

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:	:	
	:	
A PETITION OF EIP COMMUNICATIONS I,	:	PETITION NO. 1521
LLC FOR A DECLARATORY RULING ON	:	
THE NEED TO OBTAIN A SITING	:	
COUNCIL CERTIFICATE FOR THE	:	
REPLACEMENT AND RELOCATION OF A	:	
TELECOMMUNICATIONS TOWER AT 75	:	
WELLS ROAD, WETHERSFIELD,	:	
CONNECTICUT	:	AUGUST 25, 2022

**RESPONSES OF CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS
TO CONNECTICUT SITING COUNCIL PRE-HEARING
INTERROGATORIES – SET ONE**

On July 11, 2022, the Connecticut Siting Council (“Council”) issued Interrogatories to EIP Communications I, LLC (“EIP”), relating to Petition No. 1521. Below are EIP’s responses.

Question No. 1

What is the total cost of the proposed project? How would the tower construction costs be recovered?

Response

The total cost of the proposed facility modification is estimated to be \$350,000 and will be funded by EIP. Like all wireless infrastructure companies, costs associated with development/modification projects are typically recovered through rent charged to each of the wireless carriers sharing the tower and in some cases a capital contribution.

Question No. 2

With reference to page 6 section 4B of the Petition, were any comments received from the Town or any of the abutting property owners?

Response

As of the date of this filing, the Petitioner has received no comments from the Town or any abutting landowners.

Question No. 3

What is the size of the proposed expanded area of the equipment compound?

Response

The size of the proposed facility compound is approximately 2,030 square feet. The existing compound is about the same size (2,030 square feet). However, to date, the existing tower site is not fenced.

Question No. 4

Provide the distance of the tower center from the Frontier building.

Response

The new tower is approximately 18 feet from the edge of the Frontier building. The existing tower is approximately 7 feet from the Frontier building.

Question No. 5

Provide the diameters of the existing and proposed towers.

Response

The existing tower maintains a diameter of 28 inches at the base and 14.6 inches at the top. The new tower will maintain a diameter at the base of approximately 44.5 inches at the base and approximately 24 inches at the top.

Question No. 6

Which entity is driving the minimum height of the proposed facility?

Response

AT&T and T-Mobile will both maintain essentially the same overall antenna centerline heights on the new tower as they have on the existing tower. Neither carrier is seeking to increase its antenna height on the new tower. The “stronger” tower will, however, allow both AT&T and T-Mobile to upgrade their existing facilities. The stronger tower will also be able to support additional wireless carriers who may be interested in sharing the new structure.

Question No. 7

Please provide the number of channels for each proposed antenna.

Response

T-Mobile

One (1) channel for each of the AIR 6419 antennas; two (2) channels for each of the AIR 32, antennas; and four (4) channels for each of the RFS APXV antennas.

AT&T

Two (2) channels for each of the 700 MHz antennas; one (1) channel for each of the 850 MHz antennas, two (2) channels for each the 1900 MHz antennas; one (1) channel for each of the 2100 MHz antennas; and one (1) channel for each of the 3700 MHz antennas.

Question No. 8

Would the proposed/relocated antennas provide 5G services? If yes, in what frequency range?

Response

Yes. T-Mobile would provide its 5G services in its 2496-2690 frequency range. AT&T would provide 5G services in its 850 MHz, 1900 MHz, 2100 MHz and 3700 MHz frequency ranges.

Question No. 9

What is the maximum number of wireless carriers that the tower can support?

Response

The new tower will be designed to accommodate up to four (4) wireless carriers in addition to municipal or emergency service antennas, if a need exists.

Question No. 10

Provide a structural analysis for the proposed replacement monopole including the loading associated with all carriers that would locate on the tower.

Response

The tower and foundation design for the new tower would be completed following the approval of the Petition by the Council. This new tower would be designed to accommodate T-Mobile's and AT&T's planned facility upgrades, as discussed in the Petition, and the needs of potential future carriers that may decide to share the tower. EIP will provide the Council with the final tower, tower foundation and antenna mount designs prior to the commencement of site construction.

Question No. 11

What type of antenna mounts would be used for the proposed/relocated antennas? What is the structural design standard applicable to such antenna mounts?

