

STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

IN RE: :  
: :  
A PETITION OF CROWN CASTLE FOR A : PETITION NO. 1559  
DECLARATORY RULING ON THE NEED TO :  
OBTAIN A SITING COUNCIL CERTIFICATE :  
FOR THE MODIFICATION OF AN EXISTING :  
TELECOMMUNICATIONS FACILITY AT 41 :  
PADANARAM, DANBURY, CONNECTICUT : MARCH 24, 2023

RESPONSES OF CROWN CASTLE TO  
CONNECTICUT SITING COUNCIL INTERROGATORIES

On March 10, 2023, the Connecticut Siting Council (“Council”) issued Interrogatories to Crown Castle (“Crown”), relating to Petition No. 1559. Below are Crown’s responses.

Notice

Question No. 1

Referencing page 7 section B and Attachment 11 of the Petition, has the host property owner and/or any abutting property owners provided comments to Crown Castle (Crown) since the Petition filing? If yes, summarize the comments and how any concerns were addressed.

Response

Crown and the Council received written comments, in an e-mail, from the Jennifer L. Emminger, AICP, Danbury’s Deputy Planning Director on February 16, 2023. Ms. Emminger’s comments are currently a part of the Petition No. 1559 record. Crown also received a telephone call from Katie Phelan, Associate General Counsel at Alliance Energy, the property owner at 54 Padanaram Road, directly across the street from the M&M Precast parcel. Attorney Phelan asked if the proposed facility modifications would impact the Alliance Energy parcel. Crown’s response to Attorney Phelan is included in Attachment 1. As of the date of this filing, no other

comments were received from the City of Danbury or any other adjoining property owner.

### Project Development

#### Question No. 2

What is the estimated cost of the proposed project?

#### Response

Crown estimates its cost for the project costs to be approximately \$650,000.

#### Question No. 3

Is the project, or any portion of the project, proposed to be undertaken by state departments, institutions or agencies, or to be funded in whole or in part by the state through any contract or grant?

#### Response

No.

#### Question No. 4

Provide typical construction workdays and hours, and the anticipated duration of construction.

#### Response

Construction would occur between 7 a.m. and 7 p.m. Monday through Saturday.

#### Question No. 5

Would T-Mobile install the same equipment on the replacement facility as is installed on the existing facility consistent with T-Mobile's exempt modification request EM-T-Mobile-034-201208.

#### Response

Crown has been in contact with T-Mobile regarding the proposed replacement facility.

At this point, it is Crown's understanding that T-Mobile intends to relocate the same antennas and equipment from the existing tower onto the replacement tower. If T-Mobile decides to install new equipment on the replacement tower additional approvals from the Council would be required.

Question No. 6

How long will it take to switch over T-Mobile's existing antennas/equipment to the replacement tower? When will the relocated equipment become operational? Will customers experience service outages?

Response

Details regarding the relocation of T-Mobile's equipment onto the replacement tower will be coordinated with T-Mobile after the Council approves Petition No. 1559. Crown anticipates that the T-Mobile's equipment will be relocated during the tower construction phase of the project. If T-Mobile is able to provide Crown with like for like equipment, T-Mobile would be able to avoid any disruption in service. If the existing equipment is relocated onto the new tower T-Mobile may experience a short (5-10 business days) disruption of service from this facility.

Question No. 7

Would a temporary tower facility be required to maintain T-Mobile service during the cutover of carrier equipment to the replacement facility?

Response

Crown does not anticipate the need for a temporary tower for T-Mobile to maintain service during construction. T-Mobile is expected to continue its operation on the existing 80-foot tower until the replacement structure is available and its equipment relocated.

Question No. 8

Would there be any interruption in T-Mobile's service during the cutover of its equipment?

Response

*See Response to Q6 above.*

Question No. 9

Referencing page 6 of the Petition, the project would not require notification to the Federal Aviation Administration (FAA); however, page 2 of Attachment 10 of the Petition states that notification is required. Please clarify and provide the status of the notification to FAA, if applicable.

Response

The reference on page 6 of the Petition is a typographical error. As stated in the ASAC Site Specific Evaluation, notification to the FAA is required. The replacement tower will not, however, constitute a hazard to air navigation and will not require obstruction marking or lighting.

Existing Facility Site

Question No. 10

Referencing Attachment 5, Sheet C-2 and Attachment 8 of the Petition, an existing lattice tower is noted. Please clarify.

Response

References in Attachments 5 and 8 to an existing lattice tower are incorrect. The existing tower at the Property is an 80-foot laminate wood pole as described in the Petition narrative and as approved by the Council in Petition No. 712.



Question No. 11

Provide photographs of the existing facility and the proposed replacement facility area.  
Use stakes to show the limits of the proposed replacement facility area.

Response

Photographs of the existing facility and the proposed relocated facility compound areas are included in Attachment 2.

Question No. 12

Provide the number of residences within 1,000 feet of the existing facility site.

Response

There are 37 single family residences within 1,000 feet of the existing tower. An existing multi-family complex is located to the south of the existing tower. The closest building in this multi-family complex is 174 feet to the southeast of the existing tower site.

Question No. 13

What is the distance and direction from the existing facility site to the nearest residential property line?

Response

The closest single-family residence property line to the existing tower is 74 feet to the east, a parcel with a mailing address of 17 Hayestown Heights Road. The residence on this parcel is located adjacent to Hayestown Heights Road, approximately 645 feet to the east of the existing tower.

Question No. 14

When would the existing tower and equipment compound area be decommissioned/  
dismantled?

Response

Crown would decommission and remove the existing tower and related compound improvements within six months of the replacement facility becoming fully operational.

Proposed Replacement Facility

Question No. 15

Page 2 of the Petition indicates that T-Mobile would relocate to the 118-foot level of the replacement tower, however, page 4 of the Petition and Attachment 5, Sheet A-2 and the Radio Frequency Emissions Report indicates that T-Mobile would relocate to the 128-foot level of the replacement tower. Please clarify.

Response

T-Mobile antennas will be installed at the 128-foot level on the replacement tower.

Question No. 16

What is the distance and direction from the proposed replacement facility site to the nearest residential property line?

Response

The closest single-family residence property line to the replacement tower is 127 feet to the east located at 17 Hayestown Heights Road.

Question No. 17

Would the tower have a galvanized gray finish?

Response

Yes.

Question No. 18

Provide the diameter of the proposed tower.

Response

The replacement tower has not yet been designed but will likely maintain a diameter of 60 inches at the base and 26 inches at the top.

Question No. 19

What is the maximum number of tenants the replacement tower can support?

Response

Crown typically designs its towers to support a minimum of four wireless carriers and municipal and emergency service antennas, if a need exists.

Question No. 20

Have any other carriers, emergency service providers, the City of Danbury or other entities expressed an interest in locating at the proposed replacement facility?

Response

Other than AT&T, T-Mobile and Cellco/Verizon, no other entities have expressed an interest in the replacement tower.

Question No. 21

Would the tower and foundation be designed to accommodate an increase in tower height?

Response

No.

Question No. 22

The Connecticut State Building Code was updated effective October 1, 2022. Has the proposed replacement facility been designed to the updated code? If not, what changes are necessary to the design of the replacement facility to comply with the updated code?

Response

The replacement tower will be designed following the Council's approval of Petition No. 1559. Following that approval, Crown will complete a geo-technical survey and the tower and foundation design for the replacement structure. The structure will be designed in accordance with all current code requirements, including the recently updated Connecticut State Building Code.

Public Safety

Question No. 23

Referencing Petition, Attachment 5 Sheet C-1 the nearest property boundary is 127-feet northeast of the proposed 145-foot monopole. Could the tower be designed with a yield point to ensure that the tower setback radius remains within the boundaries of the host parcel?

Response

Yes. To do so, TEP would estimate the engineered fault would be designed into the tower at a height of no less than 73 feet above grade.

Question No. 24

Could the construction or operation of the replacement facility impact or interfere with any existing utilities or infrastructure within the project area? If so, identify any measures that would be employed to protect existing utilities or infrastructure from impact or interference.

Response

Crown's construction team would adhere to all prudent construction practices to identify and protect existing utilities and infrastructure at the property prior to the start of construction (e.g. Call Before You Dig). Given current development at the property, Crown doesn't not anticipate having to deal with any existing utilities or infrastructure in the area of the replacement

tower.

Question No. 25

Would the replacement facility comply with Department of Energy and Environmental Protection Noise Control Standards at the property boundaries?

Response

Yes. A noise study has not been performed for the existing or the proposed replacement facility at the Property. That said, Crown is confident that all of the carriers' radio equipment at the modified facility will comply the State Noise Standards. As the Council is aware, noise generated by emergency backup generators, is exempt from State noise regulations.

Question No. 26

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

Response

The replacement facility compound will be surrounded by an eight-foot tall chain link security fence and gate with one-foot of barbed wire at the top. The compound gate will remain locked at all times and restrict access to the carriers using the tower and Crown. Wireless service equipment will maintain silent intrusion alarms that are monitored remotely. Climbing pegs will be removed from the bottom portion of the tower to deter unauthorized climbing of the tower.

Question No. 27

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

## Response

- 2021 International Building Code (IBC), as amended by the 2022 Connecticut State Building Code.
- 2020 National Electric Code (NFPA 70), as amended by the 2022 Connecticut State Building Code.
- 2021 International Mechanical Code, as amended by the 2022 Connecticut State Building Code.
- 2022 Connecticut State Fire Prevention Code.
- 2022 Connecticut State Fire Safety Code.
- ANSI/TIA-222-H "Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures".
- Occupational Safety and Health Administration (OSHA).

## Backup Power

### Question No. 28

Could a shared emergency backup generator be installed at the site for the carriers that intend to locate at the replacement facility? If so, what size, type, etc. and how much would it cost?

### Response

It is technically feasible for all of the wireless carriers to use a shared-generator at this site. A single, shared generator would need to be adequately sized to accommodate the shared use. However, as the Council is aware, both AT&T and Verizon maintain a strong preference to install, maintain and control their own backup power supply including backup generators.

## Environmental

### Question No. 29

How would the existing tower and equipment compound area be restored?

### Response

The existing site will be restored to ground level and ground equipment / materials will be repurposed or recycled. After removal of existing equipment and tower, the disturbed earth should be loomed and seeded with native and local material.

### Question No. 30

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

### Response

Fill = 200 cubic yards

Cut = 50 cubic yards

### Question No. 31

Referencing page 5 of the Petition, clearing and grading is depicted in Attachment 5, Sheet SP-1. Please provide Sheet SP-1.

### Response

A revised set of drawing is included in Attachment 3. Plan Sheet C-1 includes site grading.

### Question No. 32

Would E&S controls comply with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control?

Response

Yes.

Question No. 33

How many trees with a diameter of six inches or greater at breast height would be removed?

Response

Crown would estimate that thirty-five (35) trees six inches or greater at breast height would need to be removed to construct the replacement tower and related facility.

Question No. 34

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

Response

The closest IBA to the host Property is the Audubon Center at Bent of the River, located in Southbury approximately 10 miles to the northeast. Encompassing a wide variety of relatively undisturbed upland and wetland habitats, this 554 acre historic estate (with an additional ±100 acres in conservation easements) serves as a model land management preserve dedicated to environmental education, research and bird conservation. This IBA contains exceptional habitats for birds and other wildlife, including managed shrubland habitats providing nesting habitat for early successional species of conservation concern.

Due to its distance from the host property, this IBA would not experience an adverse impact resulting from the proposed tower replacement facility.

Question No. 35

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

As detailed in the following response, the tower replacement facility would comply with the USFWS Best Practices recommendations. In 2021, the USFWS issued an update to the original voluntary guidelines for communication towers titled *Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance and Decommissioning*<sup>1</sup> which recommends the voluntary guidelines listed below. These voluntary guidelines are designed to assist tower companies in developing their communication systems in a way which minimizes the risk to migratory birds and threatened and endangered species. The following responses to each of the USFWS recommendations which are abridged from the original document are provided below.

### **Siting and Construction of New Towers**

*1. Contact with USFWS Office. Communicate project plans to nearest USFWS Field Office*

The USFWS New England Field Office has been contacted to determine what review process has been developed for the receipt of communication project plans. A response has not been received to date.

*2. Collocation of the communications equipment on an existing communication tower or other structure (e.g., billboard, water and transmission tower, distribution pole, or building mounts). This recommendation is intended to reduce the number of towers across the landscape.*

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<sup>1</sup> Migratory Bird Program U. S. Fish and Wildlife Service. (2021, March). Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning. <https://www.fws.gov/migratorybirds/pdf/management/usfwscommtowerguidance.pdf>

The proposed facility modifications consist of replacement of an existing 80-foot tall wood laminate tower with a new 145-foot steel monopole tower and does not result in the increase of towers on the landscape.

3. *All new towers should be sited to minimize environmental impacts to the maximum extent practicable.*

The proposed facility is a replacement of an existing tower facility to be located on an existing industrial developed property in proximity to the existing tower. Although the new tower location will require minimal tree clearing, it would occur within a small forest patch surrounded by developed properties. As a result, no significant environmental impacts would result from the tower replacement project that would result in a likely adverse impact to avian species.

*Place new towers within existing "antenna farms" (i.e., clusters of towers) when possible.*

There are no existing "antenna farms" in the vicinity of the proposed tower replacement site that would satisfy the RF coverage objectives of the proposed facility.

- a. *Select already degraded areas for tower placement.*

The tower replacement will be located adjacent to an existing developed/degraded area.

