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JUNE 19, 2018 MEETING

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TOWN OF LEWISBORO
Westchester County, New York

Planning Board
79 Bouton Road
South Salem, New York 10590

Tel: (914) 763-5592
Fax: (914) 875-9148
Email: planning@lewisborogov.com

AGENDA

Tuesday, June 19, 2018

Increase Miller Elementary School at 186 Route 138, Goldens Bridge

Note: Meeting will start at **7:00 p.m.** and end at or before 11:00 p.m.

I. PUBLIC HEARING – 7:45 p.m.

Cal #10-15 PB, Cal #20-17WP, Cal #5-17SW
Wilder Balter Partners, NY State Route 22, Goldens Bridge, NY 10526, Sheet 5, Block 10776, Lots 19, 20 & 21 (Property Group Partners, LLC, owner of record) – Application for a 46 unit MF development on a ±35.4 acre parcel.

II. WETLAND PERMIT REVIEW

Cal# 78-17WP, 15-17SW
Iannuzzi Residence, 199 North Salem Road, Cross River, NY 10518, Sheet 12, Block 10802, Lot 129 (Ruth Merns, owner of record) – Application for a single-family residence, driveway, septic system and well.

III. SKETCH PLAN REVIEWS

Cal #6-17PB
Wolf Conservation Center, Buck Run, South Salem, NY 10590, Sheet 21, Block 10803, Lots 3, 65, 81, 82, 83, 86 & 88 (Wolf Conservation Center, owner of record) - Application for a Subdivision and Special Use Permit associated with a private nature preserve.

Cal #10-17PB
Mercedes Benz of Goldens Bridge, 321 Main Street, Goldens Bridge, NY 10526, Sheet 4E, Block 11135, Lots 1, 2, 3, 4, 5, 6, 7 & Block 11137, Lot 42 (Charisma Holding Corp., owner of record) – Application for Site Plan Review for additions to existing auto showroom and service buildings, additional parking spaces and construction of a parking garage.

IV. WETLAND VIOLATION

Cal #01-18WV

Cal #02-18WV

Cal #03-18WV

Cal #04-18WV

V. DISCUSSION AND REVIEW

Cal #03-18PB
Sprint Spectrum at Leon Levy Preserve, 1411 Route 35, South Salem, NY 10590, Sheet 11, Block 11137, Lots 35 and 52 (Town of Lewisboro, owner of record) – Application for Sprint equipment upgrade at Leon Levy Preserve.

Cal #01-13PB
Verizon Wireless at 117 Waccabuc Road, Goldens Bridge, NY 10526, Sheet 11, Block 11137, Lots 35 and 52 (Francis Coyle , owner of record) - Application for Verizon equipment upgrade and Special Use Permit renewal.

Proposed cell tower behind LVAC

Requests for relaxation on septic requirements per Planning Board resolutions and wetland permits

VI. MINUTES OF January 16, 2018; MINUTES OF February 27, 2018; MINUTES OF March 20, 2018; MINUTES OF March 27, 2018 and MINUTES OF April 17, 2018.

KELLARD SESSIONS

John Kellard, P.E.
David Sessions, RLA, AICP
Joseph M. Cermele, P.E., CFM
Jan K. Johannessen, AICP

MEMORANDUM

TO: Chairman Jerome Kerner, AIA and
Members of Lewisboro Planning Board

CC: Ciorsdan Conran
Judson Siebert, Esq.

FROM: Jan K. Johannessen, AICP
Joseph M. Cermele, P.E., CFM
Town Consulting Professionals

DATE: May 9, 2018

RE: Sprint Spectrum Upgrade @ Leon Levy
1411 Route 35
Sheet 40, Block 10263, Lot 62

PROJECT DESCRIPTION

According to the plans submitted, the applicant is proposing to add three (3) additional panel antennas and three (3) additional Remote Radio Heads (RRHs); Sprint currently maintains three (3) existing panel antennas at ±108' AGL. The Planning Board renewed the Special Use Permit for Sprint-Nextel on November 21, 2017 for a period of five (5) years, expiring on November 27, 2022 (Cal.# 4-14PB).

GENERAL COMMENTS

1. In order to determine if the application can be considered exempt, the volume calculation required per Section 220-41.1H(1)(a) of the Zoning Code shall be submitted.

2. The proposed panel antennas shall be dimensioned on Sheet A-3 of the site plans.

3. A Radio Frequency Compliance Report shall be submitted for review.

4. If the proposed action is deemed to require a Special Use Permit from the Planning Board, the Short Environmental Assessment Form (EAF) shall be prepared by the applicant and submitted for review (Parts 1 and 2).

In order to expedite the review of subsequent submissions, the applicant should provide annotated responses to each of the comments outlined herein.

PLANS REVIEWED, PREPARED RAMAKER & ASSOCIATES, INC., DATED OCTOBER 31, 2018:

- Cover Sheet & Site Plan (T-1)
- Proposed Antenna Layout & Equipment Layout (A-1)
- Elevation (A-2)
- Antenna Schedules & Details (A-3)

DOCUMENTS REVIEWED:

- Letter & Report, prepared by Ramaker & Associates, Inc., dated October 3, 2017
- Letter, prepared by Steve Aneiro, InRange Solutions, LLC, dated
- Planning Board Application

JKJ/JMC/DJS/dc

T:\Lewisboro\Correspondence\2018-05-09_LWPB-SprintUpgradeLeonLevy-Review-Memo.docx

TOWN OF LEWISBORO PLANNING BOARD

PO Box 725, 20 North Salem Road, Cross River, NY 10518 Email: planning@lewisborogov.com Tel: (914) 763-5592

Site Development Plan/Subdivision Plat Application – Check all that apply:

Waiver of Site Development Plan Procedures	☐		
Site Development Plan Approval	Step I ☐	Step II ☐	
Special Use Permit Approval	Step I ☐	Step II ☐	
Subdivision Plat Approval	Step I ☐	Step II ☐	Step III ☐

Project Information

Project Name: SPRINT SPECTRUM @ LEON LEVY

Project Address: 1411 Route 35 Lewisboro

Gross Parcel Area: _____ Zoning District: _____ Sheet(s): 40 Block (s): 10263 Lot(s): 62

Project Description: Modifications to existing cellular site

Is the site located within 500 feet of any Town boundary? YES ☐ NO ☐
Is the site located within the New York City Watershed? YES ☐ NO ☐
Is the site located on a State or County Highway? YES ☐ NO ☐

Does the proposed action require any other permits/approvals from other agencies/departments?

Town Board	☐	ZBA	☐	Building Dept.	☐	Town Highway	☐
ACARC	☐	NYSDEC	☐	NYCDEP	☐	WCDH	☐
NYSDOT	☐	Town Wetland	☐	Town Stormwater	☐		

Other _____

Owner's Information

Name: American Tower Corporation Email: _____

Address: 10 Presidential Way Woburn Mass 01801 Phone: _____

Applicant's Information (if different)

Name: Steve Aneiro obo Sprint Email: sa@inrange-llc.com

Address: 695 Rt. 46 W Suite 103 Fairfield NJ 07004 Phone: (201) 741-8638

Authorized Agent's Information

Name: Steve Aneiro/InRange Solutions obo Sprint Email: sa@inrange-llc.com

Address: 695 Rt. 46 W Suite 103 Fairfield NJ 07004 Phone: (201) 741-8638

THE APPLICANT understands that any application is considered complete only when all information and documents required have been submitted and received by the Planning Board. The applicant further understands that the applicant is responsible for the payment of all application and review fees incurred by the Planning Board.

THE UNDERSIGNED WARRANTS the truth of all statements contained herein and in all supporting documents according to the best of his/her knowledge and belief, and authorizes visitation and inspection of the subject property by the Town of Lewisboro and its agents.

APPLICANT'S SIGNATURE _____ DATE 2/8/2018

OWNER'S SIGNATURE By: _____ ~~Margaret Robinson~~ Senior Counsel DATE 2/22/2018

AMERICAN TOWER®
CORPORATION

LETTER OF AUTHORIZATION

ATC SITE # / NAME: 88166 /South Salem NY
SITE ADDRESS: ROUTE 35, South Salem, New York
LICENSEE: Sprint Spectrum Realty Company, LLC d/b/a Sprint

I, Margaret Robinson senior counsel, American Towers LLC d/b/a American Tower* owner of the property located at the address identified above do hereby authorize **Sprint Spectrum Realty Company, LLC d/b/a Sprint** its successors and assigns, and/or its agent, (collectively, the "Licensee") to act as American Tower's non-exclusive agent for the sole purpose of filing and consummating any land-use or building permit application(s) as may be required by the applicable permitting authorities for Licensee's telecommunications' installation.

I understand that this application may be denied, modified or approved with conditions. The above authorization is limited to the acceptance by Licensee only of conditions related to Licensee's installation and any such conditions of approval or modifications will be Licensee's sole responsibility.

Signature:

Print Name: Margaret Robinson
Senior Counsel
American Tower*

NOTARY BLOCK

Commonwealth of MASSACHUSETTS
County of Middlesex

This instrument was acknowledged before me by Margaret Robinson, Senior Counsel for American Tower*, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

WITNESS my hand and official seal, this 21st day of February, 2018.

NOTARY SEAL

GENYS E. PEREZ
Notary Public
Commonwealth of Massachusetts
My Commission Expires
July 1, 2022

Notary Public
My Commission Expires: July 01, 2022

*American Tower includes all affiliates and subsidiaries of American Tower Corporation.

TOWN OF LEWISBORO PLANNING BOARD

PO Box 725, 20 North Salem Road, Cross River, NY 10518
Email: planning@lewisborogov.com
Tel: (914) 763-5592
Fax: (914) 763-3637

Affidavit of Ownership

State of: Massachusetts

County of: Middlesex

Margaret Robinson, being duly sworn, deposes and says that he/she ~~resides~~ office located at 10 Presidential Way, Woburn, Massachusetts 01801

in the County of Middlesex, State of _____

and that he/she is (check one) ____ the owner, or ✓ the Senior Counsel (Title)

of American Towers LLC
Name of corporation, partnership, or other legal entity

which is the owner, in fee of all that certain log, piece or parcel of land situated, lying and being in the Town of Lewisboro, New York, aforesaid and know and designated on the Tax Map in the Town of Lewisboro as:

Block _____, Lot _____, on Sheet _____.

BY: Margaret Robin
Owner's Signature Senior Counsel

Sworn to before me this
22nd day of February, 2018

GENYS E. PEREZ
Notary Public
Commonwealth of Massachusetts
My Commission Expires
July 1, 2022

Notary Public – affix stamp

Revised 6-2015

Town of Lewisboro
79 Bouton Road
South Salem, NY 10590
Attn: Building Department

RE: Building Permit Application
Applicant: SPRINT
Property Address: 1411 Route 35, Lewisboro

Dear Town Official:

SPRINT seeks a building permit for the installation of transmission equipment on the lattice tower and within the existing equipment compound at the above-referenced property. Your building application form is submitted with this letter.

Introduction to Section 6409

SPRINT applies for the building permit under Section 6409 of the federal Middle Class Tax Relief and Job Creation Act of 2012, signed into law by the President on February 22, 2012.[1] While your town retains discretionary zoning review over the construction of new towers, simple collocations and/or equipment upgrades such as reflected in this application must now be approved with the issuance of a building permit. The new law provides that:

> "**a State or local government** may not deny, and **shall approve**, any eligible facilities request for a modification of an existing wireless tower/rooftop or base station that does not substantially change the physical dimensions of such tower or base station."

The federal law defines an "eligible facilities request" as replacement of transmission equipment." The new law authorizes the immediate installation of these eligible facilities to help improve the economy, create jobs, and speed the deployment of the services they provide.

Section 6409 Benefits Your Community and has been Embraced Across the Country

Acknowledging that there is no valid basis in zoning to deny an application such as the one proposed here, municipalities across the nation have approved installations under Section 6409 with the issuance of a building permit. With the new federal law providing guidance, municipalities have been quick to embrace the benefits of a streamlined administrative review for simple collocations and equipment modifications. Unlike the construction of a new tower/rooftop cell site, simple collocations and/or equipment modifications such as this one have been quickly approved to expedite the deployment of wireless broadband. Municipalities want their residents, businesses and emergency responders to benefit from improved wireless coverage and the latest technology (4G LTE for the iPhone 5 and other handsets) as quickly as possible.

SPRINT's Application Must Be Approved

SPRINT's application must be approved under this new federal law because the proposed installation involves "a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station."

---

[1] See February 2012 link located at http://www.whitehouse.gov/briefing-room/signed-legislation.

SPRINT's current facility consists of 3 panel antennas at a centerline height of 108' AGL on an existing 125' lattice tower. AT&T, T-MOBILE and VERIZON also have equipment on the tower.

As shown on the enclosed plans prepared by Ramaker dated 8/28/2017, SPRINT's proposed installation consists principally of the following elements:

1) On the Tower: 3 panel antennas mounted at an antenna centerline height of 108', with associated remote radio heads (RRHs), along with 1 hyperflex cable from existing equipment enclosure to antennas.

2) In the Existing Compound: minor electrical work to existing cabinets with additional cable runs.

SPRINT's installation will not increase the height of the tower nor the dimensions of the equipment compound. As a result, the installation "does not substantially change the physical dimensions of such tower or base station." The installation will enhance wireless communication services to the community and will enable users to access a state-of-the-art, fully digital system for voice communications, messaging, and data transmission and reception.

SPRINT respectfully requests that the building permit be issued as soon as possible so that SPRINT can proceed with this installation immediately. If we can provide any further information regarding this application, please let us know.

Respectfully,

Steve Aneiro
InRange Solutions LLC
201-741-8638
SA@inrange-llc.com

TOWN OF LEWISBORO PLANNING BOARD

79 Bouton Road, South Salem, NY 10590
Email: planning@lewisborogov.com
Tel: (914) 763-5592 Fax: (914) 763-3637

Tax Payment Affidavit Requirement

This form must accompany all applications to the Planning Board.

Under regulations adopted by the Town of Lewisboro, the Planning Board may not accept any application unless an affidavit from the Town of Lewisboro Receiver of Taxes is on file in the Planning Board office. The affidavit must show that all amounts due to the Town of Lewisboro as real estate taxes and special assessments on the total area encompassed by the application, together with all penalties and interest thereon, have been paid.

Under New York State law, the Westchester County Clerk may not accept any subdivision map for filing unless the same type of affidavit from the Town of Lewisboro Receiver of Taxes is submitted by the applicant at the time of filing.

This form must be completed by the applicant and must accompany all applications to the Planning Board. Upon receipt, the Planning Board Secretary will send the form to the Receiver of Taxes for signature and notarization. If preferred, the applicant may directly obtain the signature of the Receiver of Taxes and notarization prior to submission.

To Be Completed by Applicant
(Please type or print)

SPRINT
Name of Applicant

Sprint Spectrum @ Leon Levy
Project Name

Property Description

Tax Block(s): 10263

Tax Lot(s): 62

Tax Sheet(s): 40

Property Assessed to:

American Tower Corp
Name

10 Presidential Way
Address

Woburn MA 01801
City *State* *Zip*

The undersigned, being duly sworn deposes and says that a search of the tax records in the office of the Receiver of Taxes, Town of Lewisboro, reveals that all amounts due to the Town of Lewisboro as real estate taxes and special assessments, together with all penalties and interest thereon, affecting the premises described below, have been paid.

Signature - Receiver of Taxes: [signature] 4/5/18
Date

Sworn to before me this

5th **day of** April, 2018

[signature]
Signature - Notary Public (affix stamp)

JANET L. DONOHUE
NOTARY PUBLIC, STATE OF NEW YORK
No. 01DO6259627
Qualified in Westchester County
Commission Expires April 16, 2020

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DRAWN BY: EH CHECKED BY: KAB

PROJECT INFORMATION:

SITE INFORMATION

LAT: 41.25841666

LONG: -73.53466666

SITE TYPE: LATTICE TOWER

COUNTY: WESTCHESTER

APPLICANT

SPRINT
1 INTERNATIONAL BLVD, SUITE 800
MAHWAH, NJ 07495
CONTACT: TBD
PHONE:
EMAIL:

PROPERTY OWNER

AT&T MOBILITY
340 MT. KIMBLE AVE
MORRISTOWN, NJ 07960

A&E FIRM

RAMAKER & ASSOCIATES, INC.
CONTACT: KEITH BOHNSACK
PROJECT MANAGER
PHONE: (608) 643-4100
EMAIL: kbohnsack@ramaker.com

SHEET INDEX:

SHEET NUMBER	SHEET DESCRIPTION
T-1	COVER SHEET & SITE PLAN
A-1	PROPOSED ANTENNA LAYOUT & EQUIPMENT LAYOUT
A-2	TOWER ELEVATION
A-3	ANTENNA SCHEDULES & DETAILS

CODE COMPLIANCE:

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1. 2015 INTERNATIONAL BUILDING CODE
2. INTERNATIONAL MECHANICAL CODE
3. ANSI/TIA-222 STRUCTURAL STANDARD
4. NFPA 780 - LIGHTNING PROTECTION CODE
5. UNIFORM PLUMBING CODE
6. NATIONAL ELECTRICAL CODE

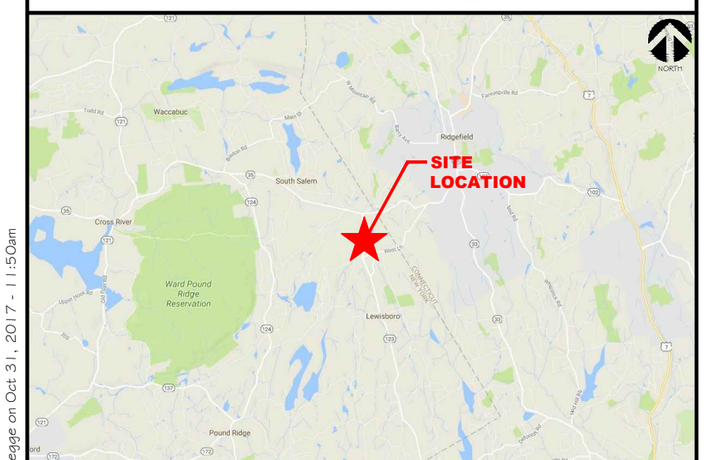
811 Know what's below. Call before you dig. www.call811.com

DO MACRO UPGRADE

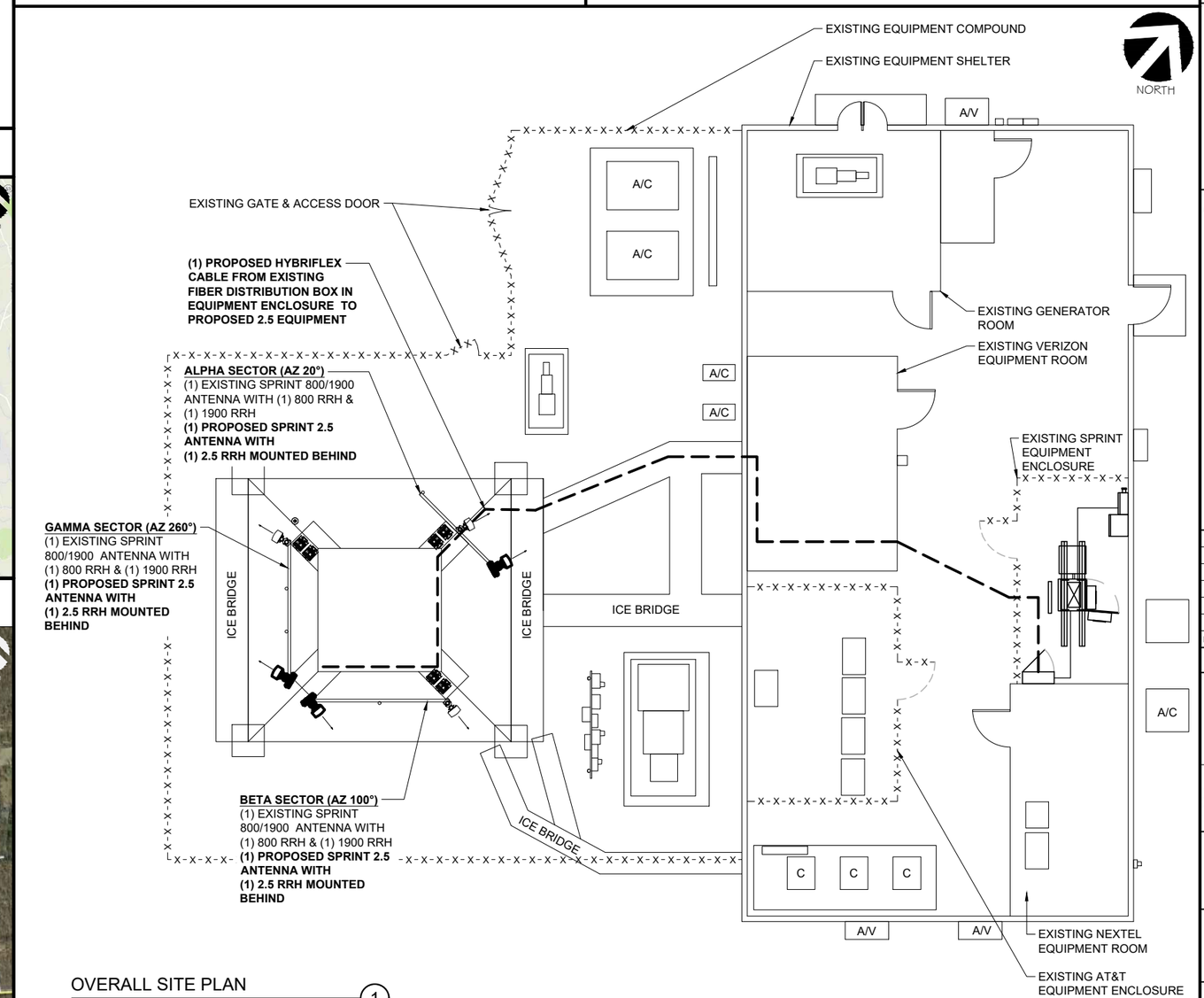
SITE CASCADE:

NY06XC421

VICINITY MAP:



AERIAL MAP:



OVERALL SITE PLAN (1)

SCALE: 1" = 12.5'

Sprint
1 INTERNATIONAL BLVD, SUITE 800
MAHWAH, NJ 07495

RAMAKER & ASSOCIATES, INC.
855 Community Drive, Sauk City, WI 53583
Phone: 608-643-4100 Fax: 608-643-7999
www.Ramaker.com

INRANGE SOLUTIONS
695 ROUTE 46 WEST
SUITE 103
FAIRFIELD, NJ 07004

Certification & Seal:
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of New York. It is a violation of this law for any person, unless he is acting under the direction of a licensed professional engineer or land surveyor, to alter an item in any way once sealed.

STATE OF NEW YORK · MICHAEL L. PINSKE · 087544 · LICENSED PROFESSIONAL ENGINEER

Michael L. Pinske: Date: 10/31/2017

MARK	DATE	DESCRIPTION

ISSUE PHASE: FINAL DATE ISSUED: 10/31/2017

PROJECT TITLE:
NY06XC421

PROJECT INFORMATION:
1411 ROUTE 35
LEWISBORO, NY 10590
WESTCHESTER COUNTY

SHEET TITLE:
COVER SHEET & SITE PLAN

SCALE:
AS NOTED

PROJECT NUMBER: 35469
SHEET NUMBER: T-1

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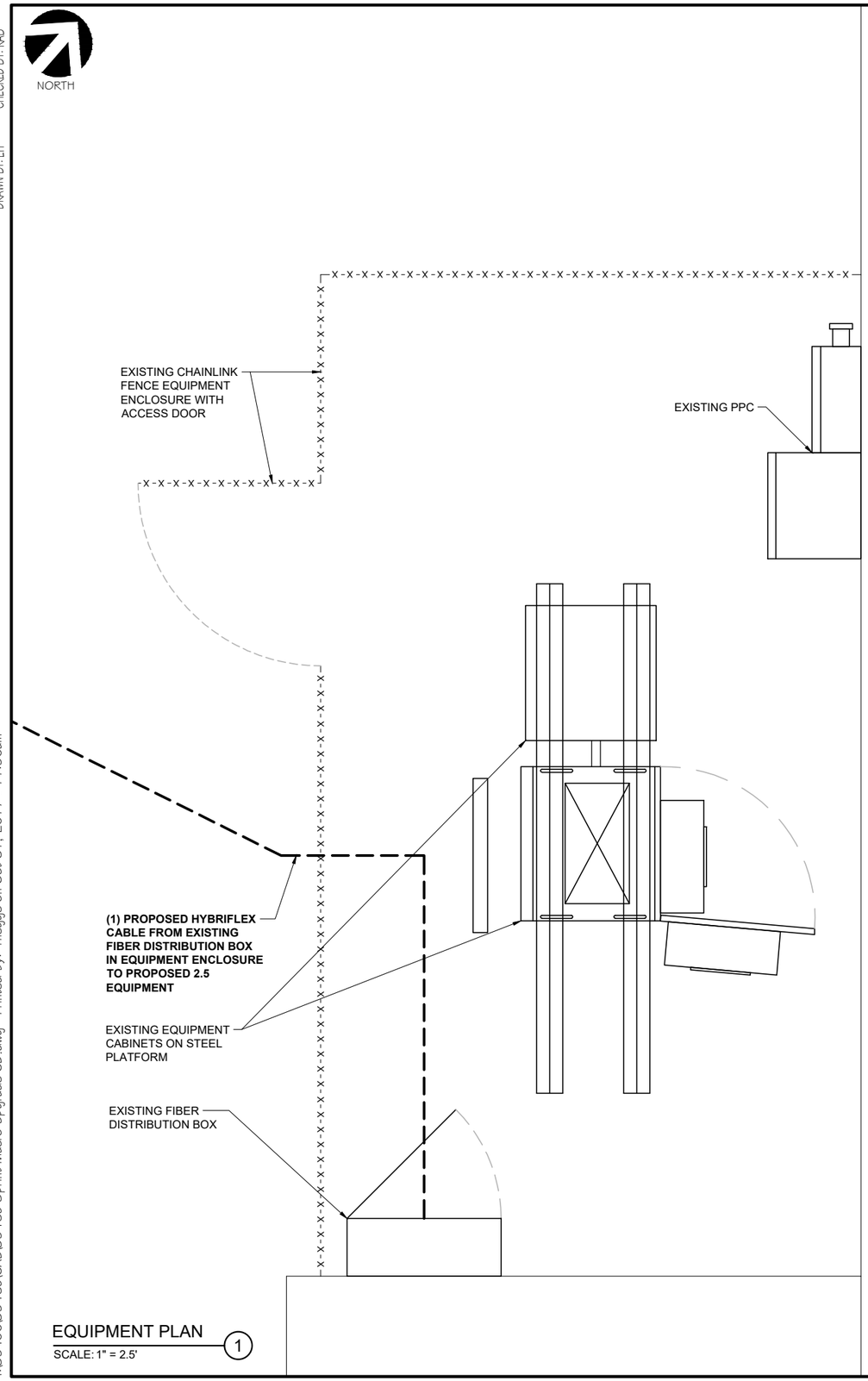
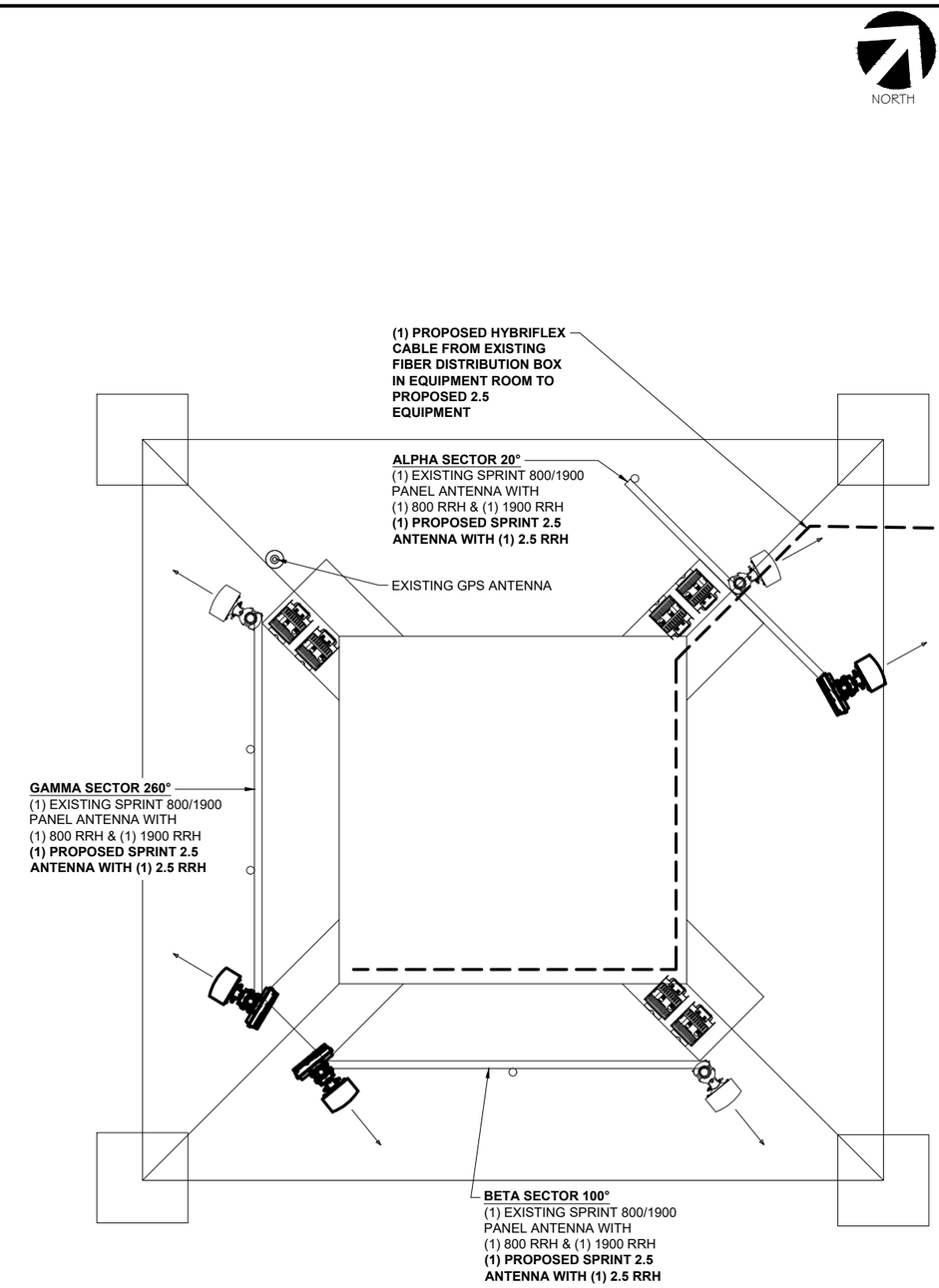


EQUIPMENT PLAN (1)
SCALE: 1" = 2.5'



ANTENNA LAYOUT (2)
SCALE: 1" = 5'

Sprint
1 INTERNATIONAL BLVD, SUITE 800
MAHWAH, NJ 07495

RAMAKER & ASSOCIATES, INC.
855 Community Drive, Sauk City, WI 53583
Phone: 608-643-4100 Fax: 608-643-7999
www.Ramaker.com

INRANGE SOLUTIONS
695 ROUTE 46 WEST
SUITE 103
FAIRFIELD, NJ 07004

Certification & Seal:
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of New York. It is a violation of this law for any person, unless he is acting under the direction of a licensed professional engineer or land surveyor, to alter an item in any way once sealed.

STATE OF NEW YORK · MICHAEL L. PINSKE · 087544 · LICENSED PROFESSIONAL ENGINEER

Michael L. Pinske: Date: 10/31/2017

MARK	DATE	DESCRIPTION

ISSUE PHASE: FINAL DATE ISSUED: 10/31/2017

PROJECT TITLE:
NY06XC421

PROJECT INFORMATION:
1411 ROUTE 35
LEWISBORO, NY 10590
WESTCHESTER COUNTY

SHEET TITLE:
PROPOSED ANTENNA LAYOUT & EQUIPMENT LAYOUT

SCALE:
AS NOTED

PROJECT NUMBER: 35469
SHEET NUMBER: A-1

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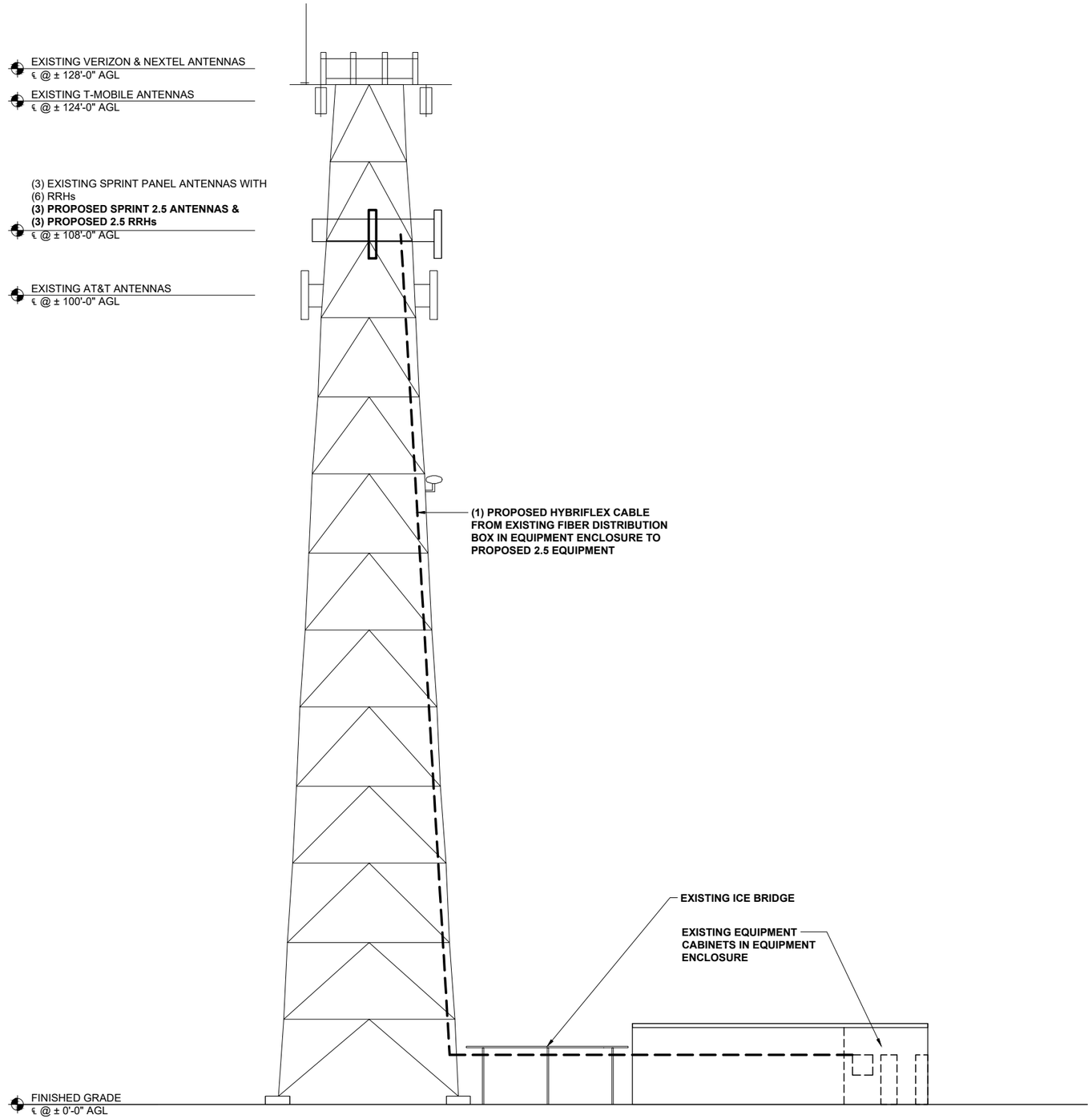

ELEVATION 1
SCALE: 1" = 15'

Sprint
1 INTERNATIONAL BLVD, SUITE 800
MAHWAH, NJ 07495

RAMAKER & ASSOCIATES, INC.
855 Community Drive, Sauk City, WI 53583
Phone: 608-643-4100 Fax: 608-643-7999
www.Ramaker.com

INRANGE SOLUTIONS
695 ROUTE 46 WEST
SUITE 103
FAIRFIELD, NJ 07004

Certification & Seal:
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of New York. It is a violation of this law for any person, unless he is acting under the direction of a licensed professional engineer or land surveyor, to alter an item in any way once sealed.

STATE OF NEW YORK · MICHAEL L. PINSKE · 087544 · LICENSED PROFESSIONAL ENGINEER

Michael L. Pinske: Date: 10/31/2017

MARK	DATE	DESCRIPTION

ISSUE PHASE: FINAL DATE ISSUED: 10/31/2017

PROJECT TITLE:
NY06XC421

PROJECT INFORMATION:
1411 ROUTE 35
LEWISBORO, NY 10590
WESTCHESTER COUNTY

SHEET TITLE:
ELEVATION

0 7.5' 15' 30'
11" x 17" - 1" = 15'
22" x 34" - 1" = 7.5'

PROJECT NUMBER: 35469
SHEET NUMBER: A-2

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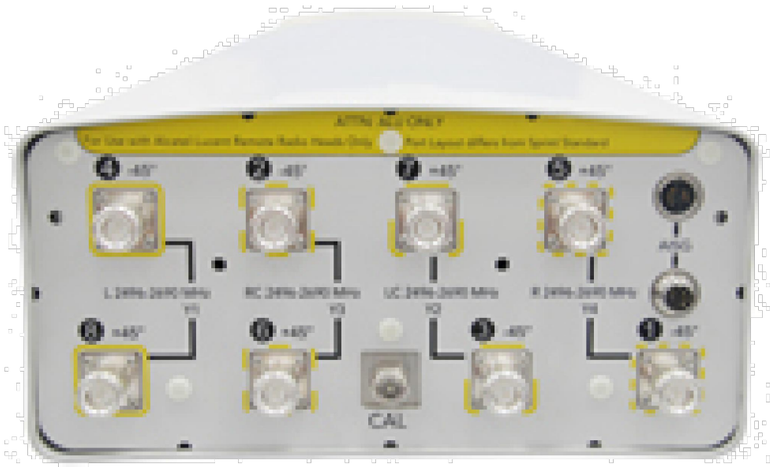
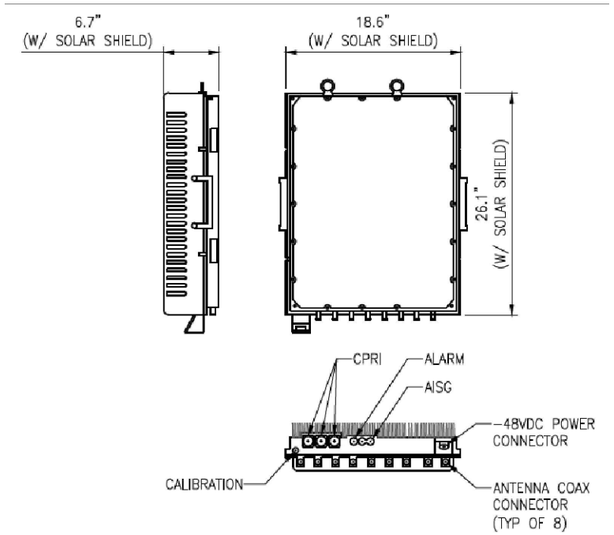


MECHANICAL	
DIMENSION (HxWxD)	56.3"x12.6"x6.3"
WEIGHT	56.2 lbs

ANTENNA MODEL: RFS #APXVTM14-ALU-I20 - ANTENNA SPECS



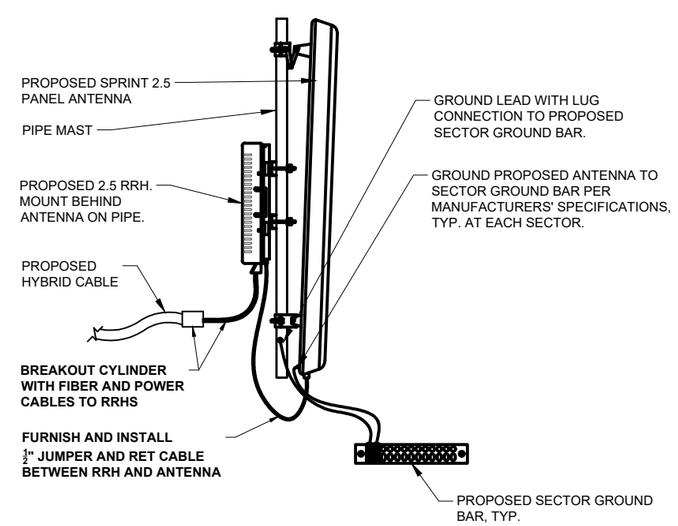
MECHANICAL	
DIMENSION (HxWxD)	26.1"x18.6"x6.7"
WEIGHT	70 lbs

RRH MODEL: ALU #TD-RRH8X20-25 - RADIO SPECS

PROPOSED ANTENNA & RRH (1)
SCALE: NTS

800/1900/2.5 EQUIPMENT SCHEDULE

SECTOR	POSITION	ANTENNA MAKE/MODEL	AZIMUTH	CENTERLINE	RRH	CABLE TYPE	CABLE LENGTH	JUMPER TYPE
ALPHA	1	-	-	-	-	-	-	-
	2	EXISTING 800/1900	20	108'-0"	(1) EXISTING 800 & (1) EXISTING1900	EXISTING HYBRIFLEX	175'	EXISTING
	3	**PROPOSED 2.5 (APXVTM14-ALU-I20)**	**20**	**108'-0"**	**(1) PROPOSED 2.5 (ALU TD-RRH8x20-25)**	**(1) PROPOSED HYBRIFLEX**	**175'**	**8' HYBRID**
BETA	1	EXISTING 800/1900	100	108'-0"	(1) EXISTING 800 & (1) EXISTING1900	EXISTING HYBRIFLEX	195'	EXISTING
	2	-	-	-	-	-	-	-
	3	**PROPOSED 2.5 (APXVTM14-ALU-I20)**	**100**	**108'-0"**	**(1) PROPOSED 2.5 (ALU TD-RRH8x20-25)**	**(1) PROPOSED HYBRIFLEX**	**195'**	**8' HYBRID**
GAMMA	**1**	**PROPOSED 2.5 (APXVTM14-ALU-I20)**	**260**	**108'-0"**	**(1) PROPOSED 2.5 (ALU TD-RRH8x20-25)**	**(1) PROPOSED HYBRIFLEX**	**195'**	**8' HYBRID**
	2	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-
	4	EXISTING 800/1900	260	108'-0"	(1) EXISTING 800 & (1) EXISTING1900	EXISTING HYBRIFLEX	195'	EXISTING



ANTENNA MOUNTING DETAIL (2)
SCALE: NTS

Sprint
1 INTERNATIONAL BLVD, SUITE 800
MAHWAH, NJ 07495

RAMAKER & ASSOCIATES, INC.
855 Community Drive, Sauk City, WI 53583
Phone: 608-643-4100 Fax: 608-643-7999
www.Ramaker.com

INRANGE SOLUTIONS

Certification & Seal:
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of New York. It is a violation of this law for any person, unless he is acting under the direction of a licensed professional engineer or land surveyor, to alter an item in any way once sealed.

STATE OF NEW YORK · MICHAEL L. PINSKE · 087544 · LICENSED PROFESSIONAL ENGINEER

Michael L. Pinske: Date: 10/31/2017

MARK	DATE	DESCRIPTION

ISSUE PHASE: FINAL DATE ISSUED: 10/31/2017

PROJECT TITLE:
NY06XC421

PROJECT INFORMATION:
1411 ROUTE 35
LEWISBORO, NY 10590
WESTCHESTER COUNTY

SHEET TITLE:
ANTENNA SCHEDULES & DETAILS

SCALE: NONE

PROJECT NUMBER: 35469
SHEET NUMBER: A-3

I:\35400\35469\CAD\35469 Sprint Macro Upgrade CD.dwg Printed by: rhegge on Oct 31, 2017 - 11:50am

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RAMAKER & ASSOCIATES, INC.

October 3, 2017

RECEIVED
LEWISBORO
MAR 2 6 2018
PLANNING
BOARD

Kyle Rightmyer
inRange Solutions
695 Route 46 West, Suite 103
Fairfield, NJ 07004

Ramaker & Associates, Inc.
855 Community Drive
Sauk City, WI 53583

SUBJECT: **MOUNT ASSESSMENT**

CARRIER: **SPRINT**

SITE: **NY06XC421**
1411 ROUTE 35
LEWISBORO, WESTCHESTER COUNTY, NEW YORK 10590
RAMAKER & ASSOCIATES PROJECT NUMBER: 35469

RESULTS: **MOUNT:** **PASS**

Dear Kyle Rightmyer:

Ramaker & Associates, Inc. (RAMAKER) respectfully submits this mount assessment for the above mentioned site. The purpose of this report is to determine the structural integrity of the mounting structure with the proposed loading configurations. Engineering recommendations regarding the analysis results are provided in the following pages.

RAMAKER developed a finite element model of the mount(s) using RISA analysis software. All information contained herein is valid only for the described structure configuration and loading conditions. RAMAKER reserves the right to modify our recommendations should alterations to the mount loading occur.

If you have any questions or comments, please do not hesitate to contact our office.

Sincerely,

RAMAKER & ASSOCIATES, INC.

STATE OF NEW YORK
MICHAEL L. PINSKE
087544
LICENSED PROFESSIONAL ENGINEER

Matthew B. Rood
Project Engineer

Michael L. Pinske, P.E.
Supervising Engineer

YORK

ANALYSIS CRITERIA

Adopted Building Code	2015 IBC
Referenced Standard	TIA-222-G
Risk Category	II
Ultimate Design Wind Speed, V_{ult}	116 mph (3 sec. gust)
Nominal Design Wind Speed, V_{asd}	90 mph (3 sec. gust)
Design Wind Speed w/ Ice	50 mph (3 sec. gust)
Ice Thickness	3/4 inch
Exposure Category	B
Topographic Category	Hill
Crest Height	193 Ft.

SUPPORTING DOCUMENTATION

- Construction drawings by RAMAKER, project number 35469
- Site visit(s) conducted by RAMAKER
- Other pertinent data procured or assumed by RAMAKER during site due diligence activities

MOUNT LOADING

RAMAKER understands that the proposed loading will consist of the antennas and equipment configurations as shown in the following chart(s):

Antenna Mount – Alpha Sector				
Elevation	**Position**	**Appurtenance**	**Mount Type**	**Status**
108	1	--	Sector Frame	--
	2	(1) RFS APXVSPP18		Existing
		(1) ALU RRH4x40-1900		
		(1) ALU RRH2x50-800		
	3	**(1) RFS APXVTM14-ALU-120**		**Proposed**
		(1) ALU TD-RRH8x20-25		

Antenna Mount – Beta Sector				
Elevation	**Position**	**Appurtenance**	**Mount Type**	**Status**
108	1	(1) RFS APXVSPP18	Sector Frame	Existing
		(1) ALU RRH4x40-1900		
		(1) ALU RRH2x50-800		
	2	--		--
	3	**(1) RFS APXVTM14-ALU-120**		**Proposed**
		(1) ALU TD-RRH8x20-25		

Antenna Mount – Gamma Sector				
Elevation	**Position**	**Appurtenance**	**Mount Type**	**Status**
108	1	**(1) RFS APXVTM14-ALU-120**	Sector Frame	**Proposed**
		(1) ALU TD-RRH8x20-25		
	2	--		--
	3	--		--
	4	(1) RFS APXVSPP18		Existing
		(1) ALU RRH4x40-1900		
		(1) ALU RRH2x50-800		

MOUNT RESULTS

By engineering calculation and inspection, the antenna and equipment mounting structure(s) are capable of supporting the proposed loading configurations without causing an overstress condition in the antenna and equipment mounting structure(s).

LIMITATIONS

The recommendations contained within this report were developed using the supporting documentation as previously described. All recommendations pertain only to the proposed antenna installation activities as described in this report. RAMAKER assumes no responsibility for failures caused by factors beyond our control. These include but are not limited to the following:

- Missing, corroding, and/or deteriorating members
- Improper manufacturing and/or construction
- Improper maintenance
- Member grades less than assumed grades shown below:

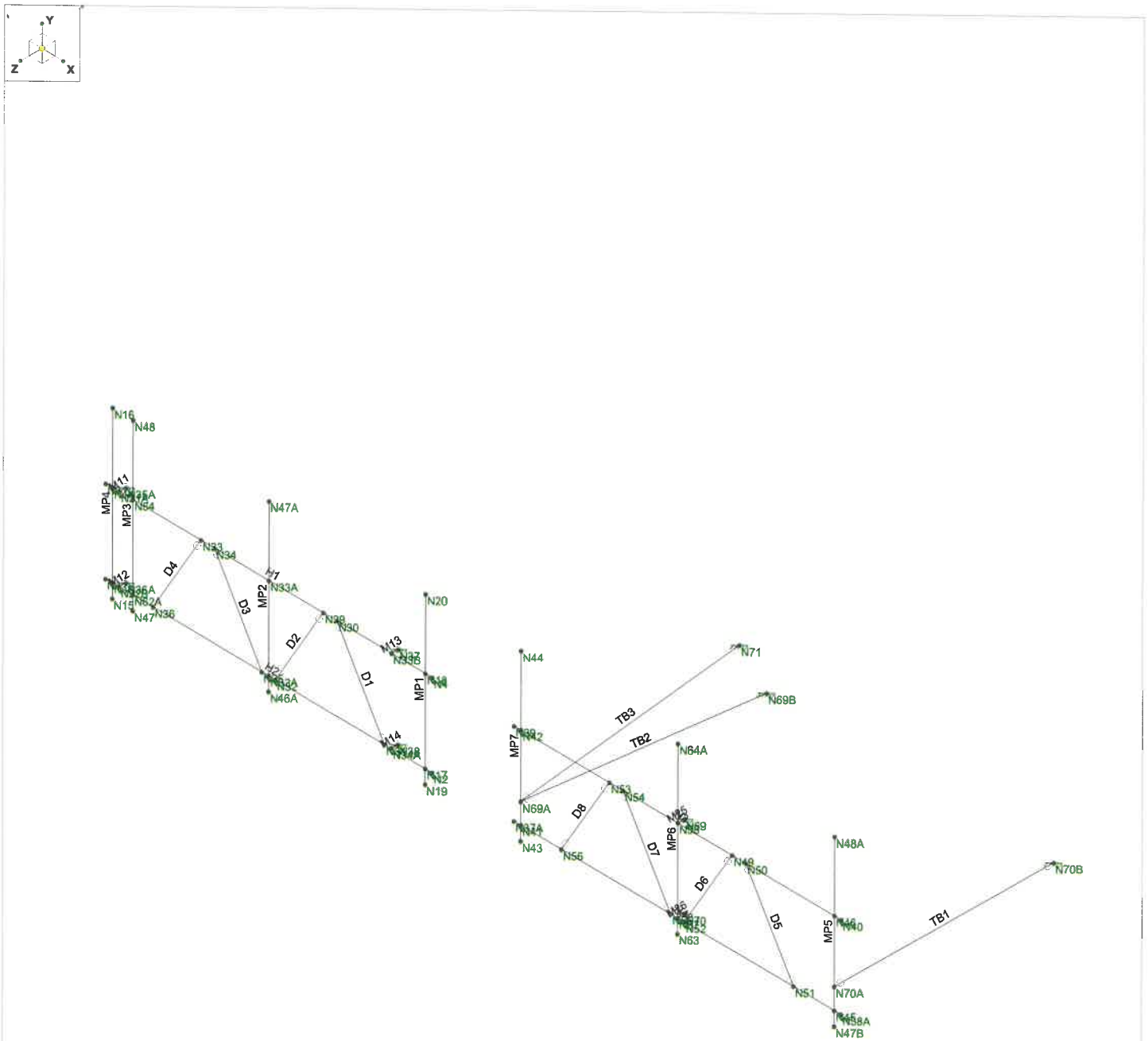
Assumed Steel Member Grades	
Angles/Plates/Channels/Solid Rods	ASTM A36, 36 ksi
Pipes	ASTM A53 Gr. B, 35 ksi

RAMAKER is not responsible for verifying that the loading on the structure is consistent with the loading applied to the structure within this report. If there is any information contrary to that contained herein, or if there are any defects arising from the original design, material, fabrication and erection deficiencies, this report should be disregarded and RAMAKER should be contacted immediately. RAMAKER is not liable for any representation, recommendation, or conclusion not expressly stated herein.

This analysis pertains only to the mounting structure, and no analyses or conclusions were made regarding the supporting structure. Analysis and certification of the supporting structure is performed and submitted separately.

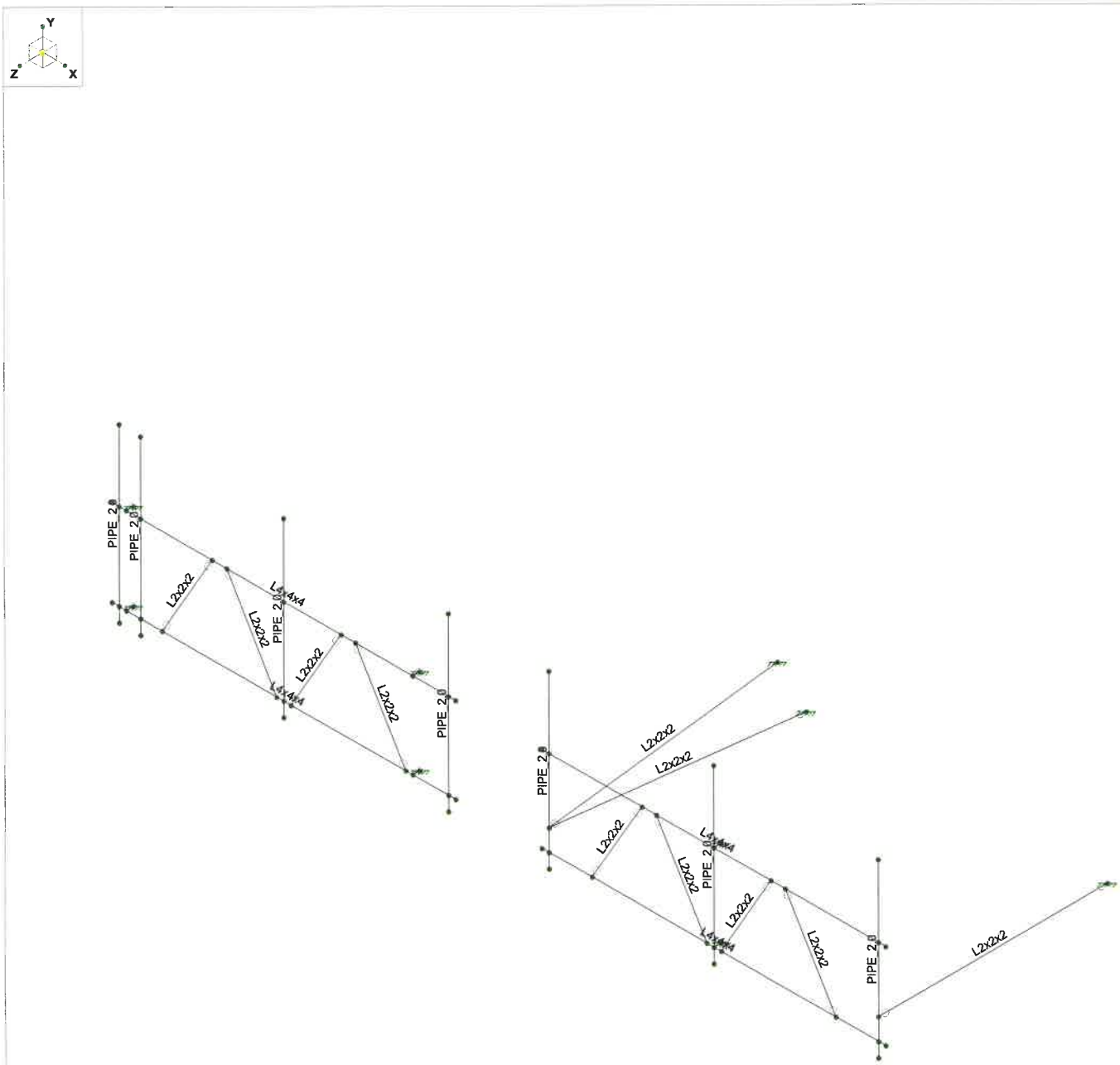
ATTACHMENTS

- Analysis Figures
- Analysis Calculations



Envelope Only Solution

Ramaker & Associates	NY06XC421	SK - 1
MBR		Oct 2, 2017 at 12:40 PM
35469		35469 Mount.r3d



Envelope Only Solution

Ramaker & Associates	NY06XC421	SK - 2
MBR		Oct 2, 2017 at 12:41 PM
35469		35469 Mount.r3d

RAMAKER & ASSOCIATES, INC.
855 Community Drive, Sauk City, WI 53583
Phone: 608-643-4100 Fax: 608-643-7999

Job: NY06XC421
Project: 35469
By: MBR
Date: 10/3/17

Wind Load on Antennas TIA-222-G

$q_z = 0.00256\ K_z\ K_{zt}\ K_d\ V^2\ I$

$F = q_z\ G_h\ C_a\ A_a$

Occupancy:	II	Classification of Structures (Table 2-1)
Exposure:	B	Exposure Category
V:	90 mph	Basic Wind Speed (Annex B)
z:	108 ft	Height above ground level to the center of the antenna
I:	1.00	Importance Factor (Table 2-3)
K_z:	1.01	Velocity Pressure Coefficient (2.6.5.2)
K_{zt}:	1.29	Topographic Factor (2.6.6.4)
K_d:	0.95	Wind Direction Probability Factor (Table 2-2)
q_z:	25.6 psf	Velocity Pressure at Height z
G_h:	1.00	Strength Design of Appurtenances and their Connections

Mount & Antenna Wind Loads

Appurtenance	Height	Width	h/D	Shape	C_a	A_f	Force	Force
	in	*in*				*sq ft*	*lb*	*plf*
APXVSPP18-C-A20	72.0	11.8	6.1	Flat	1.360	5.90	205.6	
APXVTM14-C-120	56.3	12.6	4.5	Flat	1.287	4.93	162.5	
TD-RRH8x20	26.1	18.6	1.4	Flat	1.200	3.37	103.6	
L4X4X1/4 x 12 ft	144.0	4.0	36.0	Flat	2.000	4.00	205.0	17.1
L2X2X1/8 x 3.5 ft	42.0	2.0	21.0	Flat	1.867	0.58	27.9	8.0
Pipe2STD x 6 ft	72.0	2.4	30.3	Round	1.200	1.19	36.5	6.1
L2X2X1/8 x 8 ft	96.0	2.0	48.0	Flat	2.000	1.33	68.3	8.5
L2X2X1/8 x 9 ft	108.0	2.0	54.0	Flat	2.000	1.50	76.9	8.5

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Date:	10/3/17

Wind Load on Antennas TIA-222-G

$q_z = 0.00256\ K_z\ K_{zt}\ K_d\ V^2\ I$

$F = q_z\ G_h\ C_a\ A_a$

Occupancy:	II	Classification of Structures (Table 2-1)
Exposure:	B	Exposure Category
V:	90 mph	Basic Wind Speed (Annex B)
z:	108 ft	Height above ground level to the center of the antenna
I:	1.00	Importance Factor (Table 2-3)
K_z:	1.01	Velocity Pressure Coefficient (2.6.5.2)
K_{zt}:	1.29	Topographic Factor (2.6.6.4)
K_d:	0.95	Wind Direction Probability Factor (Table 2-2)
q_z:	25.6 psf	Velocity Pressure at Height z
G_h:	1.00	Strength Design of Appurtenances and their Connections

Mount & Antenna Wind Loads

Appurtenance	Height	Depth	h/D	Shape	C_a	A_f	Force	Force
	in	*in*				*sq ft*	*lb*	*plf*
APXVSPP18-C-A20	72.0	7.9	9.1	Flat	1.470	3.95	148.8	
APXVTM14-C-120	56.3	6.3	8.9	Flat	1.465	2.46	92.4	
TD-RRH8x20	26.1	6.7	3.9	Flat	1.262	1.21	39.3	
L4X4X1/4 x 12 ft	144.0	4.0	36.0	Flat	2.000	4.00	205.0	17.1
L2X2X1/8 x 3.5 ft	42.0	2.0	21.0	Flat	1.867	0.58	27.9	8.0
Pipe2STD x 6 ft	72.0	2.4	30.3	Round	1.200	1.19	36.5	6.1
L2X2X1/8 x 8 ft	96.0	2.0	48.0	Flat	2.000	1.33	68.3	8.5
L2X2X1/8 x 9 ft	108.0	2.0	54.0	Flat	2.000	1.50	76.9	8.5

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Project: 35469
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Date: 10/3/17

Ice Wind Load on Antennas TIA-222-G

$q_z = 0.00256\ K_z\ K_{zt}\ K_d\ V^2\ I$

$F = q_z\ G_h\ C_a\ A_a$

Occupancy:	II	Classification of Structures (Table 2-1)
Exposure:	B	Exposure Category
V_i:	50 mph	Basic Wind Speed (Annex B)
z:	108 ft	Height above ground level to the center of the antenna
I:	1.00	Importance Factor (Table 2-3)
K_z:	1.01	Velocity Pressure Coefficient (2.6.5.2)
K_{zt}:	1.29	Topographic Factor (2.6.6.4)
K_d:	0.95	Wind Direction Probability Factor (Table 2-2)
q_z:	7.93 psf	Velocity Pressure at Height z
G_h:	1.00	Strength Design of Appurtenances and their Connections
K_{iz}:	1.13	Height Escalation Factor for Ice Thickness
t_{iz}:	1.85 in	Factored Thickness of Radial Glaze Ice at Height z

Mount & Antenna Ice Wind Loads

Appurtenance	Height	Width	h/D	Shape	C_a	A_f	Force	Force
	in	*in*				*sq ft*	*lb*	*plf*
APXVSPP18-C-A20	75.7	15.5	4.9	Flat	1.306	8.14	84.4	
APXVTM14-C-120	60.0	16.3	3.7	Flat	1.253	6.79	67.5	
TD-RRH8x20	29.8	22.3	1.3	Flat	1.200	4.61	43.9	
L4X4X1/4 x 12 ft	147.7	7.7	19.2	Flat	1.807	7.89	113.1	9.2
L2X2X1/8 x 3.5 ft	45.7	5.7	8.0	Flat	1.434	1.81	20.6	5.4
Pipe2STD x 6 ft	75.7	6.1	12.5	Round	0.922	3.19	23.3	3.7
L2X2X1/8 x 8 ft	99.7	5.7	17.5	Flat	1.750	3.94	54.7	6.6
L2X2X1/8 x 9 ft	111.7	5.7	19.6	Flat	1.821	4.42	63.8	6.9

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Date:	10/3/17

Ice Wind Load on Antennas TIA-222-G

$q_z = 0.00256\ K_z\ K_{zt}\ K_d\ V^2\ I$

$F = q_z\ G_h\ C_a\ A_a$

Occupancy:	II	Classification of Structures (Table 2-1)
Exposure:	B	Exposure Category
V_i:	50 mph	Basic Wind Speed (Annex B)
z:	108 ft	Height above ground level to the center of the antenna
I:	1.00	Importance Factor (Table 2-3)
K_z:	1.01	Velocity Pressure Coefficient (2.6.5.2)
K_{zt}:	1.29	Topographic Factor (2.6.6.4)
K_d:	0.95	Wind Direction Probability Factor (Table 2-2)
q_z:	7.93 psf	Velocity Pressure at Height z
G_h:	1.00	Strength Design of Appurtenances and their Connections
K_{iz}:	1.13	Height Escalation Factor for Ice Thickness
t_{iz}:	1.85 in	Factored Thickness of Radial Glaze Ice at Height z

Mount & Antenna Ice Wind Loads

Appurtenance	Height	Depth	h/D	Shape	C_a	A_f	Force	Force
	in	*in*				*sq ft*	*lb*	*plf*
APXVSPP18-C-A20	75.7	11.6	6.5	Flat	1.379	6.09	66.7	
APXVTM14-C-120	60.0	10.0	6.0	Flat	1.356	4.16	44.8	
TD-RRH8x20	29.8	10.4	2.9	Flat	1.216	2.15	20.8	
L4X4X1/4 x 12 ft	147.7	7.7	19.2	Flat	1.807	7.89	113.1	9.2
L2X2X1/8 x 3.5 ft	45.7	5.7	8.0	Flat	1.434	1.81	20.6	5.4
Pipe2STD x 6 ft	75.7	6.1	12.5	Round	0.922	3.19	23.3	3.7
L2X2X1/8 x 8 ft	99.7	5.7	17.5	Flat	1.750	3.94	54.7	6.6
L2X2X1/8 x 9 ft	111.7	5.7	19.6	Flat	1.821	4.42	63.8	6.9

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855 Community Drive, Sauk City, WI 53583
Phone: 608-643-4100 Fax: 608-643-7999

Job: NY06XC421
Project: 35469
By: MBR
Date: 10/3/17

Ice Load on Antennas TIA-222-G

Ice Weight:	56	pcf	Ice Density
t_i:	0.75		Design Ice Thickness
Occupancy:	II		Classification of Structures (Table 2-1)
Exposure:	B		Exposure Category
V_i:	50	mph	Basic Wind Speed (Annex B)
z:	108	ft	Height above ground level to the center of the antenna
I:	1.00		Importance Factor (Table 2-3)
K_{iz}:	1.13		Height Escalation Factor for Ice Thickness
K_{zt}:	1.29		Topographic Factor (2.6.6.4)
t_{iz}:	1.85	in	Factored Thickness of Radial Glaze Ice at Height z

Platform Grating: None
Ice Load: psf

Mount & Antenna Ice Wind Loads

Appurtenance	Height	Width	Depth	Diam.	Area	Perim.	Ice Weight	
	in	*in*	*in*	*in*	*sq in*	*in*	*lb*	*plf*
APXVSPP18-C-A20	75.7	15.5	11.6	14.20	93.12	46.79	217.3	
APXVTM14-C-120	60.0	16.3	10.0	14.09	92.46	45.19	168.7	
TD-RRH8x20	29.8	22.3	10.4	19.77	125.44	57.99	106.1	
L4X4X1/4 x 12 ft	147.7	7.7	7.7	5.66	43.54	23.39	203.2	16.9
L2X2X1/8 x 3.5 ft	45.7	5.7	5.7	2.83	27.13	15.39	36.9	10.6
Pipe2STD x 6 ft	75.7	6.1	6.1	2.38	24.50	13.26	57.2	9.5
L2X2X1/8 x 8 ft	99.7	5.7	5.7	2.83	27.13	15.39	84.4	10.6
L2X2X1/8 x 9 ft	111.7	5.7	5.7	2.83	27.13	15.39	95.0	10.6

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (\1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
3	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.42	29000	11154	.3	.65	.49	42	1.4	58	1.3
5	A500 Gr.46	29000	11154	.3	.65	.49	46	1.4	58	1.3
6	A53 Gr. B	29000	11154	.3	.65	.49	35	1.5	60	1.2

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rul...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	L4x4x1/4	L4x4x4	Beam	Single Angle	A36 Gr.36	Typical	1.93	3	3	.044
2	L3x3x1/4	L3x3x4	Beam	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	.031
3	L2x2x1/8	L2x2x2	Beam	Single Angle	A36 Gr.36	Typical	.491	.189	.189	.003
4	SR 1/2	SR 1/2"	Beam	BAR	A36 Gr.36	Typical	.196	.003	.003	.006
5	Pipe 2.0	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
6	Pipe 3.0	PIPE_3.0	Beam	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69
7	Pipe 3.5	PIPE_3.5	Beam	Pipe	A53 Gr. B	Typical	2.5	4.52	4.52	9.04
8	Pipe 4.0	PIPE_4.0	Beam	Pipe	A53 Gr. B	Typical	2.96	6.82	6.82	13.6

