

STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

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DRAFT

Petition No. 1467
Barrett Outdoor Communications, Inc.
Non-Tower Antenna Array Replacement Telecommunications Facility
Relocated from 28 Sidney Street to 200 East Main Street Rear
Stratford, Connecticut

Staff Report

February 18, 2022

Introduction

On October 15, 2021, the Connecticut Siting Council (Council) received a petition (Petition) from Barrett Outdoor Communications, LLC (BOC or Petitioner) for a declaratory ruling, pursuant to Connecticut General Statutes (CGS) §4-176 and §16-50k, for the proposed replacement of an existing non-tower antenna array structure located at 28 Sidney Street¹ in Stratford on property owned by UB Stratford, LLC (NTAA Structure) with a new 125-foot monopole telecommunications facility to be located at 200 East Main Street, Rear in Stratford on property owned by UB Railside, LLC (New Facility).

BOC provides outdoor advertising billboards along transportation corridors throughout the state. It hosts wireless carriers on nine billboard sites in New Haven, Stratford and West Haven.

The purpose of this Petition is to construct, operate and maintain the New Facility to support the existing coverage provided by the NTAA Structure that must be decommissioned as part of a redevelopment plan. The NTAA Structure is a billboard owned by BOC that currently hosts Verizon antenna arrays at the 67-foot level and T-Mobile antenna arrays at the 60-foot level.

BOC proposes to host Verizon antenna arrays at the 121-foot level and an omnidirectional whip antenna mounted at the 130-foot level of the New Facility. T-Mobile is not a part of the proposed project at this time.

On October 15, 2021, BOC provided notice of the Petition to abutting property owners and appropriate federal, state and local agencies pursuant to Regulations of Connecticut State Agencies (RCSA) §16-50j-40. These notice requirements apply to petitions for new electric generating facilities using renewable sources with a capacity under 65 megawatts and to applications for certificates for new facilities, including, but not limited to, telecommunications facilities.² Petitioner received certified mail receipts from all abutting property owners.

The City of Milford (City), which is within 2,500 feet of the New Facility site, and the Town of Stratford (Town), which is the host municipality of the existing and proposed sites, submitted letters to BOC in support

¹ 28 Sidney Street, among other Sidney Street addresses, such as 65 Sidney Street shown on Sheet R-1, appear to have been merged with the parcel at 100 East Main Street according to Town of Stratford Assessor's records.

² Conn. Gen. Stat. §16-50*l*(b) (2021).

of the relocation of the NTAA Structure to the New Facility site on April 13, 2021 and June 8, 2021, respectively.³ Neither municipality requested BOC to hold a public information meeting.

On October 22, 2021, the Council sent correspondence to the City and Town stating that the Council has received the Petition and invited the municipalities to contact the Council with any questions or comments by November 19, 2021. No comments were received.

The Council issued interrogatories to BOC on November 10, 2021. The Council approved BOC's request for an extension of time to provide responses to the Council's interrogatories to December 17, 2021. BOC provided partial responses to the Council's interrogatories on December 15, 2021. Also on December 14, 2021, the Council approved BOC's request for an additional extension of time to provide responses to the remaining Council interrogatories to January 14, 2022. BOC provided responses to the remaining Council interrogatories on January 11, 2022.

The Council issued a second set of interrogatories to BOC on January 25, 2022. BOC responded to the second set of interrogatories on February 4, 2022.

Pursuant to CGS §4-176(e) of the Uniform Administrative Procedure Act, an administrative agency is required to take action on a petition within 60 days of receipt. On December 16, 2021, pursuant to CGS §4-176(e), the Council voted to set the date by which to render a decision on the Petition as no later than April 18, 2022, which is the 180-day statutory deadline for a final decision under CGS §4-176(i).

Aside from the Petitioner, there are no other parties or intervenors to date.

Jurisdiction

Pursuant to CGS §16-50i(a)(6), the Council has exclusive jurisdiction over telecommunications towers, defined as "facilities" under the statute, including associated equipment, owned or operated by the state, a public service company or a certified telecommunications provider or used in a cellular system.

