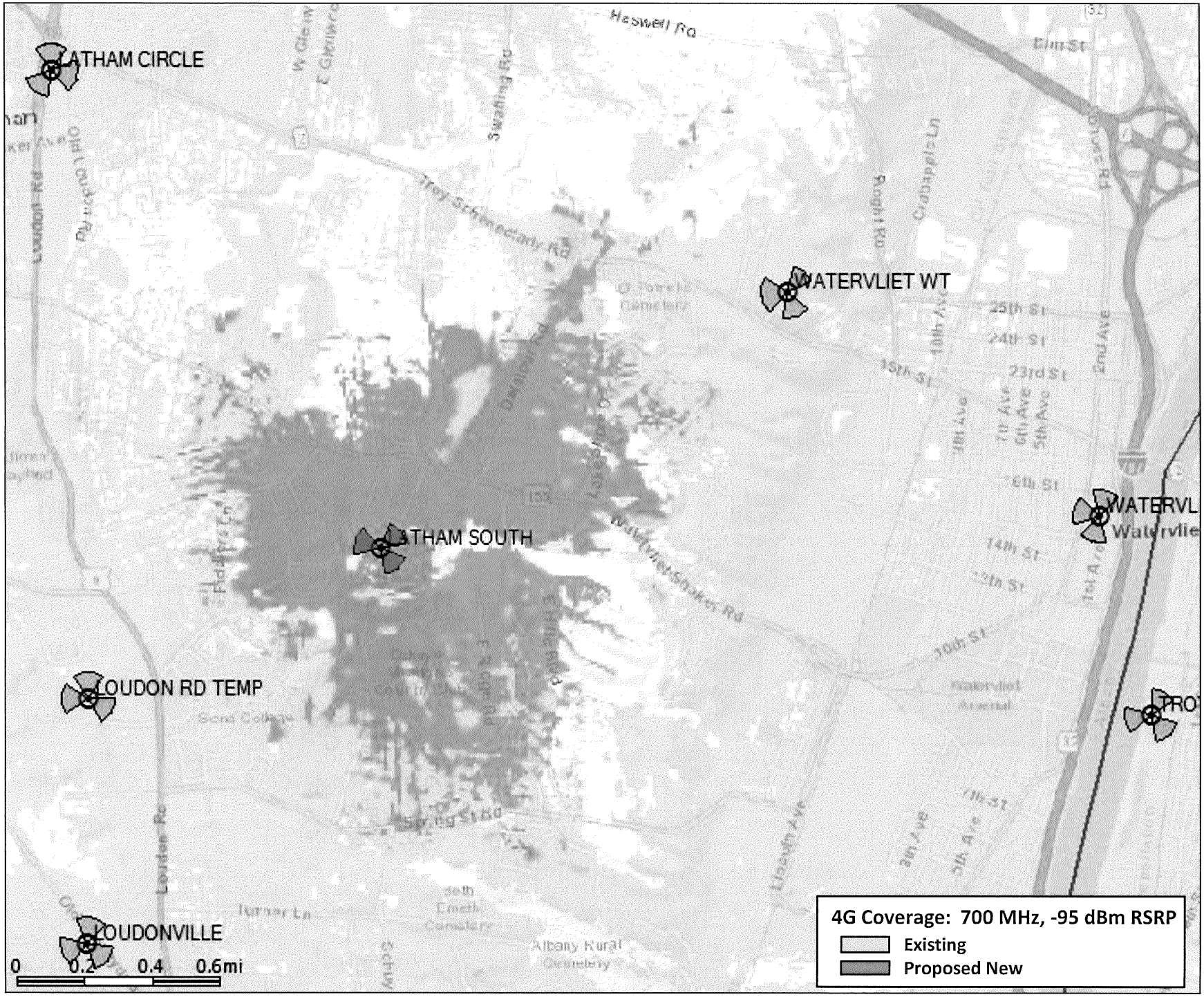


Exhibit 2. Proposed Verizon Wireless 4G Coverage in Central Colonie



Sisters of St. Joseph of Carondelet • Albany Province • Province Leadership Team

385 Watervliet-Shaker Rd., Latham, NY 12110-4799 • 518-783-3524 • fax 783-3672

September 2, 2010

Michael E. Cusack, Esq.
Young, Sommer...LLC
Executive Woods
5 Palisades Drive
Albany, NY 12205

Dear Mr. Cusack,

I thank you for all you have done to help the Board of Trustees for the Society of the Sisters of St. Joseph to understand the scope of the telecommunications project that Verizon has proposed for our consideration. We appreciated you coming and talking with us about some of our concerns especially regarding the environmental and health implications of this type of technology and also the impact this project would have on our building and surrounding property. You and your engineers were very generous with sharing your time and expertise.

After many discussions regarding the proposal from Verizon Wireless to lease space from The Society of The Sisters of St. Joseph for telecommunications use, the Board of Trustees for the Society does not wish to pursue this project with Verizon at this time. We thank you for considering our site and we wish you success in pursuing other venues for this project.

Sincerely,

Sr. Nancy Gregg, CSJ

Sister Nancy Gregg, CSJ
For the Board of Trustees for the Society

ROWLANDS & LEBROU, PLLC

ATTORNEYS AT LAW
11 BRITISH AMERICAN BOULEVARD
LATHAM, NEW YORK 12110
(518) 250-4264 (TELEPHONE)
(518) 689-4849 (FAX)
www.rowlands-lebrou.com

March 17, 2017

Young Summer LLC
Executive Woods
Five Palisades Drive
Albany, New York 12205

ATTN: David C. Brennan, Esq.

Re: Elks Lane Cell Tower

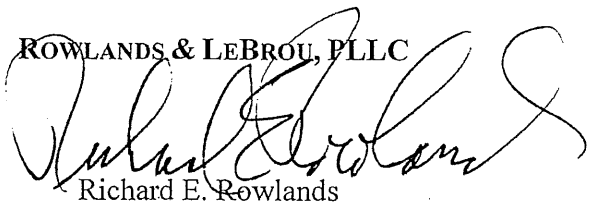
Dear Mr. Brennan:

As you know, I represent Colonie Senior Service Centers, Inc. d/b/a King Thiel Senior Community. The Board of Directors met on March 15, 2017, and considered your request to lease space for a cell tower on the building to Verizon Wireless and voted not to pursue a lease with Verizon Wireless at this time.

Should you have any questions with regard to the above, please do not hesitate to contact me.

Sincerely yours,

ROWLANDS & LEBROU, PLLC



Richard E. Rowlands

RER/pad
S:\RLDOCS\K\KING THIEL SENIOR COMMUNITY-General Business-2915.00\brennan, esq., david ltr 3-17-17.dotx

TAB 7

14-14-11 (9/95)-9c

617.20
Appendix B
State Environmental Quality Review
Visual EAF Addendum

SEQR

VZW – Latham South
Project No. 4530
6/13/2018

This form may be used to provide additional information relating to Question 11 of Part 2 of the Full EAF.
(To be completed by Lead Agency)

Visibility	**Distance Between Project and Resource (in Miles)**				
1. Would the project be visible from:	0-1/4	1/4-1/2	1/2-3	3-5	5+
A.)A parcel of land which is dedicated to and available to the public for the use, enjoyment and appreciation of natural or man-made scenic qualities?	☐	☐	☐	☐	☐
B.)An overlook or parcel of land dedicated to public observation, enjoyment and appreciation of natural or man-made scenic qualities?	☐	☐	☐	☐	☐
C.)A site or structure listed on the National or State Registers of Historic Places?	☐	☐	☐	☐	☐
D.)State Parks?	☐	☐	☐	☐	☐
E.)The State Forest Preserve?	☐	☐	☐	☐	☐
F.)National Wildlife Refuges and state game refuges?	☐	☐	☐	☐	☐
G.)National Natural Landmarks and other outstanding natural features?	☐	☐	☐	☐	☐
H.)National Park Service lands?	☐	☐	☐	☐	☐
J.)Rivers designated as National or State Wild, Scenic or Recreational?	☐	☐	☐	☐	☐
K.)Any transportation corridor of high exposure, such as part of the Interstate System, or Amtrak?	☐	☐	☐	☐	☐
L.)A governmentally established or designated interstate or inter-county foot trail, or one formally proposed for establishment or designation?	☐	☐	☐	☐	☐
M.)A site, area, lake, reservoir or highway designated as scenic?	☐	☐	☐	☐	☐
N.)Municipal park, or designated open space?	☐	☐	☐	☐	☐
P.)County road? *	☐	☐	☐	☐	☐
R.)State? *	☐	■	☐	☐	☐
S.)Local road? *	■	■	☐	☐	☐

2. Is the visibility of the project seasonal? (i.e. screened by summer foliage, but visible during other seasons?
   ☐ Yes ■ No

3. Are any of the resources checked in questions 1 used by the public during the time of year during which the project will be visible?
   ■ Yes ☐ No

DESCRIPTION OF EXISTING VISUAL ENVIRONMENT

4. From each item checked in questions 1, check those which generally describe the surrounding environment.

	Within *1/4 mile	Within * 1 mile
Essentially undeveloped	☐	☐
Forested	☐	☐
Agricultural	☐	☐
Suburban residential	■	■
Industrial	☐	☐
Commercial	☐	☐
Urban	☐	☐
River, Lake, Pond	☐	☐
Cliffs, Overlooks	☐	☐
Designated Open Space	☐	☐
Flat	■	■
Hilly	☐	■
Mountainous	☐	☐

Note: add attachments as needed

5. Are there visually similar projects within:

* 1/4 mile	☐ Yes	■ No *
* 1 mile	☐ Yes	■ No *
* 1 ½ miles	■ Yes	☐ No *
* 3 miles	■ Yes	☐ No *

* Distance from project site are provided for assistance. Substitute other distances as appropriate.

EXPOSURE

6. The annual number of viewers likely to observe the proposed project is **191,990** *

NOTE: When user data is unavailable or unknown, use best estimate.

CONTEXT

7. The situation or activity in which the viewers are engaged while viewing the proposed action is

Activity	FREQUENCY Daily	Weekly	Holidays/ Weekends	Seasonally
Travel to and from work	■	☐	☐	☐
Involved in recreational activities	■	☐	☐	☐
Routine travel by residents	■	☐	☐	☐
At a residence	■	☐	☐	☐
At worksite	■	☐	☐	☐
Other	☐	☐	☐	☐

***Refer to attached sheet**

SUPPLEMENTAL DATA FOR VISUAL EAF ADDENDUM

R.) State Roads

State Road(s)	Distance Between Project and Resource (Miles)
S.R. 155 (Watervliet-Shaker Rd.)	0.27±

S.) Local Roads

Local Road(s)	Distance Between Project and Resource (Miles)
Elks Lane	0.08±
Abedar Lane	0.12±

6. Established by assuming a percentage of travelers within the viewshed who will actually observe the project. ADT information taken from 2003 NYSDOT Traffic Volume Report for Albany Co.

State Roads

	ADT x %	**= Est. # of Viewers**
S.R. 155	10,514 x 5%	526
Total Average Daily Viewers		= 526
		x 365 days per year
Total Estimated Viewers per Year		= ***191,990/ year****

6/24/2017 Rev. 2/22/2018
CE#4530

Photolog / Viewshed Map
Latham South (NYALB791)
Project: 20151290258

Costich Engineering Land Surveying Landscape Architecture 217 LAKE AVENUE ROCHESTER, NY 14608 (585) 458-3020	PROJECT NAME Latham South	PHOTO DESCRIPTION View toward proposed site Balloons at 70'	DATE OF PHOTO 6/24/2017
	Photo 1		C.E. JOB# 4530
	PHOTO COORDINATES 42° 43' 39.8253" N, 73° 44' 31.6839" W	PHOTO LOCATION View South from Elks parking lot 675' from site	VZW JOB# 20151290258

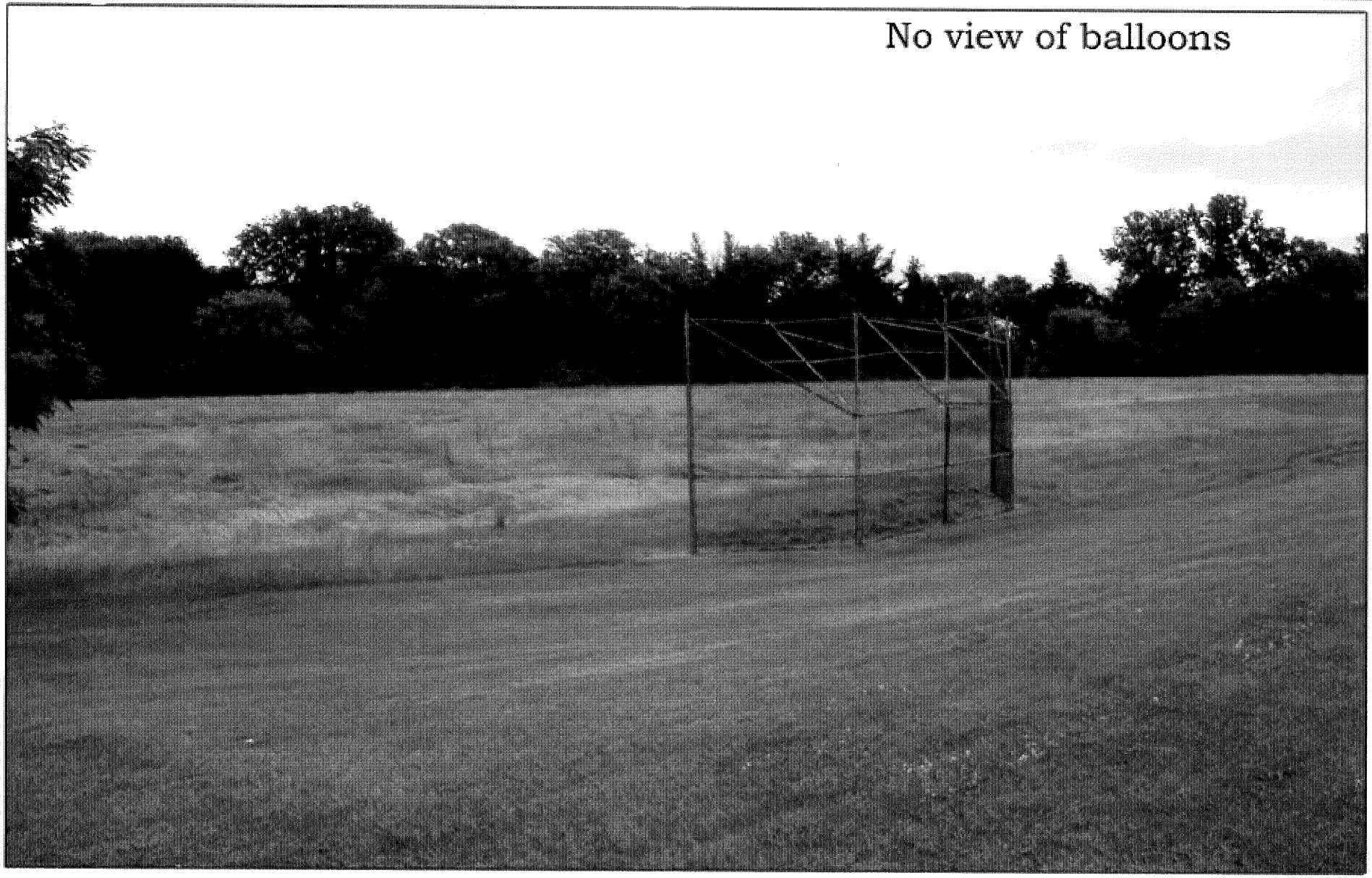
Costich Engineering Land Surveying Landscape Architecture 217 LAKE AVENUE ROCHESTER, NY 14608 (585) 458-3020	PROJECT NAME Latham South Photo 1 PHOTO COORDINATES 42° 43' 39.8253" N, 73° 44' 31.6839" W	PHOTO DESCRIPTION Photosimulation of proposed 70' monopine PHOTO LOCATION View South from Elks parking lot 675' from site	DATE OF PHOTO 6/24/2017 C.E. JOB# 4530 VZW JOB# 20151290258

Costich Engineering Land Surveying Landscape Architecture 217 LAKE AVENUE ROCHESTER, NY 14608 (585) 458-3020 COSTICH ENGINEERING	PROJECT NAME Latham South Photo 2 PHOTO COORDINATES 42° 43' 46.3006" N, 73° 44' 23.8917" W	PHOTO DESCRIPTION View toward proposed site Balloons at 70' PHOTO LOCATION View South from Watervliet Shakers Rd at Elks Ln. 1467' from site	DATE OF PHOTO 6/24/2017 C.E. JOB# 4530 VZW JOB# 20151290258

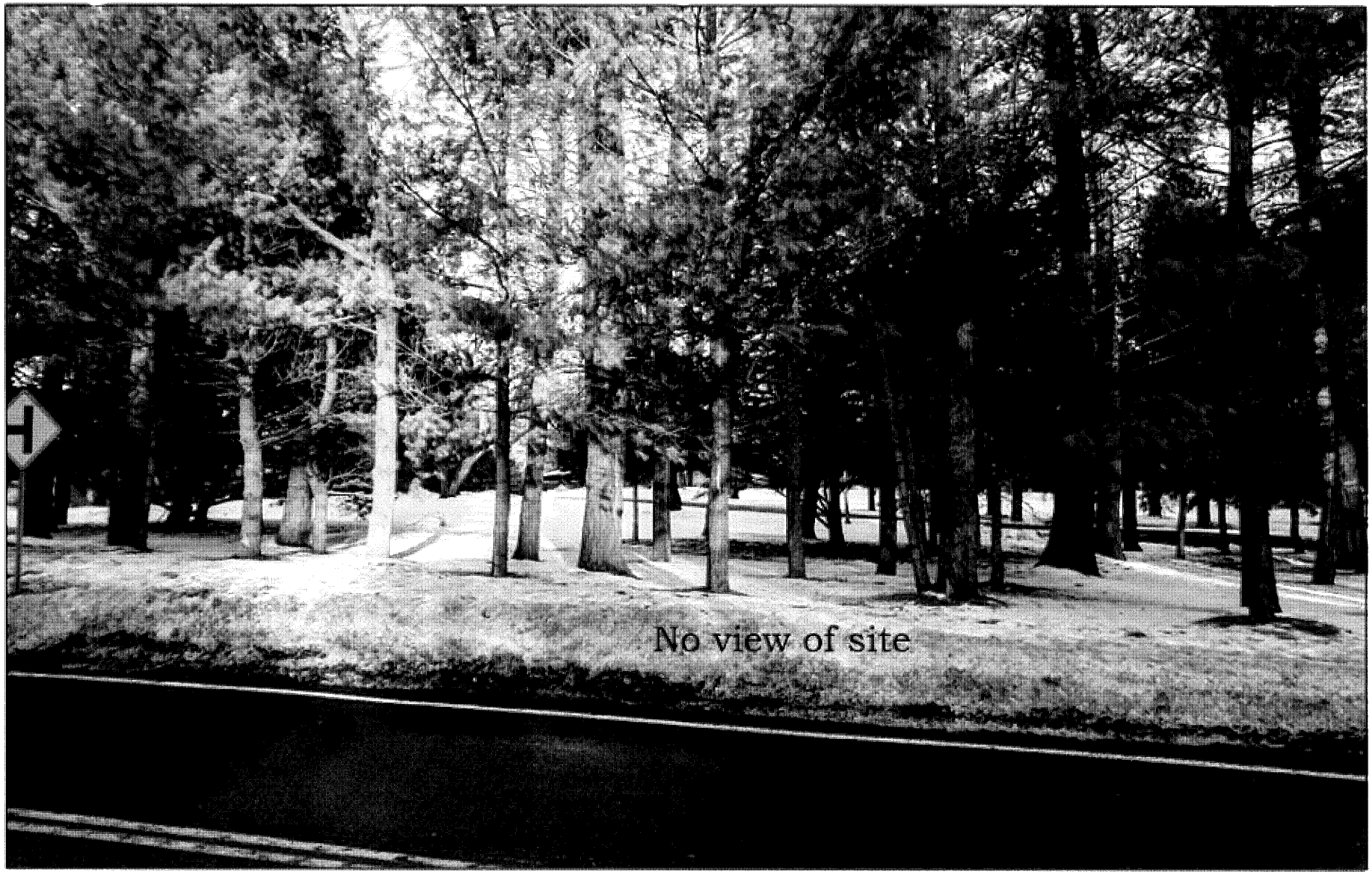
Costich Engineering Land Surveying Landscape Architecture 217 LAKE AVENUE ROCHESTER, NY 14608 (585) 458-3020 COSTICH ENGINEERING	PROJECT NAME Latham South Photo 2 PHOTO COORDINATES 42° 43' 46.3006" N, 73° 44' 23.8917" W	PHOTO DESCRIPTION Photosimulation of proposed 70' monopine PHOTO LOCATION View South from Watervliet Shakers Rd at Elks Ln. 1467' from site	DATE OF PHOTO 6/24/2017 C.E. JOB# 4530 VZW JOB# 20151290258

Costich Engineering Land Surveying Landscape Architecture 217 LAKE AVENUE ROCHESTER, NY 14608 (585) 458-3020	PROJECT NAME Latham South	PHOTO DESCRIPTION View toward proposed site Balloons at 70'	DATE OF PHOTO 6/24/2017
	Photo 3		C.E. JOB# 4530
	PHOTO COORDINATES 42° 43' 37.9221" N, 73° 44' 37.3152" W	PHOTO LOCATION View SE from Abedar Ln. 612' from site	VZW JOB# 20151290258

Costich Engineering Land Surveying Landscape Architecture 217 LAKE AVENUE ROCHESTER, NY 14608 (585) 458-3020	PROJECT NAME Latham South Photo 3 PHOTO COORDINATES 42° 43' 37.9221" N, 73° 44' 37.3152" W	PHOTO DESCRIPTION Photosimulation of proposed 70' monopine PHOTO LOCATION View SE from Abedar Ln. 612' from site	DATE OF PHOTO 6/24/2017 C.E. JOB# 4530 VZW JOB# 20151290258



Costich Engineering Land Surveying Landscape Architecture 217 LAKE AVENUE ROCHESTER, NY 14608 (585) 458-3020	PROJECT NAME Latham South Photo 4 PHOTO COORDINATES 42° 43' 43.4792" N, 73° 44' 45.3016" W	PHOTO DESCRIPTION View toward proposed site Balloons at 70' PHOTO LOCATION View SE from Fiddlers Ln. behind Goodrich School 1423' from site	DATE OF PHOTO 6/24/2017 C.E. JOB# 4530 VZW JOB# 20151290258



Costich Engineering
Land Surveying
Landscape Architecture
217 LAKE AVENUE
ROCHESTER, NY 14608
(585) 458-3020
COSTICH ENGINEERING

PROJECT NAME
Latham South

Photo 5

PHOTO COORDINATES
?

PHOTO DESCRIPTION
View toward proposed site

PHOTO LOCATION
View NE from Fiddlers Ln. near Renshaw House
2670' from site

DATE OF PHOTO
2/22/2018

C.E. JOB#
4530

VZW JOB#
20151290258

TAB 8

TOWAIR Determination Results

HELP

New Search Printable Page

A routine check of the coordinates, heights, and structure type you provided indicates that this structure does not require registration.