- b. *Towers should not be sited in or near wetlands, other known bird concentration areas (e.g., state or federal refuges, staging areas, rookeries, and Important Bird Areas), or in known migratory bird movement routes, daily movement flyways, areas of breeding concentration, in habitat of threatened or endangered species, key habitats for Birds of Conservation Concern, or near the breeding areas ("leks") of prairie grouse.*

The proposed replacement facility is not within wetlands, known bird concentration areas, migratory or daily movement flyway or result in fragmentation of a core forest habitat that could potentially provide habitat for Birds of Conservation Concern. According to the DEEP NDDB, there are no known extant populations of state or federal threatened or endangered avian species or state special concern avian species at or immediately proximate to the replacement facility or host property. The nearest NDDB polygon is located  $\pm 1.4$  miles north of the proposed facility.

- c. *Towers should avoid ridgelines, coastal areas, wetlands or other known bird concentration areas.*

The Facility is not sited on a ridgeline and is not located within coastal areas, wetlands or other known bird concentration areas.

- d. *Towers and associated facilities should be designed, sited, and constructed so as to avoid or minimize habitat loss within and adjacent to the tower "footprint". In addition, several shorter, un-guyed towers may be preferable to one, tall guyed, lit tower.*

The host property is currently improved with an industrial operation that does not support wildlife habitat in a significant capacity and the replacement facility would be sited immediately adjacent to an existing developed and disturbed area that will result in minimal tree removal.

The proposed 145-foot tall monopole tower is self-supporting (no guys) and is unlit.

4. *During construction, the following considerations can reduce the risk of take of birds:*

- a. *Schedule all vegetation removal and maintenance (e.g., general landscaping activities, trimming, grubbing) activities outside of the peak bird breeding season to reduce the risk of bird take.*

The replacement tower would be located adjacent to an existing developed and disturbed area with minimal tree clearing required. This area is not anticipated to support significant bird breeding habitat and therefore restricting vegetation removal activities outside the peak bird breeding season is not warranted.

- b. *When vegetation removal activities cannot avoid the bird breeding season, conduct nest clearance surveys.*

Please refer to response to 4.a. above. Nest clearance surveys are not warranted for this tower replacement project given the existing conditions of the host property and replacement tower location immediately adjacent to an existing developed and disturbed area.

- c. *Prevent the introduction of invasive plants during construction to minimize vegetation community degradation by: Use only native and local (when possible) seed stock for all temporary and permanent vegetation establishment; and ii. Use vehicle wash stations prior to entering sensitive habitat areas to prevent accidental introduction of non-native plants.*

With the existing developed and disturbed nature of the host property and adjacent properties, invasive plants have already likely been introduced. Therefore, the proposed replacement facility would not be considered a significant vector for introduction of invasive plant species.

5. *Tower design should consider the following attributes:*

- a. *Tower Height. It is recommended that new towers should be not more than 199 ft. above ground level (AGL).*

The Facility satisfies this recommendation with a height of 145 feet AGL.

- b. *Guy Wires. We recommend using free standing towers such as lattice towers or monopole structures.*

The Facility satisfies this recommendation with a self-supporting monopole structure.

- c. *Lighting System. Lights are a primary source of bird aggregation around towers, thus minimizing all light is recommended. No tower lighting is the preferred option if Federal Aviation Administration (FAA) regulations and lighting standards (FAA 2015, 2020, Patterson 2012) permit.*

The Facility will not contain tower lighting.

### **Operation and Maintenance of All Towers**

1. *Existing Tower Lighting. We recommend that towers be unlit, when allowed by FAA regulations.*

The Facility will not contain tower lighting.

2. *Infrastructure Lighting. We recommend that existing infrastructure be unlit, when allowed by FAA regulations. If associated buildings require security or operational lighting, minimize light trespass using motion sensors and down-shielding with minimum intensity light.*

Equipment within the compound requires security lighting, which will be set on motion sensors, down-shielded and minimum intensity lighting.

3. *Vegetation Management. Schedule all vegetation removal and maintenance (e.g., general landscaping activities, trimming, grubbing, etc.) activities outside of the peak bird breeding season to reduce the risk of bird take. When vegetation removal activities cannot avoid the bird breeding season, conduct nest clearance surveys.*

Once the Facility is constructed, minimal vegetation maintenance is anticipated and would only occur immediately adjacent to the tower compound and access road, both areas of which would support limited bird nesting habitat. Therefore, restricting this minimal vegetation maintenance work to outside the peak bird breeding season, or the need to perform nest surveys, is not considered necessary.

- 4. Birds Nesting on Towers. If birds are nesting on communication towers that require maintenance activities, contact the state natural resource protection agency and/or the USFWS for permits, recommendations, and requirements.*

Following construction of the Facility, if tower maintenance activities encounter bird nests, DEEP Wildlife Division and USFWS will be contacted.

- 5. Tower Access. Representatives from the USFWS or researchers should be allowed access to the site to evaluate bird use, conduct dead-bird searches, and conduct other research, as necessary.*

Crown Castle agrees upon advance notice from USFWS, to allow agency representatives access to the Facility.

#### Question No. 36

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

Carrier needs limit the ability for Crown to use a unipole or flagpole tower design. A brief review of the site does not show many pine trees native to the tower location and thus a monopole structure may not blend into the foreground and background of the tower and likely be more visible than a traditional monopole tower. The tower profile above the treeline would be darkened by faux branches and potentially increase its visibility against the sky. Typically, the cost of a tree tower is three times the cost of a traditional monopole.

#### Question No. 37

Would visibility of the proposed replacement tower be reduced if it was painted? If so, what colors are available that may reduce visibility? Would Crown be willing to paint the replacement tower and wireless carrier panel antennas/mounting equipment? Provide costs associated with painting.

Response

Painting the tower would not necessarily reduce visibility. The choice of paint color would not be suitable for all weather conditions, or seasonal foliage. A galvanized will weather to a dull gray finish and is often most suitable for towers surrounded wooded areas like this one. The galvanized finish also does not chip and weather in the fashion paint does and would reduce maintenance costs on the tower. Painting of the tower would likely occur during the fabrication process and would add some nominal cost to the tower.

Question No. 38

Did Crown consider a wood laminate finish for the proposed replacement facility similar to the finish of the existing tower? If so, provide costs related to this design.

Response

No. Given the level of carrier interest in this facility and a desire, on Crown's part, to make this tower available to other wireless carriers, municipal entities or emergency service provided, a steel monopole tower is needed.

Question No. 39

The Council's June 10, 2005 Declaratory Ruling and May 8, 2006 Post Construction Report on Petition 712 (attached) indicated year-round views of the 80-foot tower from Route 37 to the west and seasonal views from the condominiums to the south. How many acres of additional visibility would result from the construction of the proposed replacement tower? Characterize the additional visibility from the surrounding area.

Response

Predicted seasonal visibility (summer, leaf-on conditions) of proposed tower as compared to the existing tower is estimated to be from an additional 34.5 acres or 1.72 percent of the study

area. Additional areas of visibility are mostly contained around areas of previous tower visibility, with more visibility as you move closer to the site. Additional views are predicted in the commercial/mixed use areas along Route 37 immediately adjacent to site. Small areas (less than 300 square feet) are predicted to be scattered within the multi-family housing complex to the south-southwest. These specific views are predicted to be intermittent and of the uppermost portion of the tower. Predicted year-round visibility (winter, leaf-off conditions) of proposed tower as compared to the existing is estimated to be from an additional 77.4 acres or 3.85 percent of the study area. Due to the nature of this type of winter view (thru existing tree limbs and foliage) the additional views are mostly scattered within the study area with larger areas of predicted visibility in the open areas around the commercial area to the southwest, the field area of the Danbury High School and within Lower Pine Cove. These specific views are predicted to be distant and partially obscured. Attachment 4 contains viewshed comparison packages for both leaf on and leaf off conditions. These maps compare predicted visibility of the existing tower height (shown in orange) and location to proposed tower height and location (shown in green) and indicate where both towers are predicted to be visible (overlap in blue).

CERTIFICATION OF SERVICE

I hereby certify that on this 24<sup>th</sup> day of March 2023, a copy of the foregoing was sent, via electronic mail, to the following:

Thomas J. Regan, Esq.  
Brown Rudnick, LLP  
185 Asylum Street  
Hartford, CT 06103  
[tregan@brownrudnick.com](mailto:tregan@brownrudnick.com)



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Kenneth C. Baldwin



# **ATTACHMENT 1**

## Baldwin, Kenneth

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**From:** Baldwin, Kenneth  
**Sent:** Tuesday, February 21, 2023 7:52 AM  
**To:** Katie Phelan  
**Subject:** RE: Danbury CT - Notice to Abutters of Petition for Declaratory Ruling - 41 Padanaram Road

Hi Katie. Sorry I missed you again.

The activity described in the Petition doesn't "touch" the Alliance property at 54 Padanaram. All of our activity is occurring up the hill and across the street behind the M&M Concrete Products use. Extending the tower height from 80' to 145' may mean the tower is more visible from your client's parcel, but that's about it.

Let me know if you have any other questions.

Ken

**From:** Katie Phelan <KPhelan@globalp.com>  
**Sent:** Monday, February 20, 2023 12:35 PM  
**To:** Baldwin, Kenneth <kbaldwin@rc.com>  
**Subject:** Danbury CT - Notice to Abutters of Petition for Declaratory Ruling - 41 Padanaram Road

**CAUTION: EXTERNAL EMAIL**

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Ken,

Apologies we keep missing each other – just wanted to confirm that they attached notice is related to 41 Padanaram Road and that we are being notified as an abutter and you will not need access to 54 Padanaram Road for construction.

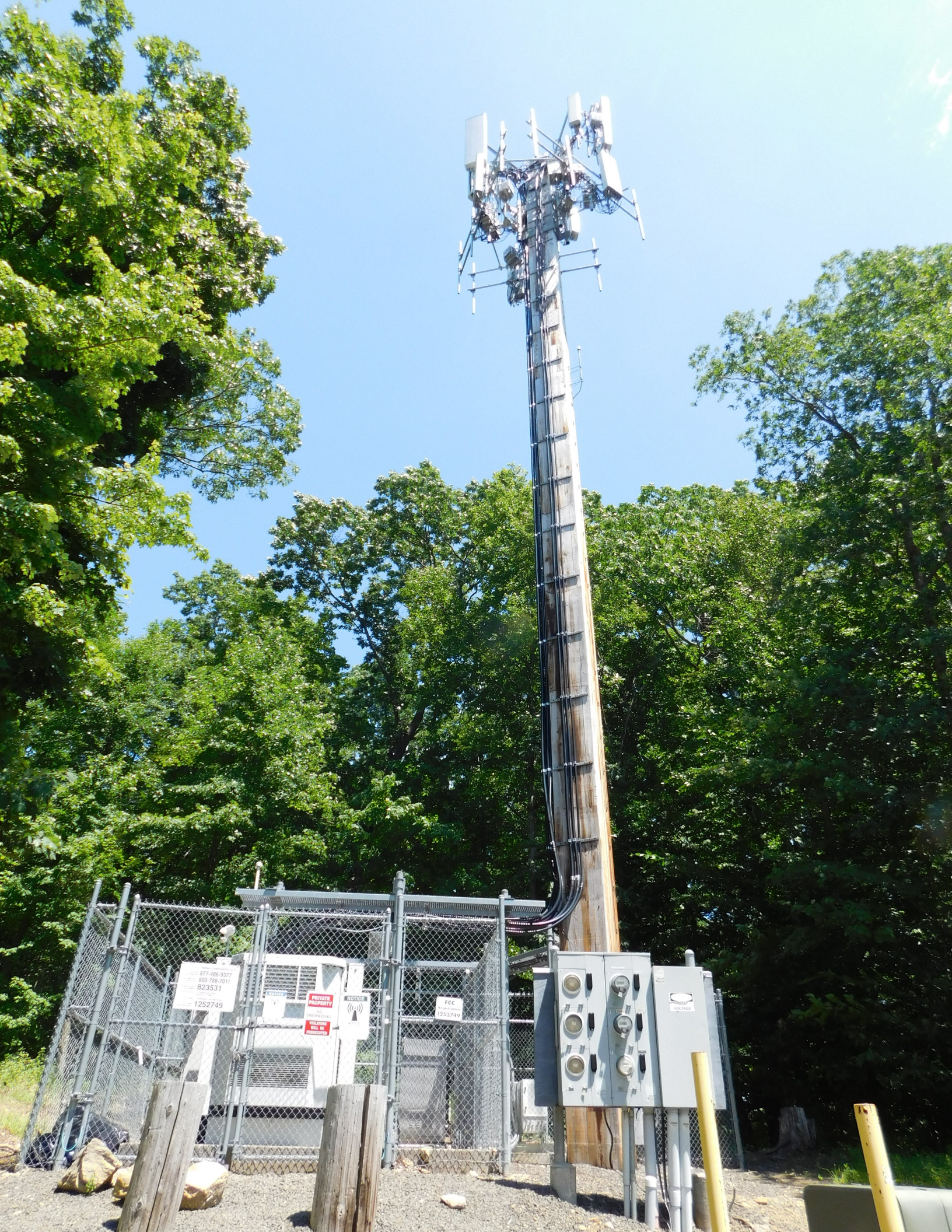
Thank you,

Katie

Katie Phelan  
Associate General Counsel  
Global Partners LP  
800 South St., Suite 500  
Waltham, MA 02453  
Office: 781.398.4119  
Fax: 781.398.7242  
Email: KPhelan@globalp.com

# **ATTACHMENT 2**





877-486-9377  
800-738-7011  
823531  
1252749

PRIVATE PROPERTY  
VIOLATORS WILL BE PROSECUTED

NOTICE  
((w))