Response

Details regarding the AT&T and T-Mobile antenna mounts will be included as a part of the tower design materials referenced above in the Petitioner's response to Q. 10. The tower and antenna mounts must adhere to the TIA-222-H "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures".

Question No. 12

Provide a mount analysis for the proposed/replacement antenna mounts.

Response

See EIPs responses to Q.10 and Q.11 above.

Question No. 13

Would the proposed replacement monopole have a galvanized gray finish or a different color/finish? Explain.

Response

Based on the findings in its National Environmental Policy Screening Report, EIP proposes to have the tower painted a light gray similar to the existing tower to “match adjacent materials” and be as “non-visible as possible”.

Question No. 14

Would the proposed replacement monopole be designed with a yield point? If so at what height?

Response

No. EIP intends to design the tower to meet or exceed all existing design standards making a yield point unnecessary.

Question No. 15

Quantify the amounts of cut and fill that would be required to develop the proposed facility.

Response

Cut – 30 Cubic Yards (Drill for Caisson foundation. Excess materials will be disposed of off-site).

Fill – 30 Cubic Yards (Concrete for Caisson foundation).

Question No. 16

Could the construction or operation of the proposed facility impact or interfere with any of the existing nearby public utilities such as the overhead wires shown in the project construction plans (Petition - Attachment 1).

Response

EIP does not anticipate that the construction or operation of the new tower will interfere with or impact any existing public utilities on or adjacent to the Property. Appropriate and typical construction practices designed to protect existing utilities, structures etc. will be employed by EIP's site contractors in accordance with State Building and Electrical Codes; Fire Codes requirements; Call Before You Dig requirements; and Occupational Health and Safety requirements.

Question No. 17

What is the distance and direction of the nearest wetland area to the proposed facility?

Response

There are no wetlands on the Property. The closest off-site wetland area is located approximately 1,600 feet (0.3 miles) to the east of the new tower location.

Question No. 18

Is the proposed facility within a Department of Energy and Environmental Protection-designated Aquifer Protection Area?

Response

No.

Question No. 19

Provide construction work days/hours and the anticipated duration of construction.

Response

EIP anticipates that construction activity would occur between the hours of 8:00 a.m. and 5:00 p.m. Monday through Friday. It is possible that some Saturday work may also be required. EIP expects to be able to complete all site improvements, including the removal of the existing tower, in a period of 6-9 months.

Question No. 20

Does the Petitioner intend to include a request for approval of T-Mobile's antenna installation at the proposed facility? If so, provide existing and "existing plus proposed" coverage maps for the proposed facility?

Response

Yes. The carrier-specific information provided in these responses includes the equipment upgrades that T-Mobile intends to install on the new/relocated tower. T-Mobile's Coverage Comparison Maps showing coverage from surrounding sites with the existing EIP tower and existing sites with the new EIP tower are included in Attachment 1.

Question No. 21

Does the Petitioner intend to include a request for approval of AT&T's antenna installation at the proposed facility? If so, provide existing and "existing plus proposed" coverage maps for the proposed facility.

Response

Yes. The carrier-specific information provided in these responses includes the equipment upgrades that AT&T intends to install on the new/relocated tower. AT&T coverage maps

showing coverage in the area with and without the proposed replacement tower, are included in Attachment 2.

Question No. 22

Identify distances and directions to the adjacent sites with which the proposed facility would hand off signals. Include locations, tower types, and AT&T and T-Mobile antenna centerline heights at these sites.

Response

T-Mobile

CT11173F – 601 Silas Deane Highway, Wethersfield, CT – Church Steeple at 45-foot antenna height located 0.2 miles to the north.

CT11060D – 100 Great Meadow Road, Wethersfield, CT – Rooftop, 114-foot antenna height located 1.14 miles to the northeast.

CTHA014A – 23 Kelleher Court, Wethersfield, CT – Monopole, 150-foot antenna height located 1.64 miles to the northwest.

AT&T

CT5125 – 100 Great Meadow Road, Wethersfield, CT – Rooftop, 121-foot antenna height located 1.14 miles to the northeast.

CT5124 – 1 Executive Square, Wethersfield, CT – Rooftop, 125-foot antenna height located 1.5 miles to the south.