*** NOTICE ***

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

DETERMINATION Results

PASS SLOPE(100:1)NO FAA REQ - 5223.0 Meters (17135.6 Feet)away & below slope by 25.0 Meters (82.0199 Feet)

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	42-44-14.00N	073-48-15.00W	ALBANY INTL	ALBANY ALBANY, NY	84.2	2590.8000000000002

PASS SLOPE(100:1)NO FAA REQ - 4407.0 Meters (14458.4 Feet)away & below slope by 17.0 Meters (55.7700 Feet)

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	42-44-59.00N	073-47-7.00W	ALBANY INTL	ALBANY ALBANY, NY	84.2	2590.8000000000002

Your Specifications

NAD83 Coordinates

Latitude	42-43-33.1 north
Longitude	073-44-32.2 west

Measurements (Meters)	
Overall Structure Height (AGL)	21.3
Support Structure Height (AGL)	21.3
Site Elevation (AMSL)	90.5
Structure Type	
POLE - Any type of Pole	

Notice Criteria Tool

Notice Criteria Tool - Desk Reference Guide V_2014.2.0

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference CFR Title 14 Part 77.9.

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with
- the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the FAA Co-location Policy
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the Air Traffic Areas of Responsibility map for Off Airport construction, or contact the FAA Airports Region / District Office for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

Latitude: 42 Deg 43 M 33.18 S N

Longitude: 73 Deg 44 M 32.25 S W

Horizontal Datum: NAD83

Site Elevation (SE): 297 (nearest foot)

Structure Height : 70 (nearest foot)

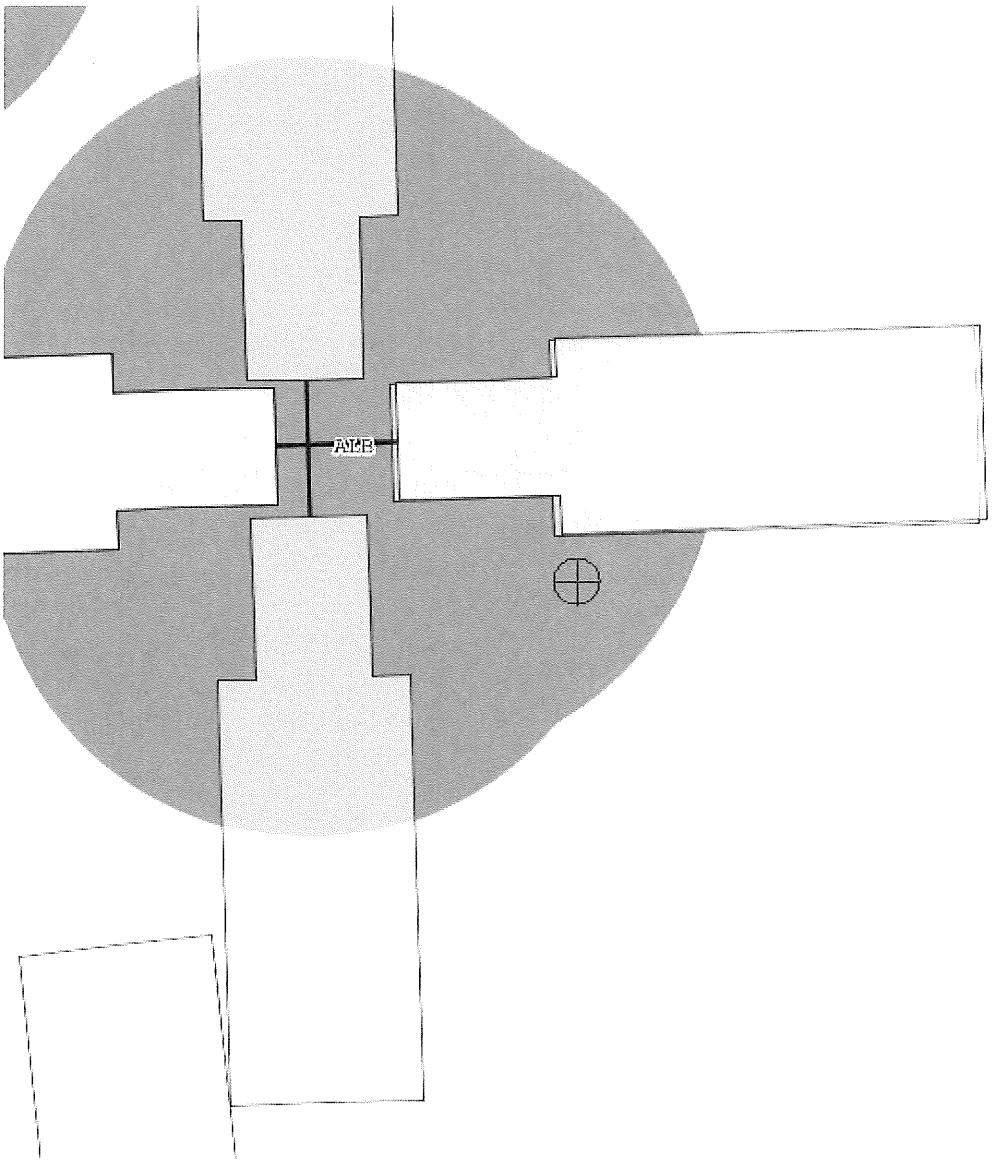
Traverseway: No Traverseway

(Additional height is added to certain structures under 77.9(c))
User can increase the default height adjustment for
Traverseway, Private Roadway and Waterway

Is structure on airport: (•) No ( ) Yes

Submit

You exceed the following Notice Criteria: Your proposed structure is in proximity to a navigation facility and may impact the assurance of navigation signal reception. The FAA, in accordance with 77.9, requests that you file.
The FAA requests that you file


A
B

TAB 9

COSTICH
ENGINEERING, D.P.C.

Project No. 4530

June 12, 2018

Ms. Kathy Pomponio
Bell Atlantic Mobile Systems of Allentown, Inc. d/b/a Verizon Wireless
1275 John Street - Suite 100
West Henrietta, New York 14586

Re: Verizon Wireless Latham South - Cell Site Tower Design
Near 17 Elks Lane, Latham, NY 12110
Town of Colonie, Albany County (T.A.#31.4-5-37) (VZW#20151290258)

Dear Ms. Pomponio:

For the Verizon Wireless Latham South Cell Site a 70' monopine constructed of galvanized steel (65' AGL top of steel and 70' AGL top of RF transparent branching) is proposed. The tower is proposed approximately 272'± from the close property line. The monopine is to be located within a 100'x100' lease parcel area and shall be designed to support a total of two cellular carriers. The monopine shall be designed to support this loading with a 90 mph basic wind speed (no ice) and 0.75-inch minimum radial ice at 40 mph in accordance with Telecommunications Industry Association Standard TIA/EIA-222-G, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures". This is the standard currently referenced by the International Building Code. The tower shall be designed by a licensed New York State Professional Engineer meeting the aforementioned criteria.

If you have any questions, feel free to contact me.

Very Truly Yours,

COSTICH ENGINEERING, DPC

David A. Weisenreder, P.E.

DAW/erw
h:\job\4530\4530_00\documents\correspondance\latham south_tower design letter_20180612.docx

TAB 10

verizon

Network Engineering - UPNY
1275 John Street, Suite 100
West Henrietta, New York 14586

June 6, 2018

Town of Colonie
347 Old Niskayuna Road
Latham, New York 12110

RE: Latham South Communications Facility — Tower Design and Collocation Commitment of Cellco Partnership d/b/a Verizon Wireless

Ladies and Gentlemen:

With respect to the above application, Cellco Partnership d/b/a Verizon Wireless ("Verizon Wireless") agrees to construct a public utility / personal wireless service facility that is designed with capacity for collocation (shared use) by one (1) additional wireless provider having a panel antenna array comparable to those of Verizon Wireless.

Should the public utility / personal wireless service facility be approved and constructed, Verizon Wireless, as the facility owner, will negotiate in good faith with other licensed wireless service providers for future shared use of the subject structure. All future collocations shall be subject to the involved parties reaching agreement on reasonable terms and conditions, in accordance all then-applicable agreements, customs and procedures in the wireless industry, and there being adequate structural capacity and space to accommodate such collocation.

The precise make and model of the telecommunications tower and the manufacturer's design and grounding data will be determined upon completion of Verizon Wireless' internal design/bid process, which will follow issuance of all required local municipal approvals. To allow Verizon Wireless an opportunity to complete the land use process and comply with its internal design/build requirements, a timing waiver is requested for the submission of these items.

Thank you for considering our application.

Sincerely,

Kathy Pomponio

Kathy Pomponio
Real Estate Manager

TAB 11

MILLENNIUM ENGINEERING, P.C.
132 Jaffrey Road
Malvern, Pennsylvania 19355
Cell: 610-220-3820 Fax: 610-644-4355
www.millenniumeng.com Email: pauldugan@comcast.net

April 10, 2018

Attn: Rick Andras, RF Design Engineer
Verizon Wireless
225 Jordan Road
Troy, NY 12180

Re: RF Safety FCC Compliance of Proposed Communications Facility
Site Name: Latham South, Proposed 65' Stealth Monopine (70' Overall Height)
Near 17 Elks Lane, Latham, NY 12110 (Town of Colonie, Albany County)

Dear Mr. Andras,

I have performed an analysis to provide an independent determination and certification that the proposed Verizon Wireless communications facility modifications at the above referenced property will comply with Federal Communications Commission (FCC) exposure limits and guidelines for human exposure to radiofrequency electromagnetic fields (Code of Federal Regulation 47 CFR 1.1307 and 1.1310). As a registered professional engineer I am under the jurisdiction of the State Registration Boards in which I am licensed to hold paramount the safety, health, and welfare of the public and to issue all public statements in an objective and truthful manner.

The existing communications facility consists of a proposed 65' monopine (70' overall height – top of proposed stealth pine branches) at the above referenced property. The proposed Verizon Wireless antenna configuration from the information furnished to me consists of (1) 700/850/1900 MHz (LTE) multi-band antenna (CommScope NHH-65C-R2B or equivalent) and (1) 700/850/2100 MHz (LTE) multi-band antenna (CommScope NHH-65C-R2B or equivalent) on each of three faces (total of 6 antennas) spaced with azimuths of 30/150/280 degrees on the horizontal plane at a centerline of 56' above ground level. Transmitting from these antennas will be (1) 700 MHz LTE wideband channel, (1) 850 MHz LTE wideband channel, (1) 1900 MHz LTE wideband channel and up to (2) 2100 MHz LTE wideband channels per face.

The following assumptions are made for reasonable upper limit radiofrequency operating parameters for the proposed facility due to Verizon Wireless antennas alone:

- (1) 700/850/1900 MHz (LTE) multi-band transmit antenna per face at 0-10 degrees mechanical downtilt
- (1) 700/850/2100 MHz (LTE) multi-band transmit antenna per face at 0-10 degrees mechanical downtilt
- (1) 700 MHz LTE wideband channel/face at 4x40W max power/face before cable loss/antenna gain
- (1) 850 MHz LTE wideband channel/face at 4x40W max power/face before cable loss/antenna gain
- (1) 1900 MHz LTE wideband channel/face at 4x40W max power/face before cable loss/antenna gain
- (2) 2100 MHz LTE wideband channels/face at 4x40W max power/face before cable loss/antenna gain
- The facility would be at or near full capacity during busy hour

Using the far-field power density equations from FCC Bulletin OET 65, the power density at any given distance from the antennas is equal to $0.360(ERP)/R^2$ where R is the distance to the point at which the exposure is being

calculated. The given equation is a conversion of the OET 65 power density equation for calculating power density given the distance in feet and the result in metric units (mW/cm^2). This calculated power density assumes the location is in the main beam of the vertical pattern of the antenna. After making an adjustment for the reduction in power density due to the vertical pattern of the transmit antenna, the calculated ground level power density is below 1 % of the FCC general population exposure limits at any distance from the antenna system of Verizon Wireless.

The 700 MHz "Upper C Block" transmit frequencies (746-757 MHz), which Verizon Wireless is licensed by the FCC to operate, have an uncontrolled/general population maximum permissible exposure (MPE) FCC limit of 497 $\mu W/cm^2$. The 850 MHz (cellular) "B Band" transmit frequencies (880-894 MHz), which Verizon Wireless is also licensed by the FCC to operate, have an uncontrolled/general population MPE FCC limit of 587 $\mu W/cm^2$. The 1900 MHz (PCS) "C4/C5 Block" transmit frequencies (1980-1990 MHz), which Verizon Wireless is also licensed by the FCC to operate, have an uncontrolled/general population MPE FCC limit of 1000 $\mu W/cm^2$ or 1 mW/cm^2. The 2100 MHz (AWS) "E Block", "F Block", "G Block" and "J Block" transmit frequencies (2140-2145, 2145-2155, 2155-2160, 2170-2180 MHz), which Verizon Wireless is also licensed by the FCC to operate, have an uncontrolled/general population MPE FCC limit of 1000 $\mu W/cm^2$ or 1 mW/cm^2. Therefore, the exposure at ground level at any distance from the structure would be below 1 % of the FCC general population exposure limits due to Verizon Wireless antennas alone. The extremely low ground exposure levels are due to the elevated positions of the antennas in the structure and the low power which these systems operate. See Figures 1 and 2 in back of this report which discuss the relationship between height, proximity or distance, and orientation to level of electromagnetic field exposure.

From the standpoint of RF exposure, the presence of Verizon Wireless would not preclude the future addition of other tenants or licensees including emergency or other municipal services which benefit the public from collocation on this structure. There is a substantial margin of safety to allow for the addition of transmit antennas of other communications services. Keep in mind that continuous exposure at 100 % of standard is considered by the scientific community as just as safe as 1 % of standard since the exposure limits themselves contain a large margin of safety.

In summary, the proposed communications facility will comply with all applicable exposure limits and guidelines adopted by the FCC governing human exposure to radiofrequency electromagnetic fields (FCC Bulletin OET 65). Federal law (FCC Rule Title 47 CFR 1.1307 and 1.1310) sets the national standard for compliance with electromagnetic field safety. The FCC exposure limits are based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI). **Thus, there is full compliance with the standards of the IRPA, FCC, IEEE, ANSI, and NCRP.**

General Information on Electromagnetic Field Safety

Verizon Wireless facilities transmit and receive low power electromagnetic fields (EMF) between base station antennas and handheld portable cell phones. The radiofrequency energy from these facilities and devices is non-ionizing electromagnetic energy. Non-ionizing, unlike X-Rays or other forms of potentially harmful energy in the microwave region, is not cumulative over time nor can the energy change the chemical makeup of atoms (e.g. strip electrons from ions). "Non-ionizing" simply means that the energy is not strong enough to break ionic bonds.

Safe levels of electromagnetic fields were determined by numerous worldwide organizations, such the International Committee for Non-Ionizing Radiation Protection, a worldwide multi-disciplinary team of researchers and scientists studying the effects of non-ionizing radiofrequency energy such as that emitted by base stations or cell phones. The FCC did not arbitrarily establish their own standards, but adopted the

recommendations of all leading organizations that set standards and research the subject such as the Institute of Electrical and Electronics Engineers (IEEE), American National Standards Institute (ANSI), and National Council on Radiation Protection and Measurements (NCRP).

When Verizon Wireless is located on an antenna structure such as a self-supporting lattice type tower, monopole, guyed tower, watertank, etc. the antennas are typically 10 meters or more above ground level (10 meters = 32.81 feet). With the relatively low power and elevated positions of the antennas on the structure with respect to ground level, the maximum ground level exposure can rarely approach 1 % of the applicable FCC exposure limit regardless of how many sets of antennas are collocated on the structure. For this reason, the FCC considers the facilities "categorically excluded" from routine evaluation at antenna heights above 10 meters (or above 32.81 feet). Categorical exclusion exempts a site from routine on-site evaluation. However, the facility is not excluded from compliance with the federal exposure limits and guidelines. The types of facilities used by Verizon Wireless typically elevated on antenna structures (away from access to close proximity, i.e. greater than 10 meters or 32.81 feet) simply cannot generate ground level exposure levels that approach the limits under any circumstances.

From a regulatory perspective, the FCC has sole jurisdiction over the regulation of electromagnetic fields from all facilities and devices. The FCC has established guidelines and limits over emissions and exposure to protect the general public. The FCC also has certain criteria that trigger when an environmental evaluation must be performed. The criteria are based on distance from the antennas (accessibility) and transmit power levels.

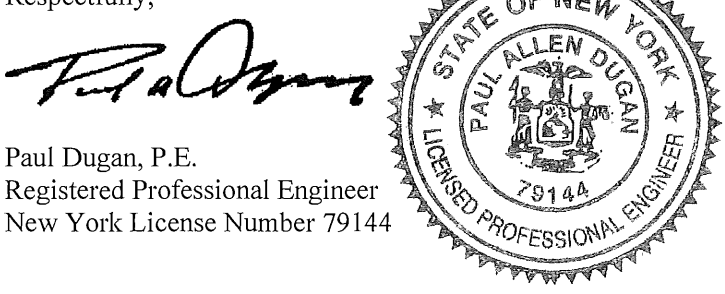
CONCLUSIONS:

1) **The proposed communications facility will comply with electromagnetic field safety standards by a substantial margin (below 1 %) in all publicly accessible areas. This includes the base of the proposed structure and any areas in proximity to the proposed structure.**

2) **Verizon Wireless takes appropriate measures to ensure that all telecommunications facilities (including this proposed facility) comply with applicable exposure limits and guidelines adopted by the FCC governing human exposure to radiofrequency electromagnetic fields (FCC Bulletin OET 65).**

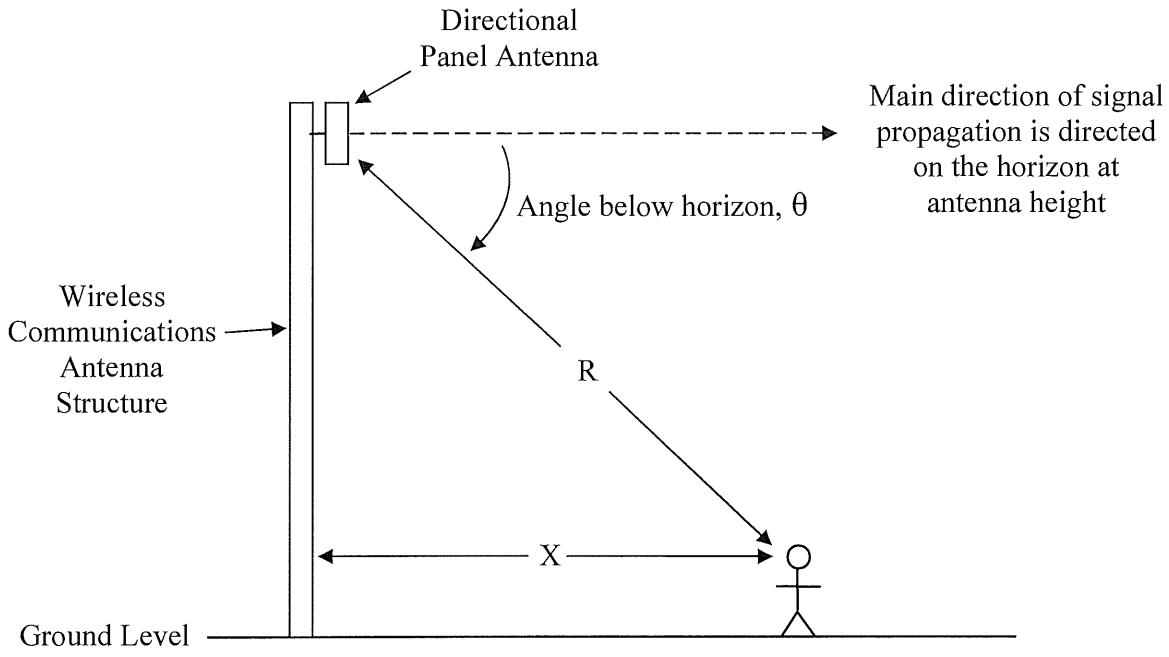
3) **In cases where such compliance exists, the subject of electromagnetic field safety is preempted.** The Telecommunications Act of 1996 states that: "No state or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the [FCC's] regulations concerning such emissions." Telecommunications Act of 1996, § 332[c][7][B][iv].

Respectfully,



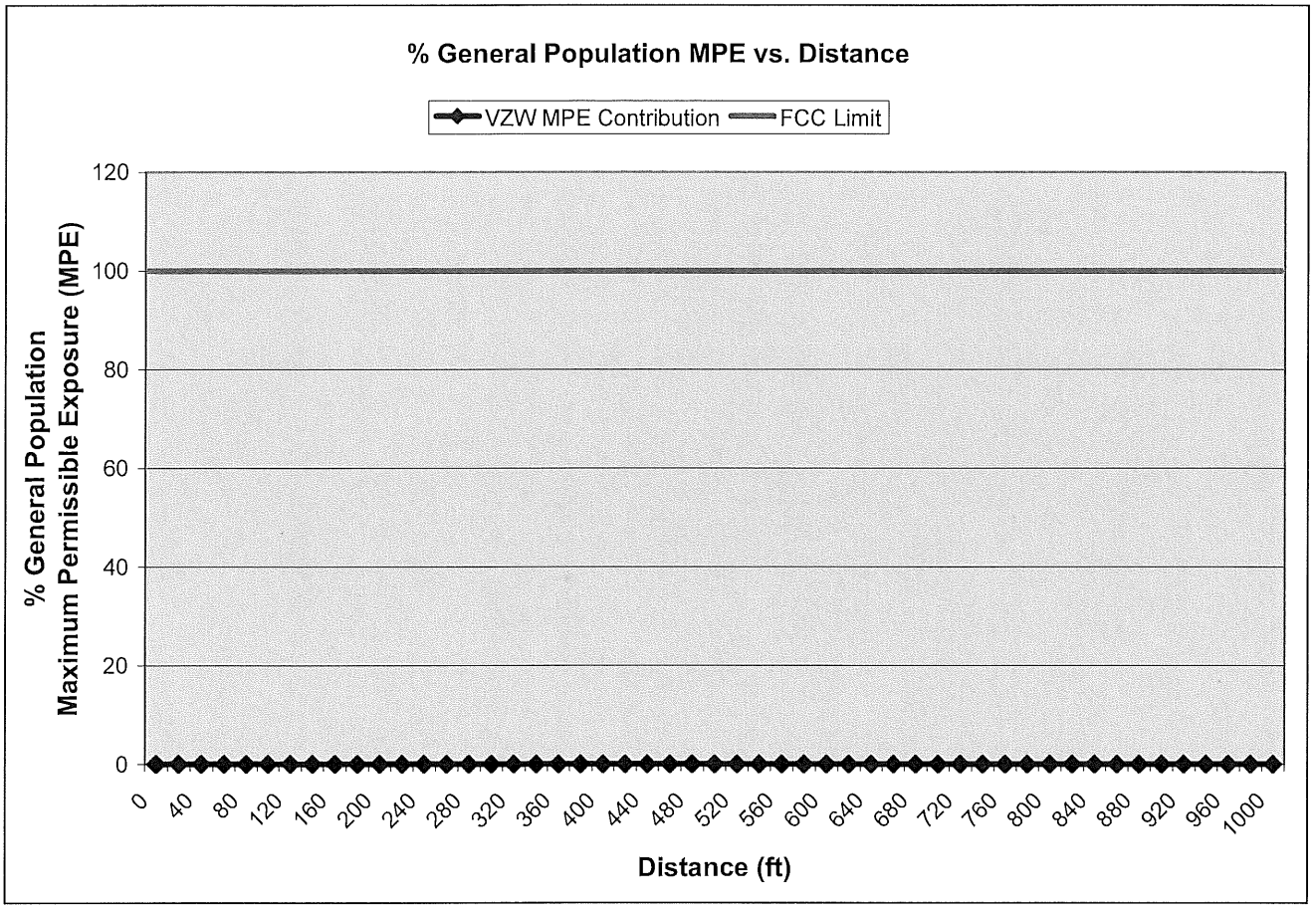
Paul Dugan, P.E.
Registered Professional Engineer
New York License Number 79144

FIGURE 1: Diagram of Electromagnetic Field Strength as a Function of Distance and Antenna Orientation



The above diagram illustrates the conceptual relationship of distance and orientation to directional panel antennas used in wireless communications. At the base of the structure (x = 0), the distance R is a minimum when the angle of the direction of propagation θ is a maximum. As one moves away from the antenna structure, the horizontal distance X increases as well as the distance R to the antennas while the angle below the horizon decreases. For this reason, electromagnetic fields from these facilities remain fairly uniform up to a few hundred feet and continue to taper off with distance. As noted in the report, the electromagnetic fields from these types of facilities are hundreds of times below safety standards at any distance from the antenna structure, making them essentially indistinguishable relative to other sources of electromagnetic fields in the environment due to the elevated heights of the antennas and the relatively low power at which these systems operate.