FCC  
1252749

DANGER  
HIGH VOLTAGE





877-486-6377  
800-798-7011  
823531  
1252749

PRIVATE  
PROPERTY  
NO TRESPASSING

NOTICE  
(( ))

FCC  
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2130





47  
DNBRCT97

B 41

WARNING  
DANGER  
CALL 911

DANGER  
VOLTAGE







# **ATTACHMENT 3**



**PROJECT INFORMATION**

SCOPE OF WORK: TELECOMMUNICATIONS FACILITY (NSB A PROPOSED 145'-0" A.G.L. TALL MONOPOLE, PROPOSED WALK-IN CABINET, AND GENERATOR WILL BE INSTALLED AT GRADE INSIDE A EXISTING FENCED-IN COMPOUND. PROPOSED NINE PANEL ANTENNAS AND ASSOCIATED EQUIPMENT WILL BE INSTALLED AT A HEIGHT OF 140'-0" A.G.L.):

SITE ADDRESS: 41 PADANARAM RD  
DANBURY, CT 06811

APPLICANT: CROWN CASTLE  
500 WEST CUMMINGS PARK, SUITE 3600  
WOBURN, MA 01801

SITE OWNER: ROBERT KAUFMAN  
41 PADANARAM ROAD  
DANBURY, CT 06811

LATITUDE: 41.41903 N, 41° 25' 08.52" N

LONGITUDE: 73.46221 W, 73° 27' 43.96" W

TYPE OF SITE: MONOPOLE/ WALK-IN CABINET

TOWER HEIGHT: 145'-0"±



**SITE NAME: DANBURY PADANARAM ROAD**

**CROWN BU: 823531**

**PROJECT: NSB**

**DRAWING INDEX**

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**VICINITY MAP**

**DIRECTIONS TO SITE:**  
HEAD NORTHWEST TOWARD CENTRAL AVE. TURN RIGHT TOWARD CENTRAL AVE. TURN RIGHT ONTO CENTRAL AVE. SLIGHT RIGHT TO MERGE ONTO I-87 S TOWARD NEW YORK THRUWAY. MERGE ONTO I-87 S. USE THE RIGHT LANE TO TAKE EXIT 1E-W FOR I-90 E TOWARD BOSTON. MERGE ONTO I-87 S/I-90 W. TAKE EXIT 23 - 1 TO MERGE ONTO I-87 S TOWARD NEW YORK. TAKE EXIT 21 TOWARD NY-23/CATSKILL/CAIRO. TURN LEFT ONTO MAIN ST. TURN LEFT ONTO THE RAMP TO HUDSON. MERGE ONTO NY-23 E. AT THE TRAFFIC CIRCLE, TAKE THE 2ND EXIT ONTO NY-23 E/NY-9G N. CONTINUE TO FOLLOW NY-23 E. CONTINUE STRAIGHT ONTO NY-82 S. SLIGHT RIGHT TO MERGE ONTO TACONIC STATE PARKWAY. MERGE ONTO TACONIC STATE PARKWAY. TAKE EXIT 47 A FOR NY-55 E TOWARD PAWLING. TURN RIGHT ONTO NY-55 E/STATE RTE 55 E. MERGE ONTO NY-22 S VIA THE RAMP TO BREWSTER. TURN LEFT ONTO HAVILAND HOLLOW RD. TURN RIGHT ONTO E BRANCH RD. CONTINUE ONTO FAIRFIELD DR. ENTERING CONNECTICUT. TURN RIGHT ONTO CT-39 S/BALL POND RD. TURN LEFT ONTO PADANARAM RD. DESTINATION WILL BE ON THE LEFT



**GENERAL NOTES**

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2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.



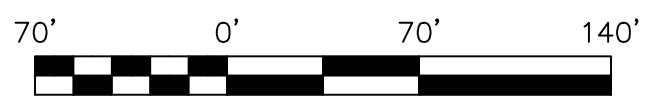
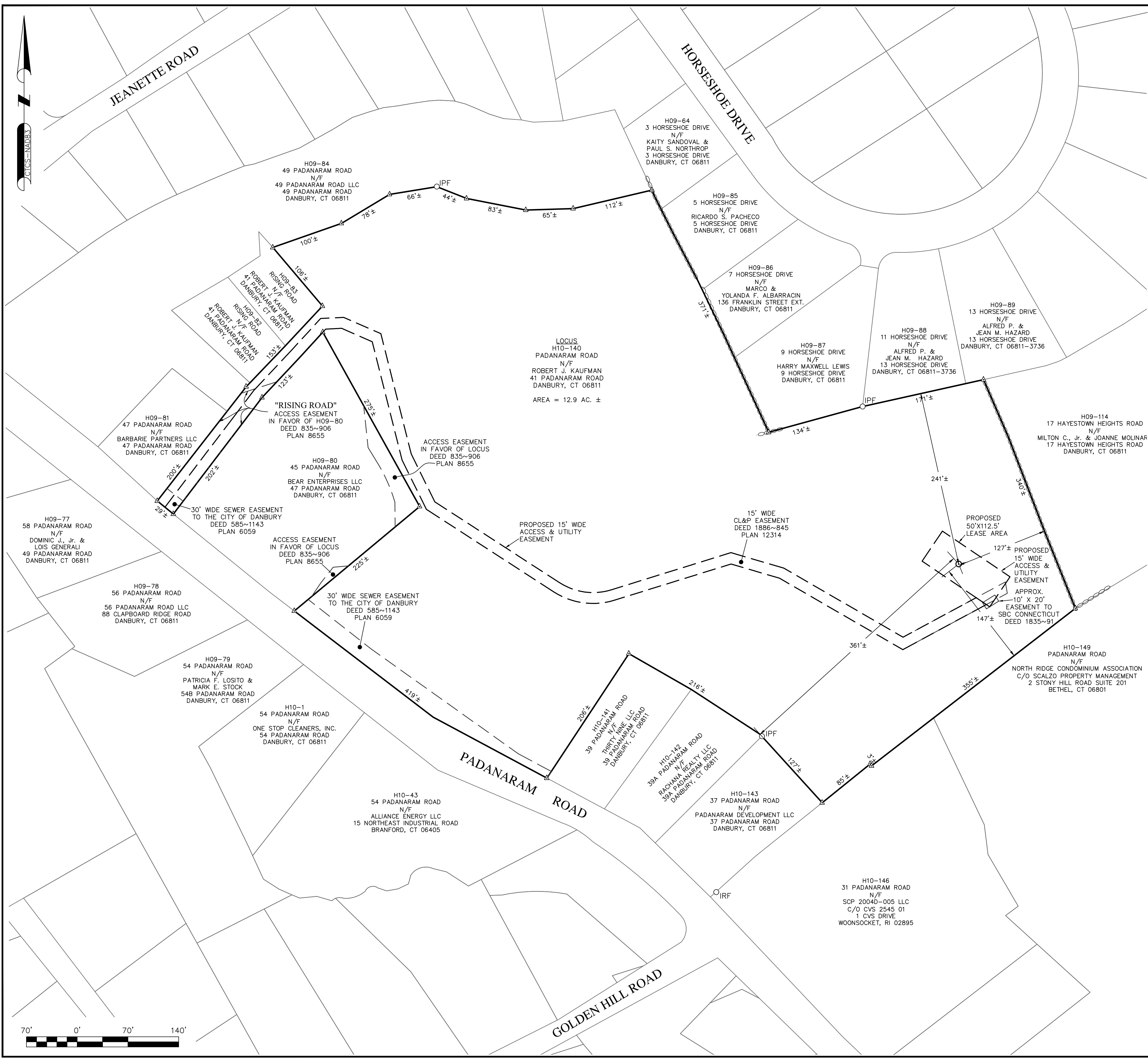
**CROWN BU: 823531**  
**SITE NAME: DANBURY PADANARAM ROAD**  
  
41 PADANARAM RD  
DANBURY, CT 06811  
FAIRFIELD COUNTY

NO.	DATE	REVISIONS	BY	CHK	APP'D
4	03/23/23	ISSUED FOR REVIEW	CC	JC	DPH
3	01/27/23	ISSUED FOR REVIEW	CC	JC	DPH
2	11/04/22	ISSUED FOR REVIEW	CC	JC	DPH
1	10/04/22	ISSUED FOR REVIEW	MJ	JC	DPH
0	08/23/22	ISSUED FOR REVIEW	MJ	JC	DPH

SCALE: AS SHOWN    DESIGNED BY: JC    DRAWN BY: AR

<b>CROWN CASTLE</b>		
TITLE SHEET (NSB)		
SITE NUMBER	DRAWING NUMBER	REV
CT1443	T-1	3



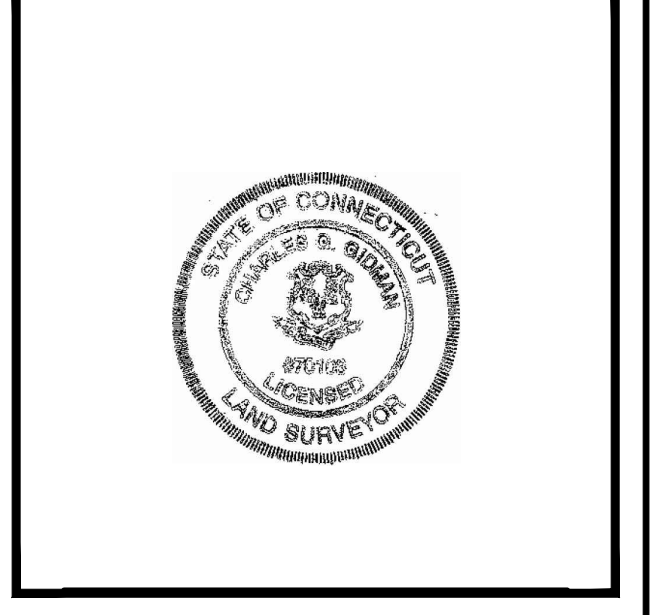


**LEGEND**

- PROPERTY LINE - SUBJECT PARCEL
- - - ABUTTERS PROPERTY LINE
- - - EASEMENT LINE
- IRON PIPE FOUND
- △ CALCULATED POINT
- N/F NOW OR FORMERLY
- H10-140 ASSESSOR'S ID
- ⊙ TOWER CONTROL POINT

**SITE SPECIFIC NOTES:**

1. FIELD SURVEY DATE: 6/28/2022-6/29/2022
2. HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)
3. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
4. OWNER: ROBERT J. KAUFMAN  
41 PADANARAM ROAD  
DANBURY, CT 06811
5. SITE NAME: DANBURY RT 39
6. SITE ADDRESS: 39 PADANARAM ROAD  
DANBURY, CT 06811  
FAIRFIELD COUNTY
7. APPLICANT: CROWN CASTLE  
500 WEST CUMMINGS PARK, SUITE 3600  
WOBURN, MA 01801
8. TAX ID: H10-140
9. DEED REFERENCE: BOOK 470 PAGE 94
10. PLAN REFERENCE: PLAN 12314  
PLAN 6059  
PLAN PREPARED FOR ROBERT J. KAUFMAN BY  
SYDNEY A. RAPP JR. & ASSOC. DATED 3/16/1992
11. ZONING DISTRICT: RA-20
12. THE HORIZONTAL DATUM AND VERTICAL DATUM WERE DERIVED FROM A DUAL FREQUENCY GPS SURVEY.
13. ALL UNDERGROUND UTILITY INFORMATION PRESENTED HEREON WAS DETERMINED FROM SURFACE EVIDENCE AND PLANS OF RECORD. ALL UNDERGROUND UTILITIES SHOULD BE LOCATED IN THE FIELD PRIOR TO COMMENCEMENT OF ALL SITE WORK. CALL DIGSAFE 1-800-322-4844 A MINIMUM OF 72 HOURS PRIOR TO PLANNED ACTIVITY.
14. ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY MAPS, THE PROPOSED IMPROVEMENTS ON THIS PROPERTY ARE LOCATED IN AN AREA DESIGNATED AS ZONE X (UNSHADED), AREAS OF MINIMAL FLOOD HAZARD. MAP NO. 09001C 0137 F, EFFECTIVE DATE: 6/18/2010.
15. FIELD SURVEY BY EDM TOTAL STATION & RTK GPS.



CHECKED BY: BCF

APPROVED BY: CCG

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
0	11/2/2022	ISSUED FOR REVIEW	JDG

SITE NUMBER:  
CT1443  
SITE NAME:  
DANBURY RT 39  
SITE ADDRESS:  
41 PADANARAM ROAD  
DANBURY, CT 06811  
FAIRFIELD COUNTY

SHEET TITLE  
ABUTTERS  
PLAN

SHEET NUMBER  
**C-1**

THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300B-1 THROUGH 20-300B-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS INC. ON SEPTEMBER 26, 1997.

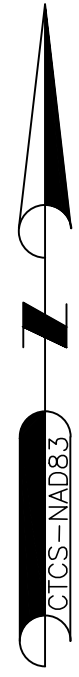
TYPE OF SURVEY: IMPROVEMENT LOCATION SURVEY  
BOUNDARY SURVEY CATEGORY: DEPENDENT SURVEY  
CLASS OF ACCURACY: HORIZONTAL CLASS D  
VERTICAL CLASS V-2  
TOPOGRAPHIC CLASS T-2  
PURPOSE OF SURVEY: PROPOSED CELLULAR UTILITIES

THIS DOCUMENT AND COPIES THEREOF ARE VALID ONLY IF THEY BEAR THE LIVE SIGNATURE AND EMBOSSED SEAL OF THE DESIGNATED PROFESSIONAL. UNAUTHORIZED ALTERATIONS RENDER ANY DECLARATION NULL AND VOID.