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
1	H2	N1	N2		270	L4x4x1/4	Beam	Single Angle	A36 Gr.36	Typical
2	H1	N3	N4		180	L4x4x1/4	Beam	Single Angle	A36 Gr.36	Typical
3	MP4	N15	N16			Pipe 2.0	Beam	Pipe	A53 Gr. B	Typical
4	MP1	N19	N20			Pipe 2.0	Beam	Pipe	A53 Gr. B	Typical
5	D2	N32	N29		270	L2x2x1/8	Beam	Single Angle	A36 Gr.36	Typical
6	D1	N30	N31		90	L2x2x1/8	Beam	Single Angle	A36 Gr.36	Typical
7	D4	N36	N33		90	L2x2x1/8	Beam	Single Angle	A36 Gr.36	Typical
8	D3	N34	N35		270	L2x2x1/8	Beam	Single Angle	A36 Gr.36	Typical
9	MP3	N47	N48			Pipe 2.0	Beam	Pipe	A53 Gr. B	Typical
10	MP2	N46A	N47A			Pipe 2.0	Beam	Pipe	A53 Gr. B	Typical
11	M11	N31A	N35A			RIGID	None	None	RIGID	Typical
12	M12	N32B	N36A			RIGID	None	None	RIGID	Typical
13	M13	N33B	N37			RIGID	None	None	RIGID	Typical
14	M14	N34A	N38			RIGID	None	None	RIGID	Typical
15	H4	N37A	N38A		270	L4x4x1/4	Beam	Single Angle	A36 Gr.36	Typical
16	H3	N39	N40		180	L4x4x1/4	Beam	Single Angle	A36 Gr.36	Typical
17	MP7	N43	N44			Pipe 2.0	Beam	Pipe	A53 Gr. B	Typical
18	MP5	N47B	N48A			Pipe 2.0	Beam	Pipe	A53 Gr. B	Typical
19	D6	N52	N49		270	L2x2x1/8	Beam	Single Angle	A36 Gr.36	Typical
20	D5	N50	N51		90	L2x2x1/8	Beam	Single Angle	A36 Gr.36	Typical
21	D8	N56	N53		90	L2x2x1/8	Beam	Single Angle	A36 Gr.36	Typical
22	D7	N54	N55		270	L2x2x1/8	Beam	Single Angle	A36 Gr.36	Typical
23	MP6	N63	N64A			Pipe 2.0	Beam	Pipe	A53 Gr. B	Typical
24	M25	N58	N69			RIGID	None	None	RIGID	Typical
25	M26	N57	N70			RIGID	None	None	RIGID	Typical
26	TB3	N69A	N71			L2x2x1/8	Beam	Single Angle	A36 Gr.36	Typical
27	TB2	N69A	N69B			L2x2x1/8	Beam	Single Angle	A36 Gr.36	Typical
28	TB1	N70A	N70B			L2x2x1/8	Beam	Single Angle	A36 Gr.36	Typical

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Dead Load	None		-1			10			
2	Antenna Wind 0	None					20			
3	Antenna Wind 30	None					20			
4	Antenna Wind 45	None					20			
5	Antenna Wind 60	None					20			
6	Antenna Wind 90	None					20			
7	Antenna Wind 120	None					20			
8	Antenna Wind 135	None					20			
9	Antenna Wind 150	None					20			
10	Antenna Wind 180	None					20			
11	Antenna Wind 210	None					20			
12	Antenna Wind 225	None					20			
13	Antenna Wind 240	None					20			
14	Antenna Wind 270	None					20			
15	Antenna Wind 300	None					20			
16	Antenna Wind 315	None					20			
17	Antenna Wind 330	None					20			
18	Antenna Ice Dead Load	None					10			
19	Antenna Wind w/Ice 0	None					20			
20	Antenna Wind w/Ice 30	None					20			
21	Antenna Wind w/Ice 45	None					20			
22	Antenna Wind w/Ice 60	None					20			
23	Antenna Wind w/Ice 90	None					20			
24	Antenna Wind w/Ice 1...	None					20			
25	Antenna Wind w/Ice 1...	None					20			
26	Antenna Wind w/Ice 1...	None					20			
27	Antenna Wind w/Ice 1...	None					20			
28	Antenna Wind w/Ice 2...	None					20			
29	Antenna Wind w/Ice 2...	None					20			
30	Antenna Wind w/Ice 2...	None					20			
31	Antenna Wind w/Ice 2...	None					20			
32	Antenna Wind w/Ice 3...	None					20			
33	Antenna Wind w/Ice 3...	None					20			
34	Antenna Wind w/Ice 3...	None					20			
35	Member Wind 0	None						44		
36	Member Wind 30	None						44		
37	Member Wind 45	None						44		
38	Member Wind 60	None						44		
39	Member Wind 90	None						44		
40	Member Wind 120	None						44		
41	Member Wind 135	None						44		
42	Member Wind 150	None						44		
43	Member Wind 180	None						44		
44	Member Wind 210	None						44		
45	Member Wind 225	None						44		
46	Member Wind 240	None						44		
47	Member Wind 270	None						44		
48	Member Wind 300	None						44		
49	Member Wind 315	None						44		
50	Member Wind 330	None						44		
51	Member Ice Dead Load	None						22		
52	Member Wind w/Ice 0	None						44		
53	Member Wind w/Ice 30	None						44		
54	Member Wind w/Ice 45	None						44		
55	Member Wind w/Ice 60	None						44		
56	Member Wind w/Ice 90	None						44		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
57	Member Wind w/Ice 1...	None						44		
58	Member Wind w/Ice 1...	None						44		
59	Member Wind w/Ice 1...	None						44		
60	Member Wind w/Ice 1...	None						44		
61	Member Wind w/Ice 2...	None						44		
62	Member Wind w/Ice 2...	None						44		
63	Member Wind w/Ice 2...	None						44		
64	Member Wind w/Ice 2...	None						44		
65	Member Wind w/Ice 3...	None						44		
66	Member Wind w/Ice 3...	None						44		
67	Member Wind w/Ice 3...	None						44		
68	Live Load - Area	None								
69	Live Load - Point 1	None					4			
70	Live Load - Point 2	None					4			
71	Live Load - Point 3	None					4			
72	Railing Dist. LL z	None								
73	Railing Dist. LL x	None								
74	Railing Point LL z	None								
75	Railing Point LL x	None								

Load Combinations

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
1	1.4D	Yes	Y		1	1.4																		
2	0.9D + 1.6 (0-Wi...	Yes	Y		1	.9	2	1.6	35	1.6														
3	0.9D + 1.6 (30-...	Yes	Y		1	.9	3	1.6	36	1.6														
4	0.9D + 1.6 (45-...	Yes	Y		1	.9	4	1.6	37	1.6														
5	0.9D + 1.6 (60-...	Yes	Y		1	.9	5	1.6	38	1.6														
6	0.9D + 1.6 (90-...	Yes	Y		1	.9	6	1.6	39	1.6														
7	0.9D + 1.6 (120-...	Yes	Y		1	.9	7	1.6	40	1.6														
8	0.9D + 1.6 (135-...	Yes	Y		1	.9	8	1.6	41	1.6														
9	0.9D + 1.6 (150-...	Yes	Y		1	.9	9	1.6	42	1.6														
10	0.9D + 1.6 (180-...	Yes	Y		1	.9	10	1.6	43	1.6														
11	0.9D + 1.6 (210-...	Yes	Y		1	.9	11	1.6	44	1.6														
12	0.9D + 1.6 (225-...	Yes	Y		1	.9	12	1.6	45	1.6														
13	0.9D + 1.6 (240-...	Yes	Y		1	.9	13	1.6	46	1.6														
14	0.9D + 1.6 (270-...	Yes	Y		1	.9	14	1.6	47	1.6														
15	0.9D + 1.6 (300-...	Yes	Y		1	.9	15	1.6	48	1.6														
16	0.9D + 1.6 (315-...	Yes	Y		1	.9	16	1.6	49	1.6														
17	0.9D + 1.6 (330-...	Yes	Y		1	.9	17	1.6	50	1.6														
18	1.2D + 1.6 (0-Wi...	Yes	Y		1	1.2	2	1.6	35	1.6														
19	1.2D + 1.6 (30-...	Yes	Y		1	1.2	3	1.6	36	1.6														
20	1.2D + 1.6 (45-...	Yes	Y		1	1.2	4	1.6	37	1.6														
21	1.2D + 1.6 (60-...	Yes	Y		1	1.2	5	1.6	38	1.6														
22	1.2D + 1.6 (90-...	Yes	Y		1	1.2	6	1.6	39	1.6														
23	1.2D + 1.6 (120-...	Yes	Y		1	1.2	7	1.6	40	1.6														
24	1.2D + 1.6 (135-...	Yes	Y		1	1.2	8	1.6	41	1.6														
25	1.2D + 1.6 (150-...	Yes	Y		1	1.2	9	1.6	42	1.6														
26	1.2D + 1.6 (180-...	Yes	Y		1	1.2	10	1.6	43	1.6														
27	1.2D + 1.6 (210-...	Yes	Y		1	1.2	11	1.6	44	1.6														
28	1.2D + 1.6 (225-...	Yes	Y		1	1.2	12	1.6	45	1.6														
29	1.2D + 1.6 (240-...	Yes	Y		1	1.2	13	1.6	46	1.6														
30	1.2D + 1.6 (270-...	Yes	Y		1	1.2	14	1.6	47	1.6														
31	1.2D + 1.6 (300-...	Yes	Y		1	1.2	15	1.6	48	1.6														
32	1.2D + 1.6 (315-...	Yes	Y		1	1.2	16	1.6	49	1.6														
33	1.2D + 1.6 (330-...	Yes	Y		1	1.2	17	1.6	50	1.6														

Load Combinations (Continued)

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
34	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	19	1	52	1										
35	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	20	1	53	1										
36	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	21	1	54	1										
37	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	22	1	55	1										
38	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	23	1	56	1										
39	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	24	1	57	1										
40	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	25	1	58	1										
41	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	26	1	59	1										
42	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	27	1	60	1										
43	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	28	1	61	1										
44	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	29	1	62	1										
45	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	30	1	63	1										
46	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	31	1	64	1										
47	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	32	1	65	1										
48	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	33	1	66	1										
49	1.2D + 1.0Di + 1...	Yes	Y		1	1.2	18	1	51	1	34	1	67	1										
50	1.0D + 1.5LL + 1...	Yes	Y		1	1	68	1.5	72	1.5														
51	1.0D + 1.5LL + 1...	Yes	Y		1	1	68	1.5	73	1.5														
52	1.0D + 1.5LL + 1...	Yes	Y		1	1	68	1.5	74	1.5														
53	1.0D + 1.5LL + 1...	Yes	Y		1	1	68	1.5	75	1.5														
54	1.0D + 1.5LL + 1...	Yes	Y		1	1	69	1.5	72	1.5														
55	1.0D + 1.5LL + 1...	Yes	Y		1	1	69	1.5	73	1.5														
56	1.0D + 1.5LL + 1...	Yes	Y		1	1	69	1.5	74	1.5														
57	1.0D + 1.5LL + 1...	Yes	Y		1	1	69	1.5	75	1.5														
58	1.0D + 1.5LL + 1...	Yes	Y		1	1	70	1.5	72	1.5														
59	1.0D + 1.5LL + 1...	Yes	Y		1	1	70	1.5	73	1.5														
60	1.0D + 1.5LL + 1...	Yes	Y		1	1	70	1.5	74	1.5														
61	1.0D + 1.5LL + 1...	Yes	Y		1	1	70	1.5	75	1.5														
62	1.0D + 1.5LL + 1...	Yes	Y		1	1	71	1.5	72	1.5														
63	1.0D + 1.5LL + 1...	Yes	Y		1	1	71	1.5	73	1.5														
64	1.0D + 1.5LL + 1...	Yes	Y		1	1	71	1.5	74	1.5														
65	1.0D + 1.5LL + 1...	Yes	Y		1	1	71	1.5	75	1.5														
66	Serviceability (0-...	Yes	Y		1	1	2	.398	35	.398														
67	Serviceability (3...	Yes	Y		1	1	3	.398	36	.398														
68	Serviceability (4...	Yes	Y		1	1	4	.398	37	.398														
69	Serviceability (6...	Yes	Y		1	1	5	.398	38	.398														
70	Serviceability (9...	Yes	Y		1	1	6	.398	39	.398														
71	Serviceability (1...	Yes	Y		1	1	7	.398	40	.398														
72	Serviceability (1...	Yes	Y		1	1	8	.398	41	.398														
73	Serviceability (1...	Yes	Y		1	1	9	.398	42	.398														
74	Serviceability (1...	Yes	Y		1	1	10	.398	43	.398														
75	Serviceability (2...	Yes	Y		1	1	11	.398	44	.398														
76	Serviceability (2...	Yes	Y		1	1	12	.398	45	.398														
77	Serviceability (2...	Yes	Y		1	1	13	.398	46	.398														
78	Serviceability (2...	Yes	Y		1	1	14	.398	47	.398														
79	Serviceability (3...	Yes	Y		1	1	15	.398	48	.398														
80	Serviceability (3...	Yes	Y		1	1	16	.398	49	.398														
81	Serviceability (3...	Yes	Y		1	1	17	.398	50	.398														

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	N35A	max	258.512	13	516.565	41	564.854	18	13.405	16	64.628	13	284.611	22
2		min	-278.601	21	-53.619	16	-564.023	10	-129.141	41	-69.65	21	-243.895	14
3	N36A	max	221.932	32	481.941	62	228.527	2	26.21	9	55.483	32	137.126	37
4		min	-194.44	8	-104.84	9	-229.194	26	-120.485	62	-48.61	8	-5.497	13

Envelope Joint Reactions (Continued)

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
5	N37	max	355.782	28	376.982	26	725.256	2	50.42	2	88.945	28	275.964	35
6		min	-266.583	4	-201.681	2	-725.932	26	-94.246	26	-66.646	4	-24.521	10
7	N38	max	128.167	12	812.486	34	303.097	18	22.29	11	32.042	12	170.856	19
8		min	-267.721	36	-89.159	11	-302.607	10	-203.121	34	-66.93	36	-285.498	58
9	N69	max	484.026	12	527.205	10	1108.489	18	157.543	18	121.007	12	446.558	9
10		min	-956.045	20	-630.172	18	-1098.61	26	-131.801	10	-239.011	20	-488.7	33
11	N70	max	863.174	48	2242.087	34	94.06	18	30.258	10	215.794	48	218.269	58
12		min	-468.228	62	-121.03	10	-95.52	10	-560.522	34	-117.057	62	-181.014	2
13	N69B	max	58.577	30	50.641	43	101.601	2	.01	26	0	1	.075	2
14		min	-55.252	6	6.051	2	-128.059	26	-.009	2	0	1	-.077	26
15	N71	max	64.197	30	56.85	42	204.134	18	.007	26	0	1	.061	26
16		min	-61.853	6	6.78	2	-182.253	10	-.007	18	0	1	-.063	18
17	N70B	max	54.658	14	50.344	42	603.136	2	0	1	0	1	.013	34
18		min	-54.658	22	5.82	2	-606.754	26	0	1	0	1	-.004	10
19	Totals:	max	2032.445	13	3863.391	42	3927.849	18						
20		min	-2032.445	7	831.056	2	-3927.849	10						

Envelope AISC 14th(360-10): LRFD Steel Code Checks

	Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc ...	phi*Pnt [...	phi*Mn y...	phi*Mn z...	Cb	Eqn
1	H2	L4x4x4	.145	10.5	58	.038	10.5	z	58	43004.2...	62532	3137.597	4451.823	1	H2-1
2	H1	L4x4x4	.180	10.5	10	.069	.5	z	26	43004.2...	62532	3137.597	4451.823	1	H2-1
3	MP4	PIPE_2.0	.238	3.5	18	.029	3.5		18	20866.7...	32130	1871.625	1871.625	2....	H1-1b
4	MP1	PIPE_2.0	.194	3.5	18	.067	3.5		18	20866.7...	32130	1871.625	1871.625	2....	H1-1b
5	D2	L2x2x2	.062	1.737	26	.007	0	y	18	8406.591	15908.4	396.008	716.334	1....	H2-1
6	D1	L2x2x2	.089	1.773	44	.007	0	y	26	8406.591	15908.4	402.563	716.334	1....	H2-1
7	D4	L2x2x2	.066	1.737	18	.006	0	y	26	8406.591	15908.4	396.008	716.334	1....	H2-1
8	D3	L2x2x2	.058	1.737	26	.006	0	y	26	8406.591	15908.4	396.008	716.334	1....	H2-1
9	MP3	PIPE_2.0	.026	3.5	18	.012	3.5		26	20866.7...	32130	1871.625	1871.625	2....	H1-1b
10	MP2	PIPE_2.0	.021	3.5	18	.006	3.5		18	20866.7...	32130	1871.625	1871.625	2....	H1-1b
11	H4	L4x4x4	.261	11.75	18	.112	6.25	z	18	43004.2...	62532	3137.597	4451.823	1	H2-1
12	H3	L4x4x4	.545	6	10	.101	8	y	18	43004.2...	62532	3137.597	4451.823	1	H2-1
13	MP7	PIPE_2.0	.104	.5	54	.151	1.25		18	20866.7...	32130	1871.625	1871.625	2....	H1-1b
14	MP5	PIPE_2.0	.379	1.25	18	.445	1.25		18	20866.7...	32130	1871.625	1871.625	1....	H3-6
15	D6	L2x2x2	.221	1.664	35	.018	0	y	18	8406.591	15908.4	402.563	716.334	1....	H2-1
16	D5	L2x2x2	.092	1.7	44	.031	0	y	18	8406.591	15908.4	402.563	716.334	1....	H2-1
17	D8	L2x2x2	.066	1.773	40	.011	3.473	y	26	8406.591	15908.4	402.563	716.334	1....	H2-1
18	D7	L2x2x2	.128	1.773	48	.019	0	y	26	8406.591	15908.4	402.563	716.334	1....	H2-1
19	MP6	PIPE_2.0	.346	3.5	18	.338	3.5		2	20866.7...	32130	1871.625	1871.625	1	H3-6
20	TB3	L2x2x2	.500	4.622	49	.012	9.055	z	30	1436.146	15908.4	396.008	474.066	1....	H2-1
21	TB2	L2x2x2	.349	4.031	46	.011	0	z	30	1811.753	15908.4	396.008	509.976	1....	H2-1
22	TB1	L2x2x2	.405	4.083	34	.011	0	z	30	1840.062	15908.4	396.008	512.299	1....	H2-1

Ciorsdan Conran

From: TED SOHONYAY <tedsohonyay@yahoo.com>
Sent: Wednesday, May 02, 2018 10:17 AM
To: Judson Siebert; Jan Johannessen; John Wolff; 'Greg La Sorsa'; Janet Andersen; 'Jerome Kerner'; 'John O'Donnell'; Rich Sklarin; Ciorsdan Conran
Cc: 'Alan Cole'; Carl Grossman; 'Neil Berman'; 'Thomas LoBosco'
Subject: Re: Sprint at Leon Levy

Ciorsdan and All,

After reviewing the attached documentation, it is evident that the application will have minimal visual impact in that the antenna equipment will be lower on the tower than other carriers.

I have no objection or questions regarding this application. If AAB members want to offer further input or have questions for the applicant, they are encouraged to do so.

I propose that this application go forward to approval.

Regards,

Ted Sohonyay, Chair
Lewisboro Antenna Advisory Board

On Thursday, April 26, 2018, 3:39:19 PM EDT, Ciorsdan Conran <Planning@lewisborogov.com> wrote:

Submission for May 15, 2018 PB meeting

KELLARD SESSIONS

John Kellard, P.E.
David Sessions, RLA, AICP
Joseph M. Cermele, P.E., CFM
Jan K. Johannessen, AICP

MEMORANDUM

TO: Chairman Jerome Kerner, AIA and
Members of Lewisboro Planning Board

CC: Ciorsdan Conran
Judson Siebert, Esq.
Joseph Angiello

FROM: Jan K. Johannessen, AICP
Joseph M. Cermele, P.E., CFM
Town Consulting Professionals

DATE: June 14, 2018

RE: Verizon Wireless Upgrade
117 Waccabuc Road
Sheet 11, Block 1137, Lot 52

PROJECT DESCRIPTION

According to the plans submitted, the applicant is proposing to remove six (6) existing panel antennas and six (6) existing Remote Radio Heads (RRHs) and replace them with six (6) new panel antennas and nine (9) new RRHs. The originally approved Verizon Wireless co-location application was approved by Special Use Permit on August 13, 2013 (Cal. #1-13PB); we note that the original approval contemplated the installation of 12 panel antennas. The applicant is also proposing a renewal of its Special Use Permit.

SEQRA

The proposed action has been preliminarily identified as an Unlisted Action under the State Environmental Quality Review Act (SEQRA). Prior to acting on this pending application, the Planning Board must issue a Determination of Significance.

GENERAL COMMENTS

1. The applicant has requested a five (5) year renewal of its Special Use Permit which was issued by the Planning Board via Resolution dated August 13, 2013 (Cal. #1-13PB). A public hearing is required.

2. The submitted Planning Board application form is incomplete. The applicant should check "Special Use Permit Approval", shall answer all questions provided, and the owner of the tower shall countersign the application.

3. It is our opinion that the proposed upgrade meets the eligibility requirements for an exemption of Special Use Permit requirements. With the exception of the above, all outstanding comments have been satisfactorily addressed.

In order to expedite the review of subsequent submissions, the applicant should provide annotated responses to each of the comments outlined herein.

PLANS REVIEWED, PREPARED TECTONIC, DATED MAY 14, 2018:

- Title Sheet (T-1)
- Site Plan & Notes (C-1)
- Elevation, Antenna Plan & Details (C-2)

DOCUMENTS REVIEWED:

- Letter, prepared by Snyder & Snyder, dated May 17, 2018
- Letter, prepared by Tectonic, dated May 14, 2018
- Short EAF, dated May 14, 2018

JKJ/JMC/DJS/dc

T:\Lewisboro\Correspondence\2018-06-14_LWPB-VerizonUpgrade117Wacca-Review-Memo.docx

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NEWARK, NEW JERSEY 07102
(973) 824-9772
FAX (973) 824-9774

REPLY TO:

Westchester office

May 17, 2018

Hon. Chairman Jerome Kerner
and Members of the Planning Board
Town of Lewisboro
20 North Salem Road
Cross River, New York 10590

RE: New York SMSA Limited Partnership d/b/a Verizon Wireless Building Permit Application for Antenna Work on the Existing Tower located at 117 Waccabuc Road, Lewisboro, New York

Dear Hon. Chairman Kerner and Members of the Planning Board:

As you recall, New York SMSA Limited Partnership d/b/a Verizon Wireless ("Verizon Wireless") is seeking approval to perform certain antenna work ("Antenna Work") on its existing facility ("Facility") on the communications tower ("Existing Tower") at the captioned site, and, to the extent required, a five (5) year extension of its special permit. Verizon Wireless' Antenna Work consists of the replacement and removal of antennas on the Existing Tower and the installation of ancillary equipment. The Antenna Work is necessary for Verizon Wireless to be able to provide enhanced voice and data services to the area, allowing for high speed wireless data transmission.

We are in receipt of a memo from the Town's Planning Consultant, Jan Johannessen of Kellard & Sessions, dated May 9, 2018 ("Planner Memo"). A copy of same is attached hereto for your reference as Exhibit 1. In connection with same, kindly see the response to such comments below:

Comment #1: The applicant has requested a five (5) year renewal of its Special Use Permit which was issued by the Planning Board via Resolution dated August 13, 2013 (Cal. #1-13PB).

Response: In addition to the proposed Antenna Work, to the extent required, Verizon Wireless is also seeking a renewal of its special permit.

Comment #2: The submitted Planning Board application form is incomplete. The applicant should check "Special Use Permit Approval", shall answer all question provided, and the owner of the tower shall counter sign the application.

Response: We are in the process of revising the application and having same signed by the

applicant and tower owner. We respectfully request that the submission of the revised application be made a condition of the issuance of the building permit.

Comment #3: Given the net decrease in volume of equipment as identified by the applicant, the proposed upgrade appears to meet the exemption provisions as provided under Section 220-41.1H(1)(a} of the Zoning Code.

Response: As indicated on the tables on Page C-2 of the plans, prepared by Tectonic Engineering and Surveying Consultants, P.C ("Tectonic") last dated, April 14, 2018, ("Plans"), the volume of equipment is decreasing in connection with the proposed Antenna Work and therefore, Verizon Wireless is entitled to an exemption pursuant to Section 220-41.1H(1)(a) of the Zoning Code.

Comment #4: The submitted structural analysis states that the application involves the removal of 12 existing panel antennas, while the submitted site plan calls for the removal of six {6} existing antennas; this apparent discrepancy shall be resolved. Further, the structural report should clarify the ramifications of the statement that the existing T-Arm does not meet the minimum requirements for classification and therefore cannot be classified per the NSTD standard.

Response: Please note that both the structural report prepared by Tectonic, dated, April 6, 2018, ("Structural") and the Plans provide for the same Antenna Work. The Plans indicate that six (6) of the twelve (12) antennas are to be removed and the remaining six (6) of the twelve (12) antennas are to be replaced/upgraded. The Structural indicates that all twelve existing antennas are to be removed and six new antennas are to be installed. In both descriptions, all twelve existing antennas are to be removed with only six (6) of them being replaced.

Additionally, in connection with the request for clarification regarding the Structural, attached hereto as Exhibit 2 is a supplemental structural certification ("Supplemental Structural") from Tectonic dated May 14, 2018. The Supplemental Structural clarifies that "NSTD" is an internal classification for Verizon Wireless and "has no bearing on the structural capacity." The Supplemental Structural also confirms that such capacity "does not exceed 43%."

Comment #5: The structural report makes specific recommendations to be incorporated into the design; these recommendations shall be identified or noted on the submitted plans.

Response: Attached hereto, please find revised plans, dated May 14, 2018, prepared by Tectonic, which shows the "stiff-arm[s]" noted in the Structural.

Comment #6: The following comments pertain to the submitted EAF:

a. The applicant should answer Question 5.b either "yes" or "no."

b. The applicant shall answer Question 14.

c. On behalf of the Planning Board, the applicant should complete Part 2 of the Short EAF for review.

Response: A revised EAF is attached hereto as Exhibit 3, which includes a response to Questions 5.b and 14, together with a Part 2 of the Short EAF, as requested.

Due to the nature of Verizon Wireless' Antenna Work on the Existing Tower, it should be noted that under Section 220-41.1(H)(2) of the Town Zoning Code, Verizon Wireless' application is required to be processed in an expedited manner. Moreover, Section 6409 of the Federal Middle Class Tax Relief and Job Creation Act of 2012 ("TRA"), states that a local government "may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station." Furthermore, the Federal Communications Commission adopted rules ("FCC Rules") implementing Section 6409 of the TRA. See Title 47 C.F.R Section 1.40001. Under the FCC Rules, if a wireless facility is an eligible facilities request, review is limited in scope and the facility must be approved within 60 days of filing the application. *The proposed Antenna Work at the Facility is an eligible facilities request pursuant to the TRA and FCC Rules since it involves the collocation/replacement of transmission equipment that does not constitute a "substantial change."* Accordingly, Verizon Wireless' application should be approved forthwith.

As indicated above, it is respectfully submitted that Verizon Wireless' request for the Antenna Work shall be approved forthwith and that the proposed Antenna Work be exempt from any required approvals, or, in the alternative, the existing special permit be revised to incorporate the Antenna Work. Moreover, to the extent required, it is further respectfully submitted that the special permit should be extended for another five (5) years.

Respectfully submitted,
Snyder & Snyder, LLP

By: _____
Michael Sheridan

MS:yp
cc: Verizon Wireless
Z:\SSDATA\WPDATA\SS4\WP\NEWBANM\JOE ROLLINS\LTE ZONING ANALYSES\WACCABUC (LEWISBORO)\PB RESPONSE LTR.FIN.DOCX

EXHIBIT 1

KELLARD SESSIONS

John Kellard, P.E.
David Sessions, RLA, AICP
Joseph M. Cermele, P.E., CFM
Jan K. Johannessen, AICP

MEMORANDUM

TO: Chairman Jerome Kerner, AIA and
Members of Lewisboro Planning Board

CC: Ciorsdan Conran
Judson Siebert, Esq.

FROM: Jan K. Johannessen, AICP
Joseph M. Cermele, P.E., CFM
Town Consulting Professionals

DATE: May 9, 2018

RE: Verizon Wireless Upgrade
117 Waccabuc Road
Sheet 11, Block 1137, Lot 52

PROJECT DESCRIPTION

According to the plans submitted, the applicant is proposing to remove six (6) existing panel antennas and six (6) existing Remote Radio Heads (RRHs) and replace them with six (6) new panel antennas and nine (9) new RRHs. The originally approved Verizon Wireless co-location application was approved by Special Use Permit on August 13, 2013 (Cal. #1-13PB); we note that the original approval contemplated the installation of 12 panel antennas.

SEQRA

The proposed action has been preliminarily identified as an Unlisted Action under the State Environmental Quality Review Act (SEQRA). Prior to acting on this pending application, the Planning Board must issue a Determination of Significance.

GENERAL COMMENTS

1. The applicant has requested a five (5) year renewal of its Special Use Permit which was issued by the Planning Board via Resolution dated August 13, 2013 (Cal. #1-13PB).

2. The submitted Planning Board application form is incomplete. The applicant should check "Special Use Permit Approval", shall answer all question provided, and the owner of the tower shall counter sign the application.

3. Given the net decrease in volume of equipment as identified by the applicant, the proposed upgrade appears to meet the exemption provisions as provided under Section 220-41.1H(1)(a) of the Zoning Code.

4. The submitted structural analysis states that the application involves the removal of 12 existing panel antennas, while the submitted site plan calls for the removal of six (6) existing antennas; this apparent discrepancy shall be resolved. Further, the structural report should clarify the ramifications of the statement that the existing T-Arm does not meet the minimum requirements for classification and therefore cannot be classified per the NSTD standard.

5. The structural report makes specific recommendations to be incorporated into the design; these recommendations shall be identified or noted on the submitted plans.

6. The following comments pertain to the submitted EAF:

   a. The applicant should answer Question 5.b either "yes" or "no."
   b. The applicant shall answer Question 14.
   c. On behalf of the Planning Board, the applicant should complete Part 2 of the Short EAF for review.

In order to expedite the review of subsequent submissions, the applicant should provide annotated responses to each of the comments outlined herein.

PLANS REVIEWED, PREPARED TECTONIC, DATED MARCH 27, 2018:

- Title Sheet (T-1)
- Site Plan & Notes (C-1)
- Elevation, Antenna Plan & Details (C-2)

DOCUMENTS REVIEWED:

- Letter & Report, prepared by Snyder & Snyder, dated April 12, 2018
- Planning Board Application
- Short EAF, dated April 11, 2018

JKJ/JMC/DJS/dc

T:\Lewisboro\Correspondence\2018-05-09_LWPB-VerizonUpgrade117Wacca-Review-Memo.docx

EXHIBIT 2

Tectonic

PRACTICAL SOLUTIONS. EXCEPTIONAL SERVICE.

May 14, 2018

MOUNT ANALYSIS SUPPLEMENTAL LETTER

Jan K. Johannessen, AICP
Joseph M. Cermele, P.E., CFM
Town Consulting Professionals
KELLARD-SESSIONS
500 Main Street,
Armonk, NY 10504

Site Name: Waccabuc
Site Address: 117 Waccabuc Road, Goldens Ridge, NY 10526
TECTONIC W.O. #: 8121.WACCABUCS850

Dear Mr. Johannessen and Mr. Cermele,

This letter is to confirm Tectonic Engineering and Surveying Consultants P.C.'s (**Tectonic**) structural assessment of the existing Verizon Wireless antenna mounting system on the site noted above.

By engineering analysis as provided in the structural report dated April 6, 2018, the stresses in any of the existing mount members do not exceed 43% of its capacity. We therefore, conclude that existing antenna mounting system and its connections to the collar mount have sufficient capacity to support the proposed Verizon Wireless upgrade in accordance with the ANSI/TIA-222-G Standard.

The State of New York accepts the ANSI/TIA-222-G as the relevant standard to be used for structural analyses for Antenna Mounting systems. However, Verizon Wireless employs an internal mount classification system named NSTD-445, for their internal use, for current and future usage of the antenna mounts. The antenna mounts at the subject site fall outside of the classification criteria for the NSTD-445 and cannot be classified into one of the Verizon Wireless internal classes. The NSTD-445 has no bearing on the structural capacity of the Antenna Mounts for the proposed changes.

Should you have any questions, please do not hesitate to contact us.

Sincerely,
Tectonic

Antonio A. Gualtieri, P.E.
Sr. Vice President

G:\Newburgh\Projects\8121 - VZW EB\8121.WACCABUC850\Structural\8121.WACCABUC850.SupplementalMountLetter.docx

Newburgh Office

1279 Route 300 | Newburgh, NY 12550
845.567.6656 Tel | 845.567.8703 Fax

tectonicengineering.com
Equal Opportunity Employer

EXHIBIT 3

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information New York SMSA Limited Partnership d/b/a Verizon Wireless		
Name of Action or Project: Modification to Verizon Wireless Public Utility Wireless Telecommunications Facility		
Project Location (describe, and attach a location map): 117 Waccabuc Road (11137-52-0011)		
Brief Description of Proposed Action: Installation of replacement antennas together with ancillary equipment on the existing tower, and renew the special permit for (5) years.		
Name of Applicant or Sponsor: New York SMSA Limited Partnership d/b/a Verizon Wireless	Telephone: 914-333-0700 E-Mail: lsnyder@snyderlaw.net	
Address: c/o Snyder & Snyder LLP, 94 White Plains Road		
City/PO: Tarrytown	State: NY	Zip Code: 10591

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: Special Permit - Planning Board Building Department - Building Permit	☐	☑

3.a. Total acreage of the site of the proposed action? approx .08 acres
b. Total acreage to be physically disturbed? 0 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? approx .08 acres

4. Check all land uses that occur on, adjoining and near the proposed action.

☐ Urban ☑ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☑ Residential (suburban)
☐ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): Wireless Telecommunications Facility
☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	✓	☐
b. Consistent with the adopted comprehensive plan?	☐	✓	☐

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	✓
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	✓	☐
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	✓	☐
b. Are public transportation service(s) available at or near the site of the proposed action?	✓	☐
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	✓	☐
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____	☐	✓
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: Action is an unmanned facility which does not require public, private, potable or wastewater services.	✓	☐
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: Action is an unmanned facility which does not require public, private, potable or wastewater services.	✓	☐
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	✓	☐
b. Is the proposed action located in an archeological sensitive area?	✓	☐
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency? (*N/A - Proposed action is on an existing tower.)	☐	✓*
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____	✓	☐

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☑ Forest ☐ Agricultural/grasslands ☐ Early mid-successional

☐ Wetland ☐ Urban ☑ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Northern Long-eared Bat (*N/A - Proposed action is on an existing tower.)	☐	✓*
16. Is the project site located in the 100 year flood plain?	✓	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? ☐ NO ☐ YES	✓	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: ☐ NO ☐ YES		

	NO	YES
18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size:	✓	
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	✓	
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	✓	

I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor name: New York SMSA Limited Partnership d/b/a Verizon Wireless Date: 5/14/18

Signature: By: , as attorney

PRINT FORM

EAF Mapper Summary Report

Tuesday, April 10, 2018 5:21 PM

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

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National Register of Historic Places]	No
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	Yes
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	Northern Long-eared Bat
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	No

Agency Use Only [If applicable]

Project:

Date:

Short Environmental Assessment Form
Part 2 - Impact Assessment

Part 2 is to be completed by the Lead Agency.
Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	✓	
2. Will the proposed action result in a change in the use or intensity of use of land?	✓	
3. Will the proposed action impair the character or quality of the existing community?	✓	
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	✓	
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	✓	
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	✓	
7. Will the proposed action impact existing: a. public / private water supplies?	✓	
b. public / private wastewater treatment utilities?	✓	
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	✓	
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	✓	
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	✓	
11. Will the proposed action create a hazard to environmental resources or human health?	✓	

PRINT FORM

Agency Use Only [If applicable]

Project:

Date:

Short Environmental Assessment Form
Part 3 Determination of Significance

For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.

☑ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

Town of Lewisboro Planning Board Name of Lead Agency	Date
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

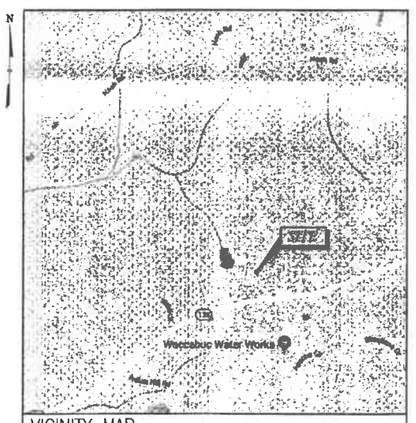
PRINT FORM

NEW YORK SMSA LIMITED PARTNERSHIP
d/b/a
verizon

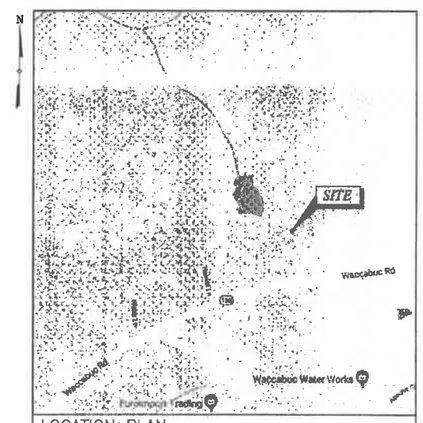
WEST NYACK, NEW YORK
PUBLIC UTILITY WIRELESS TELECOMMUNICATIONS FACILITY
SITE NAME: "WACCABUC"
117 WACCABUC ROAD, GOLDENS BRIDGE, NY 10526

SITE INFORMATION

VW SITE NAME:	WACCABUC
VW SITE TYPE:	850 UPGRADE
SITE DESCRIPTION:	REMOVAL OF TWELVE (12) VERIZON WIRELESS ANTENNAS, INSTALLATION OF SIX (6) VERIZON WIRELESS ANTENNAS & ADDITIONAL EQUIPMENT AT ANTENNAS
PROJECT LOCATION:	117 WACCABUC ROAD, GOLDENS BRIDGE, NY 10526
VW CONSTRUCTION CONTACT:	TECTONIC ENGINEERING & SURVEYING CONSULTANTS, P.C. RITU SALOT (845) 567-6656 EXT. 2817
BUILDING OWNER:	HOMELAND TOWER, LLC 22 SHELTER ROCK LANE, BLDG. C DANBURY, CT 06810
BUILDING CONTACT:	MANNY VICENTE (203) 297-6345
A/E (ENGINEER) CONTACT:	TECTONIC ENGINEERING & SURVEYING CONSULTANTS, P.C. RITU SALOT (845) 567-6656 EXT. 2817
VERIZON CONTACT:	CUSTOMER SERVICE (800) 315-6489
ELECTRICAL COMPANY	CONSOLIDATED EDISON OF NEW YORK (914) 684-3500
TELEPHONE COMPANY	VERIZON NEW YORK, INC. (845) 890-7100
LATITUDE:	41° 18' 6.14" N (WGS 84)
LONGITUDE:	73° 38' 8.28" W (WGS 84)
ELEVATION:	468'-0"± AMSL
JURISDICTION:	TOWN OF LEWISBORO
SECTION:	11
BLOCK:	11137
LOT(S):	52
ZONING DISTRICT:	R4-A



VICINITY MAP APPROX SCALE: 1" = 1000'±



LOCATION PLAN APPROX SCALE: 1" = 500'±

SHT. NO.	DESCRIPTION	REV NO	REVISION DATE
T-1	TITLE SHEET	2	05/14/18
C-1	SITE PLAN & NOTES	2	05/14/18
C-2	ELEVATION, ANTENNA PLAN, & DETAILS	2	05/14/18

UNAUTHORIZED ALTERATION OR ADDITIONS TO A DOCUMENT BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR IS A VIOLATION OF SECTION 7209 SUBSECTION 2 OF THE NEW YORK STATE EDUCATION LAW.

COPIES OF THIS DOCUMENT WITHOUT A FACSIMILE OF THE SIGNATURE AND AN ORIGINAL EMBOSSED SEAL OR ORIGINAL STAMP OF THE PROFESSIONAL ENGINEER OR LAND SURVEYOR SHALL NOT BE CONSIDERED VALID COPIES.

PLANS ARE NOT TO BE SCALED.

0 1 2 3
ORIGINAL SIZE IN INCHES

Rev	Date	Revision	Approved
0	03/27/18	FOR APPROVAL	
1	04/11/18	PER COMMENTS	
2	05/14/18	PER TOWN COMMENTS	

DRAWING CONTROL

Designed by: RS	Drawn by: RD	Checked by: SP
Purpose	Released by	Date
○ For Comment		
● For Approval	SP	05/14/18
○ For Bid		
○ For Construction		

Tectonic
PRACTICAL SOLUTIONS. EXCEPTIONAL SERVICE.
Tectonic Engineering & Surveying Consultants P.C.
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(800) 829-6531
www.tectonicengineering.com

STATE OF NEW YORK · ANTONIO ALBERTO GUALTIERI · 071249 · LICENSED PROFESSIONAL ENGINEER

NEW YORK SMSA LIMITED PARTNERSHIP
d/b/a
verizon
4 CENTERROCK ROAD
WEST STAGE, NY 10984
Phone: (914) 714-7000
Fax: (845) 945-1188

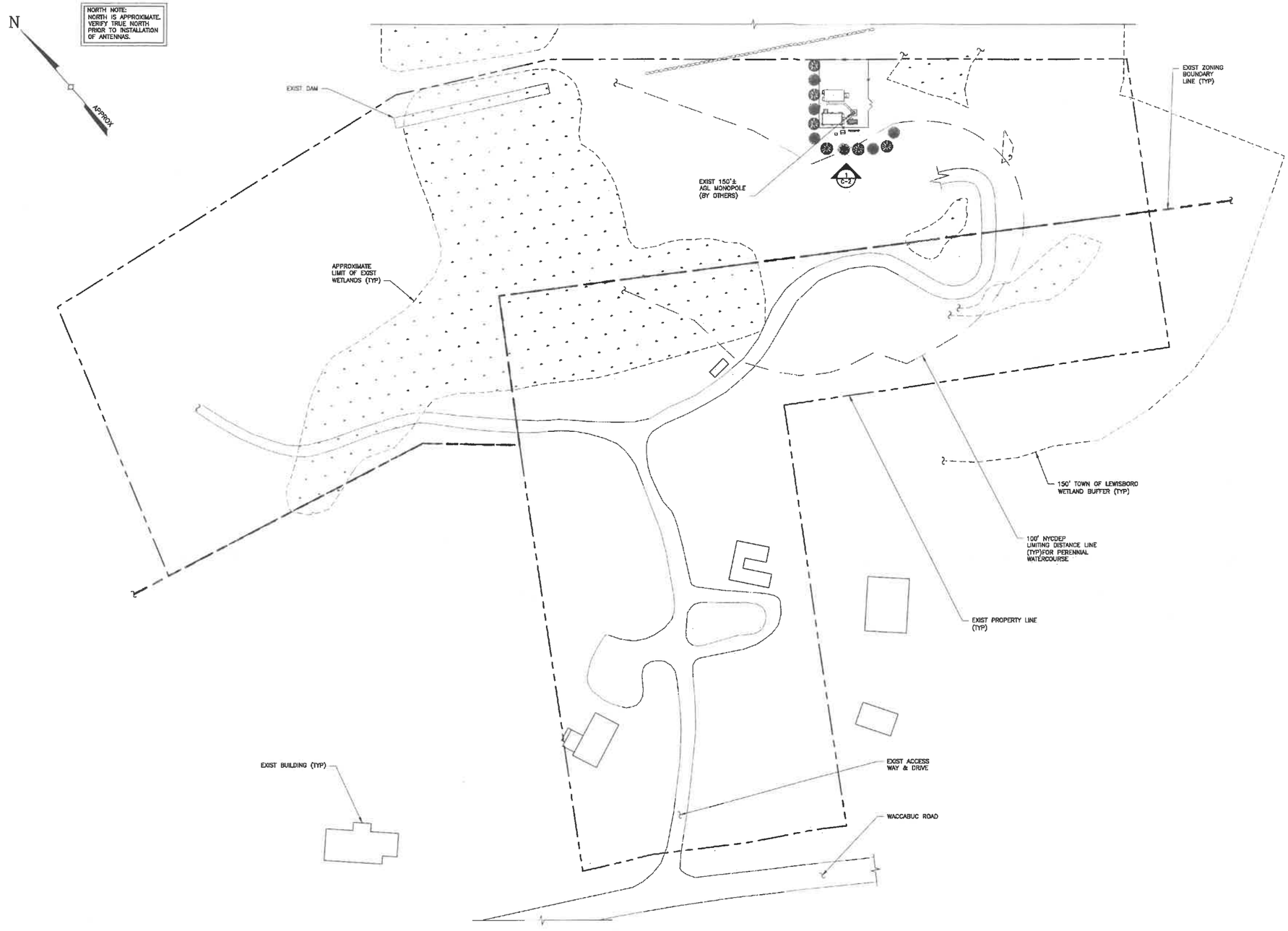
TITLE SHEET

WACCABUC

117 WACCABUC ROAD
GOLDENS BRIDGE, NY 10526

Date	Work Order	Drawing No.		Rev
03/27/18	8121.WACCABUC	T-1		2
Scale: AS NOTED				

NORTH NOTE:
NORTH IS APPROXIMATE. VERIFY TRUE NORTH PRIOR TO INSTALLATION OF ANTENNAS.



1 / C-1 SITE PLAN
SCALE: 1" = 50'

GENERAL NOTES

1. EXISTING SITE FEATURES BASED ON A SET OF ZONING DRAWINGS BY APT ENGINEERING ENTITLED GOLDENS BRIDGE, DATED 4/18/12 AND A SITE INSPECTION PERFORMED BY TECTONIC ENGINEERING AND SURVEYING CONSULTANTS P.C. ON 2/26/18.
2. TRUE NORTH DETERMINED AS REFERENCED IN NOTE #1 (APPROXIMATE).
3. VERTICAL DATUM BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1988 (APPROXIMATE).
4. ANTENNA SUPPORTS CONFORM TO ANSI/EIA/TIA-222-G "STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS", DESIGN WIND SPEED = 100 MPH. (50 MPH IN CONJUNCTION WITH .75 INCHES RADIAL ICE)
5. THE PROPOSED WORK AT THE EXISTING FACILITY IS MINIMAL, AND WILL CREATE NO ADDITIONAL STORM WATER RUNOFF AND WILL THEREFORE NOT IMPACT THE EXISTING STORM WATER DRAINAGE SYSTEM.
6. THE EXISTING FACILITY IS UNMANNED, AND THEREFORE DOES NOT REQUIRE A MEANS OF WATER SUPPLY OR SEWAGE DISPOSAL.
7. THE EXISTING FACILITY INCLUDES SIGNS IN ACCORDANCE WITH FCC RULES ON RADIO FREQUENCY EMISSIONS 47 CFR 1.1307(B) AND EMERGENCY CONTACTS, AS PER DETAIL 1/C-4.
8. CARE SHOULD BE TAKEN DURING ALL CONSTRUCTION ACTIVITIES TO AVOID DAMAGING EXIST OVERHEAD, UNDERGROUND UTILITIES AND GROUND WIRES.

LEGEND

	PROPERTY LINE
OHW	EXIST OVERHEAD WIRES
W W	EXIST WATER LINE
	EXIST/APPROVED FENCE LINE
	EXIST CURBLINE
UG UG	EXIST UNDERGROUND UTILITIES
	EXIST BUILDING

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PLANS ARE NOT TO BE SCALED.

0 1 2 3
ORIGINAL SIZE IN INCHES

Rev	Date	Revision	Approved
0	03/27/18	FOR APPROVAL	
1	04/11/18	PER COMMENTS	
2	05/14/18	PER TOWN COMMENTS	

DRAWING CONTROL

Designed by: RS	Drawn by: RD	Checked by: SP
Purpose	Released by	Date
○ For Comment		
● For Approval	SP	05/14/18
○ For Bid		
○ For Construction		

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d/b/a
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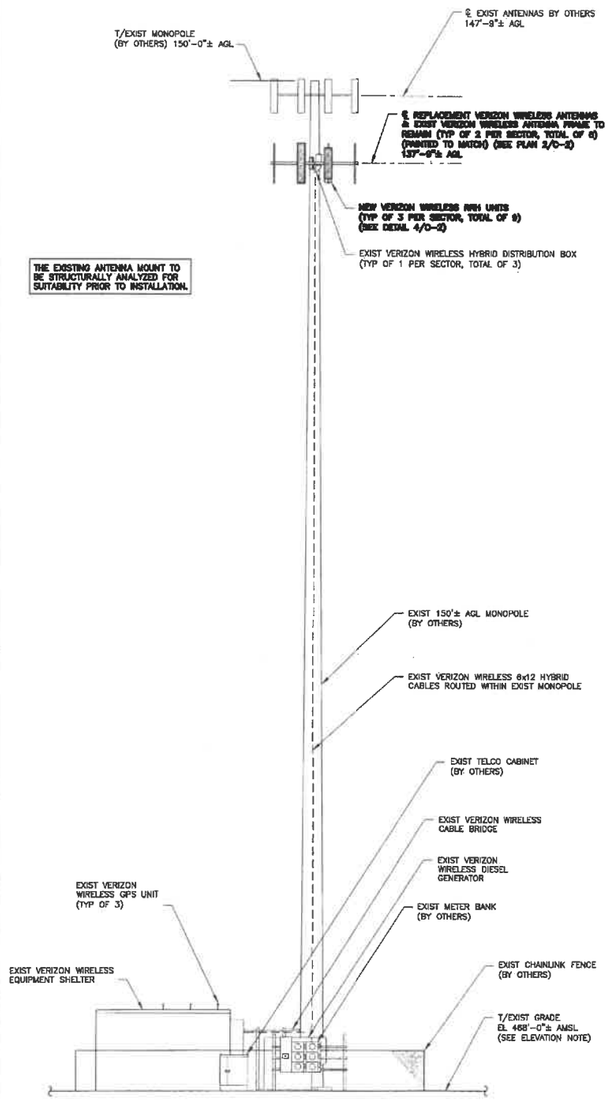
WEST NYACK, NY 10994
Phone: (914) 714-7000
Fax: (845) 348-1120

SITE PLAN & NOTES

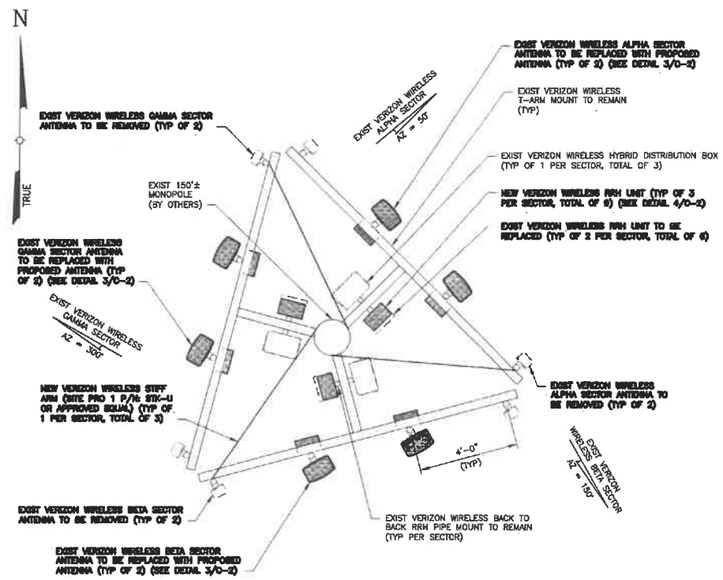
WACCABUC
117 WACCABUC ROAD
GOLDENS BRIDGE, NY 10526

Date	Work Order	Drawing No.	Rev
03/27/18	8121.WACCABUC	C-1	2
Scale: AS NOTED			

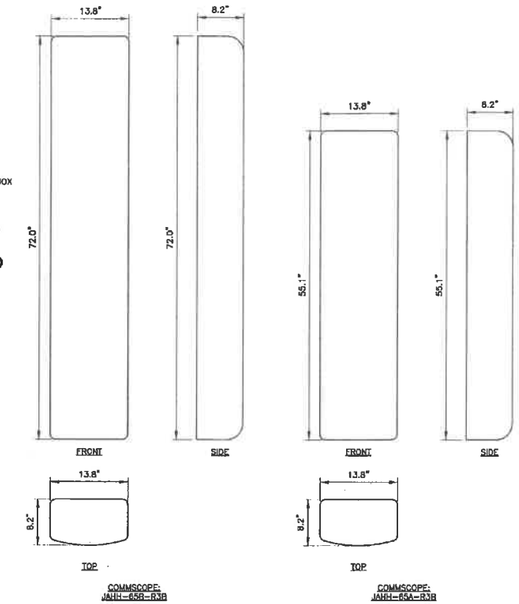


NOTE: LANDSCAPING BY OTHERS NOT SHOWN FOR CLARITY.

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



2 C-2 ANTENNA LAYOUT PLAN
SCALE: 3/8" = 1'-0"



NOTE: DIMENSIONS OF PROPOSED ANTENNAS SHOWN ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON AVAILABILITY OF ANTENNAS AT TIME OF CONSTRUCTION. ANTENNAS MAY INCLUDE RRH'S, TMA'S, AND/OR DIPLEXERS

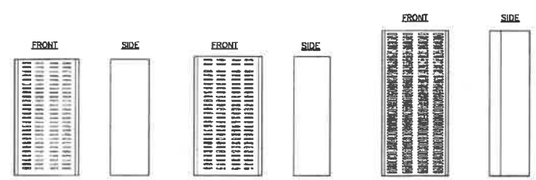
3 C-2 ANTENNA DETAILS
SCALE: 1" = 1'-0"

PROPOSED BULK TABLE						
EQUIPMENT	NUMBER	X (IN)	Y (IN)	Z (IN)	CUBIC FEET/UNIT (CUFT)	TOTAL CUBIC FEET (CUFT)
JAHH-65B-R3B	3	13.8	72.0	8.2	4.69	14.07
JAHH-65A-R3B	3	13.8	55.1	8.2	3.59	10.77
AWS RRH	3	11.8	25.8	7.2	1.26	3.78
700 RRH	3	11.4	20.7	6.9	0.95	2.85
850 RRH	3	12.0	21.4	7.2	1.07	3.21
					TOTAL:	34.68

NOTE: DIMENSIONS OF EQUIPMENT SHOWN ABOVE ARE APPROXIMATE AND SUBJECT TO CHANGE BASED OF AVAILABILITY OF EQUIPMENT AT TIME OF CONSTRUCTION.

EXISTING BULK TABLE PREVIOUSLY APPROVED BY TOWN OF LEWISBORO AS SHOWN ON DRAWINGS C-3 & C-4 DATED 9/11/14.						
EQUIPMENT	NUMBER	X (IN)	Y (IN)	Z (IN)	CUBIC FEET/UNIT (CUFT)	TOTAL CUBIC FEET (CUFT)
CSS X7C-680-00	6	12.5	72.0	7.1	3.68	22.08
CSS APX-18-80	6	6.7	69.0	4.1	3.59	21.54
AWS RRH	3	12.0	25.0	9.0	1.56	4.68
700 RRH	3	12.0	25.0	9.0	1.56	4.68
DISTRIBUTION BOX	3	15.7	19.2	10.3	1.80	5.4
					TOTAL:	58.38

NOTE: DIMENSIONS OF EQUIPMENT SHOWN ABOVE ARE APPROXIMATE AND SUBJECT TO CHANGE BASED OF AVAILABILITY OF EQUIPMENT AT TIME OF CONSTRUCTION.



'NOKIA' B13 RRH4X30

FREQUENCY:
U700 (3GPP BANDS 13)

DIMENSIONS:
20.7" (H) x 11.4" (W) x 6.9" (D)

WEIGHT:
APPROX. 55.6 LBS

'NOKIA' B25 RRH4X30

FREQUENCY:
3GPP BANDS 2 & 25 (PCS-G)

DIMENSIONS:
21.4" (H) x 12.0 (W) x 7.2" (D)

WEIGHT:
APPROX. 51 LBS

'NOKIA' B66A RRH 4x45

FREQUENCY: AWS 1-3 (R4/B66A)

DIMENSIONS:
25.8" (H) x 11.8" (W) x 7.2" (D)

WEIGHT:
APPROX. 56.8 LBS

NOTE:

DIMENSIONS & WEIGHTS SHOWN ABOVE ARE APPROXIMATE. REFER TO MANUFACTURER/MODEL FOR SPECIFICATIONS.

4 C-2 RRH DETAIL
SCALE: N.T.S.

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PLANS ARE NOT TO BE SCALED.

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ANTONIO ALBERTO GUALTIERI
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Fax: (845) 348-1188

ELEVATION, ANTENNA PLAN, & DETAILS

WACCABUC
117 WACCABUC ROAD
GOLDENS BRIDGE, NY 10526

Date	Work Order	Drawing No.		Rev
03/27/18	8121.WACCABUC	C-2		2
Scale: AS NOTED				

Ciorsdan Conran

From: TED SOHONYAY <tedsohonyay@yahoo.com>
Sent: Wednesday, April 18, 2018 9:36 AM
To: Jan Johannessen; Judson Siebert; Danielle; John Wolff; 'Greg La Sorsa'; Janet Andersen; 'Jerome Kerner'; 'John O'Donnell'; Rich Sklarin; Ciorsdan Conran
Cc: 'Alan Cole'; Carl Grossman; 'Neil Berman'; 'Thomas LoBosco'
Subject: Re: Verizon Waccabuc Road PB filing May 2018 mtg.pdf - Adobe Acrobat Standard

Upon a detailed review, I have no objection to this site revision.

AAB members, if you have any issues or questions, please don't hesitate to offer input.

Regards,

Ted Sohonyay, Chair
Lewisboro Antenna Advisory Board

On Monday, April 16, 2018, 10:00:22 AM EDT, Ciorsdan Conran <Planning@lewisborogov.com> wrote:

New submission for May Planning Board meeting – Verizon equipment change on Waccabuc Road

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SNYDER & SNYDER, LLP
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TARRYTOWN, NEW YORK 10591
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FAX (914) 333-0743

WRITER'S E-MAIL ADDRESS
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NEW JERSEY OFFICE
ONE GATEWAY CENTER, SUITE 2600
NEWARK, NEW JERSEY 07102
(973) 824-9772
FAX (973) 824-9774

REPLY TO:

Tarrytown Office

May 7, 2018

Honorable Supervisor Parsons and
Members of the Town Board
Town of Lewisboro
11 Main Street, PO Box 500
Lewisboro, NY 10590

Re: Monroe Balancing Test
779 Route 35
Cross River, NY 10518

Dear Honorable Supervisor and Members of the Town Board:

We represent Homeland Towers, LLC ("Homeland Towers") in connection with its proposal to place a public utility and emergency services wireless telecommunications facility ("Facility") at the above referenced property. As you are aware, the Town Board recently approved a lease with Homeland Towers.

The Facility will consist of a 170-foot tall monopole ("Monopole"), to support antennas, together with an approximately 2,965 square foot multi-user equipment compound at the base thereof, located at the Lewisboro Volunteer Ambulance Corps., 779 Route 35, Cross River, Town of Lewisboro, New York (the "Property") on property owned by the Town of Lewisboro ("Town"). The Facility will also support the emergency service antennas and equipment of the Town.

Under New York State law, projects proposed on Town property may be afforded immunity from local regulations. Accordingly, pursuant to the leading New York Court of Appeals decision, *In re County of Monroe*, 530 N.E.2d 202 (1988), Homeland Towers respectfully requests that the Town Board conduct a "balancing of interests" test to determine whether the Facility should be accorded immunity from local land use regulations.

In furtherance of the foregoing, Homeland Towers respectfully submits ten (10) copies of the following documents:

1. Letters of support from the Lewisboro Volunteer Ambulance Corps, Inc., dated April 13, 2018 and December 11, 2017;

2. Full Environmental Assessment Form;

3. Visual Resource Assessment, prepared by Saratoga Associates, dated May 2, 2018;

4. Affidavit of Raymond Vergati, dated May 3, 2018, with alternative site analysis;

5. Radio Frequency Justification of Need Report from Adam Feehan of PierCon Solutions LLC, dated May 3, 2018;

6. Letter from Ted Sohonyay, Chair of the Lewisboro Antenna Advisory Board, dated December 5, 2017 regarding the need for the facility and alternative sites;

7. Antenna Site FCC RF Compliance Assessment and Report, prepared by Pinnacle Telecom Group, dated August 24, 2017;

8. Structural Certification Letter, from James Caris of JMC Planning, Engineering, Landscape Architecture and Land Surveying, PLLC, dated April 24, 2017;

9. FAA Opinion Letter, from Ronald W. Lageson of Wireless Applications Corp., dated April 25, 2018 confirming that no FAA lighting or marking will be required; and

10. Site Plan.

Please note that the location of the Facility on the Property was relocated to the back of the Property in order to further screen the Facility with the significant existing surrounding vegetation. Submitted herewith is a setback map demonstrating the change in location on the Property and various corresponding setbacks. Also enclosed by way of comparison is the Visual Resource Evaluation, dated June 5, 2017, regarding the original location of the Facility on the Property.

Also enclosed are four copies of a proposed application for a DEP permit for use of the existing access drive on DEP property. The Permit Application includes four additional sets of site plan, the necessary insurance certificates and the $25.00 fee. We respectfully request that the DEP Permit Application be submitted to the DEP together with the Town Board Notice of Intent to be Lead Agency under SEQRA.

Under the laws of the State of New York, wireless facilities as proposed qualify as public utilities for zoning purposes. *See Cellular One v. Rosenberg*, 82 N.Y.2d 364 (1993) (hereinafter referred to as "Rosenberg"); *Cellular One v. Meyer*, 607 N.Y.S.2d 81 (2nd Dept. 1994); *Sprint Spectrum, L.P. v. Town of West Seneca*, (Index No. 1996/9106 Feb 25, 1997, Sup.Ct. Erie County). In *Rosenberg*, the Court of Appeals, New York's highest court, held that federally licensed wireless carriers provide an essential public service and are public utilities in the State of New York which should be accorded favored treatment in land use decisions.

The instant proposal also furthers the goals and objectives established by Congress under the federal Telecommunications Act of 1996. The federal Telecommunications Act of 1996 is "an unusually important legislative enactment," establishing national public policy in favor of encouraging "rapid deployment of new telecommunications technologies (emphasis supplied)." Reno v. ACLU, 521 U.S. 844 (1997). The federal Telecommunications Act of 1996 builds upon the federal regulatory framework for commercial mobile [radio] services which Congress established in 1993, and which was designed to "foster the growth and development of mobile services that, by their nature, operate without regard to state lines as an integral part of the national telecommunications infrastructure." H.R. Rep. No. 103-111, 103d Cong., 1st Sess. 260 (1993) (emphasis added).

In fact, in 1999, Congress expanded further upon this policy by enacting the Wireless Communications and Public Safety Act of 1999, Pub.L. 106-81, 113 Stat. 1286 (the "911 Act"). The "911 Act," empowered the FCC to develop regulations to make wireless 911 services available to all Americans. The express purpose of the Act, as articulated by Congress, was "to encourage and facilitate the prompt deployment throughout the United States of seamless, ubiquitous, and reliable end-to-end infrastructure for communications, including wireless communications, to meet the Nation's public safety and other communications needs" (emphasis added).

The Facility is proposed on Town-owned property. According to New York State law, projects proposed on Town property may be afforded immunity from local land use regulations. Therefore, pursuant to the leading New York Court of Appeals decision, *In re County of Monroe*, 530 N.E.2d 202 (1988), Homeland Towers respectfully requests that the Town Board conduct a "balancing of interests" test to determine whether the Facility should be accorded immunity from local land use regulations.

Monroe establishes the "balance of interests" analysis for resolving whether an entity accorded "immunity", such as the Town, should be immune from local regulations. The Town is a political subdivision of the State of New York and is generally recognized under New York State Law as an entity accorded certain "immunity" from local zoning regulations. *Monroe* establishes that in order to resolve whether an entity should be accorded immunity from land use regulations, the municipality must "balance the interests" of the public and the governmental entity, to determine whether or not it is in the public interest to subject the Town to its own local zoning and wetland regulations.

Monroe establishes the following nine (9) factors for consideration when balancing the interests of the public and the governmental entity:

1) The nature and scope of the instrumentality seeking immunity;
2) The encroaching governmental entity's legislative grant of authority;
3) The kind of function or land use involved;
4) The effect local land use regulation would have upon the enterprise concerned;

5) Alternative locations for the facility in less restrictive zoning areas;
6) The impact upon legitimate local interests;
7) Alternative methods of providing the proposed improvement;
8) The extent of the public interest to be served by the improvements; and
9) The intergovernmental participation in the project development process and an opportunity to be heard.

A review of these factors establish that the Facility should be exempt from zoning for the following reasons:

1. The scope and nature of the instrumentality seeking immunity is such that the Town is a political subdivision of the State of New York, which is tax-funded and self-governing with elected officials, and provides emergency response to, including but not limited to, fires, accidents, medical emergencies and natural disasters. Therefore, the Town is purely public in nature and is a governmental entity that provides an essential public service. The Town is the owner of the Property, and pursuant to New York State Town Law Section 64(2), the Town has the power to lease the Property as the purposes of the Town may require, and the Town has determined that the Facility will benefit the residents of the Town. Importantly, the Facility has been designed to support public safety communications antennas and equipment.

2. There is no encroaching governmental entity because the Town-owned Property is located within the Town of Lewisboro. In fact the Town Board has the jurisdiction to adopt and amend its own Zoning Code. In any event, the Town's legislative grant of authority is directly pursuant to New York State Town Law.

3. The function or land use that is proposed is a public utility and emergency services wireless telecommunications facility. The Facility will consist of a 170-foot Monopole to support federally licensed wireless carriers and emergency service providers. The Facility will serve the public interest, in that it will offer the general public a wireless communications alternative particularly well suited for responding to accidents, natural disasters and for reporting medical emergencies and other dangers such as potential criminal activity. Federally licensed wireless services have been deemed to be essential public services by both New York State and Federal Courts. *See Rosenberg*, 82 N.Y.2d 364; *Cellular One v. Meyer*, 607 N.Y.S.2d 81. In *Rosenberg*, the Court of Appeals, New York's highest court, held that federally licensed wireless carriers provide an essential public service and are public utilities in the State of New York which should be accorded favored treatment in zoning matters. Moreover, in *Cellular Telephone Company v. Town of Oyster Bay*, 166 F.3d 490 (2d Cir. 1999), the United States Second Circuit Court of Appeals, citing *Rosenberg*, held that: "[i]n New York, cellular telephone companies are afforded the status of public utilities." See Oyster Bay, 166 F.3d at 494 (internal citations omitted).

With respect to telecommunications facilities in general, the courts have routinely recognized a paramount public interest. *See e.g.*, *Crown Communication v. City of New Rochelle*, 824 N.E.2d 934 (2005) (holding that under the *Monroe* balancing test, an application

for a private wireless provider to co-locate on New York State Department of Transportation ("NYSDOT") owned telecommunications towers was exempt from local zoning regulations because services being provided by the private carrier benefitted the public); *Carpaneto v. Omnipoint Communications, Inc. and New York State Thruway Authority*, Index No. 20238/98 (Sup. Ct. Westchester County 3/221999) (holding that the Monroe balancing test tips in favor of an exemption for a cell tower constructed by Omnipoint on New York State Thruway Authority property based on the overriding public interest and the safety and welfare of the traveling public); and *Crown Communication New York, Inc. v. Town of Perinton*, (Sup. Ct. Ontario County 4/4/2000) (holding that under the *Monroe* balancing test, the cell tower proposed by the NYSDOT at a Park and Ride facility "will enhance communications and that the benefits of the tower outweigh the interest of the Town in the banning of such projects from its precincts.").

4. Imposing local land use regulations on the project would have the effect of unnecessarily delaying an essential public need for immediate and effective emergency response. Nevertheless, imposing the Town Zoning Code would not prohibit the Facility as it is a specially permitted use from the Planning Board at the Property. Any necessary environmental approvals, such as DEP approval, will be obtained by Homeland Towers.

5. There are no alternative locations for the Facility in less restrictive zoning areas as the Facility is expressly authorized on the Property as a special permit use. Submitted herewith is the Alternative Site Analysis by Raymond Vergati and the RF Justification Report from Adam Feehan demonstrating that the Facility is necessary to remedy a significant gap in reliable wireless services and that the Facility at the Property is necessary to provide reliable service to locations which are not and cannot be adequately served with existing facilities or structures within and outside of the Town.

6. The Facility will not have an impact upon the legitimate local interests of the public and there will be no significant adverse environmental impacts from the Facility. First, the Facility will not have a significant adverse visual impact as demonstrated by the Visual Resource Evaluation. Second, the Facility will not adversely affect the public health, safety or the general welfare. Therefore, the Facility is not obtrusive, or otherwise disruptive to its neighbors. The Property is already was used as the Volunteer Ambulance Corps headquarters. With respect to health and safety, submitted herewith is an Antenna Site FCC RF Compliance Assessment and Report, prepared by Pinnacle Telecom Group, certifying that the Facility will comply with the FCC regulations regarding radio frequency exposure. Third, the proposal will have no impact on pedestrian or vehicular traffic, since the proposed use is unmanned requiring infrequent maintenance visits of approximately once per month. Fourth, the Facility will not produce any smoke, gas, odor, heat, dust, noise above ambient levels, fumes, vibrations or flashing lights. Submitted herewith is an FAA Opinion Letter that confirms no FAA lighting is required. The Facility will not generate solid waste, waste water or sewage, will not require water supply or waste disposal, and will not attract insects, vermin or other vectors. No commercial or retail signage is proposed. Therefore, there will be no detrimental effect to the physical environment or the neighborhood in connection with the proposal. Fifth, the Facility will be designed in accordance with the applicable structural requirements of the Building Code

of New York State, and all other applicable local, state, and federal codes and regulations as demonstrated by the Structural Certification Letter submitted herewith. A Stormwater Pollution Prevention Plan will be submitted for approval to the DEP. No federal or State wetlands will be impacted.