CT5122 – 23 Kelleher Court, Wethersfield, CT – Monopole, 140-foot antenna height located 1.6 miles to the northwest.

CT5126 – 223 Brainard Road, Hartford, CT – Monopole, 98-foot antenna height located 1.9 miles to the north.

CT1145 – 99 Cedarwood Lane, Newington, CT – Guyed, 163-foot antenna height located 2.5 miles to the west.

CT1189 – 700 Maple Avenue, Hartford, CT – Building Side Mount, 76-foot antenna height located 2.6 miles to the north.

CT5127 – 99 Meadow Street, Hartford, CT – Monopole, 137-foot antenna height located 2.6 miles to the north.

CT5273 – 2577 Main Street, Glastonbury, CT – Self-Support Lattice, 123-foot antenna height located 2.7 miles to the east.

CT1011 – 2 Mountain Road, Hartford, CT – Monopole, 100/110-foot antenna height located 2.7 miles to the northwest.

CT1083 – Glastonbury Police Department, 2108 Main Street, Glastonbury, CT – Self-Supporting Lattice, 167-foot antenna height located 2.9 miles to the east.

CT1039 – 699 Old Main Street, Rocky Hill, CT – Monopole, 105-foot antenna height located 2.9 miles to the south.

CT1146 – 287 Main Street, East Hartford, CT – Rooftop, 63-foot antenna height located 3.0 miles to the northeast.

CT5123 – 52 New Britain Avenue, Rocky Hill, CT – Monopole, 168-foot antenna height located 3.3 miles to the southwest.

CT5403 – 605 Willard Avenue, Newington, CT – Monopole, 157-foot antenna height located 3.8 miles to the west.

Question No. 23

Could a backup generator be shared by other carriers that may locate at the proposed facility? What effect would a shared generator have on the run time of the generator if at full load?

Response

Technically, a generator of adequate size could be used to provide backup power to both T-Mobile and AT&T. Larger generators typically come with larger fuel tanks so run times, before refueling is required, are often comparable to smaller generators. As mentioned in the Petition, AT&T currently shares (with Frontier) the existing generator located inside the Frontier Communications building. EIP does not know if this existing Frontier generator would also have the capacity to satisfy T-Mobile's back-up power requirements.

Question No. 24

Would a battery backup (if applicable) be used for AT&T and T-Mobile to provide uninterrupted power and prevent a reboot condition? How long could the battery backup alone supply power to the facility in the event that the generator fails to start?

Response

Yes, both AT&T and T-Mobile use batteries to provide backup power to cell site equipment. AT&T batteries supply power for up to four (4) hours. T-Mobile batteries supply power for one (1) to two (2) hours.

Question No. 25

Petition page 1 states, “The existing tower is not structurally capable of supporting facility upgrades needed by AT&T and T-Mobile.” Petition page 5 and the Radio Frequency Emissions Report behind Attachment 5 confirm that the **existing** T-Mobile and AT&T antennas on the replacement tower will operate within the FCC RF emissions standards (emphasis added.) Why would AT&T and T-Mobile install their existing equipment rather than the upgraded equipment on the replacement tower?

Response

Correction – The Radio Frequency Emissions Report included in Attachment 5 of the Petition does incorporate the AT&T and T-Mobile antenna upgrades in its emissions calculations.

Question No. 26

When would AT&T and T-Mobile install their upgraded equipment on the replacement facility, if it is approved, and how would AT&T and T-Mobile apply for the approval to install the upgraded equipment on the replacement facility?

Response

EIP expects that both AT&T and T-Mobile will complete their respective facility upgrades when the new tower site is constructed. EIP asks that the Council approve, as a part of this Petition, the facility modifications described in the Petition and in these responses.

Question No. 27

Petition page 4 and the Site Plans note an existing air navigation beacon. What regulatory entity required inclusion of the beacon when the existing tower was constructed? What is the light color and strobe sequence, if applicable, of the existing beacon? Would the same type of beacon be required for the replacement tower? What FAA marking, and lighting scheme would apply to the beacon for the replacement tower?