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

*Charles G. Gidman*  
CHARLES G. GIDMAN, P.L.S. #70103





**LEGEND**

- PROPERTY LINE - SUBJECT PARCEL
- ABUTTERS PROPERTY LINE
- - - EASEMENT LINE
- - - CONTOUR LINE
- ~ TREELINE
- ~ STONEWALL
- C - BURIED COMM. LINE
- E - BURIED ELECTRIC LINE
- CHAIN LINK FENCE
- COMM. BOX
- ⊙ POST OR BOLLARD
- ⊙ TOWER CONTROL POINT



CROWN CASTLE  
500 WEST CUMMINGS PARK, SUITE 3600  
WOBURN, MA 01801



45 BEECHWOOD DRIVE TEL: (978) 557-5553  
N. ANDOVER, MA 01845 FAX: (978) 336-5586

**NORTHEAST SURVEY CONSULTANTS**

3 Ferry Street  
Studio 1 East  
Easthampton, MA 01027  
(413) 203-5144  
northeastsurvey.com



CHECKED BY: BCF

APPROVED BY: CCG

**SUBMITTALS**

REV.	DATE	DESCRIPTION	BY
0	11/2/2022	ISSUED FOR REVIEW	JDG

SITE NUMBER:  
CT1443  
SITE NAME:  
DANBURY RT 39

SITE ADDRESS:  
41 PADANARAM ROAD  
DANBURY, CT 06811  
FAIRFIELD COUNTY

SHEET TITLE  
EXISTING  
CONDITIONS  
PLAN

SHEET NUMBER  
**C-2**

H09-114  
17 HAYESTOWN HEIGHTS ROAD  
N/F  
MILTON C., Jr. & JOANNE MOLINARO  
17 HAYESTOWN HEIGHTS ROAD  
DANBURY, CT 06811

CONTROL POINT "B"  
-IRON ROD SET-  
N: 714229.59  
E: 804606.82

TM  
SPIKE IN 12" STUMP  
EL=580.69'

CONTROL POINT "A"  
-IRON ROD SET-  
N: 714256.59  
E: 804739.13

CENTER OF PROPOSED TOWER  
LAT: 41°25'08.52"  
LON: 73°27'43.96"  
N: 714211.93  
E: 804661.07  
GROUND EL: 569' ±

CENTER OF EXISTING  
LATTICE TOWER  
LAT: 41°25'08.11"  
LON: 73°27'43.00"  
N: 714169.68  
E: 804733.81  
GROUND EL: 570' ±

APPROX. LOCATION  
10' X 20' EASEMENT  
TO SBC CONNECTICUT  
DEED 1835~91

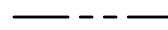
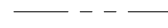







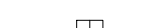
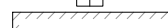
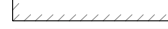





LOCUS  
H10-140  
PADANARAM ROAD  
N/F  
ROBERT J. KAUFMAN  
41 PADANARAM ROAD  
DANBURY, CT 06811  
AREA = 12.9 AC. ±

15' WIDE CL&P EASEMENT  
DEED 1886~845  
PLAN 12314

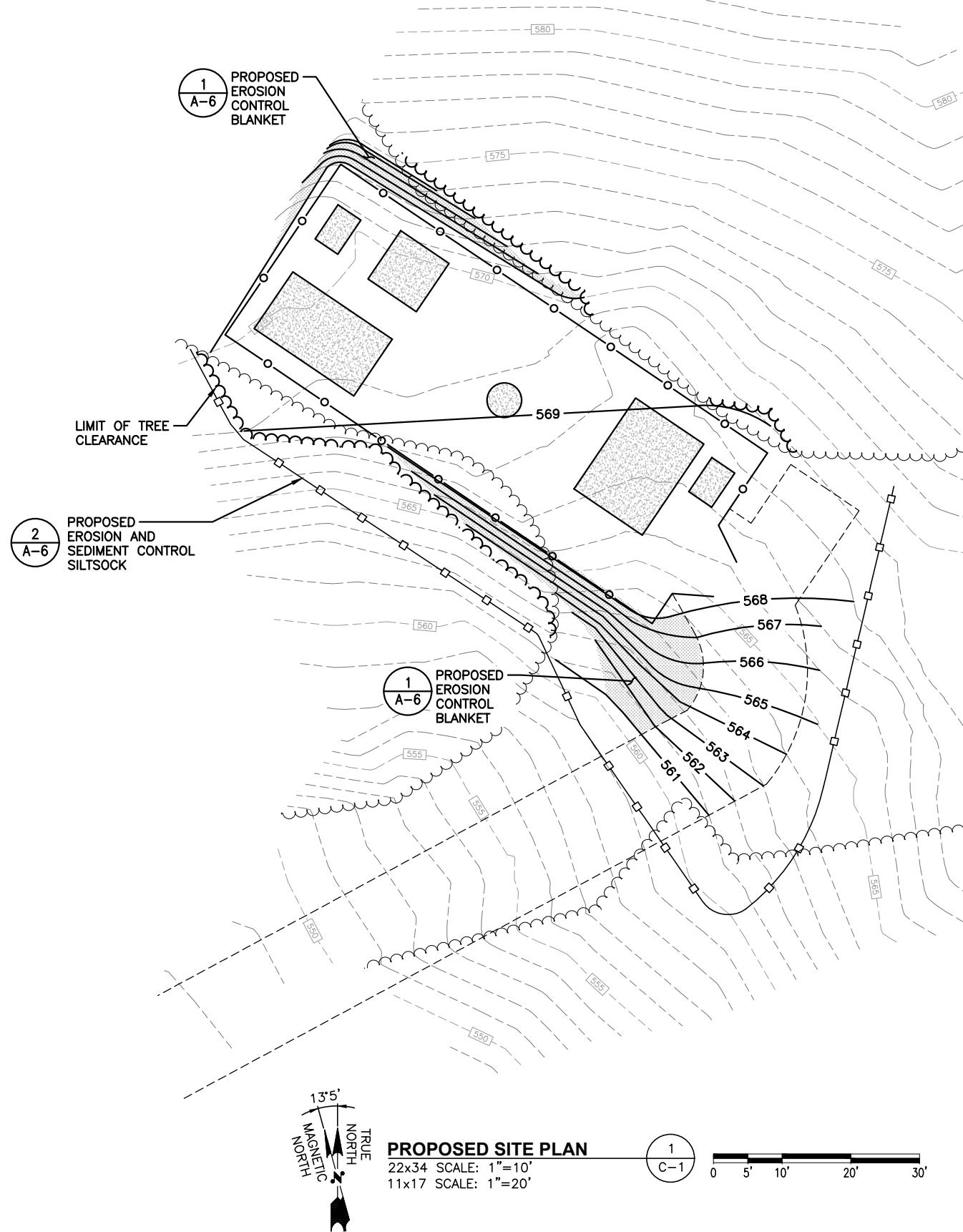
H10-149  
PADANARAM ROAD  
N/F  
NORTH RIDGE CONDOMINIUM ASSOCIATION  
C/O SCALZO PROPERTY MANAGEMENT  
2 STONY HILL ROAD SUITE 201  
BETHEL, CT 06801



**LEGEND**

-  PROPERTY LINE - SUBJECT PARCEL
-  ABUTTERS PROPERTY LINE
-  EXISTING CONTOUR LINE
-  TREE LINE
-  EXISTING TREE TO BE REMOVED
-  BARBED WIRE FENCE REMAINS
-  OHW OVERHEAD WIRE (TRANSMISSION LINE)
-  OH DOOR OVERHEAD DOOR
-  EXISTING CHAIN LINK FENCE
-  EXISTING IRON FENCE
-  EXISTING CATCH BASIN
-  EXISTING BUILDING
-  PROPOSED RETAINING WALL
-  BOW BOTTOM OF WALL
-  TOW TOP OF WALL
-  PROPOSED CONCRETE PAD
-  PROPOSED TOWER

REFER TO 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL



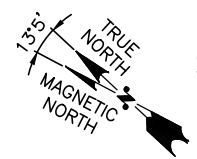
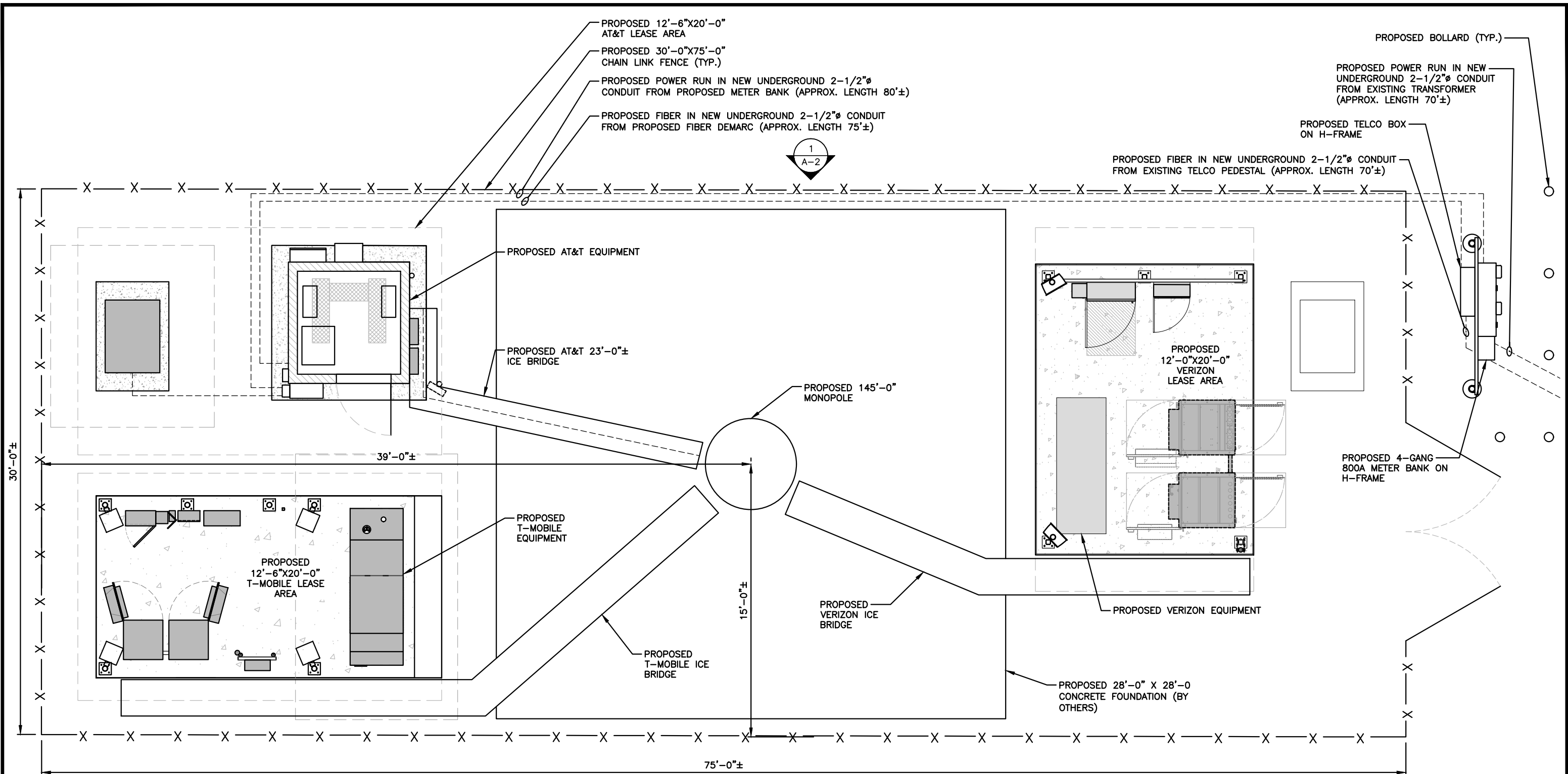
**CROWN BU: 823531**  
**SITE NAME: DANBURY PADANARAM ROAD**  
 41 PADANARAM RD  
 DANBURY, CT 06811  
 FAIRFIELD COUNTY

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0	08/23/22	ISSUED FOR REVIEW	MJ	JC	DPH