7. There are no feasible alternative methods of providing the proposed improvement. Wireless technology limits the location and type of site necessary to provide the required service. The Property in the instant case, is unique since it is ideally located to a significant gap in reliable wireless coverage which exists in the Town and currently supports a non-residential Ambulance Corps. Headquarters. Therefore, the Facility will remedy a significant gap in reliable wireless services for federally licensed carriers and emergency service entities, while creating a minimal intrusion on the community.

8. The Facility will serve the utmost public interest, the neighborhood and benefit the entire community, by offering a wireless telecommunications alternative essential for protecting public health, safety and welfare, particularly by providing mobile access to 911 services.

9. Since the Town-owned Property is located within the Town, this factor is not applicable. Nevertheless, the instant request is the subject of a public hearing where all parties will be given an opportunity to be heard. Moreover, the adoption of the Lease Approval, the corresponding SEQRA Determination and Balloon Test were all publically noticed, as well as the upcoming May 21st public hearing.

Based upon the foregoing considerations, it would be contrary to the public interest to subject the Facility to local land use and wetland regulations. The Facility will promote the health, safety and general welfare of residents of the Town by providing effective emergency communications, and therefore promotes the highest of public interests.

We look forward to discussing this matter further with the Town Board at the May 21, 2018 public hearing. As always, please feel free to contact me with any questions you may have.

Respectfully Submitted,

Robert D. Gaudioso

RDG:cae
Enclosure
Cc: Homeland Towers
Anthony Mole, Esq.
Jan Johannessen
z:\ssdata\wpdata\ss3\rdg\homelandtowers\lewisboro\ny143 (779 route 35)\town board letter 5.7.2018.doc

LEWISBORO VOLUNTEER AMBULANCE CORPS, INC.
PO Box 41
South Salem, New York 10590

December 11, 2017

Mr. Raymond Vergati
Site Development Manager
Homeland Towers, LLC
9 Harmony Street, 2nd Floor
Danbury, CT 06810

Dear Mr. Vergati:

As the Captain of Lewisboro Volunteer Ambulance Corps (LVAC), I am writing to express my full support, and our dire need, for the installation of a cell tower on the town property that serves as our headquarters.

For years the community at large has struggled with extremely poor cellular service in the area. We and our partners in the emergency services remain concerned that it is only a matter of time until the lack of cellular coverage has a direct and negative impact on an emergency response. Imagine being on the side of the road calling for help and being unable to for lack of service? As we all become ever-more reliant on cellular service, we believe that the risks associated with remaining 'uncovered' by cellular service far outweigh any other considerations.

The public safety agencies in the area also face a major hurdle when trying to communicate with each other. Due to town topology, VHF radio signals are inconsistent in the Town of Lewisboro. Combined with spotty cellphone access, LVAC is often unable to use a phone as a radio backup. Further, we are unable to utilize current mobile app technology that helps first responders provide care and communicate. It's also hard to contact On Line Medical Control for medical direction if needed, and though we are trained to do so, we cannot transmit EKG's to the hospital in a timely manner.

I'd also like to mention here that LVAC receives no town, county, state, or federal tax monies. Nor do we receive any other government funds. We operate solely with volunteer members, and we have no paid employees or staff. These critical facts determine LVAC's decisions, and we must prioritize our expenses very carefully.

As such, LVAC does not have funds for a radio system that will provide uninterrupted radio communications. We are dispatched on hundreds of emergency calls every year and each time the tones go off our members have difficulty communicating with each other, and with our dispatchers at Westchester County 60-Control in Valhalla. We have studied our challenges, and initiated a survey of our radio coverage at our own expense. Even if we invested millions of dollars (that we don't have), the topography and diverse geography of the area would still be an impediment to reliable radio communications. We have been lucky to date, as none of our members have been injured as a result of our radio challenges and their inability to radio for help.

LVAC covers 29 square miles; 12,411 people; 96 miles of road; 851 acres of water; 4,315 acres of parkland; 1 section of Interstate 684; 3 schools; 4 shopping areas; multiple group homes; and one major commuter railway and train station – and at most of these areas we lack sufficient communications resources.

We are looking forward to the new tower providing LVAC with antenna access (we hope to have four hardlines running from the top of the tower to a radio cabinet at the base) and possibly even greatly needed radio equipment.

LVAC hopes that the funds generated by the new tower will help support LVAC's life saving operations. Reliable radio communications will also help retain members. Regular assured communications will reduce member frustration and improve their overall safety. When members volunteer for 1,000 hours a year (in 2016 we have nine who did so) the least we can provide them in return is a communications system that helps keep them safe.

We keep the town safe – now we are looking for this tower to help keep us safe and provide for *our* needs. With an installed tower that results in a win-win for Homeland Towers and LVAC, we are fully supportive of its installation.

Respectfully,

Lucian Lipinsky de Orlov
Captain
Lewisboro Volunteer Ambulance Corps
captain@lvac-ems.com
914-763-9633

LEWISBORO VOLUNTEER AMBULANCE CORPS, INC.
PO Box 41
South Salem, New York 10590

April 13, 2018

Mr. Raymond Vergati

Site Development Manager
Homeland Towers, LLC
9 Harmony Street, 2nd Floor
Danbury, CT 06810

Dear Mr. Vergati:

As the Captain of Lewisboro Volunteer Ambulance Corps (LVAC), I am writing to express the need for improved cellular communications in Cross River. At the town property that serves as our headquarters, there is no cellular coverage whatsoever.

For years, the community at large has struggled with extremely poor cellular service throughout the area. We and our partners in the emergency services remain concerned that it is only a matter of time until the lack of cellular coverage has a direct and negative impact on an emergency response. Imagine being on the side of the road calling for help and being unable to, all for lack of service? As we all become ever-more reliant on cellular service, we believe that the risks associated with remaining 'uncovered' by cellular service outweigh many other considerations.

The public safety agencies in the area face major hurdles when trying to communicate with each other and our dispatchers. Due to topology, VHF radio signals are very inconsistent in the Town of Lewisboro. Combined with spotty cellphone coverage that renders our cell phones useless, we have no radio backup. Further, we are unable to utilize cutting edge mobile app technology that assists first responders both communicate, and even provide care. Some of our routine duties require our Emergency Medical Technicians to contact a physician. This is often only accomplished with significant delay, as we search for a landline telephone or more powerful radio. Our headquarters also serve as a base station for the Westchester EMS Paramedic Fly-Car system, and these Advanced Life Support units are also in dire need of improved cellular coverage.

Each time our pagers go off, our members have difficulty communicating with each other and with our dispatchers at Westchester County 60-Control in Valhalla. We have been lucky to date, as none of our members have been injured as a result of our radio challenges and their inability to radio for help.

LVAC covers 29 square miles; 12,411 people; 96 miles of road; 851 acres of water; 4,315 acres of parkland; 1 section of Interstate 684; 5 schools; 4 shopping areas; multiple group homes; and one major commuter railway and train station – and at most of these areas we lack sufficient communications resources.

LVAC does not have funds for a radio system that will provide uninterrupted radio communications throughout the town. We have previously studied our challenges, having initiated a survey of our radio coverage at our own expense. We've been told that the topography and diverse geography of the area is an impediment to reliable radio communications, and that the solution is in excess of multiple times our annual budget. We are looking forward to the new tower providing LVAC with improved cellular service, antenna access (we hope to have four hardlines running from the top of the tower to a radio cabinet at the base), and possibly even greatly needed radio equipment.

Respectfully,

Dan Murtha, EMT- B
Captain, LVAC
captain@LewisboroVAC.org
914-763-9633

Instructions for Completing Part 1

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

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

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

A. Project and Sponsor Information.

Name of Action or Project: Homeland Towers Cross River (NY 143)		
Project Location (describe, and attach a general location map): 779 Route 35, Town of Lewisboro, Westchester County, New York, 10518		
Brief Description of Proposed Action (include purpose or need): Approval of lease agreement and proposed wireless telecommunications facility, consisting of a 170 foot monopole with antennas, together with related equipment within a 2,965 square foot compound.		
Name of Applicant/Sponsor: Homeland Towers, LLC	Telephone: 203-297-6345 E-Mail: rv@homelandtowers.us	
Address: 9 Harmony Street 2nd. Floor		
City/PO: Danbury	State: Connecticut	Zip Code: 06810
Project Contact (if not same as sponsor; give name and title/role): Same as Applicant/Sponsor	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor): Town of Lewisboro	Telephone: E-Mail:	
Address: 11 Main Street		
City/PO: P.O. Box 500, South Salem	State: New York	Zip Code: 10590

B. Government Approvals

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

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, or Village Board of Trustees ☑Yes ☐No	Lease Agreement and Monroe Balancing Test.	
b. City, Town or Village Planning Board or Commission ☐Yes ☐No		
c. City Council, Town or Village Zoning Board of Appeals ☐Yes ☐No		
d. Other local agencies ☑Yes ☐No	Building Department Building Permit	
e. County agencies ☐Yes ☐No		
f. Regional agencies ☑Yes ☐No	NYCDEP SWPPP Revocable Land Use Permit	
g. State agencies ☐Yes ☐No		
h. Federal agencies ☑Yes ☐No	Existing FCC Licenses	

i. Coastal Resources.

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

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

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

C. Planning and Zoning

C.1. Planning and zoning actions.

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

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

C.2. Adopted land use plans.

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

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

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

If Yes, identify the plan(s):

NYC Watershed Boundary

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

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
Residential-1/2 Acre and Designated Main Street Area under NYCDEP watershed regulations.

b. Is the use permitted or allowed by a special or conditional use permit? (*Monroe Balancing Test) ☑ Yes ☐ No

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

C.4. Existing community services.

a. In what school district is the project site located? The project site is located within the Katonah-Lewisboro School District

b. What police or other public protection forces serve the project site?
The Town of Lewisboro is served by the NY State Police in conjunction with the Lewisboro Town Police.

c. Which fire protection and emergency medical services serve the project site?
The project site is served by the Lewisboro Volunteer Ambulance Corps and South Salem Fire Department.

d. What parks serve the project site?
Ward Pound Ridge Reservation County Park, Old Field Preserve, Lewisboro Town Park, Richard Momsen Preserve, among other Town, County and State Parks.

D. Project Details

D.1. Proposed and Potential Development

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

b. a. Total acreage of the site of the proposed action? 2.69 acres
b. Total acreage to be physically disturbed? 0.08 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.08 acres

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

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

e. Will proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 2-3 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

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

If Yes, show numbers of units proposed.

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

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

If Yes,

*Monopole is 170' in height. Compound dimensions are 66'x85'.

i. Total number of structures 1

ii. Dimensions (in feet) of largest proposed structure: 170 height; _____ width; and _____ length

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

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

If Yes,

i. Purpose of the impoundment: _____

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

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

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

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

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

D.2. Project Operations

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

If Yes:

i .What is the purpose of the excavation or dredging? Earthwork will be associated with general site work.

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

- Volume (specify tons or cubic yards): ±500 cubic yards
- Over what duration of time? 2-3 Months

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

Excavated materials will be associated with general site work and limited to monopole footing, compound area and utility trenching.

iv. Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☑ No

If yes, describe. _____

v. What is the total area to be dredged or excavated? 0.08 acres

vi. What is the maximum area to be worked at any one time? 0.08 acres

vii. What would be the maximum depth of excavation or dredging? ±7' feet

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

ix. Summarize site reclamation goals and plan: _____

Site will be stabilized after construction and maintained by Homeland Towers and future tenants.

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

If Yes:

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

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

_____

_____

_____

_____

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

If Yes, describe: _____

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

If Yes:

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

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

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

_____

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

If Yes:

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

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

If Yes:

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

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

If Yes:

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

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

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

If, Yes:

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

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

_____

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

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

If Yes:

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

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

_____

_____

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

If Yes:

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

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

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

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

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

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

_____

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

_____

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

If Yes:

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

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. _____

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

_____

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

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

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

If Yes, identify:

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

Heavy equipment during construction.

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

N/A

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

Site will contain an emergency backup generator for use during temporary power outages.

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

If Yes:

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

ii. In addition to emissions as calculated in the application, the project will generate:
- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

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

If Yes:

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

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

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

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

_____

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

If Yes:

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

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

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

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

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

_____

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

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

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

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

If Yes:

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

Energy uses associated with the operation of a commercial wireless telecommunications facility including electricity. ±800 Amps.

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

Supplier will be local utility grid provided by NYSEG.

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

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

i. During Construction:

- Monday - Friday: 8 AM - 5 PM
- Saturday: _____
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: Facility is an unmanned utility
- Saturday: and will operate 24/7 after
- Sunday: construction.
- Holidays: _____

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

If yes:

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

The proposed action will temporarily produce noise associated with general site work and construction activities during construction only.

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

Describe: _____

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

If yes:

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

Motion sensor with timer security light on equipment will be installed per carrier's specifications.

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

Describe: _____

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

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

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

If Yes:

i. Product(s) to be stored _____

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

iii. Generally describe proposed storage facilities: _____

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

If Yes:

i. Describe proposed treatment(s):

_____

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

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

If Yes:

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

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

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

- Construction: _____
- Operation: _____

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

- Construction: _____
- Operation: _____

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

If Yes:

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

ii. Anticipated rate of disposal/processing:

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

iii. If landfill, anticipated site life: _____ years

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

If Yes:

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

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

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

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

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

If Yes: provide name and location of facility: _____

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

E. Site and Setting of Proposed Action

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

a. Existing land uses.

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

☐ Urban ☐ Industrial ☑ Commercial ☑ Residential (suburban) ☐ Rural (non-farm)
☑ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): Reservoir

ii. If mix of uses, generally describe: _____

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.54	0.60	+0.06
• Forested	1.27	1.27	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0.88	0.82	-0.06
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	0	0	0
• Wetlands (freshwater or tidal)	0	0	0
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: _____			

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

i. If Yes: explain: The Site contains the Cyrus Russell Community House which can be rented by Town residents.

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

If Yes,

i. Identify Facilities:

_____

_____

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

If Yes:

i. Dimensions of the dam and impoundment:

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

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

_____

_____

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

If Yes:

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

- If yes, cite sources/documentation: _____

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

_____

_____

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

_____

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

If Yes:

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

_____

_____

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

If Yes:

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

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

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

☐ Neither database

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

_____

_____

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

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

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

_____

_____

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

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

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? ±6 feet

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

c. Predominant soil type(s) present on project site:

RhD-Riverhead Loam 15-25% slope	48 %
KnB-Knickerbocker fine sandy loam	28 %
RhB-Riverhead Loam 3-8% slopes	24 %

d. What is the average depth to the water table on the project site? Average: ±6 feet

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

f. Approximate proportion of proposed action site with slopes:
☑ 0-10%: 34.94 % of site
☑ 10-15%: 10.41 % of site
☑ 15% or greater: 54.65 % of site

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

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ Yes ☑ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name Cross River (864-391) Classification A
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

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

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

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

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

m. Identify the predominant wildlife species that occupy or use the project site:
Indigenous small game | Typical suburban wildlife

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

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

*See attached United States Department of the Interior Fish and Wildlife Service correspondence for concurrence.

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

*See attached United States Department of the Interior Fish and Wildlife Service correspondence for concurrence.

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

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

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

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

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No*
(*See attached Phase I Archaeological Survey prepared by CBRE for concurrence.)
If Yes:
i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent:

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☑ Yes ☐ No
If Yes: *See attached Phase I Archaeological Survey prepared by CBRE in addition to the attached NYSDEC letter for concurrence.
i. CEA name: County & State Park Lands
ii. Basis for designation: Exceptional or unique character
iii. Designating agency and date: Agency:Westchester County, Date:1-31-90

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

If Yes:

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

ii. Name: Cross River Hamlet Historic District

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

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

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

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: (*Details TBD)

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

If Yes:

i. Identify resource: _____

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

iii. Distance between project and resource: _____ miles.

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

If Yes:

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

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

F. Additional Information

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

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

G. Verification

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

Applicant/Sponsor Name JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC Date 04/18/2018

Signature _____ Title Project Manager

PRINT FORM

EAF Mapper Summary Report

Friday, April 13, 2018 3:13 PM

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

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

E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	Yes
E.3.d [Critical Environmental Area - Name]	County & State Park Lands
E.3.d.ii [Critical Environmental Area - Reason]	Exceptional or unique character
E.3.d.iii [Critical Environmental Area – Date and Agency]	Agency:Westchester County, Date:1-31-90
E.3.e. [National Register of Historic Places]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9349
Phone: (607) 753-9334 Fax: (607) 753-9699
http://www.fws.gov/northeast/nyfo/es/section7.htm

In Reply Refer To: June 23, 2017
Consultation Code: 05E1NY00-2017-SLI-2646
Event Code: 05E1NY00-2017-E-07576
Project Name: NY 143 - Cross River (TS70417386)

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: http://www.fws.gov/northeast/nyfo/es/section7.htm

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (

http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the Services wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9349
(607) 753-9334

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office:

Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967
(631) 286-0485

Project Summary

Consultation Code: 05E1NY00-2017-SLI-2646

Event Code: 05E1NY00-2017-E-07576

Project Name: NY 143 - Cross River (TS70417386)

Project Type: COMMUNICATIONS TOWER

Project Description: A 170' monopole within a 40'x80' fenced compound is proposed. A 12' wide access gate and short gravel road will connect the compound to an existing gravel parking area to the immediate south.

Project Location:

Approximate location of the project can be viewed in Google Maps:
https://www.google.com/maps/place/41.262456871280435N73.61276590350165W

Counties: Westchester, NY

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area. Please contact the designated FWS office if you have questions.

Mammals

NAME	STATUS
Indiana Bat *(Myotis sodalis)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *(Myotis septentrionalis)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

There are no critical habitats within your project area.

Emailed 06/28/2017

United States Department of the Interior

FISH AND WILDLIFE SERVICE
3817 Luker Road
Cortland, NY 13045

June 28, 2017

Christopher Bond
Project Manager - Biologist
CBRE, Inc.
4 West Red Oak Lane
White Plains, NY 10604

Dear Mr. Bond:

This responds to your June 23, 2017, letter regarding a telecommunications facility known as "NY 143 – Cross River" proposed near 779 Route 35, in Lewisboro, Westchester County, New York. As you are aware, Federal agencies, such as the Federal Communications Commission (FCC), have responsibilities under Section 7 of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to consult with the U.S. Fish and Wildlife Service (Service) regarding projects that may affect federally listed species or designated critical habitat, and confer with the Service regarding projects that are likely to jeopardize federally proposed species or adversely modify proposed critical habitat. We understand that all FCC licensees, applicants, tower companies, and their representatives have been designated the FCC's non-federal representative for the purposes of completing informal consultation pursuant to Section 7(a)(2) of the ESA.

On behalf of the FCC, CBRE, Inc. has determined that the proposed project "may affect, but is not likely to adversely affect," the federally listed Indiana bat (*Myotis sodalis*; Endangered) and northern long-eared bat (*Myotis septentrionalis;* Threatened). The Service concurs with your determinations given that no known roosts are located within or adjacent to the project area, a small amount of trees (approximately 0.1 acre) is proposed for removal, and the following conservation measures will be incorporated into the project to avoid and minimize impacts to these bat species:

- Tree removal will occur between November 1 and March 31, when bats are in hibernation.
- Bright orange construction fencing and flagging will be used to demarcate trees to be protected compared with those to be cut prior to the initiation of any construction.

- The number of lights, including motion sensors or timers, will be limited and directed with shielding toward the ground and buildings.

Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of federally listed and proposed endangered and threatened species in New York is available for your information. Until the proposed project is complete, we recommend that you check our website every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed project is current.*

Any additional information regarding the proposed project and its potential to impact listed species should be coordinated with both this office and with the New York State Department of Environmental Conservation.

The above comments pertaining to endangered species under our jurisdiction are provided pursuant to the ESA. We also offer the following comments pursuant to the Migratory Bird Treaty Act (40 Stat. 755; 16 U.S.C. 703-712). The proposed project was designed to incorporate the guidance provided by the Service's September 2013 Revised Voluntary Guidelines for Communication Tower Design, Siting, Construction, Operation, Retrofitting, and Decommissioning to avoid and minimize impacts to migratory birds (*i.e.*, no guy wires, reduced tower height). The Service appreciates these efforts.

Thank you for coordinating with us. If you require additional information or assistance please contact John Wiley at 607-753-9334. Future correspondence with us on this project should reference project file 17I2646.

Sincerely,

Anne d. Secord

for David A. Stilwell
Field Supervisor

*Additional information referred to above may be found on our website at:
http://www.fws.gov/northeast/nyfo/es/section7.htm

cc: NYSDEC, New Paltz, NY (Env. Permits)

SARATOGA ASSOCIATES

Proposed Wireless Telecommunications Facility

Site Name: Cross River Site, NY–143
779 Route 35
Lewisboro, NY

VISUAL RESOURCE ASSESSMENT

HOMELAND TOWERS

Prepared for:
Homeland Towers
9 Harmony Street, 2nd Floor
Danbury, CT 06810

May 2, 2018

Landscape Architects, Architects,
Engineers and Planners, P.C.

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#2017-017

VISUAL RESOURCE ASSESSMENT

Homeland Towers seeks approval from the Town of Lewisboro, NY to construct a wireless telecommunications facility (the "Project") to be located on property owned by the Town of Lewisboro at 779 Route 35 ("host property"). To address issues of potential visual impact, Saratoga Associates, Landscape Architects, Architects, Engineers, and Planners, P.C. was retained to conduct a Visual Resource Assessment ("VRA") of the proposed Project.

The study area for this VRA extends to a two-mile radius from the Project site (hereafter referred to as the "2-mile study area"). Because much of the Project area is substantially wooded, detailed analysis is focused on viewpoints within a ½-mile radius ("½-mile study area").

Project Description

The Project includes the construction of a 170-foot tall monopole designed to support up to four antenna platforms. A five-foot tall (2"± diameter) omni antenna ("whip antenna") for emergency services will be placed at the top of the structure for a total structure height of 175 feet above grade. Associated ground equipment located at the base of the tower will be enclosed within an "L" shaped fenced area roughly 2,965 square feet in size ("tower site"). The tower will be located at 41° 15' 41.4909" N, 73° 36' 44.6146" W. The existing ground elevation in this area is approximately 346.4 feet above mean sea level (AMSL).

Landscape Setting

The 2.69± acre host property is identified in Lewisboro tax records as tax parcel 53.6-1-47. The property is currently occupied by the Town Ambulance Corps and Cyrus Russell Community Center buildings. The host property is zoned "R-1/2A"; one-family residence (1/2 acre) as defined by the Lewisboro Town Code.

The tower site is approximately 460 feet south-southeast of NYS Route 35/121 (Cross River Road), 600 feet east of NYS Route 121 (Old Post Road) and 390 feet north-north east of Reservation Road. The nearest residential structure (787 Route 35) is approximately 480 feet north-northeast of tower site.

The topography within the 2-mile study area is characterized by a gently rolling terrain ranging in elevation from 815 ± feet above mean sea level (amsl) at a hilltop within the Ward Pound Ridge Reservation at the southeastern edge of the study area to 326 ± feet amsl at the Cross River Reservoir. The 940 acre Cross River Reservoir is approximately 0.3 miles south-southwest of the tower site. The Cross River (near the reservoir inlet) is approximately 100-180 feet to the west and south of the host property. The shoreline of the Cross River Reservoir is largely undeveloped.

The study area is substantially wooded with broad tracts of mature second growth deciduous forest interspersed with stands of mature evergreen species. The tree canopy occupies approximately 5,600 acres of the 8,040 acre study area (70%).[1] Mature deciduous tree cover

[1] Tree cover calculations are based on areas with 50% or greater tree canopy coverage within 30 meter x 30 meter grid cells as presented in the National Land Cover Database (NLCD) 2011 Percent Tree Canopy dataset. https://www.sciencebase.gov/catalog/item/581d598be4b0dee4cc8e4547

generally ranges from 50 to 75 feet in height. Local mature evergreen trees may be somewhat taller.

Visual Resources

The Project is located within the hamlet of Cross River, Town of Lewisboro (population approximately 12,411[2]).

The land use within two-miles of the tower site is generally comprised of an even distribution of low density (3-10 acre lot) to moderate density (1/3 to 1 acre lot) single family residential properties. The Meadows condominium complex, 800 feet northeast of the tower site, includes approximately 165 one and two-story townhouse style residential units. A small cluster of commercial and retail uses is found at the intersection of NY Route 35 (Cross River Road) and NY Route 121 (North Salem Road). The John Jay Junior/Senior High School campus is located along NY Route 121 (North Salem Road) approximately ½ north-northeast of the tower site. The Four Winds Hospital campus is located off of NY Route 35 (Cross River Road) ½ mile northwest of the tower site.

Local recreational resources include the Westchester County owned Ward Pound Ridge Reservation and the Old Field Preserve. These natural areas are open to the public and provide miles of walking trails and other passive recreational activities in all seasons. The Lewisboro Town Park, approximately 1.5 miles northeast of the tower site provides a variety of recreational facilities including a swimming pool, baseball field, volley ball and basketball courts, picnic pavilion, concert stage and children's play areas. Several nature preserves are also found within the study area including the Mount Holly Sanctuary and the Marion Yarrow Sanctuary, Frederick P. Rose Preserve and the Richard Momsen Preserve. These conservation lands are generally open to the public for passive recreation.

There are no sites listed on the National Register of Historic Places within the 2 mile study area. "The Homestead", approximately 1.6 miles northeast of the tower site, is identified on the Westchester County Inventory of Historic Places. The NYS Office of Parks Recreation and Historic Preservation has identified an area along Cross River Road, Old Post Road and Boutonville Road qualifies as a district that is eligible for inclusion in the National Register of Historic Places.

Approximately 48 miles of public roadways are within the 2-mile study area. NYS Routes 35 and 121 are the most heavily travelled. NYS Route 35 has an average daily traffic volume (AADT) of approximately 15,600 vehicles to the west of old Post Road and 15,800 vehicles to the east of Old Post Road. NY Route 121 (Old Post Road) has an AADT of 2,600 south of the NY Route 35 (Cross River Road) intersection.[3]

Viewshed Analysis

Viewshed mapping identifies the geographic area within which there is a relatively high probability that some portion of the proposed Project could be visible.

---

[2] 2010 census

[3] http://gis3.dot.ny.gov/html5viewer/?viewer=tdv

One viewshed overlay was prepared defining the area within which there would be no visibility of the Project due to the screening effect of intervening topography. This "bare earth" condition identifies the maximum potential geographic area within which further investigation is appropriate. A second viewshed overlay was prepared illustrating the screening effect of existing mature vegetation. The more realistic "land cover" condition identifies the geographic area where one would expect to be substantially screened by intervening forest vegetation.

Global Mapper 19.0 GIS software was used to generate viewshed areas based on publicly available topographic and land cover datasets. Topographic data was derived from the National Elevation Dataset (1/3 arc second)[4]. Using Global Mapper's viewshed analysis tool, the proposed tower location and height were input and a conservative offset of six feet was applied to account for the observer's eye level. The resulting viewshed identifies grid cells with a direct line-of-sight to the tower high point (170 feet above ground level).

Within one (1) mile of the tower site existing forest vegetation and built structures were manually digitized from 1 foot resolution digital ortho-photographs (2013) acquired from NYS Orthos On-line.[5] For the remainder of the 2-mile study area existing forest vegetation is based on areas with 75% or greater tree canopy coverage as presented in the National Land Cover Database (NLCD) 2011 Percent Tree Canopy dataset.[6]

The screening effect of vegetation and built structures was incorporated by adding 50 feet in vertical height to digitized forest areas and 25 feet to building footprints. Forested areas and building footprints were removed from the viewshed result to account for affected areas located within structures or densely wooded cover.

Based on field observation, most trees in forested portions of the study area are taller than 50 feet. This height therefore represents a conservative estimate of the efficacy of vegetative screening. It is important to note that digitized vegetation is based on interpretation of forest areas that are clearly distinguishable in the source aerial photography. As such, the potential screening value of site-specific vegetative cover such as small hedgerows, street trees and individual trees and other areas of non-forest tree cover may not be represented in the viewshed analysis.

It is noteworthy that untrained reviewers often misinterpret “bare earth” condition viewshed maps to represent wintertime, or leafless condition visibility. In fact, deciduous woodlands provide a substantial visual barrier in all seasons. Since the digitized forest cover overlay generally identifies only larger stands of woodland vegetation that are clearly distinguishable from aerial photography, the land cover viewshed map is substantially representative of both leaf-on and leaf-off seasons. The bare earth condition map is provided only to assist experienced visual analysts identify the maximum potential geographic area within which further investigation is appropriate. Such bare earth viewshed maps are generally not appropriate for public interpretation.

[4] http://viewer.nationalmap.gov/viewer/
[5] https://orthos.dhses.ny.gov/
[6] https://www.sciencebase.gov/catalog/item/581d598be4b0dee4cc8e4547

By themselves, the viewshed maps do not determine how much of the proposed wireless telecommunications tower would be visible above intervening landform or vegetation (e.g., 100%, 50%, 10% etc. of total tower height), but rather the geographic area within which some portion of the facility theoretically would be visible. Their primary purpose is to provide a general understanding of a project's potential visibility and identify areas where further investigation is appropriate.

Figure 1 illustrates areas of potential Project visibility at a macro scale within the 2-mile study area. Figure 2 provides a more localized assessment of potential Project visibility within the ½-mile study area.

Based on viewshed mapping, notable Project views will occur across open agricultural land to south of the host property. Direct views will also occur within a narrow corridor across the water surface of Cross River Reservoir extending from the Cross River inlet southwesterly to the southern shore of the reservoir. Isolated glimpses of the proposed tower will also occur along local roads within ½ mile of the Project site, including portions of NY Route 35, NY Route 121 and Boutonville Road.

Of the 8,042 acres within the 2-mile study area, a view of the proposed telecommunications tower is theoretically possible from approximately 198 acres (2.4%). Of the 502 acres within the 1/2-mile study area, a view of the proposed tower is possible from approximately 61 acres (12%). Approximately 20 acres of this visibility occurs on the water surface of the Cross River Reservoir.

Of the 60 miles of public roads within the 2-mile radius Study Area, potential Project views are found along approximately 1.2 linear miles (2.0%). Of the 9.2 miles of public roads within the 1/2-mile radius study area, potential Project views are found along less than 4,600 linear feet (6.1%).

Study Area Reconnaissance

An experienced visual analyst drove public roads to inventory those areas where viewshed mapping identified potential Project visibility. Photographs were taken from multiple vantage points to document views in the direction of the Project from places where a theoretical view was identified. Several locations where Project visibility was not predicted were also photographed to provide documentation of visual conditions from other areas of interest. Emphasis was placed on locations considered to be of scenic, cultural and/or social importance to the community. Such places include recreation and conservation areas, historic resources, open spaces, local roadways and residential neighborhoods.

Photographs were taken using a digital camera with a lens setting of approximately 50mm[7] to simulate normal human eyesight relative to scale. The precise coordinates of each photo location were recorded in the field using a handheld global positioning system (GPS) unit. Prior

[7] A Canon EOS digital SLR with a 24-85milimeter (mm) zoom lens was used for most of the Project photography. This digital camera, similar to most digital SLR cameras, has a sensor that is approximately 1.6 times smaller than a comparable full frame 35mm film camera. Recognizing this differential, the zoom lens used was set to approximately 31mm to achieve a field-of-view comparable to a 50mm lens on a full frame 35mm camera (31mm x 1.6 = 50mm).

field reconnaissance the coordinates of the proposed telecommunications tower were programmed into a handheld GPS unit as a “waypoint”. The "waypoint indicator" function of the GPS (arrow pointing along a calculated bearing) was used to assist the visual analyst determine the direction of the tower site from each photo location.

Photographs taken during the field reconnaissance are provided in Appendix A – Photo Log. Photographs were taken from the following places:

Map ID	Location	Direction	Distance to Tower (feet)	Theoretical View Indicated by Land Cover Viewshed - (See Figures 1 & 2)	Tower Visible Based on 3D Modeling*	Photo/ Simulation Provided as
1	Old Post Rd (NY Rte 121) near Honey Hollow Rd)	NNE	3,810	No	No	
2	Boutonville Road near Michigan Road	WNW	4,450	No	Yes	Figure 3
3	Boutonville Road	NNW	1,090	Yes	Seasonal**	Figure 4
4	Boutonville Road	N	980	Yes	Seasonal**	
5	Reservation Road	N	490	No	Seasonal**	Figure 5
6	Old Post Rd (NY Rte 121) near Boutonville Rd	NE	1,060	Yes	Seasonal**	Figure 6
7	Old Post Rd (NY Rte 121) at Cross River Res.	ENE	630	Yes	Yes	Figure 7
8	Cross River Rd (NY Rte 35/121) at Tower Site	SE	490	Yes	Yes	Figure 8
9	Cross River Rd (NY Rte 35/121) at Cross Meadow La	SSW	980	No	No	
10	Briar Court	SSW	1,400	No	No	
11	Cross Meadow Lane near Briar Court	SSW	1,320	Yes	Yes	
12	Winterberry Circle	SSW	1,730	Yes	Yes	Figure 9
13	Cross River Rd (NY Rte 35) near Old Post Rd	ESE	1,340	Yes	Yes	
14	Four Winds Hospital Grounds	ESE	3,120	No	No	
15	Lambert Ridge	SSE	2,640	No	No	
16	Cross Meadow Lane at Willow Court	SSW	2,500	Yes	Yes	
17	N Salem Rd (NY Rte 121) at Cross River Rd (NY Rte 25)	SW	3,060	No	No	
18	N Salem Rd (NY Rte 121) at John Jay H S	SSW	3,700	No	No	
19	John Jay HS at Tennis Courts	SSW	4,360	No	Seasonal**	
20	Cross River Rd (NY Rte 35/121) East of Old Post Rd	WNW	610	No	Seasonal**	Figure 10
21	Cross River Rd (NY Rte 35/121) near Old Post Rd	WNW	650	No	Seasonal**	
22	Boutonville Road near Old Post Road	SW	1,070	No	No	
23	Cross River Road (NY Rte 35/121) at Cross River Animal Hospital	N	730	No	No	
24	Old Post Road (NY Rte 121) at Gideon Reynolds House	SSE	2,500	No	No	

* “Tower Visible Based on 3D Modeling” differs from “Theoretical View Indicated by Land Cover Viewshed” due to the use of a highly conservative estimate of tree height in viewshed calculation (50 feet). In most cases mature woodland vegetation is significantly taller resulting in reduced Project visibility.
** “Seasonal” visibility indicates photo locations where the Project may be visible through intervening deciduous vegetation during winter leaf-off season. Such views would likely be fully screened during summer leaf-on season.

Photo Simulations

To illustrate how the monopole design wireless telecommunications tower will appear photo simulations were prepared from 8 (8) affected photo locations. Photo simulations were developed by superimposing a rendering of a three-dimensional computer model of the proposed Project into the base photograph taken from each corresponding visual receptor. The three-dimensional computer model was developed using *3D Studio Max Design*® software (3D Studio Max).

Simulated perspectives (camera views) were matched to the corresponding base photograph for each simulated view by replicating the precise coordinates of the field camera position (as recorded by handheld GPS) and the focal length of the camera lens used (e.g. 50mm).

Precisely matching these parameters assures scale accuracy between the base photograph and the subsequent simulated view. The camera's elevation (Z) value is derived from digital elevation model (DEM) data plus the camera's height above ground level. The camera's target position was set to match the bearing of the corresponding existing condition photograph as recorded in the field. With the existing conditions photograph displayed as a "viewport background," and the viewport properties set to match the photograph's pixel dimensions, minor camera adjustments were made (horizontal and vertical positioning, and camera roll) to align the horizon in the background photograph with the corresponding features of the 3D model.

To verify the camera alignment, elements (e.g. existing buildings, utility poles, topography, vegetation, roads, etc.) visible within the photograph were identified and digitized from digital orthophotos. Each element was assigned a Z value based on DEM data and then imported to 3D Studio Max. A 3D terrain model was also created (using DEM data) to replicate the existing local topography. The digitized elements were then aligned with corresponding elements in the photograph by adjusting the camera target. If necessary, slight camera adjustments were made for accurate alignment.

A daylight system was created matching the exact date and time of each baseline photograph to assure proper shading and shadowing of modeled elements.

Once the camera alignment was verified, a to-scale 3D model of the proposed 170 foot tall wireless telecommunications tower was merged into the model space. The 3D model of a monopole style tower was constructed in sufficient detail to accurately convey visual character and reveal impacts. The scale, alignment, elevations and location of the visible elements of the proposed tower are true to the conceptual design. Post production editing (i.e., airbrush out portion of tower that falls below or behind foreground topography and vegetation) was completed using Adobe Photoshop software. The methodology accurately represents the location, height and visual character of the proposed tower.

Conclusions

The study area is characterized by a gently rolling landscape with dense woodland vegetation that screens the Project from most locations. Of the 8,042 acres within the 2-mile study area, a view of the proposed telecommunications tower is theoretically possible from approximately 198 acres (2.4%). Of the 502 acres within the 1/2-mile study area, a view of the proposed tower is possible from approximately 61 acres (12%). Approximately 20 acres of this visibility occurs on the water surface of the Cross River Reservoir.

Of the 60 miles of public roads within the 2-mile radius Study Area, potential Project views are found along approximately 1.2 linear miles (2.0%). Of the 9.2 miles of public roads within the 1/2-mile radius study area, potential Project views are found along less than 4,600 linear feet (6.1%). Dense vegetation and intervening topography substantially limit Project views from these travel corridors to isolated and brief glimpses.

Isolated glimpses of the proposed telecommunications tower are found through deciduous trees along Reservoir Road (See Figure 5). Brief glimpses between buildings and local vegetation sre found along Boutonville Road near Old Post Road (NY Rte 121) (See Figures 3 and 4).

The Project will not be visible from the Lewisboro Town Park, Mount Holly Sanctuary, Marion Yarrow Sanctuary, Frederick P. Rose Preserve or the Richard Momsen Preserve. The upper portion of the Project may be visible at the tree line along a portion of Boutonville Road within the Ward Pound Ridge Preserve.

No resources listed on the National Register of Historic Places will be affected by views of the proposed Project. "The Homestead" historic site, identified in the Westchester County Inventory of Historic resources will be fully screened by intervening vegetation.

The NYS Office of Parks Recreation and Historic Preservation has identified an area along Cross River Road, Old Post Road and Boutonville Road qualifies as a district that is eligible for inclusion in the National Register of Historic Places. A brief glimpse of the Project will occur for passing motorists along Cross River Road directly in front of the Project Site (see Figure 8) and from the Old Post Road bridge over Cross River Reservoir (see Figure 7). All other views from within the eligible historic district are either partially or fully screened by intervening vegetation during leaf-off season. In most cases such views will be fully screened during leaf-on season.

Visual impact is defined by the NYS Department of Environmental Conservation as follows:

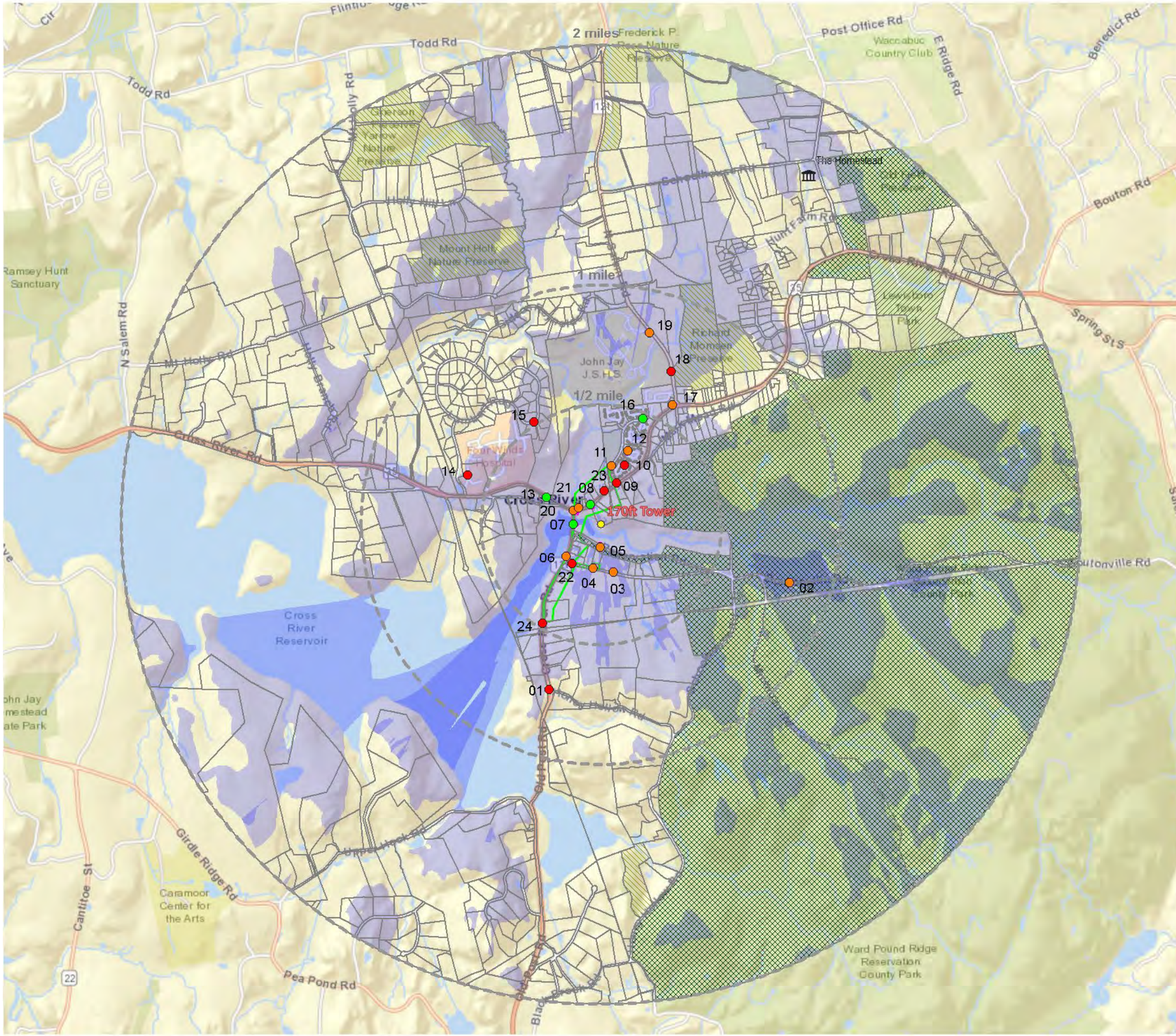
> *"Aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Significant aesthetic impacts are those that may cause a diminishment of the public enjoyment and appreciation of an inventoried resource, or one that impairs the character or quality of such a place".*[8]

Based on the limited Project visibility identified in this visual assessment, it is reasonable to conclude that the proposed telecommunications tower will not create a detrimental effect on the scenic resources of the area, nor will it cause the diminishment of public enjoyment and appreciation of any visually sensitive place. As such the proposed Project will not result in an adverse visual impact.

Submitted by:

Matthew W. Allen, RLA

[8] NYS DEC Program Policy for Assessing and Mitigating Visual Impact, DEP-00-2, July 31, 2000, p. 5.



LEGEND

- Bare Earth Viewshed Area (Excludes existing vegetation and structures)
- Land Cover Viewshed Area (Includes existing vegetation and structures)
- Photo Location - Tower Not Visible
- Photo Location - Tower Visible
- Photo Location - Tower Visible (Seasonal)
- Photo Simulation Location
- County Park
- Cross River Historic District
- Municipal Park
- Open Space Preserve
- County Inventory of Historic Places

Note: Viewshed areas are not definitive. Viewshed mapping provides a general understanding of where the proposed project is theoretically visible based on regional topographic, forest and building cover data sources.

The "Bare Earth' condition overlay identifies areas where the proposed telecommunictions tower high point may be visible without consideration of the screening effect of existing vegetation or built structures. Bare earth analysis is provided to assist experienced visual analysts identify the maximum potential geographic area within which further investigation is appropriate. This topography-only viewshed map is not representative of project visibility during winter season leaf-off conditions.

The "Land Cover" condition viewshed area includes the screening effect of intervening vegetation and buildings. Vegetated areas and buildings were manually digitized from 2016 one-foot resolution digital orthoimagery. All digitized tree cover is assumed to be 50 feet tall and all digitized buildings are assumed to be 25 feet tall.

0 ft 2000 ft 4000 ft 6000 ft

FIGURE 1

VIEWSHED MAP - 2 MILE RADIUS

Visual Resource Assessment

Proposed Telecommunications Tower

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Cross River, NY

LEGEND

- Land Cover Viewshed Area (Includes existing vegetation and structures)
- Photo Location - Tower Not Visible
- Photo Location - Tower Visible
- Photo Location - Tower Visible (Seasonal)
- Photo Simulation Location
- County Park
- Cross River Historic District
- Open Space Preserve

Note: Viewshed areas are not definitive. Viewshed mapping provides a general understanding of where the proposed project is theoretically visible based on regional topographic, forest and building cover data sources.

The "Bare Earth" condition overlay identifies areas where the proposed telecommunictions tower high point may be visible without consideration of the screening effect of existing vegetation or built structures. Bare earth analysis is provided to assist experienced visual analysts identify the maximum potential geographic area within which further investigation is appropriate. This topography-only viewshed map is not representative of project visibility during winter season leaf-off conditions.

The "Land Cover" condition viewshed area includes the screening effect of intervening vegetation and buildings. Vegetated areas and buildings were manually digitized from 2016 one-foot resolution digital orthoimagery. All digitized tree cover is assumed to be 50 feet tall and all digitized buildings are assumed to be 25 feet tall.

0 ft 500 ft 1000 ft 1500 ft

FIGURE 2

VIEWSHED MAP - 1/2 MILE RADIUS

Visual Resource Assessment

Proposed Telecommunications Tower

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Cross River, NY

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Photograph Information

Date:	April 11, 2017
Time:	12:59pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 31.0392" N 73° 36' 41.0652" W
Distance:	1,090 Feet

Figure 3a

Existing Condition

VP3 - Boutonville Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Photograph Information

Date:	April 11, 2017
Time:	12:59pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 31.0392" N 73° 36' 41.0652" W
Distance:	1,090 Feet
Visibility:	Seasonal

Figure 3b

Simulated Condition

VP3 - Boutonville Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	12:59pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 31.9791” N 73° 36’ 47.0123” W
Distance:	980 Feet

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 4b

Existing Condition

VP4 - Boutonville Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	12:59pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 31.9791” N 73° 36’ 47.0123” W
Distance:	980 Feet
Visibility:	Seasonal

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 4b

Simulated Condition

VP4 - Boutonville Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Photograph Information

Date:	April 11, 2017
Time:	12:51pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 36.6012" N 73° 36' 44.9424" W
Distance:	490 Feet

Figure 5a

Existing Condition

VP5 - Reservation Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Photograph Information

Date:	April 11, 2017
Time:	12:51pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 36.6012" N 73° 36' 44.9424" W
Distance:	490 Feet
Visibility:	Seasonal

Figure 5b

Simulated Condition

VP5 - Reservation Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Photograph Information

Date:	April 11, 2017
Time:	12:43pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 34.6644" N 73° 36' 54.7992" W
Distance:	1,060 Feet

Figure 6a

Existing Condition

VP6 - Old Post Road (NY Rte 121) near Boutonville Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	12:43pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 34.6644" N 73° 36' 54.7992" W
Distance:	1,060 Feet
Visibility:	Seasonal

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 6b

Simulated Condition

VP6 - Old Post Road (NY Rte 121) near Boutonville Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Photograph Information

Date:	April 11, 2017
Time:	12:47pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 41.6772" N 73° 36' 52.5816" W
Distance:	630 Feet

Figure 7a

Existing Condition

VP7 - Old Post Road (NY Rte 121) at Cross River Reservoir

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Photograph Information

Date:	April 11, 2017
Time:	12:47pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 41.6772" N 73° 36' 52.5816" W
Distance:	630 Feet
Visibility:	Year Round

Figure 7b

Simulated Condition

VP7 - Old Post Road (NY Rte 121) at Cross River Reservoir

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	14:21pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 45.8148” N 73° 36’ 47.5383” W
Distance:	490 Feet

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 8a

Existing Condition

VP8 - Cross River Road (NY Rte 35/121) at Cyrus Russell Community House

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	14:21pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 45.8148” N 73° 36’ 47.5383” W
Distance:	490 Feet
Visibility:	Year Round

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 8b

Simulated Condition

VP8 - Cross River Road (NY Rte 35/121) at Cyrus Russell Community House

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	14:03pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 57.4704” N 73° 36’ 36.5940” W
Distance:	1,730 Feet

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 9a

Existing Condition

VP12 - Winterberry Circle

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS

Photograph Information

Date:	April 11, 2017
Time:	14:03pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 57.4704” N 73° 36’ 36.5940” W
Distance:	1,730 Feet
Visibility:	Seasonal

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 9b

Simulated Condition

VP12 - Winterberry Circle

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS

Photograph Information

Date:	March 28, 2018
Time:	11:23am
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 44.5260” N 73° 36’ 52.2809” W
Distance:	650 Feet

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 10a

Existing Condition

VP21 - Cross River Road (NY Rte 35/121) at Old Post Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

Photograph Information

Date:	March 28, 2018
Time:	11:23am
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 44.5260” N 73° 36’ 52.2809” W
Distance:	650 Feet
Visibility:	Seasonal

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 10b

Simulated Condition

VP21 - Cross River Road (NY Rte 35/121) at Old Post Road

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

SARATOGA ASSOCIATES

HOMELAND TOWERS

APPENDIX A

Photo Log

VP1 - Old Post Road (NY Rte 121) near Honey Hollow Road

Distance: 3,810 feet

VP2 - Boutonville Road near Michigan Road

Distance: 4,350 feet

Figure A1
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP3 - Boutonville Road

Distance: 1,090 feet

VP4 - Boutonville Road

Distance: 980 feet

Figure A2
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP5 - Reservation Road

Distance: 490 feet

VP6 - Old Post Road (NY Rte 121) near Boutonville Road

Distance: 1,060 feet

Figure A3
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP7 - Old Post Road (NY Rte 121) at Cross River Reservoir

Distance: 630 feet

VP8 - Cross River Road (NY Rte 35/121) at Tower Site

Distance: 490 feet

Figure A4
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP9 - Cross River Road (NY Rte 35/121) at Cross Meadows Lane

Distance: 980 feet

VP10 - Briar Court

Distance: 1,400 feet

Figure A5
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP11 - Cross Meadow Lane near Briar Court

Distance: 1,320 feet

VP12 - Winterberry Circle

Distance: 1,730 feet

Figure A6
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP13 - Cross River Road (NY Rte 35) near Old Post Road

Distance: 1,340 feet

VP14 - Four Winds Hospital Grounds

Distance: 3,120 feet

Figure A7
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP15 - Lambert Ridge

Distance: 2,640 feet

VP16 - Cross Meadow Lane at Willow Court

Distance: 2,500 feet

Figure A8
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP17 - North Salem Road (NY Rte 121) at Cross River Road (NY Rte 25) Distance: 3,060 feet

VP18- North Salem Road (NY Rte 121) at Johh Jay High School Distance: 3,700 feet

Figure A9
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP19 - John Jay High School at Tennis Courts

Distance: 4,360 feet

VP20 - Cross River Road (NY Rte 35/121) East of Old Post Road

Distance: 610 feet

Figure A10
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP21 - Cross River Road (NY Rte 35/121) at Old Post Road

Distance: 650 feet

VP22 - Boutonville Road near Old Post Road

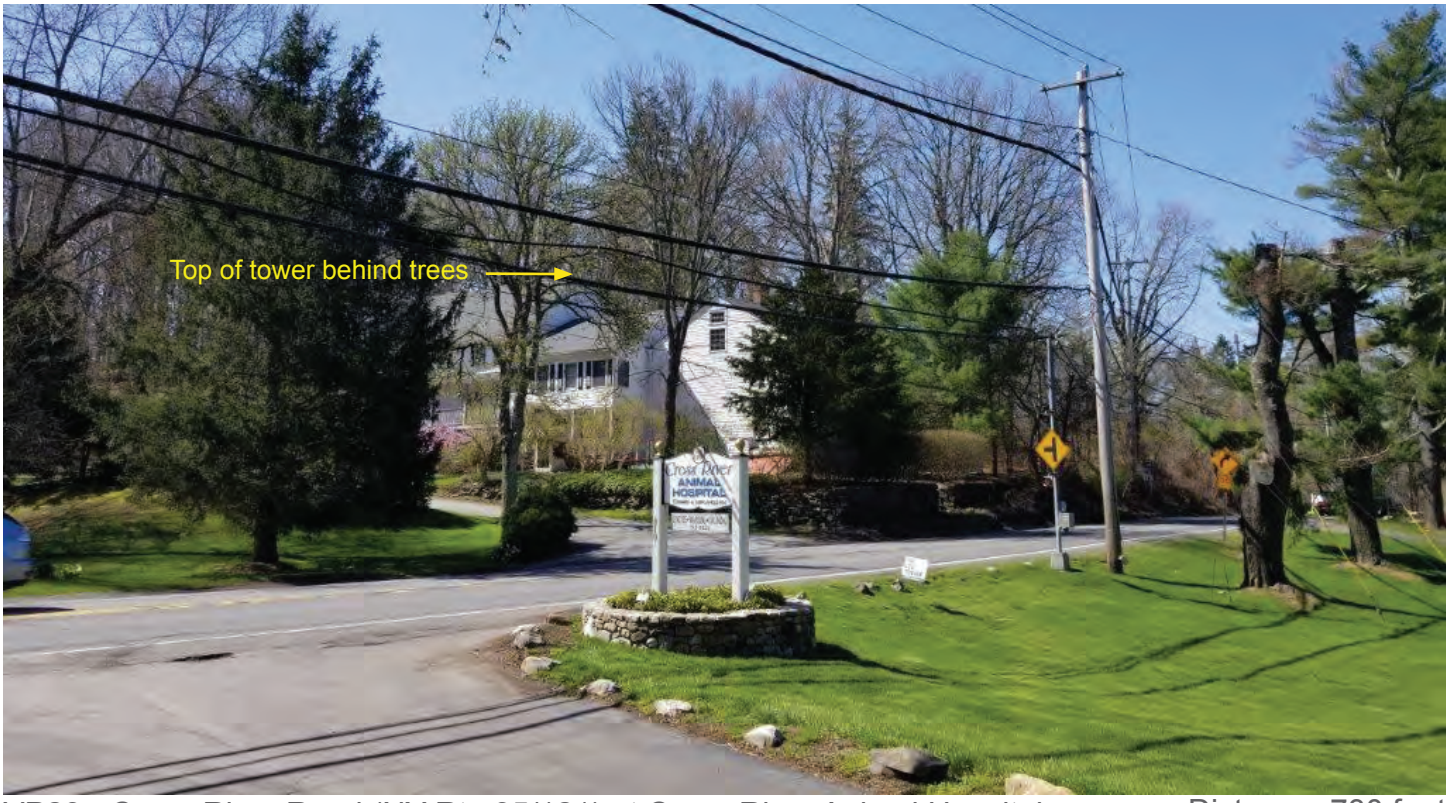
Distance: 1,070 feet

Figure A11
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY



VP23 - Cross River Road (NY Rte 35/121) at Cross River Animal Hospital Distance: 730 feet

VP24 - Old Post Road (NYRte 121) at Gideon Reynolds House Distance: 2,500 feet

Figure A12
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

SARATOGA ASSOCIATES

Proposed Wireless Telecommunications Facility

Site Name: Cross River Site, NY–143
779 Route 35
Lewisboro, NY

VISUAL RESOURCE ASSESSMENT

HOMELAND TOWERS

Prepared for:
Homeland Towers
9 Harmony Street, 2nd Floor
Danbury, CT 06810

June 5, 2017

Landscape Architects, Architects, Engineers and Planners, P.C.

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#2017-017

VISUAL RESOURCE ASSESSMENT

Homeland Towers seeks approval from the Town of Lewisboro, NY to construct a wireless telecommunications facility (the "Project") to be located on property owned by the Town of Lewisboro at 779 Route 35 ("host property"). To address issues of potential visual impact, Saratoga Associates, Landscape Architects, Architects, Engineers, and Planners, P.C. was retained to conduct a Visual Resource Assessment ("VRA") of the proposed Project.

The study area for this VRA extends to a two-mile radius from the Project site (hereafter referred to as the "2-mile study area"). Because much of the Project area is substantially wooded, detailed analysis is focused on viewpoints within a ½-mile radius ("½-mile study area").

Project Description

The Project includes the construction of a 170-foot tall monopole designed to support up to five antenna platforms. Associated ground equipment located at the base of the tower will be enclosed within an 80 feet by 40 feet (3,200 square feet) fenced area ("tower site"). The tower will be located at 41° 15' 43.68" N, 73° 36' 44.73" W. The existing ground elevation in this area is approximately 352 feet above mean sea level (AMSL).

Landscape Setting

The 2.76± acre host property is identified in Lewisboro tax records as tax parcel 53.6-1-47. The property is currently occupied by the Cyrus Russell Community Center and Town Ambulance Corps buildings. The host property is zoned "R-1/2A"; one-family residence as defined by the Lewisboro Town Code.

The tower site is approximately 300 feet south-southeast of NYS Route 35/121 (Cross River Road), 560 feet east of NYS Route 121 (Old Post Road) and 570 feet north-north east of Reservation Road. The nearest residential structure is approximately 280 feet north-northeast of tower site on NYS Route 35.

The topography within the 2-mile study area is characterized by a gently rolling terrain ranging in elevation from 815 ± feet above mean sea level (amsl) at a hilltop within the Ward Pound Ridge Reservation at the southeastern edge of the study area to 326 ± feet amsl at the Cross River Reservoir. The 940 acre Cross River Reservoir is approximately 0.3 miles south-southwest of the tower site. The Cross River (near the reservoir inlet) is approximately 400 feet south of the host property. The shoreline of the Cross River Reservoir is largely undeveloped.

The study area is substantially wooded with broad tracts of mature second growth deciduous forest interspersed with stands of mature evergreen species. The tree canopy occupies approximately 5,600 acres of the 8,040 acre study area (70%).[1] Mature deciduous tree cover generally ranges from 50 to 75 feet in height. Local mature evergreen trees may be somewhat taller.

[1] Tree cover calculations are based on areas with 50% or greater tree canopy coverage within 30 meter x 30 meter grid cells as presented in the National Land Cover Database (NLCD) 2011 Percent Tree Canopy dataset. https://www.sciencebase.gov/catalog/item/581d598be4b0dee4cc8e4547

Visual Resources

The Project is located within the hamlet of Cross River, Town of Lewisboro (population approximately 12,411[2]).

The land use within two-miles of the tower site is generally comprised of an even distribution of low density (3-10 acre lot) to moderate density (1/3 to 1 acre lot) single family residential properties. The Meadows condominium complex, 800 feet northeast of the tower site, includes approximately 165 one and two-story townhouse style residential units. A small cluster of commercial and retail uses is found at the intersection of NY Route 35 (Cross River Road) and NY Route 121 (North Salem Road). The John Jay Junior/Senior High School campus is located along NY Route 121 (North Salem Road) approximately ½ north-northeast of the tower site. The Four Winds Hospital campus is located off of NY Route 35 (Cross River Road) ½ mile northwest of the tower site.

Local recreational resources include the Westchester County owned Ward Pound Ridge Reservation and the Old Field Preserve. These natural areas are open to the public and provide miles of walking trails and other passive recreational activities in all seasons. The Lewisboro Town Park, approximately 1.5 miles northeast of the tower site provides a variety of recreational facilities including a swimming pool, baseball field, volley ball and basketball courts, picnic pavilion, concert stage and children's play areas. Several nature preserves are also found within the study area including the Mount Holly Sanctuary and the Marion Yarrow Sanctuary, Frederick P. Rose Preserve and the Richard Momsen Preserve. These conservation lands are generally open to the public for passive recreation.

There are no sites listed on the National Register of Historic Places within the 2 mile study area. "The Homestead", approximately 1.6 miles northeast of the tower site, is identified on the Westchester County Inventory of Historic Places.

Approximately 48 miles of public roadways are within the 2-mile study area. NYS Routes 35 and 121 are the most heavily travelled. NYS Route 35 has an average daily traffic volume (AADT) of approximately 15,600 vehicles to the west of old Post Road and 15,800 vehicles to the east of Old Post Road. NY Route 121 (Old Post Road) has an AADT of 2,600 south of the NY Route 35 (Cross River Road) intersection.[3]

Viewshed Analysis

Viewshed mapping identifies the geographic area within which there is a relatively high probability that some portion of the proposed Project could be visible.

One viewshed overlay was prepared defining the area within which there would be no visibility of the Project due to the screening effect of intervening topography. This "bare earth" condition identifies the maximum potential geographic area within which further investigation is appropriate. A second viewshed overlay was prepared illustrating the screening effect of existing mature vegetation. The more realistic "land cover" condition identifies the geographic area where one would expect to be substantially screened by intervening forest vegetation.

[2] 2010 census
[3] http://gis3.dot.ny.gov/html5viewer/?viewer=tdv

Global Mapper 17.0 GIS software was used to generate viewshed areas based on publicly available topographic and land cover datasets. Topographic data was derived from the National Elevation Dataset (1/3 arc second)[4]. Using Global Mapper's viewshed analysis tool, the proposed tower location and height were input and a conservative offset of six feet was applied to account for the observer's eye level. The resulting viewshed identifies grid cells with a direct line-of-sight to the tower high point (170 feet above ground level).

Within one (1) mile of the tower site existing forest vegetation and built structures were manually digitized from 1 foot resolution digital ortho-photographs (2013) acquired from NYS Orthos On-line.[5] For the remainder of the 2-mile study area existing forest vegetation is based on areas with 75% or greater tree canopy coverage as presented in the National Land Cover Database (NLCD) 2011 Percent Tree Canopy dataset.[6]

The screening effect of vegetation and built structures was incorporated by adding 50 feet in vertical height to digitized forest areas and 25 feet to building footprints. Forested areas and building footprints were removed from the viewshed result to account for affected areas located within structures or densely wooded cover.

Based on field observation, most trees in forested portions of the study area are taller than 50 feet. This height therefore represents a conservative estimate of the efficacy of vegetative screening. It is important to note that digitized vegetation is based on interpretation of forest areas that are clearly distinguishable in the source aerial photography. As such, the potential screening value of site-specific vegetative cover such as small hedgerows, street trees and individual trees and other areas of non-forest tree cover may not be represented in the viewshed analysis.

It is noteworthy that untrained reviewers often misinterpret “bare earth” condition viewshed maps to represent wintertime, or leafless condition visibility. In fact, deciduous woodlands provide a substantial visual barrier in all seasons. Since the digitized forest cover overlay generally identifies only larger stands of woodland vegetation that are clearly distinguishable from aerial photography, the land cover viewshed map is substantially representative of both leaf-on and leaf-off seasons. The bare earth condition map is provided only to assist experienced visual analysts identify the maximum potential geographic area within which further investigation is appropriate. Such bare earth viewshed maps are generally not appropriate for public interpretation.

By themselves, the viewshed maps do not determine how much of the proposed wireless telecommunications tower would be visible above intervening landform or vegetation (e.g., 100%, 50%, 10% etc. of total tower height), but rather the geographic area within which some portion of the facility theoretically would be visible. Their primary purpose is to provide a general understanding of a project’s potential visibility and identify areas where further investigation is appropriate.

[4] http://viewer.nationalmap.gov/viewer/
[5] https://orthos.dhses.ny.gov/
[6] https://www.sciencebase.gov/catalog/item/581d598be4b0dee4cc8e4547

Figure 1 illustrates areas of potential Project visibility at a macro scale within the 2-mile study area. Figure 2 provides a more localized assessment of potential Project visibility within the ½-mile study area.

Based on viewshed mapping, notable Project views will occur across open agricultural land to south of the host property. Direct views will also occur within a narrow corridor across the water surface of Cross River Reservoir extending from the Cross River inlet southwesterly to the southern shore of the reservoir. Isolated glimpses of the proposed tower will also occur along local roads within ½ mile of the Project site, including portions of NY Route 35, NY Route 121 and Bountonville Road.

Of the 8,042 acres within the 2-mile study area, a view of the proposed telecommunications tower is theoretically possible from approximately 240 acres (3%). Of the 502 acres within the 1/2-mile study area, a view of the proposed tower is possible from approximately 65 acres (13%). Approximately 20 acres of this visibility occurs on the water surface of the Cross River Reservoir.

Of the 60 miles of public roads within the 2-mile radius Study Area, potential Project views are found along approximately 1.2 linear miles (2.0%). Of the 9.2 miles of public roads within the 1/2-mile radius study area, potential Project views are found along less than 4,600 linear feet (6.1%).

Study Area Reconnaissance

An experienced visual analyst drove public roads to inventory those areas where viewshed mapping identified potential Project visibility. Photographs were taken from multiple vantage points to document views in the direction of the Project from places where a theoretical view was identified. Several locations where Project visibility was not predicted were also photographed to provide documentation of visual conditions from other areas of interest. Emphasis was placed on locations considered to be of scenic, cultural and/or social importance to the community. Such places include recreation and conservation areas, historic resources, open spaces, local roadways and residential neighborhoods.

Photographs were taken using a digital camera with a lens setting of approximately 50mm[7] to simulate normal human eyesight relative to scale. The precise coordinates of each photo location were recorded in the field using a handheld global positioning system (GPS) unit. Prior field reconnaissance the coordinates of the proposed telecommunications tower were programmed into a handheld GPS unit as a “waypoint”. The "waypoint indicator" function of the GPS (arrow pointing along a calculated bearing) was used to assist the visual analyst determine the direction of the tower site from each photo location.

[7] A Canon EOS digital SLR with a 24-85milimeter (mm) zoom lens was used for most of the Project photography. This digital camera, similar to most digital SLR cameras, has a sensor that is approximately 1.6 times smaller than a comparable full frame 35mm film camera. Recognizing this differential, the zoom lens used was set to approximately 31mm to achieve a field-of-view comparable to a 50mm lens on a full frame 35mm camera (31mm x 1.6 = 50mm).

Photographs taken during the field reconnaissance are provided in Appendix A – Photo Log. Photographs were taken from the following places:

Map ID	Location	Direction	Distance to Tower (feet)	Theoretical View Indicated by Land Cover Viewshed - (See Figures 1 & 2)	Tower Visible Based on 3D Modeling*	Photo/ Simulation Provided as
1	Old Post Rd (NY Rte 121) near Honey Hollow Rd)	NNE	4,010	No	No	
2	Boutonville Road near Michigan Road	WNW	4,430	Yes	Yes	Figure 3
3	Boutonville Road	NNW	1,310	Yes	Seasonal**	Figure 4
4	Boutonville Road	N	1,200	Yes	Seasonal**	
5	Reservation Road	N	720	No	Seasonal**	Figure 5
6	Old Post Rd (NY Rte 121) near Boutonville Rd	NE	1,190	Yes	No	
7	Old Post Rd (NY Rte 121) at Cross River Res.	ENE	630	Yes	Yes	Figure 6
8	Cross River Rd (NY Rte 35/121) at Tower Site	SE	300	Yes	Yes	Figure 7
9	Cross River Rd (NY Rte 35/121) at Cross Meadow La	SSW	790	Yes	Seasonal**	Figure 8
10	Briar Court	SSW	1,190	Yes	Seasonal**	
11	Cross Meadow Lane near Briar Court	SSW	1,100	Yes	Yes	Figure 9
12	Winterberry Circle	SSW	1,530	Yes	Yes	Figure 10
13	Cross River Rd (NY Rte 35) near Old Post Rd	ESE	1,250	Yes	No	
14	Avery Road	ESE	3,040	No	No	
15	Lambert Ridge	SSE	2,530	No	No	
16	Cross Meadow Lane at Willow Court	SSW	2,310	Yes	Yes	
17	N Salem Rd (NY Rte 121) at Cross River Rd (NY Rte 25)	SW	2,890	No	No	
18	N Salem Rd (NY Rte 121) at John Jay H S	SSW	3,520	No	No	
19	John Jay HS at Tennis Courts	SSW	4,140	Yes	Seasonal**	

* "Tower Visible Based on 3D Modeling" differs from "Theoretical View Indicated by Land Cover Viewshed" due to the use of a highly conservative estimate of tree height in viewshed calculation (50 feet). In most cases mature woodland vegetation is significantly taller resulting in reduced Project visibility.
** "Seasonal" visibility indicates photo locations where the Project may be visible through intervening deciduous vegetation during winter leaf-off season. Such views would likely be fully screened during summer leaf-on season.

Photo Simulations

To illustrate how the monopole design wireless telecommunications tower will appear photo simulations were prepared from eight (8) affected photo locations. Photo simulations were developed by superimposing a rendering of a three-dimensional computer model of the proposed Project into the base photograph taken from each corresponding visual receptor. The three-dimensional computer model was developed using *3D Studio Max Design*® software (3D Studio Max).

Simulated perspectives (camera views) were matched to the corresponding base photograph for each simulated view by replicating the precise coordinates of the field camera position (as recorded by handheld GPS) and the focal length of the camera lens used (e.g. 50mm). Precisely matching these parameters assures scale accuracy between the base photograph and the subsequent simulated view. The camera's elevation (Z) value is derived from digital elevation model (DEM) data plus the camera's height above ground level. The camera's target position was set to match the bearing of the corresponding existing condition photograph as recorded in the field. With the existing conditions photograph displayed as a "viewport background," and the viewport properties set to match the photograph's pixel dimensions, minor camera adjustments were made (horizontal and vertical positioning, and camera roll) to align the horizon in the background photograph with the corresponding features of the 3D model.