FIGURE 2: Graph of MPE Contribution vs. Distance



The above graph represents the contribution of Verizon Wireless to the composite electromagnetic field exposure level at any distance from the base of the structure. The contribution of Verizon Wireless will remain well under 1% of the FCC general population maximum permissible exposure (MPE) at any distance as shown.

DECLARATION OF ENGINEER

Paul Dugan, P.E., declares and states that he is a graduate telecommunications consulting engineer (BSE/ME Widener University 1984/1988), whose qualifications are a matter of record with the Federal Communications Commission (FCC). His firm, Millennium Engineering, P.C., has been retained by Verizon Wireless to perform power density measurements or calculations for an existing or proposed communications facility and analyze the data for compliance with FCC exposure limits and guidelines for human exposure to radiofrequency electromagnetic fields.

Mr. Dugan also states that the calculations or measurements made in the evaluation were made by himself or his technical associates under his direct supervision, and the summary letter certification of FCC compliance associated with the foregoing document was made or prepared by him personally. Mr. Dugan is a registered professional engineer in the Jurisdictions of Pennsylvania, New Jersey, Delaware, Maryland, Virginia, New York, Connecticut, District of Columbia, West Virginia and Puerto Rico with over 30 years of engineering experience. Mr. Dugan is also an active member of the Association of Federal Communications Consulting Engineers, the National Council of Examiners for Engineering, the National Society of Professionals Engineers, the Pennsylvania Society of Professional Engineers, and the Radio Club of America. Mr. Dugan further states that all facts and statements contained herein are true and accurate to the best of his own knowledge, except where stated to be in information or belief, and, as to those facts, he believes them to be true. He believes under penalty of perjury the foregoing is true and correct.

Paul Dugan, P.E.

Executed this the 10th day of April, 2018.

PAUL DUGAN, P.E.
132 Jaffrey Road
Malvern, Pennsylvania 19355

Cell: 610-220-3820
Fax: 610-644-4355
Email: pauldugan@comcast.net
Web Page: www.millenniumeng.com

EDUCATION:

Widener University, Chester, Pennsylvania
Master of Business Administration, July 1991
Master of Science, Electrical Engineering, December 1988
Bachelor of Science, Electrical Engineering, May 1984

PROFESSIONAL ASSOCIATIONS:

Registered Professional Engineer in the following jurisdictions:

Pennsylvania, License Number PE-045711-E
New Jersey, License Number GE41731
Maryland, License Number 24211
Delaware, License Number 11797
Virginia, License Number 36239
Connecticut, License Number 22566
New York, License Number 079144
District of Columbia, License Number PE-900355
West Virginia, License Number 20258
Puerto Rico, License Number 18946

Full member of **The Association of Federal Communications Consulting Engineers** (www.afcce.org) January 1999 to Present
Elected to serve on the Board of Directors for 2006-2007

Full member of **The National Society of Professional Engineers** (www.nspe.org) and the **Pennsylvania Society of Professional Engineers** (www.pspe.org) June 2003 to Present
Currently serving on the Board of Directors of the Valley Forge Chapter and as South East Region Vice-Chair for the "Professional Engineers in Private Practice" Executive Committee

Actively participate in **Chester County ARES/RACES** (CCAR www.w3eoc.org) which prepares and provides emergency backup communications for Chester County Department of Emergency Services, March 2005 to Present

Full member of **The National Council of Examiners for Engineering** (www.ncees.org) May 2001 to Present

Full Member of **The Radio Club of America** (www.radio-club-of-america.org) December 2003 to present

PROFESSIONAL EXPERIENCE:

Millennium Engineering, P.C., Malvern, Pennsylvania
Position: **President**, August 1999 to Present (www.millenniumeng.com)

Verizon Wireless, Plymouth Meeting, Pennsylvania
Position: **Cellular RF System Design/Performance Engineer**, April 1990 to August 1999

Communications Test Design, Inc., West Chester, Pennsylvania
Position: **Electrical Engineer,** May 1984 to April 1990

TAB 12

verizon

Network Engineering - UPNY
1275 John Street, Suite 100
West Henrietta, New York 14586

June 27, 2018

Town of Colonie
Building Department
347 Old Niskayuna Rd.
Latham, NY 12110

RE: **Latham South Communications Facility (Colonie Elk's Club)** – **Application for Special Use Permit** of Cellco Partnership d/b/a Verizon Wireless
Public Utility/Personal Wireless Service Facility located at 17 Elks Lane

Ladies and Gentlemen:

With respect to the above application, and in accordance with applicable provisions of the Wireless Telecommunications Facilities Siting Law for the Town of Colonie, Cellco Partnership d/b/a Verizon Wireless ("Verizon Wireless") operates Wireless Communications Fourth Generation (4G) Services, Personal Communication Service (PCS) and/or Cellular Radiotelephone Services network authorized by the Federal Communications Commission (FCC) to provide state of the art digital and/or cellular wireless communications in many parts of the nation, including upstate New York. Verizon Wireless' operations and network are licensed and regulated by the FCC.

Verizon Wireless' radio equipment is designed to transmit frequencies only within the allocated frequency bands and each transmitter is carefully adjusted to comply with FCC regulations for power output and frequency. These procedures prevent interference with other radio services, public safety communications, airport navigation, cordless phones, computers and other community office or residential household appliances.

The incidence of these transmissions causing interference with other radio service is rare. All other radio communication services, including broadcast radio and television, are assigned to specific frequency bands, separate and distinct from cellular and other frequencies. For instance AM Radio operates between 0.5 -1.5 MHz and VHF Television operates between 54 - 215 MHz. In addition, receivers for other services are similarly designed to prevent interference from out of band service. In the unlikely event that malfunctioning equipment or improper settings are shown to cause interference with an existing service, Verizon Wireless would be required, under the conditions of its FCC license, to take immediate steps to correct any problems.

Thank you for considering this application.

Very truly yours,

Rick Andras
Radio Frequency (RF) Design Engineer

TAB 13

verizon

Network Engineering - UPNY
1275 John Street, Suite 100
West Henrietta, New York 14586

June 6, 2018

Town of Colonie
347 Old Niskayuna Road
Latham, New York 12110

RE: **Latham South Communications Facility (Colonie Elk's Club)** – Application of Cellco Partnership d/b/a Verizon Wireless

Ladies and Gentlemen:

With respect to the above application, Cellco Partnership d/b/a Verizon Wireless (or the then-current communications facility owner) agrees to remove its facilities at the Colonie Elk's Club site if the communications facility becomes obsolete or ceases to be used for its intended purpose by all existing collocators for a period of ninety (90) consecutive days, or a total of one hundred eighty (180) days in any three hundred sixty-five (365) day period; if such wireless telecommunications facilities fall into such a state of disrepair that it creates a health or safety hazard; or if such wireless telecommunications facilities have been located, constructed or modified without first obtaining, or in a manner not authorized by, the required special use permit or any other necessary authorization.

In such circumstance, and in accordance with § X[E][3][g] of Local Law No. 1 of 2007 of the Town of Colonie (the " Telecommunications Facilities Law"), the Board shall notify Verizon Wireless (or the then-current tower owner) that all communications facility equipment is to be removed within ninety (90) days of the date of such notification, weather-permitting. In the event that the Town of Colonie believes removal is appropriate for any of the reasons stated above, the Town Code Enforcement Officer shall provide 48 hours' notice and an opportunity to be heard and/or provide for an interim temporary use agreement/permit.

Thank you for considering our application.

Sincerely,

Kathy Pomponio

Kathy Pomponio
Real Estate Manager

TAB 14

CELLCO PARTNERSHIP
DBA

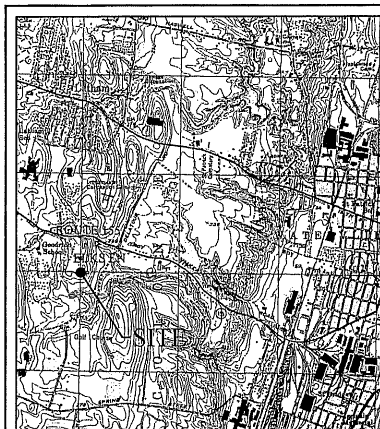
verizon

PROJECT NUMBER: 20181835542
LOCATION CODE: 175248
SITE NAME:

LATHAM SOUTH ZONING DRAWINGS

SHEET NO.	DESCRIPTION	REV. NO	REVISION DATE
GA001	TITLE SHEET	5	06/27/2018
CA100	ZONING SITE PLAN	3	06/15/2018
CA110	SITE PLAN	3	06/15/2018
CA111	DETAILED SITE PLAN & NOTES	3	06/15/2018
CA130	GRADING & EROSION CONTROL PLAN	3	06/15/2018
EA120	UTILITY ROUTING PLAN	3	06/15/2018
CA500	TOWER ELEVATION, DETAILS & NOTES	0	04/29/2016
CA501	EQUIPMENT PLATFORM DETAILS & NOTES	1	06/15/2018
CA502	EROSION CONTROL DETAILS & NOTES	0	04/29/2016

SHEET INDEX



DIRECTIONS TO SITE:
FROM VERIZON'S TROY OFFICE, HEAD EAST ON JORDAN RD TOWARD DEFREEST DR. TURN LEFT AT N GREENBUSH RD/US-4. SHARP LEFT AT US-4/VANDENBURGH AVE. TURN RIGHT AT MORRISON AVE. TURN LEFT AT HIGH ST/RT-378. TAKE RT-32 EXIT TOWARD WATERVLIET/MENANDS. TURN RIGHT AT BROADWAY/RT-32. TURN LEFT AT 1ST ST, CONTINUE ON LINCOLN AVE. SLIGHT RIGHT AT RT-155/WATERVLIET-SHAKER RD. TURN LEFT AT ELKS LANE.

VICINITY MAP SCALE: 1" = 2000'±

N NORTH

SITE ADDRESS:	NEAR 17 ELKS LANE LATHAM, NEW YORK 12110
MUNICIPALITY:	COLONIE
COUNTY:	ALBANY
TOWER LOCATION :	LATITUDE: 42°-43'-33.18" NAD 83 LONGITUDE: 073°-44'-32.25" NAD 83
BASE ELEVATION:	297.0'± AMSL NAVD 1988
PROPERTY/ ACCESS OWNER:	ELKS B.P.O COLONIE LODGE 11 ELKS LANE LATHAM, NEW YORK 12110 CONTACT: WILLIAM HOBLOCK SR. PHONE: (518) 455-7521 COLONIE SENIOR SERVICE CENTERS, INC. CONTACT: EDWARD NEARY, EXECUTIVE DIRECTOR PHONE: (518) 459-7132
SENIOR HOUSING ENGINEER:	HERSHBERG & HERSHBERG CONSULTING ENGINEERS AND LAND SURVEYORS 18 LOCUST STREET ALBANY, NEW YORK 12203 PHONE: (518) 459-3096
TOWER OWNER/ APPLICANT:	CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS 1275 JOHN STREET, SUITE #100 WEST HENRIETTA, NEW YORK 14586 CONTACT: KATHY POMPONIO PHONE: (585) 321-5435
LEGAL REPRESENTATIVE:	YOUNG/SOMMER LLC EXECUTIVE WOODS 5 PALISADES DRIVE ALBANY, NEW YORK 12205 PHONE: (518) 438-9907
PARENT PARCEL TAX MAP NUMBER:	31.4-5-37 (20.37 ± ACRES)
ZONING CLASSIFICATION:	PLANNED DEVELOPMENT DISTRICT (PDD)
LENGTH OF ACCESS DRIVEWAY:	860'± EXISTING + 75'± PROPOSED = 935'± TOTAL LENGTH
LENGTH OF UTILITY RUN:	161'±
AREA OF PROJECT DISTURBANCE:	0.31± ACRES

PROJECT INFORMATION

verizon
1275 JOHN STREET, SUITE #100
WEST HENRIETTA, NEW YORK 14586

COSTICH ENGINEERING
• CIVIL ENGINEERING
• LAND SURVEYING
• LANDSCAPE ARCHITECTURE
217 LAKE AVENUE
ROCHESTER, NY 14608
(585) 458-3020

WORK ORDER NUMBER | DRAWN BY

NO.	DATE	ISSUE
1	05/16/2016	TOWER COORDINATES
2	10/13/2016	TOWER COORDINATES
3	11/10/2016	UPDATED SURVEY
4	06/15/2018	VERIZON PLATFORM UPDATE
5	06/27/2018	PLATFORM SIZE

RELEASED BY | DATE

STATE OF NEW YORK · Licensed Professional Engineer · No. 085971

PROJECT ENGINEER: D.A.W.
DRAWN BY: J.S.S.
DATE: 04/29/2016
SCALE: AS NOTED

ORIGINAL SIZE IN INCHES
0 1 2 3

SITE INFORMATION
LATHAM SOUTH
PROJECT #20181835542
ELKS LANE / 12110

TOWN OF COLONIE
COUNTY OF ALBANY
STATE OF NEW YORK

SHEET TITLE
TITLE SHEET

C.E. JOB NUMBER: 4530
SHEET NUMBER: GA001

GRAPHIC SCALE

(IN FEET)
1 inch = 100 ft.

SECTION/PARCEL BOUNDARY
PROPOSED EASEMENT LINE
MIN. BUILDING SETBACK
CENTER LINE
EXIST. EASEMENT LINE
EXIST. RIGHT-OF-WAY LINE
EXIST. EDGE OF PAVEMENT
CONIFEROUS, DECIDUOUS TREE, EDGE OF WOODS
EXISTING CONTOUR
PROPOSED CONTOUR
EXISTING/PROPOSED SPOT ELEVATION @ X
WATER, CREEK OR STREAM
EXISTING SINGLE/DOUBLE SIGNS
EXIST. WATERMAIN, VALVE & HYDRANT
EXIST. SANITARY SEWER & MANHOLE
EXIST. STORM SEWER, FIELD INLET INLET MANHOLE, M.H., & END SECTION
BARBED WIRE, STOCKADE, CHAIN LINKED FENCE
EXISTING BUILDING

LEGEND

1. THE APPLICANT SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS, INCLUDING BUT NOT LIMITED TO THE STATE ENVIRONMENTAL QUALITY REVIEW ACT (SEQR), FRESHWATER WETLANDS PERMIT REGULATIONS, THE TOWNS GRADING LAW, THE TOWN FLOOD PLAINS MANAGEMENT, AND THE TOWN PROTECTED WATERCOURSE LAW.
2. THE APPLICANT SHALL BEAR THE SOLE RESPONSIBILITY FOR ENSURING THAT ALL IMPROVEMENTS ARE COMPLETED AND MAINTAINED IN ACCORDANCE WITH APPROVED PLANS, SPECIFICATIONS AND STANDARDS.
3. NO CERTIFICATE OF COMPLIANCE SHALL BE ISSUED UNTIL ALL REQUIRED IMPROVEMENTS ARE SATISFACTORILY COMPLETED, AND THE PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT HAS ISSUED WRITTEN AUTHORIZATION TO THE BUILDING DEPARTMENT.
4. THE APPLICANT SHALL BE RESPONSIBLE FOR KEEPING EXISTING PUBLIC HIGHWAYS AND ADJACENT LANDS FREE OF DEBRIS, SOIL AND OTHER MATTER WHICH MAY ACCUMULATE DUE TO CONSTRUCTION RELATED TO THE SITE.
5. ALL SITE LIGHTING SHALL BE DESIGNED AND INSTALLED SO AS NOT TO ILLUMINATE ADJACENT PROPERTIES OR HIGHWAYS.
6. ALL PLANT MATERIALS INSTALLED PURSUANT TO THIS SITE DEVELOPMENT PLAN SHALL CONFORM TO THE AMERICAN STANDARD NURSERY STOCK (ANSI Z60.1-1986) OF THE AMERICAN ASSOCIATION OF NURSERYMEN OR EQUIVALENT RECOGNIZED STANDARD AND SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH ACCEPTED INDUSTRY PRACTICE.
7. NO PORTION OF THIS SITE SHALL BE USED FOR STORAGE OR DISPLAY OF ANY PRODUCT OR MATERIAL, OR FOR PARKING OF ANY VEHICLES, OR FOR THE CONDUCT OF ANY OTHER BUSINESS OPERATIONS, UNLESS SPECIFICALLY DESIGNATED FOR SUCH USE ON THIS SITE DEVELOPMENT PLAN.
8. ALL REQUIRED EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

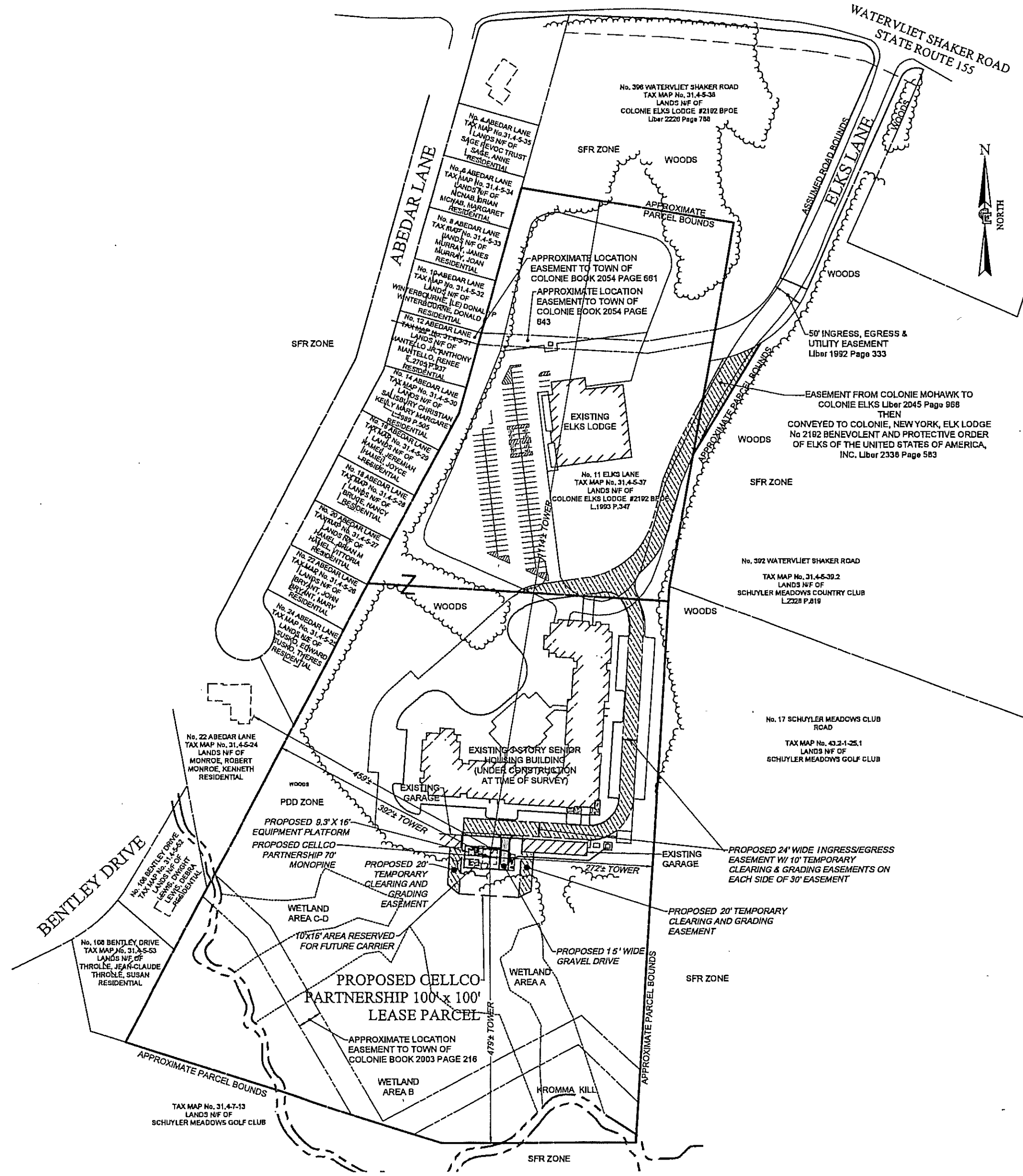
STANDARD MUNICIPAL NOTES

DIMENSION TABLE/ SETBACK REQUIREMENTS

	BUILDING AND LOT REQUIREMENTS			YARD REQUIREMENTS		
	MINIMUM TOWER SETBACK	MAXIMUM BUILDING FOOTPRINT (%)	MINIMUM GREEN SPACE COVERAGE (%)	FRONT SETBACK MINIMUM (FEET)	SIDE SETBACK MINIMUM EACH SIDE/ TOTAL OF TWO SIDES (FEET) 10/25	REAR SETBACK MINIMUM (FEET)
EXISTING	N/A	23,440 SQ. FT. 2.60%	714,771.14 SQ. FT. 80.48%	71'	RIGHT 297'± LEFT 650'±, TOTAL 947'±	135'
PROPOSED	FRONT: 263'± SIDE: 481'± REAR: 410'±	23,840 SQ. FT. 2.66%	714,571.14 SQ. FT. 80.45%	PLATFORM: 284'±	PLATFORM: RIGHT 1,121'± LEFT 458'±, TOTAL 1,579±	PLATFORM: 370'±

Dig Safely. New York
Underground Facilities Protective Organization
- Call Before You Dig
- Wait The Required Time
- Confirm Utility Response
- Respect The Marks
- Dig With Care