SCALE: AS SHOWN    DESIGNED BY: JC    DRAWN BY: AR

CROWN CASTLE		
PROPOSED SITE PLAN (NSB)		
SITE NUMBER	DRAWING NUMBER	REV
CT1443	C-1	3





**COMPOUND PLAN**  
 22x34 SCALE: 3/8"=1'-0"  
 11x17 SCALE: 3/16"=1'-0"

1  
A-1



**NOTE:**  
 PROPOSED POWER, TELCO, & GROUNDING TO COME FROM EXISTING SOURCES (ROUTING TO BE DETERMINED)

**NOTE:**  
 REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

**TEP**  
 NORTH EAST  
 TEP OPCO, LLC.  
 45 BEECHWOOD DRIVE, NORTH ANDOVER, MA 01845  
 TEL: (978) 557-5553

**CROWN CASTLE**  
 CROWN CASTLE  
 500 WEST CUMMINGS PARK, SUITE 3600  
 WOBURN, MA 01801

**CROWN BU: 823531**  
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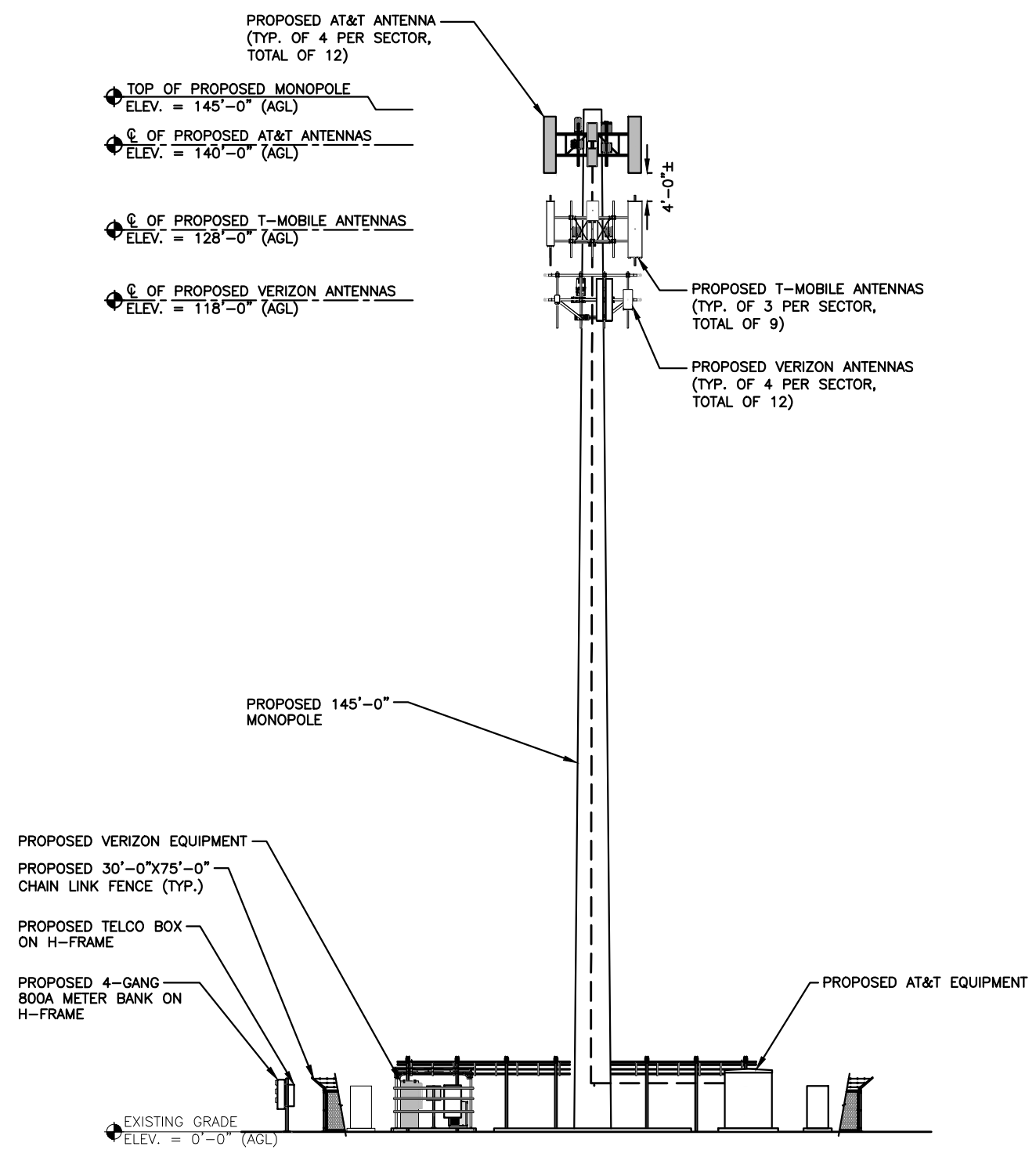
SCALE: AS SHOWN    DESIGNED BY: JC    DRAWN BY: AR

**CROWN CASTLE**

**COMPOUND PLAN (NSB)**

SITE NUMBER	DRAWING NUMBER	REV
CT1443	A-1	3

**NOTE:**  
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.



**NORTHWEST ELEVATION** 1  
A-2  
22x34 SCALE: 3/32"=1'-0"  
11x17 SCALE: 3/64"=1'-0"  
0 5'-4" 10'-8" 21'-4" 32'-0"

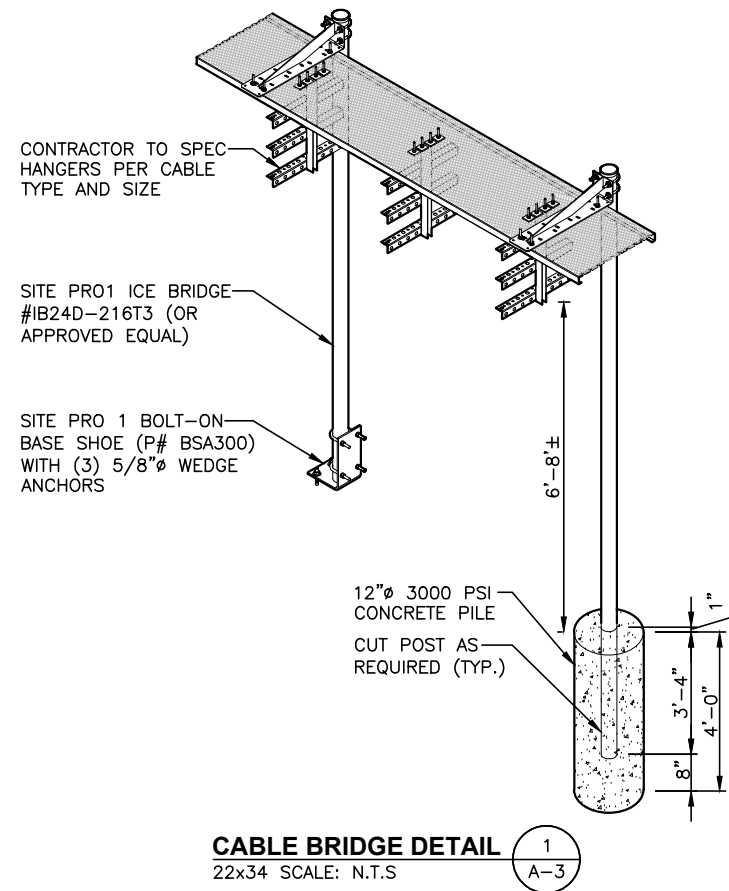


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41 PADANARAM RD  
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FAIRFIELD COUNTY

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1	10/04/22	ISSUED FOR REVIEW	MJ	JC	DPH
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SCALE: AS SHOWN    DESIGNED BY: JC    DRAWN BY: AR

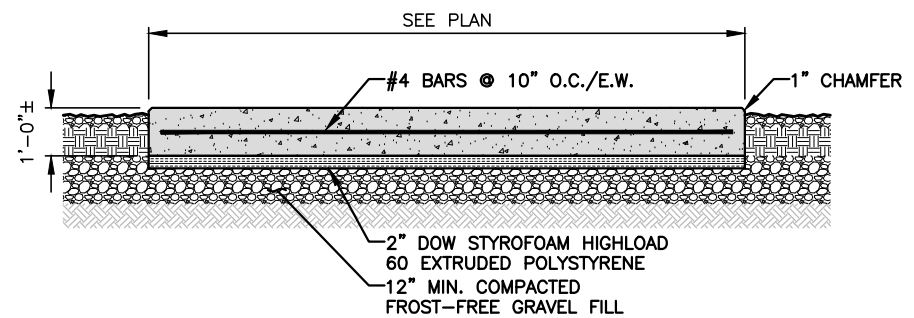
CROWN CASTLE		
ELEVATION (NSB)		
SITE NUMBER	DRAWING NUMBER	REV
CT1443	A-2	3



**CABLE BRIDGE DETAIL** 1  
22x34 SCALE: N.T.S. A-3

**FOUNDATION NOTES & CONCRETE SPECIFICATIONS:**

1. FOUNDATION AREA SHALL BE EXCAVATED TO THE DEPTH AND DIMENSIONS SHOWN ON THE PLANS. EXISTING LEDGE AND ALL OTHER EXISTING UNSUITABLE MATERIAL SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE. THE SUBGRADE SHALL BE ROLLED WITH A 1-TON, VIBRATORY, WALK-BEHIND ROLLER AT A SPEED OF LESS THAN 2 FPS, 6 PASSES MINIMUM, TO PROVIDE UNYIELDING SURFACE.
2. UNDERCUT SOFT OR "WEAVING" AREAS A MINIMUM OF 12 INCHES DEEP. BACKFILL UNDERCUT AREA WITH FILL MEETING THE SPECIFICATIONS OF STRUCTURAL FILL.
3. CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH ( $f'_c$ )=4000 psi. CONCRETE TO BE AIR ENTRAINED, DESIRED AIR CONTENT TO BE 6% (PLUS OR MINUS 2%)
4. REINFORCING BAR TO BE ASTM A615 GRADE 60.
5. WELDED WIRE FABRIC TO CONFORM TO THE REQUIREMENTS OF ASTM A185. WIRES FOR FABRIC TO CONFORM TO THE REQUIREMENTS OF ASTM A82.
6. COORDINATE WITH MANUFACTURER OF PREFABRICATED SHELTER FOR LOCATION OF ATTACHMENTS TO BASE SLAB.
7. ALL REINFORCING TO HAVE MINIMUM CONCRETE COVER PER ACI SPECIFICATIONS.
8. ALL CONCRETE MATERIALS AND WORKMANSHIP SHALL CONFORM TO LATEST EDITION OF ACI 318 AND APPLICABLE STATE BUILDING CODE.



**CONCRETE PAD DETAIL** 2  
22x34 SCALE: N.T.S. A-3



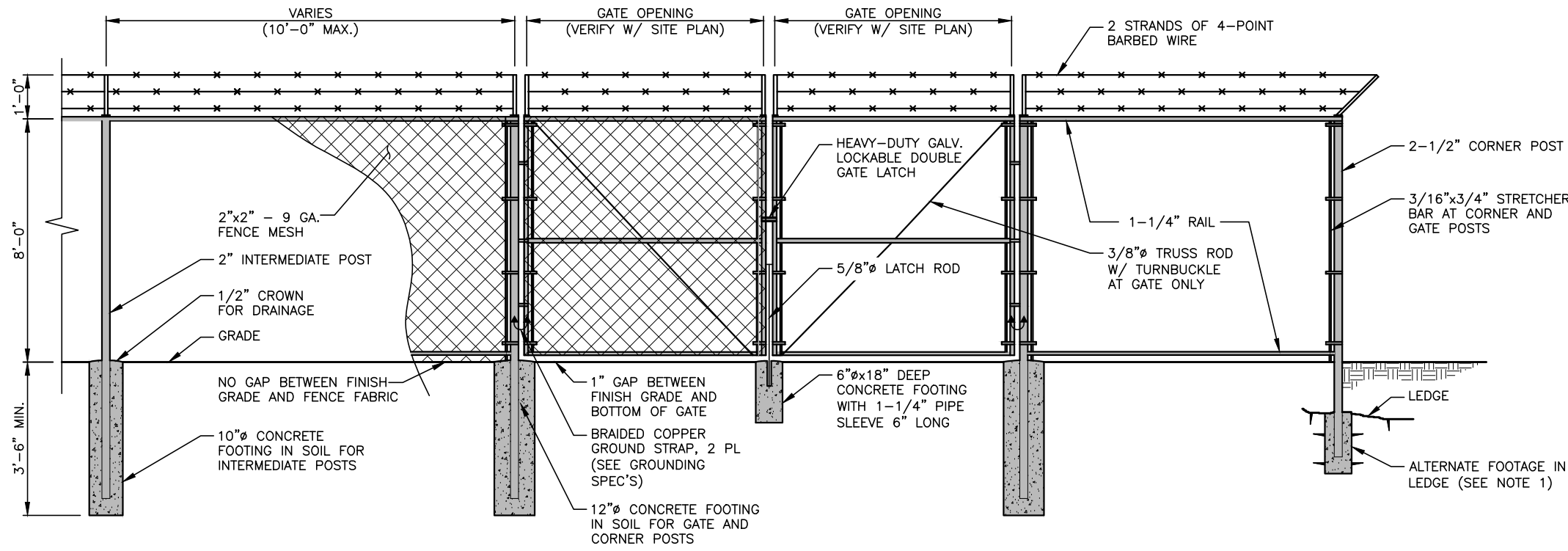
**CROWN BU: 823531**  
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 DANBURY, CT 06811  
 FAIRFIELD COUNTY

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NO.	DATE	REVISIONS	BY	CHK	APP'D
SCALE: AS SHOWN		DESIGNED BY: JC	DRAWN BY: AR		

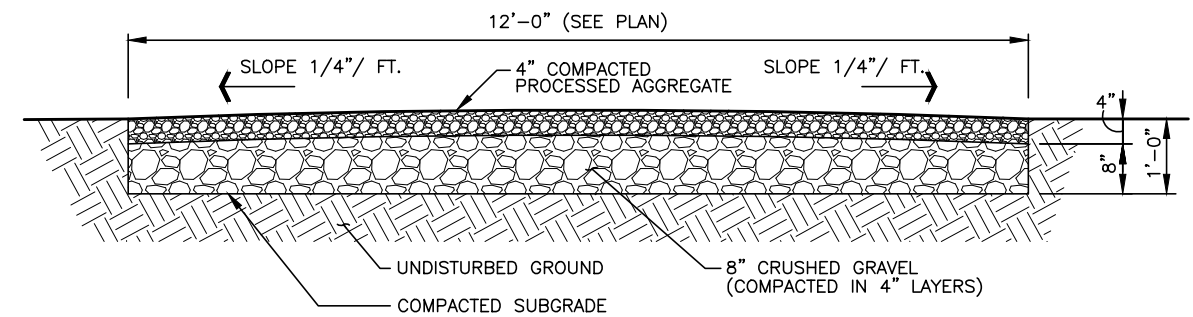
<b>CROWN CASTLE</b>		
DETAILS (NSB)		
SITE NUMBER	DRAWING NUMBER	REV
CT1443	A-3	3

**FENCE NOTES**

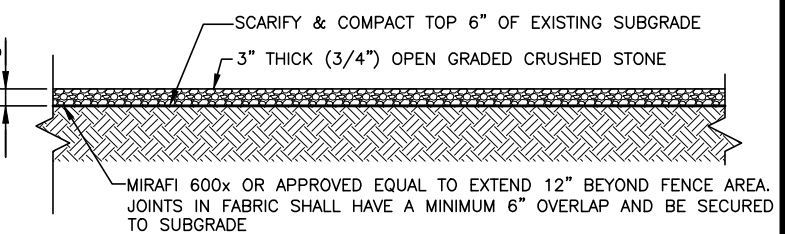
1. ALTERNATE FOOTINGS FOR ALL FENCE POSTS IN LEDGE: IF LEDGE IS ENCOUNTERED AT GRADE, OR AT A DEPTH SHALLOWER THAN 3'-6", CORE DRILL AN 8" DIA HOLE 18" INTO THE LEDGE. CENTER POST IN THE HOLE AND FILL WITH CONCRETE OR GROUT. IF LEDGE IS BELOW FINISH GRADE, COAT BACKFILLED SECTION OF POST WITH COAL TAR, AND BACKFILL WITH WELL-DRAINING GRAVEL.
2. ATTACH EACH GATE WITH 1-1/2 PAIR OF NON-LIFT-OFF TYPE, MALLEABLE IRON OR FORGING, PIN-TYPE HINGES. ASSEMBLIES SHALL ALLOW FOR 180° OF GATE TRAVEL.