To verify the camera alignment, elements (e.g. existing buildings, utility poles, topography, vegetation, roads, etc.) visible within the photograph were identified and digitized from digital orthophotos. Each element was assigned a Z value based on DEM data and then imported to 3D Studio Max. A 3D terrain model was also created (using DEM data) to replicate the existing local topography. The digitized elements were then aligned with corresponding elements in the photograph by adjusting the camera target. If necessary, slight camera adjustments were made for accurate alignment.

A daylight system was created matching the exact date and time of each baseline photograph to assure proper shading and shadowing of modeled elements.

Once the camera alignment was verified, a to-scale 3D model of the proposed 170 foot tall wireless telecommunications tower was merged into the model space. The 3D model of a monopole style tower was constructed in sufficient detail to accurately convey visual character and reveal impacts. The scale, alignment, elevations and location of the visible elements of the proposed tower are true to the conceptual design. Post production editing (i.e., airbrush out portion of tower that falls below or behind foreground topography and vegetation) was completed using Adobe Photoshop software. The methodology accurately represents the location, height and visual character of the proposed tower.

Conclusions

The study area is characterized by a gently rolling landscape with dense woodland vegetation that screens the Project from most locations. Of the 8,042 acres within the 2-mile study area, a view of the proposed telecommunications tower is theoretically possible from approximately 240 acres (3%). Of the 502 acres within the 1/2-mile study area, a view of the proposed tower is possible from approximately 65 acres (13%). Approximately 20 acres of this visible area occurs on the water surface of the Cross River Reservoir.

Of the 60 miles of public roads within the 2-mile radius Study Area, potential Project views are found along approximately 1.2 linear miles (2.0%). Of the 9.2 miles of public roads within the 1/2-mile radius study area, potential Project views are found along less than 4,600 linear feet (6.1%). Dense vegetation and intervening topography substantially limit Project views from these travel corridors to isolated and brief glimpses.

The proposed telecommunications tower will be visible along the access road into the Ward Pound Ridge Reservation. Views are found where Boutonville Road passes through an open agricultural field at a distance greater than 1 ¼ miles. For westbound motorists (exiting the Ward Pound Ridge Preserve) the proposed tower will be viewed against the background hillside. At this distance and the Project visually subordinate to the other built structures in within view and not a point of visual distinction (See Figure 10).

The Project will not be visible from the Lewisboro Town Park, Mount Holly Sanctuary, Marion Yarrow Sanctuary, Frederick P. Rose Preserve or the Richard Momsen Preserve.

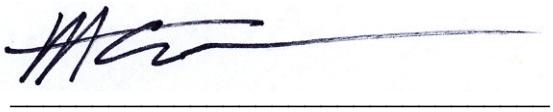
No resources listed on the National Register of Historic Places will be affected by views of the proposed Project. “The Homestead” historic site, indentified in the Westchester County Inventory of Historic resources will be fully screened by intervening vegetation.

Visual impact is defined by the NYS Department of Environmental Conservation as follows:

> *“Aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Significant aesthetic impacts are those that may cause a diminishment of the public enjoyment and appreciation of an inventoried resource, or one that impairs the character or quality of such a place”.*[8]

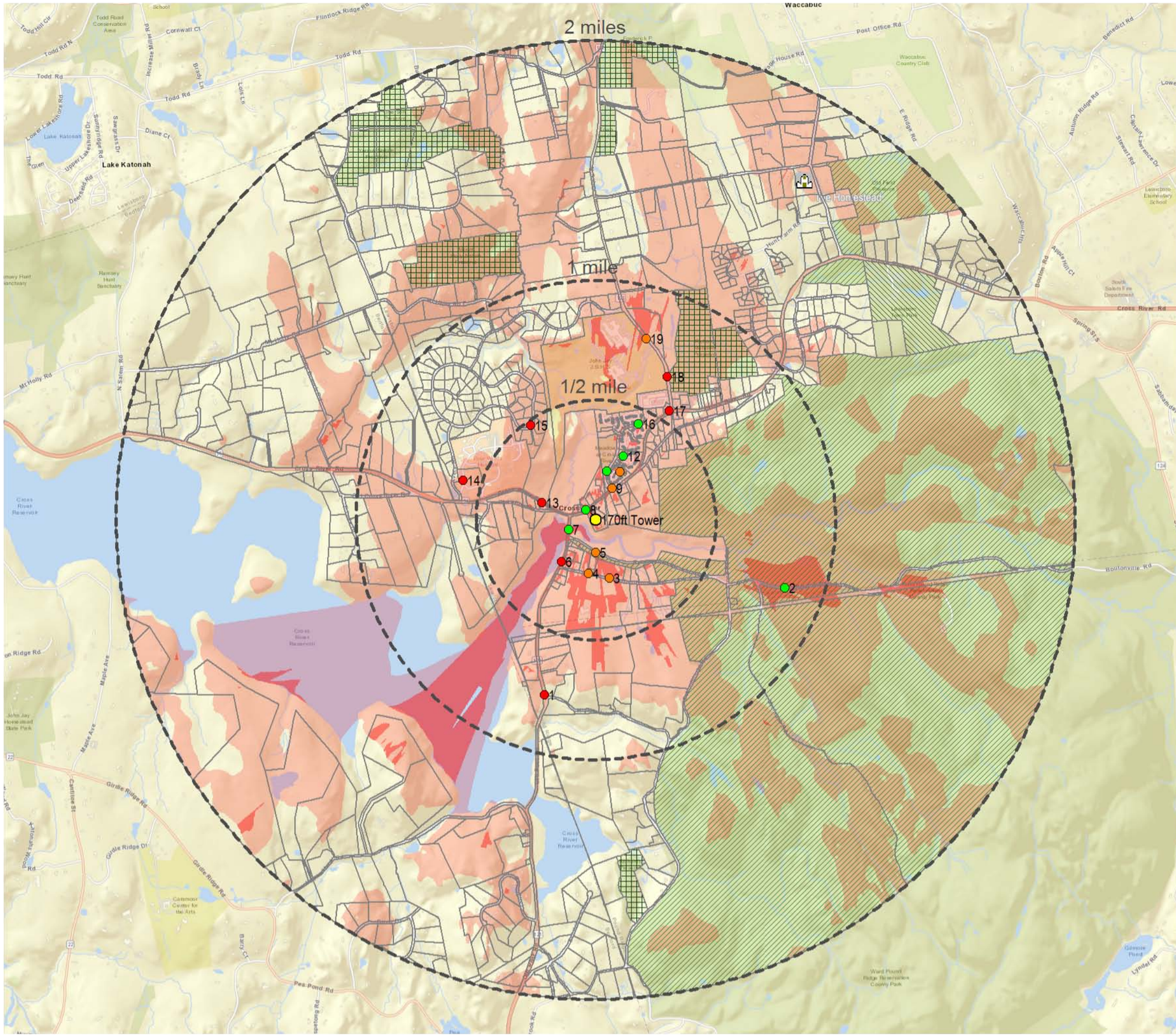
Based on the limited Project visibility identified in this visual assessment, it is reasonable to conclude that the proposed telecommunications tower will not create a detrimental effect on the scenic resources of the area, nor will it cause the diminishment of public enjoyment and appreciation of any visually sensitive place. As such the proposed Project will not result in an adverse visual impact.

Submitted by:



Matthew W. Allen, RLA

[8] NYS DEC Program Policy for Assessing and Mitigating Visual Impact, DEP-00-2, July 31, 2000, p. 5.



LEGEND

- Bare Earth Viewshed Area (Excludes existing vegetation and structures)
- Land Cover Viewshed Area (Includes existing vegetation and structures)
- County Park
- Municipal Park
- Open Space Preserve
- County Inventory of Historic Places
- Photo Location - Tower Not Visible
- Photo Location - Tower Visible
- Photo Location - Tower Visible (Seasonal)

Note: Viewshed areas are not definitive. Viewshed mapping provides a general understanding of where the proposed project is theoretically visible based on regional topographic, forest and building cover data sources.

The "Bare Earth' condition overlay identifies areas where the proposed telecommunictions tower high point may be visible without consideration of the screening effect of existing vegetation or built structures. Bare earth analysis is provided to assist experienced visual analysts identify the maximum potential geographic area within which further investigation is appropriate. This topography-only viewshed map is not representative of project visibility during winter season leaf-off conditions.

The "Land Cover" condition viewshed area includes the screening effect of intervening vegetation and buildings. Vegetated areas and buildings were manually digitized from 2016 one-foot resolution digital orthoimagery. All digitized tree cover is assumed to be 50 foot tall and all digitized buildings are assumed to be 25 foot tall.

0 ft 2000 ft 4000 ft 6000 ft

FIGURE 1

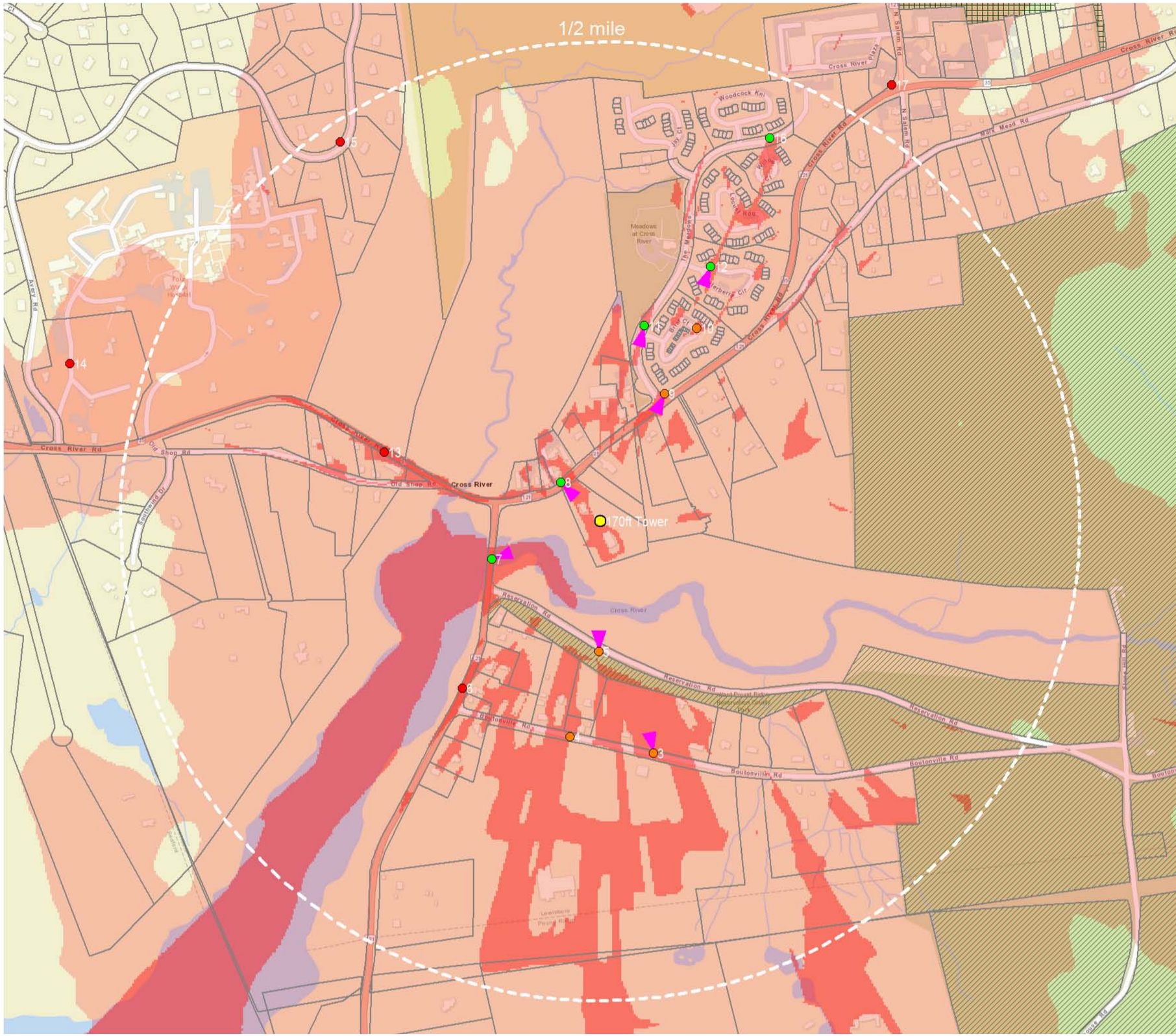
VIEWSHED MAP - 2 MILE RADIUS

Visual Resource Assessment

Proposed Telecommunications Tower

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY



LEGEND

- Bare Earth Viewshed Area (Excludes existing vegetation and structures)
- Land Cover Viewshed Area (Includes existing vegetation and structures)
- County Park
- Municipal Park
- Open Space Preserve
- County Inventory of Historic Places
- Photo Simulation
- Photo Location - Tower Not Visible
- Photo Location - Tower Visible
- Photo Location - Tower Visible (Seasonal)

Note: Viewshed areas are not definitive. Viewshed mapping provides a general understanding of where the proposed project is theoretically visible based on regional topographic, forest and building cover data sources.

The "Bare Earth' condition overlay identifies areas where the proposed telecommunictions tower high point may be visible without consideration of the screening effect of existing vegetation or built structures. Bare earth analysis is provided to assist experienced visual analysts identify the maximum potential geographic area within which further investigation is appropriate. This topography-only viewshed map is not representative of project visibility during winter season leaf-off conditions.

The "Land Cover" condition viewshed area includes the screening effect of intervening vegetation and buildings. Vegetated areas and buildings were manually digitized from 2016 one-foot resolution digital orthoimagery. All digitized tree cover is assumed to be 50 foot tall and all digitized buildings are assumed to be 25 foot tall.

0 ft 500 ft 1000 ft 1500 ft

FIGURE 2

VIEWSHED MAP - 1/2 MILE RADIUS

Visual Resource Assessment

Proposed Telecommunications Tower

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	14:34pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 28.4616” N 73° 35’ 50.3628” W
Distance:	4,430 Feet

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 3a

Existing Condition

VP2 - Boutonville Road near Michigan Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Photograph Information

Date:	April 11, 2017
Time:	14:34pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 28.4616" N 73° 35' 50.3628" W
Distance:	4,430 Feet
Visibility:	Year Round

Figure 3b

Simulated Condition

VP2 - Boutonville Road near Michigan Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Photograph Information

Date:	April 11, 2017
Time:	12:55pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 31.0392" N 73° 36' 41.0652" W
Distance:	1,310 Feet

Figure 4a

Existing Condition

VP3 - Bountonville Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Photograph Information

Date:	April 11, 2017
Time:	12:55pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 31.0392" N 73° 36' 41.0652" W
Distance:	1,310 Feet
Visibility:	Seasonal

Figure 4b

Simulated Condition

VP3 - Bountonville Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Photograph Information

Date:	April 11, 2017
Time:	12:51pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 36.6012" N 73° 36' 44.9424" W
Distance:	720 Feet

Figure 5a

Existing Condition

VP5 - Reservation Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Photograph Information

Date:	April 11, 2017
Time:	12:51pm
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Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 36.6012" N 73° 36' 44.9424" W
Distance:	720 Feet
Visibility:	Seasonal

Figure 5b

Simulated Condition

VP5 - Reservation Road

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Photograph Information

Date:	April 11, 2017
Time:	12:47pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 41.6772" N 73° 36' 52.5816" W
Distance:	630 Feet

Figure 6a

Existing Condition

VP7 - Old Post Road (NY Rte 121) at Cross River Reservoir

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS

Photograph Information

Date:	April 11, 2017
Time:	12:47pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 41.6772” N 73° 36’ 52.5816” W
Distance:	630 Feet
Visibility:	Year Round

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 6b

Simulated Condition

VP7 - Old Post Road (NY Rte 121) at Cross River Reservoir

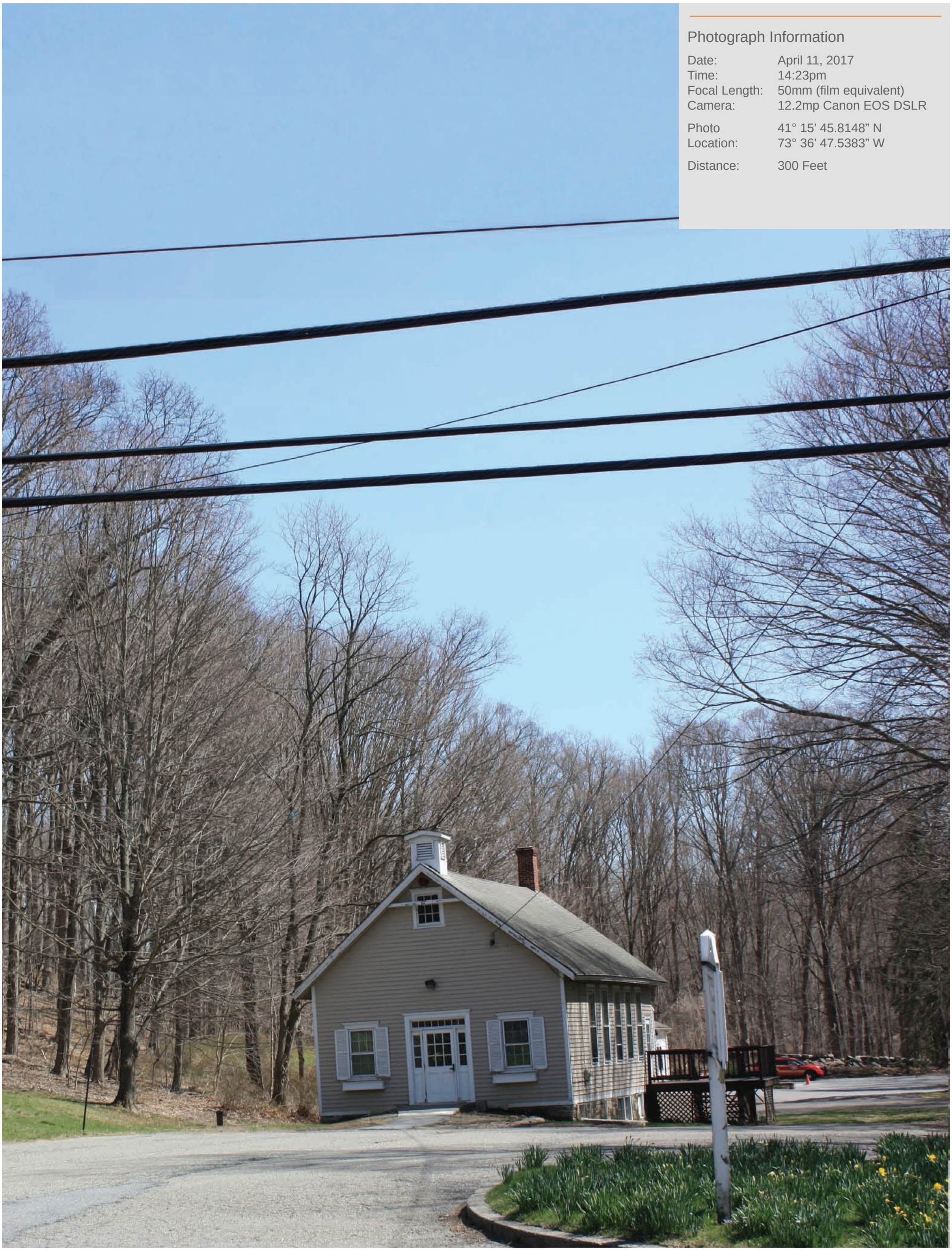
SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS



Photograph Information

Date:	April 11, 2017
Time:	14:23pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 45.8148” N 73° 36’ 47.5383” W
Distance:	300 Feet

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 7a

Existing Condition

VP8 - Cross River Road (NY Rte 35) at Tower Site

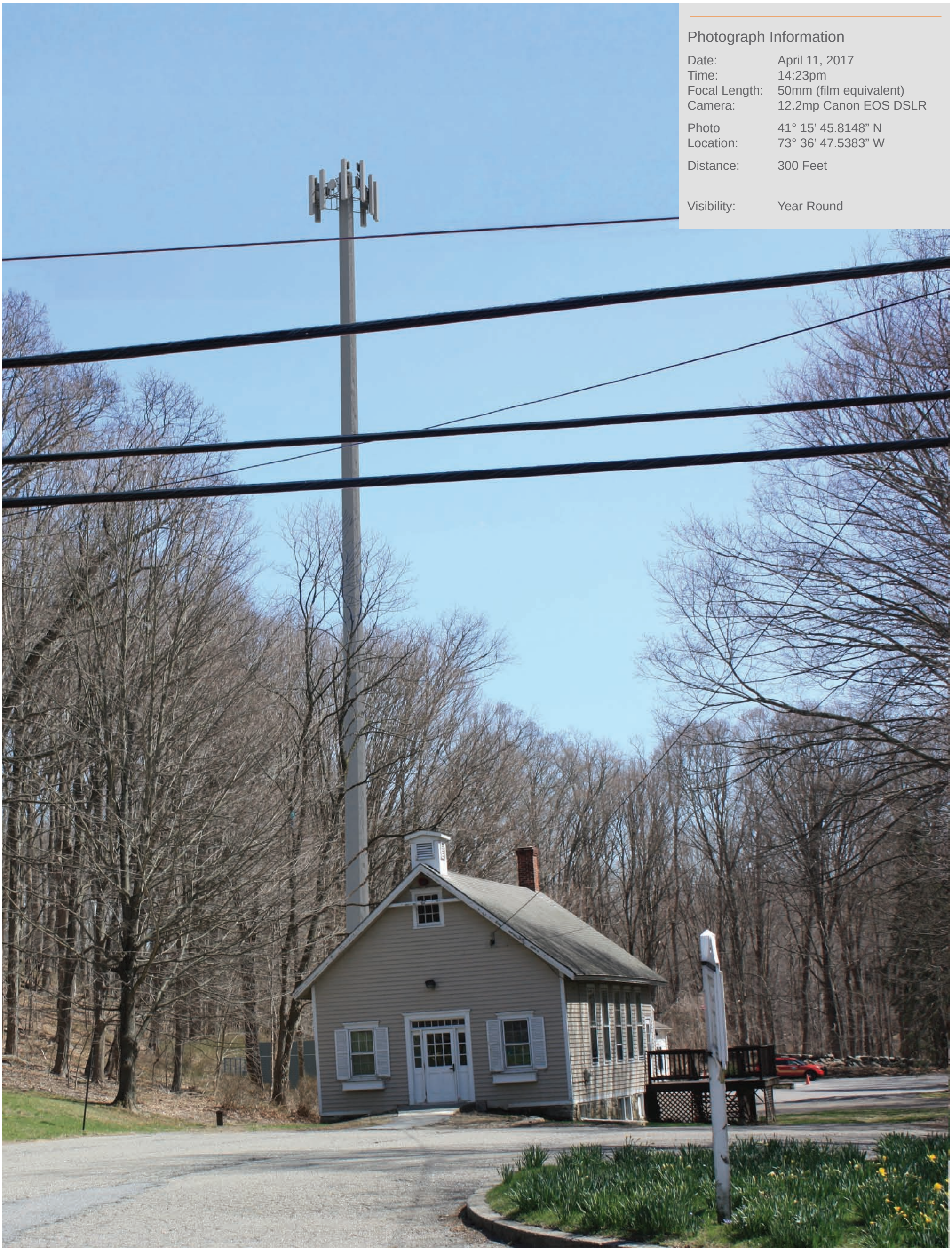
SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY



Photograph Information

Date:	April 11, 2017
Time:	14:23pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 45.8148” N 73° 36’ 47.5383” W
Distance:	300 Feet
Visibility:	Year Round

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 7b

Simulated Condition

VP8 - Cross River Road (NY Rte 35) at Tower Site

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	14:15pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 50.5728” N 73° 36’ 39.9924” W
Distance:	790 Feet

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 8a

Existing Condition

VP9 - Cross River Road (NY Rte 35/121) at Cross Meadows Lane

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS

Photograph Information

Date:	April 11, 2017
Time:	14:15pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 50.5728” N 73° 36’ 39.9924” W
Distance:	790 Feet
Visibility:	Seasonal

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 8b

Simulated Condition

VP9 - Cross River Road (NY Rte 35/121) at Cross Meadows Lane

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS

Photograph Information

Date:	April 11, 2017
Time:	10:39am
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 54.2882” N 73° 36’ 41.4229” W
Distance:	2,800 Feet

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 9a

Existing Condition

VP11 - Cross Meadows Lane near Briar Court

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS

Photograph Information

Date:	April 11, 2017
Time:	10:39am
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 54.2882” N 73° 36’ 41.4229” W
Distance:	2,800 Feet
Visibility:	Year Round

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 9b

Simulated Condition

VP11 - Cross Meadows Lane near Briar Court

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS

Photograph Information

Date:	April 11, 2017
Time:	14:03pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 57.4704” N 73° 36’ 36.5940” W
Distance:	1,530 Feet

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 10a

Existing Condition

VP12 - Winterberry Circle

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS

Photograph Information

Date:	April 11, 2017
Time:	14:03pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15’ 57.4704” N 73° 36’ 36.5940” W
Distance:	1,530 Feet
Visibility:	Year Round

The above photograph is intended to be viewed 18 inches from the reader’s eye when printed on 11”x17” paper.

Figure 10b

Simulated Condition

VP12 - Winterberry Circle

SARATOGA ASSOCIATES

Visual Resource Assessment

PROPOSED TELECOMMUNICATIONS TOWER

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS

APPENDIX A

Photo Log

VP1 - Old Post Road (NY Rte 121) near Honey Hollow Road

Distance: 4,010 feet

VP2 - Boutonville Road near Michigan Road

Distance: 4,430 feet

Figure A1
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP3 - Boutonville Road

Distance: 1,310 feet

VP4 - Boutonville Road

Distance: 1,200 feet

Figure A2
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP5 - Reservation Road

Distance: 720 feet

VP6 - Old Post Road (NY Rte 121) near Boutonville Road

Distance: 1,190 feet

Figure A3
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP7 - Old Post Road (NY Rte 121) at Cross River Reservoir

Distance: 630 feet

VP8 - Cross River Road (NY Rte 35/121) at Tower Site

Distance: 300 feet

Figure A4
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP9 - Cross River Road (NY Rte 35/121) at Cross Meadows Lane

Distance: 790 feet

VP10 - Briar Court

Distance: 1,190 feet

Figure A5
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

SARATOGA ASSOCIATES

HOMELAND TOWERS

VP11 - Cross Meadow Lane near Briar Court

Distance: 1,100 feet

VP12 - Winterberry Circle

Distance: 1,530 feet

Figure A6
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP13 - Cross River Road (NY Rte 35) near Old Post Road

Distance: 1,250 feet

VP14 - Avery Road

Distance: 3,040 feet

Figure A7
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP15 - Lambert Ridge

Distance: 2,530 feet

VP16 - Cross Meadow Lane at Willow Court

Distance: 2,310 feet

Figure A8
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP17 - North Salem Road (NY Rte 121) at Cross River Road (NY Rte 25) Distance: 2,890 feet

VP18- North Salem Road (NY Rte 121) at Johh Jay High School Distance: 3,520 feet

Figure A9
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

VP19 - John Jay High School at Tennis Courts

Distance: 4,140 feet

Figure A10
PHOTO LOG
Visual Resource Assessment
Proposed Telecommunications Tower

SARATOGA ASSOCIATES

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

HOMELAND TOWERS

AFFIDAVIT OF RAYMOND M. VERGATI

I, Raymond M. Vergati, do hereby declare and state:

1. I am over the age of 18 years, and believe in the obligation of an oath.

2. I am the Regional Manager of Homeland Towers, LLC with respect to projects in New York.

3. Homeland Towers has overseen the development of the telecommunications facility proposed at 779 Route 35, Cross River, NY ("Facility"). I assisted in all facets of the site acquisition and have personal knowledge of the development of the Facility including the specific contents of this affidavit.

4. I communicated with various parcel owners via certified mail, emails and phone calls to determine landlord interest in entering into a lease with Homeland Towers for the purpose of constructing a wireless Facility. The list of those properties and the reasons why they were rejected are attached hereto as **Exhibit A.** A map of those properties is attached hereto as **Exhibit B.**

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 3rd day of May 3, 2018.

Raymond M. Vergati

Subscribed and sworn to before me this 3 day of May, 2018.

VINCENT L. XAVIER
NOTARY PUBLIC-STATE OF NEW YORK
No. 01XA6136274
Qualified In Westchester County
My Commission Expires 01-09-2022

Notary Public
My Commission Expires: 1-9-22

VINCENT L. XAVIER
NOTARY PUBLIC-STATE OF NEW YORK
No. 01XA6136274
Qualified in Westchester County
My Commission Expires 01-09-2022

HOMELAND TOWERS

EXHIBIT A

Site Search Summary

In general, a "site search area" is developed to initiate a site selection process in an area where a service need has been identified. The site search area is a general location where the installation of a wireless facility would address an identified coverage need problem while still allowing for orderly integration of the site into a network such as Verizon's, based on the engineering criteria hand-off, frequency reuse and interference. In any site search area, the Applicants seek to avoid the unnecessary proliferation of towers and to reduce the potential adverse environmental effects of a needed facility, while at the same time ensuring the quality of service provided by the site to users of its network.

The candidate identification process includes reviewing the applicable zoning ordinance to identify areas within which the proposed use is allowed. Viable candidates consist of existing structures of sufficient height from which an antenna installation can provide sufficient coverage, or lacking such a structure, parcels located within the narrowly defined search area upon which a tower may be constructed to a sufficient height. In order to be viable, a candidate must provide adequate service to the significant gap in Verizon's network. In addition, all viable candidates must have a willing landowner with whom commercially reasonable lease terms may be negotiated. Preference is given to locations that closely comply with local zoning ordinances, or in the event no viable candidates are determined to be located within such areas, to identify other potentially suitable locations. In the case of this particular site search area in the Town of Lewisboro, no tall, non-tower structures were located within the identified area of need. The area consists of mainly residential and commercial structures. There are no existing structures within the search area adequate to meet the coverage requirements of the proposed facility.

As noted below, Homeland Towers, LLC investigated a number of different parcels of land within and near this area for construction of a new facility. The Applicants found these sites to be adequate and available for the siting of a wireless facility or, for the reasons cited below, unavailable or inappropriate for the siting of a facility or technically inadequate to satisfy Verizon's service requirements in this area of need.

Properties Investigated by Homeland Towers
NY143 Cross River

Homeland Towers identified and investigated seventeen (17) sites in and around the Cross River site search area where the construction of a new tower might be feasible for radio frequency engineering purposes. A list of Homeland Tower's sites investigated are set forth below along with a map depicting the approximate location of the sites investigated.

A. Cyruss Russell House, 779 Route 35, Cross River, NY
Tax ID: 53.6-1-47
Owner: Town of Lewisboro
Zoning District: R 1/2 A
Parcel Size: 2.64 Ac.

This is the Candidate site where the wireless Facility is proposed.

B. Reynolds Cross River Cemetery, Route 35, Cross River, NY
Tax ID: 53.6-1-44
Owner: Town of Lewisboro
Zoning District: R 1/2 A
Parcel Size: 2.28 Ac

This parcel was discussed with the Town and walked with the Town Planner. Due to the presence of steep slopes this parcel was not pursued. In addition, due to the small parcel size, which is only 2.28 acres, setbacks would not be met.

C. Richard Momsen Preserve, North Salem Road, Cross River, NY
Tax ID: 42.4-1-2
Owner: Town of Lewisboro
Zoning District: R-4A
Parcel Size: 44.16 Ac.

This parcel was discussed with the Town, due to a deed restriction, this parcel was not pursued.

D. Richard Momsen Preserve, Debbie Lane, Cross River, NY
Tax ID: 42.4-1-22
Owner: Town of Lewisboro
Zoning District: R-1A
Parcel Size: 17.23 Ac.

This parcel was discussed with the Town, due to a deed restriction, this parcel was not pursued.

E. Vacant Lot, Route 35, Cross River, NY
Tax ID: 42.4-1-22
Owner: Town of Lewisboro
Zoning District: R-1A
Parcel Size: 2.43 Ac.

This parcel was discussed with the Town and walked with the Town Planner. Due to the presence of extensive wetlands this parcel was not pursued.

F. 892 Route 35, Cross River, NY
Tax ID: 42.4-1-6
Owner: Old Post Road Professional Building & Annex, Inc.
Zoning District: RB
Parcel Size: 1.46 Ac.

Due to the small parcel size, which is only 1.46 acres, setbacks would not be met. In addition, the parcel offered very little screening as it is located directly on Route 35.

G. Meadows at Cross River Water Pump Parcel, Briar Court, Cross River, NY
Tax ID: 53.6-1-10
Owner: The Meadows at Cross River Homeowners Association
Zoning District: R-MF
Parcel Size: 1.1 Ac.

There have been discussions but no decision has been made on the part of the Meadows Condo Board in leasing to Homeland Towers.

H. Meadows at Cross River -Sewage/Water Parcel, Jay Court, Cross River, NY
Tax ID: 42.18-1-12
Owner: The Meadows at Cross River Sewage Works Corp.
Zoning District: R-MF
Parcel Size: 5.14 Ac.

Owner stated they were not interested in leasing to Homeland Towers.

I. 876 Route 35, Cross River, NY
Tax ID: 42.4-1-3
Owner: Marjorie V. Clark
Zoning District: RB
Parcel Size: .98 Ac.

Owner did not respond to proposal letter.

J. Michelle Estates Homeowners Association Inc., Lambert Ridge, Cross River, NY
Tax ID: 42.3-1-51
Owner: Michelle Estates Homeowners Association Inc
Zoning District: R-1A
Parcel Size: 34.31 Ac.

Owner stated they were not interested in leasing to Homeland Towers.

K. 35 North Salem Road, Cross River, NY
Tax ID: 42.3-1-51
Owner: Laurence & Judith Beller
Zoning District: R-4A
Parcel Size: 16.62 Ac.

Owner did not respond to proposal letter.

L. Cross River Shopping Plaza, 16 North Salem Road, Cross River, NY
Tax ID: 42.18-1-2
Owner: EK Cross River, LLC
Zoning District: RB
Parcel Size: 5.44 Ac.

Owner stated they were not interested in leasing to Homeland Towers.

M. 890 Route 35, Cross River, NY
Tax ID: 42.4-1-5
Owner: Cross River Westchester Association
Zoning District: RB
Parcel Size: 1.46 Ac.

Owner did not respond to proposal letter.

N. 19 North Salem Road, Cross River, NY
Tax ID: 42.18-1-3
Owner: Cross River Realty Corp.
Zoning District: RB
Parcel Size: .897 Ac.

Owner did not respond to proposal letter.

O. Route 35 (vacant), Cross River, NY
Tax ID: 42.4-1-7
Owner: Bjorn Rafoss
Zoning District: RB
Parcel Size: .41 Ac.

Due to the small parcel size which is only .41 acres, setbacks would be limited and the parcel offered very little screening as it is located directly on Route 35.

P. John Jay High School, 60 North Salem Road, Cross River, NY
Tax ID: 42.18-1-1
Owner: Union Free School District 1
Zoning District: R-4A
Parcel Size: 107.65 Ac.

The School District stated they were not interested in leasing to Homeland Towers.

Q. Four Winds Hospital, 750 Route 35, Katonah, NY
Tax ID: 53.1-2-8
Owner: Four Winds Inc.
Zoning District: R-1A
Parcel Size: 42.7 Ac.

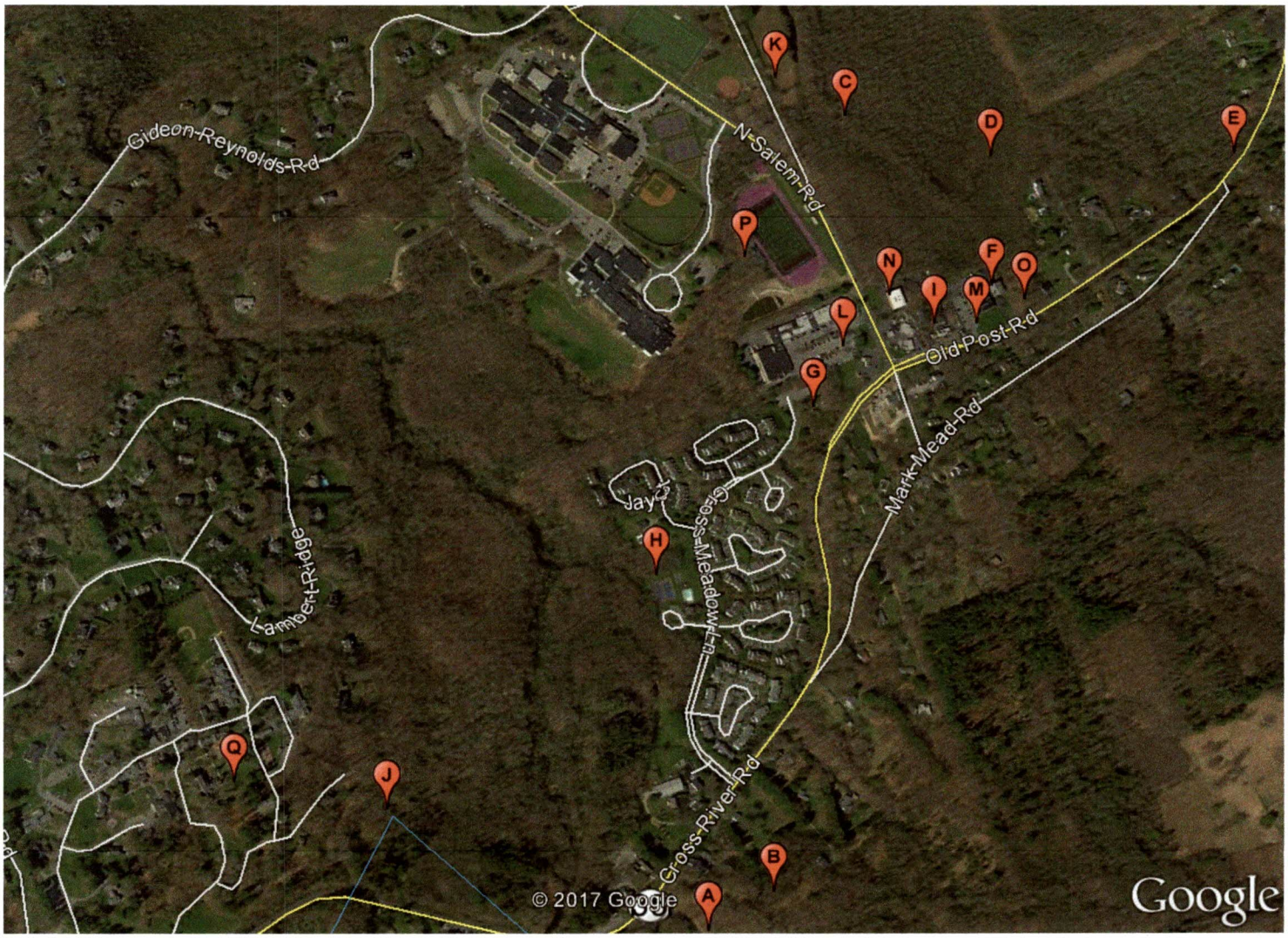
Owner stated they were not interested on leasing to Homeland Towers.

Based on the forgoing, the proposed site is capable of remedying Verizon's significant gap in service, and will be the least intrusive alternative.

HOMELAND TOWERS

EXHIBIT B

Aerial Map of Homeland Towers search and proposed site (A-NY143)



PierCon Solutions L.L.C.
Specialists in Wireless Systems

May 3, 2018

Town of Lewisboro
11 Main Street
South Salem, NY 10590

Re: Homeland Towers, LLC
779 Route 35
Lewisboro, NY 10518

Honorable Supervisor and Members of the Town Board:

On behalf of Homeland Towers, LLC, our office has prepared coverage plots for the proposed wireless telecommunications facility at the above captioned site. Verizon Wireless is interested in locating antennas upon a monopole at antenna centerline heights of 166' (170' to top of monopole). A monopole height of 170' allows colocation of up to four wireless carriers. Verizon Wireless is licensed by the FCC in the 700, 800, 1900, and 2100 MHz frequency bands.

Verizon Wireless primarily uses the 700/800 MHz frequency bands to provide widespread coverage for customers since coverage provided is inherently larger at lower frequency bands. The higher frequency bands are more adversely affected by local factors leading to less coverage obtained by a site than the lower frequency bands. Verizon Wireless primarily uses the 1900/2100 MHz frequency bands to provide additional capacity to customers. Additional capacity is typically needed in residential neighborhoods, schools, businesses, and anywhere where high speed data is used. In order to provide additional capacity to a specific area, coverage at the higher frequency bands must be adequate.

Currently, there is a coverage gap in the vicinity of 779 Route 35. The attached coverage plots show two different frequency bands at 700 and 2100 MHz. The proposed plots were created using the proposed antenna height of 166'.

Verizon Wireless demonstrates acceptable signal levels in terms of dBm Reference Signal Received Power (RSRP). A dBm is a unit of signal strength in decibels referenced to a milliwatt. RSRP is the measurement which identifies where LTE service is acceptable based on predetermined thresholds. The acceptable signal levels shown in attached plots are an RSRP value equal to or greater than -95 dBm RSRP for reliable suburban residential in-building coverage and an RSRP value equal to or greater than -105 dBm for reliable suburban outdoor and in-vehicle use. Stronger signal levels may be required for reliable service inside buildings such as dense residential, commercial, industrial, and other masonry type buildings.

Also attached is a detailed site table of the surrounding sites which provide coverage to this area of Lewisboro. The table contains details such as site name, address, structure type, and antenna height.

CORPORATE HEADQUARTERS
63 Beaver Brook Rd., Suite 201
Lincoln Park, NJ 07035
973-628-9330 phone 973-628-9321 fax

Verizon Wireless Exhibits:

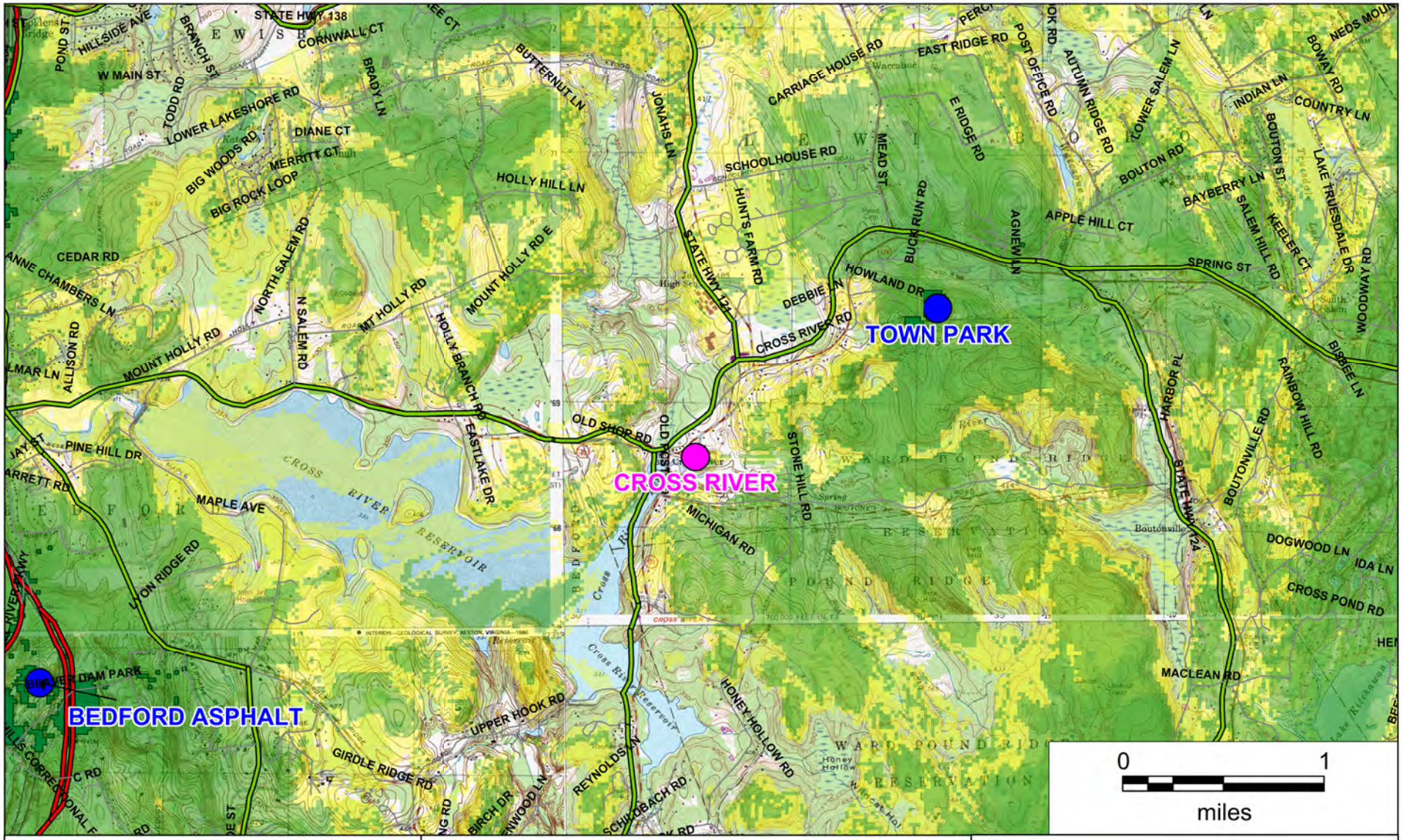
1. Existing Verizon Wireless 700 MHz LTE Coverage
2. Existing and Proposed Verizon Wireless 700 MHz LTE Coverage at 170' Proposed Height
3. Existing and Proposed Verizon Wireless 700 MHz LTE Coverage at 140' Proposed Height
4. Existing Verizon Wireless 2100 MHz LTE Coverage
5. Existing and Proposed Verizon Wireless 2100 MHz LTE Coverage at 170' Proposed Height
6. Existing and Proposed Verizon Wireless 2100 MHz LTE Coverage at 140' Proposed Height
7. Detailed Site Table

As evidenced by the above referenced plots, the attainable coverage from 140' to 170' (136' to 166' antenna centerlines) all show acceptable coverage. Any antennas mounted below the 136' mounting position will have its coverage significantly impacted due to nearby terrain and topography.

Please let me know if anything is unclear in these attachments. After you have had the opportunity to review the exhibits, please feel free to contact me regarding any questions you may have.

Regards,

Adam Feehan
RF Engineer
PierCon Solutions LLC
(973)-628-9330 ext 225



Cross River

Existing Verizon Wireless
700 MHz LTE Coverage

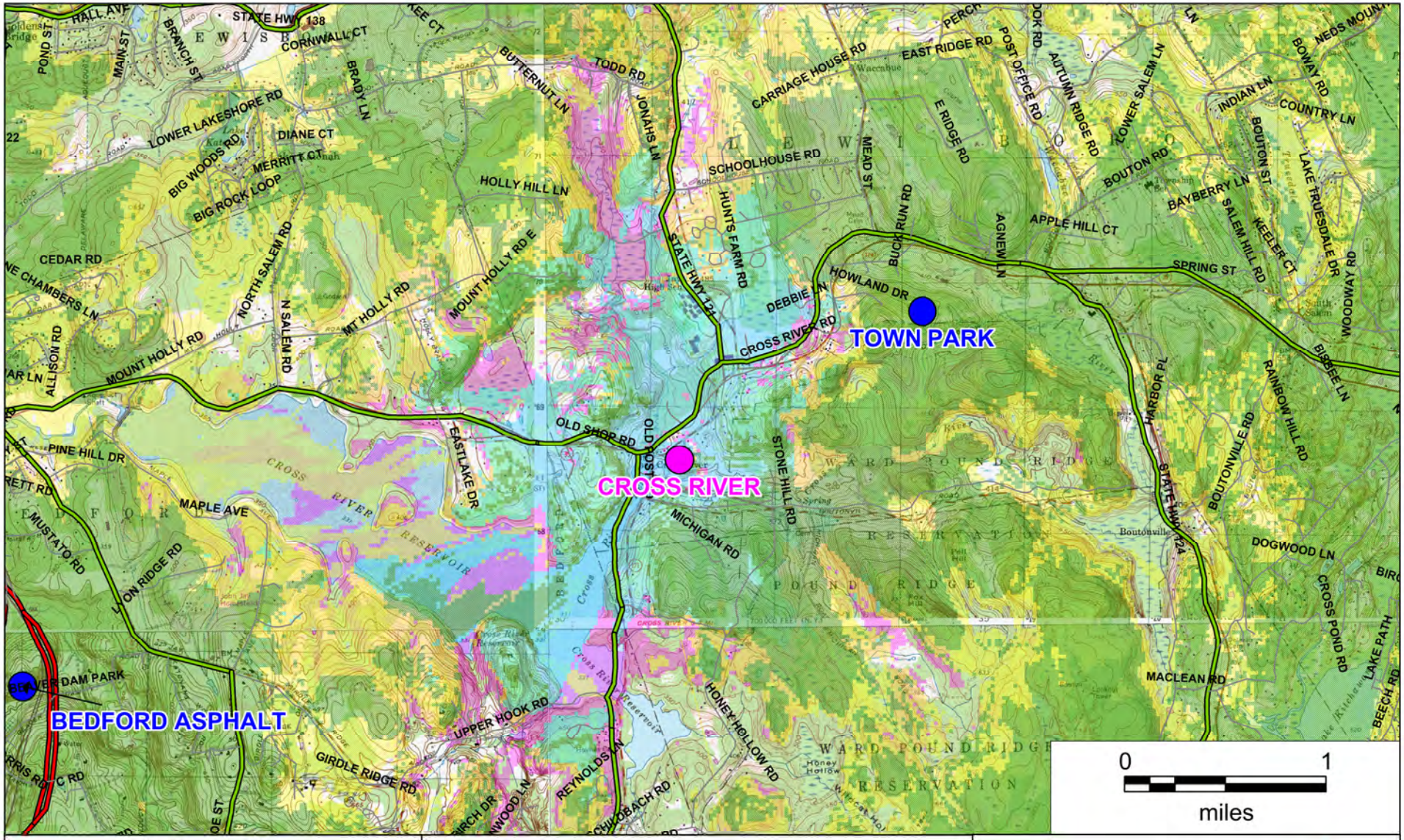
779 Route 35
Lewisboro, NY 10518

- Verizon Wireless Existing Facility
- Verizon Wireless Proposed Facility
- Existing Reliable In-Building Suburban Coverage (>-95 dBm RSRP)
- Existing Reliable In-Vehicle Coverage (>-105 dBm RSRP)

verizon

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by A. Feehan 4/23/2018



Cross River

Existing and Proposed Verizon Wireless 700 MHz LTE Coverage At 170' Proposed Height

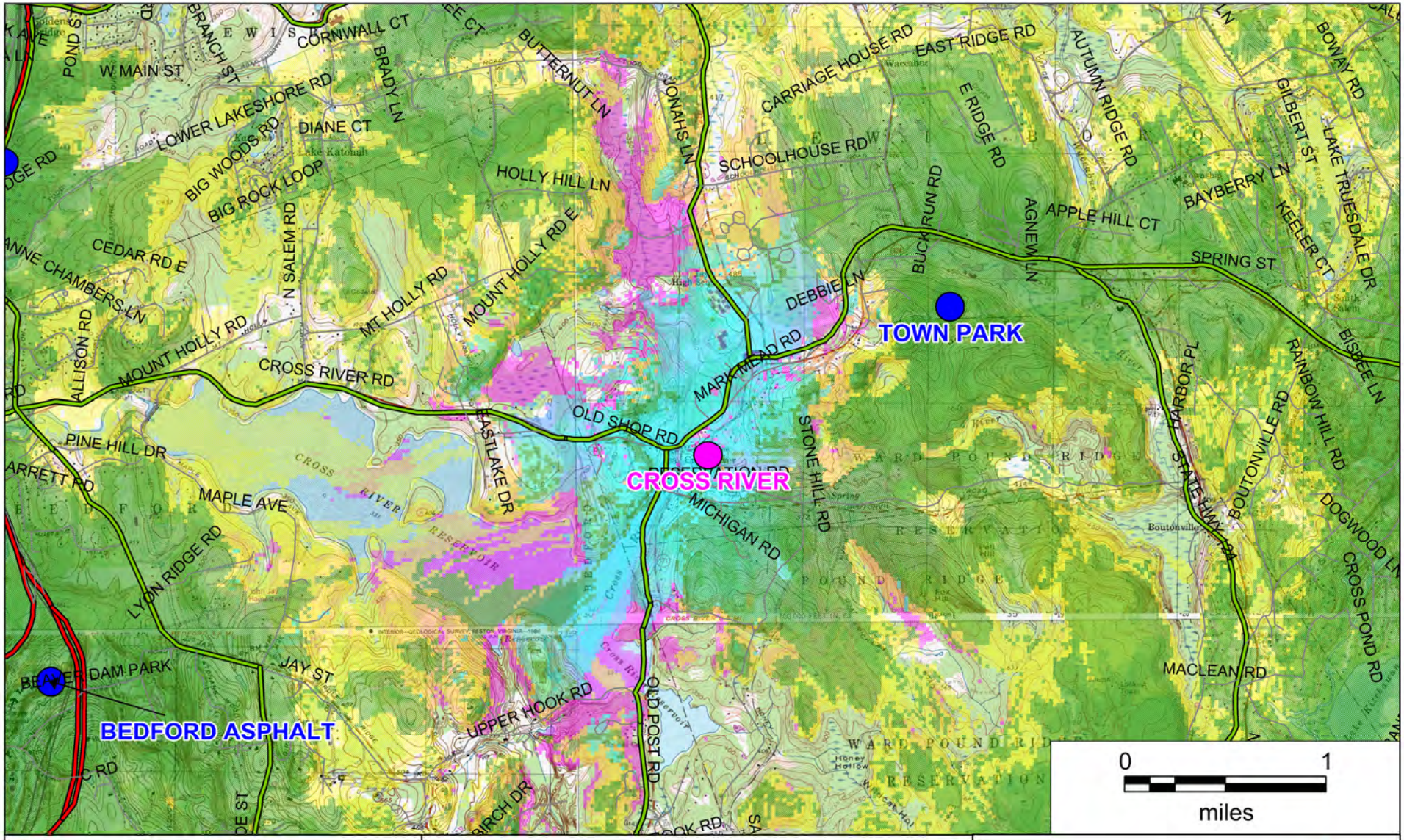
779 Route 35
Lewisboro, NY 10518

- Verizon Wireless Existing Facility
- Verizon Wireless Proposed Facility
- Existing Reliable In-Building Suburban Coverage (>-95 dBm RSRP)
- Existing Reliable In-Vehicle Coverage (>-105 dBm RSRP)
- Proposed Reliable In-Building Suburban Coverage (>-95 dBm RSRP)
- Proposed Reliable In-Vehicle Coverage (>-105 dBm RSRP)

verizon

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by A. Feehan 4/20/2018



Cross River

Existing and Proposed Verizon Wireless 700 MHz LTE Coverage At 140' Proposed Height

779 Route 35
Lewisboro, NY 10518

Verizon Wireless Existing Facility

Verizon Wireless Proposed Facility

Existing Reliable In-Building Suburban Coverage (>-95 dBm RSRP)

Existing Reliable In-Vehicle Coverage (>-105 dBm RSRP)

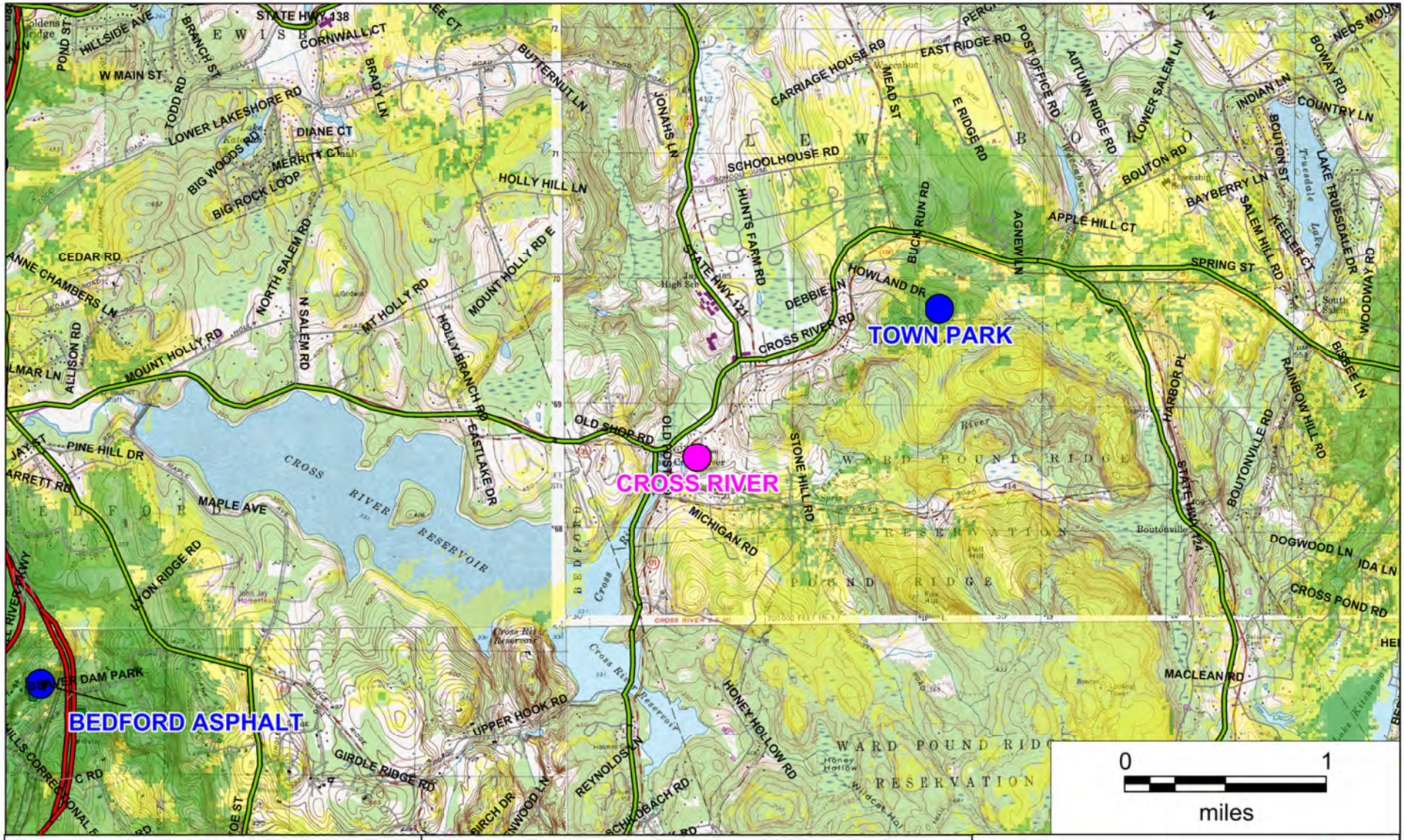
Proposed Reliable In-Building Suburban Coverage (>-95 dBm RSRP)

Proposed Reliable In-Vehicle Coverage (>-105 dBm RSRP)

verizon

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by A. Feehan 5/3/2018



Cross River

Existing Verizon Wireless
2100 MHz LTE Coverage

779 Route 35
Lewisboro, NY 10518

Verizon Wireless Existing Facility

Verizon Wireless Proposed Facility

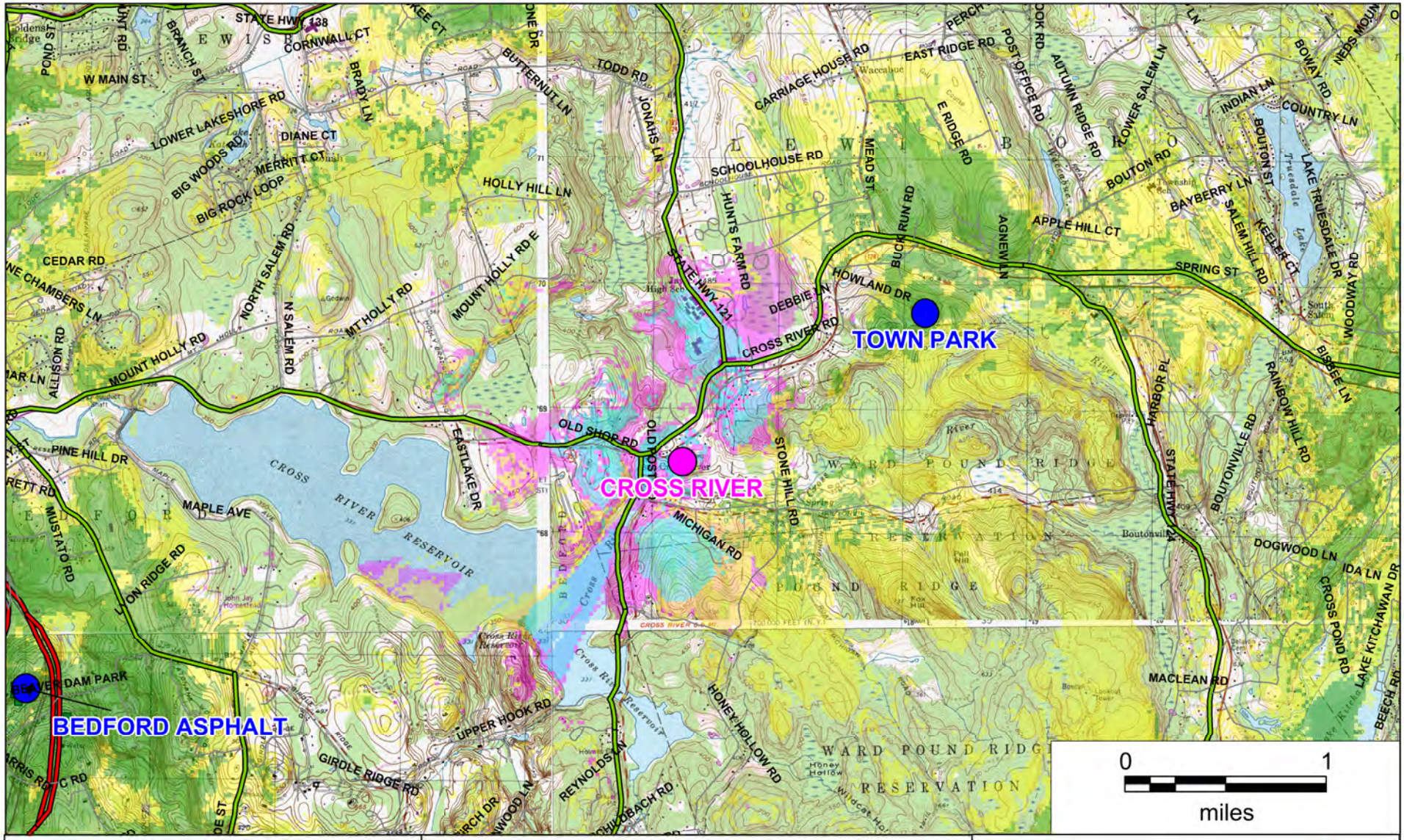
Existing Reliable In-Building Suburban Coverage (>-95 dBm RSRP)

Existing Reliable In-Vehicle Coverage (>-105 dBm RSRP)

verizon

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by A. Feehan 4/20/2018



Cross River

Existing and Proposed Verizon Wireless 2100 MHz LTE Coverage At 170' Proposed Height

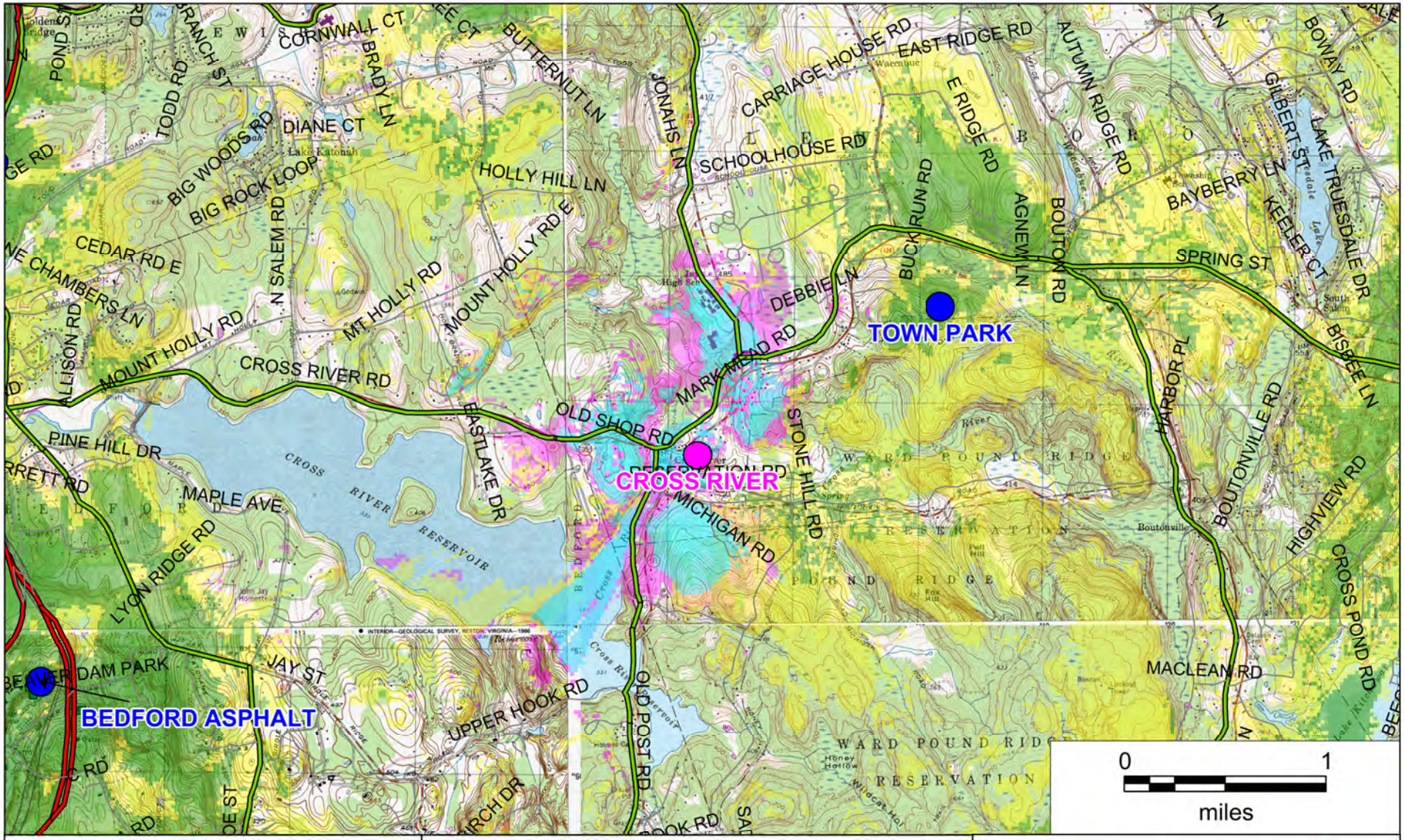
779 Route 35
Lewisboro, NY 10518

- Verizon Wireless Existing Facility
- Verizon Wireless Proposed Facility
- Existing Reliable In-Building Suburban Coverage (>-95 dBm RSRP)
- Existing Reliable In-Vehicle Coverage (>-105 dBm RSRP)
- Proposed Reliable In-Building Suburban Coverage (>-95 dBm RSRP)
- Proposed Reliable In-Vehicle Coverage (>-105 dBm RSRP)

verizon

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by A. Feehan 4/20/2018



Cross River

Existing and Proposed Verizon Wireless 2100 MHz LTE Coverage At 140' Proposed Height

779 Route 35
Lewisboro, NY 10518

- Verizon Wireless Existing Facility
- Verizon Wireless Proposed Facility
- Existing Reliable In-Building Suburban Coverage (>-95 dBm RSRP)
- Existing Reliable In-Vehicle Coverage (>-105 dBm RSRP)
- Proposed Reliable In-Building Suburban Coverage (>-95 dBm RSRP)
- Proposed Reliable In-Vehicle Coverage (>-105 dBm RSRP)

verizon

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by A. Feehan 5/3/2018

DETAILED SITE TABLE

Site ID	Address	Stucture	Height (feet)
CROSS RIVER	779 Route 35	Monopole	170
RIDGEFIELD CT	76 East Ridge Ave	Monopole	140
TOWN PARK	1065 Route 35	Monopole	160
BEDFORD ASPHALT	250 Harrison Road	Lattice Tower	172
POUND RIDGE	Adams Lane	Utility Pole	139
GOLDENS BRIDGE	Exit 6A I-684	Monopole	102
NORTH SALEM	Delancey Road	Monopole	100
SOUTH SALEM	1411 Route 35	Monopole	125
WACCABUC	117 Waccubuc Road	Monopole	140

Dec 5 at 2:08 PM

To:Supervisor@lewisborogov.com
Cc:ALAN COLE,CARL GROSSMAN,NEIL BERMAN,TOM LOBOSCO

Peter:

As per our conversations with Homeland Tower, I would like to re-visit the Town's Homeland Towers' and the AAB's attempts to find a wireless site that would fill a very critical "hole" in wireless coverage in the Cross River area.