Response

A 1999 FAA Study (99-ANE-0118-OE) states voluntary marking and lighting should be considered because of the site's proximity to an airport (likely Brainerd Airport in Hartford). That voluntary request was honored by the previous owner of the tower. This site is currently marked/lit with A0-Red L-810 beacons.

EIP is still waiting for a final determination from the FAA for the replacement structure (2022-ANE-1394-OE). In the Petition, EIP stated that we will continue to use the same type of lighting on the new tower. However, if the FAA comes back with new information in its determination, we will adhere to the findings of that determination. EIP is happy to provide the Council with a copy of the final FAA Determination as soon as it is available.

Question No. 28

Identify the nearest "Important Bird Area" as designated by the National Audubon Society?

Response

The closest Important Bird Area is located more than one mile to the southeast of the existing and proposed tower site. See Attachment 3.

Question No. 29

Would the proposed replacement tower comply with the USFWS Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance and Decommissioning? (available at <https://www.fws.gov/sites/default/files/documents/usfws-communication-tower-guidance.pdf>).

Response

Yes.

Question No. 30

How many acres of additional visibility would result from construction of the proposed replacement tower? Characterize the additional visibility from the surrounding areas.

Response

Predicted year-round visibility (leaf-on conditions) of the existing tower is approximately 18.7 acres, 0.93% of the one-mile radius (2010.6 acres) study area. Visibility of the proposed replacement tower is approximately 20.5 acres, 1.02% of the one-mile radius study area. The additional visibility is mostly contained within the commercial parking lots directly to the east and northeast of the Frontier property. Other additional areas of visibility are small areas scattered along the edges of the previous visible areas.

Question No. 31

Would the existing tower and equipment compound area be decommissioned/dismantled? If so, how would the existing tower and equipment compound area be restored?

Response

Yes. Once the new tower is constructed and the carrier facilities have been activated, the original tower would be decommissioned and removed from the Property. Due to its proximity to the Frontier central office building, the existing tower foundation would be left in place and used as an equipment pad for a future tenant. All other areas within the tower compound will maintain a gravel surface.

Question No. 32

Would AT&T's and T-Mobile's, proposed co-location(s) support text-to-911 service? Is additional equipment required for this purpose?

Response

Yes, both T-Mobile's and AT&T's shared use of the new tower would continue to support text-to-911 service. No new equipment would need to be installed to continue this service.

Question No. 33

Would AT&T and T-Mobile's antennas comply with federal E911 requirements?

Response

Yes, both T-Mobile and AT&T antennas will comply with federal E911 requirements.

Question No. 34

Would AT&T's and T-Mobile's installation(s) comply with the intent of the Warning, Alert and Response Network Act of 2006?

Response

Yes, both T-Mobile and AT&T installations will comply with the intent of the Warning, Alert and Response Network Act of 2006.

Question No. 35

What, if any, stealth tower design options would be feasible to employ at this site? Please provide costs related to each stealth tower design.

Response

In this instance, EIP is proposing to replace the existing monopole tower with another monopole tower of similar height and appearance and paint the monopole to “match adjacent materials” and be as “non-visible as possible”. EIP does not believe that any other “stealth” tower designs would have any real screening impact on the structure.

Question No. 36

Would the proposed facility comply with Department of Energy and Environmental Protection noise control standards at the property boundaries?

Response

Yes, EIP anticipates that the tower, all tower-mounted equipment and all ground-mounted equipment will comply with State Noise Standards. As discussed in the Petition, AT&T will continue to use the existing Frontier generator located inside the Frontier switch building. The Petition is not aware of T-Mobile plans to install a backup generator at the site.

Question No. 37

What measures are proposed for the site to ensure security and deter vandalism?
(Including alarms, gates, locks, anti-climb fence design, etc.)

Response

The facility compound will be surrounded by a chain link fence and locked security gate. Access to the facility compound would be restricted to EIP and those carriers sharing the proposed tower site. Typically, carrier equipment cabinets in the secure compound maintain

silent intrusion alarms. These systems are monitored remotely. If a breach of any of these security systems occurs, local police will be dispatched to the cell site. Climbing pegs on the lower portion of the tower will also be removed to reduce the risk of someone climbing the tower.

Question No. 38

Identify the safety standards and/or codes by which equipment, machinery or technology that would be used or operated at the proposed facility.