800-962-7962
www.digsafelynewyork.com



WATERVLIET SHAKER ROAD
STATE ROUTE 155
ELKS LANE
ABEDAR LANE
BENTLEY DRIVE
ASSUMED ROAD BOUNDS
SFR ZONE
WOODS
PDD ZONE
NORTH
APPROXIMATE PARCEL BOUNDS
EXISTING ELKS LODGE
No. 11 ELKS LANE
TAX MAP No. 31.4-5-37
LANDS N/F OF
COLONIE ELKS LODGE #2192 BPOE
L.1993 P.347
No. 396 WATERVLIET SHAKER ROAD
TAX MAP No. 31.4-5-38
LANDS N/F OF
COLONIE ELKS LODGE #2192 BPOE
Liber 2226 Page 788
APPROXIMATE LOCATION EASEMENT TO TOWN OF COLONIE BOOK 2054 PAGE 661
APPROXIMATE LOCATION EASEMENT TO TOWN OF COLONIE BOOK 2054 PAGE 643
50' INGRESS, EGRESS & UTILITY EASEMENT
Liber 1992 Page 333
EASEMENT FROM COLONIE MOHAWK TO COLONIE ELKS Liber 2045 Page 968
THEN
CONVEYED TO COLONIE, NEW YORK, ELK LODGE No 2192 BENEVOLENT AND PROTECTIVE ORDER OF ELKS OF THE UNITED STATES OF AMERICA, INC. Liber 2338 Page 583
No. 392 WATERVLIET SHAKER ROAD
TAX MAP No. 31.4-5-39.2
LANDS N/F OF
SCHUYLER MEADOWS COUNTRY CLUB
L.2328 P.819
No. 17 SCHUYLER MEADOWS CLUB ROAD
TAX MAP No. 43.2-1-25.1
LANDS N/F OF
SCHUYLER MEADOWS GOLF CLUB
EXISTING 3-STORY SENIOR HOUSING BUILDING (UNDER CONSTRUCTION AT TIME OF SURVEY)
EXISTING GARAGE
459'±
392'± TOWER
711'± TOWER
272'± TOWER
479'± TOWER
PROPOSED 9.3' X 16' EQUIPMENT PLATFORM
PROPOSED CELLCO PARTNERSHIP 70' MONOPINE
PROPOSED 20' TEMPORARY CLEARING AND GRADING EASEMENT
PROPOSED 24' WIDE INGRESS/EGRESS EASEMENT W/ 10' TEMPORARY CLEARING & GRADING EASEMENTS ON EACH SIDE OF 30' EASEMENT
PROPOSED 15' WIDE GRAVEL DRIVE
10'x16' AREA RESERVED FOR FUTURE CARRIER
PROPOSED CELLCO PARTNERSHIP 100' x 100' LEASE PARCEL
APPROXIMATE LOCATION EASEMENT TO TOWN OF COLONIE BOOK 2003 PAGE 216
WETLAND AREA C-D
WETLAND AREA A
WETLAND AREA B
KROMMA KILL
No. 22 ABEDAR LANE
TAX MAP No. 31.4-5-24
LANDS N/F OF
MONROE, ROBERT
MONROE, KENNETH
RESIDENTIAL
No. 108 BENTLEY DRIVE
TAX MAP No. 31.4-5-53
LANDS N/F OF
THROLDE, JEAN-CLAUDE
THROLDE, SUSAN
RESIDENTIAL
TAX MAP No. 31.4-7-13
LANDS N/F OF
SCHUYLER MEADOWS GOLF CLUB

OVERALL ZONING SITE PLAN
SCALE: 1" = 100' (22" x 34" SHEET)
1" = 200' (11" x 17" SHEET)

verizon
1275 JOHN STREET, SUITE #100
WEST HENRIETTA, NEW YORK 14586

COSTICH ENGINEERING
- CIVIL ENGINEERING
- LAND SURVEYING
- LANDSCAPE ARCHITECTURE

217 LAKE AVENUE
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(585) 458-3020

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RELEASED BY | DATE

STATE OF NEW YORK – Licensed Professional Engineer

PROJECT ENGINEER	D.A.W.
DRAWN BY	J.S.S.
DATE	04/29/2016
SCALE	AS NOTED

ORIGINAL SIZE IN INCHES

SITE INFORMATION
LATHAM SOUTH
PROJECT #20181835542
ELKS LANE / 12110

TOWN OF COLONIE
COUNTY OF ALBANY
STATE OF NEW YORK

SHEET TITLE
ZONING
SITE PLAN

C.E. JOB NUMBER	SHEET NUMBER
4530	CA100

SHEET 2 OF 9

PLAN REFERENCES

1. TOWER BASE ELEVATION, LATITUDE AND LONGITUDE ARE BASED ON GPS OBSERVATIONS PERFORMED BY COSTICH ENGINEERING, D.P.C. ON 10/27/2016 FOR THE PURPOSES OF GENERATING A 1A FAA CERTIFICATION LETTER. OPUS REFERENCE MONUMENT:

   -NYFV CORS ARP (PID-DI0456) } NAD 83 (CORS)
   LATITUDE: 42-59-20.99797 (N)
   LONGITUDE: 074-21-12.01370 (W)
   ELLIP HEIGHT: 135.628 METERS

   -NYST CORS ARP (PID-DI0622) } NAD 83 (CORS)
   LATITUDE: 43-03-41.73519 (N)
   LONGITUDE: 073-48-15.01002 (W)
   ELLIP HEIGHT: 100.278 METERS

   -VTBE CORS ARP (PID-DK8255) } NAD 83 (CORS)
   LATITUDE: 42-52-57.02625 (N)
   LONGITUDE: 073-11-59.84829 (W)
   ELLIP HEIGHT: METERS

2. PLANS PREPARED BY CLOUGH HARBOUR & ASSOCIATES, LLP, HAVING SITE NAME NYALB78/LATHAM SOUTH, WITH CHA PROJECT NO.: 14089-1060-1601, DATED 05/20/2008.
3. FIELD VERIFICATION PERFORMED BY COSTICH ENGINEERING, D.P.C. ON 10/27/2016.
4. PER THE NYSDEC FRESHWATER WETLANDS MAP, THERE ARE NO STATE WETLANDS IN PROJECT AREA.
5. PER THE NATIONAL WETLANDS INVENTORY MAPS, THERE ARE NO FEDERAL WETLANDS IN PROJECT AREA.
6. PER THE ESRI/FEMA PROJECT IMPACT HAZARD INFORMATION AND AWARENESS SITE MAP THERE IS NO 100 YR. FLOOD PLAIN IN THE PROJECT AREA.
7. PLANS ENTITLED "LATHAM SOUTH", HAVING JOB NO. 4530, PREPARED BY COSTICH ENGINEERING, DATED 09/13/2014.
8. PLANS ENTITLED "OVERALL SITE PLAN FOR PDD & ODA", HAVING JOB NO. 130112-2, PREPARED BY HERSHBERG & HERSHBERG, DATED 11/04/2014, WITH A FINAL REVISION DATE OF 03/23/2016.
9. SITE VERTICAL DATUM BASED ON SURVEY CONTROL PROVIDED BY HERSHBERG & HERSHBERG, REF. #8.

SITE NOTES

1. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWING.
2. RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
3. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE EQUIPMENT AND TOWER AREAS.
4. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
5. THE SUBGRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
6. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UITLITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND OR NEAR UTILITIES.
7. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF ENGINEERING.
8. THE AREAS DISTURBED DUE TO CONSTRUCTION ACTIVITY SHALL BE GRADED TO A UNIFORM SLOPE, FERTILIZED, SEEDED, AND COVERED WITH MULCH.
9. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROLS, AND COORDINATED WITH THE TOWN.
10. CONTRACTOR SHALL NOTIFY UNDERGROUND FACILITIES PROTECTIVE ORGANIZATION AT TELEPHONE NUMBER 1-800-962-7962 PRIOR TO EXCAVATION AT SITE.
11. ALL EXCAVATION WORK WITHIN 36" OF EITHER SIDE OF UNDERGROUND UTILITIES MUST BE DONE BY HAND EXCAVATION METHODS.

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- Wait The Required Time
- Confirm Utility Response
- Respect The Marks
- Dig With Care

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NORTH ORIENTATION

1. NORTH ORIENTATION ESTABLISHED PER REF. NO. 1.
2. DECLINATION OBTAINED FROM THE NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION DURING THE MONTH OF MARCH 2016.

-13°37'± N MAGNETIC TRUE

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft. (22 x 34)
1 inch = 120ft. (11 x 17)

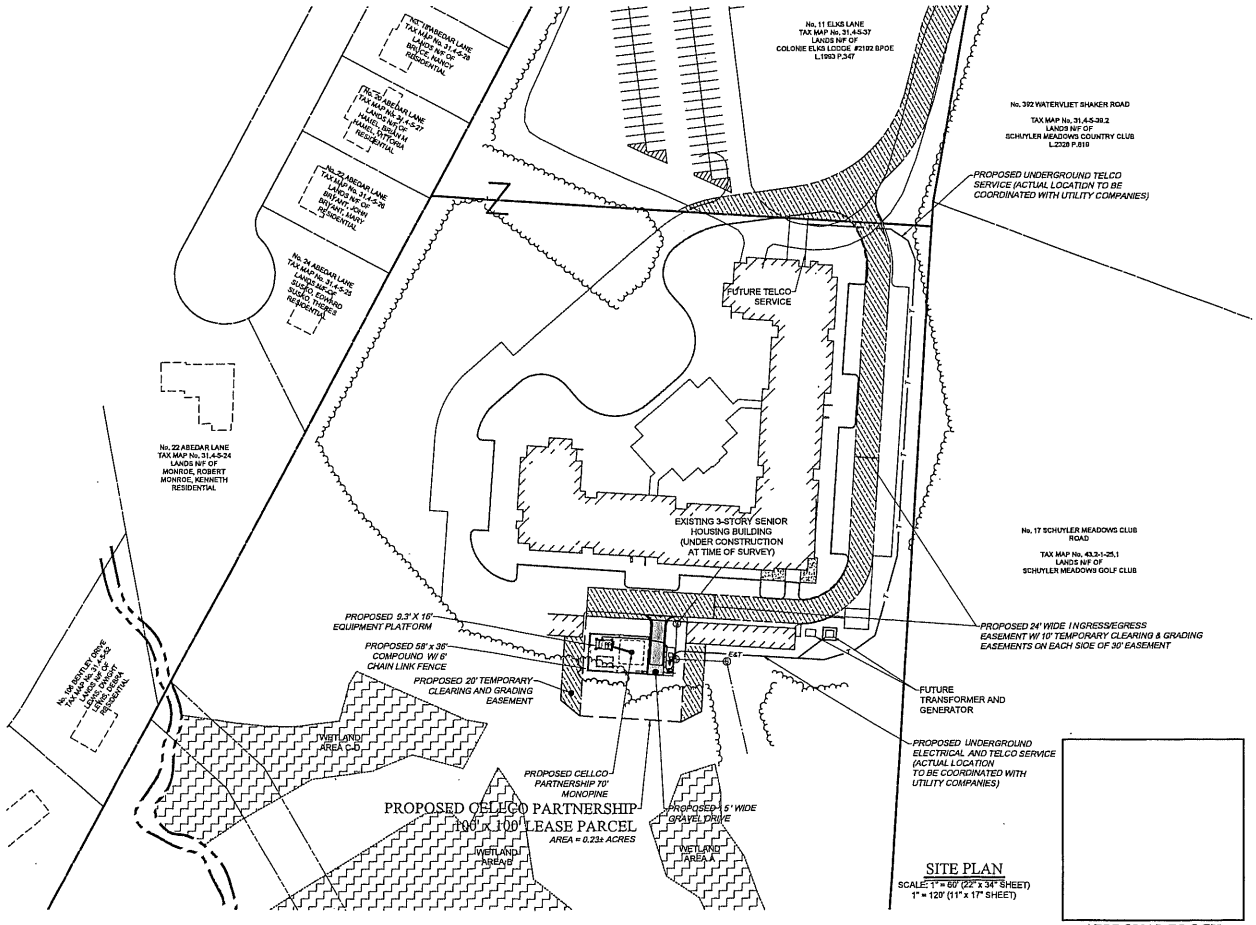
GENERAL NOTES

1. NORTH ORIENTATION IS TRUE NORTH BY GPS. VERTICAL DATUM IS NGVD 1988 (APPROXIMATE)
2. ALL BEARINGS SHOWN HEREON ARE ROTATED TO GRID NORTH.
3. UNDERGROUND UTILITIES OR IMPROVEMENTS, IF ANY AND NOT VISIBLE AT TIME OF SURVEY ARE NOT SHOWN.
4. THIS SURVEY IS SUBJECT TO THE FINDINGS OF AN UP TO DATE ABSTRACT OF THE TITLE.
5. THIS SURVEY IS FOR SITE PLAN/ ENGINEERING PURPOSES ONLY AND IS NOT INTENDED TO BE USED FOR THE TRANSFER OF TITLE.
6. SUBJECT TO THE RIGHTS OF THE PUBLIC IN AND TO THAT PORTION OF THE DEDICATED ROAD FOR NORMAL HIGHWAY PURPOSES.

LEGEND

- SECTION/PARCEL BOUNDARY
- PROPOSED EASEMENT LINE
- MINIMUM BUILDING SETBACK
- CENTER LINE
- EXISTING EASEMENT LINE
- EXISTING RIGHT-OF-WAY LINE
- EXISTING EDGE OF PAVEMENT
- CONIFEROUS, DECIDUOUS TREE, EDGE OF WOODS
- 350 EXISTING CONTOUR
- 350 PROPOSED CONTOUR
- x350.5 350.4 x EXISTING/ PROPOSED SPOT ELEVATION @ X
- WATER,CREEK OR STREAM
- EXISTING SINGLE/ DOUBLE SIGNS
- EXISTING WATERMAIN, VALVE & HYDRANT
- EXISTING SANITARY SEWER & MANHOLE
- EXISTING STORM SEWER, FIELD INLET INLET MANHOLE, M.H., & END SECTION
- BARBED WIRE,STOCKADE,CHAIN LINKED FENCE
- EXISTING BUILDING
- LOD LOD LIMITS OF DISTURBANCE
- APPROXIMATE LOCATION ZONING DISTRICT LINE

N (GRID NORTH)



SITE PLAN

SCALE: 1" = 60' (22" x 34" SHEET)
1" = 120' (11" x 17" SHEET)

APPROVAL BLOCK

verizon

1275 JOHN STREET, SUITE #100
WEST HENRIETTA, NEW YORK 14586

COSTICH ENGINEERING
- CIVIL ENGINEERING
- LAND SURVEYING
- LANDSCAPE ARCHITECTURE

217 LAKE AVENUE
ROCHESTER, NY 14608
(585) 436-3020

WORK ORDER NUMBER	DRAWN BY

NO.	DATE	ISSUE
1	10/13/2016	TOWER COORDINATES
2	11/10/2016	UPDATED SURVEY
3	06/15/2016	VERIZON PLATFORM UPDATE

RELEASED BY	DATE

STATE OF NEW YORK — MARK A. COSTICH — 065971 — Licensed Professional Engineer

PROJECT ENGINEER	D.A.W.
DRAWN BY	J.S.S.
DATE	04/29/2016
SCALE	AS NOTED

ORIGINAL SIZE IN INCHES
0 1 2 3

SITE INFORMATION

LATHAM SOUTH
PROJECT #20181835542
ELKS LANE / 12110

TOWN OF COLONIE
COUNTY OF ALBANY
STATE OF NEW YORK

SHEET TITLE

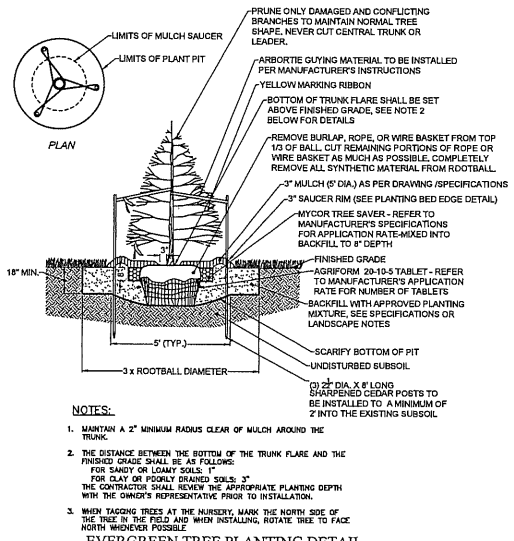
SITE PLAN

C.E. JOB NUMBER	SHEET NUMBER
4530	CA110

SHEET 3 OF 9

GENERAL NOTES

1. THE PROJECT CONCERNS THE INSTALLATION/ OPERATION AND MAINTENANCE OF AN UNMANNED PUBLIC UTILITY/ PERSONAL WIRELESS SERVICE FACILITY.
2. THE PROPOSED DEVELOPMENT IS UNMANNED AND DOES NOT REQUIRE A MEANS OF WATER SUPPLY OR SEWAGE DISPOSAL, OR HANDICAPPED ACCESS.
3. THE PROPOSED DEVELOPMENT IS MINIMAL, AND WILL CREATE NEGLIGIBLE ADDITIONAL STORMWATER RUNOFF AND WILL THEREFORE NOT IMPACT THE EXISTING STORMWATER DRAINAGE SYSTEM.
4. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE OUTDOOR STORAGE, ANY SOLID WASTE RECEPTACLES, OR PLUMBING.
5. ADEQUATE PARKING EXISTS FOR ONE VEHICLE FOR MAINTENANCE ONCE A MONTH OR EMERGENCY SERVICE.
6. THERE ARE NO NEW STREETS, CURBS, SIDEWALKS OR WALKWAYS PROPOSED.
7. THERE ARE NO COMMERCIAL SIGNS PROPOSED FOR THIS INSTALLATION.
8. EX ISTING UTILITIES (LOCATION, SIZES AND INVERTS) SHOWN ON THE PLANS ARE APPROXIMATE AND ARE NOT CERTIFIED AS TO THE ACCURACY OF THEIR LOCATION OR COMPLETENESS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATIONS AND DEPTHS OF ALL UTILITIES AND STRUCTURES IN THE PATH OF, OR CLOSELY PARALLEL TO, OR UNDER, THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DELAYS OR DAMAGES OCCURRING AS A RESULT OF INCORRECTLY LOCATED UTILITIES. IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITY OWNERS IN AMPLE TIME FOR THEM TO LOCATE AND MARK THEIR FACILITIES. THE CONTRACTOR SHALL ALSO NOTIFY UNDERGROUND UTILITY LOCATION SERVICE AT LEAST 48 HOURS IN ADVANCE OF COMMENCING ANY WORK.



NOTES:

1. MAINTAIN A 2" MINIMUM RADIUS CLEAR OF MULCH AROUND THE TRUNK.
2. THE DISTANCE BETWEEN THE BOTTOM OF THE TRUNK FLARE AND THE FINISHED GRADE SHALL BE AS FOLLOWS:
   FOR SANDY OR LOAMY SOILS: 1"
   FOR CLAY OR POORLY DRAINED SOILS: 3"
   THE CONTRACTOR SHALL REVIEW THE APPROPRIATE PLANTING DEPTH WITH THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
3. WHEN TAGGING TREES AT THE NURSERY, MARK THE NORTH SIDE OF THE TREE IN THE FIELD AND WHEN INSTALLING, ROTATE TREE TO FACE NORTH WHENEVER POSSIBLE

EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE

LEGEND

- SECTION/PARCEL BOUNDARY
- PROPOSED EASEMENT LINE
- MINIMUM BUILDING SETBACK
- CENTER LINE
- EXISTING EASEMENT LINE
- EXISTING RIGHT-OF-WAY LINE
- EXISTING EDGE OF PAVEMENT
- CONIFEROUS, DECIDUOUS TREE, EDGE OF WOODS
- 350 EXISTING CONTOUR
- 350 PROPOSED CONTOUR
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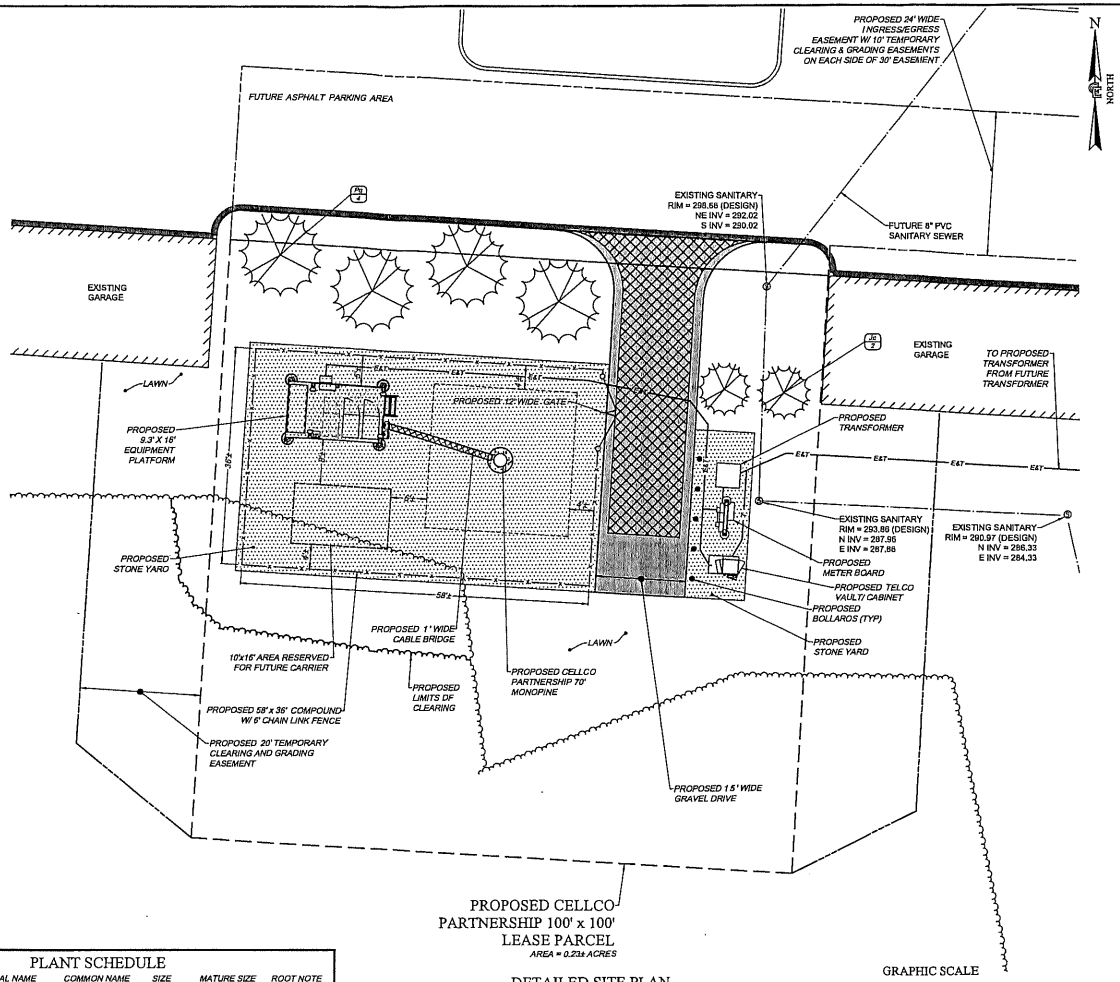
- EXISTING SANITARY SEWER & MANHOLE
- EXISTING STORM SEWER, FIELD INLET INLET MANHOLE, M.H., & END SECTION
- BARBED WIRE, STOCKADE, CHAIN LINKED FENCE
- EXISTING BUILDING
- LOD LOD LIMITS OF DISTURBANCE
- APPROXIMATE LOCATION ZONING DISTRICT LINE



DETAILED SITE PLAN

SCALE: 1" = 10' (22" x 34" SHEET)
1" = 20' (11" x 17" SHEET)

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft. (22 x 34)
1 inch = 20 ft. (11 x 17)

PLANT SCHEDULE

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	MATURE SIZE	ROOT NOTE
EVERGREEN TREES						
4	Pg	PICEA GLAUCA 'DENBATA'	BLACK HILLS SPRUCE	5 -6' HT.	25 - 50' HT / 15 - 25' SP	BB
2	Js	JUNIPERUS CHINENSIS	BLUE POINT JUNIPER	12' HT.	12' HT / 8' SP	BB

ABBREVIATIONS: BB=BALLED & BURLAPPED HT.=HEIGHT

LANDSCAPING NOTES

1. LANDSCAPE CONTRACTOR SHALL SECURE CURRENT PLANS AND SPECIFICATIONS FOR PROPER CONSTRUCTION METHODS AND MATERIAL OF ALL LANDSCAPING PRIOR TO COMMENCING WORK.
2. ALL PLANTS SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS AS NOTED IN THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, BY THE AMERICAN ASSOCIATION OF NURSERYMEN, ANSI Z60.1.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN QUANTITY TAKEOFF.
4. THE CONTRACTOR SHALL PERFORM A ROUGH FIELD STAKEOUT OF ALL PLANT MATERIAL AND SHRUB BEDS, CONTACT CONSTRUCTION MANAGER FOR INSPECTION AND APPROVAL. LOCATIONS SHOWN ON THE PLANS CONVEY DESIGN INTENT ONLY. ACTUAL LOCATIONS WILL BE AS DIRECTED BY THE CONSTRUCTION MANAGER AT TIME OF INSTALLATION.
5. THE CONTRACTOR IS HEREBY NOTIFIED THAT UNDERGROUND UTILITIES EXIST, SHOULD LOCATION OF TREES BE WITHIN (5) FIVE FEET OF UNDERGROUND UTILITIES, RELOCATE SAID TREES TO A MINIMUM (5) FIVE FEET FROM BALL TO UTILITIES.
6. SHOULD LOCATION OF TREES BE WITHIN (20) TWENTY FEET OF OVERHEAD WIRES, RELOCATE SAID TREES TO A MINIMUM OF (20) TWENTY FEET FROM WIRES.
7. A ONE YEAR GUARANTEE SHALL BE PROVIDED ON ALL PLANT MATERIALS FROM DATE OF PROVISIONAL ACCEPTANCE.
8. PLANTING BACKFILL MIXTURE: (4) FOUR PARTS TOPSOIL, (1) ONE PART PEAT MOSS, 1/2 PART WELL ROTTED MANURE, (10) TEN POUNDS OF 5-10-5 PLANTING FERTILIZER THOROUGHLY MIXED PER CUBIC YARD.
9. STAKE TREES IMMEDIATELY AFTER PLANTING. CONTRACTOR TO REMOVE STRAPS AND STAKES AFTER (12) TWELVE MONTHS.
10. ALL PLANTED AREAS SHALL RECEIVE A (3) THREE INCH LAYER OF SHREDDED PINE BARK MULCH.
11. ALL DISTURBED AREAS NOT RECEIVING PLANTINGS (INCLUDING RIGHT-OF-WAYS) SHALL BE SEEDED.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING WEEKLY FOR (8) EIGHT WEEKS POST CONSTRUCTION.