Various parties, including the AAB, have identified potential wireless sites in the Cross River area, with the following results:

1. The rear of Cameron's 7X24 Deli. It was determined that this site was adjacent to a Nature Conservancy preservation area. Many parties objected to such as use for various reasons. This site was not pursued, in that the Town Park site was at the focus of attention, although the projected coverage was not the same.

2. Four Winds Hospital. This site was found to be an optimal site for covering the aforementioned Cross River "hole", as well as the Shopping Center, the JJMS and JJHS campus. The hospital's Board of Directors advised the interested parties [Town, Verizon, ATT] that Four Winds was not to be considered as a wireless site either now or in the future. Since this is private property, there is no further recourse to be considered.

3. Reynolds Cemetery. Good high point, but private property and not enough space for a wireless site. Site not further pursued.

4. Light pole stanchions on the John Jay Field. Verizon had solicited the K-L School Board about using the poles as cell sites. The School Board never responded to this solicitation, therefore this site was not pursued.

4 potential wireless sites were investigated before proceeding on the LVAC/Cyrus Russell site. Town Law states that 3 "alternative sites" have to be investigated; thus, all due diligence has been exercised prior to going forward with the LVAC/Cyrus Russell location. This site will provide wireless coverage to the "Meadows", "Michelle Estates”, the aforementioned "hole" as well as improved coverage in the Shopping Center and further north as well. It would be a significant improvement to coverage both along Route 35 as well as Route 121 North.

Regarding coverage as related to tower height above ground level (AGL) relative to Height Above Average Terrain (HAAT) was the primary reason that the AAB requested coverage plots at various elevations up to 170 feet. To wit, the 130 foot AGL plot confirms that coverage drops off considerably. This means that, with a 150' tower there wouldn't be much encouragement for collocation because the third carrier (with 10' separation for each carrier) wouldn't be inclined to collocate. Thus, a 170' AGL tower would provide good coverage down to the 150' elevation, as

the 170-150' plots confirm. The 170' tower would provide sufficient impetus for the other carriers to collocate, as is stated in Town Law

I hope you find this input useful in whatever path the Town seeks to pursue.

Regards,

Ted Sohonyay, Chair
Lewisboro Antenna Advisory Board

-

Pinnacle Telecom Group

Professional and Technical Services

Telecom Consulting

Antenna Site FCC RF Compliance Assessment and Report

Homeland Towers, LLC

Site "NY143 – Cross River"
779 Route 35
Town of Lewisboro, NY

August 24, 2017

14 Ridgedale Avenue, Suite 260 • Cedar Knolls, NJ 07927 • 973-451-1630

Contents

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Certification 14

Appendix A. Background on the FCC MPE Limit

Appendix B. Summary of Expert Qualifications

Introduction and Summary

At the request of Homeland Towers, LLC, Pinnacle Telecom Group has performed an independent expert assessment of radiofrequency (RF) levels and related FCC compliance for proposed wireless antenna operations on a proposed 170-foot monopole to be located at 779 Route 35 in the Town of Lewisboro, NY.

Homeland Towers refers to the prospective site as “NY143 – Cross River”, and the proposed pole will accommodate the directional panel antennas of up to four wireless carriers, as well as an omnidirectional (dipole) antenna operation and a point-to-point (dish) antenna operation by the Town of Lewisboro. At this time, Verizon Wireless plans to occupy the highest antenna mounting position on the pole.

The FCC requires wireless antenna operators to perform an assessment of the RF levels from all the transmitting antennas at a site whenever antenna operations are added or modified, and ensure compliance with the FCC Maximum Permissible Exposure (MPE) limit in areas of unrestricted public access, i.e., at street level around the site.

In this case, the compliance assessment will include the RF effects of a worst-case hypothetical collocation of three wireless carriers’ antennas. By worst case, we mean that the carriers whose maximum capacity relates to higher emitted power levels will be hypothetically assumed to occupy the lower mounting positions on the monopole, thus matching higher power and smaller distances to ground-level around the site.

The analysis will conservatively assume all the wireless carriers are operating at maximum capacity and maximum power in each of their FCC-licensed frequency bands. With that extreme degree of conservatism incorporated in the analysis, we can have great confidence that the actual RF effects from any combination of wireless operators, however they might actually be positioned on the pole, would be in compliance with the FCC’s MPE limit.

This assessment of antenna site compliance is based on the FCC limit for general population “maximum permissible exposure” (MPE), a limit established as safe for continuous exposure to RF fields by humans of either sex, all ages and sizes, and under all conditions.

The result of an FCC compliance assessment can be described in layman’s terms by expressing the calculated RF levels as simple percentages of the FCC MPE limit. In that way, the figure 100 percent serves as the reference for compliance, and calculated RF levels below 100 percent indicate compliance with the MPE limit. An equivalent way to describe the calculated results is to relate them to a “times-below-the-limit” factor. Here, we will apply both descriptions.

The result of the FCC compliance assessment in this case is as follows:

- At street level around the site, the conservatively calculated maximum RF level caused by the combination of the wireless carriers’ panel antenna operations and the Town of Lewisboro antenna operations is 1.2190 percent of the FCC general population MPE limit, well below the 100-percent reference for compliance. In other words, even with calculations designed to significantly overstate the RF levels versus those that could actually occur at the site, the worst-case calculated RF level in this case is still more than 82 times below the limit defined by the federal government as safe for continuous exposure of the general public.
- The results of the calculations provide a clear demonstration that the RF levels from as many as four wireless carriers, even under worst-case collocation circumstances, along with the Town of Lewisboro antenna operations, would satisfy the FCC requirement for controlling potential human exposure to RF fields. Moreover, because of the conservative methodology and assumptions applied in this analysis, RF levels actually caused by any combination of wireless operators’ antenna operations at this site will be even less significant than the calculation results here indicate.

The remainder of this report provides the following:

- relevant technical data on the parameters for the four wireless carriers, as well as on the Town of Lewisboro antenna operations;
- a description of the applicable FCC mathematical model for assessing compliance with the MPE limit, and application of the relevant technical data to that model; and
- analysis of the results of the calculations, and the compliance conclusion for the proposed site.

In addition, two Appendices are included. Appendix A provides background on the FCC MPE limit, along with a list of key references. Appendix B provides a summary of the qualifications of the author of this report.

Antenna and Transmission Data

As described, the proposed 170-foot pole will be able to accommodate as many as four wireless carriers' antennas, along with antenna operations by the Town of Lewisboro. Verizon Wireless proposed to occupy the highest mounting position on the pole, and this analysis will include an assumption of "worst-case" collocation by three other wireless carriers – AT&T, Sprint and T-Mobile.

The worst-case collocation methodology basically involves taking the carriers with the most available spectrum and the opportunity for higher power levels and hypothetically positioning them at the lower points on the monopole – thus matching the most power with the shorter distances to the ground.

Typically, the vertical spacing between different wireless carriers' antennas on a tower is 10 feet. In this case, the Verizon Wireless antenna centerline will be 166 feet and we will assign antenna centerlines to the three other assumed wireless collocators at 156 feet, 146 feet and 136 feet. The town will mount dipole and dish antennas on the pole as well.

The transmission parameters for each of the wireless carriers are described below.

Verizon Wireless is licensed to operate in the 700, 850, 1900 and 2100 MHz frequency bands. In the 746 MHz band, Verizon uses two 60-watt channels per antenna sector. In the 869 MHz band, Verizon uses eight 20-watt channels per antenna sector. In the 1900 MHz band, Verizon uses three 16-watt channels and two 60-watt channels per antenna sector. In the 2100 MHz band, Verizon uses two 90-watt channels per sector.

T-Mobile is licensed to operate in the 700 MHz, 1900 MHz and 2100 MHz frequency bands. In the 700 MHz band, T-Mobile uses one 40-watt channel per sector. In the 1900 MHz band, T-Mobile uses two 7.5-watt channels and two 40-watt channels per sector. In the 2100 MHz band, T-Mobile uses one 40-watt channel and one 120-watt channel per sector.

AT&T is licensed to operate in the 700, 850, 1900 and 2300 MHz frequency bands. In the 700 MHz band, AT&T uses four 40-watt RF channels per sector. In the 850 MHz band, AT&T uses four 30-watt channels and one 40-watt channel per sector. In the 1900 MHz band, AT&T uses four 30-watt channels and one 40-watt channel per sector. In the 2300 MHz band, AT&T uses four 25-watt channels per sector.

Sprint is licensed to operate in the 860, 1900 and 2500 MHz frequency bands. In the 860 MHz band, Sprint uses two 40-watt channels per antenna sector. In the 1900 MHz band, Sprint uses two 20-watt channels and two 40-watt channels per sector. In the 2500 MHz band, Sprint uses four 5-watt channels and four 10-watt channels per sector.

Based on the proposed mounting heights and then followed by overall available power levels, we will hypothetically assign the mounting heights (to the centerline of the antennas) as follows:

- Verizon Wireless: 166 feet

- Sprint: 156 feet
- T-Mobile: 146 feet
- AT&T: 136 feet

The Town of Lewisboro dipole antenna – a Commscope model DB404B, with a frequency range of 450-470 MHz and a maximum gain of 5.9 dBd – is proposed to be mounted on the pole. The transmitter power level has not been specified, but in our analysis we will conservatively apply the manufacturer-specified maximum antenna input power of 250 watts, which will grossly overstate the RF effects of this operation.

The Town of Lewisboro will also employ a point-to-point (dish) antenna operation at the site. As described in Appendix A, the FCC "categorically excludes" all point-to-point antenna operations from the requirement to demonstrate compliance. Because of their use of very low power and highly directional antennas, the RF contributions of point-to-point antennas are insignificant (typically less than one-tenth of one percent of the FCC limit at ground level around the site). The FCC deems such operations to automatically be in compliance, and as a result, dish antennas need not be included in compliance demonstrations.

The area below the antennas, at street level, is of interest in terms of potential "uncontrolled" exposure of the general public, so the antenna's vertical-plane emission characteristic is used in the calculations, as it is a key determinant in the relative level of RF emissions in the "downward" direction.

By way of illustration, Figure 1 on the next page shows the vertical-plane pattern of a typical 1900 MHz panel antenna. The antenna is effectively pointed at the three o'clock position (the horizon) and the pattern at different angles is described using decibel units. The use of a decibel scale in incidentally visually understates the relative directionality characteristic of the antenna in the vertical plane. Where the antenna pattern reads 20 dB, the relative RF energy emitted at the corresponding downward angle is 1/100th of the maximum that occurs in the main beam (at 0 degrees); at 30 dB, the energy is 1/1000th of the maximum.

Note that the automatic pattern-scaling feature of our internal software may skew side-by-side visual comparisons of different antenna models, or even different parties' depictions of the same antenna model.

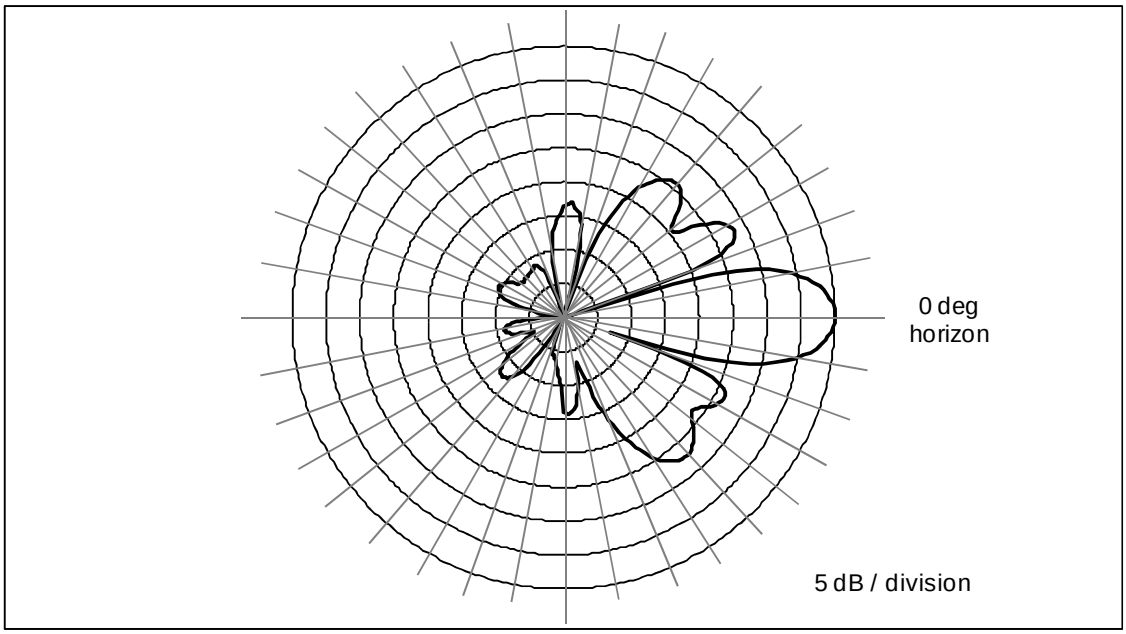


Figure 1. 1900 MHz Directional Panel Antenna – Vertical-plane Pattern

Compliance Analysis

FCC Office of Engineering and Technology Bulletin 65 ("OET Bulletin 65") provides guidelines for mathematical models to calculate potential RF exposure levels at various points around transmitting antennas.

Around an antenna site at ground level (in what is called the "far field" of the antennas), the RF levels are directly proportional to the total antenna input power and the relative antenna gain (focusing effect) in the downward direction of interest – and the levels are otherwise inversely proportional to the square of the straight-line distance to the antenna. Conservative calculations also assume the potential RF exposure is enhanced by reflection of the RF energy from the intervening ground. Our calculations will assume a 100% "perfect", mirror-like reflection, which is the absolute worst-case approach.

The formula for ground-level MPE compliance assessment of any given wireless antenna operation is as follows:

$$MPE\% = (100 * TxPower * 10^{(Gmax-Vdisc)/10} * 4) / (MPE * 4\pi * R^2)$$

where

MPE%	=	RF level, expressed as a percentage of the FCC MPE limit applicable to continuous exposure of the general public
100	=	factor to convert the raw result to a percentage
TxPower	=	maximum net power into antenna sector, in milliwatts, a function of the number of channels per sector, the transmitter power per channel, and line loss
$10^{(Gmax-Vdisc)/10}$	=	numeric equivalent of the relative antenna gain in the direction of interest downward toward ground level
4	=	factor to account for a 100-percent-efficient energy reflection from the ground, and the squared relationship between RF field strength and power density ($2^2 = 4$)
MPE	=	FCC general population MPE limit
R	=	straight-line distance from the RF source to the point of interest, centimeters

The MPE% calculations are normally performed out to a distance of 500 feet from the facility to points 6.5 feet (approximately two meters, the FCC-recommended standing height) off the ground, as illustrated in Figure 2 on the next page.

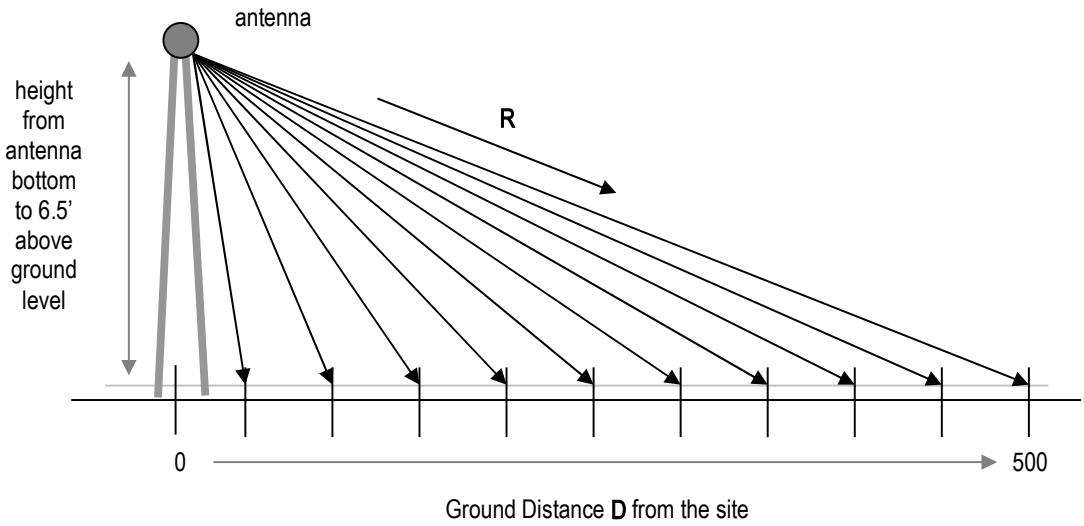


Figure 2. Street-level MPE% Calculation Geometry

It is popularly thought that the farther away one is from an antenna, the lower the RF level – which is generally but not universally correct. The results of MPE% calculations fairly close to the site will reflect the variations in the vertical-plane antenna pattern as well as the variation in straight-line distance to the antennas. Therefore, RF levels may actually increase slightly with increasing distance within the range of zero to 500 feet from the site. As the distance approaches 500 feet and beyond, though, the antenna pattern factor becomes less significant, the RF levels become primarily distance-controlled and, as a result, the RF levels generally decrease with increasing distance. In any case, the RF levels more than 500 feet from a wireless antenna site are well understood to be sufficiently low and always in compliance.

FCC compliance for a collocated antenna site is assessed in the following manner. At each distance point away from the site, an MPE% calculation is made for each antenna operation, including the individual components of dual-band operations. Then, at each point, the sum of the individual MPE% contributions is compared to 100 percent, where the latter figure serves as a normalized reference for compliance with the MPE limit. We refer to the sum of the individual MPE% contributions as “total MPE%”, and any calculated total

MPE% result exceeding 100 percent is, by definition, higher than the limit and represent non-compliance and a need to take action to mitigate the RF levels. If all results are below 100 percent, that indicates compliance with the federal regulations on controlling exposure.

Note that the following conservative methodology and assumptions are incorporated into the MPE% calculations on a general basis:

1. The antennas are assumed to be operating continuously at maximum RF power – i.e., with the maximum number of channels and the maximum transmitter power per channel.
2. The power-attenuation effects of any shadowing or visual obstruction to a line-of-sight path from the antennas to the points of interest at ground level are ignored.
3. The calculations intentionally minimize the distance factor (R) by assuming a 6’6” human and performing the calculations from the bottom (rather than the centerline) of the antenna.
4. The potential RF exposure at ground level is assumed to be 100-percent enhanced (increased) via a “perfect” field reflection from the intervening ground.

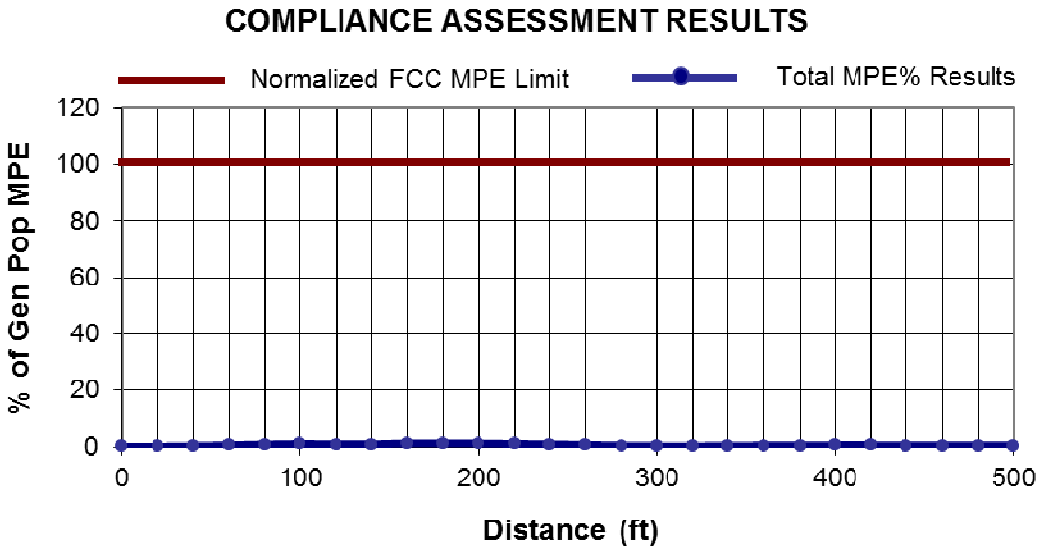
The net result of these assumptions is to intentionally and significantly overstate the calculated RF levels relative to the RF levels that will actually occur – and the purpose of this conservatism is to allow “safe-side” conclusions about compliance with the MPE limit.

The table on the following page provides the results of the MPE% calculations for each operator, with the worst-case overall result highlighted in bold in the last column.

Ground Distance (ft)	Verizon MPE%	AT&T MPE%	Sprint MPE%	T-Mobile MPE%	Town of Lewisboro MPE%	Total MPE%
0	0.0015	0.0335	0.0028	0.0006	0.0013	0.0397
20	0.0069	0.0721	0.0056	0.0012	0.0326	0.1184
40	0.0260	0.0857	0.0043	0.0087	0.0964	0.2211
60	0.0581	0.2240	0.0117	0.0253	0.1602	0.4793
80	0.1152	0.4521	0.0180	0.0142	0.1684	0.7679
100	0.1753	0.6291	0.0040	0.0192	0.1353	0.9629
120	0.1503	0.5225	0.0168	0.0754	0.0780	0.8430
140	0.0769	0.4741	0.0245	0.2333	0.0332	0.8420
160	0.1131	0.7005	0.0299	0.3446	0.0075	1.1956
180	0.2565	0.6640	0.0299	0.2657	0.0029	**1.2190**
200	0.4943	0.5183	0.0341	0.0815	0.0121	1.1403
220	0.4603	0.4387	0.0376	0.0160	0.0332	0.9858
240	0.3167	0.4112	0.0204	0.0306	0.0479	0.8268
260	0.1058	0.3323	0.0154	0.0459	0.0634	0.5628
280	0.0363	0.1755	0.0227	0.0391	0.0860	0.3596
300	0.0310	0.0641	0.0214	0.0195	0.1120	0.2480
320	0.0325	0.0482	0.0103	0.0133	0.1163	0.2206
340	0.0472	0.0550	0.0126	0.0474	0.1423	0.3045
360	0.0578	0.0728	0.0251	0.0769	0.1522	0.3848
380	0.0633	0.0910	0.0399	0.0959	0.1596	0.4497
400	0.0634	0.1085	0.0473	0.0881	0.1642	0.4715
420	0.0591	0.1287	0.0434	0.0807	0.1733	0.4852
440	0.0518	0.1182	0.0331	0.0523	0.1792	0.4346
460	0.0455	0.1458	0.0249	0.0196	0.1859	0.4217
480	0.0421	0.1856	0.0233	0.0049	0.1933	0.4492
500	0.0463	0.1720	0.0216	0.0045	0.1796	0.4240

As indicated, the overall worst-case calculated result is 1.2190 percent of the FCC general population MPE limit – well below the 100-percent reference for compliance, particularly given the significant conservatism incorporated in the analysis.

A graph of the overall calculation results, shown on the next page, provides perhaps a clearer *visual* illustration of the relative compliance of the calculated RF levels. The line representing the overall calculation results barely rises above the graph's baseline, and shows an obviously clear, consistent margin to the FCC MPE limit.



Compliance Conclusion

The FCC MPE limit has been constructed in such a manner that continuous human exposure to RF fields up to and including 100 percent of the MPE limit is acceptable and completely safe.

The conservatively calculated maximum RF effect at street level from the assumed worst-case collocation of as many as four wireless carriers along with the Town of Lewisboro antenna operations is 1.2190 percent of the FCC general population MPE limit. In other words, even with an extremely conservative analysis intended to dramatically overstate the RF effects of any wireless collocation scenario at the site, the calculated worst-case RF level is still more than 82 times below the FCC MPE limit.

The results of the calculations indicate clear compliance with the FCC regulations and the related MPE limit, even for a worst-case collocation scenario. Because of the conservative calculation methodology and operational assumptions applied in this analysis, the RF levels actually caused by any more realistic collocation of antennas at this site would be even less significant than the calculation results here indicate, and compliance would be achieved by an even larger margin.

Certification

The undersigned certifies as follows:

1. I have read and fully understand the FCC regulations concerning RF safety and the control of human exposure to RF fields (47 CFR 1.1301 *et seq*).
2. To the best of my knowledge, the statements and information disclosed in this report are true, complete and accurate.
3. The analysis of RF compliance provided herein is consistent with the applicable FCC regulations, additional guidelines issued by the FCC, and industry practice.
4. The results of the analysis indicate that any combination of antenna operations at the subject site will be in compliance with the FCC regulations concerning the control of potential RF exposure.

Daniel Penesso

Daniel Penesso
Director- RF Engineering
Pinnacle Telecom Group, LLC

8/2417
Date

Appendix A. Background on the FCC MPE Limit

As directed by the Telecommunications Act of 1996, the FCC has established limits for maximum continuous human exposure to RF fields.

The FCC maximum permissible exposure (MPE) limits represent the consensus of federal agencies and independent experts responsible for RF safety matters. Those agencies include the National Council on Radiation Protection and Measurements (NCRP), the Occupational Safety and Health Administration (OSHA), the National Institute for Occupational Safety and Health (NIOSH), the American National Standards Institute (ANSI), the Environmental Protection Agency (EPA), and the Food and Drug Administration (FDA). In formulating its guidelines, the FCC also considered input from the public and technical community – notably the Institute of Electrical and Electronics Engineers (IEEE).

The FCC's RF exposure guidelines are incorporated in Section 1.301 *et seq* of its Rules and Regulations (47 CFR 1.1301-1.1310). Those guidelines specify MPE limits for both occupational and general population exposure.

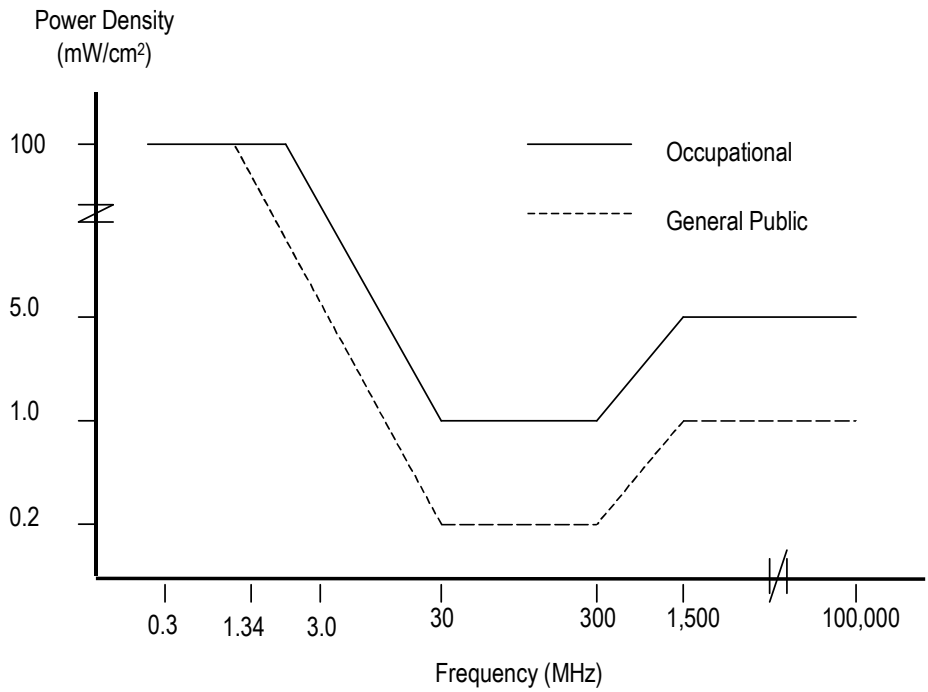
The specified continuous exposure MPE limits are based on known variation of human body susceptibility in different frequency ranges, and a Specific Absorption Rate (SAR) of 4 watts per kilogram, which is universally considered to accurately represent human capacity to dissipate incident RF energy (in the form of heat). The occupational MPE guidelines incorporate a safety factor of 10 or greater with respect to RF levels known to represent a health hazard, and an additional safety factor of five is applied to the MPE limits for general population exposure. Thus, the general population MPE limit has a built-in safety factor of more than 50. The limits were constructed to appropriately protect humans of both sexes and all ages and sizes and under all conditions – and continuous exposure at levels equal to or below the applicable MPE limits is considered to result in no adverse health effects or even health risk.

The reason for *two* tiers of MPE limits is based on an understanding and assumption that members of the general public are unlikely to have had appropriate RF safety training and may not be aware of the exposures they receive; occupational exposure in controlled environments, on the other hand, is assumed to involve individuals who have had such training, are aware of the exposures, and know how to maintain a safe personal work environment.

The FCC's RF exposure limits are expressed in two equivalent forms, using alternative units of field strength (expressed in volts per meter, or V/m), and power density (expressed in milliwatts per square centimeter, or mW/cm^2). The table on the next page lists the FCC limits for both occupational and general population exposures, using the mW/cm^2 reference, for the different radio frequency ranges.

Frequency Range (F) (MHz)	Occupational Exposure (mW/cm²)	General Public Exposure (mW/cm²)
0.3 - 1.34	100	100
1.34 - 3.0	100	180 / F^2
3.0 - 30	900 / F^2	180 / F^2
30 - 300	1.0	0.2
300 - 1,500	F / 300	F / 1500
1,500 - 100,000	5.0	1.0

The diagram below provides a graphical illustration of both the FCC's occupational and general population MPE limits.



Because the FCC's RF exposure limits are frequency-shaped, the exact MPE limits applicable to the instant situation depend on the frequency range used by the systems of interest.

The most appropriate method of determining RF compliance is to calculate the RF power density attributable to a particular system and compare that to the MPE limit applicable to the operating frequency in question. The result is usually expressed as a percentage of the MPE limit.

For potential exposure from multiple systems, the respective percentages of the MPE limits are added, and the total percentage compared to 100 (percent of the limit). If the result is less than 100, the total exposure is in compliance; if it is more than 100, exposure mitigation measures are necessary to achieve compliance.

Note that the FCC "categorically excludes" all "non-building-mounted" wireless antenna operations whose mounting heights are more than 10 meters (32.8 feet) from the routine requirement to demonstrate compliance with the MPE limit, because such operations "are deemed, individually and cumulatively, to have no significant effect on the human environment". The categorical exclusion also applies to *all* point-to-point antenna operations, regardless of the type of structure they're mounted on. Note that the FCC considers any facility qualifying for the categorical exclusion to be automatically in compliance.

FCC References on RF Compliance

47 CFR, FCC Rules and Regulations, Part 1 (Practice and Procedure), Section 1.1310 (Radiofrequency radiation exposure limits).

FCC Second Memorandum Opinion and Order and Notice of Proposed Rulemaking (FCC 97-303), *In the Matter of Procedures for Reviewing Requests for Relief From State and Local Regulations Pursuant to Section 332(c)(7)(B)(v) of the Communications Act of 1934 (WT Docket 97-192), Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation (ET Docket 93-62), and Petition for Rulemaking of the Cellular Telecommunications Industry Association Concerning Amendment of the Commission's Rules to Preempt State and Local Regulation of Commercial Mobile Radio Service Transmitting Facilities*, released August 25, 1997.

FCC First Memorandum Opinion and Order, ET Docket 93-62, *In the Matter of Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation*, released December 24, 1996.

FCC Report and Order, ET Docket 93-62, *In the Matter of Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation*, released August 1, 1996.

FCC Office of Engineering and Technology (OET) Bulletin 65, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", Edition 97-01, August 1997.

FCC Office of Engineering and Technology (OET) Bulletin 56, "Questions and Answers About Biological Effects and Potential Hazards of RF Radiation", edition 4, August 1999.

Appendix B. Summary of Expert Qualifications

Daniel Penesso, Director – RF Engineering, Pinnacle Telecom Group, LLC

Synopsis:	• 19 years of experience in all aspects of wireless RF engineering, including network design and implementation, interference analysis, FCC and FAA regulatory matters, and antenna site compliance with FCC RF exposure regulations • Have performed RF engineering and FCC compliance work for all the major wireless carriers – AT&T, Verizon Wireless, Sprint, T-Mobile, and MetroPCS, as well as Crown Castle • Have served as an expert witness on RF engineering and/or FCC RF compliance more than 100 times before municipal boards in New Jersey and New York
Education:	• Bachelor of Science in Electrical Engineering, DeVry Institute of Technology, Chicago, IL, 1987
Current Responsibilities	• Manages PTG staff work involving FCC RF compliance for wireless antenna sites, including the provision of math- and measurements-based site compliance reports, related expert testimony in municipal hearings, and compliance-related support in client meetings with prospective site landlords and in town meetings • Provides math-based FCC compliance assessments and reports for PTG's wireless clients, including AT&T, Verizon Wireless, T-Mobile, Sprint, MetroPCS, and Crown Castle • Responsible for providing client consulting and in-house training on FCC and OSHA RF safety compliance
Prior Experience:	• Have served as senior RF engineer for four of the five national wireless carriers – AT&T, T-Mobile, Sprint, and MetroPCS – in the New York and New Jersey markets • Served as an RF engineer for Metricom, Triton PCS, Alltel Communications, and Western Wireless • Have worked as an RF engineer for several engineering services companies, including Sublime Wireless, Amirit Technologies, Celcite, and Wireless Facilities Incorporated

Site Planning
Civil Engineering
Landscape Architecture
Land Surveying
Transportation Engineering

Environmental Studies
Entitlements
Construction Services
3D Visualization
Laser Scanning

August 24, 2017

Honorable Supervisor Peter Parsons
and Members of the Town Board
Town of Lewisboro
11 Main Street, P.O. Box 500
South Salem, NY 10590

Re: JMC Project 17024
NY143 – Cross River
779 Old Post Road (NYS Rt. 35)
Town of Lewisboro, New York

Dear Honorable Supervisor Parsons and Members of the Town Board:

Homeland Towers, LLC, is proposing the construction of a wireless telecommunications facility at the above referenced site. The facility will consist of the construction of a 170-foot monopole and related equipment at the base of the structure. The monopole will be designed to support the collocation of at least five (5) wireless carriers and will conform to ANSI TIA/EIA 222-F and ANSI TIA 222-G "Structural Standards for Antenna Supporting Structures and Antennas" and the New York State Building Code. The monopole will be constructed in accordance with the manufacturer's specifications.

Please feel free to contact our office at (914) 273-5225 with any questions you may have regarding this matter.

Sincerely,

James E. Caris
Project Manager

cc: Vincent Xavier, Homeland Towers, LLC

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WIRELESS APPLICATIONS, CORP.®
Connecting Wireless...

OPINION LETTER

April 25, 2018

Christine Vergati
Homeland Towers, LLC
9 Harmony Street, 2nd Floor
Danbury, CT 06810

RE: **NY143 - Cross River, NY Airspace Analysis**

Latitude (NAD-83):	**41° 15' 41.49" N**
Longitude (NAD-83):	**73° 36' 44.61" W**
Ground Elevation:	**346.0 ft AMSL**
Tower tip height:	**175.0 ft AGL**
Overall height:	**521.0 ft AMSL**

Dear Ms. Vergati,

Our airspace analysis results for the NY143 - Cross River, NY site are as follows:

1. **Filing an FAA Form 7460-1 is not required for the proposed tower height of 175.0 ft AGL (521.0 ft AMSL). The maximum allowable height for not filing an FAA Form 7460-1 is 200 ft.**
2. **FCC's TOWAIR Determination indicates that this structure does not require registration. There are no airports within 8 kilometers (5 miles) of the coordinates you provided. The maximum allowable height is for not filing for an ASR is 200 ft AGL.**
3. Wireless Applications Corp. generally recommends filing an FAA Form 7460-1 for tower heights of 180 ft to 200 ft AGL that are within 5 nm of the nearest public use airport runway.
4. The FAA time frame for the proposed 521.0 ft AMSL overall height will be 45 days. The FAA Form 7460-1 for NY143 - Cross River, NY at 175.0 ft AGL was not filed as of April 26, 2018.
5. The proposed site is 8.458 nm SW from the nearest public landing facility – DXR: Danbury Muni. At an overall height of 521.0 ft AMSL, it does not exceed FAR 77.9 (a) or FAR 77.9 (b) Notice Criteria for DXR airport. This airport has both Circling and Straight-In Instrument approach procedures. It does not exceed any glide slopes of DXR airport. DXR: Danbury Muni is an airport type landing facility and it is associated with the city of Danbury, CT.
6. The proposed site is not within any of the instrument approach procedures of DXR airport.
7. The nearest private landing facility is NY44: Somers, which is a heliport type landing facility not eligible for study under FAR Part 77 sub-Part C. It is 4.52 nm NW from the proposed site.
8. The proposed 175.0 ft AGL tower would not adversely affect low altitude en route airways and/ or VFR routes in the area.
9. The nearest AM tower is WAXB, which is 6.82 mi (10981 meters) away bearing 72.72°. WAXB AM is operating a non-directional type antenna system. As noted per the FCC AM Tower Locator and per FCC regulation 13-115, Section 1.30002, the structure will not require a "Proof of Performance" measurement study before and after construction.
10. Marking and lighting are not required for the proposed tower height of 175.0 ft AGL.
11. All Wireless Applications Corp. analyses are based on the latest Airspace program.

If you have any questions, please do not hesitate to call.

Thank you.

Ronald W. Lageson, Jr.
425-643-5000 (office)
425-649-5675 (fax)

PROJECT INFORMATION:

PROPOSED WORK:	PROPOSED EMERGENCY SERVICES AND PUBLIC UTILITY WIRELESS TELECOMMUNICATIONS FACILITY INCLUDING THE INSTALLATION OF A 170' MONOPOLE WITH ANTENNAS AND ASSOCIATED EQUIPMENT WITHIN A PROPOSED FENCED MULTI-CARRIER WIRELESS EQUIPMENT COMPOUND.
SITE ADDRESS:	779 ROUTE 35 CROSS RIVER, NY 10518
PROPERTY OWNER:	TOWN OF LEWISBORO 11 MAIN STREET SOUTH SALEM, NY 10590
TOWER OWNER/ APPLICANT:	HOMELAND TOWERS, LLC 9 HARMONY STREET, 2ND FLOOR DANBURY, CT 06810
ELECTRICAL CONTACT:	NEW YORK STATE ELECTRIC AND GAS CORPORATION CONTACT: CUSTOMER SERVICE PHONE: (800) 572-1111
TELCO CONTACT:	VERIZON (800) 843-2255
LATITUDE:	N41°15'41.4909"
LONGITUDE:	W73°36'44.6146"
LAT/LONG TYPE:	NORTH AMERICAN DATUM OF 1983 (NAD83)
ELEVATION:	±516.3'
JURISDICTION:	TOWN OF LEWISBORO
COUNTY:	WESTCHESTER COUNTY
TAX PARCEL:	53.6-1-47
LOT SIZE:	2.69 ACRES
ZONING DISTRICT:	R-1/2A "ONE FAMILY RESIDENCE, 1/2 ACRE"
CURRENT USE:	MUNICIPAL BUILDINGS - LEWISBORO VOLUNTEER AMBULANCE CORPS.

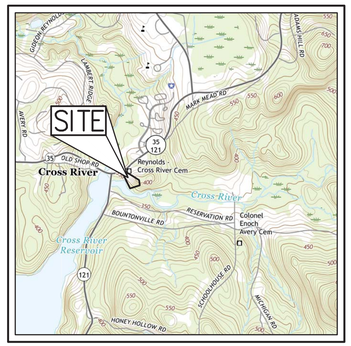
HOMELAND TOWERS

ZONING DRAWINGS

SITE NUMBER: NY143

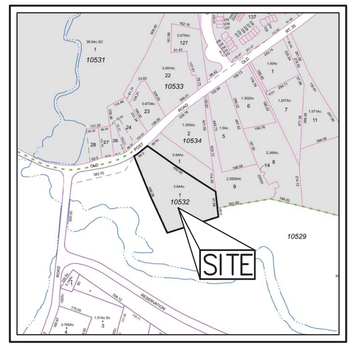
SITE NAME: CROSS RIVER

779 ROUTE 35
TOWN OF LEWISBORO
WESTCHESTER COUNTY, NY



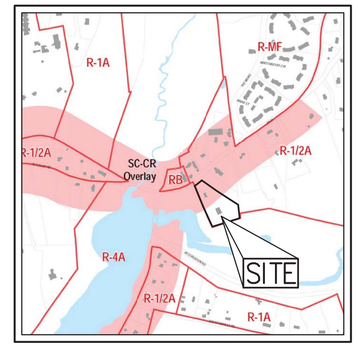
VICINITY MAP

SCALE: 1" = 2,000'



TAX PARCEL MAP

SCALE: 1" = 400'



ZONING MAP

SCALE: 1" = 750'

ZONING LEGEND	
R-1A	- ONE FAMILY RESIDENCE, 1-ACRE
R-MF	- MULTI-FAMILY RESIDENCE
R-1/2A	- ONE FAMILY RESIDENCE, 1/2 ACRE
RB	- RETAIL BUSINESS
R-4A	- ONE FAMILY RESIDENCE, 4 ACRE
SC-CR	- CROSS RIVER SPECIAL CHARACTER OVERLAY

PROJECT CONTACTS:

SITE PLANNER & CIVIL ENGINEER

JMC PLANNING ENGINEERING LANDSCAPE ARCHITECTURE & LAND SURVEYING, PLLC
120 BEDFORD ROAD
ARMONK, NY 10504
(914) 273-5225

APPLICANT:

HOMELAND TOWERS, LLC
9 HARMONY STREET, 2ND FLOOR
DANBURY, CT 06810
(203) 297-6345

ATTORNEY:

SNYDER & SNYDER, LLP
94 WHITE PLAINS ROAD,
TARRYTOWN, NY 10591
(914) 333-0700

SURVEYOR:

MARTIN SURVEYING ASSOCIATES, LLC
201 CHRISTIAN LANE
BERLIN, CT 06037
(860) 832-9328

NEPA CONSULTANT:

CBRE TELECOM SERVICES, INC.
4 WEST RED OAK LANE
WHITE PLAINS, NY 10604
(914) 694-9600

JMC DRAWINGS:

ZD-1	COVER SHEET
ZD-2	ABUTTERS PLAN
ZD-3	OVERALL SITE PLAN
ZD-4	LAYOUT PLAN
ZD-5	PRELIMINARY GRADING, UTILITIES, AND EROSION & SEDIMENT CONTROL PLAN
ZD-6	CONSTRUCTION DETAILS
ZD-7	CONSTRUCTION DETAILS
ZD-8	CONSTRUCTION DETAILS

GENERAL CONSTRUCTION NOTES APPLY TO ALL WORK HEREIN:

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CALL 811 "DIG SAFELY" (1-800-962-7962) TO HAVE UNDERGROUND UTILITIES LOCATED. EXPLORATORY EXCAVATIONS SHALL COMPLY WITH CODE 753 REQUIREMENTS. NO WORK SHALL COMMENCE UNTIL ALL THE OPERATORS HAVE NOTIFIED THE CONTRACTOR THAT THEIR UTILITIES HAVE BEEN LOCATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL PUBLIC AND PRIVATE UNDERGROUND AND SURFACE UTILITIES AND STRUCTURES AT OR ADJACENT TO THE SITE OF CONSTRUCTION, INSOFAR AS THEY MAY BE ENDANGERED BY HIS OPERATIONS. THIS SHALL HOLD TRUE WHETHER OR NOT THEY ARE SHOWN ON THE CONTRACT DRAWINGS. IF THEY ARE SHOWN ON THE DRAWINGS, THEIR LOCATIONS ARE NOT GUARANTEED EVEN THOUGH THE INFORMATION WAS OBTAINED FROM THE BEST AVAILABLE SOURCES, AND IN ANY EVENT, OTHER UTILITIES ON THESE PLANS MAY BE ENCOUNTERED IN THE FIELD. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, IMMEDIATELY REPAIR OR REPLACE ANY STRUCTURES OR UTILITIES THAT HE DAMAGES, AND SHALL CONSTANTLY PROCEED WITH CAUTION TO PREVENT UNDUE INTERRUPTION OF UTILITY SERVICE.
2. UNDER INDUSTRIAL CODE 753, CONTRACTOR SHALL NOTIFY ALL OPERATORS OF UTILITIES LOCATED IN THE AREA WHERE THE WORK IS TO BE PERFORMED PRIOR TO THE START OF THIS WORK SO THAT ALL THE VARIOUS UNDERGROUND UTILITY OPERATORS WILL BE ABLE TO LOCATE AND MARK THE LOCATIONS OF THEIR OWN UTILITIES. NO WORK SHALL COMMENCE UNTIL ALL THE OPERATORS HAVE NOTIFIED THE CONTRACTOR THAT THEIR UTILITIES HAVE BEEN LOCATED.
3. CONTRACTOR SHALL HAND DIG TEST PITS TO VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL VERIFY EXISTING UTILITIES DEPTHS AND ADVISE OF ANY CONFLICTS WITH PROPOSED UTILITIES. IF CONFLICTS ARE PRESENT. THE OWNER'S FIELD REPRESENTATIVE, JMC AND THE APPLICABLE MUNICIPALITY OR AGENCY SHALL BE NOTIFIED IN WRITING. THE EXISTING/PROPOSED UTILITIES RELOCATION SHALL BE DESIGNED BY JMC.
4. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL SAFETY CODES. APPLICABLE SAFETY CODES MEAN THE LATEST EDITION INCLUDING ANY AND ALL AMENDMENTS, REVISIONS, AND ADDITIONS THERETO, TO THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S OCCUPATIONAL SAFETY AND HEALTH STANDARDS (OSHA); AND APPLICABLE SAFETY, HEALTH REGULATIONS AND BUILDING CODES FOR CONSTRUCTION IN THE STATE OF NEW YORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GUARDING AND PROTECTING ALL OPEN EXCAVATIONS IN ACCORDANCE WITH THE PROVISION OF SECTION 107-05 (SAFETY AND HEALTH REQUIREMENTS) OF THE NYSDOT STANDARD SPECIFICATIONS. IF THE CONTRACTOR PERFORMS ANY HAZARDOUS CONSTRUCTION PRACTICES, ALL OPERATIONS IN THE AFFECTED AREA SHALL BE DISCONTINUED AND IMMEDIATE ACTION SHALL BE TAKEN TO CORRECT THE SITUATION TO THE SATISFACTION OF THE APPROVAL AUTHORITY HAVING JURISDICTION.
5. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES AFFECTED BY THE SCOPE OF WORK SHOWN HEREON AT ALL TIMES TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE. RAMPING CONSTRUCTION TO PROVIDE ACCESS MAY BE CONSTRUCTED WITH SUBBASE MATERIAL EXCEPT THAT TEMPORARY ASPHALT CONCRETE SHALL BE PLACED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE PEDESTRIAN ACCESS AT ALL TIMES.
6. PRIOR TO OBTAINING A BUILDING PERMIT TO ALLOW ITS CONSTRUCTION, DETAILED DESIGN CALCULATIONS MUST BE PROVIDED TO ILLUSTRATE COMPLIANCE WITH ANSI TIA/EIA '222-F AND ANSI TIA 222-G "STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS" AND THE NYS BUILDING CODE, FOR REVIEW AND ACCEPTANCE BY THE TOWN.

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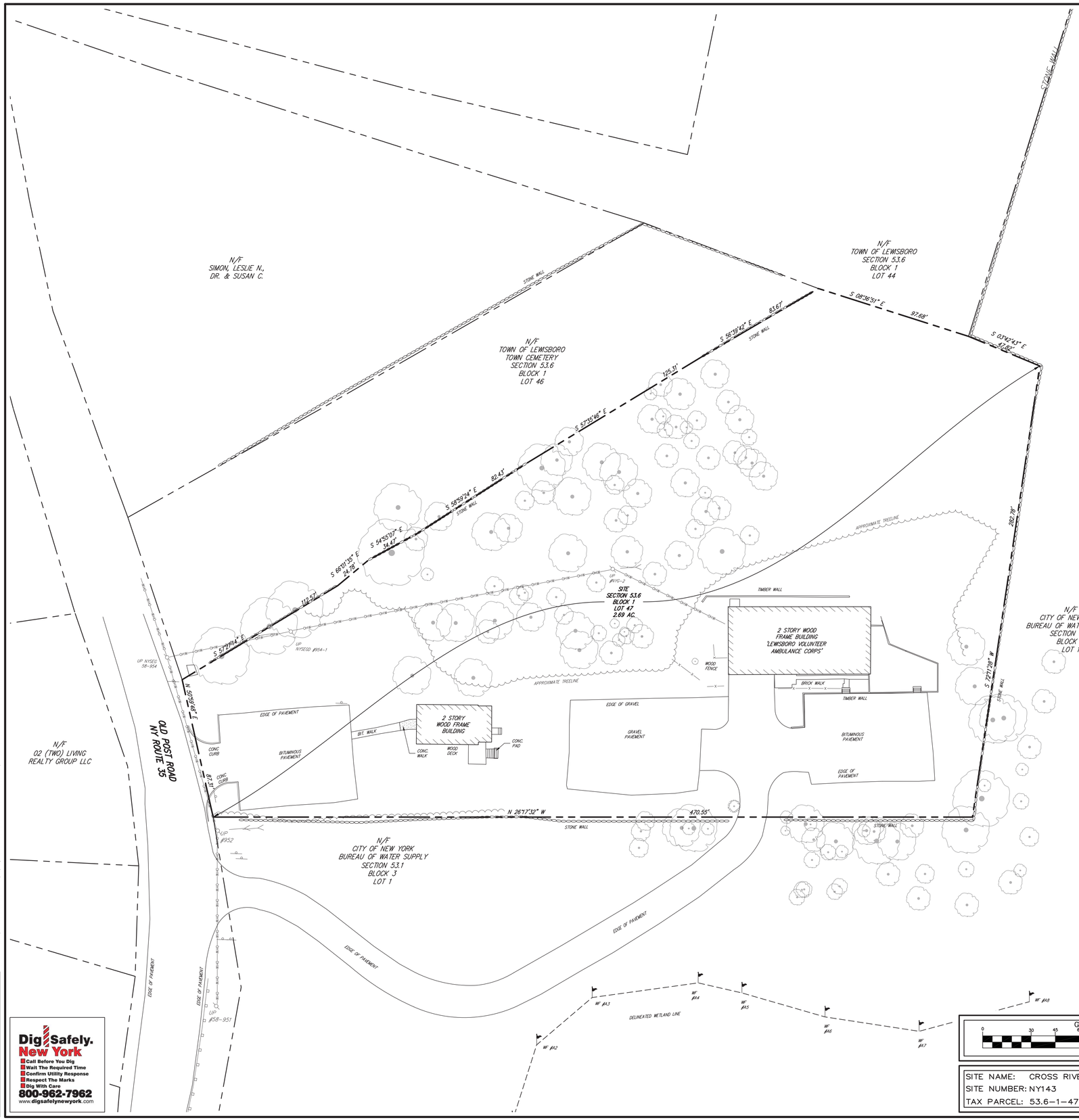
STATE OF NEW YORK · DAVID P. LOMBARDI · 071001 · LICENSED PROFESSIONAL ENGINEER

SITE NAME: CROSS RIVER
SITE NUMBER: NY143
TAX PARCELS: 53.6-1-47

NO.	REVISION	DATE	BY

Previous Editions Obsolete

DRAWN: PD	APPROVED: JS
SCALE: AS SHOWN	
DATE: 05/04/2018	
PROJECT No: 17024	
DWG: 17024-SITE	TAB: COVER / SCR: 9_COVER
DRAWING No: ZD-1	



LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING TREELINE
- EXISTING FENCE
- EXISTING OVERHEAD WIRE
- WETLAND FLAG AND NUMBER
- EXISTING UTILITY POLE
- EXISTING DECIDUOUS TREE
- EXISTING EVERGREEN TREE

NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM A DRAWING TITLED "SURVEY OF TAX LOT 53.6–1–47" PREPARED BY MARTIN SURVEYING ASSOCIATES, LLC, DATED 06/07/2017, AND LAST REVISED 03/29/2018.
2. A WETLAND DELINEATION WAS PERFORMED BY ECOLOGICAL SOLUTIONS ON 05/22/2017, AND WETLAND FLAGS WERE FIELD LOCATED BY MARTIN SURVEYING ASSOCIATES, LLC.
3. SUPPLEMENTAL EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM PUTNAM COUNTY GEOGRAPHIC INFORMATION SYSTEMS. THIS INFORMATION IS APPROXIMATE AND SHOULD BE USED FOR PLANNING PURPOSES ONLY.

PROPERTY OWNERS ABUTTING SECTION 53.6, BLOCK 1, LOT 47

SECTION	BLOCK	LOT	PROPERTY OWNER	MAILING ADDRESS
53.6	1	46	TOWN CEMETERY	P.O. BOX 500 SOUTH SALEM, NY 10590
53.6	1	44	TOWN OF LEWISBORO	11 MAIN STREET SOUTH SALEM, NY 10590
53.1	3	1	CITY OF NEW YORK BUREAU OF WATER SUPPLY, TAXES	71 SMITH AVENUE KINGSTON, NY 12401

NOTES:

1. TAX PARCEL DATA INCLUDING PROPERTY OWNER AND ADDRESS WERE OBTAINED FROM THE WESTCHESTER COUNTY GEOGRAPHIC INFORMATION SYSTEMS "MUNICIPAL TAX PARCEL VIEWER".

APPLICANT:

HOMELAND TOWERS, LLC
9 HARMONY STREET, 2ND FLOOR
DANBURY, CT 06810

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

ABUTTERS PLAN

HOMELAND TOWERS
CROSS RIVER (NY143)
779 ROUTE 35
TOWN OF LEWISBORO, NY

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GRAPHIC SCALE
0 30 45 60 90 150
1" = 30'

SITE NAME: CROSS RIVER
SITE NUMBER: NY143
TAX PARCEL: 53.6–1–47

NO.	REVISION	DATE	BY

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DRAWN: PD	APPROVED: JS
SCALE: 1" = 30'	
DATE: 05/04/2018	
PROJECT No: 17024	
DWG: 17024-SITE	TAB: ABUTTERS / SCR: 0_ABUTTERS
DRAWING No: ZD–2	

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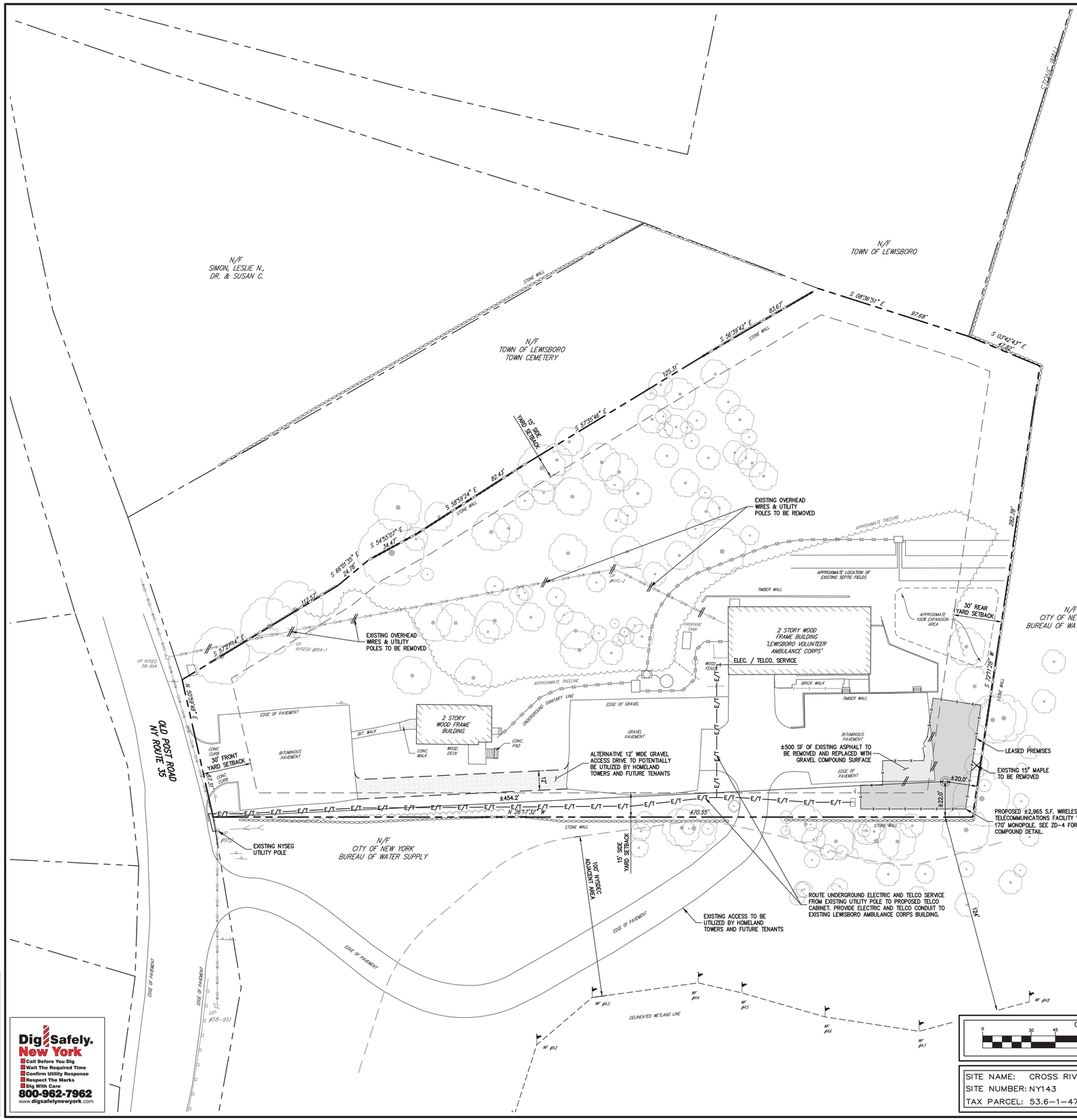

LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING UTILITY POLE
- EXISTING OVERHEAD WIRE
- WETLAND FLAG AND NUMBER
- EXISTING STONE WALL
- EXISTING DECIDUOUS TREE
- EXISTING EVERGREEN TREE
- EXISTING YARD SETBACK
- EXISTING WETLAND BUFFER
- PROPOSED FENCE
- PROPOSED UNDERGROUND ELECTRIC & TELCO LINE

NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM A DRAWING TITLED "SURVEY OF TAX LOT 53.6–1–47" PREPARED BY MARTIN SURVEYING ASSOCIATES, LLC, DATED 06/07/2017, AND LAST REVISED 03/29/2018.
2. A WETLAND DELINEATION WAS PERFORMED BY ECOLOGICAL SOLUTIONS ON 05/22/2017, AND WETLAND FLAGS WERE FIELD LOCATED BY MARTIN SURVEYING ASSOCIATES, LLC.
3. THE EXISTING SEPTIC SYSTEM LAYOUT DEPICTED ON THESE FIGURES HAS BEEN OBTAINED FROM A DRAWING TITLED "SITE PLAN", PREPARED BY JEROME KERNER, AIA, LAST REVISED 07/26/2007.
4. SUPPLEMENTAL EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM WESTCHESTER COUNTY GEOGRAPHIC INFORMATION SYSTEMS. THIS INFORMATION IS APPROXIMATE AND SHOULD BE USED FOR PLANNING PURPOSES ONLY.

GENERAL SITE NOTES:

1. SUBJECT PROPERTY IS KNOWN AS SECTION 53.6, BLOCK 1, LOT 47 AS SHOWN ON A TAX PARCEL MAP GENERATED BY WESTCHESTER COUNTY GEOGRAPHIC INFORMATION SYSTEMS.
2. ZONING CLASSIFICATION IS R–1/2A – ONE FAMILY RESIDENCE, 1/2 ACRE.

   APPLICANT: HOMELAND TOWERS, LLC
   9 HARMONY STREET, 2ND FLOOR
   DANBURY, CT 06810

3. PROPERTY OWNER: TOWN OF LEWISBORO
   11 MAIN STREET
   SOUTH SALEM, NY 10590
4. THE PROPOSED USE IS FOR WIRELESS TELECOMMUNICATIONS. THE SITE IS NOT INTENDED FOR PERMANENT EMPLOYEE OCCUPANCY AND THEREFORE, POTABLE WATER SUPPLY AND SANITARY SEWER FACILITIES ARE NOT REQUIRED OR PROPOSED.
5. THE FACILITY SHALL BE VISITED ON AVERAGE, ONCE A MONTH FOR MAINTENANCE AND SHALL BE CONTINUOUSLY MONITORED FROM A REMOTE FACILITY 24 HOURS A DAY, 7 DAYS A WEEK.
6. THE APPLICANT'S EQUIPMENT IS REMOTELY OPERATED AND CONTROLLED, AND AS SUCH IS NORMALLY UNMANNED. COMPUTERIZED EQUIPMENT AND FACILITY ALARM SYSTEMS CONTINUOUSLY MONITOR AN EXTENSIVE NUMBER OF OPERATIONAL AND SHELTER FUNCTIONS.
7. ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION FOR THE SITE IMPROVEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH:
   A. CURRENT PREVAILING MUNICIPAL AND/OR STATE SPECIFICATIONS, STANDARDS AND REQUIREMENTS.
   B. CURRENT PREVAILING UTILITY COMPANY AUTHORITY SPECIFICATIONS, STANDARDS AND REQUIREMENTS.
8. THERE WILL NOT BE ANY CHANGES IN EXISTING DRAINAGE PATTERNS TO THE MAXIMUM EXTENT PRACTICABLE.
9. THERE ARE NO COMMERCIAL SIGNS PROPOSED FOR ANY ASPECT OF THE USE.
10. THE PROPOSED FACILITY IS UNMANNED AND WILL NOT GENERATE ANY ADDITIONAL NOISE ABOVE AMBIENT LEVELS AT THE PROPERTY LINE, DUST, FUMES, ODORS OR VIBRATIONS.
11. THERE ARE NO COMMERCIAL SIGNS PROPOSED FOR THE PROJECT.
12. ANY LIGHTING PROPOSED BY TENANT/CARRIER EQUIPMENT SPECIFICATIONS SHALL CONFORM TO TOWN CODE REQUIREMENTS, BE CONTROLLED BY A MANUAL TIMER, AND NOT SPILL ONTO ADJACENT PROPERTIES.

APPLICANT:

HOMELAND TOWERS, LLC
9 HARMONY STREET, 2ND FLOOR
DANBURY, CT 06810

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

OVERALL SITE PLAN

HOMELAND TOWERS
CROSS RIVER (NY143)
779 ROUTE 35
TOWN OF LEWISBORO, NY

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GRAPHIC SCALE
0 30 45 60 90 150
1" = 30'

SITE NAME: CROSS RIVER
SITE NUMBER: NY143
TAX PARCEL: 53.6–1–47

NO.	REVISION	DATE	BY

Previous Editions Obsolete

DRAWN: PD	APPROVED: JS
SCALE: 1" = 30'	
DATE: 05/04/2018	
PROJECT No: 17024	
DWG: 17024-SITE	TAB: OSP / SCR: 1_OSP
DRAWING No: ZD–3	

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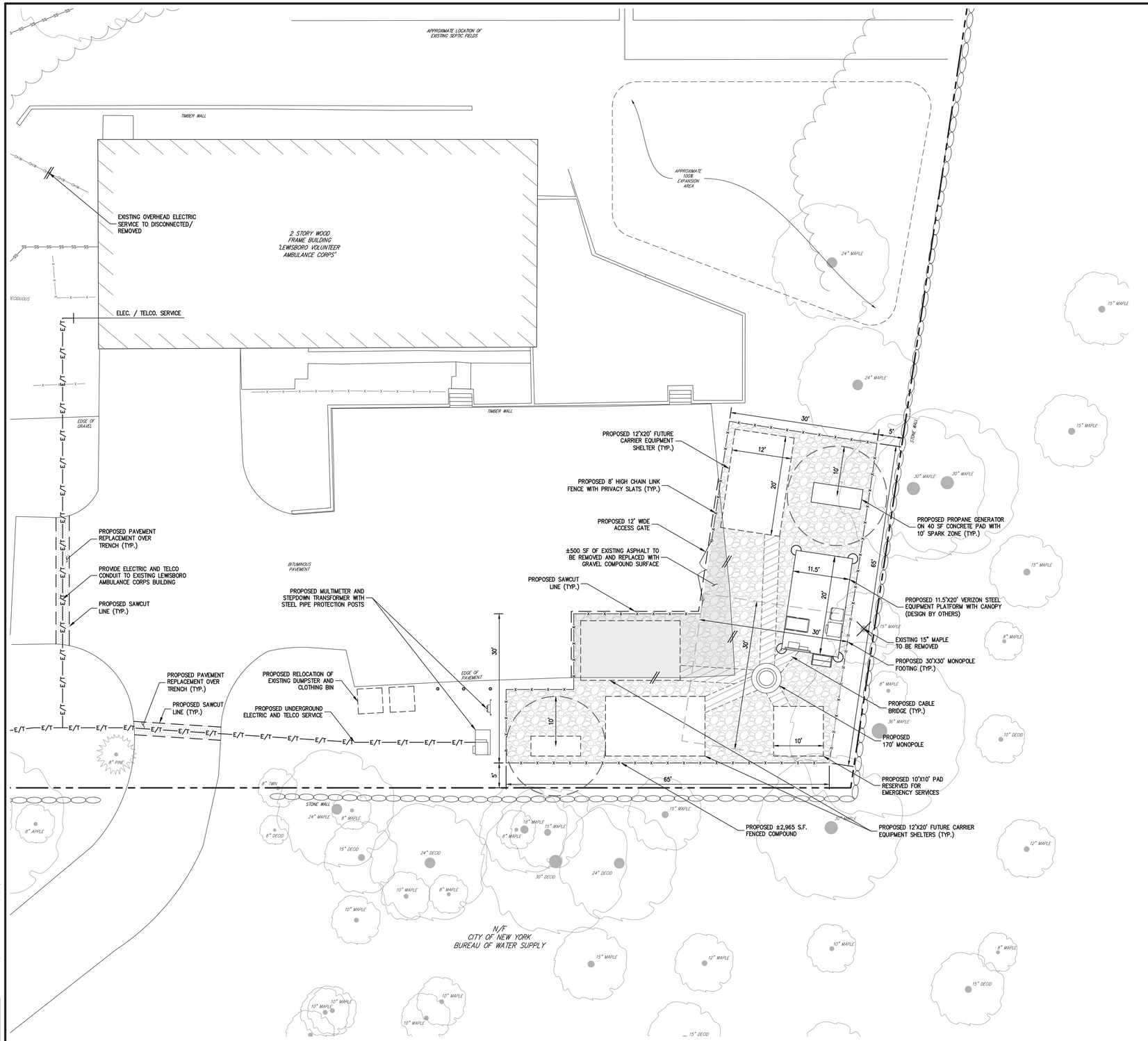
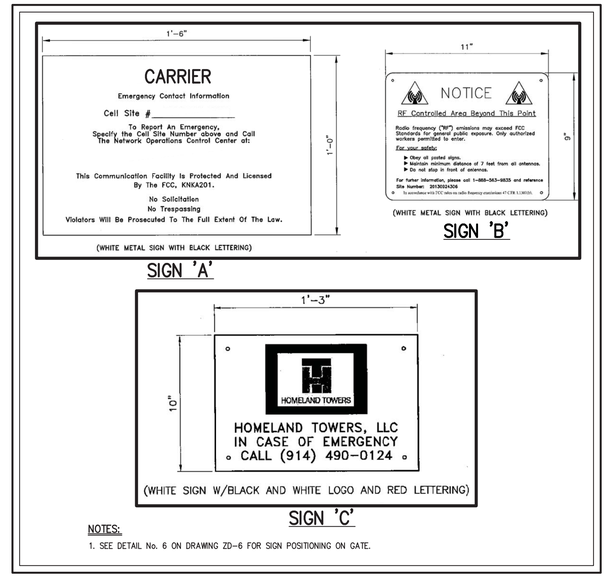


LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING PAVEMENT EDGE
- EXISTING BUILDING LINE
- EXISTING FENCE
- EXISTING TREELINE
- EXISTING STONE WALL
- EXISTING DECIDUOUS TREE
- EXISTING EVERGREEN TREE
- PROPOSED UNDERGROUND ELECTRIC & TELCO LINE
- PROPOSED GRAVEL SURFACE
- PROPOSED CABLE BRIDGE
- PROPOSED FENCE
- PROPOSED SAWCUT LINE
- PROPOSED STEEL PIPE PROTECTION POST

NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM A DRAWING TITLED "SURVEY OF TAX LOT 53.6-1-47" PREPARED BY MARTIN SURVEYING ASSOCIATES, LLC, DATED 06/07/2017, AND LAST REVISED 03/29/2018.
2. THE EXISTING SEPTIC SYSTEM LAYOUT DEPICTED ON THESE FIGURES HAS BEEN OBTAINED FROM A DRAWING TITLED "SITE PLAN", PREPARED BY JEROME KERNER, AIA, LAST REVISED 07/26/2007.
3. EXISTING TREES IN THE VICINITY OF THE PROPOSED COMPOUND ARE TO BE LIMBED/PRUNED AS NEEDED.