Under RCSA §16-50j-2a (30), "Tower" means a structure, whether free standing or attached to a building or another structure, that has a height greater than its diameter and that is high relative to its surroundings, or that is used to support antennas for sending or receiving radio frequency signals, or for sending or receiving signals to or from satellites, or any of these, which is or is to be:

- (A) *used principally to support one or more antennas* for receiving or sending radio frequency signals, or for sending or receiving signals to or from satellites, or any of these, and
- (B) owned or operated by the state, a public service company as defined in Section 16-1 of the Connecticut General Statutes, or a certified telecommunications provider, or used in a cellular system, as defined in Section 16-50i(a) of the Connecticut General Statutes. (Emphasis added).

The existing NTAA Structure is not a telecommunications facility over which the Council has jurisdiction. It is not a "tower" under the Council's regulations because its principal use is not to support one or more antennas. Its principal use is a billboard. Therefore, it is a "non-tower antenna array structure."

BOC states the existing structure is a "tower" pursuant to RCSA §16-50j-2a(30) because BOC surrendered its outdoor advertising permit for the billboard to the Department of Transportation (DOT) in 2018, at which time the NTAA Structure became a tower since it no longer displays any advertising signage and its principal use is to support the antennas of Verizon and T-Mobile. In support of its position, BOC references 5

³ If the 90-day municipal consultation requirement applied to petitions, this would comply with the requirement.

declaratory rulings issued by the Council for relocation and extension of existing towers that the Council determined would not have a substantial adverse environmental effect.

In Petition No. 455A, the Council issued a declaratory ruling that the relocation of an approved antenna array from an existing electric transmission structure in Wilton to another electric transmission structure would not have a substantial adverse environmental effect. Under CGS §16-50i(a)(1), the Council has exclusive jurisdiction over electric transmission line structures throughout the state.

In Petition No. 518, the Council issued a declaratory ruling that the relocation and replacement of an existing telecommunications facility in Greenwich that had reached its maximum capacity would not have a substantial adverse environmental effect and would promote tower sharing. Under CGS §16-50i(a)(6), the Council has exclusive jurisdiction over telecommunications facilities that are owned or operated by a certified telecommunications provider.

In Petition No. 593, the Council issued a declaratory ruling that the relocation and replacement of an existing telecommunications facility at Eastern Connecticut State University that had reached its maximum capacity would not have a substantial adverse environmental effect and would promote tower sharing. Under CGS §16-50i(a)(6), the Council has exclusive jurisdiction over telecommunications facilities that are owned or operated by the state.

In Petition No. 1346, the Council issued a declaratory ruling that the relocation and replacement of an existing Eversource Energy-owned telecommunications facility at Manchester Substation would not have a substantial adverse environmental effect and would promote tower sharing. Under CGS §16-50i(a)(6), the Council has exclusive jurisdiction over telecommunications facilities that are owned or operated by a public service company.⁴

In Petition No. 1435, the Council issued a declaratory ruling that the relocation and replacement of an existing Department of Emergency Services and Public Protection-owned telecommunications facility in Branford that had reached its maximum capacity would not have a substantial adverse environmental effect and would promote tower sharing. Under CGS §16-50i(a)(6), the Council has exclusive jurisdiction over telecommunications facilities that are owned or operated by the state.

All of the above-referenced declaratory rulings issued by the Council related to existing "facilities," such as electric transmission lines and telecommunications towers that are owned or operated by certified telecommunications providers, the state, or a public service company, over which the Council has exclusive jurisdiction. A billboard, such as the subject NTAA Structure, is not a "facility" over which the Council has or had jurisdiction.

The proposed New Facility is a telecommunications facility over which the Council has jurisdiction. Its principal use would be to support one or more antennas under the Council's regulations and it would be used in a cellular system under CGS §16-50i(a)(6). Therefore, it is a "facility."

Existing NTAA Structure at 28 Sidney Street

CGS §16-50dd requires the Council to develop, maintain and update quarterly a Statewide Telecommunications Coverage Database (CSC Database) that includes the location, type and height of all telecommunications towers and antennas in the state. CGS §16-50ee requires providers of

⁴ Under CGS §16-50i(a)(4), the Council also has exclusive jurisdiction over electric transmission substations throughout the state.

telecommunications services to annually file a list of non-tower locations of antenna array serving cellular and PCS operations in the state with the Council.