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• LAND SURVEYING
• LANDSCAPE ARCHITECTURE
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WORK ORDER NUMBER	DRAWN BY

NO.	DATE	ISSUE
1	10/13/2016	TOWER COORDINATES
2	11/10/2016	UPDATED SURVEY, LANDSCAPING
3	06/15/2016	VERIZON PLATFORM UPDATE

RELEASED BY DATE

PROJECT ENGINEER	D.A.W.
DRAWN BY	J.S.S.
DATE	04/29/2016
SCALE	AS NOTED

ORIGINAL SIZE IN INCHES

0 1 2 3

SITE INFORMATION

LATHAM SOUTH
PROJECT #20181835542
ELKS LANE / 12110

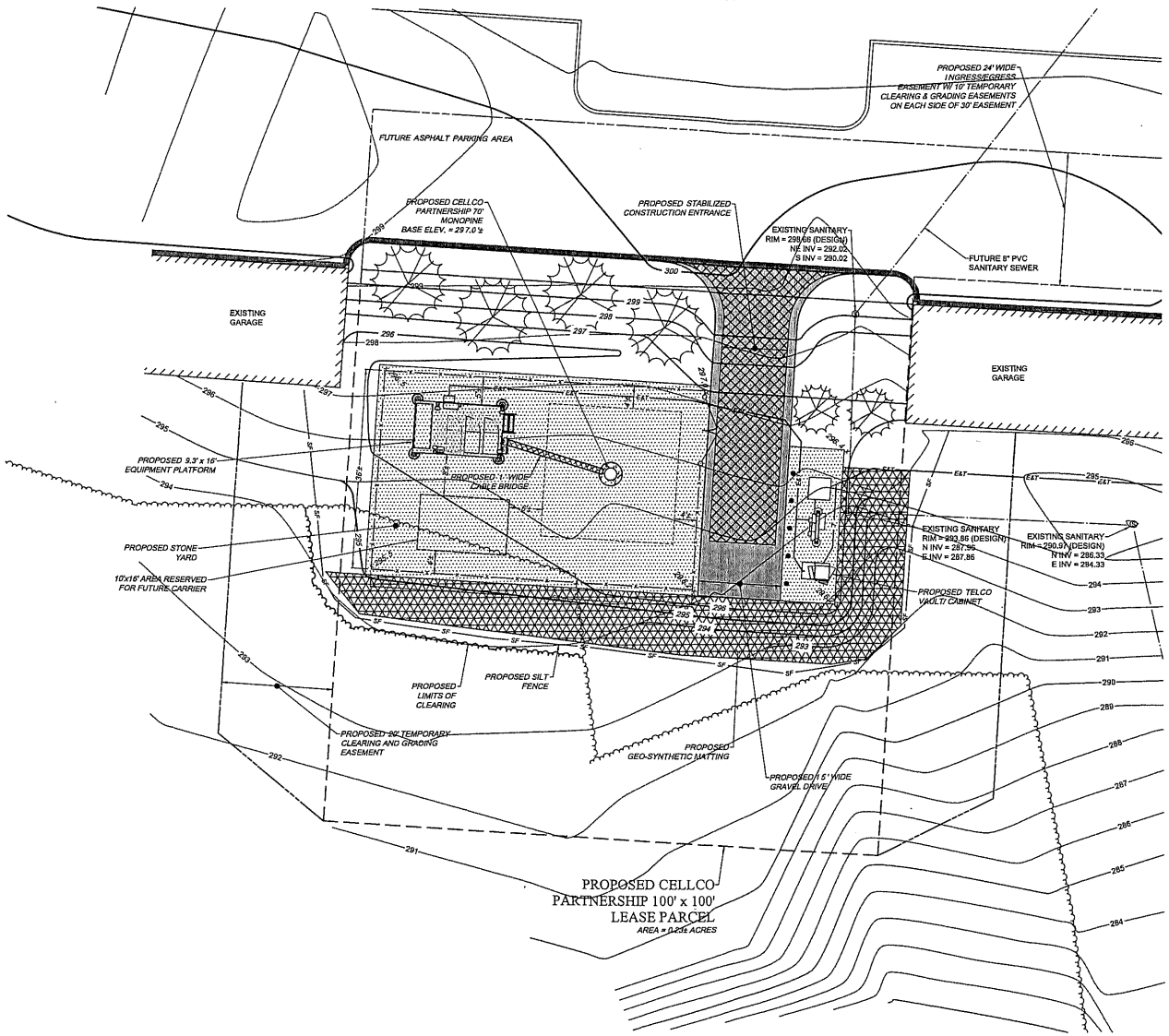
TOWN OF COLONIE
COUNTY OF ALBANY
STATE OF NEW YORK

SHEET TITLE

DETAILED SITE PLAN & NOTES

C.E. JOB NUMBER	SHEET NUMBER
4530	CA111

SHEET 4 OF 9



SLOPE STABILIZATION LEGEND

PROPOSED RIP-RAP SLOPE PROTECTION d50 = 8".

PROPOSED GEOSYNTHETIC MATTING.

NOTE:
ALL SLOPES GREATER THAN 3:1 SHALL RECEIVE EITHER GEO-SYNTHETIC MATTING OR RIP-RAP SLOPE STABILIZATION (SEE PLAN).

NOTE:
UTILITY PULL BOXES SHALL BE INSTALLED EVERY 600' OR LESS WITH PULLS ON ANY SUBSTANTIAL ROAD SWEEPS. LOCATIONS TO COORDINATED W/ UTILITY COMPANIES.

N
NORTH

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft. (22 x 34)
1 inch = 20 ft. (11 x 17)

GRADING & EROSION CONTROL PLAN
SCALE: 1" = 10' (22" x 34" SHEET)
1" = 20' (11" x 17" SHEET)

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217 LAKE AVENUE ROCHESTER, NY 14608 (585) 456-3020

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3	06/15/2016	VERIZON PLATFORM UPDATE
4	06/27/2016	PLATFORM SIZE

RELEASED BY	DATE

STATE OF NEW YORK — MARK A. COSTICH — 065871 — Licensed Professional Engineer

PROJECT ENGINEER	D.A.W.
DRAWN BY	J.S.S.
DATE	04/29/2016
SCALE	AS NOTED

ORIGINAL SIZE IN INCHES
0 1 2 3

SITE INFORMATION

LATHAM SOUTH
PROJECT #20181835542
ELKS LANE / 12110

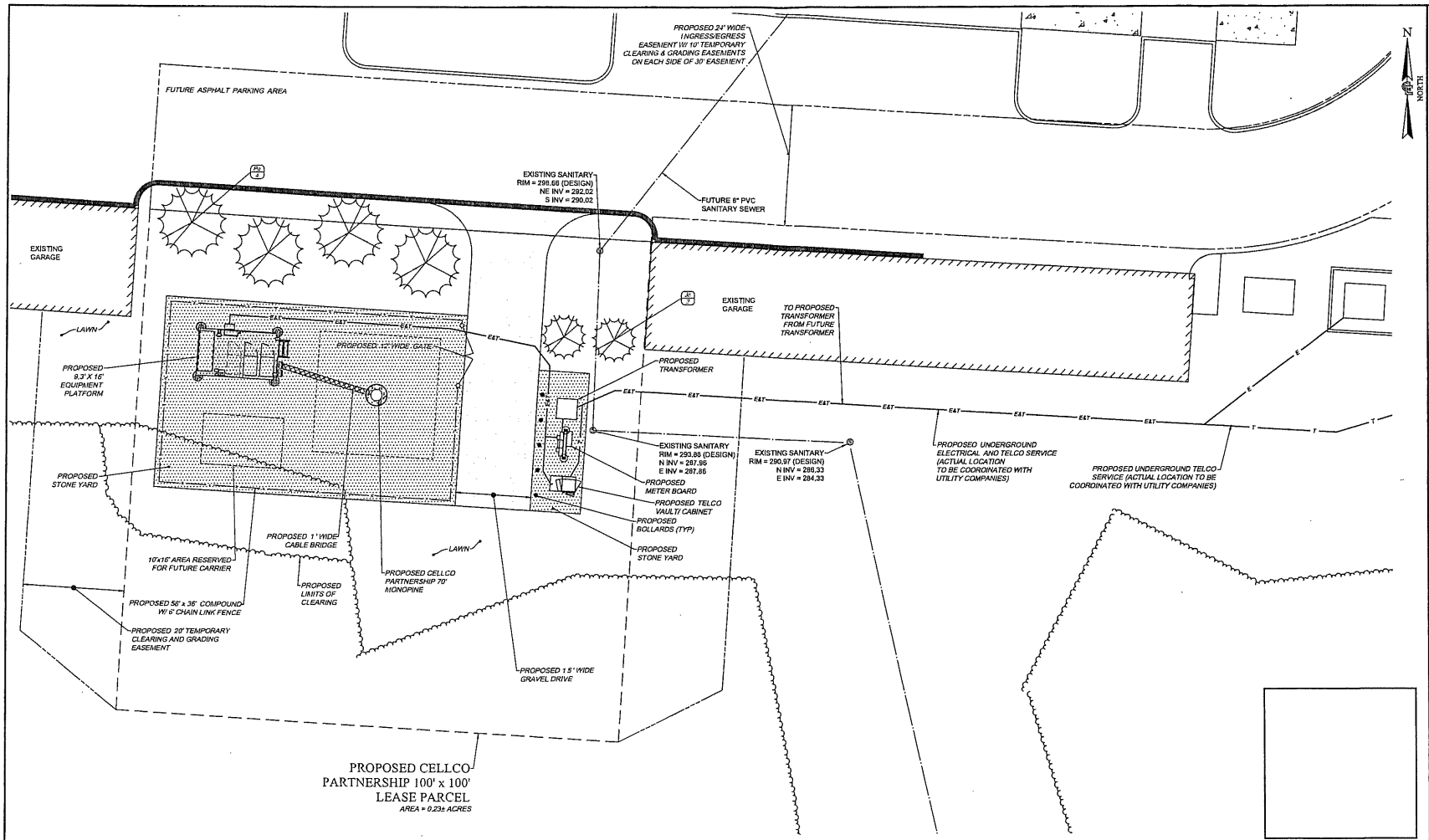
TOWN OF COLONIE
COUNTY OF ALBANY
STATE OF NEW YORK

SHEET TITLE

GRADING & EROSION CONTROL PLAN

C.E. JOB NUMBER	SHEET NUMBER
4530	CA130

SHEET 5 OF 9



UTILITY ROUTING PLAN
SCALE: 1" = 10' (22" x 34" SHEET)
1" = 20' (11" x 17" SHEET)

NOTE:
UTILITY PULL BOXES SHALL BE INSTALLED EVERY 500' OR LESS WITH PULLS ON ANY SUBSTANTIAL ROAD SWEEPS. LOCATIONS TO COORDINATED W/ UTILITY COMPANIES.

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COSTICH ENGINEERING
- CIVIL ENGINEERING
- LAND SURVEYING
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217 LAKE AVENUE
ROCHESTER, NY 14608
(585) 458-3020

WORK ORDER NUMBER | DRAWN BY

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RELEASED BY | DATE

STATE OF NEW YORK — MICHAEL J. DESIR — LICENSED PROFESSIONAL ENGINEER

PROJECT ENGINEER	D.A.W.
DRAWN BY	J.S.S.
DATE	04/29/2016
SCALE	AS NOTED

ORIGINAL SIZE IN INCHES
0 1 2 3

SITE INFORMATION

LATHAM SOUTH
PROJECT #20181835542
ELKS LANE / 12110

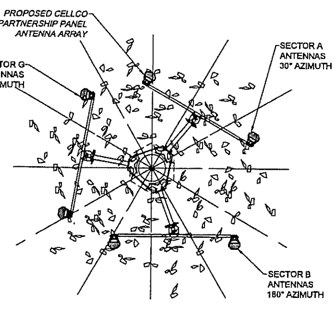
TOWN OF COLONIE
COUNTY OF ALBANY
STATE OF NEW YORK

SHEET TITLE

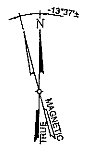
UTILITY
ROUTING PLAN

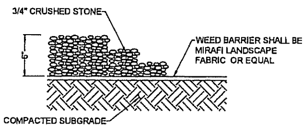
C.E. JOB NUMBER	SHEET NUMBER
4530	EA120

SHEET 6 OF 9



PLAN VIEW
PROPOSED ANTENNA LAYOUT
SCALE: 1" = 5' (22" x 34" SHEET)
1" = 10' (11" x 17" SHEET)

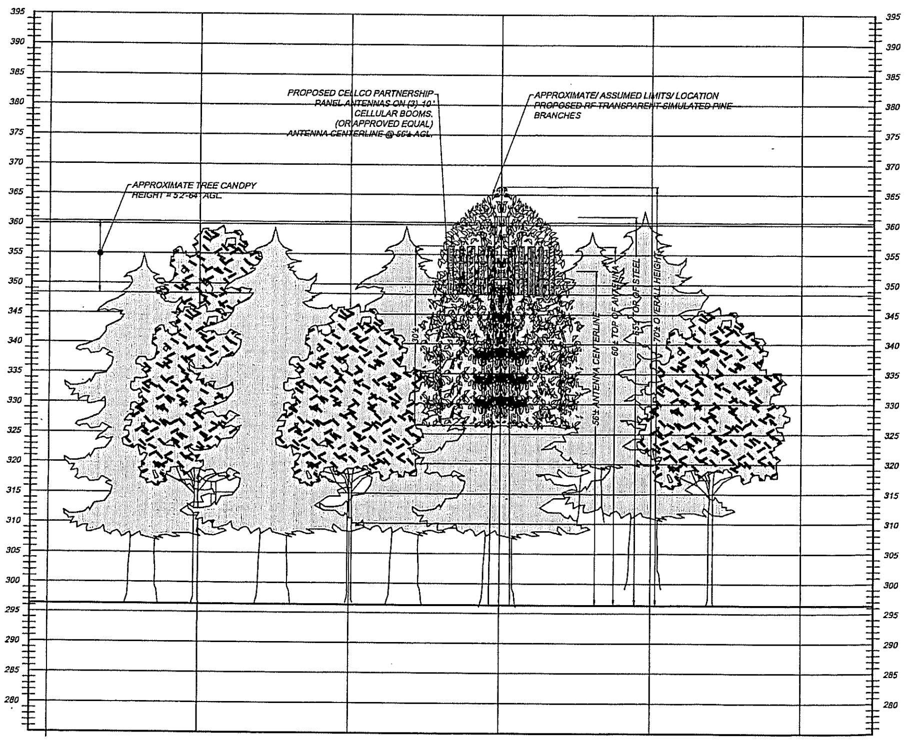




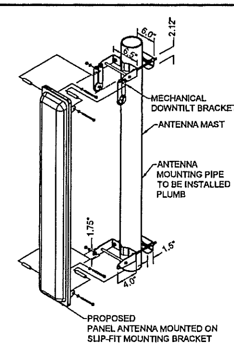
GRAVEL SURFACE/ STONE YARD
NOT TO SCALE

TOWER NOTES

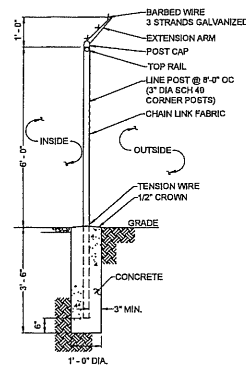
1. THE TOWER SHALL BE CONSTRUCTED WITH GALVANIZED STEEL.
2. NO FAA OBSTRUCTION LIGHTING IS PROPOSED BY CELLCO PARTNERSHIP UNLESS IT IS REQUIRED BY THE FEDERAL AVIATION ADMINISTRATION OR THE LOCAL MUNICIPALITY.
3. ALL REFERENCES TO THE TOWER AND ITS FOUNDATION ARE TO BE DIRECTED TO THE DESIGN AND DETAIL DRAWINGS BY THE TOWER SUPPLIER.
4. TOWER SHALL BE DESIGNED/ CONSTRUCTED TO ACCOMMODATE A TOTAL OF TWO WIRELESS CARRIERS.
5. THERE SHALL BE NO PERMANENT CLIMBING PEGS WITHIN 15' OF THE GROUND OF ANY TOWER.
6. PROPOSED ANTENNAS SHALL BE INSTALLED IN ACCORDANCE WITH THE SITE SPECIFIC RF ANTENNA DESIGN SHEET SUPPLIED BY THE RF SYSTEMS ENGINEER.


PROPOSED CELLCO PARTNERSHIP PANEL ANTENNAS ON (3) 10' CELLULAR BOOMS. (OR APPROVED EQUAL) ANTENNA CENTERLINE @ 56'± AGL.
APPROXIMATE/ ASSUMED LIMITS/ LOCATION PROPOSED RF TRANSPARENT SIMULATED PINE BRANCHES
APPROXIMATE TREE CANOPY HEIGHT = 52-64' AGL.
56'± ANTENNA CENTERLINE
60'± TOP OF ANTENNA
65'± TOP OF STEEL
70'± OVERALL HEIGHT
395
390
385
380
375
370
365
360
355
350
345
340
335
330
325
320
315
310
305
300
295
290
285
280

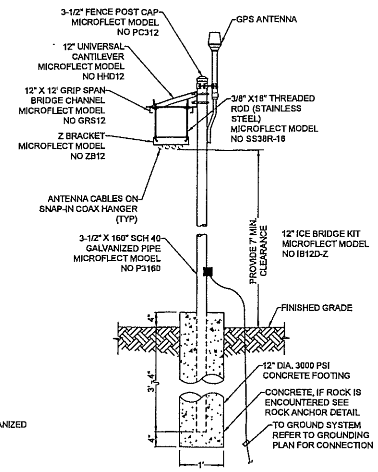
PROPOSED 70' MONOPINE
SCALE 1"=10' (22" x 34" SHEET)
1"=20' (11" x 17" SHEET)



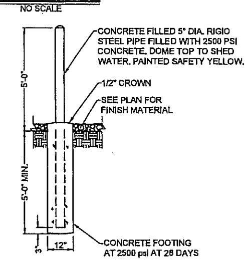
ANTENNA MOUNT
ISOMETRIC VIEW
NOT TO SCALE



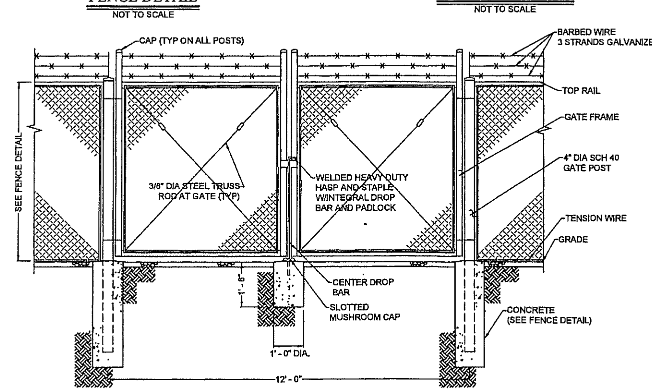
FENCE DETAIL
NOT TO SCALE


3-1/2" FENCE POST CAP MICROFLECT MODEL NO PC312
GPS ANTENNA
12" UNIVERSAL CANTILEVER MICROFLECT MODEL NO HHD12
12" X 12' GRIP SPAN BRIDGE CHANNEL MICROFLECT MODEL NO GRS12
Z BRACKET MICROFLECT MODEL NO ZB12
3/8" X18" THREADED ROD (STAINLESS STEEL) MICROFLECT MODEL NO SS38R-18
ANTENNA CABLES ON SNAP-IN COAX HANGER (TYP)
3-1/2" X 160" SCH 40 GALVANIZED PIPE MICROFLECT MODEL NO P3160
PROVIDE 7' MIN. CLEARANCE
12" ICE BRIDGE KIT MICROFLECT MODEL NO IB12D-Z
FINISHED GRADE
12" DIA. 3000 PSI CONCRETE FOOTING
CONCRETE, IF ROCK IS ENCOUNTERED SEE ROCK ANCHOR DETAIL
TO GROUND SYSTEM REFER TO GROUNDING PLAN FOR CONNECTION