NOTES:

1. SEE DETAIL No. 6 ON DRAWING ZD-6 FOR SIGN POSITIONING ON GATE.

APPLICANT:

HOMELAND TOWERS, LLC
9 HARMONY STREET, 2ND FLOOR
DANBURY, CT 06810

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LAYOUT PLAN

HOMELAND TOWERS
CROSS RIVER (NY143)
779 ROUTE 35
TOWN OF LEWISBORO, NY

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GRAPHIC SCALE
0 20 30 40 60 100
1" = 20'

SITE NAME: CROSS RIVER
SITE NUMBER: NY143
TAX PARCEL: 53.6-1-47

NO.	REVISION	DATE	BY

Previous Editions Obsolete

DRAWN: PD	APPROVED: JS
SCALE: 1" = 10'	
DATE: 05/04/2018	
PROJECT No: 17024	
DWG: 17024-SITE	TAB: LAYOUT / SCR: 2_LAYOUT
DRAWING No: ZD-4	

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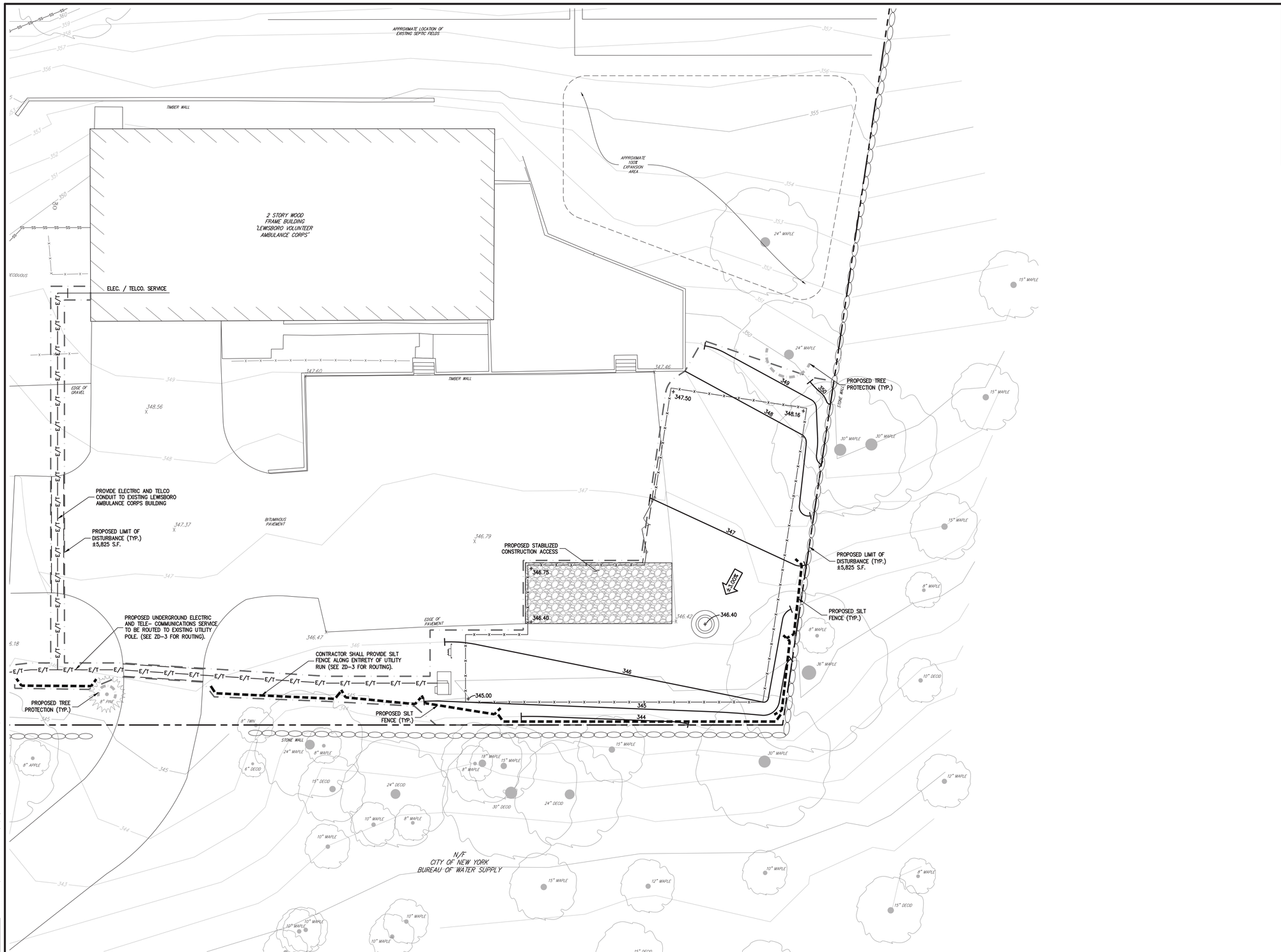

LEGEND

- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING STONE WALL
- PROPOSED FENCE
- PROPOSED UNDERGROUND ELECTRIC & TELECO SERVICE
- PROPOSED FINISHED GRADE
- PROPOSED SPOT GRADE
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED SILT FENCE
- PROPOSED STEEL PROTECTION POST

NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM A DRAWING TITLED "SURVEY OF TAX LOT 53.6-1-47" PREPARED BY MARTIN SURVEYING ASSOCIATES, LLC, DATED 06/07/2017, AND LAST REVISED 03/29/2018.
2. THE EXISTING SEPTIC SYSTEM LAYOUT DEPICTED ON THESE FIGURES HAS BEEN OBTAINED FROM A DRAWING TITLED "SITE PLAN", PREPARED BY JEROME KERNER, AIA, LAST REVISED 07/26/2007.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH ALL THE PLANS, PRIOR TO BEGINNING ANY CLEARING, GRUBBING OR EXCAVATION.
4. EXPOSED SLOPES AND ALL GRADED AREAS SHALL BE SEEDED WITH THE FOLLOWING GRASS MIX IMMEDIATELY UPON COMPLETION OF ITS CONSTRUCTION AT A RATE OF 6 POUNDS PER 1000 S.F. IN THE FOLLOWING PROPORTIONS:
   CREEPING RED FESCUE 30 %
   PERENNIAL RYE GRASS 70 %
5. GRASS SEED MIX FOR EROSION AND SEDIMENT CONTROL MAY BE APPLIED BY EITHER MECHANICAL OR HYDROSEEDING METHODS. HYDROSEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF NURSERYMEN, AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION.
6. ALL DISTURBED AREAS SHALL BE MULCHED WITH STRAW AT A RATE OF 2 TONS PER ACRE (90 LBS. PER 1,000 S.F.) SUCH THAT THE MULCH FORMS A CONTINUOUS BLANKET.
7. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A DAILY BASIS BY THE CONTRACTOR. ALL COLLECTED SEDIMENT WITHIN SEDIMENT BARRIERS SHALL BE REMOVED PERIODICALLY TO MAINTAIN THE FUNCTION OF THE SEDIMENT BARRIER. ALL SEDIMENT COLLECTED SHALL BE RESPREAD ON-SITE WITHIN STABILIZED AREAS AS DIRECTED BY THE OWNERS FIELD REPRESENTATIVE.
8. DUST SHALL BE CONTROLLED BY SPRINKLING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE VILLAGE ENGINEER.
9. CUT AND FILLS SHALL NOT ENDANGER ADJOINING PROPERTIES, NOR DIVERT WATER ONTO THE PROPERTY OF OTHERS.
10. ALL FILLS SHALL BE COMPACTED TO PROVIDE STABILITY OF MATERIAL AND TO PREVENT SETTLEMENT.
11. THE CONTRACTOR SHALL INSPECT DOWNSTREAM CONDITIONS FOR EVIDENCE OF SEDIMENTATION ON A WEEKLY BASIS AND AFTER RAINSTORMS.
12. AS WARRANTED BY FIELD CONDITIONS, SPECIAL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR AS REQUIRED.
13. FINAL UNDERGROUND ELECTRIC AND TELECOMMUNICATIONS SERVICE ROUTING TO BE DETERMINED AFTER CONSULT WITH PROVIDER.
14. ELECTRIC / TELECOMMUNICATION LINES SHALL BE INSTALLED UNDERGROUND IN CONDUIT IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY HAVING JURISDICTION.
15. A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE APPROVED BY THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NYCDEP) PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

GENERAL SEQUENCE OF CONSTRUCTION:

1. PRIOR TO THE INITIATION OF ANY CONSTRUCTION, THE APPLICANT OR HIS REPRESENTATIVE WILL MEET ON-SITE WITH THE TOWN BUILDING INSPECTOR, TOWN ENGINEER, SITE CONTRACTOR, AND/OR ANY ADDITIONAL OUTSIDE AGENCIES THAT MAY HAVE JURISDICTION FOR A PRE-CONSTRUCTION CONFERENCE TO REVIEW ALL FACETS OF CONSTRUCTION, REQUIRED EROSION PROTECTION MEASURES AND REQUIRED INSPECTIONS.
2. STAKE LIMIT OF DISTURBANCE BOUNDARY WITH LATHE AND FLAGGING. INSTALL A STABILIZED CONSTRUCTION ACCESS.
3. INSTALL ALL SILT FENCES.
4. CLEAR AND GRUB THE AREA TO BE CONSTRUCTED.
5. REMOVE AND STOCKPILE TOPSOIL WITHIN COMPOUND AREA. INSTALL SILT FENCING AROUND THE TEMPORARY TOPSOIL STOCKPILE LOCATION FOR EROSION CONTROL PURPOSES.
6. PROCEED WITH ROUGH GRADING OF THE AREA UNDER ACTIVE CONSTRUCTION.
7. INSTALL MONOPOLE FOUNDATION.
8. INSTALL GRAVEL COMPOUND SURFACE AND CARRIER EQUIPMENT PLATFORM(S).
9. TRENCH AND INSTALL UTILITIES IN BURIED CONDUIT.
10. REDISTRIBUTE TOPSOIL AND ESTABLISH VEGETATION.
11. CLEAN SURROUNDING AREA OF ALL ACCUMULATED SEDIMENT IN CONJUNCTION WITH THE REMOVAL OF ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES.
12. COMPLETE CONSTRUCTION.

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

STATE OF NEW YORK · DAVID P. LOMBARDI · 071001 · LICENSED PROFESSIONAL ENGINEER

APPLICANT:

HOMELAND TOWERS, LLC
9 HARMONY STREET, 2ND FLOOR
DANBURY, CT 06810

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JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
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PRELIMINARY GRADING, UTILITIES, AND EROSION & SEDIMENT CONTROL PLAN

HOMELAND TOWERS
CROSS RIVER (NY143)
779 ROUTE 35
TOWN OF LEWISBORO, NY

GRAPHIC SCALE
0 10 15 20 30 50
1" = 10'

SITE NAME: CROSS RIVER
SITE NUMBER: NY143
TAX PARCEL: 53.6-1-47

NO.	REVISION	DATE	BY

Previous Editions Obsolete

DRAWN: PD	APPROVED: JS
SCALE: 1" = 20'	
DATE: 05/04/2018	
PROJECT No: 17024	
DWG: 17024-SITE	TAB: G-U-SE
SCR: 3_GRAD-UTIL-SE	
DRAWING No: ZD-5	

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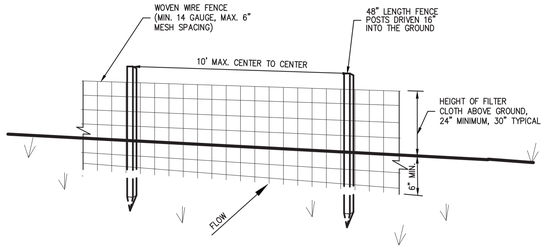
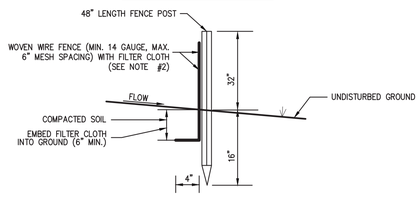


PERSPECTIVE VIEW

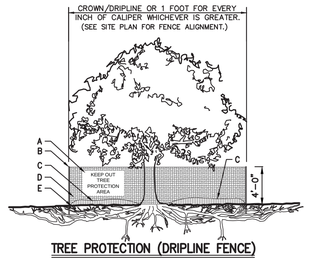


SECTION

NOTES:

1. WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL, EITHER T OR U TYPE OR HARDWOOD.
2. FILTER CLOTH SHALL BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABLINKA T140N, OR APPROVED EQUAL.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVROFENCE, OR APPROVED EQUAL.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED AND REPLACED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

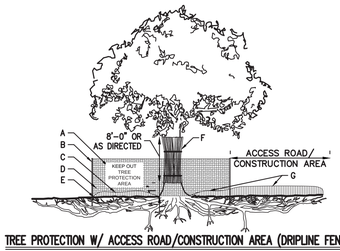
SILT FENCE — 1



TREE PROTECTION (DRIPLINE FENCE)

A	8.5"X11" SIGN LAMINATED IN PLASTIC SPACED EVERY 50' ALONG FENCE
B	2"X6' STEEL POSTS OR APPROVED EQUAL.
C	5" THICK LAYER OF MULCH.
D	TREE PROTECTION FENCE: HIGH DENSITY POLYETHYLENE FENCING WITH 3.5" X 1.5" OPENINGS; COLOR ORANGE. STEEL POSTS INSTALLED AT 8' O.C.
E	MAINTAIN EXISTING GRADE WITHIN THE TREE PROTECTION FENCE UNLESS OTHERWISE INDICATED ON THE PLANS.
F	INSTALL ROUGH SAWN WOOD WHERE AND AS DIRECTED BY PROJECT LANDSCAPE ARCHITECT OR PROFESSIONAL ARBORIST. SEE CHART FOR WOOD SIZE BOUND WITH 9 GAUGE WIRE.
G	8"–12" THICK LAYER OF MULCH ON MAINTENANCE ROAD. 5" THICK LAYER INSIDE TREE PROTECTION AREA.

TREE DIAMETER	ROUGH SAWN WOOD SIZE
<12"	2"X2"
13"–24"	2"X4"
>25"	2"X6"

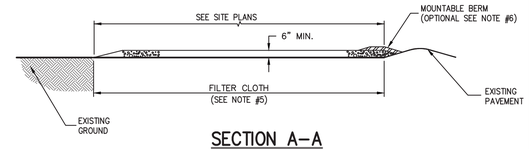


TREE PROTECTION W/ ACCESS ROAD/CONSTRUCTION AREA (DRIPLINE FENCE)

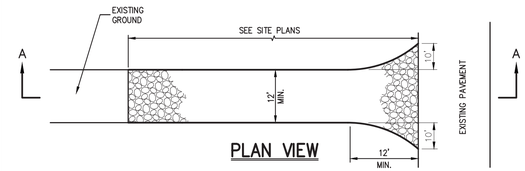
NOTES:

1. SEE SPECIFICATIONS FOR ADDITIONAL TREE PROTECTION REQUIREMENTS.
2. IF THERE IS NO EXISTING IRRIGATION, SEE SPECIFICATIONS FOR WATERING REQUIREMENTS.
3. NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.
4. NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.
5. SEE SITE PLANS FOR IDENTIFICATIONS/LOCATIONS OF INDIVIDUAL TREES TO BE PROTECTED.
6. ALL EXCAVATION WITHIN THE CROWN/DRIPLINE OF ANY TREE SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF THE PROJECT LANDSCAPE ARCHITECT OR PROFESSIONAL ARBORIST. SPECIAL MEASURES, SUCH AS THE USE OF AN AIR SPADE MAY BE REQUIRED.
7. THE CONTRACTOR MAY PROPOSE THE USE OF ENGINEERED MATTING OR OTHER ENGINEERED PRODUCTS IN LIEU OF MULCH, WHICH SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF ALL AUTHORITIES HAVING JURISDICTION.

TREE PROTECTION — 2



SECTION A–A

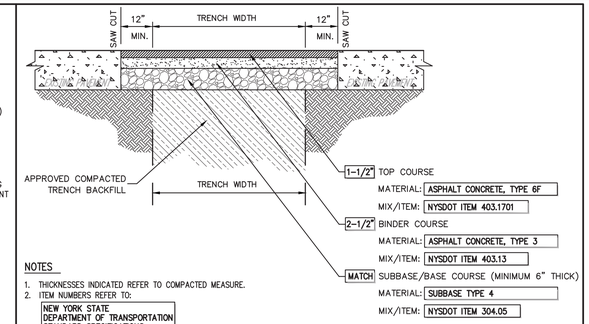


PLAN VIEW

NOTES

1. STONE SIZE – USE 1" TO 4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET.
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH TO BE PLACED OVER THE ENTIRE WIDTH AND LENGTH OF AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ACCESS — 3

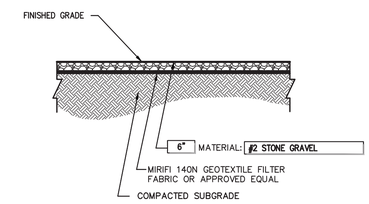


NOTES

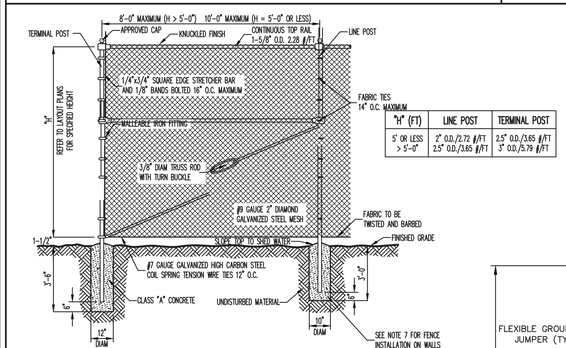
1. THICKNESSES INDICATED REFER TO COMPACTED MEASURE.
2. ITEM NUMBERS REFER TO:

NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS

PAVEMENT REPLACEMENT OVER TRENCH — 4



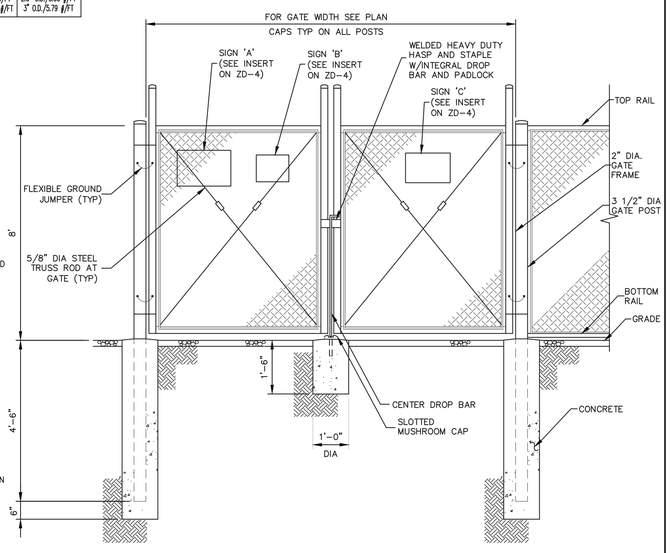
GRAVEL COMPOUND SURFACE — 5



"H" (FT)	LINE POST	TERMINAL POST
5' OR LESS	2" O.D./2.72 #/FT	2.5" O.D./3.65 #/FT
> 5'–0"	2.5" O.D./3.65 #/FT	3" O.D./5.79 #/FT

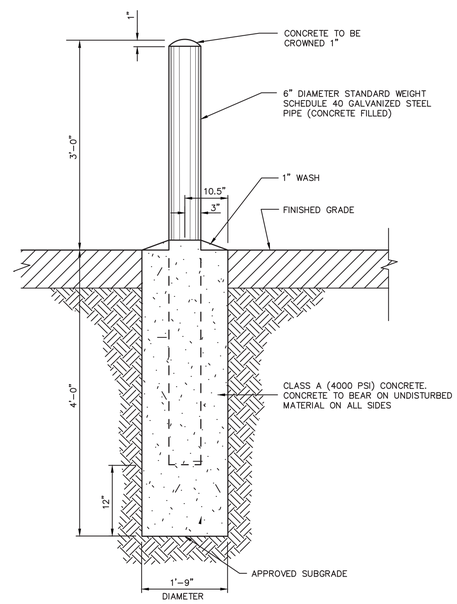
NOTES:

1. ALL POSTS, RAILS, FABRIC AND ACCESSORIES SHALL BE GALVANIZED.
2. POST AND RAILS SHALL BE STANDARD FULL WEIGHT GALVANIZED SCHEDULE 40 PIPE MANUFACTURED AND GALVANIZED IN ACCORDANCE WITH ASTM A120. ALL MATERIALS SHALL BE NEW AND FIRST CLASS AND SHALL NOT INCLUDE RECONDITIONED OR REROLLED PIPE.
3. FITTINGS SHALL BE MALLEABLE IRON FITTINGS CONFORMING TO THE REQUIREMENTS OF ASTM A47 GALVANIZED IN ACCORDANCE WITH ASTM A153.
4. FABRIC SHALL BE 9 GAUGE GALVANIZED 2" MESH. TOP SELVAGE SHALL HAVE KNUCKLED FINISH.
5. TENSION WIRE SHALL BE 7 GAUGE MEETING THE REQUIREMENTS OF ASTM A641 AS MODIFIED HEREIN. THE TENSILE STRENGTH SHALL BE AT LEAST 80,000 PSI WITH A GALVANIZED COATING OF NOT LESS THAN 0.7 OZ. PER SQUARE FOOT.
6. FABRIC TIES SHALL BE MINIMUM 9 GAUGE GALVANIZED STEEL OR ALUMINUM. MINIMUM SPACING SHALL BE AS FOLLOWS:
   A. 14" O.C. AT LINE POSTS
   B. 24" O.C. AT TOP RAIL
   C. 12" O.C. AT TENSION WIRE
7. WHERE CHAIN LINK FENCE IS TO BE INSTALLED ON WALLS, THE FENCE POSTS SHALL BE IMBEDDED A MINIMUM OF TWELVE (12) INCHES IN THE WALL. NEWLY CONSTRUCTED WALLS SHALL BE PROVIDED WITH PROPER SIZE SLEEVES TO ACCOMMODATE FENCE POSTS. FENCE POSTS SHALL BE SECURELY GROUTED IN PLACE USING AN APPROVED HIGH STRENGTH, NON–SHRINKING, NON–STAINING GROUT.
8. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT SHOP AND ERECTION DRAWINGS INDICATING MATERIALS, SIZES AND DIMENSIONS OF FENCING TO THE OWNER'S FIELD REPRESENTATIVE PRIOR TO ORDERING MATERIALS FOR HIS REVIEW AND APPROVAL.
9. PRIOR TO INSTALLATION OF THE FENCE, THE CONTRACTOR SHALL CHECK THE FENCE LAYOUT WITH THE OWNER'S FIELD REPRESENTATIVE WHO MUST APPROVE THE LAYOUT BEFORE ANY OF THE WORK IS TO BE DONE.
10. FENCE SHALL COATED WITH BLACK VINYL AND BE FITTED WITH PRIVACY SLATS.



CHAIN LINK FENCE W/ ACCESS GATE — 6

(BLACK VINYL COATED WITH PRIVACY SLATS)



NOTES:

1. WHEN PROTECTION POSTS ARE TO BE USED FOR PROTECTION OF HANDICAP PARKING SIGNS OR OTHER TRAFFIC SIGNS, SIGN SUPPORTING POSTS SHALL BE IMBEDDED A MINIMUM OF THREE (3) FEET INTO THE CONCRETE.
2. POST FOR HANDICAP PARKING STALLS SHALL BE PAINTED BLUE AS FOLLOWS:
   A. SOLVENT CLEAN TO REMOVE OIL, GREASE AND OTHER CONTAMINANTS.
   B. APPLY METAL PRIMER FOR GALVANIZED SURFACES.
   C. APPLY TWO (2) FINISH COATS OF APPROVED EXTERIOR PAINT FOR METAL SURFACES.

STEEL PIPE PROTECTION POST — 7

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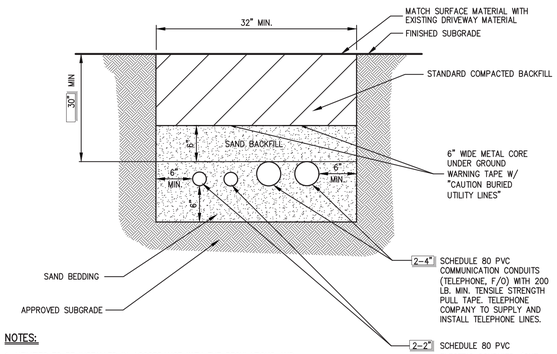

NOTES:

1. UTILITIES TO BE INSTALLED IN ACCORDANCE WITH THE REGULATIONS AND REQUIREMENTS OF THE UTILITY COMPANY HAVING JURISDICTION.
2. BACKFILL FOR PIPE AND CONDUIT SHALL BE PLACED EVENLY AND CAREFULLY AROUND AND OVER THE PIPE OR CONDUIT IN SIX (6) INCH MAXIMUM LAYERS. EACH LAYER SHALL BE THOROUGHLY AND CAREFULLY COMPACTED UNTIL TWELVE (12) INCHES OF COVER EXISTS OVER THE PIPE OR CONDUIT. THE REMAINDER OF THE BACKFILL MAY THEN BE PLACED AND COMPACTED IN A MAXIMUM OF TWELVE (12) INCH LAYERS. EACH LAYER SHALL BE COMPACTED BY APPROVED MECHANICAL TAMPING MACHINES. UNLESS OTHERWISE SPECIFIED BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 92% MAXIMUM MODIFIED DENSITY IN ACCORDANCE WITH ASTM DESIGNATION D–1557 IN THE MANNER HEREIN DESCRIBED. BACKFILL SHALL PROCEED UP TO THE LINES AND GRADES AS SHOWN ON THE DRAWINGS.

UTILITY TRENCH DETAIL — 8

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STATE OF NEW YORK · DAVID P. LOMBARDI · LICENSED PROFESSIONAL ENGINEER · 071001

CONSTRUCTION DETAILS

HOMELAND TOWERS
CROSS RIVER (NY143)
779 ROUTE 35
TOWN OF LEWISBORO, NY

DRAWN: PD	APPROVED: JS
SCALE: N.T.S.	
DATE: 05/04/2018	
PROJECT No: 17024	
DWG: 17024–ZD–DETAILS	TAB: ZD–6 / LS: --
DRAWING No: ZD–6	

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Product Specifications

COMMSCOPE®

DB404-B

Omni Exposed Dipole Antenna, 450–470 MHz, 360° horizontal beamwidth, fixed electrical tilt

Electrical Specifications

Frequency Band, MHz	**450–470**
Gain, dBi	5.9
Beamwidth, Horizontal, degrees	360
Beamwidth, Vertical, degrees	27.0
Beam Tilt, degrees	0
VSWR | Return Loss, dB	1.5 | 14.0
Input Power per Port, maximum, watts	250
Polarization	Vertical
Impedance	50 ohm

General Specifications

Operating Frequency Band	450 – 470 MHz
Antenna Type	Omni
Band	Single band
Performance Note	Outdoor usage

Mechanical Specifications

RF Connector Quantity, total	1
RF Connector Quantity, low band	1
RF Connector Interface	N Male
Color	Silver
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Aluminum
RF Connector Location	End of flexible lead
Wind Speed, maximum	161 km/h | 100 mph

Dimensions

Length	1524.0 mm | 60.0 in
Net Weight, without mounting kit	6.4 kg | 14.1 lb

Regulatory Compliance/Certifications

Agency	**Classification**
RoHS 2011/65/EU	Compliant by Exemption
China RoHS SJ/T 11364-2005	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

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Product Specifications

COMMSCOPE®

DB404-B

Included Products

DB365-OS — Pipe Mounting Kit that consists of two clamps for mounting antennas to round members 1.25 - 3.5 in (35 - 89 mm) OD round members.

* Footnotes

Performance Note — Severe environmental conditions may degrade optimum performance

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	Sector 1	Sector 2	Sector 3	DISH(ES)	OTHER
Antenna Type (1):	Panel	Panel	Panel	N/A	N/A
# of Antennas (1)/ Sector:	Two (2)	Two (2)	Two (2)	None	None
Tx, Rx or Both:	Both	Both	Both	N/A	N/A
Antenna Make (1):	QUINTEL	QUINTEL	QUINTEL	N/A	N/A
Antenna Model (1):	QS8658-5	QS8658-5	QS8658-5	N/A	N/A
Antenna Dimensions (1):	96" x 12" x 9.6"	96" x 12" x 9.6"	96" x 12" x 9.6"	N/A	N/A
Antenna Weight (1):	98 lbs	98 lbs	98 lbs	N/A	N/A
Antenna RAD Ctr (1):	121 ft	121 ft	121 ft	N/A	N/A
Antenna Type (2):	Panel	Panel	Panel	N/A	N/A
# of Antennas (2)/ Sector:	Two (2)	Two (2)	Two (2)	None	None
Tx, Rx or Both:	Both	Both	Both	N/A	N/A
Antenna Manufacturer (2):	CSS	CSS	CSS	N/A	N/A
Antenna Model (2):	Xj7c-FRO-840-V	Xj7c-FRO-840-V	Xj7c-FRO-840-V	N/A	N/A
Antenna RAD Ctr (2):	121 ft (Reserved)	121 ft (Reserved)	121 ft (Reserved)	N/A	N/A
RRU/RRHs/ Sector (1):	One (1)	One (1)	One (1)	Please include microwave dish frequencies below:	Please include microwave dish frequencies below:
RRU/RRH Manufacturer (1):	Alcatel Lucent	Alcatel Lucent	Alcatel Lucent		
RRU/RRH Model (1):	RRH4X30-B13	RRH4X30-B13	RRH4X30-B13		
RRU/RRH Dimensions (1):	20.9" x 11.8" x 7.5"	20.9" x 11.8" x 7.5"	20.9" x 11.8" x 7.5"		
RRU/RRH Weight (1):	50 lbs	50 lbs	50 lbs		
RRU/RRH RAD Ctr (1):	121 ft	121 ft	121 ft		
RRU/RRHs/ Sector (2):	One (1)	One (1)	One (1)		
RRU/RRH Manufacturer (2):	Alcatel Lucent	Alcatel Lucent	Alcatel Lucent		
RRU/RRH Model (2):	RRH4X45-B66A	RRH4X45-B66A	RRH4X45-B66A		
RRU/RRH Dimension (2):	25.2" x 11.4" x 6.3"	25.2" x 11.4" x 6.3"	25.2" x 11.4" x 6.3"		
RRU/RRH Weight (2):	57 lbs	57 lbs	57 lbs		
RRU/RRH RAD Ctr (2):	121 ft	121 ft	121 ft		
# of RRU/RRHs/ Sector (3):	One (1)	One (1)	One (1)		
RRU/RRH Manufacturer (3):	Alcatel Lucent	Alcatel Lucent	Alcatel Lucent		
RRU/RRH Model (3):	RRH2x40-HW	RRH2x40-HW	RRH2x40-HW		
RRU/RRH Weight (3):	56 lbs	56 lbs	56 lbs		
RRU/RRH RAD Ctr (3):	121 ft (Reserved)	121 ft (Reserved)	121 ft (Reserved)		
RRU/RRHs/ Sector (4):	One (1)	One (1)	One (1)		
RRU/RRH Manufacturer (4):	Nokia	Nokia	Nokia		
RRU/RRH Model (4):	RRH 4T4R B5	RRH 4T4R B5	RRH 4T4R B5		
RRU/RRH Dimension (4):	13.3" x 11.6" x 6.5"	13.3" x 11.6" x 6.5"	13.3" x 11.6" x 6.5"		
RRU/RRH Weight (4):	35 lbs	35 lbs	35 lbs		
RRU/RRH RAD Ctr (4):	121 ft	121 ft	121 ft		
TMAs/ Sector:	None	None	None		
Diplexers Per Sector:	None	None	None		
Surge Suppressors/Sector:	One (1)	One (1)	Two (2)		
Surge Suppressor Make:	Raycap	Raycap	Raycap		
Surge Suppressor Model:	RRFDC-3315-PF48	RRFDC-3315-PF48	RRFDC-3315-PF48		
Surge Supressor Dimensions:	19.2" x 15.7" x 10.3"	19.2" x 15.7" x 10.3"	19.2" x 15.7" x 10.3"		
Surge Supressor Weight:	26.9 lbs	26.9 lbs	26.9 lbs		
Surge Supressors RAD Ctr:	121 ft	121 ft	121 ft (Reserved)		
Junction Boxes/Sector:	One (1)	One (1)	One (1)		
Junction Box Make:	Unknown	Unknown	Unknown		
Junction Box Model:	Unknown	Unknown	Unknown		
Junction Box Dimensions:	Unknown	Unknown	Unknown		
Junction Box Weight:	Unknown	Unknown	Unknown		
Junction Box RAD Ctr:	121 ft (Reserved)	121 ft (Reserved)	121 ft (Reserved)		
OTHER:	None	None	None		
Transmit Frequencies:	776.00-787.00, 835.02-844.98, 846.51-848.97, 1900.00-1905.00, 1890.00-1895, 1745.00-1755.00 MHz			N/A	N/A
Receive Frequencies:	746.00-757.00, 880.02-889.98, 891.51-893.97, 1980.00-1985.00, 1970-1975.00, 2145.00-2155.00 MHz			N/A	N/A
# of Lines:	One (1)	One (1)	Four (4)	None	None
Line Size:	1-1/4"	1-1/4"	1-5/8" (Reserved)	N/A	N/A
Mount Type:	TBD	TBD	TBD	N/A	N/A
Mount Size:	TBD	TBD	TBD	N/A	N/A

EMERGENCY SERVICES ANTENNA SPECIFICATIONS 9

VERIZON EQUIPMENT SPECIFICATIONS 10

X

X X X X

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NO.	REVISION	DATE	BY

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JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

CONSTRUCTION DETAILS

HOMELAND TOWERS
CROSS RIVER (NY143)
779 ROUTE 35
TOWN OF LEWISBORO, NY

DRAWN: PD	APPROVED: JS
SCALE: N.T.S.	
DATE: 05/04/2018	
PROJECT No: 17024	
DWG: 17024-ZD-DETAILS	TAB: ZD-8 / LS: --
DRAWING No: ZD-7	

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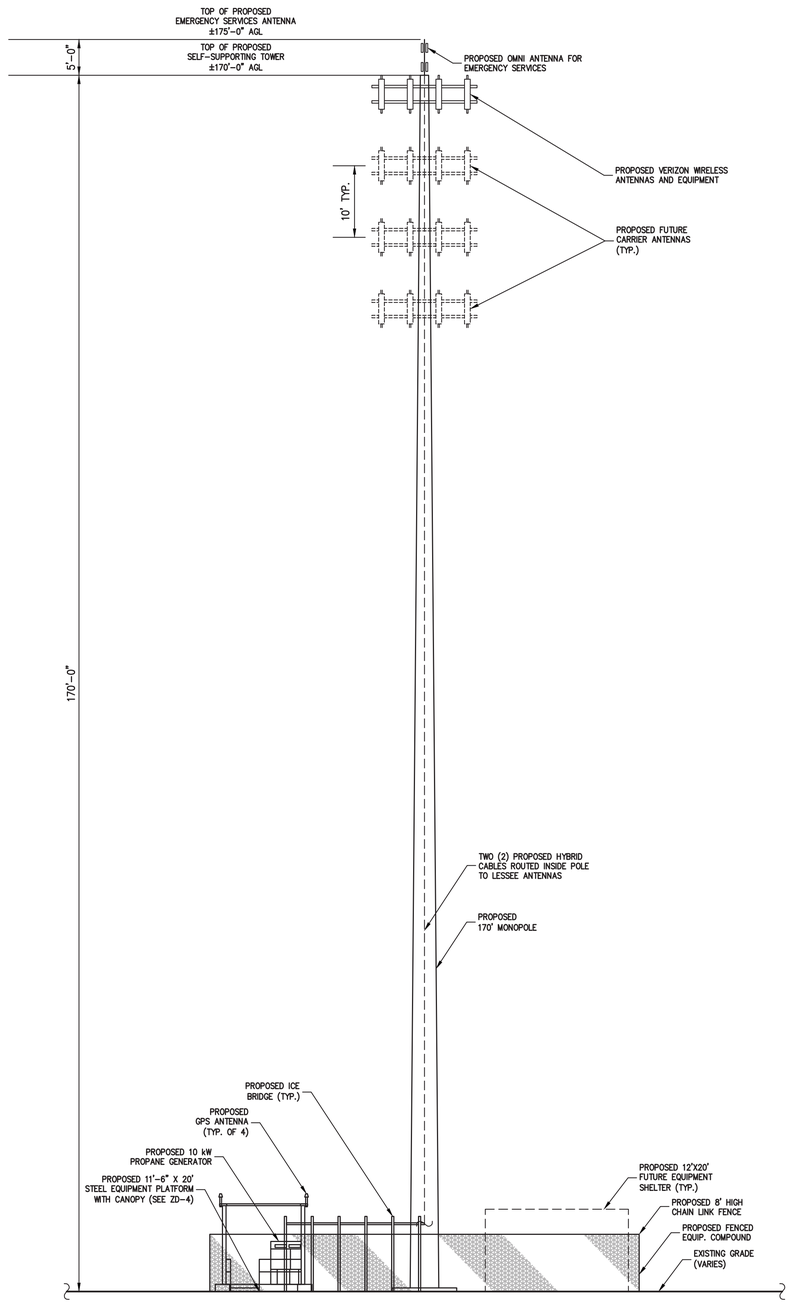

TOWER ELEVATION

(SCALE: 1"=10')

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CONSTRUCTION DETAILS

HOMELAND TOWERS
CROSS RIVER (NY143)
779 ROUTE 35
TOWN OF LEWISBORO, NY

DRAWN: PD	APPROVED: JS
SCALE: N.T.S.	
DATE: 05/04/2018	
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DWG: 17024-ZD-DETAILS	TAB: ZD-8 / LS: --
DRAWING No: ZD-8	

10

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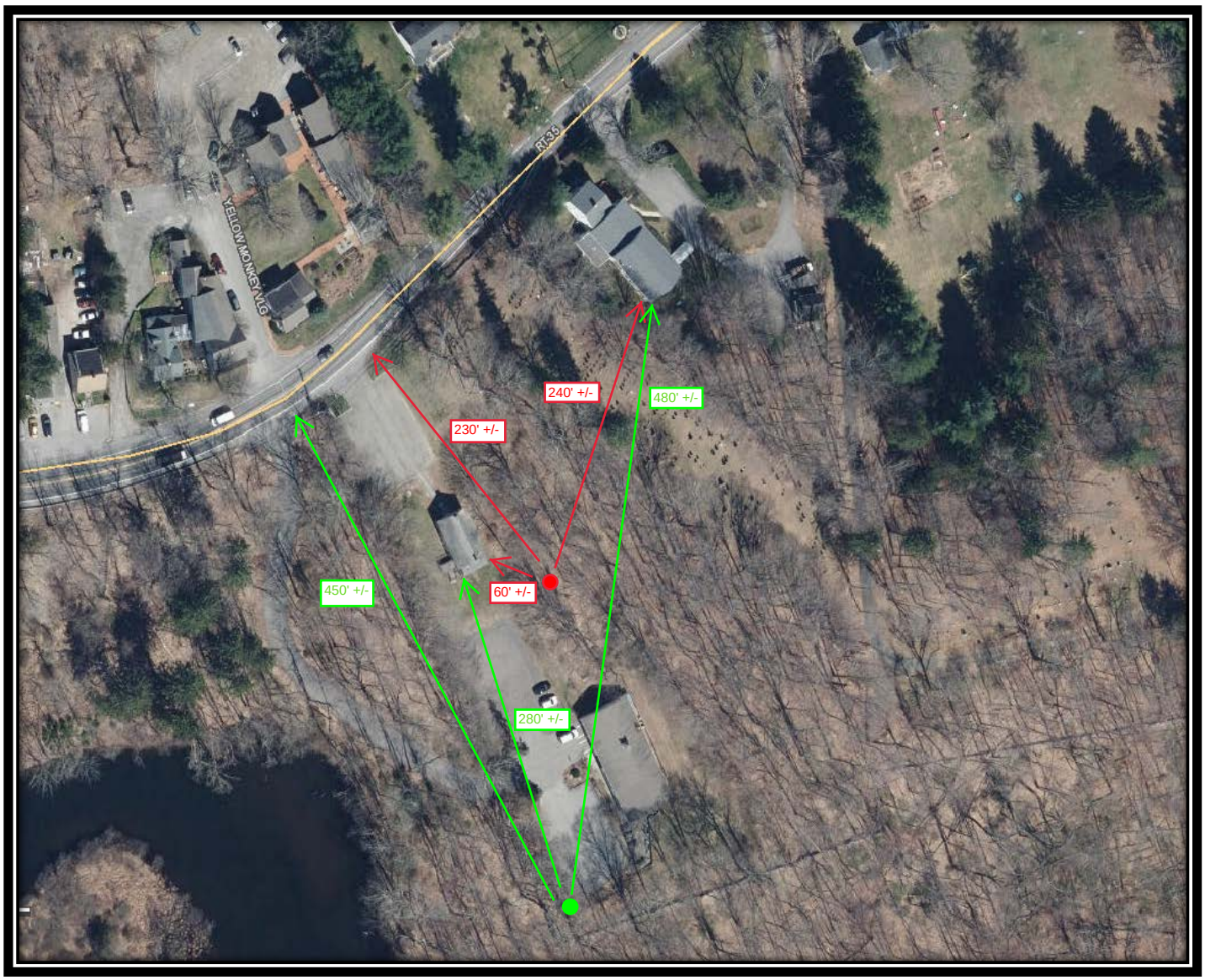


Homeland Towers proposed wireless facility at Lewisboro Volunteer Ambulance Corps,

779 Route 35, Cross River, NY.

Aerial Map showing tower setback distances to structures. Distances shown from the original proposed location of the facility and the revised location of the facility.

ORIGINAL LOCATION OF PROPOSED FACILITY

REVISED LOCATION OF PROPOSED FACILITY

Laura L. Mancuso
Director, Cultural Resources

CBRE, Inc.
Telecom Advisory Services

4 West Red Oak Lane
White Plains, New York 10604

914-597-6991 Tel
914-522-7433 Fax
914-439-0527 Cell

Laura.Mancuso@cbre.com
www.cbre.com

VIA EMAIL

May 3, 2018

John Bonafide
New York State Division for Historic Preservation
Peebles Island State Park
P.O. Box 189
Waterford, NY 12188-0189
518-268-2166

Re: Section 106 Public Outreach
NY143 - Cross River
779 Route 35
Lewisboro, NY
CBRE Project No.: TS70417386
FCC File No.: 0007886709
NY SHPO No.: 17PR06068

Dear Mr. Bonafide:

CBRE is writing on behalf of Homeland Towers, LLC regarding the proposed telecommunications facility at the above-referenced address.

CBRE is in receipt of your letter dated February 23, 2018. Per your request, the proposed facility has been moved from its original location between the existing Cyrus Russell Community Center and the Lewisboro Volunteer Ambulance Corps buildings. The new location will be to the far back (southwest corner) of the property at 41.2615252° N, 73.6123930° W. Moreover, based on your request the compound size has been reduced. The relocated compound is also is move necessitated a loss of five feet lower in elevation; therefore, the AMSL is now lower at 516 feet. The revised project consists of a proposed 170-foot monopole with a five-foot emergency services antenna on top, making the overall tower height 175 feet above ground level and associated equipment located within a 2,965 square-foot fenced compound. Please see attached zoning drawings and aerial map identifying the setback distances gained by this new location.

In April of 2018 Hudson Valley Cultural Resource Consultants (HVCRC) completed a Supplemental Phase 1 Cultural Resource Survey of the NY 143-Cross River Tower revised compound location on behalf of CBRE. The project area is located in the Town of Lewisboro, Westchester County, New York. Based on the cultural and environmental assessment completed, it was determined that the site met the ecological criteria for the potential to contain pre-contact cultural resources. A total of 13 shovel tests were completed within the proposed project area; however, no cultural resources of any kind were identified on the site, and it is the recommendation of HVCRC and CBRE that no further archaeological testing be required for the NY 143-Cross River Tower location. Photographs of the proposed project area are also included in the attached report.

Saratoga Associates also completed a supplemental Visual Resource Assessment of the proposed facility at the new location (please see attached). Upon review of the photo simulations and the report provided by HVCRC, the proposed facility will be visible during leaf-off season from a very small portion of the Cross River Historic District; however, due to the dense stands of mature trees and the topography of the area, the facility will not be visible from the majority of the historic district during the leaf-on seasons. The revised location has significantly helped to screen the proposed facility form the Historic District. CBRE's opinion remains that the proposed facility will have no adverse effect on the Cross River Historic District.

In addition, CBRE has submitted the revised project plans to the Lewisboro Architectural and Community Review Council and the Lewisboro Historian. In addition, a revised public notice will be run in The Record Review.

In your letter dated February 23, 2018, you asked six specific questions. Please see the questions and responses below in italics:

1. Is 170 feet the minimum or maximum height required to achieve the stated project goals? If not, what is?

   Yes, 170 feet is the minimum height required to achieve Verizon Wireless' coverage goals while allowing for collocation of four carriers and the Town's emergency services antenna. Attached hereto is a radio frequency engineer report prepared by PierCon Solutions and a recommendation from to the Town Board from the Lewisboro Antenna Advisory Board confirming the need for the proposed height.

2. If 170 feet is the minimum requirement, how can five potential carriers be accommodated when four carriers would be located below minimum operations height on the structure?

   The tower will be designed to accommodate four wireless carriers (being the number of active wireless carriers in the area) along with emergency antennas for public safety.

The Lewisboro Antenna Advisory Board Committee chairman had reviewed various plots submitted by the Verizon Radio Frequency engineer and determined in his December 5th, 2017 correspondence to the Supervisor and member of the committee that 170 feet will provide coverage for four carriers and that at 130' coverage plots drop off considerably (see attached letter.)

3. How are local EMS agency communications concerns being managed by the proposed tower?

   Lewisboro Volunteer Ambulance Corp will be placing a 5-foot UHF omni antenna at the top of the tower. In addition to Lewisboro Volunteer Ambulance Corps placing equipment on this facility, Homeland Towers, LLC has offered space at no charge to the Lewisboro Volunteer Fire Department and the Lewisboro Police Department, both of which support this wireless facility for public safety.

4. Can the tower be relocated behind the modern building on site? If not, why?

   Homeland Towers LLC, has worked closely with the Town Board, Town Planner, LVAC, NYCS DEPC to successfully accomplish the relocation of the e the tower to the far back (southwest corner) of the property. Due to the presence of steep slopes and existing septic/overflow fields the tower cannot be placed directly behind the modern building which houses the ambulance corps (see attached Zoning Drawings and Cultural Resources Reports for the revised location and photographs).

5. Can the equipment compound (Lease area) be significantly reduced or relocated? If not, why?

   Homeland Towers, LLC has successfully reduced the original lease area from 3,200 S.F. down to 2,965 S.F. and relocated the compound to the far back (southwest corner) of the property (see attached Zoning Drawings and Cultural Resources Reports for the revised location and photographs).

6. If the tower can rest at 130 feet and achieve the stated goals, what stealth options could be explored?

   The tower cannot rest at 130-foot, 170-foot is the minimum height required to accommodate for four carriers and the emergency service antenna. Stealth design is may not be appropriate for a 170-foot tower at this location.

As we stated in our letter to you dated January 30, 2018, the proposed facility has support from the Town Historian, the Lewisboro Antenna Advisory Board, the Lewisboro Volunteer Ambulance Corps, and the Town Supervisor. In addition, on April 23, 2018, the Town of Lewisboro authorized the lease

to Homeland Towers, LLC. Please see the attached letters of support and Authorization from the Town.

If this revised location is acceptable to you, CBRE will submit a revised Form 620 via E106.

Thank you for your time and attention to this matter. Should you have any questions, please do not hesitate to contact me.

Sincerely,

Laura L. Mancuso
Director, Cultural Resources

cc: Guy Lopez, Advisory Council on Historic Preservation
Jill Springer, Federal Communications Commission

PROJECT INFORMATION:

PROPOSED WORK:	PROPOSED EMERGENCY SERVICES AND PUBLIC UTILITY WIRELESS TELECOMMUNICATIONS FACILITY INCLUDING THE INSTALLATION OF A 170' MONOPOLE WITH ANTENNAS AND ASSOCIATED EQUIPMENT WITHIN A PROPOSED FENCED MULTI-CARRIER WIRELESS EQUIPMENT COMPOUND.
SITE ADDRESS:	779 ROUTE 35 CROSS RIVER, NY 10518
PROPERTY OWNER:	TOWN OF LEWISBORO 11 MAIN STREET SOUTH SALEM, NY 10590
TOWER OWNER/ APPLICANT:	HOMELAND TOWERS, LLC 9 HARMONY STREET, 2ND FLOOR DANBURY, CT 06810
ELECTRICAL CONTACT:	NEW YORK STATE ELECTRIC AND GAS CORPORATION CONTACT: CUSTOMER SERVICE PHONE: (800) 572-1111
TELCO CONTACT:	VERIZON (800) 843-2255
LATITUDE:	N41°15'41.4909"
LONGITUDE:	W73°36'44.6146"
LAT/LONG TYPE:	NORTH AMERICAN DATUM OF 1983 (NAD83)
ELEVATION:	±516.3'
JURISDICTION:	TOWN OF LEWISBORO
COUNTY:	WESTCHESTER COUNTY
TAX PARCEL:	53.6-1-47
LOT SIZE:	2.69 ACRES
ZONING DISTRICT:	R-1/2A "ONE FAMILY RESIDENCE, 1/2 ACRE"
CURRENT USE:	MUNICIPAL BUILDINGS – LEWISBORO VOLUNTEER AMBULANCE CORPS.

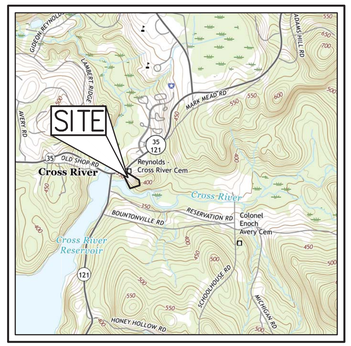
HOMELAND TOWERS

ZONING DRAWINGS

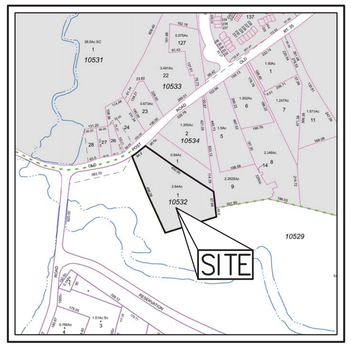
SITE NUMBER: NY143

SITE NAME: CROSS RIVER

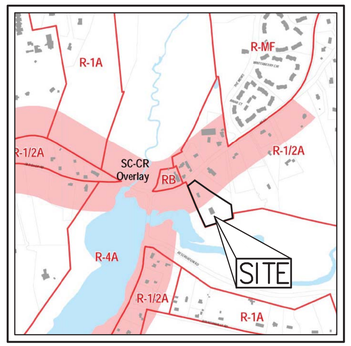
779 ROUTE 35
TOWN OF LEWISBORO
WESTCHESTER COUNTY, NY



VICINITY MAP
SCALE: 1" = 2,000'



TAX PARCEL MAP
SCALE: 1" = 400'



ZONING MAP
SCALE: 1" = 750'

ZONING LEGEND	
R-1A	– ONE FAMILY RESIDENCE, 1-ACRE
R-MF	– MULTI-FAMILY RESIDENCE
R-1/2A	**– ONE FAMILY RESIDENCE, 1/2 ACRE**
RB	– RETAIL BUSINESS
R-4A	– ONE FAMILY RESIDENCE, 4 ACRE
SC-CR	– CROSS RIVER SPECIAL CHARACTER OVERLAY

PROJECT CONTACTS:

SITE PLANNER & CIVIL ENGINEER

JMC PLANNING ENGINEERING LANDSCAPE ARCHITECTURE & LAND SURVEYING, PLLC
120 BEDFORD ROAD
ARMONK, NY 10504
(914) 273-5225

APPLICANT:

HOMELAND TOWERS, LLC
9 HARMONY STREET, 2ND FLOOR
DANBURY, CT 06810
(203) 297-6345

ATTORNEY:

SNYDER & SNYDER, LLP
94 WHITE PLAINS ROAD,
TARRYTOWN, NY 10591
(914) 333-0700

SURVEYOR:

MARTIN SURVEYING ASSOCIATES, LLC
201 CHRISTIAN LANE
BERLIN, CT 06037
(860) 832-9328

NEPA CONSULTANT:

CBRE TELECOM SERVICES, INC.
4 WEST RED OAK LANE
WHITE PLAINS, NY 10604
(914) 694-9600

JMC DRAWINGS:

ZD-1	COVER SHEET
ZD-2	ABUTTERS PLAN
ZD-3	OVERALL SITE PLAN
ZD-4	LAYOUT PLAN
ZD-5	GRADING, UTILITIES, & EROSION & SEDIMENT CONTROL PLAN
ZD-6	CONSTRUCTION DETAILS
ZD-7	CONSTRUCTION DETAILS
ZD-8	CONSTRUCTION DETAILS

GENERAL CONSTRUCTION NOTES APPLY TO ALL WORK HEREIN:

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CALL 811 "DIG SAFELY" (1-800-962-7962) TO HAVE UNDERGROUND UTILITIES LOCATED. EXPLORATORY EXCAVATIONS SHALL COMPLY WITH CODE 753 REQUIREMENTS. NO WORK SHALL COMMENCE UNTIL ALL THE OPERATORS HAVE NOTIFIED THE CONTRACTOR THAT THEIR UTILITIES HAVE BEEN LOCATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL PUBLIC AND PRIVATE UNDERGROUND AND SURFACE UTILITIES AND STRUCTURES AT OR ADJACENT TO THE SITE OF CONSTRUCTION, INSOFAR AS THEY MAY BE ENDANGERED BY HIS OPERATIONS. THIS SHALL HOLD TRUE WHETHER OR NOT THEY ARE SHOWN ON THE CONTRACT DRAWINGS. IF THEY ARE SHOWN ON THE DRAWINGS, THEIR LOCATIONS ARE NOT GUARANTEED EVEN THOUGH THE INFORMATION WAS OBTAINED FROM THE BEST AVAILABLE SOURCES, AND IN ANY EVENT, OTHER UTILITIES ON THESE PLANS MAY BE ENCOUNTERED IN THE FIELD. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, IMMEDIATELY REPAIR OR REPLACE ANY STRUCTURES OR UTILITIES THAT HE DAMAGES, AND SHALL CONSTANTLY PROCEED WITH CAUTION TO PREVENT UNDUE INTERRUPTION OF UTILITY SERVICE.
2. UNDER INDUSTRIAL CODE 753, CONTRACTOR SHALL NOTIFY ALL OPERATORS OF UTILITIES LOCATED IN THE AREA WHERE THE WORK IS TO BE PERFORMED PRIOR TO THE START OF THIS WORK SO THAT ALL THE VARIOUS UNDERGROUND UTILITY OPERATORS WILL BE ABLE TO LOCATE AND MARK THE LOCATIONS OF THEIR OWN UTILITIES. NO WORK SHALL COMMENCE UNTIL ALL THE OPERATORS HAVE NOTIFIED THE CONTRACTOR THAT THEIR UTILITIES HAVE BEEN LOCATED.
3. CONTRACTOR SHALL HAND DIG TEST PITS TO VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL VERIFY EXISTING UTILITIES DEPTHS AND ADVISE OF ANY CONFLICTS WITH PROPOSED UTILITIES. IF CONFLICTS ARE PRESENT. THE OWNER'S FIELD REPRESENTATIVE, JMC AND THE APPLICABLE MUNICIPALITY OR AGENCY SHALL BE NOTIFIED IN WRITING. THE EXISTING/PROPOSED UTILITIES RELOCATION SHALL BE DESIGNED BY JMC.
4. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL SAFETY CODES. APPLICABLE SAFETY CODES MEAN THE LATEST EDITION INCLUDING ANY AND ALL AMENDMENTS, REVISIONS, AND ADDITIONS THERETO, TO THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S OCCUPATIONAL SAFETY AND HEALTH STANDARDS (OSHA); AND APPLICABLE SAFETY, HEALTH REGULATIONS AND BUILDING CODES FOR CONSTRUCTION IN THE STATE OF NEW YORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GUARDING AND PROTECTING ALL OPEN EXCAVATIONS IN ACCORDANCE WITH THE PROVISION OF SECTION 107-05 (SAFETY AND HEALTH REQUIREMENTS) OF THE NYSDOT STANDARD SPECIFICATIONS. IF THE CONTRACTOR PERFORMS ANY HAZARDOUS CONSTRUCTION PRACTICES, ALL OPERATIONS IN THE AFFECTED AREA SHALL BE DISCONTINUED AND IMMEDIATE ACTION SHALL BE TAKEN TO CORRECT THE SITUATION TO THE SATISFACTION OF THE APPROVAL AUTHORITY HAVING JURISDICTION.
5. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES AFFECTED BY THE SCOPE OF WORK SHOWN HEREON AT ALL TIMES TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE. RAMPING CONSTRUCTION TO PROVIDE ACCESS MAY BE CONSTRUCTED WITH SUBBASE MATERIAL EXCEPT THAT TEMPORARY ASPHALT CONCRETE SHALL BE PLACED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE PEDESTRIAN ACCESS AT ALL TIMES.
6. PRIOR TO OBTAINING A BUILDING PERMIT TO ALLOW ITS CONSTRUCTION, DETAILED DESIGN CALCULATIONS MUST BE PROVIDED TO ILLUSTRATE COMPLIANCE WITH ANSI TIA/EIA '222-F AND ANSI TIA 222-G "STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS" AND THE NYS BUILDING CODE, FOR REVIEW AND ACCEPTANCE BY THE TOWN.

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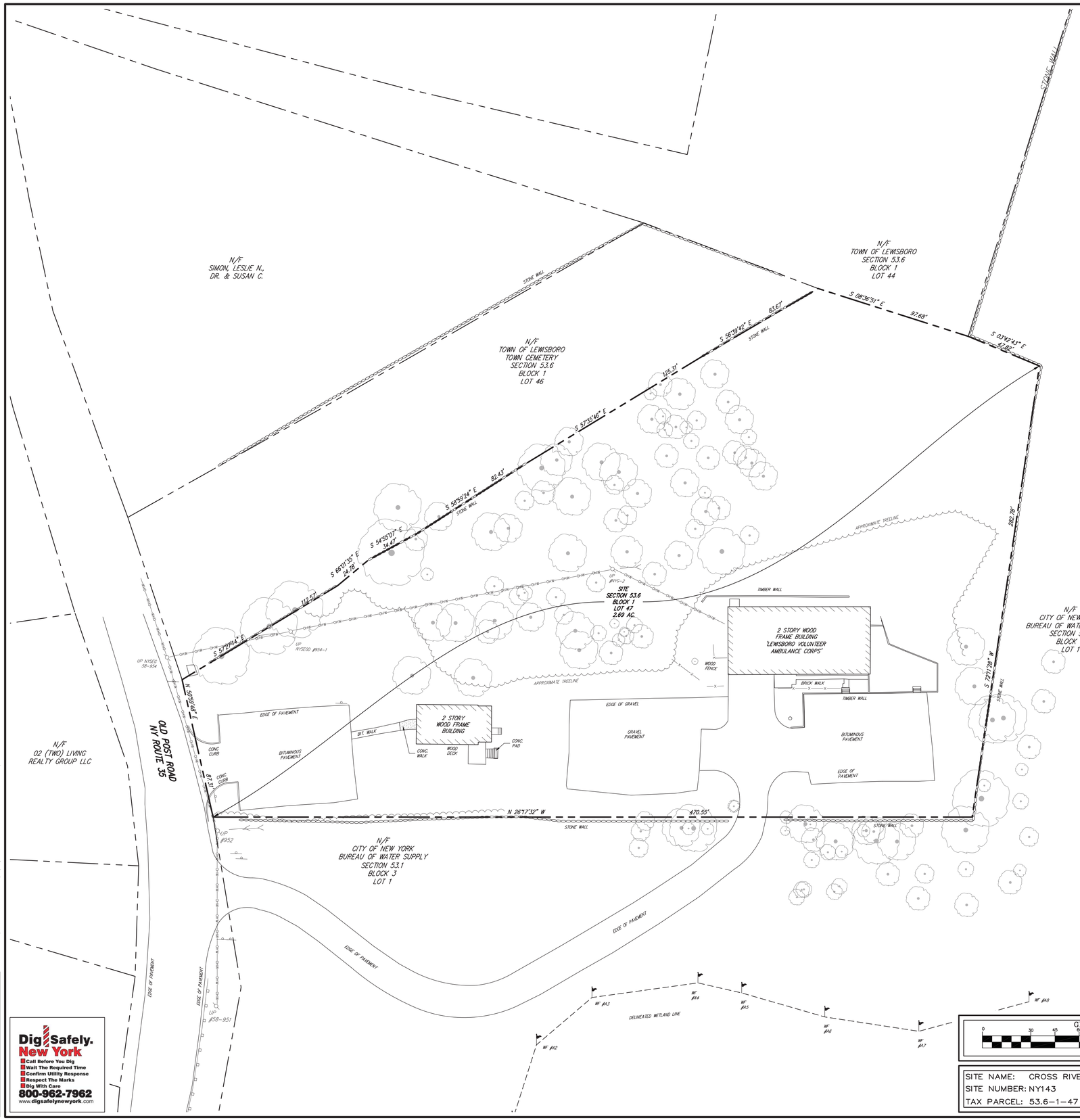
PROGRESS PLOTTING

Drawing: 17024-SITE
Date: 2018-04-30
Time: 4:34 PM
By: PD

SITE NAME: CROSS RIVER
SITE NUMBER: NY143
TAX PARCELS: 53.6-1-47

NO.	REVISION	DATE	BY
	Previous Editions Obsolete		

DRAWN: PD	APPROVED: JS
SCALE: AS SHOWN	
DATE: 04/XX/2018	
PROJECT No: 17024	
DWG: 17024-SITE	TAB: COVER / SCR: 9_COVER
DRAWING No: ZD-1	



LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING TREELINE
- EXISTING FENCE
- EXISTING OVERHEAD WIRE
- EXISTING UTILITY POLE
- EXISTING DECIDUOUS TREE
- EXISTING EVERGREEN TREE

NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM A DRAWING TITLED "SURVEY OF TAX LOT 53.6–1–47" PREPARED BY MARTIN SURVEYING ASSOCIATES, LLC, DATED 06/07/2017, AND LAST REVISED 03/29/2018.
2. A WETLAND DELINEATION WAS PERFORMED BY ECOLOGICAL SOLUTIONS ON 05/22/2017, AND WETLAND FLAGS WERE FIELD LOCATED BY MARTIN SURVEYING ASSOCIATES, LLC.
3. SUPPLEMENTAL EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM PUTNAM COUNTY GEOGRAPHIC INFORMATION SYSTEMS. THIS INFORMATION IS APPROXIMATE AND SHOULD BE USED FOR PLANNING PURPOSES ONLY.

PROPERTY OWNERS ABUTTING SECTION 53.6, BLOCK 1, LOT 47

SECTION	BLOCK	LOT	PROPERTY OWNER	MAILING ADDRESS
53.6	1	46	TOWN CEMETERY	P.O. BOX 500 SOUTH SALEM, NY 10590
53.6	1	44	TOWN OF LEWISBORO	11 MAIN STREET SOUTH SALEM, NY 10590
53.1	3	1	CITY OF NEW YORK BUREAU OF WATER SUPPLY, TAXES	71 SMITH AVENUE KINGSTON, NY 12401

NOTES:

1. TAX PARCEL DATA INCLUDING PROPERTY OWNER AND ADDRESS WERE OBTAINED FROM THE WESTCHESTER COUNTY GEOGRAPHIC INFORMATION SYSTEMS "MUNICIPAL TAX PARCEL VIEWER".

APPLICANT:

HOMELAND TOWERS, LLC
9 HARMONY STREET, 2ND FLOOR
DANBURY, CT 06810

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
www.jmcpllc.com

ABUTTERS PLAN

HOMELAND TOWERS
CROSS RIVER (NY143)
779 ROUTE 35
TOWN OF LEWISBORO, NY

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PROGRESS PLOTTING

Drawing: 17024-SITE
Date: 2018-04-30
Time: 4:34 PM
By: PD

GRAPHIC SCALE
0 30 45 60 90 150
1" = 30'

SITE NAME: CROSS RIVER
SITE NUMBER: NY143
TAX PARCEL: 53.6–1–47

NO.	REVISION	DATE	BY

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DRAWN: PD APPROVED: JS
SCALE: 1" = 30'
DATE: 04/XX/2018
PROJECT No: 17024
DWG: 17024-SITE TAB: ABUTTERS SCR: 0_ABUTTERS
DRAWING No:
ZD–2

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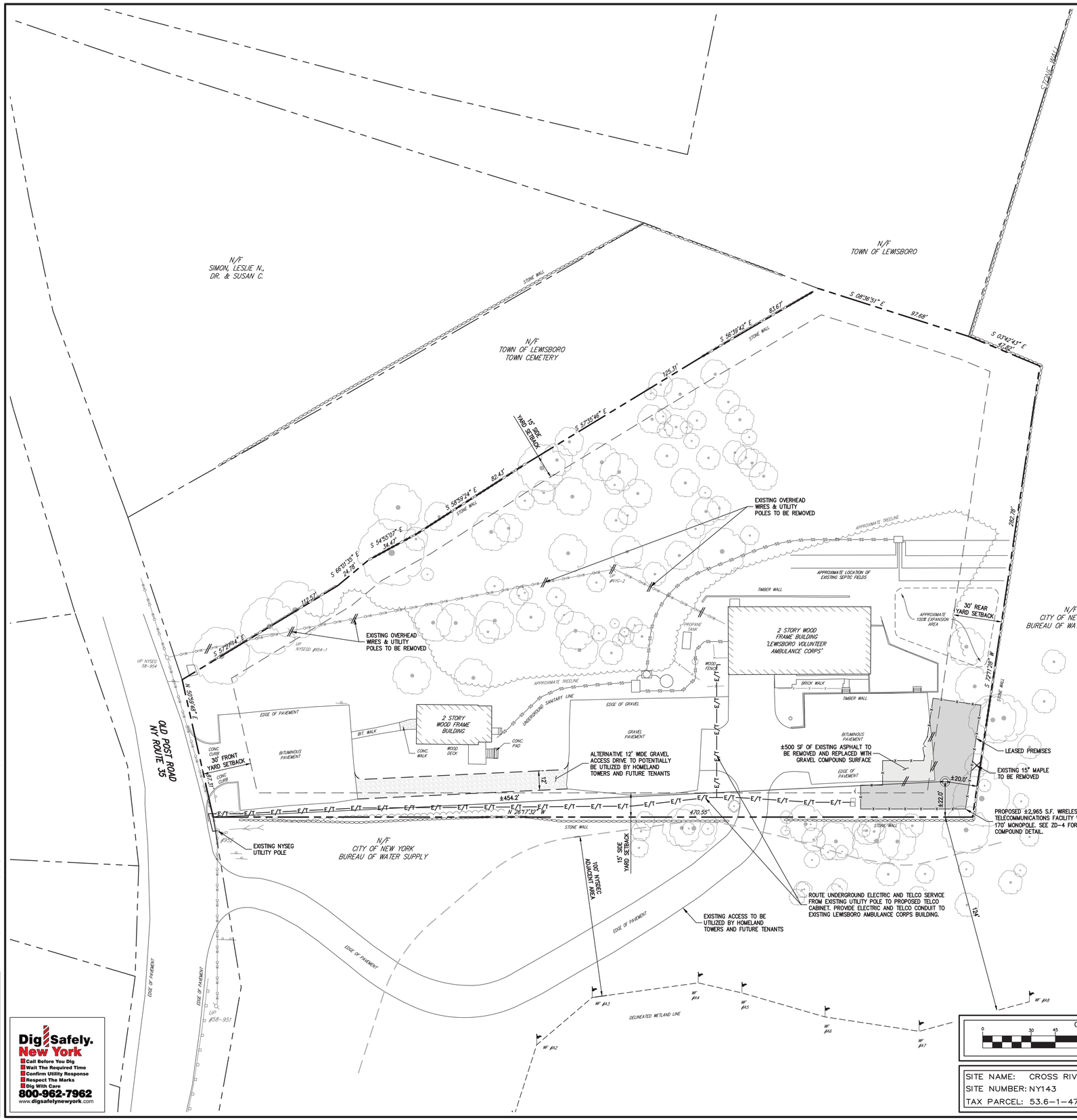

LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING UTILITY POLE
- EXISTING OVERHEAD WIRE
- EXISTING STONE WALL
- EXISTING DECIDUOUS TREE
- EXISTING EVERGREEN TREE
- EXISTING YARD SETBACK
- EXISTING WETLAND BUFFER
- PROPOSED FENCE
- PROPOSED UNDERGROUND ELECTRIC & TELCO LINE

NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM A DRAWING TITLED "SURVEY OF TAX LOT 53.6–1–47" PREPARED BY MARTIN SURVEYING ASSOCIATES, LLC, DATED 06/07/2017, AND LAST REVISED 03/29/2018.
2. A WETLAND DELINEATION WAS PERFORMED BY ECOLOGICAL SOLUTIONS ON 05/22/2017, AND WETLAND FLAGS WERE FIELD LOCATED BY MARTIN SURVEYING ASSOCIATES, LLC.
3. THE EXISTING SEPTIC SYSTEM LAYOUT DEPICTED ON THESE FIGURES HAS BEEN OBTAINED FROM A DRAWING TITLED "SITE PLAN", PREPARED BY JEROME KERNER, AIA, LAST REVISED 07/26/2007.
4. SUPPLEMENTAL EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM WESTCHESTER COUNTY GEOGRAPHIC INFORMATION SYSTEMS. THIS INFORMATION IS APPROXIMATE AND SHOULD BE USED FOR PLANNING PURPOSES ONLY.