The CSC Database identifies the existing NTAA Structure as a 65-foot billboard owned by T-Mobile located at 28 Sidney Street. The Petition identifies the existing NTAA structure as a 63.5-foot above ground level (agl) billboard owned by BOC located at 28 Sidney Street that was approved by the Town in 1979. At the time of the approval, the principal use of the structure was a billboard. In 1996, 1997 and 2008, the Town approved the collocation of Verizon, T-Mobile and MetroPCS antenna arrays on the NTAA structure. The top of the antennas extend to a height of approximately 72.5 feet agl.

In 2018, in connection with a redevelopment plan known as the Dock Shopping Center, the Town approved a new billboard at the shopping center, approximately 380 feet northeast of the existing NTAA structure. This new billboard is 87 feet tall, but due to overall site redevelopment into a shopping center, the property owner is not interested in allowing antenna co-location on the new billboard.

According to the Town-approved redevelopment plan, a Starbuck's is proposed for construction at the location of the existing NTAA Structure.

Proposed New Facility to be located at 200 East Main Street, Rear

The subject property is an approximately 4.37 acre, triangular-shaped parcel owned by UB Railside, LLC, located in the Town's Retail Commercial District. It is part of the Town-approved redevelopment plan in the area between the Housatonic River and East Main Street. The property is developed with a metal-framed building and is currently used as a boat storage area.

The host parcel is bounded by the Metro North Railroad (MNRR) to the north, the Housatonic River to the east, commercial development to the west and Interstate 95 to the south. The surrounding land use is commercial. The nearest residence is located approximately 1,155 feet northwest of the proposed facility at 153 Peck Street. The nearest residence to the existing NTAA Structure is located approximately 655 feet to the southeast at 858 Housatonic Avenue.

The ground elevation at the proposed New Facility Site is approximately 12.3 feet above mean sea level (amsl). The ground elevation at the site of the existing NTAA Structure is approximately 18 feet amsl.

The proposed facility would be located in the far northeastern corner of the parcel. The proposed fence line would be approximately 6 to 11 feet from the MNRR property line. The proposed monopole would be approximately 27.6 feet from the MNRR property line.

Access to the New Facility would originate from the shopping center entrance off East Main Street and continue along an existing paved driveway for approximately 2,235 feet to a proposed equipment compound.

The proposed facility would consist of a 125-foot monopole tower that could accommodate four wireless carriers and municipal emergency communications equipment. Verizon would install antennas at the 121-foot level. At some point in the future, BOC may install an omni-directional whip antenna at the 130-foot level of the proposed facility on behalf of the Connecticut-Rhode Island Red Cross for disaster communications. A lightning rod would be installed at the top of the tower. The top of the whip antennas would reach a height of approximately 145 feet. The tower would be designed to accommodate a 20-foot extension.

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⁵ The available records indicate the collocations were approved without any conditions.

The compound/lease area would encompass a 4,210 square foot rectangular area along the south side of the MNRR property. An elevated 90-foot long by 23-foot wide by 21.8-foot tall elevated steel equipment platform would be located in the fenced compound area. The elevated platform would have four 10 x 16-foot equipment bays for each carrier that would be accessible by two stairways at either end. Space would be available within the compound for the construction of a fifth bay, if necessary, at the east end of the elevated platform. The elevated platform is necessary due to an embankment along the north side of the site, abutting the MNRR. Moving the ground equipment area to the south and down the slope would reduce the landlords boat storage capacity.

The proposed compound would be surrounded by an eight-foot tall chain link fence with anti-climb mesh and include a 12-foot wide double swing gate. Concrete-filled steel bollards would be installed outside the fence line at 5-foot intervals along the south, east and west sides of the compound.

Electrical service would be run underground approximately 430 feet from a pad-mounted transformer southeast of the site to the proposed equipment platform. The telecommunications fiber connection would extend overhead from East Main Street to the first shopping center building, cross the roof, and continue overhead between the first and second shopping center buildings. From there, the connection would run down the side of the second building and continue underground to the site. The proposed route of the underground service would not encroach upon MNRR property.

The estimated cost of the proposed New Facility is:

Foundation	\$ 45,000
Tower	\$ 65,000
Site Development	\$115,000
Utility Installation	\$ 75,000

Total Estimated Costs \$300,000

Existing and Proposed Wireless Services

Verizon and T-Mobile maintain antennas at a centerline height of 65.7 feet agl and 60 feet agl, respectively, on the NTAA Structure.