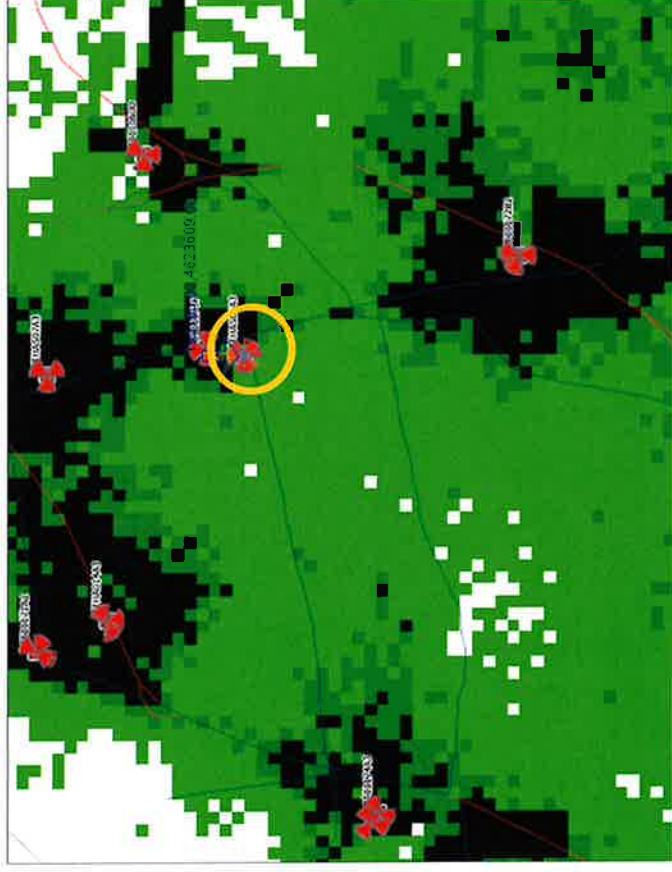
Response

- 2012 International Building Code with the 2016 CT Building Code Amendments.
- National Electric Code (NFPA70).
- 2005 CT State Fire Safety Code with the 2009 Amendments.
- TIA-222-G-4 “Structural Standards for Steel Antenna Towers and Antenna Supporting Structures”.
- Occupational Safety and Health Administration (OSHA).