SECTION VIEW
CABLE BRIDGE
NO SCALE



BOLLARD DETAIL
NOT TO SCALE


CAP (TYP ON ALL POSTS)
BARBED WIRE 3 STRANDS GALVANIZED
TOP RAIL
GATE FRAME
4" DIA SCH 40 GATE POST
3/8" DIA STEEL TRUSS ROD AT GATE (TYP)
WELDED HEAVY DUTY HASP AND STAPLE W/INTEGRAL DROP BAR AND PADLOCK
TENSION WIRE
GRADE
SEE FENCE DETAIL
CENTER DROP BAR
SLOTTED MUSHROOM CAP
CONCRETE (SEE FENCE DETAIL)
1'-6"
1'-0" DIA.
12'-0"

DOUBLE GATE DETAIL
NO SCALE

verizon
1275 JOHN STREET, SUITE #100
WEST HENRIETTA, NEW YORK 14586

COSTICH ENGINEERING
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• LAND SURVEYING
• LANDSCAPE ARCHITECTURE
217 LAKE AVENUE
ROCHESTER, NY 14608
(585) 458-3020

WORK ORDER NUMBER	DRAWN BY

NO.	DATE	ISSUE

RELEASED BY	DATE

STATE OF NEW YORK — Licensed Professional Engineer (seal)

PROJECT ENGINEER	D.A.W.
DRAWN BY	J.S.S.
DATE	04/29/2016
SCALE	AS NOTED

ORIGINAL SIZE IN INCHES

SITE INFORMATION
LATHAM SOUTH
PROJECT #20181835542
ELKS LANE / 12110

TOWN OF COLONIE
COUNTY OF ALBANY
STATE OF NEW YORK

SHEET TITLE
TOWER ELEVATION, DETAILS & NOTES

C.E. JOB NUMBER	SHEET NUMBER
4530	CA500

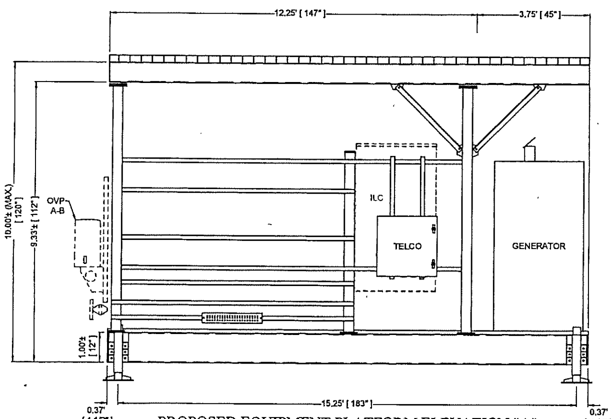
SHEET 7 OF 9

GENERAL NOTES:

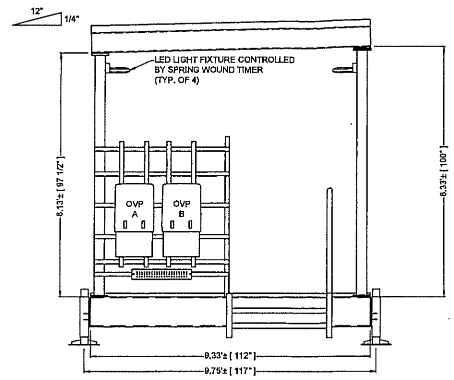
1. REFER TO EQUIPMENT PLATFORM DRAWINGS (BY OTHERS) FOR ADDITIONAL INFORMATION.
2. PLATFORM TO BE VFP, INC. MODEL# 4814, VERIZON NUMBER VZW 9.4X16-GLP-3, OR APPROVED EQUAL. VERIFY ALL DIMENSIONS WITH PLATFORM MANUFACTURERS DRAWINGS BEFORE CONSTRUCTION.

PLATFORM NOTES:

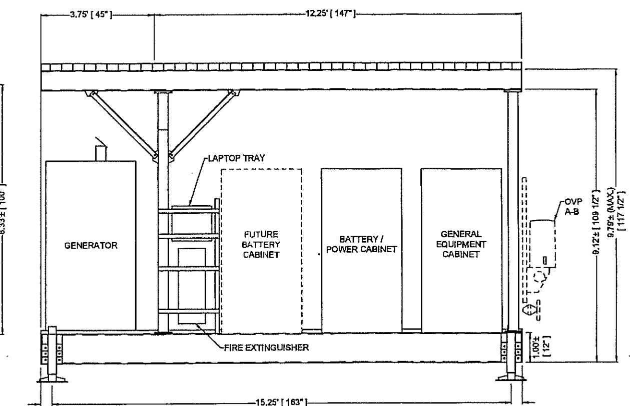
1. ALL NON-STRUCTURAL MOUNTING HARDWARE (NUTS, BOLTS, WASHERS, ETC.) SHALL BE STAINLESS STEEL.
2. ALL EMPTY CONDUITS SHALL HAVE PULL STRINGS INSTALLED.
3. PROTECT ALL EXPOSED ENDS OF STRUT CHANNELS WITH PLASTIC CAPS OR RUBBERIZED COATING.
4. LFMC WILL BE RUN AFTER EQUIPMENT INSTALLATION AND KEPT TO A MINIMUM. LFMC MUST BE SUPPORTED PER N.E.C. SPECIFICATIONS. STOP CONDUIT IN RELATIVE LOCATION AND CONNECT A RIDID-LFMC COMBINATION COUPLING ON END.
5. RUN ALL CONDUIT ALONG STRUCTURAL FRAME OR UNDERNEATH STEEL SKID FLOOR. DO NOT RUN ANY CONDUIT ON TOP OF FLOOR.
6. ALARMS SHALL BE TERMINATED OR COILED IN TELCO BOX. SEE PCCS FOR INSTRUCTIONS.
7. OVP'S MAY BE INSTALLED AS SHOWN OR MAY BE INSTALLED IN EQUIPMENT CABINET.



PROPOSED EQUIPMENT PLATFORM ELEVATION "A"
SCALE: 1" = 2' (22" x 34" SHEET)
1" = 4' (11" x 17" SHEET)

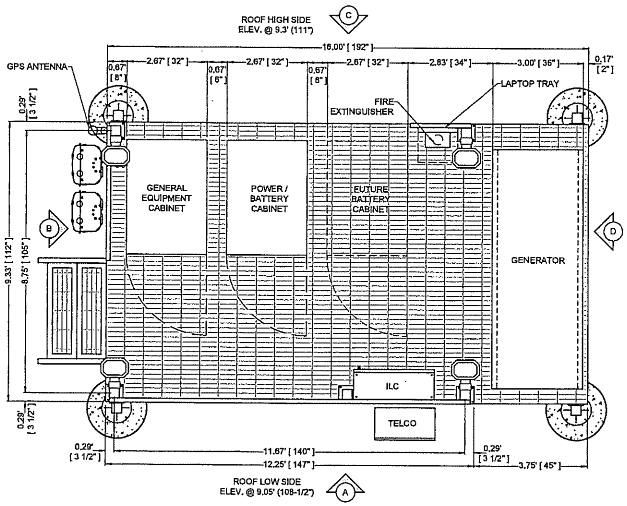


PROPOSED EQUIPMENT PLATFORM ELEVATION "B"
SCALE: 1" = 2' (22" x 34" SHEET)
1" = 4' (11" x 17" SHEET)



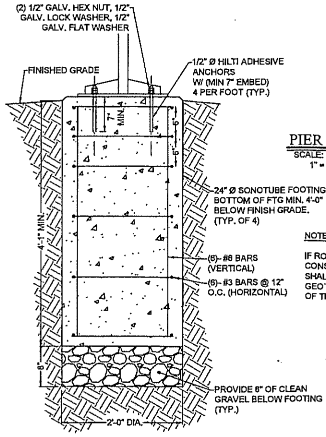
PROPOSED EQUIPMENT PLATFORM ELEVATION "C"
SCALE: 1" = 2' (22" x 34" SHEET)
1" = 4' (11" x 17" SHEET)

THE DIMENSIONS ON THESE DRAWINGS MAY NOT REFLECT THE ACTUAL PLATFORM MANUFACTURER'S FABRICATED DIMENSIONS. FIELD INSTALLERS SHOULD USE DIMENSIONS FROM THE SITE SPECIFIC PLATFORM MANUFACTURER'S DRAWINGS TO LOCATE CONDUITS, FOUNDATION SIZE, AND OTHER CRITICAL MEASUREMENTS.



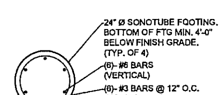
ROOF HIGH SIDE ELEV. @ 9.3' (111")
16.00' [192"]
GPS ANTENNA
2.67' [32"]
2.83' [34"]
3.00' [36"]
0.67' [8"]
0.17' [2"]
LAPTOP TRAY
FIRE EXTINGUISHER
GENERAL EQUIPMENT CABINET
POWER / BATTERY CABINET
FUTURE BATTERY CABINET
GENERATOR
ILC
TELCO
9.33' [112"]
8.75' [105"]
0.29' [3 1/2"]
11.67' [140"]
12.25' [147"]
3.75' [45"]
ROOF LOW SIDE ELEV. @ 9.05' (108-1/2")

PROPOSED EQUIPMENT PLATFORM PLAN
SCALE: 1" = 2' (22" x 34" SHEET)
1" = 4' (11" x 17" SHEET)



(2) 1/2" GALV. HEX NUT, 1/2" GALV. LOCK WASHER, 1/2" GALV. FLAT WASHER
FINISHED GRADE
1/2" Ø HILTI ADHESIVE ANCHORS W/ (MIN 7" EMBED) 4 PER FOOT (TYP.)
7" MIN.
24" Ø SONOTUBE FOOTING. BOTTOM OF FTG MIN. 4'-0" BELOW FINISH GRADE. (TYP. OF 4)
4'-1" MIN.
(6)- #6 BARS (VERTICAL)
(6)- #3 BARS @ 12" O.C. (HORIZONTAL)
PROVIDE 8" OF CLEAN GRAVEL BELOW FOOTING (TYP.)
2'-0" DIA.

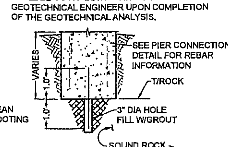
PIER CONNECTION DETAIL
SCALE: 1" = 2' (22" x 34" SHEET)
1" = 4' (11" x 17" SHEET)



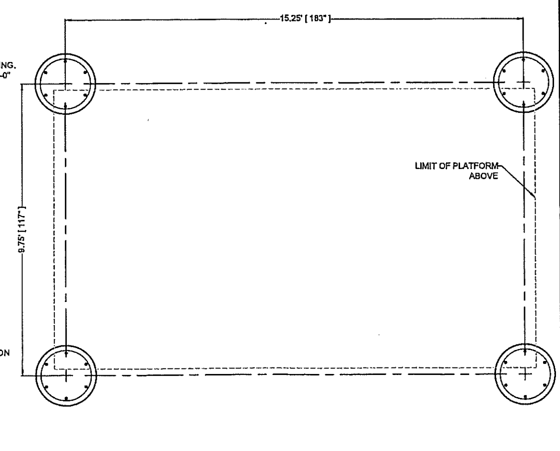
PIER DETAIL (TOP)
SCALE: 1" = 2' (22" x 34" SHEET)
1" = 4' (11" x 17" SHEET)

NOTE:

IF ROCK IS ENCOUNTERED, SITE SPECIFIC CONSTRUCTION DETAILS FOR ROCK ANCHORS SHALL BE COORDINATED WITH THE GEOTECHNICAL ENGINEER UPON COMPLETION OF THE GEOTECHNICAL ANALYSIS.



ROCK ANCHOR DETAIL
SCALE: 1" = 1' (22" x 34" SHEET)
1" = 2' (11" x 17" SHEET)



PROPOSED CONCRETE PIER LOCATION PLAN
SCALE: 1" = 2' (22" x 34" SHEET)
1" = 4' (11" x 17" SHEET)

verizon
1275 JOHN STREET, SUITE #100
WEST HENRIETTA, NEW YORK 14586

COSTICH ENGINEERING
• CIVIL ENGINEERING
• LAND SURVEYING
• LANDSCAPE ARCHITECTURE
217 LAKE AVENUE ROCHESTER, NY 14608 (585) 458-3020

WORK ORDER NUMBER		DRAWN BY
NO.	DATE	ISSUE
1	10/13/2016	UPDATED PLATFORM
2	06/15/2018	VERIZON PLATFORM UPDATE

RELEASED BY	DATE

STATE OF NEW YORK — MARK R. COSTICH — Licensed Professional Engineer — No. 065971

PROJECT ENGINEER	D.A.W.
DRAWN BY	J.S.S.
DATE	04/29/2016
SCALE	AS NOTED

ORIGINAL SIZE IN INCHES

SITE INFORMATION
LATHAM SOUTH
PROJECT #20181835542
ELKS LANE / 12110

TOWN OF COLONIE
COUNTY OF ALBANY
STATE OF NEW YORK

SHEET TITLE
EQUIPMENT PLATFORM DETAILS & NOTES

C.E. JOB NUMBER	SHEET NUMBER
4530	CA501

SHEET 8 OF 9

- PROPOSED ON SITE DISTURBANCE IS 0.31± ACRES THEREFORE STORMWATER PERMITTING IS NOT REQUIRED PER N.Y.S.D.E.C. GUIDELINES.

1. STABILIZED CONSTRUCTION ENTRANCE

- ALL VEHICLES AND EQUIPMENT MUST ENTER THE CONSTRUCTION SITE VIA STABILIZED CONSTRUCTION ENTRANCE ONLY.
- A STABILIZED CONSTRUCTION ENTRANCE HAS BEEN PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO ADJACENT ACCESS DRIVES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED WASHED OR TRACKED ONTO ADJACENT ACCESS DRIVES MUST BE REMOVED IMMEDIATELY.
- DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WHICH ARE PRONE TO BLOWING FROM THE WIND WILL BE COVERED WITH A TARPAULIN.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

2. TEMPORARY STABILIZATION PRACTICES

ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED FOR MORE THAN 14 DAYS MUST BE SEEDED AND MULCHED IMMEDIATELY. THE SOIL SHALL BE TESTED TO DETERMINE THE AMOUNT OF AMENDMENTS NEEDED, DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR MAY BE SEEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEEDING MIXTURE OF RYE GRASS AT A RATE OF 30 POUNDS PER ACRE AND MULCH. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL BE REDISTURBED WITHIN ONE YEAR MUST BE SEEDED AND MULCHED WITH A PERMANENT SEED MIXTURE AND MULCH. DIVERSIONS, CHANNELS, SEDIMENTATION BASINS, AND STOCKPILES MUST BE SEEDED AND MULCHED IMMEDIATELY.

ALL TEMPORARY EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE VEGETATIVE COVER IS ESTABLISHED.

3. PERMANENT STABILIZATION PRACTICES

PERMANENT HYDROSEED STABILIZATION FOR SLOPES LESS THAN 3H:1V SHALL BE AS FOLLOWS:

WOODED/ SHADY AREAS:
WOODS SEED MIX - ERNMX-132-1

COMMON NAME	BOTANICAL NAME
VIRGINIA WILD RYE	30% ELYMUS VIRGINICUS
ANNUAL RYEGRASS	20% LOLIUM MULTIFLORUM
'SHELTER' SWITCHGRASS	15% PANICUM VIRGATUM, 'SHELTER'
CREPING RED FESCUE	10% FESTUCA RUBRA
AUTUMN BENTGRASS	5% AGROSTIS PERENNANS
FOX SEDGE	5% CAREX VULPINOIDEA
SHOWY TICK TREFOIL	5% DESMODIUM CANADENSE
NIMBLE WILL	5% MUHLENBERGIA SCHREBERI
'TIOGA' DEER TONGUE	5% PANICUM CLANDESTINUM, 'TIOGA'
TOTAL:	100% SEEDING RATE = 30LB/ ACRE
	FERTILIZER RATE = 600LB/ ACRE

OPEN/ SUNNY AREAS:
MEADOW SEED MIX - NEW YORK STANDARDS AND SPECIFICATIONS MIX, 6

COMMON NAME	BOTANICAL NAME
CREEPING RED FESCUE	36% FESTUCA RUBRA
TALL FESCUE	36% FESTUCA ARUNDINACEA
PERENNIAL RYEGRASS	10% LOLIUM PERENNE
BIRDSFOOT TREFOIL	18% LOTUS CORNICULATUS
TOTAL:	100% SEEDING RATE = 55 LB/ ACRE
	FERTILIZER RATE = 600LB/ ACRE

FERTILIZER: PROVIDE FERTILIZER WHICH IS COMPLETE AND AT LEAST 50% OF THE TOTAL NITROGEN IS DERIVED FROM, UREAFORM. THE BALANCE OF NITROGEN SHALL BE PRESENT AS METHYLENE UREA, WATER SOLUBLE UREA, NITRATE AND AMMONIACAL COMPOUNDS. THE FERTILIZER SHALL HAVE THE FOLLOWING ANALYSIS: 5% NITROGEN, 10% PHOSPHORUS, 10% POTASH.

MULCH: HYDRO-MULCH SHALL BE CONWED HYDROMULCH OR CONWED HYDROMULCH2000 FIBER (WITH TACK), OR APPROVED EQUAL. ALL SLURRY APPLICATIONS FOR SEEDING WITH A CELLULOSE TACKIFIER MUST BE ACCOMPANIED BY A STRAW MULCH BINDER AT THE RATE OF 3 TONS/ ACRE.

IF MULCHING IS NOT APPLIED WITH HYDROSEED MIXTURE, (I.E. NON-GERMINATING PERIODS), APPROVED MULCHING CONSISTING OF HYDRO-MULCH FIBER OR STRAW SHALL BE SPREAD EVENLY AT THE RATE OF 3 TONS/ ACRE. MULCH MUST BE TRACKED INTO PLACE.

NOTE: SEED, FERTILIZER, HYDRO-MULCH, WATER AND INOCULATE SHALL BE THOROUGHLY MIXED IN THE HYDROSEEDING MIXING TANK PRIOR TO APPLICATION.

LIMING RATE: APPLY GROUND AGRICULTURAL LIMESTONE TO OBTAIN A PH OF 6.0 IN THE UPPER 2 INCHES OF SOIL MEETING THE FOLLOWING GRADATION REQUIREMENTS:

HYDRO-MULCH - 1200 POUNDS/ ACRE
WATER - 500 GALLONS/ ACRE MINIMUM
INOCULATE - 4 TIMES THE MANUFACTURER'S RECOMMENDED RATE.

SEEDING DATES: 4/1 - 6/15 OR 8/16 - 10/15.

PARKING/ DRIVE AREAS OF THE SITE WILL BE STABILIZED BY APPLYING STONE SUB-BASE.

PERMANENT STABILIZATION FOR SLOPES 2H:1V TO 3H:1V SHALL BE AS FOLLOWS:
EITHER THE INSTALLATION RIP-RAP SLOPE PROTECTION
AND/ OR
THE INSTALLATION OF THE NORTH AMERICAN GREEN C-150 GEO-SYNTHETIC MATTING (OR APPROVED EQUAL) WITH THE FOLLOWING SEEDING, MULCHING AND FERTILIZING SPECIFICATIONS:

WOODED/ SHADY AREAS:
WOODS SEED MIX - ERNMX-132-1

COMMON NAME	BOTANICAL NAME
VIRGINIA WILD RYE	30% ELYMUS VIRGINICUS
ANNUAL RYEGRASS	20% LOLIUM MULTIFLORUM
'SHELTER' SWITCHGRASS	15% PANICUM VIRGATUM, 'SHELTER'
CREPING RED FESCUE	10% FESTUCA RUBRA
AUTUMN BENTGRASS	5% AGROSTIS PERENNANS
FOX SEDGE	5% CAREX VULPINOIDEA
SHOWY TICK TREFOIL	5% DESMODIUM CANADENSE
NIMBLE WILL	5% MUHLENBERGIA SCHREBERI
'TIOGA' DEER TONGUE	5% PANICUM CLANDESTINUM, 'TIOGA'
TOTAL:	100% SEEDING RATE = 30LB/ ACRE
	FERTILIZER RATE = 600LB/ ACRE

OPEN/ SUNNY AREAS:
MEADOW SEED MIX - NEW YORK STANDARDS AND SPECIFICATIONS MIX, 6

COMMON NAME	BOTANICAL NAME
CREEPING RED FESCUE	36% FESTUCA RUBRA
TALL FESCUE	36% FESTUCA ARUNDINACEA
PERENNIAL RYEGRASS	10% LOLIUM PERENNE
BIRDSFOOT TREFOIL	18% LOTUS CORNICULATUS
TOTAL:	100% SEEDING RATE = 55 LB/ ACRE
	FERTILIZER RATE = 600LB/ ACRE

FERTILIZER: PROVIDE FERTILIZER WHICH IS COMPLETE AND AT LEAST 50% OF THE TOTAL NITROGEN IS DERIVED FROM, UREAFORM. THE BALANCE OF NITROGEN SHALL BE PRESENT AS METHYLENE UREA, WATER SOLUBLE UREA, NITRATE AND AMMONIACAL COMPOUNDS. THE FERTILIZER SHALL HAVE THE FOLLOWING ANALYSIS: 5% NITROGEN, 10% PHOSPHORUS, 10% POTASH.

MULCH: HYDRO-MULCH SHALL BE CONWED HYDROMULCH OR CONWED HYDROMULCH2000 FIBER (WITH TACK), OR APPROVED EQUAL. ALL SLURRY APPLICATIONS FOR SEEDING WITH A CELLULOSE TACKIFIER MUST BE ACCOMPANIED BY A STRAW MULCH BINDER AT THE RATE OF 3 TONS/ ACRE.

IF MULCHING IS NOT APPLIED WITH HYDROSEED MIXTURE, (I.E. NON-GERMINATING PERIODS), APPROVED MULCHING CONSISTING OF HYDRO-MULCH FIBER OR STRAW SHALL BE SPREAD EVENLY AT THE RATE OF 3 TONS/ ACRE. MULCH MUST BE TRACKED INTO PLACE.

NOTE: SEED, FERTILIZER, HYDRO-MULCH, WATER AND INOCULATE SHALL BE THOROUGHLY MIXED IN THE HYDROSEEDING MIXING TANK PRIOR TO APPLICATION.

LIMING RATE: APPLY GROUND AGRICULTURAL LIMESTONE TO OBTAIN A PH OF 6.0 IN THE UPPER 2 INCHES OF SOIL MEETING THE FOLLOWING GRADATION REQUIREMENTS:

HYDRO-MULCH - 1200 POUNDS/ ACRE
WATER - 500 GALLONS/ ACRE MINIMUM
INOCULATE - 4 TIMES THE MANUFACTURER'S RECOMMENDED RATE.

SEEDING DATES: 4/1 - 6/15 OR 8/16 - 10/15.

SEE PLANS FOR SLOPE STABILIZATION TYPES/ LOCATIONS.