Verizon requires a minimum antenna height of 121 feet at the proposed facility to replace its coverage and capacity from the NTAA Structure and enhance the performance of its Long Term Evolution (LTE) 700/850/1900/2100 MHz frequency bands. Verizon designs its LTE network using a -95 dB Reverse Link Operational Path Loss standard for reliable in-vehicle service and -85 Reverse Link Operational Path Loss standard for reliable in-building service.

Verizon's installation at the proposed New Facility would also provide capacity relief to its existing Milford 2 CT site, Milford CT site, and Stratford W CT site by reassigning user traffic from the exhausted sectors to Verizon's new installation and to other non-exhausted sectors.

Verizon's installation would comply with the intent of the Warning, Alert and Response Network Act of 2006. The act mandates a public safety system that allows customers who own enabled mobile devices to receive geographically-targeted, text messages alerting them of imminent threats to safety in their area.

Neither the Town nor the City expressed an interest in collocating emergency communications equipment on the New Facility at this time.

AT&T expressed interest in collocation at the 131-foot level. This would require a 20-foot tower height extension.

Site Selection

The nearest existing towers and structures are either already occupied by Verizon or too far from the target area to provide sufficient coverage. After determining there are no suitable existing structures in the Town or City, BOC considered other potential sites for the proposed facility proximate to the existing NTAA Structure and the redevelopment.

The alternative sites BOC investigated and reasons for their rejection are as follows:

- 1. **200** East Main Street (Stop & Shop) This is the front portion of the host parcel along East Main Street. The property owner was not interested in leasing any locations in the front or rear of the host parcel other than the proposed site.
- 2. **250 East Main Street (Ashcroft, Inc.)** the property is located in a flood zone.
- 3. **350 Barnum Avenue (Home Depot/WalMart)** the property is a capped Superfund site.
- 4. **955 Ferry Boulevard (Edge Fitness)** the property is located near a residential area.

Additional alternative sites suggested by the Council and reasons for their rejection are as follows:

- 1. **Collocation on power plant smokestacks** the facility owner is not interested in leases.
- 2. **Collocation on electric transmission line structures** Verizon chooses not to use electric transmission line structures due to co-use restrictions by the utility companies.
- 3. Collocation on an existing billboard at 335 Ferry Boulevard this structure is too close (<0.5 mile) to an existing Verizon site.
- 4. Collocation on an existing billboard at the East Main Street Shopping Center property owner is not interested in leasing the billboard for telecommunications use.
- 5. Collocation on an existing five story self-storage building adjacent to the site property owner is not interested in leasing building space for telecommunications use.

BOC selected the site⁶ based on the height of the new buildings for the redevelopment plan and the property owner's desire to move the proposed facility further from the redevelopment. Other factors considered in site selection include the location in a commercial district adjacent to a shopping center, Interstate 95 and the MNRR, lack of sensitive environmental resources and distance from residential areas to the north and south. BOC entered into a Telecommunications Easement Agreement with UB Dockside, LLC (200 East Main Street, Front parcel) and UB Railside, LLC (200 East Main Street, Rear parcel) for the proposed New Facility site.

The proposed New Facility site is approximately 1,250 feet northeast of the NTAA Structure and would meet Verizon's network coverage and capacity needs.

A series of small cells or a Distributed Antenna System to serve the area is not cost effective or feasible given the number of facilities required and encumbrances on existing utility poles such as transformers, and

⁶ Under RCSA 16-50j-2a(29), Site" means a contiguous parcel of property with specified boundaries, including, but not limited to, the leased area, right-of-way, access and easements on which a facility and associated equipment is located, shall be located or is proposed to be located.

streetlights that would limit Verizon's ability to use the pole, and, due to space constraints, the lack of reliable backup power source for each small cell or DAS node.

Public Safety

On September 3, 2020, the Federal Aviation Administration (FAA) issued a Determination of No Hazard to Air Navigation for the proposed New Facility, with a notice expiration date of March 3, 2022. BOC would re-file with the FAA on February 16, 2022.