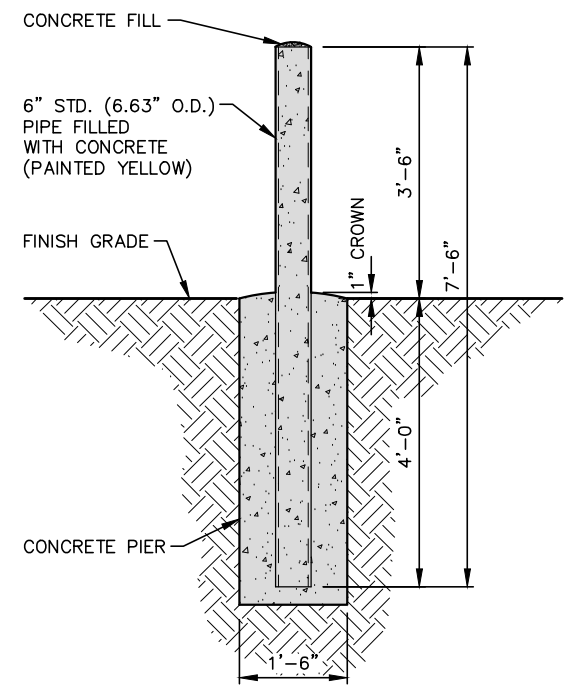
**CHAINLINK FENCE DETAIL** 1  
SCALE: N.T.S. A-4



**GRAVEL ACCESS DRIVE** 3  
SCALE: N.T.S. A-4



**COMPOUND SURFACE DETAIL** 4  
22x34 SCALE: 1"=1'-0"  
11x17 SCALE: 1/2"=1'-0" A-4



**CONCRETE FILLED BOLLARD** 2  
22x34 SCALE: N.T.S. A-4

CRUSHED GRAVEL	
SIEVE	% PASSING BY WEIGHT
5"	100
3 1/2"	90-100
1 1/2"	55-95
1/4"	25-60
#10	15-45
#40	5-25
#100	0-10
#200	0-5

PROCESSED AGGREGATE	
SIEVE	% PASSING BY WEIGHT
2 1/4"	100
2"	95-100
3/4"	50-75
1/4"	25-45
#40	5-20
#100	2-12



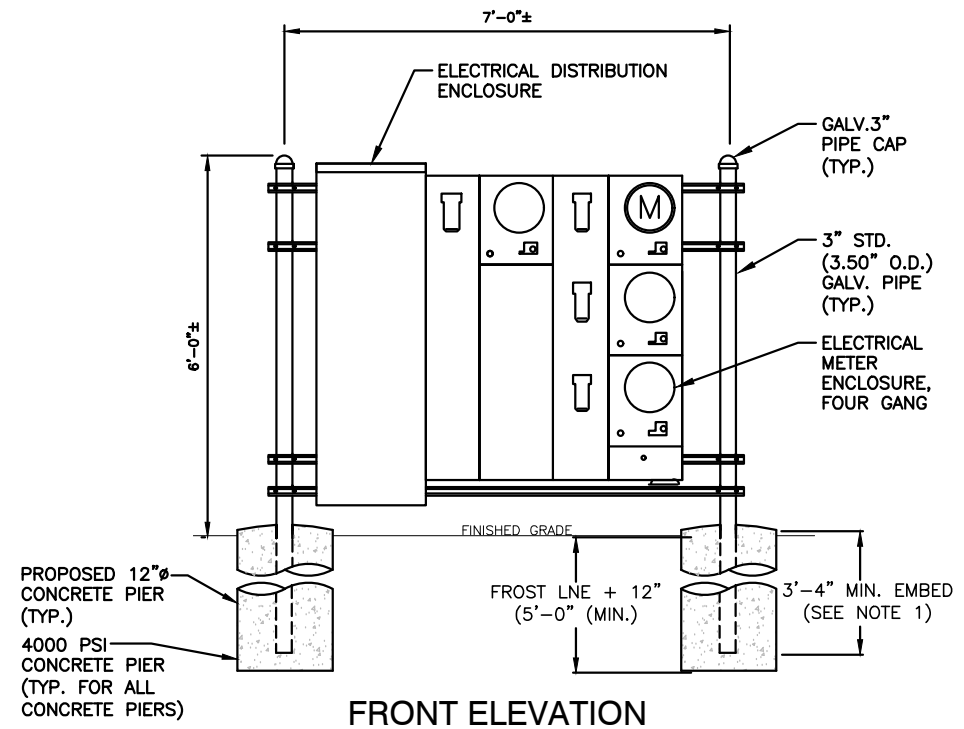
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SCALE: AS SHOWN    DESIGNED BY: JC    DRAWN BY: AR

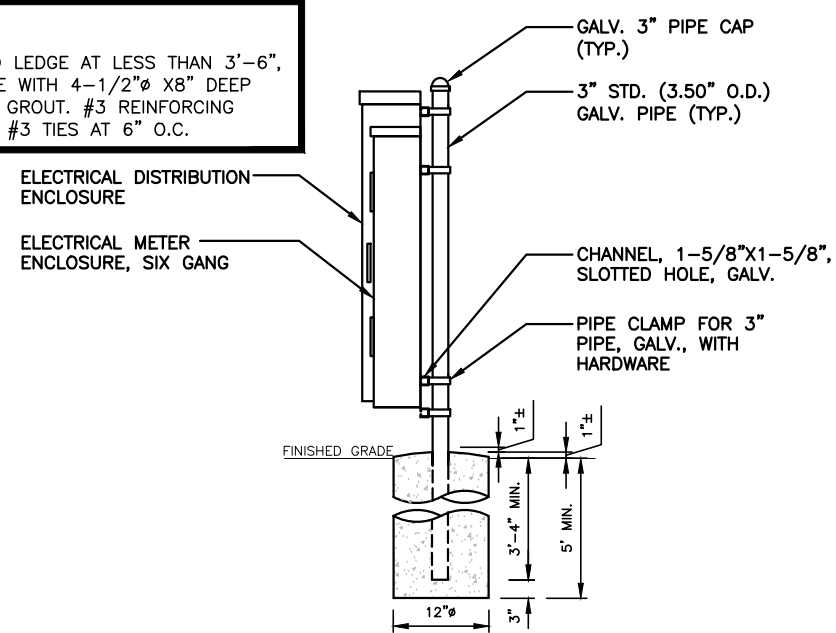
CROWN CASTLE		
COMPOUND DETAILS (NSB)		
SITE NUMBER	DRAWING NUMBER	REV
CT1443	A-4	3





**FRONT ELEVATION**

**NOTE:**  
 1.) FOR BURIED LEDGE AT LESS THAN 3'-6", CORE LEDGE WITH 4-1/2"Ø X 8" DEEP HOLES AND GROUT. #3 REINFORCING STEEL WITH #3 TIES AT 6" O.C.



**SIDE ELEVATION**

**ELECTRICAL METER BOARD ELEVATION** 1  
 SCALE: N.T.S. A-5



**CROWN BU: 823531**  
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 41 PADANARAM RD  
 DANBURY, CT 06811  
 FAIRFIELD COUNTY

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0	08/23/22	ISSUED FOR REVIEW	MJ	JC	DPH

SCALE: AS SHOWN    DESIGNED BY: JC    DRAWN BY: AR

CROWN CASTLE		
COMPOUND DETAILS (NSB)		
SITE NUMBER	DRAWING NUMBER	REV
CT1443	A-5	3

**SEQUENCE OF CONSTRUCTION**

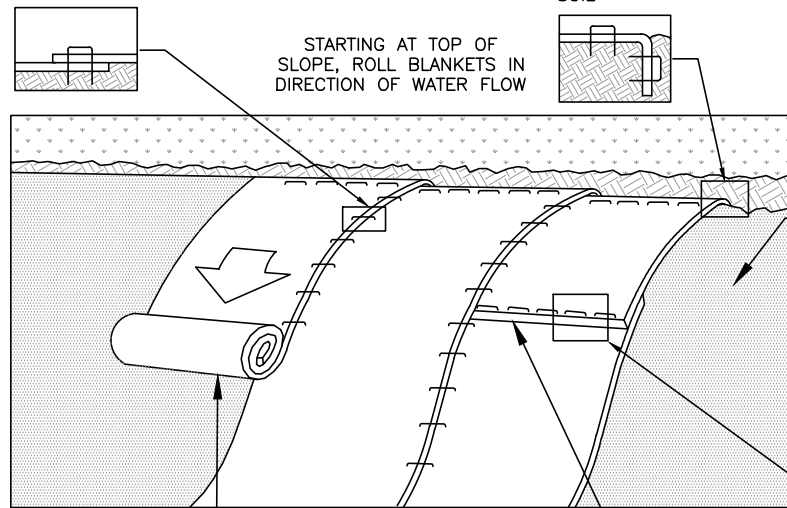
1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECPS IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECPS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECPS WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12" PORTION OF RECPS BACK OVER THE SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECPS.
3. ROLL THE RECPS DOWN HORIZONTALLY ACROSS THE SLOPE. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL RECPS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" OVERLAP DEPENDING ON THE RECPS TYPE.
5. CONSECUTIVE RECPS SPLICED DOWN THE SLOPE MUST BE END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECPS WIDTH.

**NOTES:**

1. PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
2. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
3. BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
4. THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
5. BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

BLANKET EDGES STAPLED AND OVERLAPPED (4 IN. MIN.)

INSTALL BEGINNING OF ROLL IN 6 IN. x 6 IN. ANCHOR TRENCH, STAPLE, BACKFILL AND COMPACT SOIL



THE BLANKET SHOULD NOT BE STRETCHED; IT MUST MAINTAIN GOOD SOIL CONTACT

OVERLAP BLANKET ENDS 6 IN. MIN. WITH THE UPSLOPE BLANKET OVERLYING THE DOWNSLOPE BLANKET (SHINGLE STYLE). STAPLE SECURELY.

REFER TO MANUF. RECOMMENDED STAPLING PATTERN FOR STEEPNESS AND LENGTH OF SLOPE BEING BLANKETED

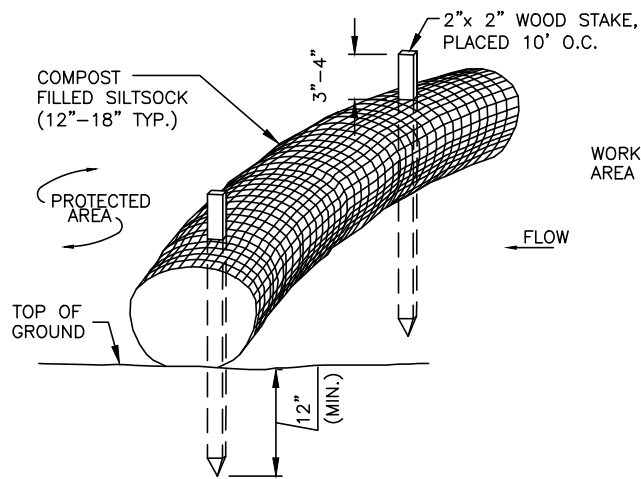
**NORTH AMERICAN S150**

**EROSION CONTROL BLANKET**

SCALE: N.T.S.

1

A-6



1. SILT SOCK SHALL BE FILTREXX SILT SOXX, OR APPROVED EQUAL.
2. COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
3. SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
4. SEE SPECIFICATIONS FOR SOCK SIZE, AND COMPOST FILL, REQUIREMENTS.