4. CONSTRUCTION SEQUENCE OF EVENTS

- ALL SOIL AND EROSION CONTROL PRACTICES TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE OR IN THE PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2. INSTALL SILT FENCE, CLEARING AND GRUBBING.
3. ROUGH GRADING INCLUDING SWALES. INSTALL CHECK DAMS IN SWALES AS CONSTRUCTION PROGRESSES.
4. BOX ROAD FOR ROAD CONSTRUCTION.
5. EXCAVATE FOR ELECTRIC AND TELEPHONE (TRENCH SPOILS SHALL BE PLACED BETWEEN EDGE OF PROPOSED GRAVEL DRIVE AND PROPOSED UTILITY TRENCH), INSTALL CONDUIT AND IMMEDIATELY BACKFILL TRENCH.
6. CONSTRUCTION OF THE ACCESS ROAD AND DRAINAGE SWALES.
7. ALONG ACCESS DRIVEWAY, REPLACE TOPSOIL ON DISTURBED AREAS TO BE SEEDED, FINE GRADE, LIME, FERTILIZE, SEED AND MULCH.
8. STRIP AND STOCKPILE TOPSOIL IN COMPOUND AREA. PROTECT WITH FILTER FABRIC.
9. EXCAVATE FOR TOWER AND EQUIPMENT PLATFORM FOUNDATIONS WITH EXCAVATED MATERIALS STOCKPILED FOR FUTURE FINAL GRADING. ERECT TOWER AND EQUIPMENT PLATFORM. ESTABLISH STONE YARD. INSTALL FENCE AND ROUGH GRADE.
10. IN THE COMPOUND AREA REPLACE TOPSOIL ON DISTURBED AREAS TO BE SEEDED, INSTALL NORTH AMERICAN GREEN SC150 DOUBLE NET EROSION CONTROL BLANKET, FINE GRADE, LIME, FERTILIZE, SEED AND MULCH AREA.
11. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS REMAINING AFTER 80% UNIFORM VEGETATIVE COVER STABILIZATION IS ACHIEVED, AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY.

NOTE: THESE ACTIVITIES SHALL BE PERFORMED IN SUCH A MANNER THAT ALL COMPONENTS OF ACTIVITIES WILL BE COMPLETED AND STABILIZED WITH ONE OF THESE FOLLOWING METHODS BEFORE PROCEEDING TO THE NEXT SECTION:
- NORTH AMERICAN GREEN SC150 DOUBLE NET EROSION CONTROL BLANKET ON THE EXCAVATED SLOPES
- COMPACTED STONE BASE ON THE ROAD.

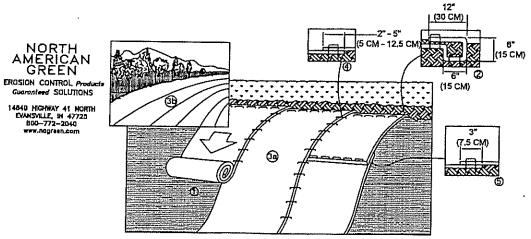
5. MAINTENANCE/ INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

IN ADDITION TO PROCEDURES OUTLINED IN "CONSTRUCTION SEQUENCES", THESE ARE THE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS UNTIL THE SITE IS PERMANENTLY STABILIZED.

- ALL CONTROL MEASURES WILL BE INSPECTED AT LEAST ONCE EACH WEEK BY THE CONTRACTOR FOLLOWING ANY STORM EVENT.
- ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY.
- SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POST, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
- TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS AND HEALTHY GROWTH.

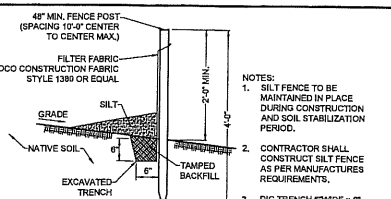
MAINTENANCE OF EROSION CONTROL DEVICES AND CONSTRUCTION SEQUENCE OF MAJOR ACTIVITIES



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" (15 CM) DEEP x 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/ STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH, BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP'S BACK OF SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/ STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S (A.) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL ROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/ STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™, STAPLES/ STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP'S WIDTH.

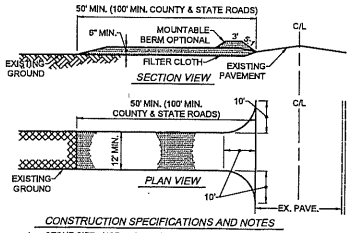
* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OS STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

BANK STABILIZATION DETAIL
NO SCALE



NOTES:
1. SILT FENCE TO BE MAINTAINED IN PLACE DURING CONSTRUCTION AND SOIL STABILIZATION PERIOD.
2. CONTRACTOR SHALL CONSTRUCT SILT FENCE AS PER MANUFACTURES REQUIREMENTS.
3. DIG TRENCH 6"WIDE x 6" DEEP, BURY BOTTOM 12" OF FABRIC, TAMP IN PLACE.

SILT FENCE DETAIL
NO SCALE



CONSTRUCTION SPECIFICATIONS AND NOTES

1. STONE SIZE - USE 1-4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED, (100 FT. MIN. FOR ACCESS TO COUNTY OR STATE ROADS) NOT LESS THAN 50 FT. (EXCEPT ON SINGLE RESIDENCE LOT WHERE A 30 FT. MINIMUM LENGTH SHALL APPLY.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING AND/OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF THE PIPING IS IMPRACTICAL, A MOUNTING BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION & NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE DETAIL
NO SCALE

verizon
1275 JOHN STREET, SUITE #100
WEST HENRIETTA, NEW YORK 14586

COSTICH ENGINEERING
• CIVIL ENGINEERING
• LAND SURVEYING
• LANDSCAPE ARCHITECTURE
217 LAKE AVENUE
ROCHESTER, NY 14608
(585) 458-3020

WORK ORDER NUMBER | DRAWN BY

NO.	DATE	ISSUE

RELEASED BY | DATE

STATE OF NEW YORK — JOSEPH R. COSTICH — 065 065571 — Licensed Professional Engineer

PROJECT ENGINEER: D.A.W.
DRAWN BY: J.S.S.
DATE: 04/29/2016
SCALE: AS NOTED

ORIGINAL SIZE IN INCHES
0 1 2 3

SITE INFORMATION

LATHAM SOUTH
PROJECT #20181835542
ELKS LANE / 12110

TOWN OF COLONIE
COUNTY OF ALBANY
STATE OF NEW YORK

SHEET TITLE

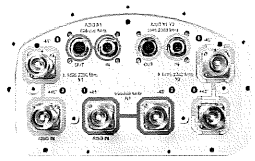
EROSION CONTROL DETAILS & NOTES

C.E. JOB NUMBER: 4530
SHEET NUMBER: CA502
SHEET 9 OF 9

TAB 15

Product Specifications

COMMSCOPE®



NHH-65C-R2B

6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 65° HPBW, 2x RET. Both high bands share the same electrical tilt.

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

Electrical Specifications

Frequency Band, MHz	**698–806**	**806–896**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2360**
Gain, dBi	16.0	16.1	17.3	17.7	18.3	18.2
Beamwidth, Horizontal, degrees	65	62	74	66	62	59
Beamwidth, Vertical, degrees	9.0	7.9	5.6	5.2	4.9	4.5
Beam Tilt, degrees	0–11	0–11	0–7	0–7	0–7	0–7
USLS (First Lobe), dB	21	18	19	20	22	18
Front-to-Back Ratio at 180°, dB	35	31	33	29	29	30
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	400	400	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	**698–806**	**806–896**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2360**
Gain by all Beam Tilts, average, dBi	15.8	15.9	16.9	17.5	18.0	17.9
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.4	±0.3	±0.6	±0.4
Gain by Beam Tilt, average, dBi	0 ° | 15.9	0 ° | 15.8	0 ° | 16.9	0 ° | 17.4	0 ° | 17.9	0 ° | 17.8
	5 ° | 15.9	5 ° | 16.0	4 ° | 17.0	4 ° | 17.5	4 ° | 18.0	4 ° | 17.9
	11 ° | 15.5	11 ° | 15.7	7 ° | 16.9	7 ° | 17.4	7 ° | 18.0	7 ° | 17.9
Beamwidth, Horizontal Tolerance, degrees	±1.2	±1.6	±5.3	±3.4	±6	±3.1
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.4	±0.3	±0.2	±0.2	±0.2
USLS, beampeak to 20° above beampeak, dB	15	14	17	16	17	15
Front-to-Back Total Power at 180° ± 30°, dB	26	24	28	25	25	24
CPR at Boresight, dB	18	26	20	25	20	17
CPR at Sector, dB	15	9	11	10	8	2

* 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.

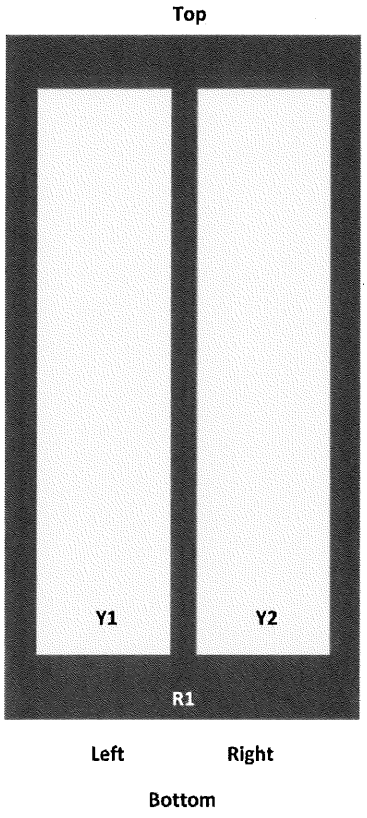
Array Layout

Product Specifications

COMMSCOPE®

NHH-65C-R2B

NHH



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-896	1-2	1	ANxxxxxxxxxxxxxxx1
Y1	1695-2360	3-4	2	ANxxxxxxxxxxxxxxx2
Y2	1695-2360	5-6		

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 – 896 MHz
Antenna Type	Sector
Band	Multiband
Performance Note	Outdoor usage
Total Input Power, maximum	500 W @ 50 °C

Mechanical Specifications

RF Connector Quantity, total	6
RF Connector Quantity, low band	2
RF Connector Quantity, high band	4
RF Connector Interface	7-16 DIN Female

Product Specifications

COMMSCOPE®

NHH-65C-R2B

Color	Light gray
Grounding Type	RF connector body grounded to reflector and mounting bracket
Radiator Material	Copper | Low loss circuit board
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	875.0 N @ 150 km/h 196.7 lbf @ 150 km/h
Wind Loading, lateral	271.0 N @ 150 km/h 60.9 lbf @ 150 km/h
Wind Loading, rear	1028.0 N @ 150 km/h 231.1 lbf @ 150 km/h
Wind Speed, maximum	241 km/h | 150 mph

Dimensions

Length	2438.0 mm | 96.0 in
Width	301.0 mm | 11.9 in
Depth	180.0 mm | 7.1 in
Net Weight, without mounting kit	23.4 kg | 51.6 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 | Port 3
Internal RET	High band (1) | Low band (1)
Power Consumption, idle state, maximum	2.0 W
Power Consumption, normal conditions, maximum	13.0 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	2561.0 mm | 100.8 in
Width	409.0 mm | 16.1 in
Depth	299.0 mm | 11.8 in
Shipping Weight	36.1 kg | 79.6 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

Product Specifications

COMMSCOPE®

NHH-65C-R2B

Included Products

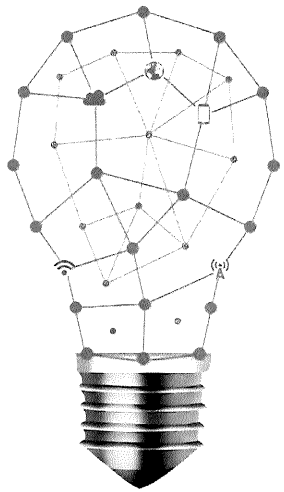
BSAMNT-1 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

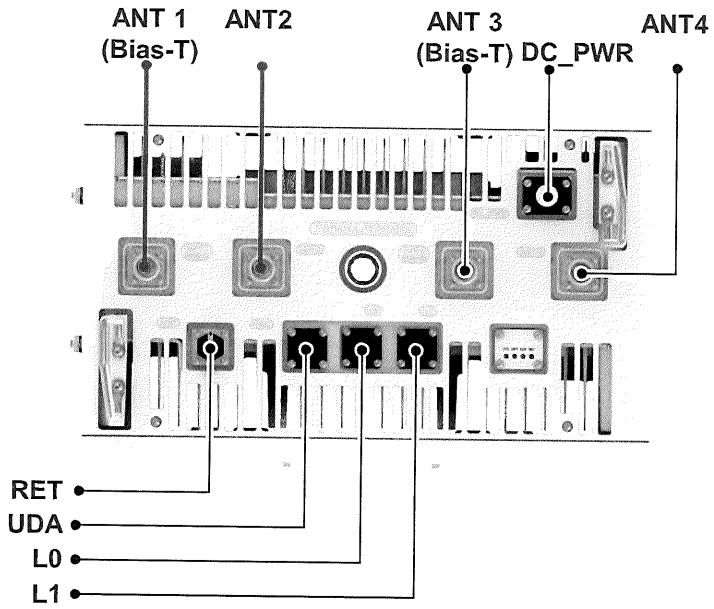
SAMSUNG

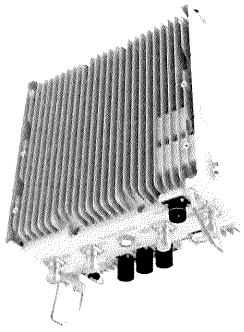
Samsung RRH



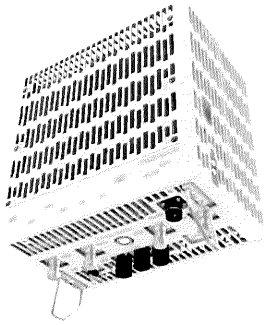
Macro - 700/850MHz RRH (B13+B5)

700/850MHz Dual-Band RRH (B13+B5)





w/o Finger Guard



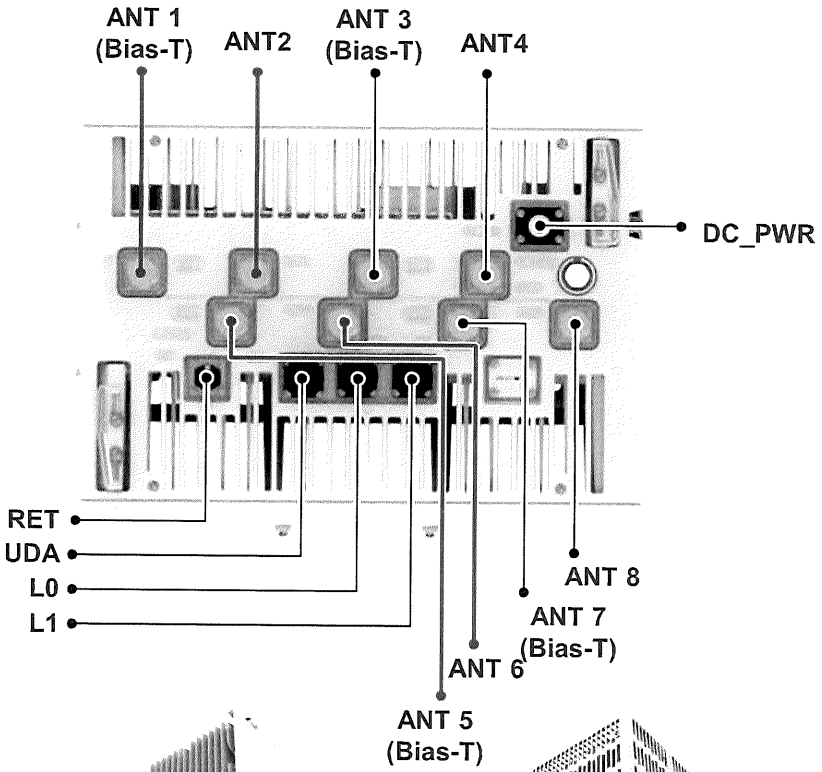
w/ Finger Guard

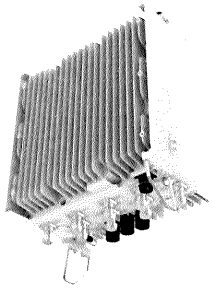
Note : 2T supported in ANT1 and ANT2

Category		Specification	
RF	Band	Band13 (700MHz)	Band5 (850MHz)
	Frequency	DL : 746 ~ 756MHz UL : 777 ~ 787MHz	DL : 869 ~ 894MHz UL : 824 ~ 849MHz
	IBW/OBW	10MHz/10MHz	25MHz/25MHz
	# of Carriers	1 Carriers	3 Carriers
	Total # of Carriers	4 Carriers	
	RF power	Total 320W 40W x 4 or 60W x 2	40W x 4 or 60W x 2
	Ant. configuration	4T4R/2T4R/2T2R, SW configurable	
Electrical	Input Power	-48VDC (-38VDC to -57VDC)	
	Power consumption	About 1106 Watt @ 100% RF load, typical conditions + TMA/RET	
Mechanical	Size (W × H× D)	15" x 15" x 8.1" (380 x 380 x 207 mm)	
	Volume	29.9L	
	Weight	70.3lb (31.9kg), w/o solar shield	
Environmental	Operating temperature	-40°C ~ 55°C (40°F~131°F), w/o solar load	
Feature	Modulation	256 QAM support	
	Spectrum Analyzer	Support for TX/RX	
	PIM Cancellation	Support	
	NB-IoT	Support	
	CPRI Cascade	Not supported	
	Optic Interface	20km, 2 ports (9.8Gbps x 2), SFP, single mode, Duplex/Bi-Di	
	RET & TMA	AISG 2.2	
	Bias-T	2 ports (Max. 49W)	
	External Alarm	4	

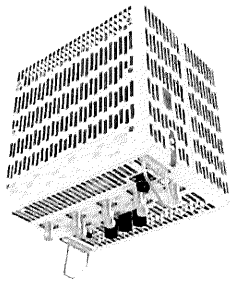
Macro - PCS/AWS RRH (B2+B66)

PCS/AWS Dual-Band RRH (B2+B66)





w/o Finger Guard



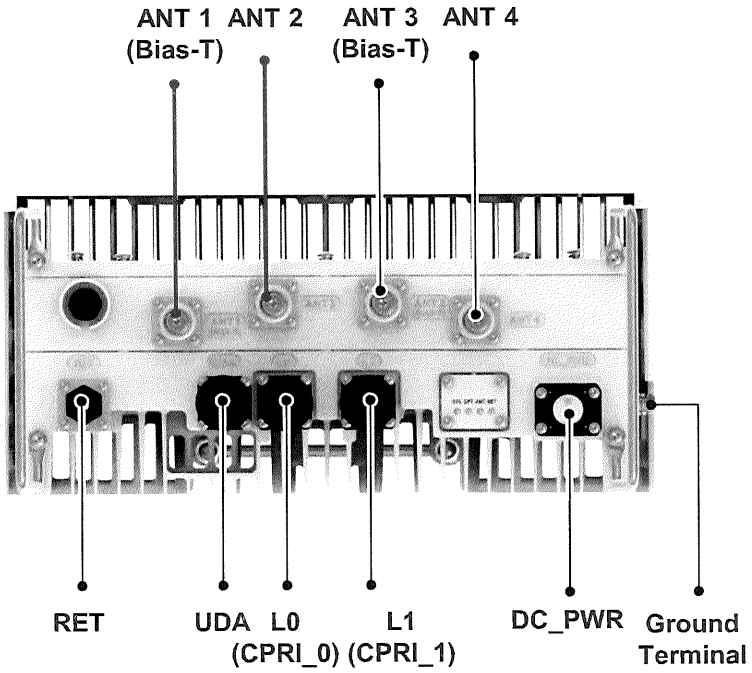
w/ Finger Guard

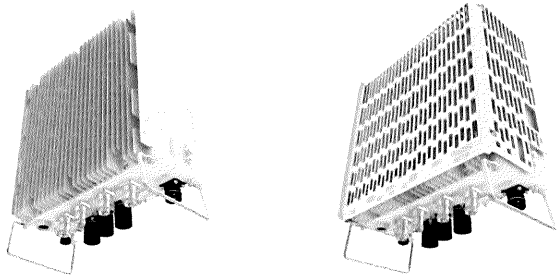
Note : 2T supported in ANT1 and ANT2 for B66
2T supported in ANT5 and ANT6 for B2

Category		Specification	
RF	Band	Band2 (PCS)	Band66 (AWS)
	Frequency	DL : 1930 ~ 1990MHz UL : 1850 ~ 1910MHz	DL : 2110 ~ 2180MHz UL : 1710 ~ 1780MHz
	IBW/OBW	60MHz/20MHz	70MHz/30MHz
	# of Carriers	2 Carriers	3 Carriers
	Total # of Carriers	4 Carriers	
	RF power	Total 320W (for OBW 40MHz) 40W x 4 or 60W x 2	60W x 4 or 90W x 2
	Ant. configuration	4T4R/2T4R/2T2R, SW configurable	
Electrical	Input Power	-48VDC (-38VDC to -57VDC)	
	Power consumption	About 1270 Watt @ 100% RF load, typical conditions (w/ BAS Filter)+ TMA/RET	
Mechanical	Size (W × H× D)	15” x 15” x 10” (380 x 380 x 255 mm), w/ BAS	
	Volume	36.8L	
	Weight	84.4lb (38kg), w/o solar shield	
Environmental	Operating temperature	-40°C ~ 55°C (40°F~131°F), w/o solar load	
Feature	Modulation	256 QAM support	
	Spectrum Analyzer	Support for TX/RX	
	PIM Cancellation	Support	
	NB-IoT	Support	
	CPRI Cascade	Not supported	
	Optic Interface	20km, 2 ports (9.8Gbps x 2), SFP, single mode, Duplex/Bi-Di	
	RET & TMA	AISG 2.2	
	Bias-T	4 ports, 2 ports per Band (Max. 49W)	
	External Alarm	4	

Macro - 700MHz RRH (B13)

700MHz Single-Band RRH (B13)





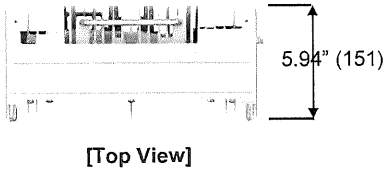
w/o Finger Guard w/ Finger Guard

Note : 2T supported in ANT1 and ANT2

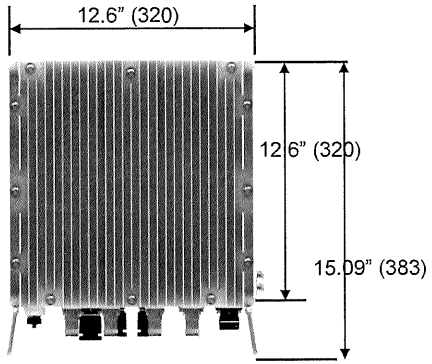
Category		Specification
RF	Band	B13 (700MHz)
	Frequency	DL : 746 ~ 756MHz UL : 777 ~ 787MHz
	IBW/OBW	10MHz/10MHz
	# of Carriers	1 Carrier
	Total # of Carriers	1 Carrier
	RF power	Total 160W (40W x 4 or 60W x2)
	Ant. configuration	4T4R/2T4R/2T2R, SW configurable
Electrical	Input Power	-48VDC (-38VDC to -57VDC)
	Power consumption	About 620 Watt @ 100% RF load, typical conditions + TMA/RET
Mechanical	Size (W × H× D)	12.6" x 12.6" x 6.0" (320 x 320 x 151 mm)
	Volume	15.5L
	Weight	37.5lb (17kg), w/o solar shield
Environmental	Operating temperature	-40°C ~ 55°C (40°F~131°F), w/o solar load
Feature	Modulation	256 QAM support
	Spectrum Analyzer	Support for TX/RX
	PIM Cancellation	Not supported
	NB-IoT	Support
	CPRI Cascade	Up to 3 B13 RRHs
	Optic Interface	20km, 2 ports (9.8Gbps x 2), SFP, single mode, Duplex/Bi-Di
	RET & TMA	AISG 2.2
	Bias-T	2 ports (Max. 30W)
	External Alarm	4