The New Facility would be designed to Telecommunications Industry Association, TIA-222-H "Structural Standards for Antenna Supporting Structures, Antennas and Small Wind Turbine Support Structures".

The proposed New Facility would comply with Department of Energy and Environmental Protection (DEEP) Noise Control Standards. Noise from the proposed facility would be minimal. The surrounding area is fully developed with commercial properties that generate a high volume of traffic. Interstate 95 is immediately to the southeast, and active rail lines run along the northern property boundary.

A gasoline station associated with Stop & Shop is located on-site approximately 365 feet southwest of the proposed New Facility.

Emergency responders would access the equipment compound using a key to the KNOX lock that BOC would install on the gate.

The Federal Railroad Administration requires a 25-foot safety zone from the outer rail. Non-railroad personnel are prohibited from accessing the safety area unless they are oriented in rail safety and accompanied by a railroad flagman. BOC owns billboards situated on or near rail lines and its agents receive annual railroad safety training. The distance of the project limit of disturbance to the outer rail is approximately 30 feet.

The proposed tower would have a designed yield point at a height of 105 feet. It is designed to protect transmission lines operated by United Illuminating (UI) located immediately to the north along the MNRR. The nearest MNRR Power Line Arm and nearest UI conductor are approximately 22 and 25 feet from the proposed monopole, respectively.

The proposed New Facility is not expected to have any impact on access and/or maintenance activities for MNRR and UI. The Petitioner has consulted with the MNRR and UI and confirmed that the proposed relocated facility satisfies their respective setback requirements.

The proposed lightning rod at the top of the tower would protect the facility from a lighting strike. There are no specific measures to protect the facility from a train derailment or accidental contact with live electric wires. BOC would own and maintain the proposed New Facility. Pursuant to the Telecommunications Easement Agreement, BOC must carry and maintain commercial general liability insurance.

The calculated power density from Verizon's proposed antennas would be 13.69 percent of the applicable limit using a -10 dB off-beam adjustment.

Backup Power

Verizon would utilize a battery backup system lasting four to eight hours depending upon site loading.

Commercial Mobile Radio Service (CMRS) providers are licensed by and are under the jurisdiction and authority of the Federal Communications Commission (FCC). At present, no standards for backup power for CMRS providers have been promulgated by the FCC. Every year since 2006, AT&T, Sprint, T-Mobile, and Verizon have certified their compliance with the CTIA Business Continuity/Disaster Recovery Program and the Communications Security, Reliability and Interoperability Council standards and best practices to ensure network reliability during power outages.

Environmental

The proposed New Facility is not within a Federal Emergency Management Agency (FEMA) designated flood zone.

There are no wetlands or coastal resources within the project development area. The nearest wetland/coastal resource area to the proposed facility are tidal wetlands along the west bank of the Housatonic River, located approximately 316 feet to the east.

The Petitioner performed a Coastal Consistency Review and determined coastal resources would not be affected by the project. The Coastal Consistency Review aligns with the policies set forth in the DEEP Long Island Sound Blue Plan.

On September 23, 2020, DEEP issued a determination letter for the project indicating that it does not anticipate negative impacts to species listed on the Natural Diversity Database.

Connecticut is within the range of the northern long-eared bat (NLEB), a federally-listed threatened species and state-listed endangered species. There are no known NLEB hibernacula or known maternity roost trees within 0.25 miles and 150-feet, respectively, of the proposed site. Cellco consulted with the U.S. Fish and Wildlife Service and determined that the proposed facility would not have an impact on the NLEB.

On November 19, 2020, the State Historic Preservation Office determined that the proposed New Facility would have no adverse effect to sites listed on or eligible for listing on the National Register of Historic Places as long as it is designed and installed to be as non-visible as possible.

The proposed facility is approximately 0.63 mile north of the Milford Point/Wheeler Marsh, an Important Bird Area designated by the National Audubon Society. The design of the New Facility would comply with United States Fish and Wildlife Service guidelines for minimizing potential impacts to bird species.

The Housatonic River and Long Island Sound are nearby; hence, there is the potential for the antenna platforms to be used for bird nesting, particularly by ospreys. Should ospreys (or other avian species) establish a nest on the monopole, any antenna maintenance activities would need to comply with the federal Migratory Bird Treaty Act regulations while the nest is active. Depending upon the species, the time of year and the proposed work activities, maintenance activities may need to be delayed until the nest is no longer active.