**SILT SOCK DETAIL**

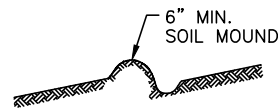
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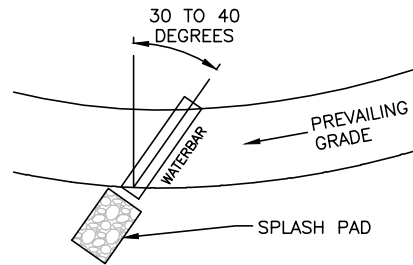
A-6

**NOTES:**

1. INSTALL BARS AT LOCATIONS INDICATED ON PLANS
2. SOIL MOUNDED WATERBAR SHALL CONSIST OF A 6" MOUND OF COMPACTED SOIL IMMEDIATELY DOWNGRADIENT OF TROUGH.



**PROFILE - SOIL BERM**

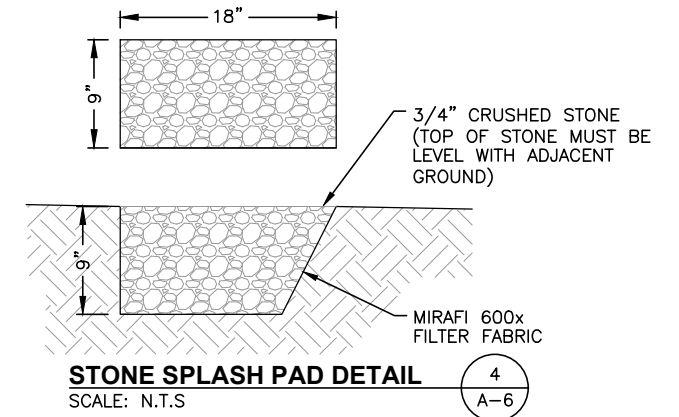


**PLAN VIEW DIVERSION BERM DETAIL**

SCALE: N.T.S.

3

A-6



**STONE SPLASH PAD DETAIL**

SCALE: N.T.S.

4

A-6

**EROSION CONTROL MEASURES:**

- 1). DISTURBED AREAS SHALL BE KEPT TO THE MINIMUM AREA NECESSARY TO CONSTRUCT THE ROADWAYS AND ASSOCIATED DRAINAGE FACILITIES.
- 2). HAY BALE BARRIERS AND SEDIMENT TRAPS SHALL BE INSTALLED AS REQUIRED. BARRIERS AND TRAPS ARE TO BE MAINTAINED AND CLEANED UNTIL ALL SLOPES HAVE A HEALTHY STAND OF GRASS.
- 3). BALED HAY AND MULCH SHALL BE MOWINGS OF ACCEPTABLE HERBACEOUS GROWTH, FREE FROM NOXIOUS WEEDS OR WOODY STEMS, AND SHALL BE DRY. NO SALT HAY SHALL BE USED.
- 4). FILL MATERIAL SHALL BE FREE FROM STUMPS, WOOD, ROOTS, ETC.
- 5). STOCKPILED MATERIALS SHALL BE PLACED IN AREAS SHOWN ON THE PLANS. STOCKPILES SHALL PREVENT EROSION. THESE MEASURES SHALL REMAIN UNTIL ALL MATERIAL HAS BEEN PLACED FOR DISPOSED OFF SITE.
- 6). ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED. A MINIMUM OF 4 INCHES OF LOAM SHALL BE INSTALLED WITH NOT LESS THAN ONE POUND OF SEED PER 50 SQUARE YARDS OF AREA.
- 7). APPLICATION OF GRASS SEED, FERTILIZERS AND MULCH SHALL BE ACCOMPLISHED BY BROADCAST SEEDING OR HYDROSEEDING AT THE RATES OUTLINED BELOW:

**LIMESTONE:** 75-100 LBS/1,000 SQUARE FEET

**FERTILIZER:** RATE RECOMMENDED BY MANUFACTURER.

**MULCH:** HAY MULCH APPROXIMATELY 3 TON/ACRE UNLESS EROSION CONTROL MATTING IS USED.

SEED MIX: (SLOPES LESS THAN 4:1)	LBS./ACRE
CREeping RED FESCUE	20
TALL FESCUE	20
RED TOP	2
	42

SLOPE MIX: (SLOPES GREATER THAN 4:1)	LBS./ACRE
CREeping RED FESCUE	20
TALL FESCUE	20
RED TOP	8
	48

**TREATMENT SWALE PLANTING SPECIFICATIONS**

TALL FESCUE	20 LBS/ACRE OR 0.45 LBS/10,000 SF
CREeping RED FESCUE	20 LBS/ACRE OR 0.45 LBS/10,000 SF
BIRDSFOOT TREFLOIL	8 LBS/ACRE OR 0.20 LBS/10,000 SF

LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. THE FOLLOWING RATES ARE RECOMMEND:

AGRICULTURAL LIMESTONE	2 TONS/ACRE OR 100 LBS/1,000 SF
NITROGEN (N)	50 TONS/ACRE OR 1.1 LBS/1,000 SF
PHOSPHATE (P205)	100 TONS/ACRE OR 2.2 LBS/1,000 SF
POTASH (K20)	100 TONS/ACRE OR 2.2 LBS/1,000 SF

(THIS IS EQUIVALENT TO 500 LBS/ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS/ACRE OF 5-10-10)

- 8). AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED.
- 9). PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
- 10). ALL CATCH BASIN INLETS WILL BE PROTECTED WITH THE LOW POINT SEDIMENTATION BARRIER.
- 11). ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED AND CLEANED AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
- 12). ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA.
- 13). NO DISCHARGE SHALL BE DIRECTED TOWARD ANY PROPOSED DITCHES, SWALES, OR PONDS UNTIL THEY HAVE BEEN PROPERLY STABILIZED.

**GENERAL CONSTRUCTION SEQUENCE:**

THIS IS A GENERAL CONSTRUCTION OUTLINE SOME ITEMS OF WHICH MAY NOT APPLY TO PARTICULAR SITES.

- 1). CLEAR AND GRUB AREAS OF PROPOSED CONSTRUCTION.
- 2). INSTALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES AS REQUIRED.
- 3). REMOVED AND STOCKPILE TOPSOIL. STOCKPILE SHALL BE SEEDED TO PREVENT EROSION.
- 4). CONSTRUCT CLOSED DRAINAGE SYSTEM. PROTECT CULVERT INLETS AND CATCH BASINS WITH SEDIMENTATION BARRIERS.
- 5). CONSTRUCT ROADWAYS AND PERFORM SITE GRADING, PLACING HAY BALES AND SILTATION FENCES AS REQUIRED TO CONTROL SOIL EROSION.
- 6). INSTALL UNDERGROUND UTILITIES.
- 7). BEGIN TEMPORARY AND PERMANENT SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED OR MULCHED IMMEDIATELY AFTER CONSTRUCTION. NO AREA SHALL BE LEFT UNSTABLE FOR A TIME PERIOD OF MORE THAN 30 DAYS.
- 8). DAILY, OR AS REQUIRED, CONSTRUCT, INSPECT, AND IF NECESSARY, RECONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES AND SEDIMENT TRAPS INCLUDING MULCHING AND SEEDING.
- 9). BEGIN EXCAVATION FOR AND CONSTRUCTION OF TOWER AND PLATFORMS.
- 10). FINISH PAVING ALL ROADWAYS, DRIVES, AND PARKING AREAS.
- 11). COMPLETE PERMANENT SEEDING AND LANDSCAPING
- 12). NO STORM WATER FLOW SHALL BE DIVERTED TO ANY WETLANDS UNTIL HEALTHY STAND OF GRASS HAS BEEN ESTABLISHED IN REGRADED AREAS.
- 13). AFTER GRASS HAS BEEN FULLY GERMINATED IN ALL SEEDED AREAS, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

# **ATTACHMENT 4**

# Comparison Viewshed Mapping Package

## Proposed Wireless Telecommunications Facility:

CT1443 Danbury RT 39  
39 Padnaram Rd  
Danbury, CT 06811

- Proposed new 145 ft AGL antenna structure
- Viewshed map completed 3/23/23

Package prepared by:

Virtual Site Simulations, LLC  
24 Salt Pond Road  
Suite C3  
South Kingstown, Rhode Island 02879

[www.VirtualSiteSimulations.com](http://www.VirtualSiteSimulations.com)  
[www.ThinkVSSFirst.com](http://www.ThinkVSSFirst.com)

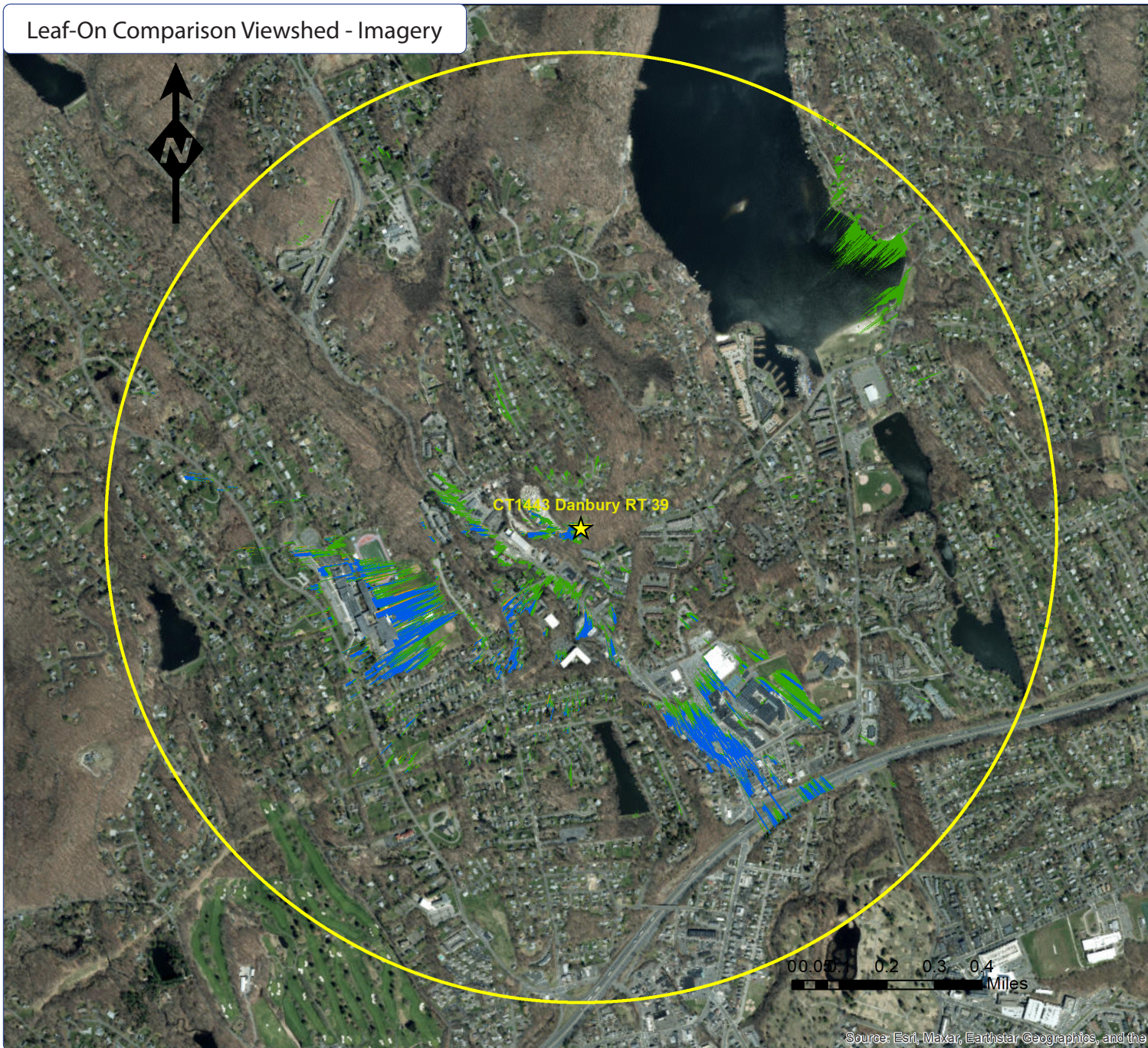


Viewshed analysis maps and representations contained herein depict where proposed facility may potentially be visible based on the best data available and site conditions at the time data was collected. This study does not claim to depict all locations from where the facility may be potentially visible.