GENERAL SITE NOTES:

1. SUBJECT PROPERTY IS KNOWN AS SECTION 53.6, BLOCK 1, LOT 47 AS SHOWN ON A TAX PARCEL MAP GENERATED BY WESTCHESTER COUNTY GEOGRAPHIC INFORMATION SYSTEMS.
2. ZONING CLASSIFICATION IS R–1/2A – ONE FAMILY RESIDENCE, 1/2 ACRE.

   APPLICANT: HOMELAND TOWERS, LLC
   9 HARMONY STREET, 2ND FLOOR
   DANBURY, CT 06810

3. PROPERTY OWNER: TOWN OF LEWISBORO
   11 MAIN STREET
   SOUTH SALEM, NY 10590
4. THE PROPOSED USE IS FOR WIRELESS TELECOMMUNICATIONS. THE SITE IS NOT INTENDED FOR PERMANENT EMPLOYEE OCCUPANCY AND THEREFORE, POTABLE WATER SUPPLY AND SANITARY SEWER FACILITIES ARE NOT REQUIRED OR PROPOSED.
5. THE FACILITY SHALL BE VISITED ON AVERAGE, ONCE A MONTH FOR MAINTENANCE AND SHALL BE CONTINUOUSLY MONITORED FROM A REMOTE FACILITY 24 HOURS A DAY, 7 DAYS A WEEK.
6. THE APPLICANT'S EQUIPMENT IS REMOTELY OPERATED AND CONTROLLED, AND AS SUCH IS NORMALLY UNMANNED. COMPUTERIZED EQUIPMENT AND FACILITY ALARM SYSTEMS CONTINUOUSLY MONITOR AN EXTENSIVE NUMBER OF OPERATIONAL AND SHELTER FUNCTIONS.
7. ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION FOR THE SITE IMPROVEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH:
   A. CURRENT PREVAILING MUNICIPAL AND/OR STATE SPECIFICATIONS, STANDARDS AND REQUIREMENTS.
   B. CURRENT PREVAILING UTILITY COMPANY AUTHORITY SPECIFICATIONS, STANDARDS AND REQUIREMENTS.
8. THERE WILL NOT BE ANY CHANGES IN EXISTING DRAINAGE PATTERNS TO THE MAXIMUM EXTENT PRACTICABLE.
9. THERE ARE NO COMMERCIAL SIGNS PROPOSED FOR ANY ASPECT OF THE USE.
10. THE PROPOSED FACILITY IS UNMANNED AND WILL NOT GENERATE ANY ADDITIONAL NOISE ABOVE AMBIENT LEVELS AT THE PROPERTY LINE, DUST, FUMES, ODORS OR VIBRATIONS.
11. THERE ARE NO COMMERCIAL SIGNS PROPOSED FOR THE PROJECT.
12. ANY LIGHTING PROPOSED BY TENANT/CARRIER EQUIPMENT SPECIFICATIONS SHALL CONFORM TO TOWN CODE REQUIREMENTS, BE CONTROLLED BY A MANUAL TIMER, AND NOT SPILL ONTO ADJACENT PROPERTIES.

APPLICANT:

HOMELAND TOWERS, LLC
9 HARMONY STREET, 2ND FLOOR
DANBURY, CT 06810

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Meyer Consulting, Inc.
120 BEDFORD ROAD • ARMONK, NY 10504
voice 914.273.5225 • fax 914.273.2102
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OVERALL SITE PLAN

HOMELAND TOWERS
CROSS RIVER (NY143)
779 ROUTE 35
TOWN OF LEWISBORO, NY

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PROGRESS PLOTTING

Drawing: 17024-SITE
Date: 2018-04-30
Time: 4:34 PM
By: PD

GRAPHIC SCALE
0 30 45 60 90 150
1" = 30'

SITE NAME: CROSS RIVER
SITE NUMBER: NY143
TAX PARCEL: 53.6–1–47

NO.	REVISION	DATE	BY

Previous Editions Obsolete

DRAWN: PD	APPROVED: JS
SCALE: 1" = 30'	
DATE: 04/XX/2018	
PROJECT No: 17024	
DWG: 17024-SITE	TAB: OSP / SCR: 1_OSP
DRAWING No: ZD–3	

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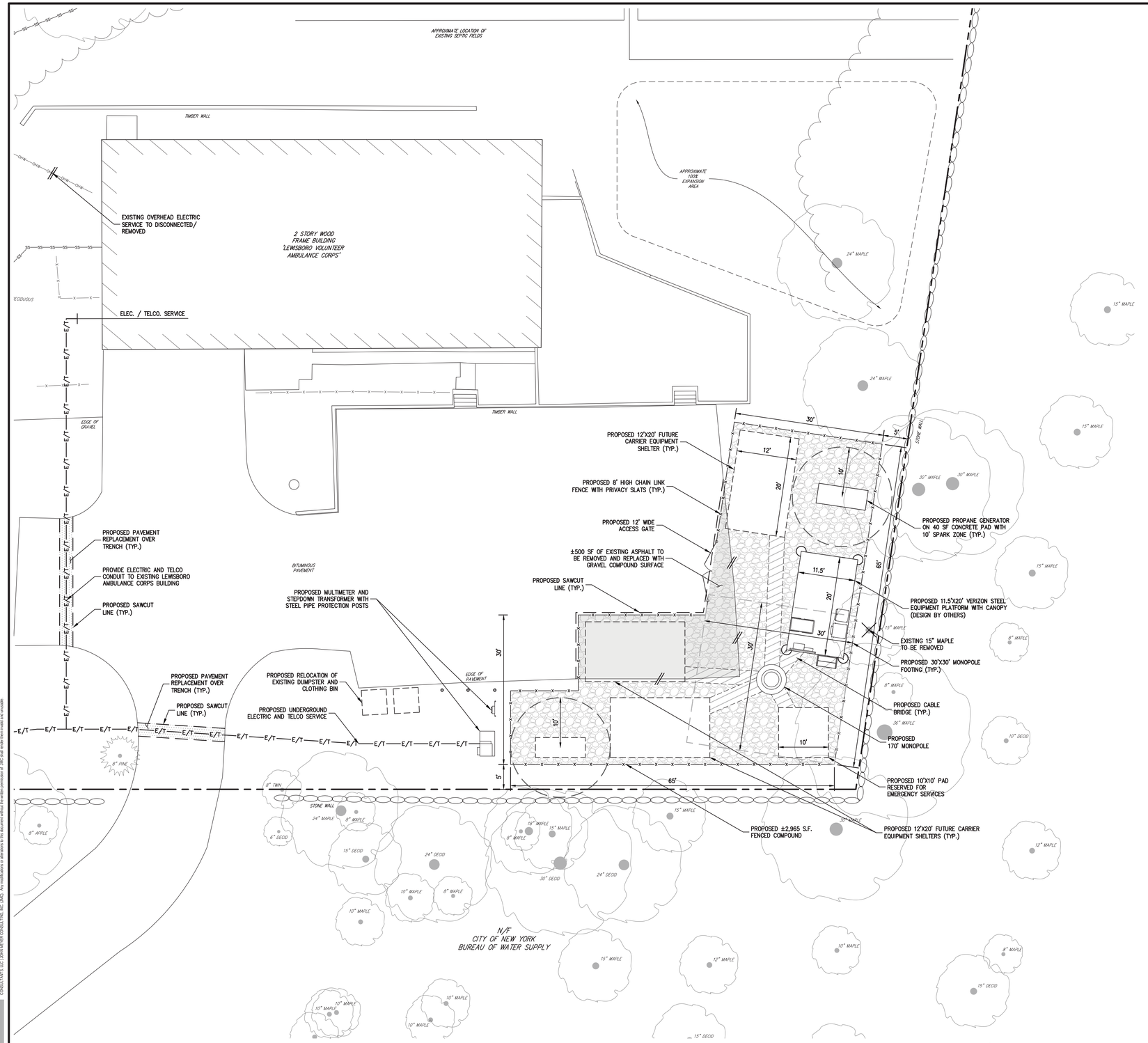
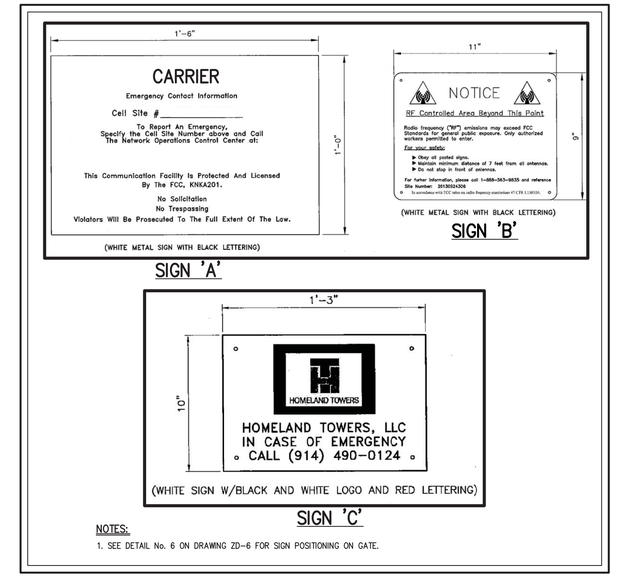


LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING PAVEMENT EDGE
- EXISTING BUILDING LINE
- EXISTING FENCE
- EXISTING TREELINE
- EXISTING STONE WALL
- EXISTING DECIDUOUS TREE
- EXISTING EVERGREEN TREE
- PROPOSED UNDERGROUND ELECTRIC & TELCO LINE
- PROPOSED GRAVEL SURFACE
- PROPOSED CABLE BRIDGE
- PROPOSED FENCE
- PROPOSED SAWCUT LINE
- PROPOSED STEEL PIPE PROTECTION POST

NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM A DRAWING TITLED "SURVEY OF TAX LOT 53.6-1-47" PREPARED BY MARTIN SURVEYING ASSOCIATES, LLC, DATED 06/07/2017, AND LAST REVISED 03/29/2018.
2. THE EXISTING SEPTIC SYSTEM LAYOUT DEPICTED ON THESE FIGURES HAS BEEN OBTAINED FROM A DRAWING TITLED "SITE PLAN", PREPARED BY JEROME KERNER, AIA, LAST REVISED 07/26/2007.



NOTES:

1. SEE DETAIL No. 6 ON DRAWING ZD-6 FOR SIGN POSITIONING ON GATE.

APPLICANT:

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9 HARMONY STREET, 2ND FLOOR
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LAYOUT PLAN

HOMELAND TOWERS
CROSS RIVER (NY143)
779 ROUTE 35
TOWN OF LEWISBORO, NY

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PROGRESS PLOTTING

Drawing: 17024-SITE
Date: 2018-04-30
Time: 4:34 PM
By: PD

GRAPHIC SCALE
0 20 30 40 60 100
1" = 20'

SITE NAME: CROSS RIVER
SITE NUMBER: NY143
TAX PARCEL: 53.6-1-47

NO.	REVISION	DATE	BY

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SCALE: 1" = 10'			
DATE: 04/XX/2018			
PROJECT No: 17024			
DWG: 17024-SITE	TAB: LAYOUT	SCR: 2_LAYOUT	
DRAWING No: ZD-4			

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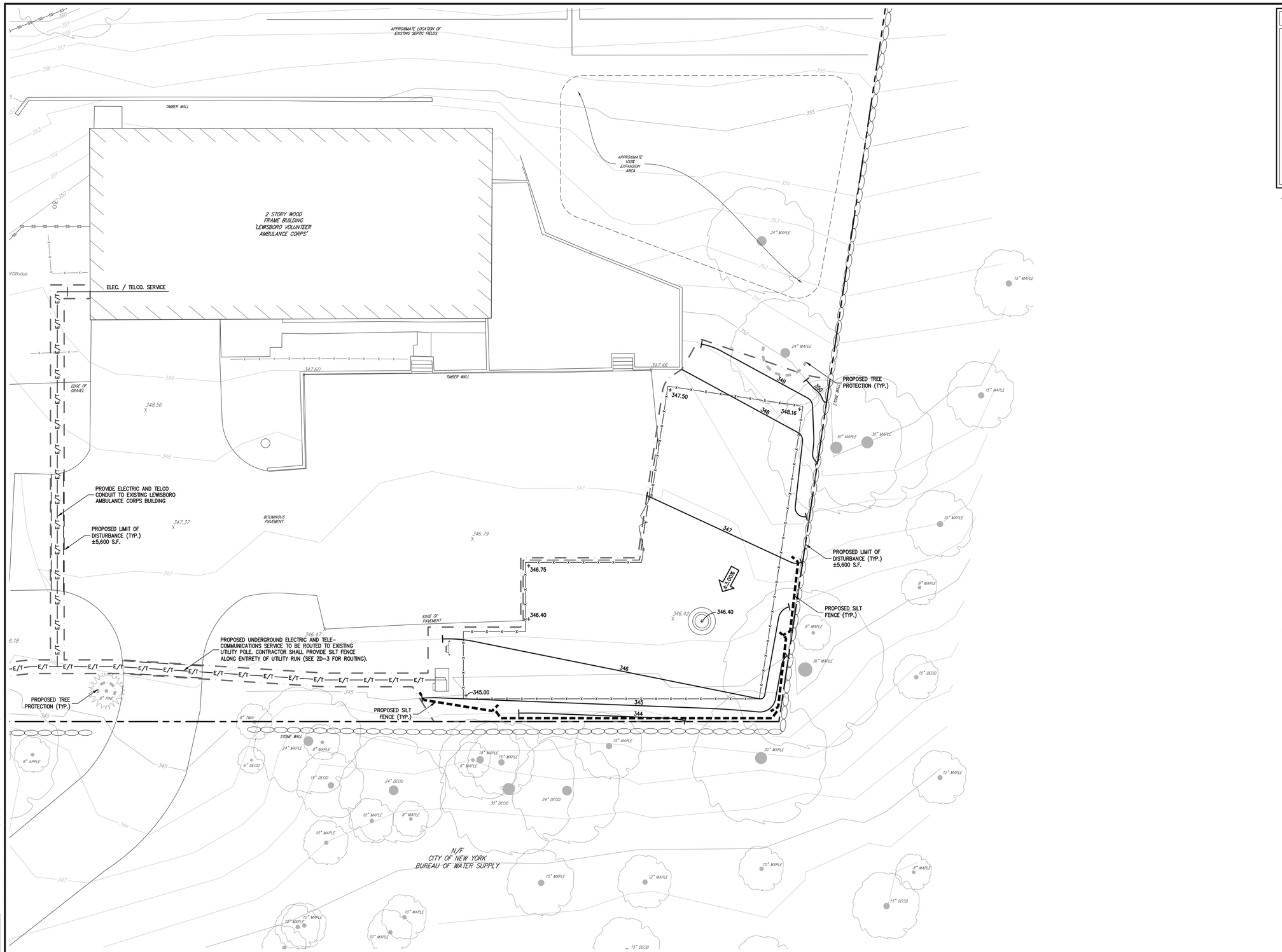

LEGEND

351	EXISTING CONTOUR
350	EXISTING INDEX CONTOUR
	EXISTING STONE WALL
	PROPOSED CABLE BRIDGE
	PROPOSED ACCESS DRIVE
—x—x—x—x—	PROPOSED FENCE
—E/T—E/T—E/T—E/T—	PROPOSED UNDERGROUND ELECTRIC & TELECO SERVICE
346	PROPOSED FINISHED GRADE
345.00+	PROPOSED SPOT GRADE
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED SILT FENCE
	PROPOSED STEEL PROTECTION POST

NOTES:

1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM A DRAWING TITLED "SURVEY OF TAX LOT 53.6-1-47" PREPARED BY MARTIN SURVEYING ASSOCIATES, LLC, DATED 06/07/2017, AND LAST REVISED 03/29/2018.
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3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH ALL THE PLANS, PRIOR TO BEGINNING ANY CLEARING, GRUBBING OR EXCAVATION.
4. EXPOSED SLOPES AND ALL GRADED AREAS SHALL BE SEEDED WITH THE FOLLOWING GRASS MIX IMMEDIATELY UPON COMPLETION OF ITS CONSTRUCTION AT A RATE OF 6 POUNDS PER 1000 S.F. IN THE FOLLOWING PROPORTIONS:
   CREEPING RED FESCUE 30 %
   PERENNIAL RYE GRASS 70 %
5. GRASS SEED MIX FOR EROSION AND SEDIMENT CONTROL MAY BE APPLIED BY EITHER MECHANICAL OR HYDROSEEDING METHODS. HYDROSEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF NURSERYMEN, AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION.
6. ALL DISTURBED AREAS SHALL BE MULCHED WITH STRAW AT A RATE OF 2 TONS PER ACRE (90 LBS. PER 1,000 S.F.) SUCH THAT THE MULCH FORMS A CONTINUOUS BLANKET.
7. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A DAILY BASIS BY THE CONTRACTOR. ALL COLLECTED SEDIMENT WITHIN SEDIMENT BARRIERS SHALL BE REMOVED PERIODICALLY TO MAINTAIN THE FUNCTION OF THE SEDIMENT BARRIER. ALL SEDIMENT COLLECTED SHALL BE RESPREAD ON-SITE WITHIN STABILIZED AREAS AS DIRECTED BY THE OWNERS FIELD REPRESENTATIVE.
8. DUST SHALL BE CONTROLLED BY SPRINKLING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE VILLAGE ENGINEER.
9. CUT AND FILLS SHALL NOT ENDANGER ADJOINING PROPERTIES, NOR DIVERT WATER ONTO THE PROPERTY OF OTHERS.
10. ALL FILLS SHALL BE COMPACTED TO PROVIDE STABILITY OF MATERIAL AND TO PREVENT SETTLEMENT.
11. THE CONTRACTOR SHALL INSPECT DOWNSTREAM CONDITIONS FOR EVIDENCE OF SEDIMENTATION ON A WEEKLY BASIS AND AFTER RAINSTORMS.
12. AS WARRANTED BY FIELD CONDITIONS, SPECIAL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR AS REQUIRED.
13. FINAL UNDERGROUND ELECTRIC AND TELECOMMUNICATIONS SERVICE ROUTING TO BE DETERMINED AFTER CONSULT WITH PROVIDER.
14. ELECTRIC / TELECOMMUNICATION LINES SHALL BE INSTALLED UNDERGROUND IN CONDUIT IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY HAVING JURISDICTION.
15. A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE APPROVED BY THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NYCDEP) PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

APPLICANT:

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GRADING, UTILITIES, AND EROSION & SEDIMENT CONTROL PLAN

HOMELAND TOWERS
CROSS RIVER (NY143)
779 ROUTE 35
TOWN OF LEWISBORO, NY

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PROGRESS PLOTTING

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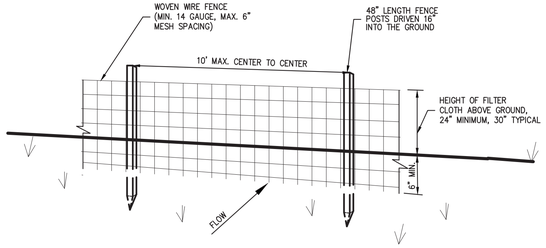
GRAPHIC SCALE
0 10 15 20 30 50
1" = 10'

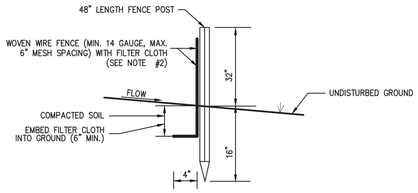
SITE NAME: CROSS RIVER
SITE NUMBER: NY143
TAX PARCEL: 53.6-1-47

NO.	REVISION	DATE	BY
	Previous Editions Obsolete		

DRAWN: PD	APPROVED: JS
SCALE: 1" = 20'	
DATE: 04/XX/2018	
PROJECT No: 17024	
DWG: 17024-SITE	TAB: G-U-SE / SCR: 3_GRAD-UTIL-SE
DRAWING No: ZD-5	



PERSPECTIVE VIEW

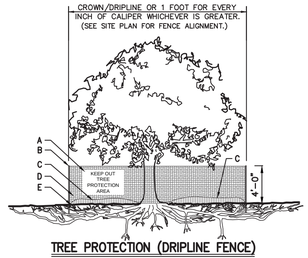


SECTION

NOTES:

1. WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL, EITHER T OR U TYPE OR HARDWOOD.
2. FILTER CLOTH SHALL BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABLINKA T140N, OR APPROVED EQUAL.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVROFENCE, OR APPROVED EQUAL.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED AND REPLACED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

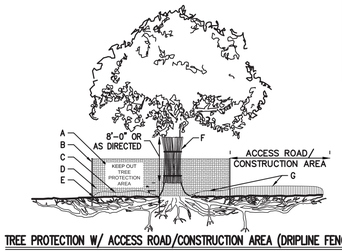
SILT FENCE — 1



TREE PROTECTION (DRIPLINE FENCE)

A	8.5"X11" SIGN LAMINATED IN PLASTIC SPACED EVERY 50' ALONG FENCE
B	2"X6' STEEL POSTS OR APPROVED EQUAL.
C	5" THICK LAYER OF MULCH.
D	TREE PROTECTION FENCE: HIGH DENSITY POLYETHYLENE FENCING WITH 3.5" X 1.5" OPENINGS; COLOR ORANGE. STEEL POSTS INSTALLED AT 8' O.C.
E	MAINTAIN EXISTING GRADE WITHIN THE TREE PROTECTION FENCE UNLESS OTHERWISE INDICATED ON THE PLANS.
F	INSTALL ROUGH SAWN WOOD WHERE AND AS DIRECTED BY PROJECT LANDSCAPE ARCHITECT OR PROFESSIONAL ARBORIST. SEE CHART FOR WOOD SIZE BOUND WITH 9 GAUGE WIRE.
G	8"–12" THICK LAYER OF MULCH ON MAINTENANCE ROAD. 5" THICK LAYER INSIDE TREE PROTECTION AREA.

TREE DIAMETER	ROUGH SAWN WOOD SIZE
<12"	2"X2"
13"–24"	2"X4"
>25"	2"X6"

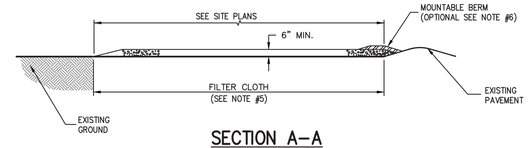


TREE PROTECTION W/ ACCESS ROAD/CONSTRUCTION AREA (DRIPLINE FENCE)

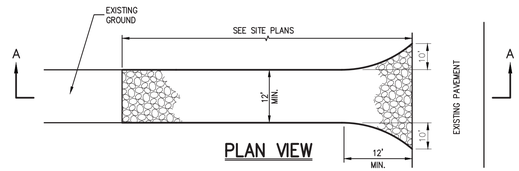
NOTES:

1. SEE SPECIFICATIONS FOR ADDITIONAL TREE PROTECTION REQUIREMENTS.
2. IF THERE IS NO EXISTING IRRIGATION, SEE SPECIFICATIONS FOR WATERING REQUIREMENTS.
3. NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.
4. NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.
5. SEE SITE PLANS FOR IDENTIFICATIONS/LOCATIONS OF INDIVIDUAL TREES TO BE PROTECTED.
6. ALL EXCAVATION WITHIN THE CROWN/DRIPLINE OF ANY TREE SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF THE PROJECT LANDSCAPE ARCHITECT OR PROFESSIONAL ARBORIST. SPECIAL MEASURES, SUCH AS THE USE OF AN AIR SPADE MAY BE REQUIRED.
7. THE CONTRACTOR MAY PROPOSE THE USE OF ENGINEERED MATTING OR OTHER ENGINEERED PRODUCTS IN LIEU OF MULCH, WHICH SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF ALL AUTHORITIES HAVING JURISDICTION.

TREE PROTECTION — 2



SECTION A–A

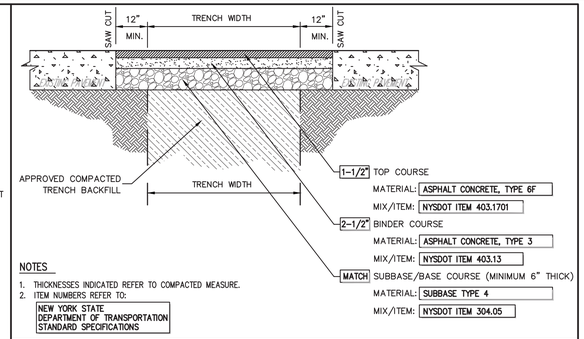


PLAN VIEW

NOTES

1. STONE SIZE – USE 1" TO 4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET.
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH TO BE PLACED OVER THE ENTIRE WIDTH AND LENGTH OF AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE — 3

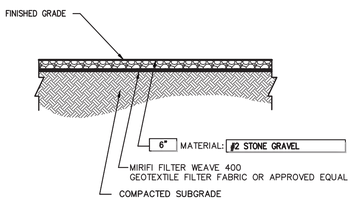


NOTES

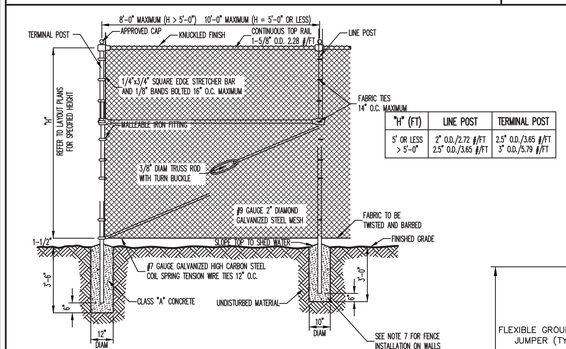
1. THICKNESSES INDICATED REFER TO COMPACTED MEASURE.
2. ITEM NUMBERS REFER TO:

NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS

PAVEMENT REPLACEMENT OVER TRENCH — 4



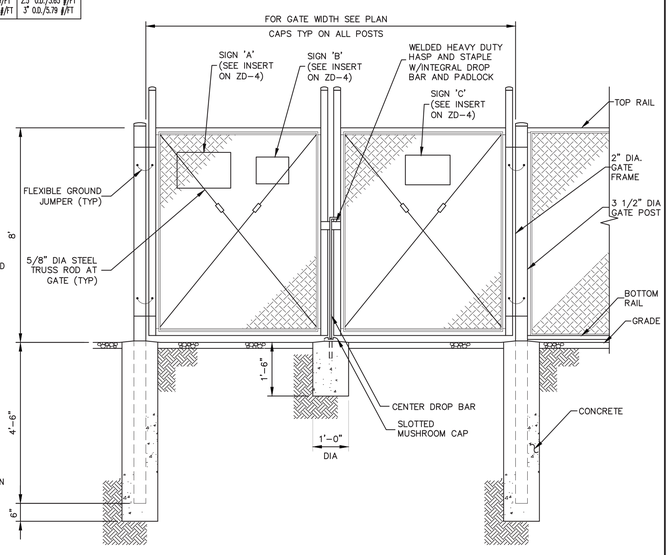
GRAVEL COMPOUND SURFACE — 5



"H" (FT)	LINE POST	TERMINAL POST
5' OR LESS	2" O.D./2.72 #/FT	2.5" O.D./3.65 #/FT
> 5'–0"	2.5" O.D./3.65 #/FT	3" O.D./5.79 #/FT

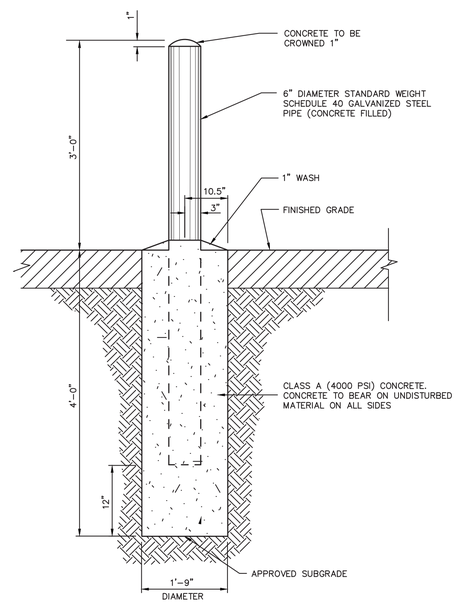
NOTES:

1. ALL POSTS, RAILS, FABRIC AND ACCESSORIES SHALL BE GALVANIZED.
2. POST AND RAILS SHALL BE STANDARD FULL WEIGHT GALVANIZED SCHEDULE 40 PIPE MANUFACTURED AND GALVANIZED IN ACCORDANCE WITH ASTM A120. ALL MATERIALS SHALL BE NEW AND FIRST CLASS AND SHALL NOT INCLUDE RECONDITIONED OR REROLLED PIPE.
3. FITTINGS SHALL BE MALLEABLE IRON FITTINGS CONFORMING TO THE REQUIREMENTS OF ASTM A47 GALVANIZED IN ACCORDANCE WITH ASTM A153.
4. FABRIC SHALL BE 9 GAUGE GALVANIZED 2" MESH. TOP SELVAGE SHALL HAVE KNUCKLED FINISH.
5. TENSION WIRE SHALL BE 7 GAUGE MEETING THE REQUIREMENTS OF ASTM A641 AS MODIFIED HEREIN. THE TENSILE STRENGTH SHALL BE AT LEAST 80,000 PSI WITH A GALVANIZED COATING OF NOT LESS THAN 0.7 OZ. PER SQUARE FOOT.
6. FABRIC TIES SHALL BE MINIMUM 9 GAUGE GALVANIZED STEEL OR ALUMINUM. MINIMUM SPACING SHALL BE AS FOLLOWS:
   A. 14" O.C. AT LINE POSTS
   B. 24" O.C. AT TOP RAIL
   C. 12" O.C. AT TENSION WIRE
7. WHERE CHAIN LINK FENCE IS TO BE INSTALLED ON WALLS, THE FENCE POSTS SHALL BE IMBEDDED A MINIMUM OF TWELVE (12) INCHES IN THE WALL. NEWLY CONSTRUCTED WALLS SHALL BE PROVIDED WITH PROPER SIZE SLEEVES TO ACCOMMODATE FENCE POSTS. FENCE POSTS SHALL BE SECURELY GROUTED IN PLACE USING AN APPROVED HIGH STRENGTH, NON–SHRINKING, NON–STAINING GROUT.
8. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT SHOP AND ERECTION DRAWINGS INDICATING MATERIALS, SIZES AND DIMENSIONS OF FENCING TO THE OWNER'S FIELD REPRESENTATIVE PRIOR TO ORDERING MATERIALS FOR HIS REVIEW AND APPROVAL.
9. PRIOR TO INSTALLATION OF THE FENCE, THE CONTRACTOR SHALL CHECK THE FENCE LAYOUT WITH THE OWNER'S FIELD REPRESENTATIVE WHO MUST APPROVE THE LAYOUT BEFORE ANY OF THE WORK IS TO BE DONE.
10. FENCE SHALL COATED WITH BLACK VINYL AND BE FITTED WITH PRIVACY SLATS.



CHAIN LINK FENCE W/ ACCESS GATE — 6

(BLACK VINYL COATED WITH PRIVACY SLATS)



NOTES:

1. WHEN PROTECTION POSTS ARE TO BE USED FOR PROTECTION OF HANDICAP PARKING SIGNS OR OTHER TRAFFIC SIGNS, SIGN SUPPORTING POSTS SHALL BE IMBEDDED A MINIMUM OF THREE (3) FEET INTO THE CONCRETE.
2. POST FOR HANDICAP PARKING STALLS SHALL BE PAINTED BLUE AS FOLLOWS:
   A. SOLVENT CLEAN TO REMOVE OIL, GREASE AND OTHER CONTAMINANTS.
   B. APPLY METAL PRIMER FOR GALVANIZED SURFACES.
   C. APPLY TWO (2) FINISH COATS OF APPROVED EXTERIOR PAINT FOR METAL SURFACES.

STEEL PIPE PROTECTION POST — 7

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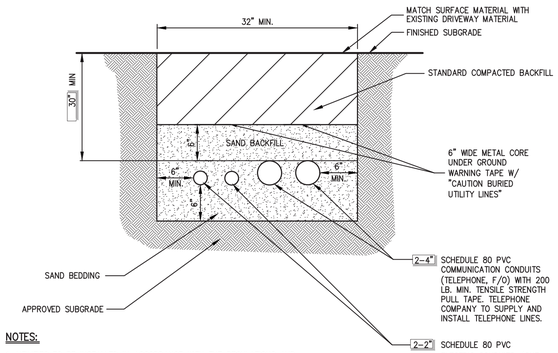

NOTES:

1. UTILITIES TO BE INSTALLED IN ACCORDANCE WITH THE REGULATIONS AND REQUIREMENTS OF THE UTILITY COMPANY HAVING JURISDICTION.
2. BACKFILL FOR PIPE AND CONDUIT SHALL BE PLACED EVENLY AND CAREFULLY AROUND AND OVER THE PIPE OR CONDUIT IN SIX (6) INCH MAXIMUM LAYERS. EACH LAYER SHALL BE THOROUGHLY AND CAREFULLY COMPACTED UNTIL TWELVE (12) INCHES OF COVER EXISTS OVER THE PIPE OR CONDUIT. THE REMAINDER OF THE BACKFILL MAY THEN BE PLACED AND COMPACTED IN A MAXIMUM OF TWELVE (12) INCH LAYERS. EACH LAYER SHALL BE COMPACTED BY APPROVED MECHANICAL TAMPING MACHINES. UNLESS OTHERWISE SPECIFIED BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 92% MAXIMUM MODIFIED DENSITY IN ACCORDANCE WITH ASTM DESIGNATION D–1557 IN THE MANNER HEREIN DESCRIBED. BACKFILL SHALL PROCEED UP TO THE LINES AND GRADES AS SHOWN ON THE DRAWINGS.

UTILITY TRENCH DETAIL — 8

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CONSTRUCTION DETAILS

HOMELAND TOWERS
CROSS RIVER (NY143)
779 ROUTE 35
TOWN OF LEWISBORO, NY

PROGRESS PLOTTING

Drawing: 17024-ZD-DETAILS
Date: 2018-04-30
Time: 4:35 PM
By: PD

DRAWN: PD	APPROVED: JS
SCALE:	N.T.S.
DATE:	04/XX/2018
PROJECT No:	17024
DWG: 17024-ZD-DETAILS	TAB: ZD–6 / LS: --
DRAWING No:	ZD–6

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Product Specifications

COMMSCOPE®

DB404-B

Omni Exposed Dipole Antenna, 450–470 MHz, 360° horizontal beamwidth, fixed electrical tilt

Electrical Specifications

Frequency Band, MHz	**450–470**
Gain, dBi	5.9
Beamwidth, Horizontal, degrees	360
Beamwidth, Vertical, degrees	27.0
Beam Tilt, degrees	0
VSWR | Return Loss, dB	1.5 | 14.0
Input Power per Port, maximum, watts	250
Polarization	Vertical
Impedance	50 ohm

General Specifications

Operating Frequency Band	450 – 470 MHz
Antenna Type	Omni
Band	Single band
Performance Note	Outdoor usage

Mechanical Specifications

RF Connector Quantity, total	1
RF Connector Quantity, low band	1
RF Connector Interface	N Male
Color	Silver
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Aluminum
RF Connector Location	End of flexible lead
Wind Speed, maximum	161 km/h | 100 mph

Dimensions

Length	1524.0 mm | 60.0 in
Net Weight, without mounting kit	6.4 kg | 14.1 lb

Regulatory Compliance/Certifications

Agency	**Classification**
RoHS 2011/65/EU	Compliant by Exemption
China RoHS SJ/T 11364-2005	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

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Product Specifications

COMMSCOPE®

DB404-B

Included Products

DB365-OS — Pipe Mounting Kit that consists of two clamps for mounting antennas to round members 1.25 - 3.5 in (35 - 89 mm) OD round members.

* Footnotes

Performance Note — Severe environmental conditions may degrade optimum performance

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EMERGENCY SERVICES ANTENNA SPECIFICATIONS

9

	Sector 1	Sector 2	Sector 3	DISH(ES)	OTHER
Antenna Type (1):	Panel	Panel	Panel	N/A	N/A
# of Antennas (1)/ Sector:	Two (2)	Two (2)	Two (2)	None	None
Tx, Rx or Both:	Both	Both	Both	N/A	N/A
Antenna Make (1):	QUINTEL	QUINTEL	QUINTEL	N/A	N/A
Antenna Model (1):	QS8658-5	QS8658-5	QS8658-5	N/A	N/A
Antenna Dimensions (1):	96" x 12" x 9.6"	96" x 12" x 9.6"	96" x 12" x 9.6"	N/A	N/A
Antenna Weight (1):	98 lbs	98 lbs	98 lbs	N/A	N/A
Antenna RAD Ctr (1):	121 ft	121 ft	121 ft	N/A	N/A
Antenna Type (2):	Panel	Panel	Panel	N/A	N/A
# of Antennas (2)/ Sector:	Two (2)	Two (2)	Two (2)	None	None
Tx, Rx or Both:	Both	Both	Both	N/A	N/A
Antenna Manufacturer (2):	CSS	CSS	CSS	N/A	N/A
Antenna Model (2):	Xj7c-FRO-840-V	Xj7c-FRO-840-V	Xj7c-FRO-840-V	N/A	N/A
Antenna RAD Ctr (2):	121 ft (Reserved)	121 ft (Reserved)	121 ft (Reserved)	N/A	N/A
RRU/RRHs/ Sector (1):	One (1)	One (1)	One (1)		
RRU/RRH Manufacturer (1):	Alcatel Lucent	Alcatel Lucent	Alcatel Lucent		
RRU/RRH Model (1):	RRH4X30-B13	RRH4X30-B13	RRH4X30-B13		
RRU/RRH Dimensions (1):	20.9" x 11.8" x 7.5"	20.9" x 11.8" x 7.5"	20.9" x 11.8" x 7.5"		
RRU/RRH Weight (1):	50 lbs	50 lbs	50 lbs		
RRU/RRH RAD Ctr (1):	121 ft	121 ft	121 ft		
RRU/RRHs/ Sector (2):	One (1)	One (1)	One (1)		
RRU/RRH Manufacturer (2):	Alcatel Lucent	Alcatel Lucent	Alcatel Lucent		
RRU/RRH Model (2):	RRH4X45-B66A	RRH4X45-B66A	RRH4X45-B66A		
RRU/RRH Dimension (2):	25.2" x 11.4" x 6.3"	25.2" x 11.4" x 6.3"	25.2" x 11.4" x 6.3"		
RRU/RRH Weight (2):	57 lbs	57 lbs	57 lbs		
RRU/RRH RAD Ctr (2):	121 ft	121 ft	121 ft		
# of RRU/RRHs/ Sector (3):	One (1)	One (1)	One (1)		
RRU/RRH Manufacturer (3):	Alcatel Lucent	Alcatel Lucent	Alcatel Lucent		
RRU/RRH Model (3):	RRH2x40-HW	RRH2x40-HW	RRH2x40-HW		
RRU/RRH Weight (3):	56 lbs	56 lbs	56 lbs		
RRU/RRH RAD Ctr (3):	121 ft (Reserved)	121 ft (Reserved)	121 ft (Reserved)		
RRU/RRHs/ Sector (4):	One (1)	One (1)	One (1)		
RRU/RRH Manufacturer (4):	Nokia	Nokia	Nokia		
RRU/RRH Model (4):	RRH 4T4R B5	RRH 4T4R B5	RRH 4T4R B5		
RRU/RRH Dimension (4):	13.3" x 11.6" x 6.5"	13.3" x 11.6" x 6.5"	13.3" x 11.6" x 6.5"		
RRU/RRH Weight (4):	35 lbs	35 lbs	35 lbs		
RRU/RRH RAD Ctr (4):	121 ft	121 ft	121 ft		
TMAs/ Sector:	None	None	None		
Diplexers Per Sector:	None	None	None		
Surge Suppressors/Sector:	One (1)	One (1)	Two (2)		
Surge Suppressor Make:	Raycap	Raycap	Raycap		
Surge Suppressor Model:	RRFDC-3315-PF48	RRFDC-3315-PF48	RRFDC-3315-PF48		
Surge Supressor Dimensions:	19.2" x 15.7" x 10.3"	19.2" x 15.7" x 10.3"	19.2" x 15.7" x 10.3"		
Surge Supressor Weight:	26.9 lbs	26.9 lbs	26.9 lbs		
Surge Supressors RAD Ctr:	121 ft	121 ft	121 ft (Reserved)		
Junction Boxes/Sector:	One (1)	One (1)	One (1)		
Junction Box Make:	Unknown	Unknown	Unknown		
Junction Box Model:	Unknown	Unknown	Unknown		
Junction Box Dimensions:	Unknown	Unknown	Unknown		
Junction Box Weight:	Unknown	Unknown	Unknown		
Junction Box RAD Ctr:	121 ft (Reserved)	121 ft (Reserved)	121 ft (Reserved)		
OTHER:	None	None	None	**Please include microwave dish frequencies below:**	**Please include microwave dish frequencies below:**
Transmit Frequencies:	776.00-787.00, 835.02-844.98, 846.51-848.97, 1900.00-1905.00, 1890.00-1895, 1745.00-1755.00 MHz			N/A	N/A
Receive Frequencies:	746.00-757.00, 880.02-889.98, 891.51-893.97, 1980.00-1985.00, 1970-1975.00, 2145.00-2155.00 MHz			N/A	N/A
# of Lines:	One (1)	One (1)	Four (4)	None	None
Line Size:	1-1/4"	1-1/4"	1-5/8" (Reserved)	N/A	N/A
Mount Type:	TBD	TBD	TBD	N/A	N/A
Mount Size:	TBD	TBD	TBD	N/A	N/A

VERIZON EQUIPMENT SPECIFICATIONS

10

X

X

X

X

X

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CONSTRUCTION DETAILS

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PROGRESS PLOTTING

Drawing: 17024-ZD-DETAILS
Date: 2018-04-30
Time: 4:35 PM
By:

DRAWN: PD	APPROVED: JS		
SCALE: N.T.S.			
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PROJECT No: 17024			
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DRAWING No: ZD-7			

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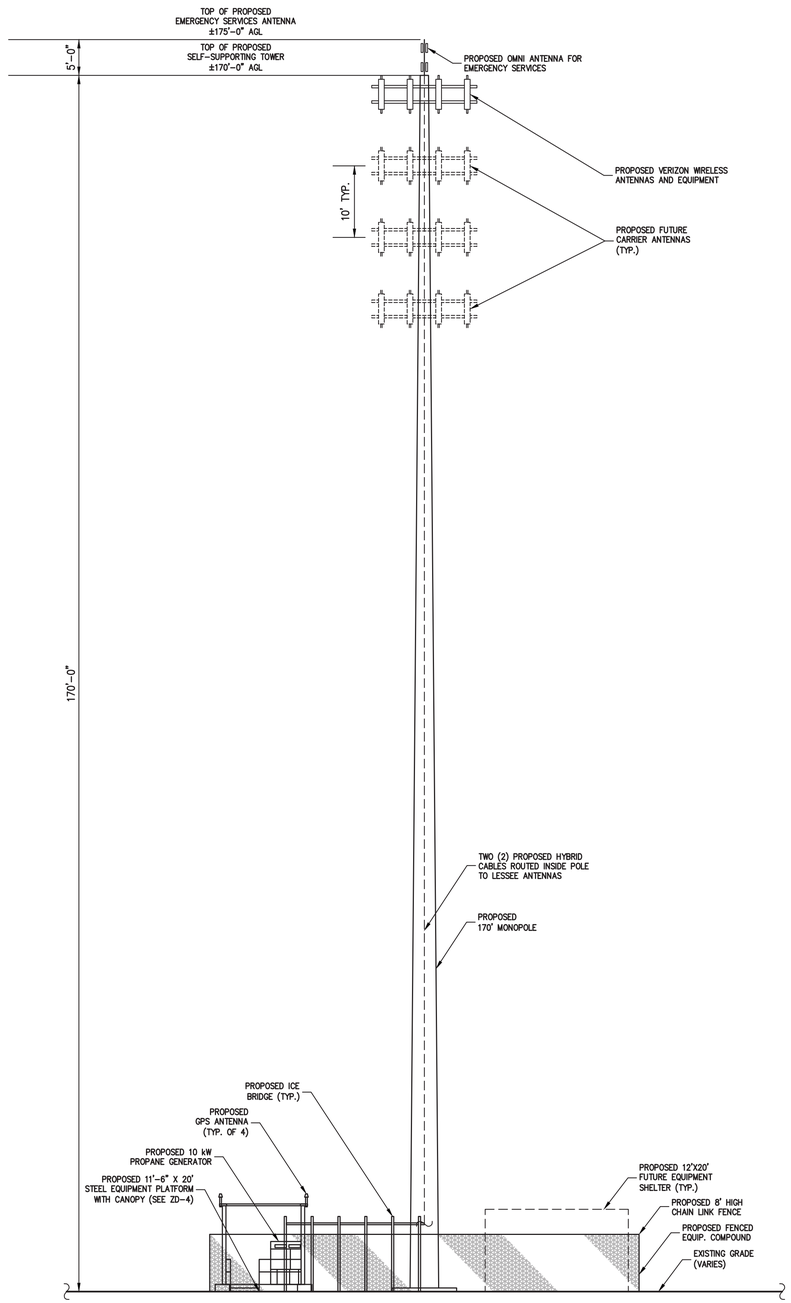

TOWER ELEVATION

(SCALE: 1"=10')

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Supplemental
PHASE I ARCHAEOLOGICAL SURVEY

Proposed Wireless Telecommunications Site

NY 143-Cross River
779 Route 35
Lewisboro, Westchester County, New York

NY SHPO Project Review Number: 17PR06068

Prepared for:

Homeland Towers
22 Shelter Rock Lane
Building C
Danbury, CT 06810

Prepared by:

CBRE Telecom Advisory Services
4 West Red Oak Lane
White Plains, New York 10604

April 30 2018
CBRE Project No.: TS70417386

MANAGEMENT SUMMARY

CBRE TS70417386

Involved State and Federal Agencies (DEC, CORPS, FHWA, etc.): **FCC**

Phase of Survey **Phase I Site Identification**

Local Information

Site Name: **NY 143-Cross River**

Site Number: **TS70417386**

Location: **779 Route 35**

Minor Civil Division: **Lewisboro**

County: **Westchester**

USGS 7.5 Minute Quadrangle Map: **Peach Lake NY 2016**

UTM Coordinates (Standard): **616239, 4568717.9**

Latitude (WGS84 Datum): **41°15'41.49"N**

Longitude (WGS84 Datum): **73°36'44.61"W**

Project Information

The proposed undertaking includes the construction of a telecommunications facility within a 30' (9.14 m) by 65' (19.81 m). The undertaking will be accessed via the existing driveway for the Ambulance Corps Building. A ±200' by 10' (60.96m by 3.04 m) underground electric utility corridor will connect to the existing utility poles on Old Post Road/ Route 35. The existing access road provides vehicular access to the Ambulance Corps Building from Route 35. The overall acreage of the proposed impact area is ± 0.06 acres (0.024 hectares).

Total Area to Be Disturbed: 7669 **ft² (712.47 m²) or ± 0.17acres (0.0687 hectares).**

Number of Acres Surveyed: **40, 019 ft² (3,717.88 m²) or ± .918 acres (0.371 hectares).**

Transect Interval: **50' (15.4 m)**

Number & Interval of Shovel Tests: **13 STPs at 50' (15.4 m) intervals**

Number & name(s) of site(s) identified: **0**

Number of buildings/structures/cemeteries within the APE-DE: **0**
Number of previously determined NR listed/ eligible buildings/structures/cemeteries/districts in the APE-DE: **0**

Hours Spent on Fieldwork and Survey: **3 person hours**

Report Author(s): **Beth Selig, MA, RPA**

Date of Field Survey: **April 28, 2018**

Report Date: **April 30, 2018**

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Figure 2: 2016 Aerial Image showing the project area and previously surveyed area. (Source: Google Earth). Scale: 1"=135'. Green line delineates the area surveyed in 2017.

Figure 3: Aerial Image showing soil units within the project area. (Source: Natural Resources Conservation Service) Scale 1" = 150'.

Figure 4: NY 143-Cross River Tower Location. Supplemental Phase 1B Field Reconnaissance Map. Scale: 1"=75'.

Figure 5: 2016 Aerial Image depicting the Land Use within the vicinity of the project area. (Source: Google Earth). Scale 1"=135'.

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Table 1: Soil Unit Descriptions for the project area.

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Photo 1: View north from the project area. The building in the photo is the Cyrus Russell Community Center.

Photo 2: View east from the center of the project area

Photo 3: View south from the center of the project area.

Photo 4: View to the west from the center of the project area.

Photo 5: View to the northwest along the existing Ambulance Corps access road. The proposed utility corridor will be located to the right of this roadway.

Photo 6: The soils encountered consisted of a dark brown sandy silt overlying a dark yellow brown silty sand with gravel. View of STP 4.

Photo 7: View to the northeast from the proposed compound toward the Ambulance Corps Building.

Photo 8: View to the south along the proposed utility corridor. The proposed utility trench will be located to the left of the stone wall. The Cyrus Russell Community Center is located in the left portion of the photo.

Photo 9: View to the along the proposed route of the utility corridor. A short portion of the corridor will cross the asphalt parking lot to connect with the Ambulance Corp building.

Photo 10: View to the north along the proposed utility corridor.

1.0 NY 143-CROSS RIVER SCOPE & LIMITATIONS

In April of 2018 Hudson Valley Cultural Resource Consultants (HVCRC), on behalf of CBRE Telecom Advisory Services, completed a Supplemental Phase 1A Cultural Resource Survey of the proposed NY 143-Cross River Tower location in the Town of Lewisboro, Westchester County, New York. An initial survey of the site was completed by HVCRC in March of 2017. This survey was reviewed and approved by the Office of Parks, Recreation and Historic Preservation (OPRHP) in September of 2017. In April of 2018, the proposed access road and the proposed lease area were relocated east of the previously surveyed location, which required a review of the new location. The field work was completed on April 28, 2018 by Dylan Lewis under the supervision of Beth Selig. Mr. Lewis received his Bachelor's degree in Anthropology from SUNY New Paltz and is currently completing his Master's Degree in archaeology from CUNY Hunter. He has more than five years of experience working as an Archaeologist in CRM/Archaeology in the United States.

The background research, as well as the cultural and environmental overviews were completed by Beth Selig, MA, RPA, President and Principal Investigator with HVCRC. Ms. Selig has a Master's degree from SUNY Empire State College and has more than 15 years of experience in the CRM/Archaeology industry.

All work was completed in accordance with the Standards for Cultural Resource Investigations and the Curation of Archeological Collections published by the New York Archeological Council (NYAC) and recommended for use by New York State Office of Parks, Recreation and Historic Preservation (OPRHP). The report complies with New York State ORPHP's Phase 1 Archaeological Report Format Requirements, established in 2005. Furthermore this report complies with the Wyandotte Nation Archaeological Procedures established in September 2013.

The Federal Communications Commission (FCC) requires licensees and their representatives to consider the effects of their actions on historic properties in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the National Environmental Policy Act of 1969 (NEPA) (Federal Communications Commission 1996). Historic properties include Native American or European American archaeological sites, architectural resources (historic districts and standing structures), objects, and traditional cultural properties. Applicants are required to assess and report all potential environmental effects as part the Section 106 process prior to construction.

Figure 1: 2016 Peach Lake NY USGS Topographical Quadrangle. (Source: USGS.gov). Scale: 1"=545'.

Figure 2: 2016 Aerial Image showing the project area and previously surveyed area. (Source: Google Earth). Scale: 1''=135'. Green line delineates the area surveyed in 2017.

2.0 Site Description

The proposed undertaking includes the construction of a telecommunications facility within a 30' (9.14 m) by 65' (19.8 m). The undertaking will be accessed via the existing driveway for the Ambulance Corps Building. A ±200' by 10' (91.4 m by 3.04 m) underground electric utility corridor will connect to the existing utility poles on Old Post Road/ Route 35. The existing access road provides vehicular access to the Ambulance Corps Building from Route 35. The overall acreage of the proposed impact area is ± 0.06 acres (0.027 hectares). The field team utilized GPS data to determine the accurate location of the project area and during the surface inspection and field work. Field work involved three person hours.

On April 28, 2018 the existing conditions within the project area were assessed and the site was photographed. The center of the proposed compound is located on a level area to the southwest of the Ambulance Corps Building. The surface conditions within the project area consist of downed leaves and brush. The existing access roads are covered with asphalt. The utility corridor is proposed the southern edge of the property marked by a stone wall.

3.0 Environmental Conditions

The location of the proposed tower compound is a flat surface area with an elevation of 350 feet (106.7 m) above Mean Sea Level (AMSL). The project area is accessed from Old Post Road/ Route 35.

Soils

The characteristics of the soils within the project area have an important impact on the potential for the presence of cultural material, since the types of soils present affected the ability of an area to support human populations. The Natural Resources Conservation Service indicates that the soils within the project area are moderately well drained sandy and gravelly loam.

Table 1: Soil Unit Descriptions for the project area

Map Unit Symbol	Map Unit Name	Soil Horizons & Texture	Slope	Drainage	Landform
KnB	Knickerbocker fine sandy loam	H1 - 0 to 9 inches: fine sandy loam H2 - 9 to 19 inches: fine sandy loam H3 - 19 to 31 inches: loamy fine sand H4 - 31 to 60 inches: loamy fine sand	2 to 8%	Somewhat excessively drained	Deltas. Terraces
RhB	Riverhead Sandy loam	H1 - 0 to 6 inches: loam H2 - 6 to 25 inches: sandy loam H3 - 25 to 30 inches: loamy sand H4 - 30 to 60 inches: loamy sand	3 to 8%	Well Drained	Deltas, terraces
RhD	Riverhead Sandy loam	H1 - 0 to 6 inches: loam H2 - 6 to 25 inches: sandy loam H3 - 25 to 30 inches: loamy sand H4 - 30 to 60 inches: loamy sand	15 to 25%	Well Drained	Deltas, terraces

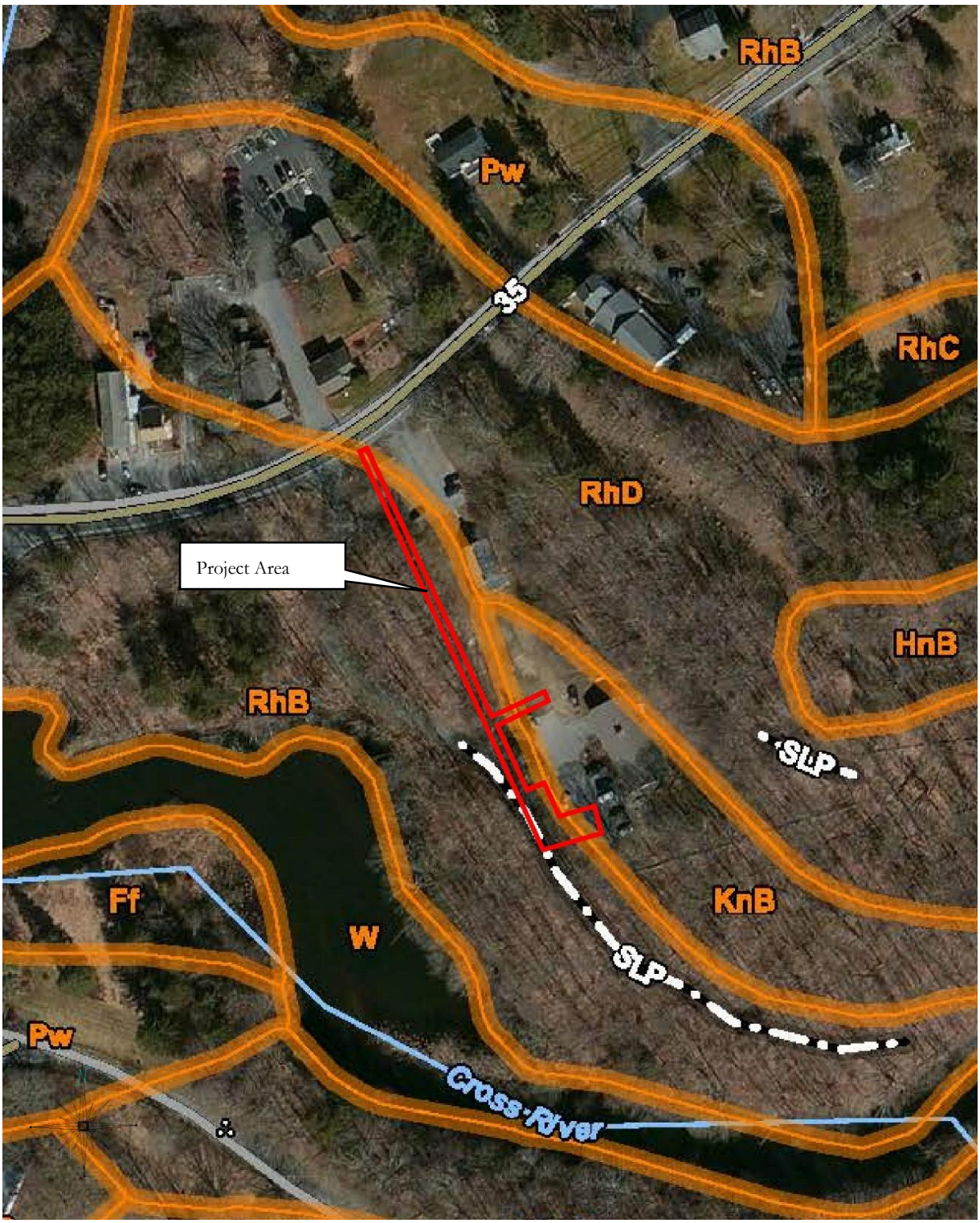


Figure 3: Aerial Image showing soil units within the project area. (Source: Natural Resources Conservation Service) Scale 1" = 150'.

Photo 1: View north from the project area. The building in the photo is the Cyrus Russell Community Center.

Photo 2: View east from the center of the project area.

Photo 3: View south from the center of the project area.

Photo 4: View to the west from the center of the project area.

4.0: Pre-Contact and Historic Context

The pre-contact and historic backgrounds and cartographic research have been included in the Phase 1 Cultural Resource Survey completed in July of 2017. No structures are located within or adjacent to the project area.

5.0: Records Review

In July of 2017, a comprehensive review of the site files housed at NYS OPRHP were reviewed to identify sites located within or adjacent to the project area. No previously recorded archaeological sites or professional surveys, excluding the prior survey at this location, have been identified within a one mile radius of the project area.

In September 2017, OPRHP delineated the boundaries of the National Register Listed Cross River Hamlet Historic District. The previous location of the NY 143-Cross River tower was located adjacent to its boundaries and the Cyrus Russell Community Center is included in the district. The new location of the proposed tower is located to the south of this boundary.

6.0: Sensitivity Assessment

An assessment of whether significant cultural resources are likely to be present within the project area must consider what is known of the prehistory of the area, including likely locations of archaeological sites and proximity to known sites. In addition, the history of the immediate area, including whether any historic structures or features are known to exist within the project area boundaries, must be considered. Disturbance to the landscape and the soils on the property are also considered in this assessment.

Although no historic or pre-contact sites were identified in the immediate vicinity of the project area, there are environmental factors present which suggest that the undisturbed, level portions of the landscape have the potential to contain pre-contact cultural resources. These factors include the proximity of the site to the Cross River and Cross River Reservoir, where Native American sites have been identified, and the fact that level, well drained soils are identified within the boundaries of the project area. The pre-contact sensitivity of the project area is considered to be moderate to high.

Careful examination of the historic and topographical maps available indicate that the project area has been agricultural land until the early 20th century, when a school house was built (now the Russell Cyrus Community Center). The project area is currently adjacent to a modern building and parking area. Given the fact that historic structures are located within or adjacent to the project area, the historic sensitivity is considered to be low.

7.0 Archaeological Survey

On April 28, 2018 a Supplemental Phase 1B Field Reconnaissance Survey was completed on the NY 143-Cross River Tower location. Archaeological fieldwork was supervised by Beth Selig MA, RPA. Field work was completed by Dylan Lewis under the direction of Beth Selig, who also completed the photography and the final report.

Archaeological Field Methodology

Areas selected for subsurface testing were identified during a comprehensive walkover of the area of potential effect, which served to evaluate the site, assess loci of disturbance, rule out slope and wetland areas, assess available raw material and habitation resources and determine former land usage. The project area is currently lightly wooded and covered with a light leaf litter. .

The areas selected for shovel testing within the Area of Potential Effect (APE), were subjected to tests at intervals of 50' (15 m) on a grid plan covering the APE, which includes a 25' (7.5 m) buffer outside of the APE boundary. The locations of the tests and disturbed areas were recorded on a large-scale map that shows surveyed borders and the locations of the various structures identified on the site. (Figure 4: Field Reconnaissance Map)

The field methodology employed at the NY 143-Cross River Tower location consisted of several stages of investigation. These included:

1. A walkover and visual inspection of the site to assess areas of potential sensitivity for pre-contact cultural remains.
2. Systematic visual inspection of the land surface to rule out the presence of rock faces and overhangs.
3. Shovel testing in the areas identified as having a potential sensitivity for pre-contact remains.
4. Photographic documentation of the overall site.

The methodology for shovel testing in the sensitive areas involved excavating 50 cm (20") diameter shovel tests at standard intervals within the APE. Shovel Tests were excavated to a minimum of 10 cm (4") into sterile subsoil, unless terminated by rock obstructions. Soils were passed through a ¼ inch steel mesh screen, and the material remaining in the screens was carefully examined for cultural material. Had items been recovered from the screens they would have been assigned to the stratum from which they were obtained. The stratigraphy of each test was recorded, including the depth and the soil description of each layer. (See Appendix A) Had cultural materials been recovered, they would have been bagged, labeled, and returned to the laboratory for processing, however no cultural material was identified.

Photo 5: View to the northwest along the existing Ambulance Corps access road. The proposed utility corridor will be located to the right of this roadway.

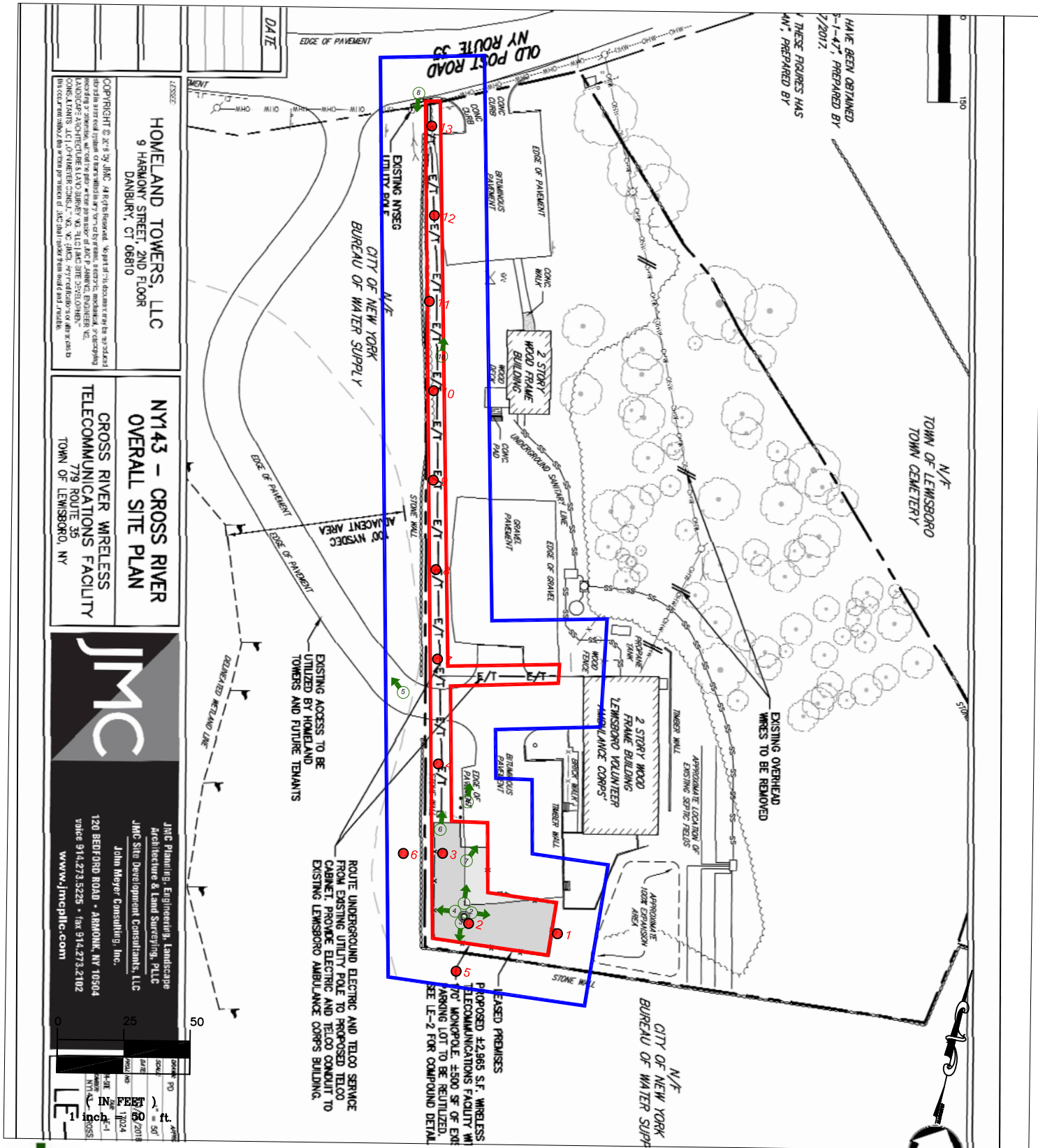
Photo 6: The soils encountered consisted of a dark brown sandy silt overlying a dark yellow brown silty sand with gravel. View of STP 4.

Photo 7: View to the northeast from the proposed compound toward the Ambulance Corps Building.

Photo 8: View to the south along the proposed utility corridor. The proposed utility trench will be located to the left of the stone wall. The Cyrus Russell Community Center is located in the left portion of the photo.

Photo 9: View to the along the proposed route of the utility corridor. A short portion of the corridor will cross the asphalt parking lot to connect with the Ambulance Corp building.

Photo 10: View to the north along the proposed utility corridor.



HUDSON VALLEY
Cultural Resource Consultants, Ltd.

Figure 4: NY143-Cross River Tower Location
Supplemental Phase 1B Field Reconnaissance Map
Scale 1" = 75'

LEGEND

- ST — Sterile Shovel Test Location
- 1 — Photographic View
- Subject Property Boundaries
- 25' (7.5 m) Buffer

8.0 Archaeological Survey Results

Field investigations began with an initial walkover of the surface of the APE. The field team utilized GPS technology to identify the boundaries of the proposed compound and the location of the proposed access corridor. A 25' (7.6 m) buffer was observed around the boundaries of the compound, establishing the APE of the lease area as a 115' (24.3 m) by 80' (24.3 m) irregular shaped area, and for the proposed utility trench, a 300' by 60' area (91.4 m by 18.2 m). The surface conditions permitted 10% visibility due to the density of the leaf litter. Due to the limited visibility, subsurface investigations were necessary to adequately document whether cultural materials were present.

Within the proposed compound, Transects (TR) were laid out at 50' (15 m) intervals across the APE. Shovel tests were completed at 50' (15.2 m) intervals along transects within the compound. A total of six tests were laid out along two transects within the boundaries of the proposed compound. The shovel tests completed within the compound identified a dark brown silty sandy loam overlying a dark yellow brown silty sand with gravel. The soils within the proposed compound are consistent with the soil type identified on the Natural Resources Conservation soils survey, which indicates that the soils are well drained sandy loam.

Once the testing within the compound was completed the field team completed shovel tests along the proposed utility corridor. Seven shovel tests were completed along the proposed access corridor north of the proposed compound. A small portion of the proposed utility trench will bisect the existing Ambulance Corps Parking Lot. Due to the existing asphalt, no testing was completed in this area. The soils identified consisted of a similar profile to the strata examined in the proposed compound area. No cultural material was identified in the project area.

9.0 Conclusions and Recommendations

In April of 2018 HVCRC completed a Supplemental Phase 1 Cultural Resource Survey of the NY 143-Cross River Tower location on behalf of CBRE. The project area is located in the town of Lewisboro, Westchester County, New York. Based on the cultural and environmental assessment completed, it was determined that the site met the ecological criteria for the potential to contain pre-contact cultural resources. A total of 13 shovel tests were completed within the proposed project area, however no cultural resources of any kind were identified on the site, and it is the recommendation of Hudson Valley Cultural Resource Consultants that no further archaeological testing be required for the NY 143-Cross River Tower location.