Visibility

No schools or commercial day care centers are located within 250 feet of the Site. The nearest school or child day care (Wilcoxson Elementary School) is located approximately 0.52-mile northwest of the Site. The proposed New Facility would not be visible from the school.

The Petitioner evaluated the potential visibility of the proposed New Facility by using a predictive computer model for areas within 2 miles of the site (8,042 acre study area) and an in-field analysis to develop photo-

simulations of the proposed tower. The visual assessment indicates year-round visibility of the proposed New Facility would occur from approximately 1,244 acres within the study area but this includes 1,168 acres of visibility over open water and tidal wetlands at the mouth of the Housatonic River. Seasonal visibility of the proposed New Facility would occur from an additional 197 acres. Collectively, the total acreage of year-round and seasonal visibility represents 17.9 percent of the Study Area.

The visual assessment determined that both year-round and seasonal visibility of the tower would generally occur from locations within 0.75 miles or less and include commercial and residential areas, the I-95 and MNNR corridors and associated elevated bridges over the Housatonic River, and wetlands, tidal marshes and open water. The nearest residential areas with year-round and seasonal views are over 0.25 mile northwest of the site. Commercial areas and MNRR catenary structures are between these residential areas and the site.

Installing antennas in a flush-mount configuration on the tower to reduce the visual profile of an antenna platform would limit the number of antennas at each tower level, thus requiring a taller tower to accommodate all of Verizon's proposed antennas as well as additional tower levels to support other wireless carriers and emergency communications agencies that may locate at the facility.

Facility Construction

The construction of the proposed New Facility is anticipated to begin as soon as possible and would require approximately 60 days. Typical work hours would be Monday through Friday between 7:30 AM and 5:30 PM. BOC would consult with MNRR and UI concerning the final construction schedule.

The site is generally level and would disturb an approximate 12,400 square foot area. Approximately 95 cubic yards of excavated material from installation of the utility trench would be removed from the site. A Phase I Environmental Assessment did not identify any areas within the work areas that contain potential subsurface contaminants.

The proposed project would not materially increase impervious surfaces and would not result in a change in stormwater volume.

Conclusion

If approved, staff recommends the following condition:

- 1. The petitioner shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include:
 - a) a certified letter from a wireless telecommunications carrier with a firm commitment to install associated wireless equipment at the facility upon completion of construction
 - b) final site plan(s) for development of the facility that employ the governing standard in the State of Connecticut for tower design in accordance with the currently adopted International Building Code and include specifications for the tower, tower foundation, antennas and equipment compound including, but not limited to, fence design, ground equipment, access road, utility installation and emergency backup power;
 - c) the tower shall be designed with a yield point to ensure that the tower setback radius protects UI's transmission lines and the MNRR;
 - d) construction plans for site clearing, grading, water drainage and stormwater control, erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended; and
 - e) submission of an updated FAA Determination of No Hazard to Air Navigation.

Figure 1. Existing NTAA Site Location at 28 Sidney Street and Proposed Site Location at 200 East Main Street, Rear.



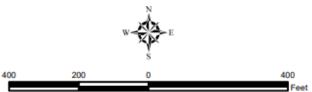


Figure 2. Existing NTAA Structure at 28 Sidney Street.