Leaf-On Comparison Viewshed - Imagery



Proposed Facility:

CT1443 Danbury RT 39  
 39 Padnaram Rd  
 Danbury, CT 06811

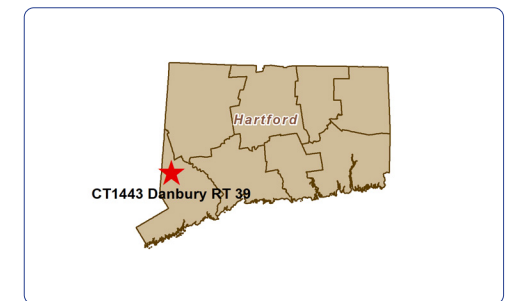
	Facility Location		1 Mile Radius
	Existing Tower Visibility		
	1.39 % Visible		28.0 Acres
	Proposed Tower Visibility		
	3.11 % Visible		62.5 Acres
	Combined Tower Visibility		
	1.27 % Visible		25.6 Acres

Statistics:

PROJ\_DESC=Geographic (Lat/Long) / WGS84 / arc degrees  
 PROJ\_DATUM=WGS84 PROJ\_UNITS=arc degrees  
 PIXEL WIDTH=0.0000013 arc degrees (+/- .6 ft)  
 PIXEL HEIGHT=0.0000014 arc degrees (+/- .6 ft)  
 RADIUS (FT)= 1 Mile  
 TRANSMITTER\_HEIGHT (Ft-AGL)= 80 & 145  
 RECEIVER\_HEIGHT (Ft-AGL)= 5 Ft

Notes:

- map compiled by VSS, LLC on: 11/15/22
- Tower location(lat/long NAD 83): 41.4191 -73.46216
- Data Sources noted on documentation page attached

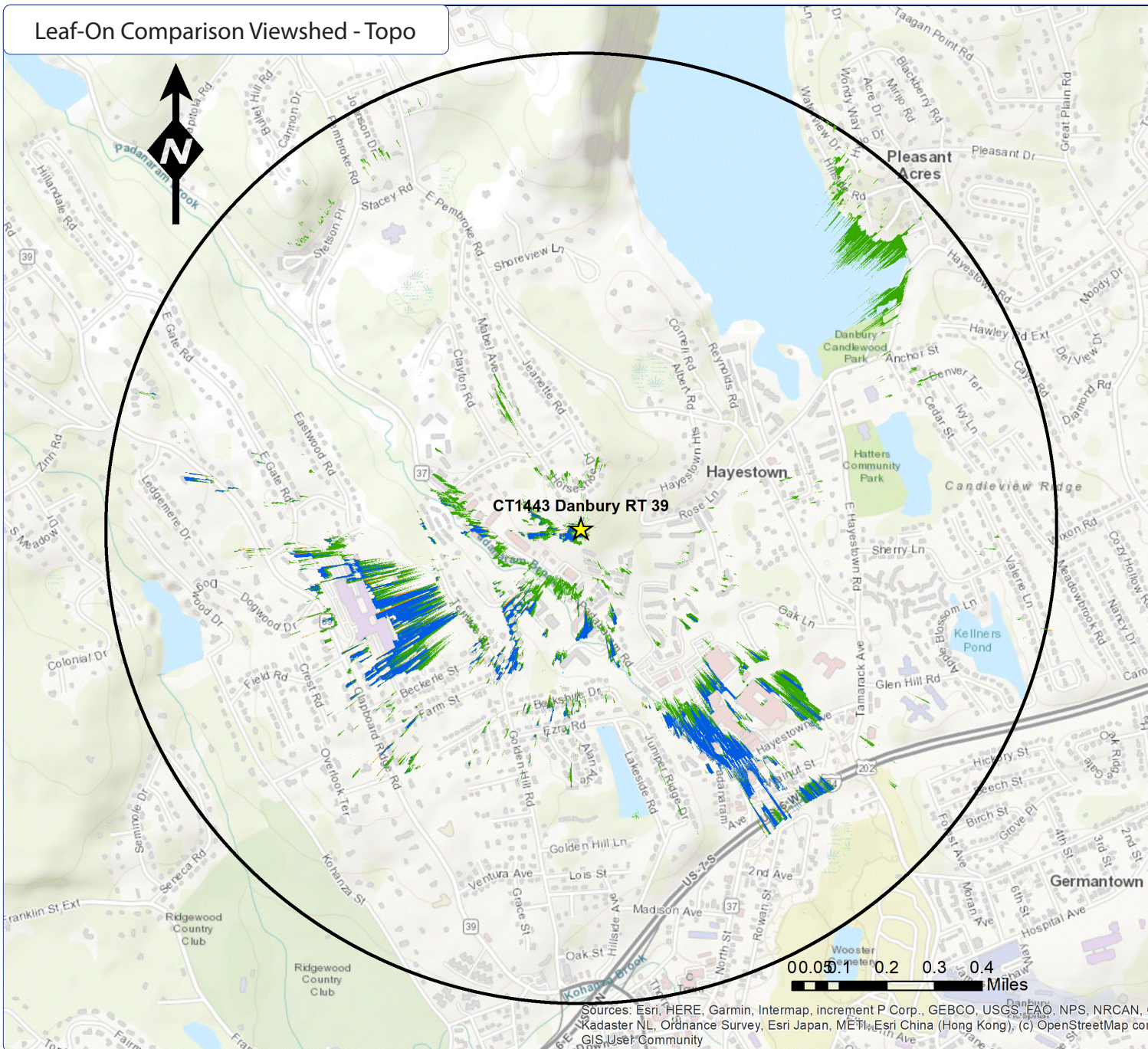


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Leaf-On Comparison Viewshed - Topo



Proposed Facility:

CT1443 Danbury RT 39  
 39 Padnaram Rd  
 Danbury, CT 06811

- Facility Location
- 1 Mile Radius
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**1.39 % Visible    28.0 Acres**
- Proposed Tower Visibility  
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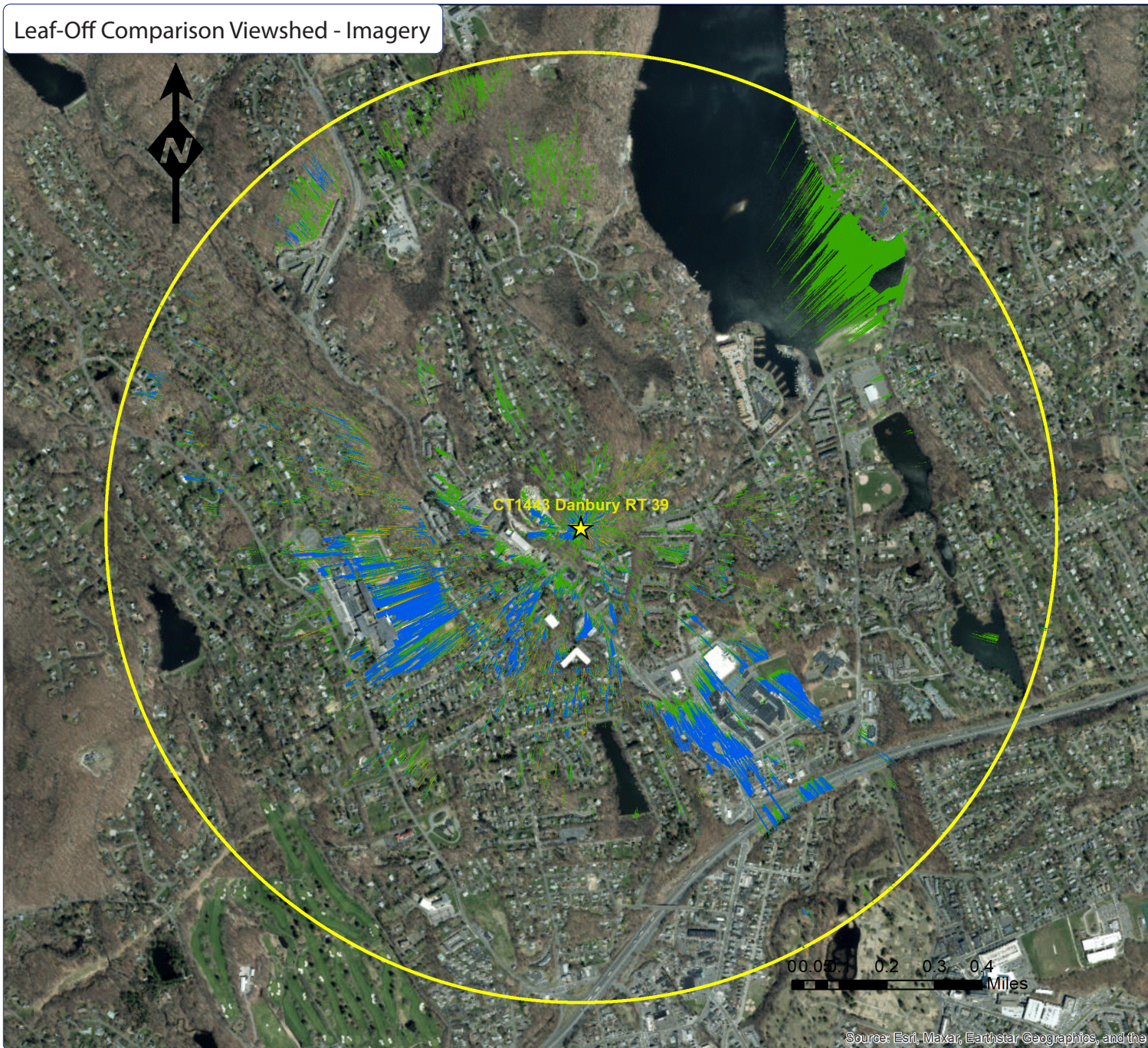


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Leaf-Off Comparison Viewshed - Imagery

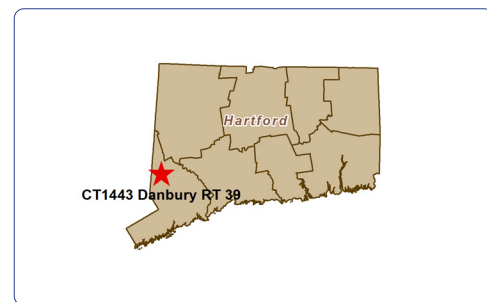


Proposed Facility:  
 CT1443 Danbury RT 39  
 39 Padnaram Rd  
 Danbury, CT 06811

- ★ Facility Location    ○ 1 Mile Radius
- Existing Tower Visibility  
**3.22 % Visible    64.7 Acres**
- Proposed Tower Visibility  
**7.07 % Visible    142.1 Acres**
- Combined Tower Visibility  
**2.63 % Visible    52.9 Acres**

Statistics:  
 PROJ\_DESC=Geographic (Lat/Long) / WGS84 / arc degrees  
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 RADIUS (FT)= 1 Mile  
 TRANSMITTER\_HEIGHT (Ft-AGL)= 80 & 145  
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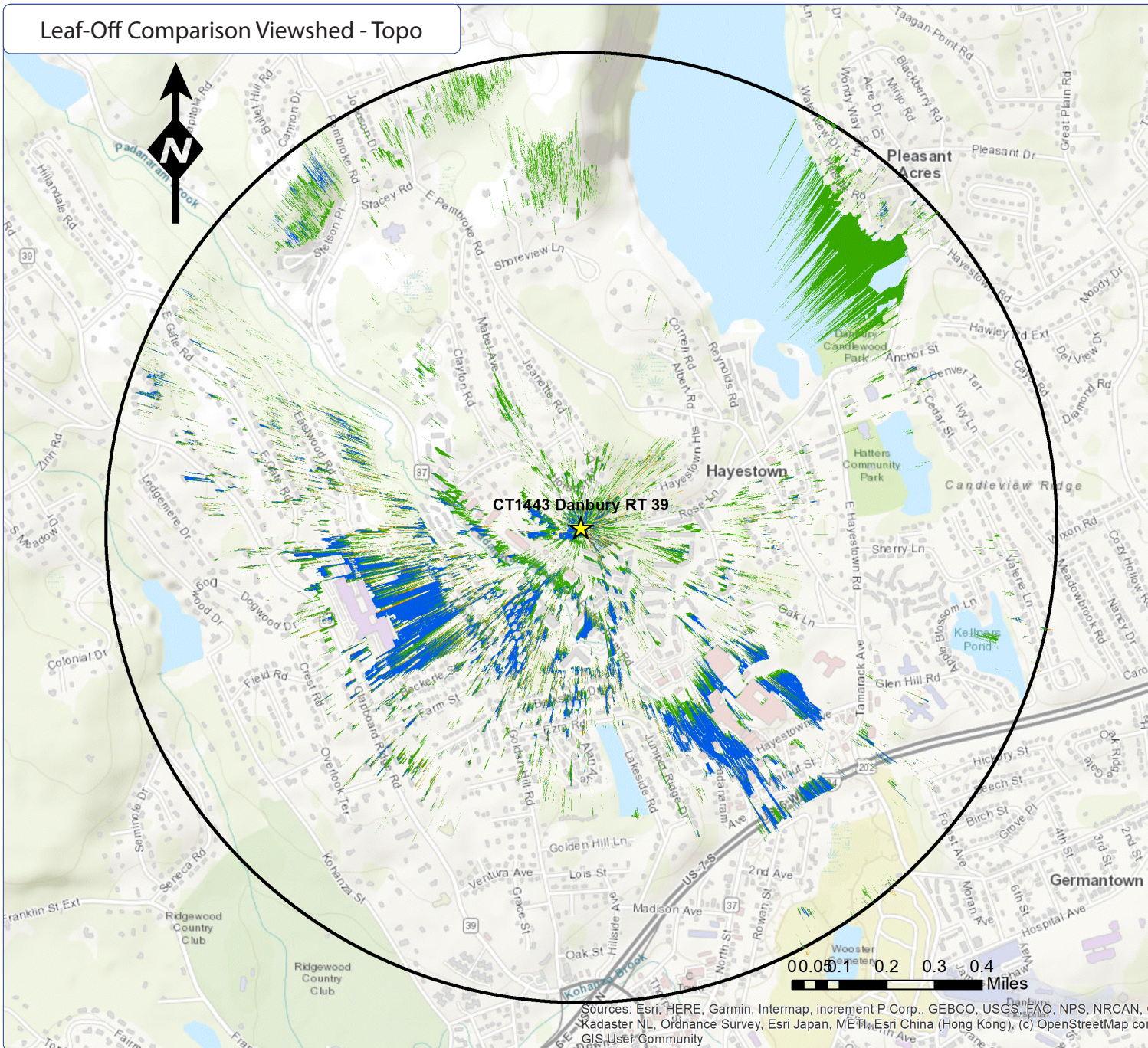


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Leaf-Off Comparison Viewshed - Topo



Proposed Facility:

CT1443 Danbury RT 39  
 39 Padnaram Rd  
 Danbury, CT 06811

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