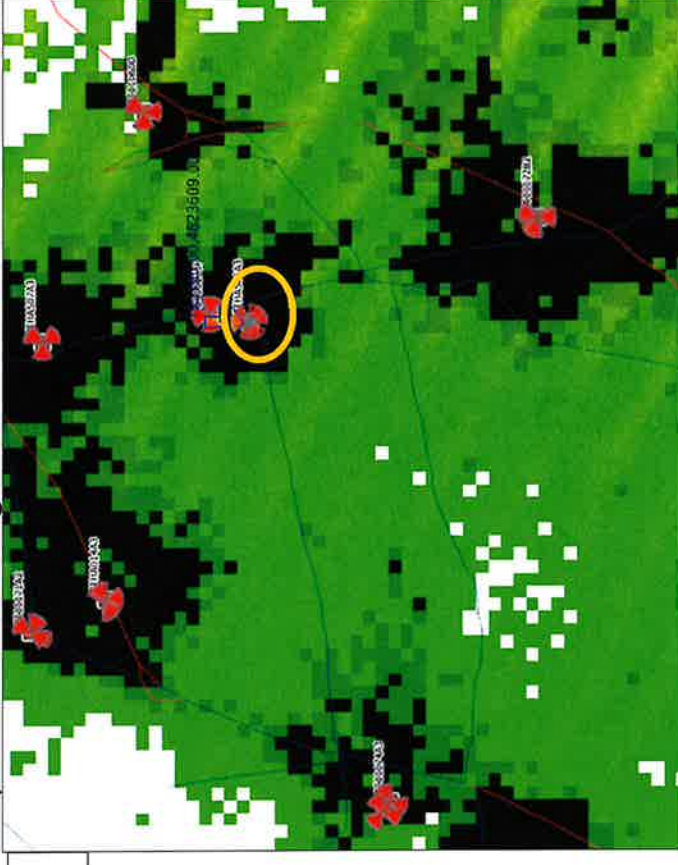
ATTACHMENT 1

Coverage Comparison – Current site vs. Proposed site

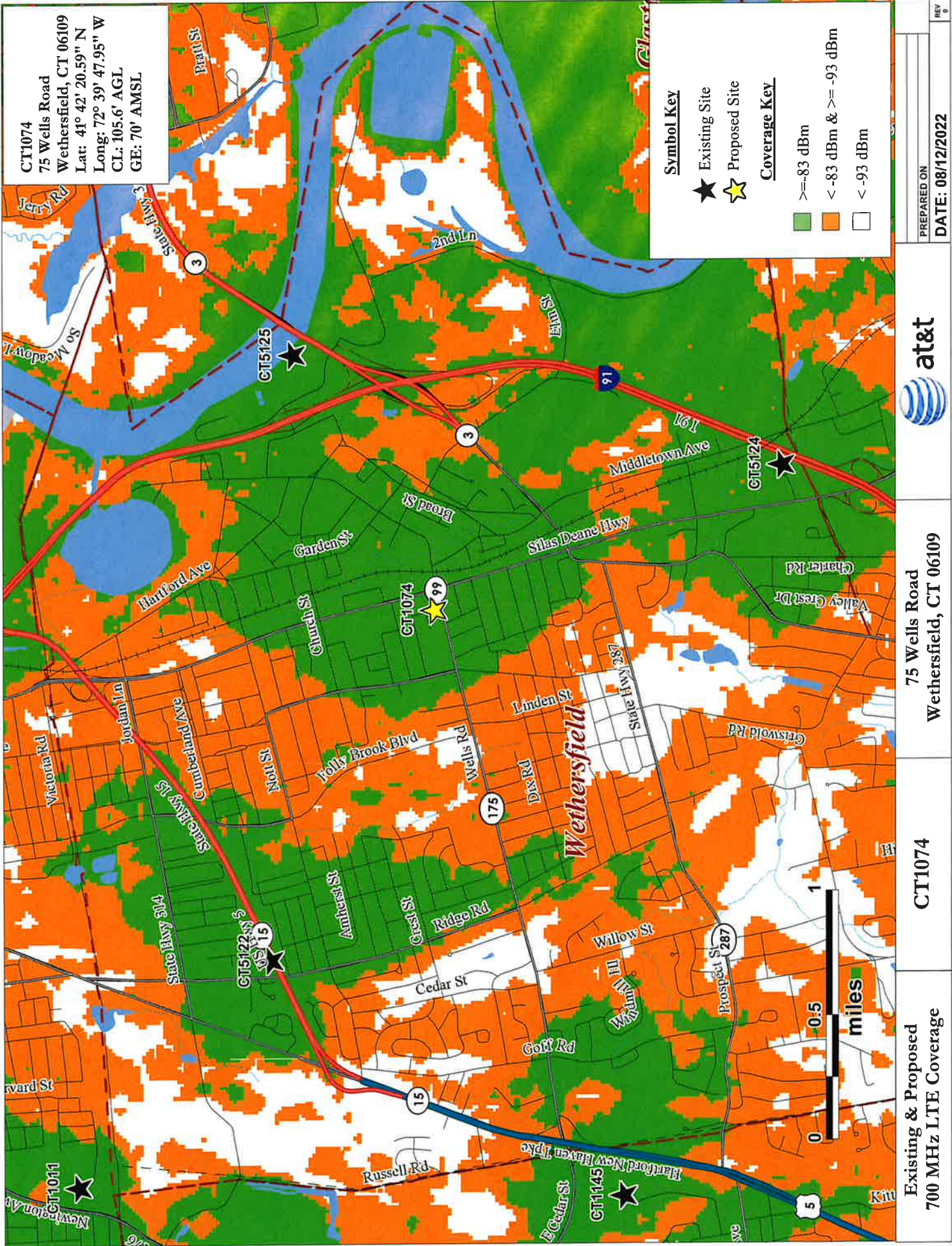
Current Site Coverage CTHA506A



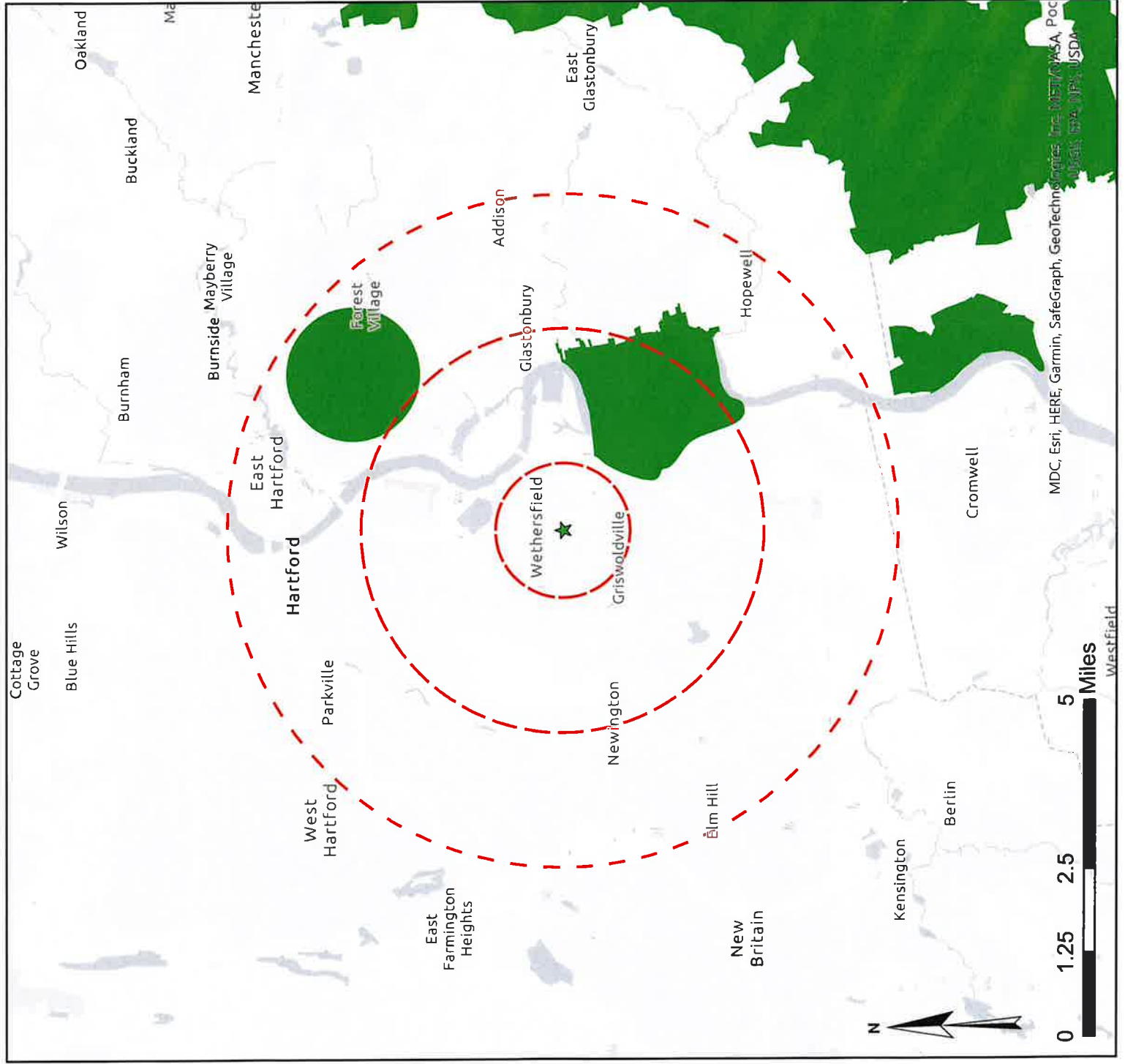
Proposed Site Coverage CTHA506A



ATTACHMENT 2



ATTACHMENT 3



Legend

★ Project Site

○ Radius at 1, 3 & 5 Miles

Important Bird Area Type

■ Continental

■ Global

■ State

638512/Wethersfield CO
75 Wells Road
Wethersfield, CT 06109

EBI Consulting

Source: Selected data from
the Audubon, ESRI & EBI.

PN: 6122002173

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