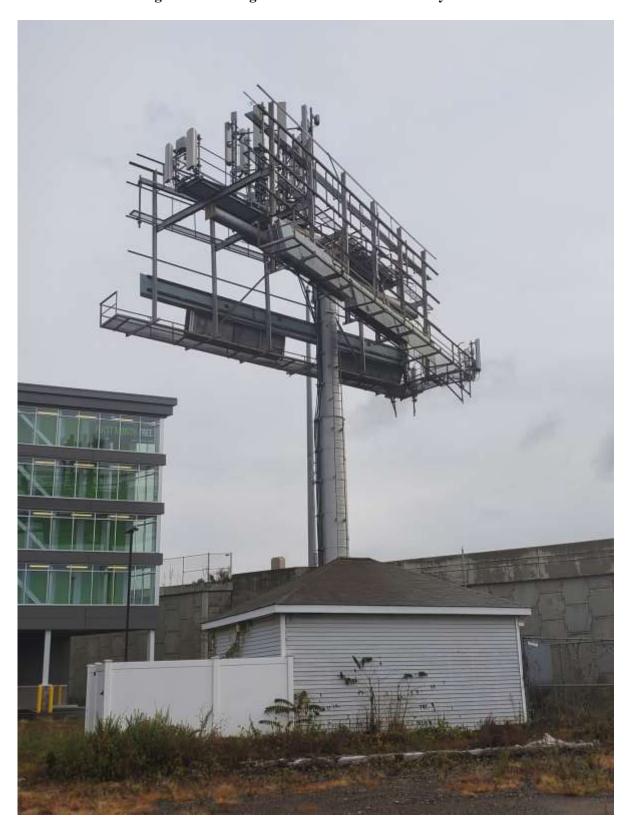
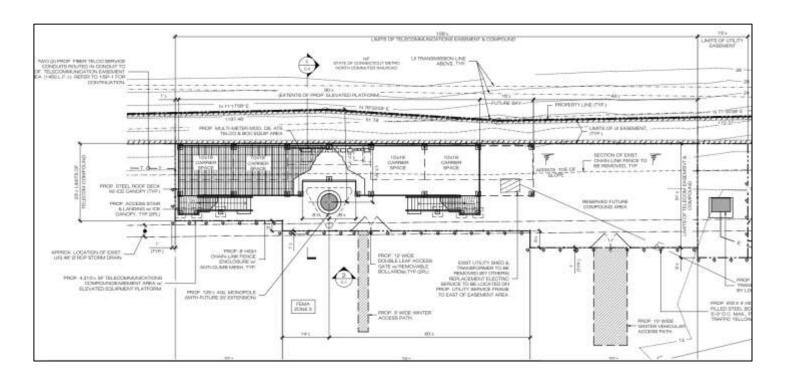


Figure 3. Site Plan of Proposed New Facility.



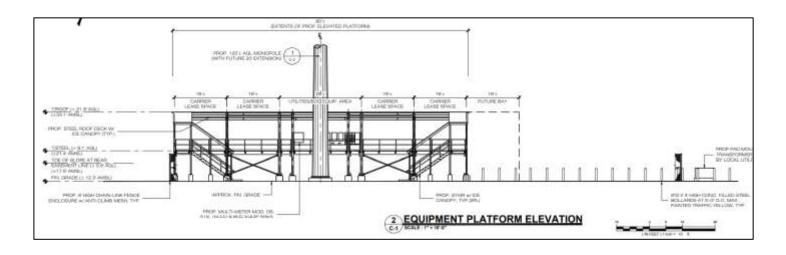


Figure 4. Proposed New Facility Tower Elevation Drawing

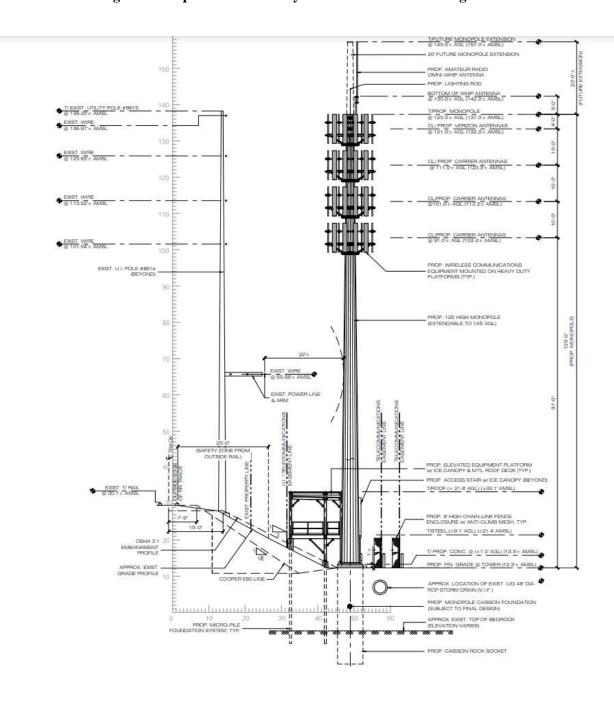


Figure 5. Visibility Analysis