Mechanical/Electrical specifications comparison

Category		Macro RRH		
		700MHz Single-Band	700/850 Dual-Band	PCS/AWS Dual-Band
Electrical	Power consumption	About 620 Watt @ 100% RF load, typical conditions + TMA/RET	About 1106 Watt @ 100% RF load, typical conditions + TMA/RET	About 1270 Watt @ 100% RF load, typical conditions + TMA/RET
Mechanical	Size (W × H× D) w/o Finger Guard	12.6" x 12.6" x 6.0" (320 x 320 x 151 mm)	15" x 15" x 8.1" (380 x 380 x 207 mm)	15" x 15" x 10" (380 x 380 x 255 mm)
	Volume	15.5L	29.9L	36.8L
	Weight (w/o solar shield)	37.5lb (17kg)	70.3lb (31.9 kg)	84.4lb (38kg)

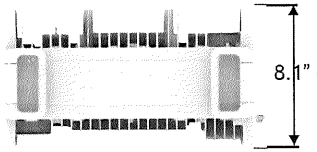


[Top View]

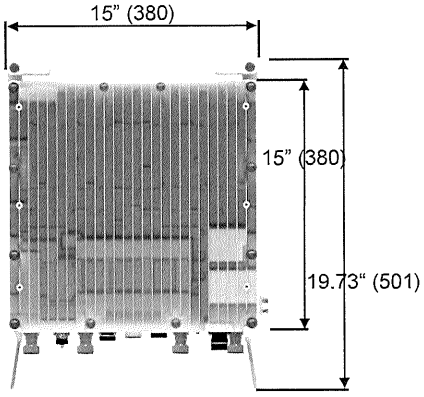


[Front View]

[Macro 700MHz RRH]

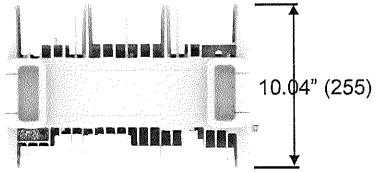


[Top View]

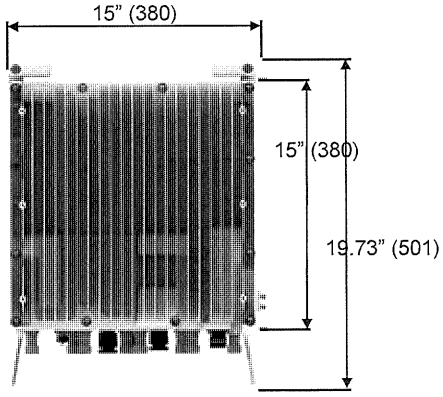


[Front View]

[Macro 700/850MHz RRH]



[Top View]



[Front View]

[Macro PCS/AWS RRH]

RF and Feature specifications comparison

Category		Macro RRH				
		700MHz RRH	700/850 RRH		PCS/AWS RRH	
RF	Band	B13 (700MHz)	Band13 (700MHz)	Band5 (850MHz)	Band2 (PCS)	Band66 (AWS)
	Frequency (MHz)	DL : 746 ~ 756 UL : 777 ~ 787	DL : 746 ~ 756 UL : 777 ~ 787	DL : 869 ~ 894 UL : 824 ~ 849	DL : 1930 ~ 1990 UL : 1850 ~ 1910	DL : 2110 ~ 2180 UL : 1710 ~ 1780
	IBW/OBW	10MHz/10MHz	10MHz/10MHz	25MHz/25MHz	60MHz/20MHz	70MHz/30MHz
	# of Carriers	1 Carrier	1 Carriers	3 Carriers	2 Carriers	3 Carriers
	Total # of Carriers	1 Carrier	4 Carriers		4 Carriers	
	RF power	Total 160W (40W x 4 or 60W x2)	Total 320W 40W x 4 or 60W x 2	40W x 4 or 60W x 2	Total 320W (for OBW 40MHz) 40W x 4 or 60W x 2	60W x 4 or 90W x 2
Feature	Ant. configuration	4T4R/2T4R/2T2R, SW configurable				
	# of Ant. port	4	4		8	
	Modulation	DL : 256 QAM, UL : 64QAM				
	Spectrum Analyzer	Support for TX/RX				
	PIM Cancellation	Not supported	Support		Support	
	NB-IoT	Support				
	CPRI Cascade	Up to 3 B13 RRHs	Not supported		Not supported	
	Optic Interface	20km, 2 ports (9.8Gbps x 2), SFP, single mode, Duplex/Bi-Di				
	RET & TMA	AISG 2.2				
	Bias-T	2 ports (Max. 30W)	2 ports (Max. 49W)		4 ports, 2 ports per Band (Max. 49W)	
	External Alarm	4				

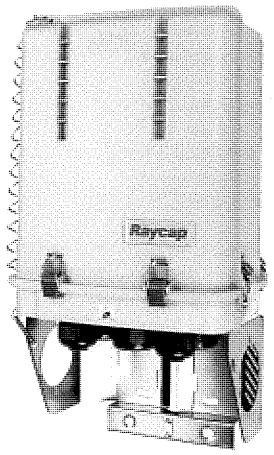
DATA SHEET

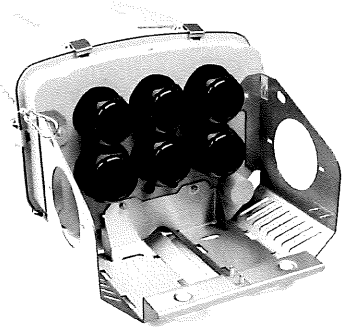
DC Surge Protection for RRH/Integrated Antenna Radio Head

RVZDC-6627-PF-48

Tower / Base / Rooftop

Raycap's flexible Tower, Base Stations and Rooftop protection and Distribution products provide protection for up to 12 Remote Radio Heads/Integrated Antennas. The solutions mitigate the risk of damage due to lightning and provide high levels of availability and reliability to radio equipment.

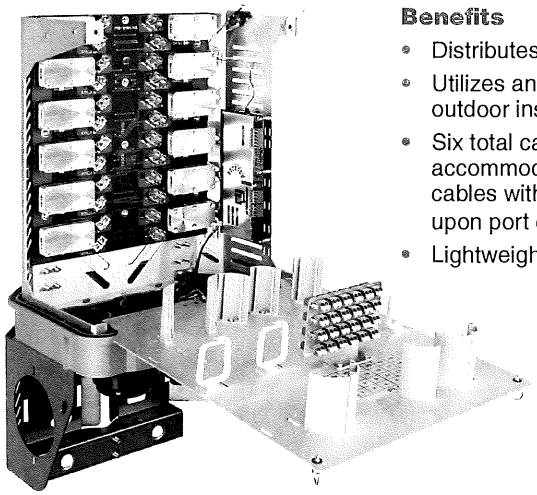




Mounting Bracket Included

Features

- Designed for distribution to 12 RRH circuits, DC power and fiber optics.
- Alarms for moisture detection and intrusion
- Digital Voltmeter with twelve (12) position switch to monitor each DC circuit
- Power alarms for wiring anomalies and power disruptions
- Employs the Strikesorb® 30-V1-2CHV Surge Protective Device (SPD) specifically designed for the Remote Radio Head (RRH) installation environment and certified for use in DC applications and at low DC operating voltages (48V)
- The Strikesorb 30-V1-2CHV is a Class I SPD certified by VDE per the IEC 61643-11 standard as suitable for installation in areas where direct lightning exposure is expected. Strikesorb 30-V1-2CHV is able to withstand direct lightning currents of up to 5kA (10/350) and induced surge currents of up to 60kA (8/20)
- Provides very low let through / clamping voltage - unique for a Class I product - as it does not employ spark gaps or other switching elements. Strikesorb offers unique protection levels to the RRH equipment as well as the Base Band Units
- RS485 communication link uses two (2) twisted pair (+ground) wires per hybrid cable, and communicates all voltage, boost system and alarm data
- Patent pending design



Benefits

- Distributes DC up to 12 Remote Radio Heads and connects up to 24 LC fiber pairs
- Utilizes an IP 67 rated enclosure, also rated to NEBS and UL, allowing for indoor or outdoor installation on a roof or tower top
- Six total cable ports for cable access with custom configurable UL rated glands that accommodate varying diameters of hybrid (combined power and fiber optic) or standard cables with diameters up to 2" (will fit most standard 1⅝" coax class cables), depending upon port configuration
- Lightweight aerodynamic design provides maximum flexibility for tower top installation

Strikesorb 30-V1-2CHV

Raycap

www.raycap.com

SPECIFICATIONS

DC Surge Protection for RRH/Integrated Antenna Radio Head

RVZDC-6627-PF-48

Tower / Base / Rooftop

Electrical

Model Numbers	RVZDC-6627-PF-48
Nominal Operating Voltage	48 VDC
Nominal Discharge Current [I_n]	20 kA 8/20 µs
Maximum Surge Current [I_{max}]	60 kA 8/20 µs
Maximum Impulse (Lightning) Current per IEC 61643-11	5 kA 10/350 µs
Maximum Continuous Operating Voltage [U_c]	75 VDC
Voltage Protection Rating (VPR) per UL 1449 4th Edition	400V
Protection Class as per IEC 61643-11	Class I
Power Alarm	cross polarity, short circuit, or power outage
Intrusion Sensor	microswitch
Moisture Sensor	infrared moisture detector
Strikesorb Module Type	30-V1-2CHV Strikesorb modules installed to protect 12 Remote Radio Heads
Power Boost Ready	RS485 twisted pair connection available

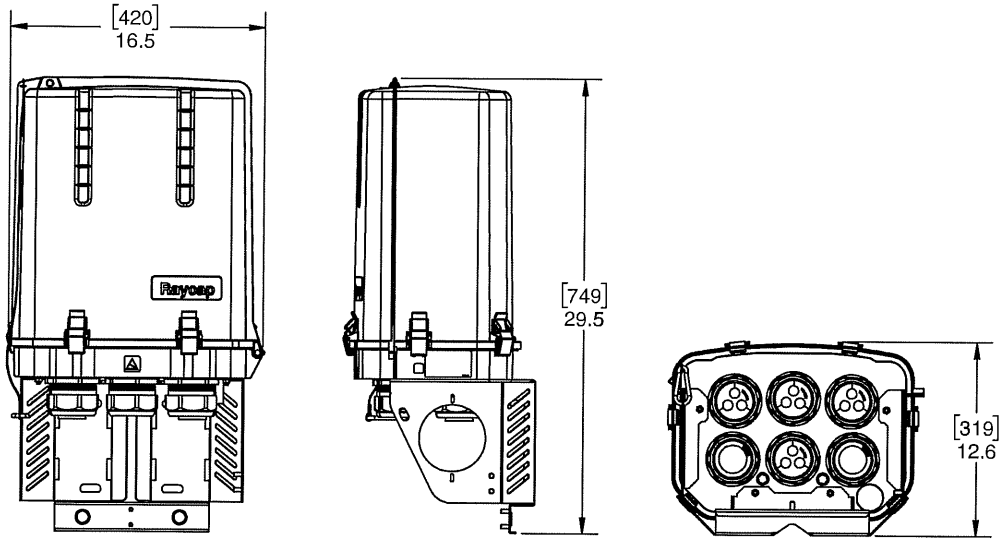
Mechanical

Suppression Connection Method	Compression lug, #14 - #2 AWG (2 mm² - 33 mm²)
Fiber Connection Method	LC-LC Single mode
Pressure Equalizing Vent	Gore™ Vent
Environmental Rating	IP 67
Operating Temperature	-40° C to +80° C
UV Resistant	Yes
Dimensions (L x W x H)	12.6" x 16.5" x 29.5" [319mm x 420mm 749mm]
Weight	System: 32 lbs (14.51 kg)
Combined Wind Loading	150mph (sustained): 185 lbs (823 N)

Standards Compliance

Strikesorb modules are compliant to the following Surge Protective Device (SPD) Standards	
Standards	UL 1449 4th Edition, IEC 61643-11:2011, EN 61643-11:2012, IEEE C62.11, IEEE C62.41.2, IEEE C62.45 NEBS certified to: GR-63-CORE Issue 4, GR-1089-CORE Issue 6, GR-3108-CORE Issue 3, GR-487-CORE Issue 4, GR-950-CORE Issue 1

Product Diagram



[mm]
inches

AWG=American Wire Gauge

Raycap

www.raycap.com

Costich Engineering Land Surveying Landscape Architecture 217 LAKE AVENUE ROCHESTER, NY 14608 (585) 458-3020 COSTICH ENGINEERING	PROJECT NAME Latham South Photo 1 PHOTO COORDINATES 42° 43' 39.8253" N, 73° 44' 31.6839" W	PHOTO DESCRIPTION View toward proposed site Balloons at 70' PHOTO LOCATION View South from Elks parking lot 675' from site	DATE OF PHOTO 6/24/2017 C.E. JOB# 4530 VZW JOB# 20151290258

Costich Engineering Land Surveying Landscape Architecture 217 LAKE AVENUE ROCHESTER, NY 14608 (585) 458-3020	PROJECT NAME Latham South	PHOTO DESCRIPTION Photosimulation of proposed 70' monopine	DATE OF PHOTO 6/24/2017
	Photo 1		C.E. JOB# 4530
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Costich Engineering Land Surveying Landscape Architecture 217 LAKE AVENUE ROCHESTER, NY 14608 (585) 458-3020 COSTICH ENGINEERING	PROJECT NAME Latham South Photo 2 PHOTO COORDINATES 42° 43' 46.3006" N, 73° 44' 23.8917" W	PHOTO DESCRIPTION View toward proposed site Balloons at 70' PHOTO LOCATION View South from Watervliet Shakers Rd at Elks Ln. 1467' from site	DATE OF PHOTO 6/24/2017 C.E. JOB# 4530 VZW JOB# 20151290258

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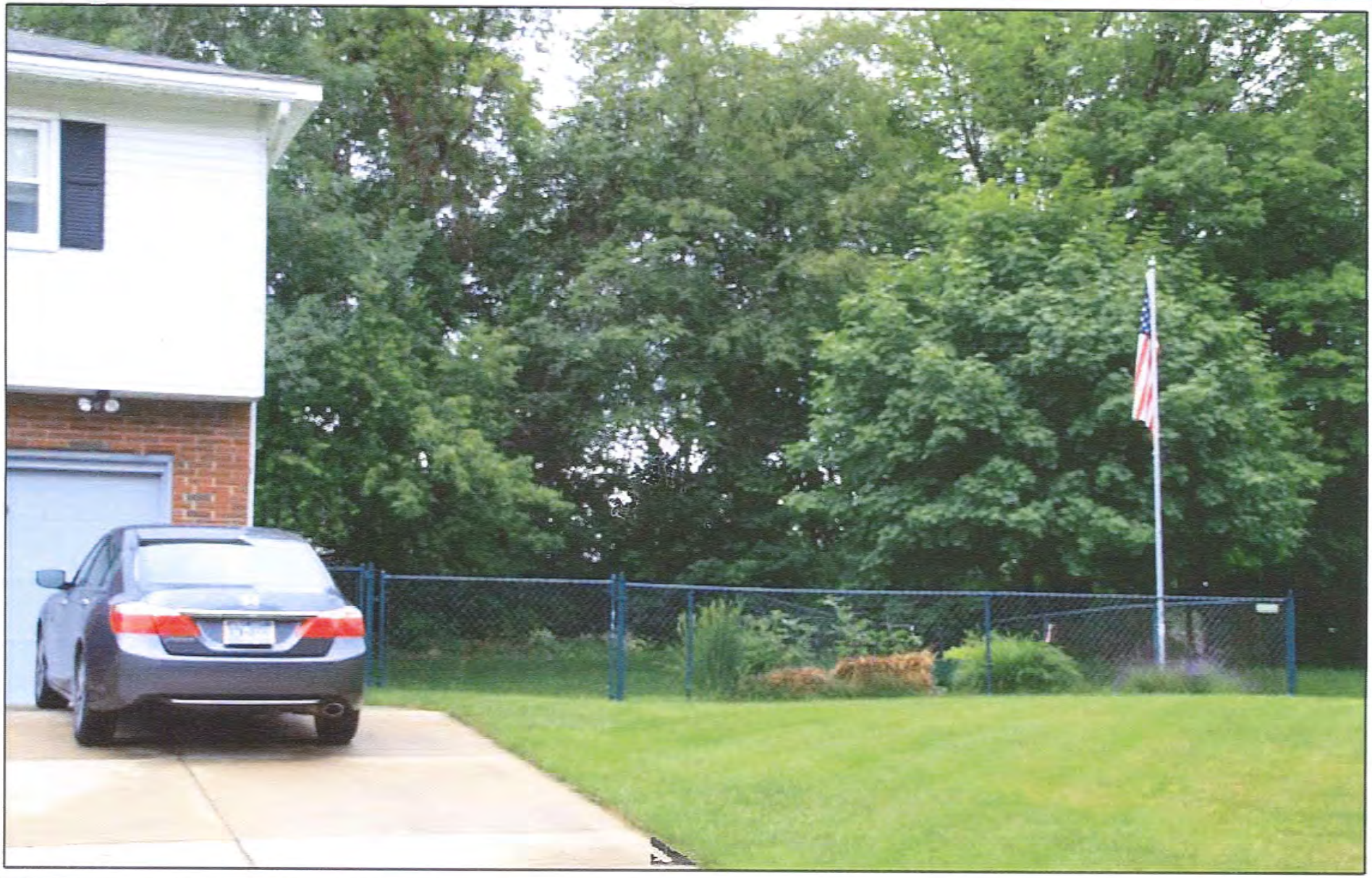
Costich Engineering Land Surveying Landscape Architecture 217 LAKE AVENUE ROCHESTER, NY 14608 (585) 458-3020	PROJECT NAME Latham South Photo 3 PHOTO COORDINATES 42° 43' 37.9221" N, 73° 44' 37.3152" W	PHOTO DESCRIPTION View toward proposed site Balloons at 70' PHOTO LOCATION View SE from Abedar Ln. 612' from site	DATE OF PHOTO 6/24/2017 C.E. JOB# 4530 VZW JOB# 20151290258



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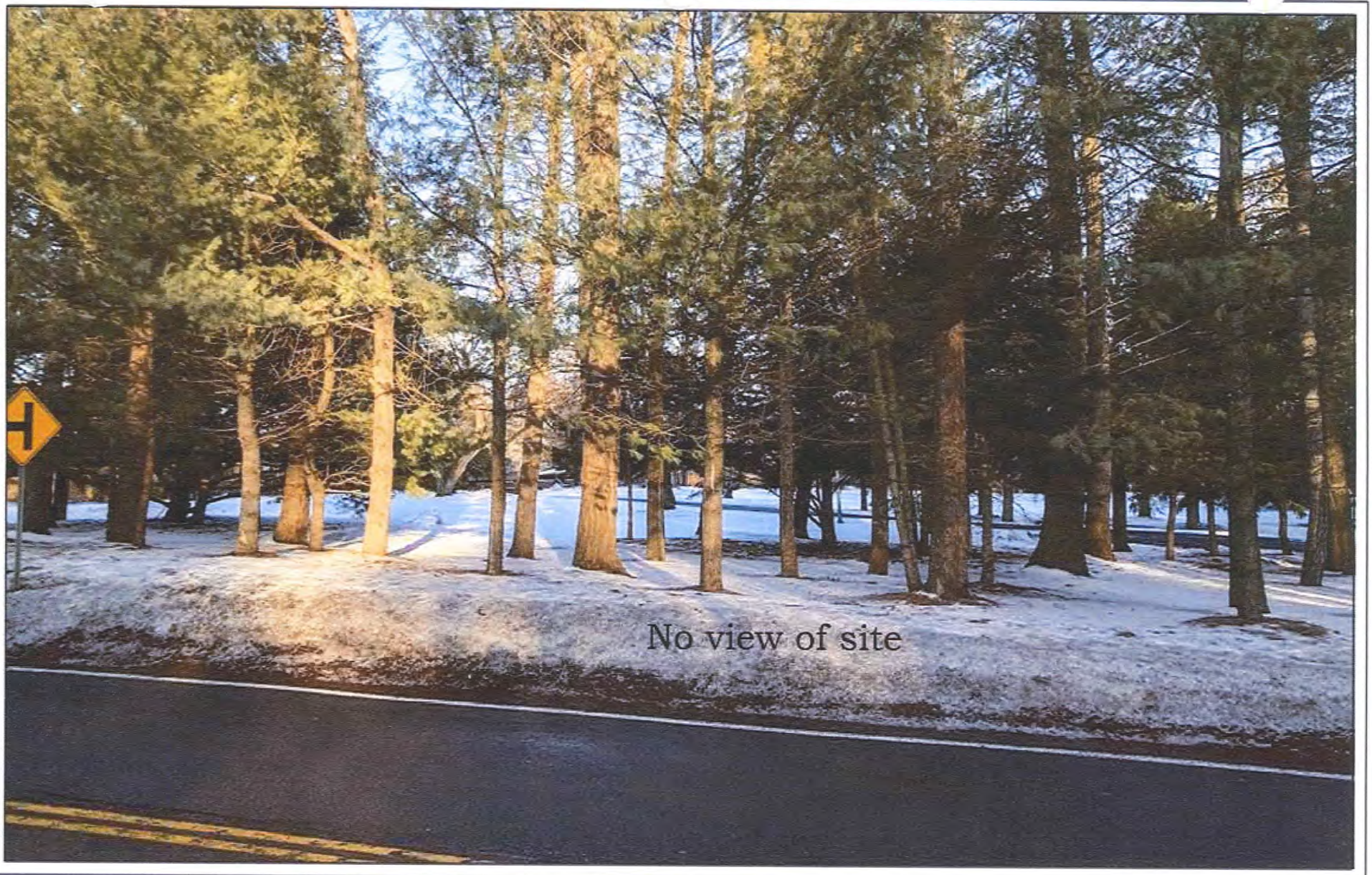
Costich Engineering Land Surveying Landscape Architecture 217 LAKE AVENUE ROCHESTER, NY 14608 (585) 458-3020	PROJECT NAME Latham South Photo 4 PHOTO COORDINATES 42° 43' 43.4792" N, 73° 44' 45.3016" W	PHOTO DESCRIPTION View toward proposed site Balloons at 70' PHOTO LOCATION View SE from Fiddlers Ln. behind Goodrich School 1423' from site	DATE OF PHOTO 6/24/2017 C.E. JOB# 4530 VZW JOB# 20151290258



Costich Engineering
Land Surveying
Landscape Architecture
217 LAKE AVENUE
ROCHESTER, NY 14608
(585) 458-3020
COSTICH ENGINEERING

PROJECT NAME
Latham South

Photo 5

PHOTO COORDINATES
?

PHOTO DESCRIPTION
View toward proposed site

PHOTO LOCATION
View NE from Fiddlers Ln. near Renshaw House
2670' from site

DATE OF PHOTO
2/22/2018

C.E. JOB#
4530

VZW JOB#
20151290258