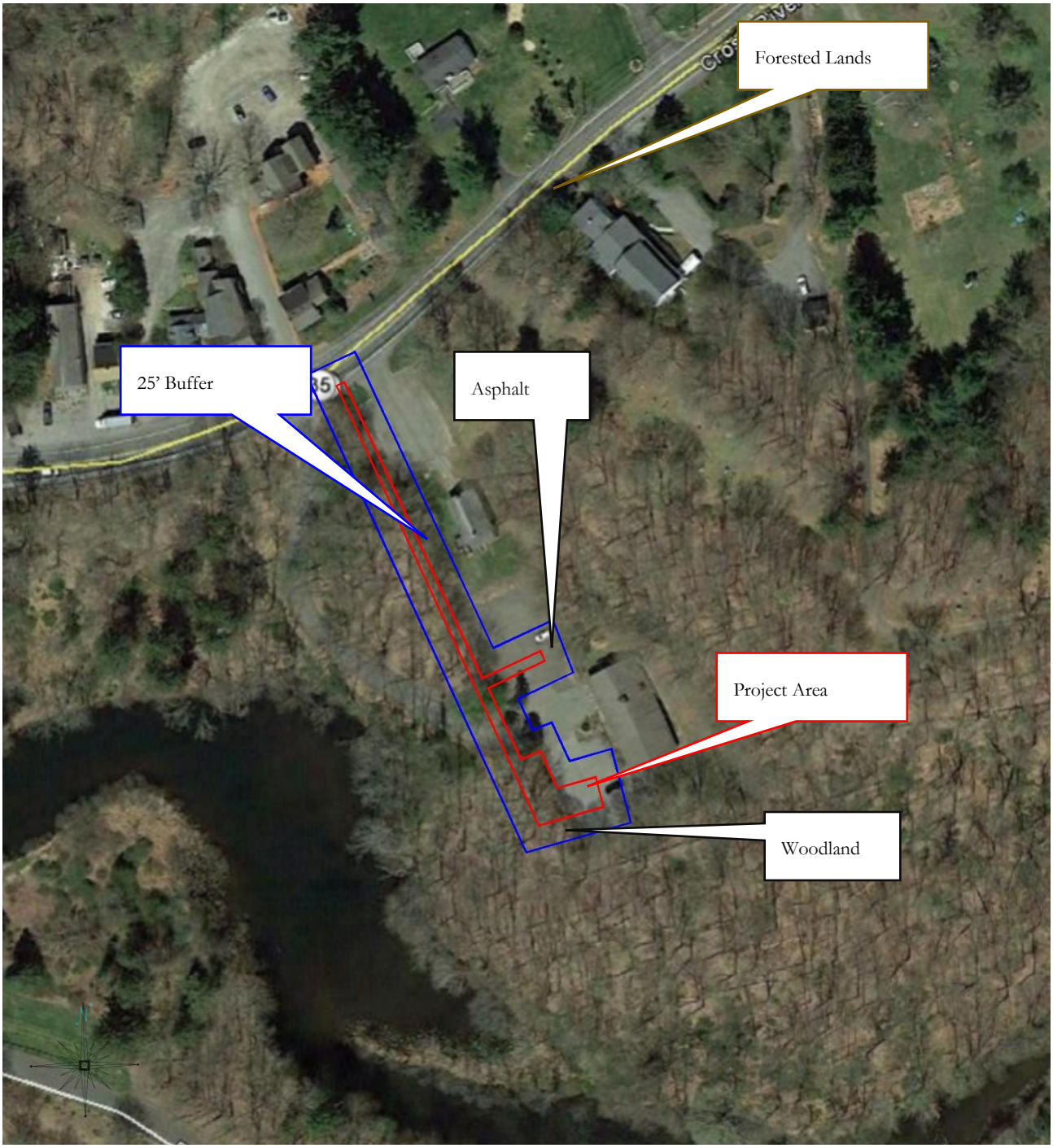


Figure 5: 2016 Aerial Image depicting the Land Use within the vicinity of the project area. (Source: Google Earth). Scale 1"=135'.

10.0: BIBLIOGRAPHY

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Transect	STP	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material	GPS Coordinates
TR 1	1	1	0-7	0-18	10YR3/3	Dark brown silty sandy loam	NCM	41°15'41.75"N 73°36'43.96"W
		2	7-12	18-30	10YR5/6	Yellow brown silt sand	NCM	
	2	1	0-10	0-24	10YR3/3	Dark brown silty sandy loam	NCM	41°15'41.66"N 73°36'44.62"W
		2	10-11	24-26	10YR5/6	Yellow brown silt sand	NCM	
	3	1	0-5	0-16	10YR3/3	Dark brown silty sandy loam, terminated at a submerged gravel and asphalt driveway	NCM	41°15'41.90"N 73°36'45.08"W
	4	1	0-11	0-26	10YR3/3	Dark brown silty sandy loam	NCM	41°15'42.26"N 73°36'45.34"W
		2	11-15	26-36	10YR5/6	Yellow brown silt sand	NCM	
	5	1	0-8	0-20	10YR3/3	Dark brown silty sandy loam	NCM	41°15'41.14"N 73°36'44.35"W
		2	8-15	20-36	10YR5/6	Yellow brown silt sand	NCM	
	6	1	0-8	0-19	10YR3/3	Dark brown silty sandy loam	NCM	41°15'41.64"N 73°36'45.33"W
		2	8-12	19-29	10YR5/6	Yellow brown silt sand	NCM	
TR 2	7	1	0-13	0-33	10YR4/3	Brown silty loam with gravel	NCM	41°15'42.59"N 73°36'45.52"W
		2	13-17	33-43	10YR5/8	Yellow brown silt with sand	NCM	
	8	1	0-14	0-36	10YR4/3	Brown silty loam with gravel	NCM	41°15'43.21"N 73°36'45.98"W
		2	14-18	36-48	10YR5/8	Yellow brown silt with sand	NCM	
	9	1	0-13	0-34	10YR4/3	Brown silty loam with gravel	NCM	41°15'43.74"N 73°36'46.29"W
		2	13-18	34-47	10YR5/8	Yellow brown silt with sand	NCM	
	10	1	0-9	0-22	10YR4/3	Brown silty loam with gravel	NCM	41°15'44.22"N 73°36'46.60"W
		2	9-13	22-32	10YR5/8	Yellow brown silt with sand	NCM	
	11	1	0-11	0-26	10YR4/3	Brown silty loam with gravel	NCM	41°15'44.71"N 73°36'47.00"W
		2	11-14	26-37	10YR5/8	Yellow brown silt with sand	NCM	

Transect	STP	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material	GPS Coordinates
	12	1	0-11	0-28	10YR4/3	Brown silty loam with gravel	coal, discarded	41°15'45.07"N 73°36'47.17"W
		2	11-15	28-38	10YR5/8	Yellow brown silt with sand	NCM	
	13	1	0-12	0-30	10YR4/3	Brown silty loam with gravel	asphalt, discarded	41°15'45.47"N 73°36'47.40"W
		2	12-17	30-43	10YR5/8	Yellow brown silt with sand	NCM	

Resume

Dylan Lewis

Professional History

2015 to 2018 — Lead Archaeologist: Hudson Valley Cultural Resource Consultants.

Provide archaeological assistance with cultural resource studies (Phases 1A and 1B), Phase 2 Cultural Resource Studies and Phase 3 Data Recovery Investigations. Provide support for post excavation processing (artifact analysis, mapping, documentary & cartographic research) for cultural resource studies (Phases 1A and 1B), Phase 2 Cultural Resource Studies and Phase 3 Data Recovery Investigations.

2012 to 2014 — Field Technician for CITY/SCAPE: Cultural Resource Consultants
166 Hillair Circle, White Plains, NY 10605

2012 to 2015 — Field Technician for Joe Diamond, PhD.
290 Old Route 209, Hurley New York

2013 — Field Crew Chief, Archaeologist, SUNY New Paltz, Field School

Education

SUNY Hunter Collece, New York, NY, Masters in Anthropology. 2016 (expected May 2018)

SUNY New Paltz, New Paltz, NY, Bachelors in Anthropology and Bio-Archaeology. 2013

SUNY Ulster, Stone Ridge, New York. Associate of Science, Communication and Media Studies. 2011

Exemplar Archaeological Projects Completed as Lead Archaeologist

2017 Phase 1B Archaeological Field Reconnaissance Survey. Deerpark Commons Orange County, New York.

2017 Phase 1A Literature Search And Sensitivity Assessment & Phase 1B Archaeological Field Reconnaissance Survey Larkin Drive West Extension, Monroe, Orange County, New York

2016 Phase 1 Cultural Resource Survey Of The Proposed Boonton Tourne Park Location In The Town Of Boonton, Morris County, New Jersey.

Beth Selig, M.A., R.P.A.

Professional Associations

Executive Board Member, New York Archaeological Council
Register of Professional Archaeologists
Society for Historical Archaeology

Professional History

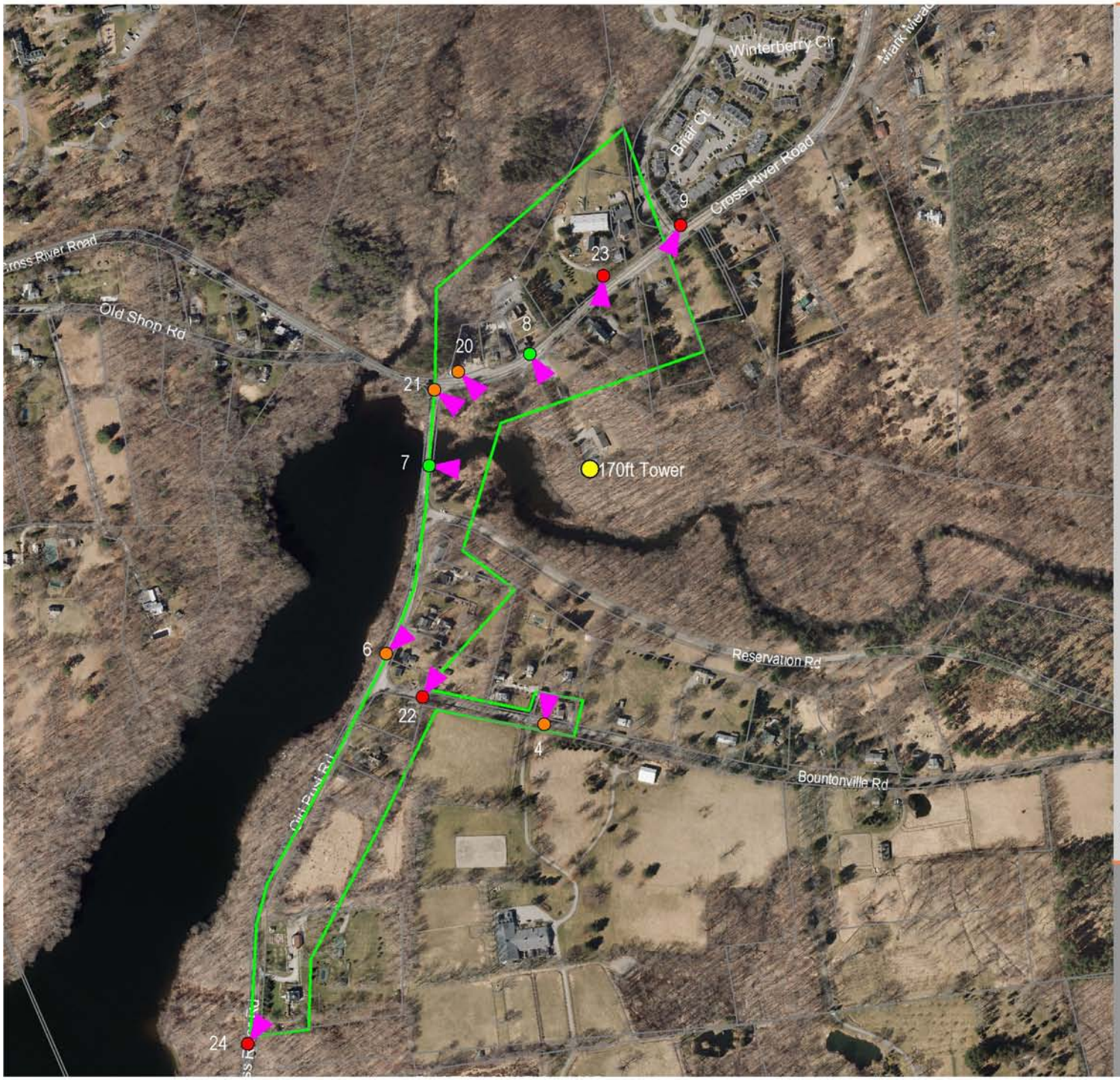
2015	President/ Project Manager/Lead Archaeologist Hudson Valley Cultural Resource Consultants Ltd.
	Provide archaeological oversight for project proposals, cultural resource studies (Phases 1A and 1B), Historic Building Assessment, Phase 2 Cultural Resource Studies and Phase 3 Data Recovery Investigations.
2005 to 2014	Project Archaeologist: CITY/SCAPE: Cultural Resource Consultants 166 Hillair Circle, White Plains, NY 10605
	Provide support for post excavation processing (artifact analysis, mapping, documentary & cartographic research) for cultural resource studies (Phases 1A and 1B), Phase 2 Cultural Resource Studies and Phase 3 Data Recovery Investigations.
2003 to 2005	Field/Laboratory Technician: John Milner Associates Croton-on-Hudson, New York
1998 to 2003	Field/Laboratory Technician: CITY/SCAPE: Cultural Resource Consultants 166 Hillair Circle, White Plains, NY 10605

Education

Empire State College, (SUNY) New York, NY, Masters of Arts in Liberal Studies . 2012

Dutchess County BOCES AUTO CAD Certificate, 2009

University at Albany, (SUNY) Albany, New York, Bachelors in Anthropology and Archaeology. Dean's List. Cum Laude.2002



LEGEND

- Photo Simulation
- Photo Location - Tower Not Visible
- Photo Location - Tower Visible
- Photo Location - Tower Visible (Seasonal)
- Cross River Historic District

0 ft 500 ft 1000 ft

FIGURE 1

PHOTO LOCATION MAP

Visual Resource Assessment

Proposed Telecommunications Tower

HOMELAND TOWERS

Cross River Site (NY143)
779 Route 35
Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	14:15pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 50.5728" N
	73° 36' 39.9924" W
Distance:	790 Feet

Existing Condition

VP9 - Cross River Road (NY Rte 35/121) at The Meadows

SARATOGA ASSOCIATES

HOMELAND TOWERS

Figure 2a

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	14:15pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 50.5728" N
	73° 36' 39.9924" W
Distance:	790 Feet
Visibility:	Not Visible

Simulated Condition

VP9 - Cross River Road (NY Rte 35/121) at The Meadows

SARATOGA ASSOCIATES

HOMELAND TOWERS

Figure 2b

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

Photograph Information

Date:	May 1, 2018
Time:	-
Focal Length:	-
Camera:	-
Photo Location:	41° 15' 48.7198" N
	73° 36' 43.8458" W
Distance:	730 Feet

Existing Condition

VP23 - Cross River Road (NY Rte 35/121) at Cross River Animal Hospital

Figure 3a

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

SARATOGA ASSOCIATES

HOMELAND TOWERS

Photograph Information

Date:	May 1, 2018
Time:	-
Focal Length:	-
Camera:	-
Photo Location:	41° 15' 48.7198" N 73° 36' 43.8458" W
Distance:	730 Feet
Visibility:	Not Visible

Simulated Condition

VP23 - Cross River Road (NY Rte 35/121) at Cross River Animal Hospital

Figure 3b

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

SARATOGA ASSOCIATES

HOMELAND TOWERS

Photograph Information

Date:	April 11, 2017
Time:	14:21pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 45.8148" N
	73° 36' 47.5383" W
Distance:	490 Feet

Existing Condition

VP8 - Cross River Road (NY Rte 35/121) at Cyrus Russell Community House

Figure 4a

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

SARATOGA ASSOCIATES

HOMELAND TOWERS

Photograph Information

Date:	April 11, 2017
Time:	14:21pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 45.8148" N
	73° 36' 47.5383" W
Distance:	490 Feet
Visibility:	Year Round

Simulated Condition

VP8 - Cross River Road (NY Rte 35/121) at Cyrus Russell Community House

Figure 4b

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

SARATOGA ASSOCIATES

HOMELAND TOWERS

Photograph Information

Date:	March 28, 2018
Time:	11:23am
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 45.1841" N
	73° 36' 51.0751" W
Distance:	610 Feet

Existing Condition

VP20 - Cross River Road (NY Rte 35/121) at East of Old Post Road

SARATOGA ASSOCIATES

HOMELAND TOWERS

Figure 5a

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

Photograph Information

Date:	March 28, 2018
Time:	11:23am
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 45.1841" N 73° 36' 51.0751" W
Distance:	610 Feet
Visibility:	Seasonal

Simulated Condition

VP20 - Cross River Road (NY Rte 35/121) at East of Old Post Road

SARATOGA ASSOCIATES

HOMELAND TOWERS

Figure 5b

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

Photograph Information

Date:	March 28, 2018
Time:	11:23am
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 44.5260" N
	73° 36' 52.2809" W
Distance:	650 Feet

Existing Condition

VP21 - Cross River Road (NY Rte 35/121) at Old Post Road

Figure 6a

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

SARATOGA ASSOCIATES

HOMELAND TOWERS

Photograph Information

Date:	March 28, 2018
Time:	11:23am
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 44.5260" N
	73° 36' 52.2809" W
Distance:	650 Feet
Visibility;	Seasonal

Simulated Condition

VP21 - Cross River Road (NY Rte 35/121) at Old Post Road

SARATOGA ASSOCIATES

HOMELAND TOWERS

Figure 6b

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	12:47pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 41.6772" N
	73° 36' 52.5816" W
Distance:	630 Feet

Existing Condition

VP7 - Old Post Road (NY Rte 121) at Cross River Reservoir

SARATOGA ASSOCIATES

HOMELAND TOWERS

Figure 7a

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	12:47pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 41.6772" N
	73° 36' 52.5816" W
Distance:	630 Feet
Visibility:	Year Round

Simulated Condition

VP7 - Old Post Road (NY Rte 121) at Cross River Reservoir

SARATOGA ASSOCIATES

HOMELAND TOWERS

Figure 7b

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	12:43pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 34.6644" N
	73° 36' 54.7992" W
Distance:	1,060 Feet

Existing Condition

VP6 - Old Post Road (NY Rte 121) near Boutonville Road

SARATOGA ASSOCIATES

HOMELAND TOWERS

Figure 8a

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	12:43pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 34.6644" N 73° 36' 54.7992" W
Distance:	1,060 Feet
Visibility:	Seasonal

Simulated Condition

VP6 - Old Post Road (NY Rte 121) near Boutonville Road

SARATOGA ASSOCIATES

HOMELAND TOWERS

Figure 8b

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

Photograph Information

Date:	March 28, 2018
Time:	12:02pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 33.0316" N 73° 36' 53.0191" W
Distance:	1,070 Feet

Existing Condition

VP22 - Boutonville Road Near Old Post Road

SARATOGA ASSOCIATES

HOMELAND TOWERS

Figure 9a

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

Photograph Information

Date:	March 28, 2018
Time:	12:02pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 33.0316" N 73° 36' 53.0191" W
Distance:	1,070 Feet
Visibility:	Not Visible

Simulated Condition

VP22 - Boutonville Road Near Old Post Road

SARATOGA ASSOCIATES

HOMELAND TOWERS

Figure 9b

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	12:59pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 31.9791" N
	73° 36' 47.0123" W
Distance:	980 Feet

Existing Condition

VP4 - Boutonville Road

SARATOGA ASSOCIATES

HOMELAND TOWERS

Figure 10a

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

Photograph Information

Date:	April 11, 2017
Time:	12:59pm
Focal Length:	50mm (film equivalent)
Camera:	12.2mp Canon EOS DSLR
Photo Location:	41° 15' 31.9791" N 73° 36' 47.0123" W
Distance:	980 Feet
Visibility:	Seasonal

Simulated Condition

VP4 - Boutonville Road

Figure 10b

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

SARATOGA ASSOCIATES

HOMELAND TOWERS

Photograph Information

Date:	May 1, 2018
Time:	-
Focal Length:	-
Camera:	-
Photo Location:	41° 15' 20.1375" N 73° 37' 01.8368" W
Distance:	2,500 Feet

Existing Condition

VP24 - Old Post Road (NY Rte 121) at Gideon Reynolds House

Figure 11a

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

SARATOGA ASSOCIATES

HOMELAND TOWERS

Photograph Information

Date:	May 1, 2018
Time:	-
Focal Length:	-
Camera:	-
Photo Location:	41° 15' 20.1375" N 73° 37' 01.8368" W
Distance:	2,500 Feet
Visibility:	Not Visible

Simulated Condition

VP24 - Old Post Road (NY Rte 121) at Gideon Reynolds House

SARATOGA ASSOCIATES

HOMELAND TOWERS

Figure 11b

Visual Resource Assessment

Proposed Telecommunications Tower

Cross River Site (NY143)

779 Route 35

Lewisboro, NY

PierCon Solutions L.L.C.
Specialists in Wireless Systems

May 3, 2018

Town of Lewisboro
11 Main Street
South Salem, NY 10590

Re: Homeland Towers, LLC
779 Route 35
Lewisboro, NY 10518

Honorable Supervisor and Members of the Town Board:

On behalf of Homeland Towers, LLC, our office has prepared coverage plots for the proposed wireless telecommunications facility at the above captioned site. Verizon Wireless is interested in locating antennas upon a monopole at antenna centerline heights of 166' (170' to top of monopole). A monopole height of 170' allows colocation of up to four wireless carriers. Verizon Wireless is licensed by the FCC in the 700, 800, 1900, and 2100 MHz frequency bands.

Verizon Wireless primarily uses the 700/800 MHz frequency bands to provide widespread coverage for customers since coverage provided is inherently larger at lower frequency bands. The higher frequency bands are more adversely affected by local factors leading to less coverage obtained by a site than the lower frequency bands. Verizon Wireless primarily uses the 1900/2100 MHz frequency bands to provide additional capacity to customers. Additional capacity is typically needed in residential neighborhoods, schools, businesses, and anywhere where high speed data is used. In order to provide additional capacity to a specific area, coverage at the higher frequency bands must be adequate.

Currently, there is a coverage gap in the vicinity of 779 Route 35. The attached coverage plots show two different frequency bands at 700 and 2100 MHz. The proposed plots were created using the proposed antenna height of 166'.

Verizon Wireless demonstrates acceptable signal levels in terms of dBm Reference Signal Received Power (RSRP). A dBm is a unit of signal strength in decibels referenced to a milliwatt. RSRP is the measurement which identifies where LTE service is acceptable based on predetermined thresholds. The acceptable signal levels shown in attached plots are an RSRP value equal to or greater than -95 dBm RSRP for reliable suburban residential in-building coverage and an RSRP value equal to or greater than -105 dBm for reliable suburban outdoor and in-vehicle use. Stronger signal levels may be required for reliable service inside buildings such as dense residential, commercial, industrial, and other masonry type buildings.

Also attached is a detailed site table of the surrounding sites which provide coverage to this area of Lewisboro. The table contains details such as site name, address, structure type, and antenna height.

CORPORATE HEADQUARTERS
63 Beaver Brook Rd., Suite 201
Lincoln Park, NJ 07035
973-628-9330 phone 973-628-9321 fax

Verizon Wireless Exhibits:

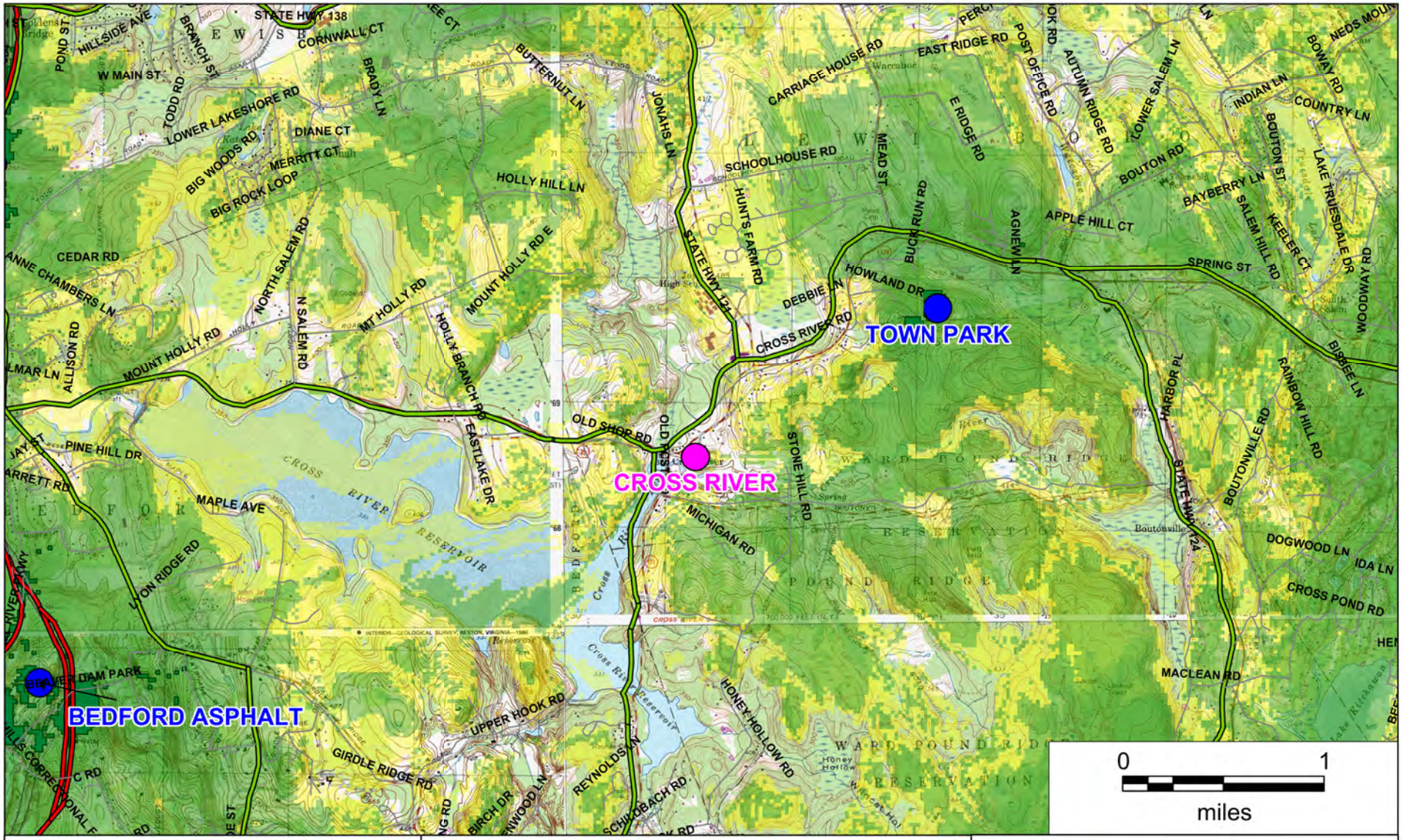
1. Existing Verizon Wireless 700 MHz LTE Coverage
2. Existing and Proposed Verizon Wireless 700 MHz LTE Coverage at 170' Proposed Height
3. Existing and Proposed Verizon Wireless 700 MHz LTE Coverage at 140' Proposed Height
4. Existing Verizon Wireless 2100 MHz LTE Coverage
5. Existing and Proposed Verizon Wireless 2100 MHz LTE Coverage at 170' Proposed Height
6. Existing and Proposed Verizon Wireless 2100 MHz LTE Coverage at 140' Proposed Height
7. Detailed Site Table

As evidenced by the above referenced plots, the attainable coverage from 140' to 170' (136' to 166' antenna centerlines) all show acceptable coverage. Any antennas mounted below the 136' mounting position will have its coverage significantly impacted due to nearby terrain and topography.

Please let me know if anything is unclear in these attachments. After you have had the opportunity to review the exhibits, please feel free to contact me regarding any questions you may have.

Regards,

Adam Feehan
RF Engineer
PierCon Solutions LLC
(973)-628-9330 ext 225



Cross River

Existing Verizon Wireless
700 MHz LTE Coverage

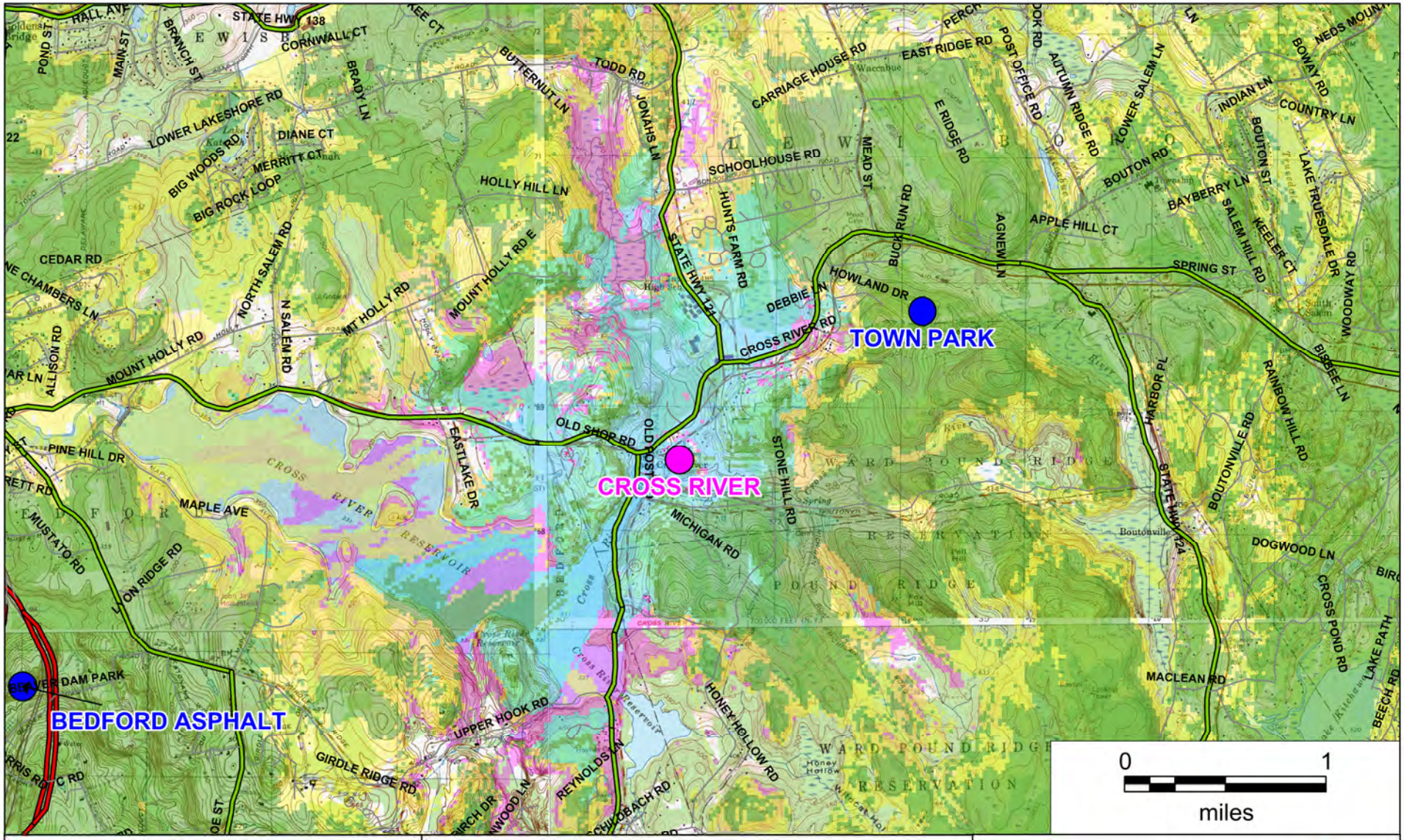
779 Route 35
Lewisboro, NY 10518

- Verizon Wireless Existing Facility
- Verizon Wireless Proposed Facility
- Existing Reliable In-Building Suburban Coverage (>-95 dBm RSRP)
- Existing Reliable In-Vehicle Coverage (>-105 dBm RSRP)

verizon

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by A. Feehan 4/23/2018



Cross River

Existing and Proposed Verizon Wireless 700 MHz LTE Coverage At 170' Proposed Height

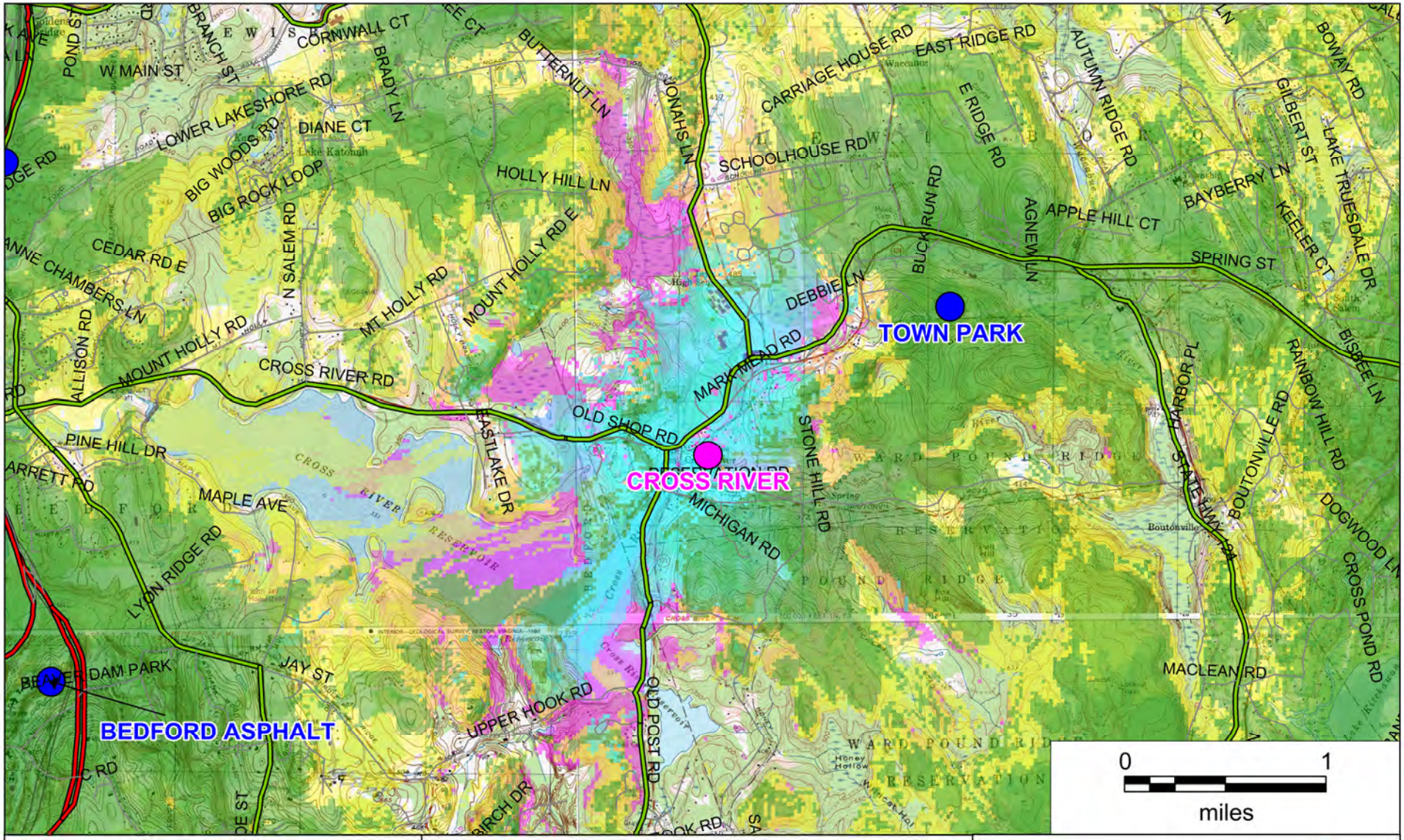
779 Route 35
Lewisboro, NY 10518

- Verizon Wireless Existing Facility
- Verizon Wireless Proposed Facility
- Existing Reliable In-Building Suburban Coverage (>-95 dBm RSRP)
- Existing Reliable In-Vehicle Coverage (>-105 dBm RSRP)
- Proposed Reliable In-Building Suburban Coverage (>-95 dBm RSRP)
- Proposed Reliable In-Vehicle Coverage (>-105 dBm RSRP)

verizon

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by A. Feehan 4/20/2018



Cross River

Existing and Proposed Verizon Wireless 700 MHz LTE Coverage At 140' Proposed Height

779 Route 35
Lewisboro, NY 10518

Verizon Wireless Existing Facility

Verizon Wireless Proposed Facility

Existing Reliable In-Building Suburban Coverage (>-95 dBm RSRP)

Existing Reliable In-Vehicle Coverage (>-105 dBm RSRP)

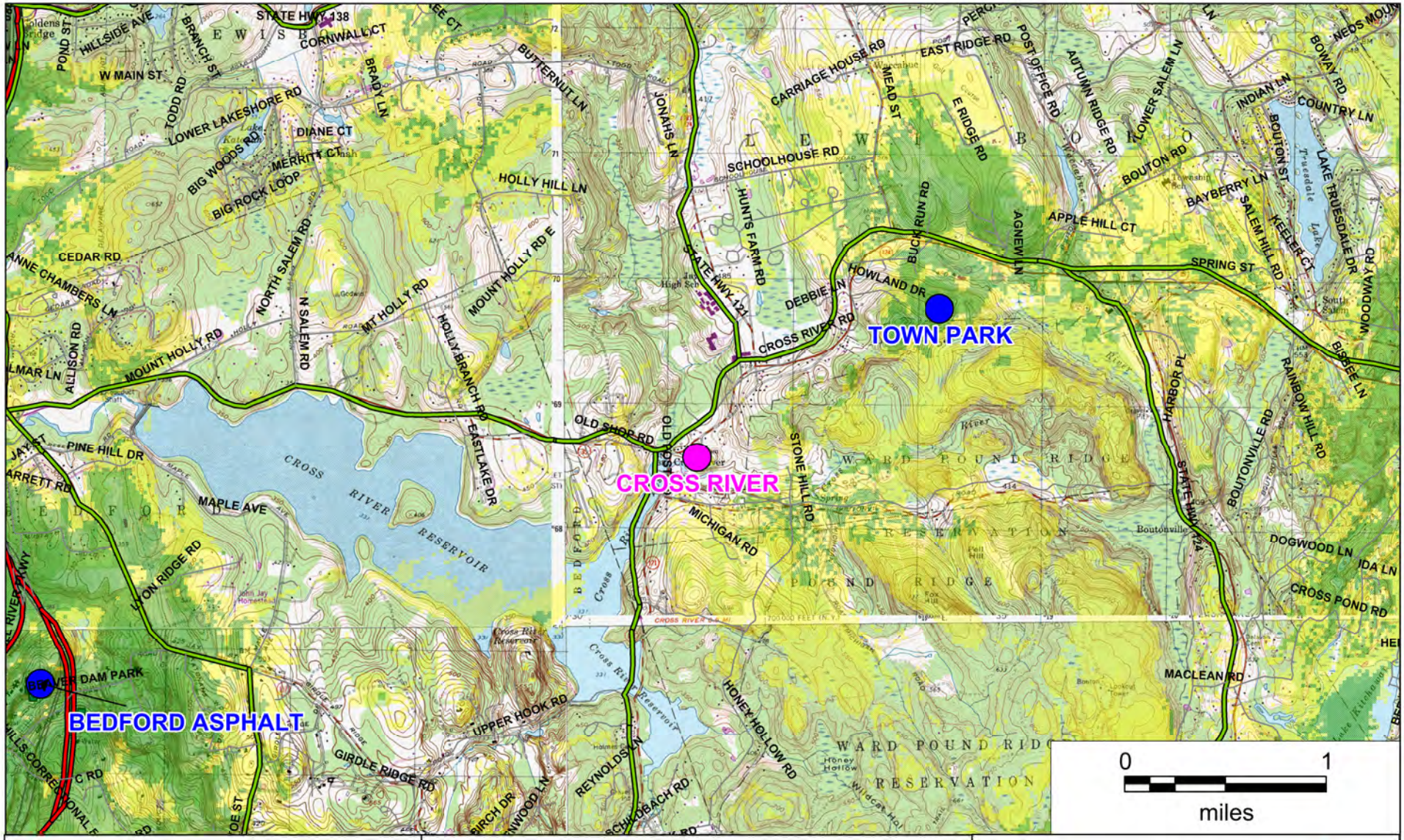
Proposed Reliable In-Building Suburban Coverage (>-95 dBm RSRP)

Proposed Reliable In-Vehicle Coverage (>-105 dBm RSRP)

verizon

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by A. Feehan 5/3/2018



Cross River

Existing Verizon Wireless
2100 MHz LTE Coverage

779 Route 35
Lewisboro, NY 10518

Verizon Wireless Existing Facility

Verizon Wireless Proposed Facility

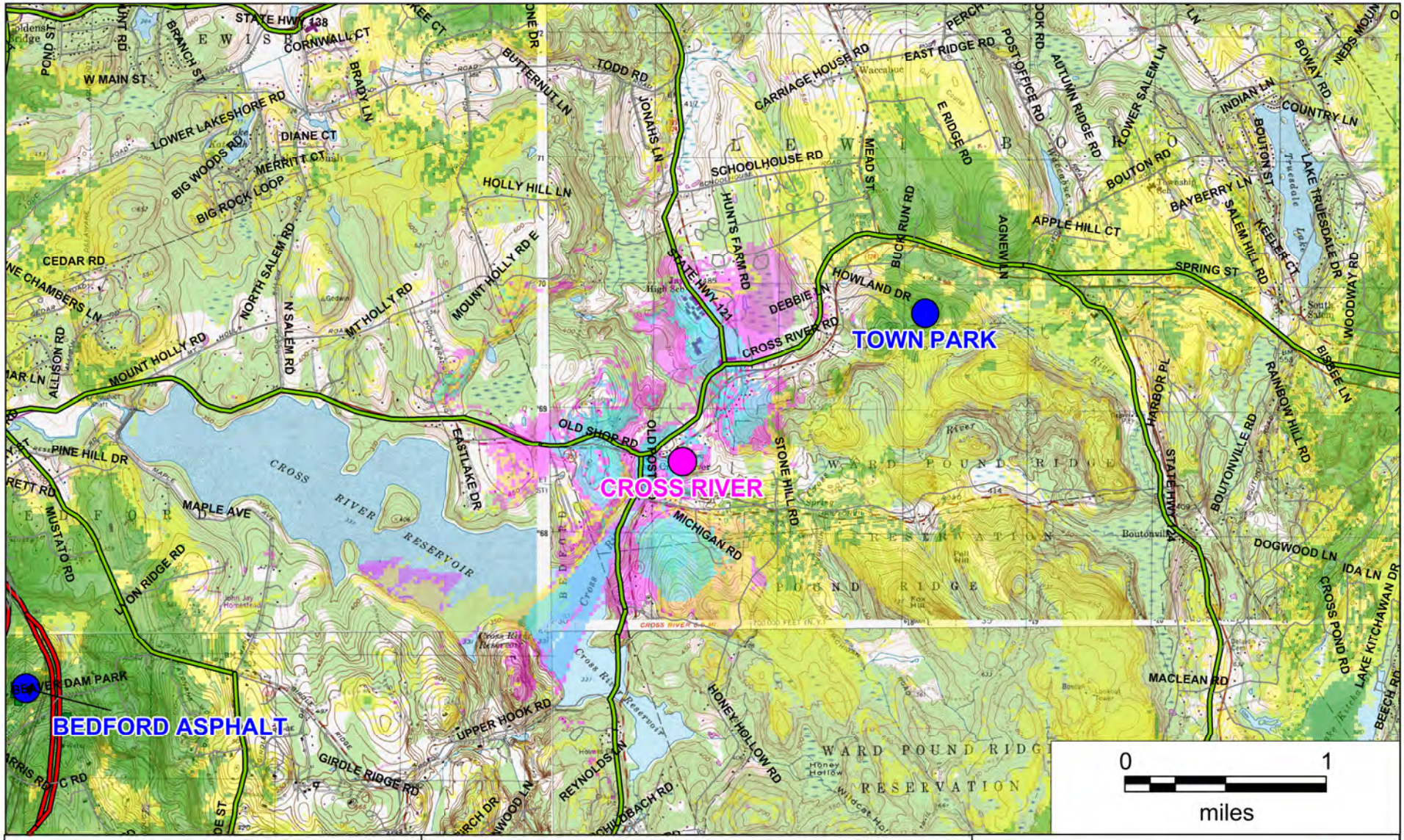
Existing Reliable In-Building Suburban Coverage (>-95 dBm RSRP)

Existing Reliable In-Vehicle Coverage (>-105 dBm RSRP)

verizon

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by A. Feehan 4/20/2018



Cross River

Existing and Proposed Verizon Wireless 2100 MHz LTE Coverage At 170' Proposed Height

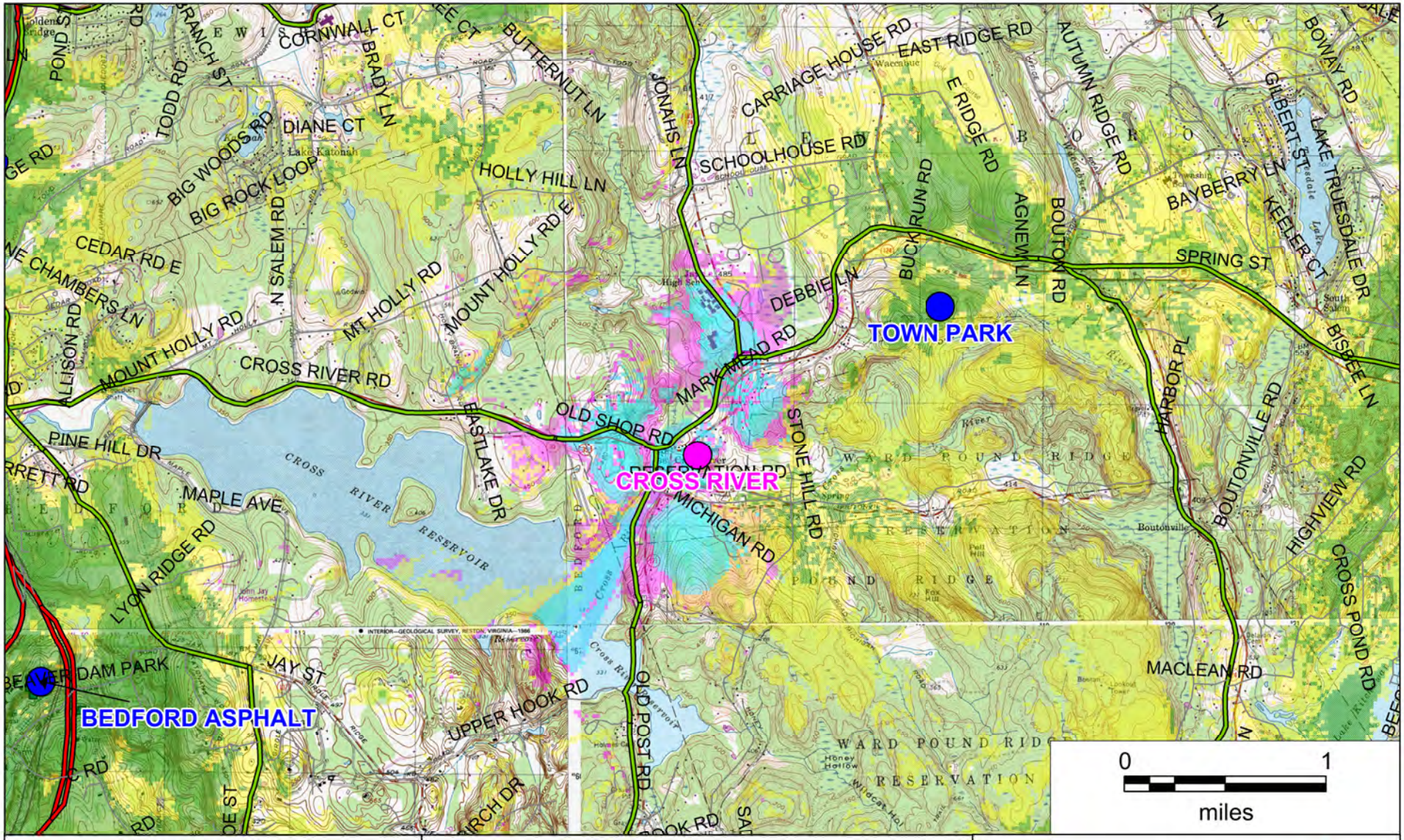
779 Route 35
Lewisboro, NY 10518

- Verizon Wireless Existing Facility
- Verizon Wireless Proposed Facility
- Existing Reliable In-Building Suburban Coverage (>-95 dBm RSRP)
- Existing Reliable In-Vehicle Coverage (>-105 dBm RSRP)
- Proposed Reliable In-Building Suburban Coverage (>-95 dBm RSRP)
- Proposed Reliable In-Vehicle Coverage (>-105 dBm RSRP)

verizon

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by A. Feehan 4/20/2018



Cross River

Existing and Proposed Verizon Wireless 2100 MHz LTE Coverage At 140' Proposed Height

779 Route 35
Lewisboro, NY 10518

- Verizon Wireless Existing Facility
- Verizon Wireless Proposed Facility
- Existing Reliable In-Building Suburban Coverage (>-95 dBm RSRP)
- Existing Reliable In-Vehicle Coverage (>-105 dBm RSRP)
- Proposed Reliable In-Building Suburban Coverage (>-95 dBm RSRP)
- Proposed Reliable In-Vehicle Coverage (>-105 dBm RSRP)

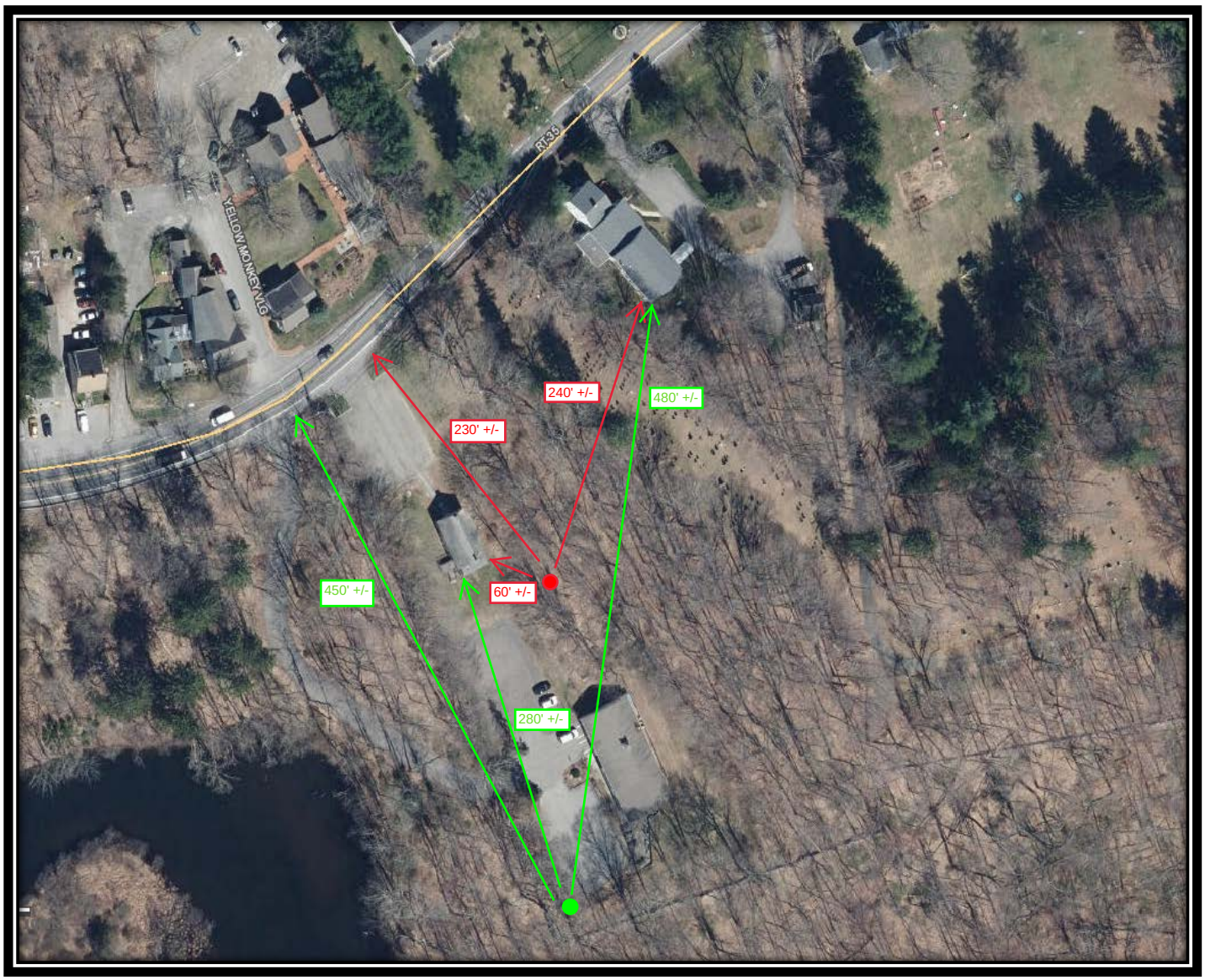
verizon

PierCon Solutions LLC
Specialists in Wireless Systems

Prepared by A. Feehan 5/3/2018

DETAILED SITE TABLE

Site ID	Address	Stucture	Height (feet)
CROSS RIVER	779 Route 35	Monopole	170
RIDGEFIELD CT	76 East Ridge Ave	Monopole	140
TOWN PARK	1065 Route 35	Monopole	160
BEDFORD ASPHALT	250 Harrison Road	Lattice Tower	172
POUND RIDGE	Adams Lane	Utility Pole	139
GOLDENS BRIDGE	Exit 6A I-684	Monopole	102
NORTH SALEM	Delancey Road	Monopole	100
SOUTH SALEM	1411 Route 35	Monopole	125
WACCABUC	117 Waccubuc Road	Monopole	140



Homeland Towers proposed wireless facility at Lewisboro Volunteer Ambulance Corps,

779 Route 35, Cross River, NY.

Aerial Map showing tower setback distances to structures. Distances shown from the original proposed location of the facility and the revised location of the facility.

ORIGINAL LOCATION OF PROPOSED FACILITY

REVISED LOCATION OF PROPOSED FACILITY

TOWN OF LEWISBORO

County of Westchester, State of New York

AUTHORIZATION TO LEASE PORTION OF TOWN PROPERTY TO HOMELAND TOWERS, LLC

INTRODUCED BY: Councilman John Pappalardo

SECONDED BY: Supervisor Peter Parsons

DATE OF CONSIDERATION/ADOPTION: April 23, 2018

WHEREAS, the Town of Lewisboro owns a parcel of real property located at 779 Route 35, Town of Lewisboro, County of Westchester, State of New York and shown on the Tax Map of the Town of Lewisboro as Sheet 0018, Block 10532, Lot 001 (hereinafter referred to as the "subject premises"), and

WHEREAS, the subject premises currently has two buildings located thereon, namely the Cyrus Russell Community House and the Lewisboro Volunteer Ambulance Corps building, and

WHEREAS, the Town Board of the Town of Lewisboro desires to lease a portion of the subject premises to Homeland Towers, LLC for the purpose of constructing, establishing, and maintaining a radio transmission tower facility for its use and that of its subtenants, licensees and customers, which facility includes a tower and associated facilities, including radio transmitting and receiving antennas, communications equipment, and related cables, wires, conduits, air conditioning equipment and other appurtenances, as shown on a certain site plan for said purpose as submitted to the Town Board, which site plan is subject to final approval, and

WHEREAS, the Town Board of the Town of Lewisboro finds that it is in the best interest of the Town to lease a portion of the subject premises, as set forth in a certain Lease, a copy of which is annexed hereto, and as shown on the aforementioned site plan, (hereinafter referred to as the "Lease Area") to Homeland Towers, LLC, a New York limited liability company having a place of business at 9 Harmony Road, 2nd Floor, Danbury, Connecticut 06810, and

WHEREAS, in accordance with Article 8 of the Environmental Conservation Law (the State Environmental Quality Review Act) and 6 NYCRR Part 617 of the implementing regulations, the proposed action has been determined to be an UNLISTED Action; and

WHEREAS, the Town Board of the Town of Lewisboro has reviewed the Environmental Assessment Form submitted for the project, and

WHEREAS, the Town Board of the Town of Lewisboro hereby issues a negative declaration of significance pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law, in that is has determined that the proposed action, namely entering into the aforementioned Lease, will not have a significant environmental impact and that a Draft Environmental Impact Statement will not be prepared, and

WHEREAS, this review under the State Environmental Quality Review Act is limited to the lease of a portion of the subject premises as set forth herein, and there will be a separate review in accordance with the State Environmental Quality Review Act in relation to the application of the Monroe balancing test and the approval of the site plan for the proposed use of the subject premises;

NOW, THEREFORE BE IT RESOLVED, that the Town Board of the Town of Lewisboro hereby authorizes and approves the lease of the subject premises to Homeland Towers, LLC, upon the terms and conditions contained in the Lease annexed hereto as Exhibit "A" and incorporated herein by reference thereto, subject to further negotiation between the parties and approval of any changes by the Town Board of the Town of Lewisboro, and

BE IT FURTHER RESOLVED, that pursuant to Section 64(2) of the Town Law of the State of New York, this Resolution is adopted by the Town Board of the Town of Lewisboro subject to a permissive referendum, and

BE IT FURTHER RESOLVED, that the Lewisboro Town Clerk is hereby authorized and directed to post and publish notice of this Resolution in accordance with Section 90 of the Town Law of the State of New York, and

BE IT FURTHER RESOLVED, that the Town Board of the Town of Lewisboro hereby authorizes the Supervisor to execute any and all documents necessary to give effect to this resolution, including authority to sign the Lease with regard to same.

UPON ROLL CALL VOTE:

Supervisor Parsons - Yea

Councilwoman Crimmins - Yea

Councilman Goncalves - Yea

Councilman Pappalardo - Yea

Councilman Welsh - Yea

VOTE: RESOLUTION CARRIED BY A VOTE OF 5 TO 0.

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

I, JANET L. DONOHUE, Town Clerk of the Town of Lewisboro, do hereby certify that the above is a true and exact copy of a Resolution adopted by the Town Board of the Town of Lewisboro at a meeting of said Board on April 23, 2018.

DATED: April 23, 2018

JANET L. DONOHUE, TOWN CLERK

NEGATIVE DECLARATION
Notice of Determination of Non-Significance

Project Number / Agenda Item: Lease to Homeland Towers, LLC

Date: April 23, 2018

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law.

The Town of Lewisboro (the "Town") by its Town Board, acting as Lead Agency, has determined that the Proposed Action described below will not have a significant effect on the environment and that a Draft Environmental Impact Statement will not be prepared.

Name of Action: Proposed lease of Town land (the "Lease") to Homeland Towers, LLC which lease contemplates the construction and operation of an antenna support structure.

Status: Unlisted

Conditioned Negative Declaration: Yes ____
No __X__

Description of Action: The Proposed Action consists of entering into a lease of approximately 2,965 square feet of ground space at 779 Route 35, Town of Lewisboro, County of Westchester, State of New York and shown on the Tax Map of the Town of Lewisboro as Sheet 0018, Block 10532, Lot 001 to Homeland Towers, LLC ("Tenant") to construct, maintain and operate a communications tower and related ancillary facilities and improvements for the transmission and reception of communication signals and to accommodate the installations of wireless carriers and Town and local emergency service antennas and equipment, including without limitation, radio equipment cabinets, antennas and related equipment and utilities.

Location: 779 Route 35, Town of Lewisboro, County of Westchester, State of New York

Reasons Supporting This Determination:

Based upon a review of the Environmental Assessment Form, the Plans, the Lease terms, and other documents submitted, in connection with the Lease, the Lead Agency makes the within negative declaration of environmental significance based upon the following findings:

The Proposed Action will not have a significant adverse environmental impact as a result of physical changes to the leasehold site. The area of the project site where the facility is to be located will require only minimal grading.

The Proposed Action will not have a significant adverse environmental impact on unique or unusual land forms found on the site. A separate review and finding under SEQR will be performed in relation to the construction of the facilities on the site, as this determination is related to the lease document only.

The Proposed Action will not have a significant adverse environmental impact on any water body designated as protected. The property is adjacent to a New York City Watershed Boundary. However, a separate review and finding under SEQR will be performed in relation to the construction of the facilities on the site, as this determination is related to the lease document only.

The Proposed Action will not have a significant adverse environmental impact on any non-protected existing or new body of water.

The Proposed Action will not have a significant adverse environmental impact on surface or groundwater quality or quantity. All necessary erosion and sediment control measures will be implemented.

The Proposed Action will not have a significant adverse environmental impact as a result of altered drainage flow or patterns, or surface water runoff.

The Proposed Action will not have a significant adverse environmental impact on air quality.

The Proposed Action will not have a significant adverse environmental impact on any threatened or endangered species.

The Proposed Action will not have a significant adverse environmental impact on non-threatened or non-endangered species.

The Proposed Action will not have a significant adverse environmental impact on agricultural land resources.

The Proposed Action will not have a significant adverse environmental impact on aesthetic resources.

The Proposed Action will not have a significant adverse environmental impact on any site or structure of historic, prehistoric or paleontological importance.

The Proposed Action will not have a significant adverse environmental impact on the quantity or quality of existing or future open spaces or recreational

opportunities.

The Proposed Action will not have a significant adverse environmental impact on existing transportation systems.

The Proposed Action will not have a significant adverse environmental impact on the community's sources of fuel or energy supply.

The Proposed Action will not have a significant adverse environmental impact as a result of objectionable odors, noise, or vibration.

The Proposed Action will not have a significant adverse environmental impact on the public health and safety.

The Proposed Action will not have a significant adverse environmental impact on the character of the existing community for the reasons described above in relation to the aesthetic impact and safety impact.

There are no potential adverse environmental impacts related to the proposed Lease, and the application of the Monroe Balancing Test and the proposed project will be subject to a separate review under the State Environmental Quality Review Act, as the review herein is in relation to the Lease only, and as such lease is subject to the tenant obtaining all necessary approvals to construct the subject facilities on the site.

The Lead Agency has relied upon the Environmental Assessment Form, the site plan and other documentation including the Lease terms and coverage report regarding the need for the facility, in preparing this document.

If conditioned Negative Declaration: N/A

Lead Agency: Town Board
Town of Lewisboro
11 Main Street, P.O. Box 500
South Salem, New York 10590

For Further Information:

Contact Person: Peter Parsons, Supervisor, Town of Lewisboro

Address: 11 Main Street, P.O. Box 500
South Salem, New York 10590

Telephone Number: (914) 763-3151

For Type 1 Actions and Conditioned Negative Declarations, a copy of this notice has been filed with:

N/A

For Unlisted Actions, a copy of this notice has been filed with:

A copy of this negative declaration is on file in the office of the Town Board of the Town of Lewisboro together with copies of all reports and documents referenced herein. These documents are available for review by the public.

For Type 1 Actions and Conditioned Negative Declarations, notice of this determination has been provided to the following organization for publication in the ENB:

N/A

TOWN OF LEWISBORO
OFFICE OF THE SUPERVISOR

(914) 763-3151
FAX (914) 763-6496
email:supervisor@lewisborogov.com
www.lewisborogov.com

TOWN OF LEWISBORO
11 MAIN STREET
P.O. BOX 500
SOUTH SALEM, NEW YORK 10590

PETER H. PARSONS, SUPERVISOR

January 11, 2018

John A. Bonafide, Director
Technical Preservation Services Bureau
Agency Historic Preservation Officer
New York State Parks, Recreation and Historic Preservation
Division for Historic Preservation
PO BOX 189,
Waterford, NY 12188-0189

Dear Mr. Bonafide:

Re: FCC New Communications Tower/170'/FCC#0007886709
779 Route 35, Lewisboro, Westchester County 17PR06068

The critical issue in Cross River hamlet is public safety. Communications are at best erratic and normally non-existent. The hamlet is intersected by New York State Routes 35 and 121 and as a result is the most heavily trafficked section of Town. Apart from the more traditional buildings you would expect to find in a Lewisboro hamlet, you will find 176 condominiums, 116 large newer homes in the Michelle Estates Development, the busiest shopping center in Town known as Orchard Square, several smaller groups of stores, the Lewisboro Volunteer Ambulance Corps, the area base station for Emergency Medical Services and Advanced Life Support, the Katonah Lewisboro District high school & middle school and Four Winds, a hospital caring for psychiatric cases. The population in this area complains on a continuing basis to me about lack of cell service which they find to be a relic of a prior age which reduces their access to emergency services and is a depressant on the value of their homes. All of these facilities and institutions produce pedestrian and bicycle traffic as well as heavy motor traffic on roads which the New York State Department of Transportation has agreed are treacherous but which that Department sees little way of improving without radical changes to the landscape of the area.

The biggest single contribution that the Town can make to improving this situation is to upgrade communications with a cell tower in the center of the hamlet. **That is what the cell tower proposed by Homeland Towers and Verizon would achieve.**

Attached are:

- A memo from the Lewisboro Chief of Police with accompanying statistics
- A letter from the Captain of the Lewisboro Ambulance Corps
- A memo from the Chair of the Lewisboro Antenna Advisory Board
- A letter from the Lewisboro Town Historian.

I understand the Town Historian's reservations but I believe them to be relatively minimal in comparison with the pre-existing changes in the immediate vicinity of the Special Character District and the Town's duty to protect public safety. Specifically the properties in the Historic District which will be most affected are:

1. The Cross River Baptist Church – This is visually separate from the site of the proposed tower
2. The recently built and then enlarged headquarters for the Lewisboro Ambulance Corps
3. The Cyrus Russell Community House which would face away from the tower
4. The home next to the Community House on Route 35 which has undergone radical alterations and expansion in order to accommodate professional offices for two lawyers and a dentist.

I trust you will understand the paramount requirement of Town government to help safeguard the public.

Yours,

Peter H. Parsons

cc.
Town Board,
Anthony Mole, Esq.
Jennifer Herodes, Esq.
Chief Charlie Beckett
Ted Sohonyay
Maureen Koehl
Raymond Vergati

LEWISBORO VOLUNTEER AMBULANCE CORPS, INC.
PO Box 41
South Salem, New York 10590

December 11, 2017

Mr. Raymond Vergati
Site Development Manager
Homeland Towers, LLC
9 Harmony Street, 2nd Floor
Danbury, CT 06810

Dear Mr. Vergati:

As the Captain of Lewisboro Volunteer Ambulance Corps (LVAC), I am writing to express my full support, and our dire need, for the installation of a cell tower on the town property that serves as our headquarters.

For years the community at large has struggled with extremely poor cellular service in the area. We and our partners in the emergency services remain concerned that it is only a matter of time until the lack of cellular coverage has a direct and negative impact on an emergency response. Imagine being on the side of the road calling for help and being unable to for lack of service? As we all become ever-more reliant on cellular service, we believe that the risks associated with remaining 'uncovered' by cellular service far outweigh any other considerations.

The public safety agencies in the area also face a major hurdle when trying to communicate with each other. Due to town topology, VHF radio signals are inconsistent in the Town of Lewisboro. Combined with spotty cellphone access, LVAC is often unable to use a phone as a radio backup. Further, we are unable to utilize current mobile app technology that helps first responders provide care and communicate. It's also hard to contact On Line Medical Control for medical direction if needed, and though we are trained to do so, we cannot transmit EKG's to the hospital in a timely manner.

I'd also like to mention here that LVAC receives no town, county, state, or federal tax monies. Nor do we receive any other government funds. We operate solely with volunteer members, and we have no paid employees or staff. These critical facts determine LVAC's decisions, and we must prioritize our expenses very carefully.

As such, LVAC does not have funds for a radio system that will provide uninterrupted radio communications. We are dispatched on hundreds of emergency calls every year and each time the tones go off our members have difficulty communicating with each other, and with our dispatchers at Westchester County 60-Control in Valhalla. We have studied our challenges, and initiated a survey of our radio coverage at our own expense. Even if we invested millions of dollars (that we don't have), the topography and diverse geography of the area would still be an impediment to reliable radio communications. We have been lucky to date, as none of our members have been injured as a result of our radio challenges and their inability to radio for help.

LVAC covers 29 square miles; 12,411 people; 96 miles of road; 851 acres of water; 4,315 acres of parkland; 1 section of Interstate 684; 3 schools; 4 shopping areas; multiple group homes; and one major commuter railway and train station – and at most of these areas we lack sufficient communications resources.

We are looking forward to the new tower providing LVAC with antenna access (we hope to have four hardlines running from the top of the tower to a radio cabinet at the base) and possibly even greatly needed radio equipment.

LVAC hopes that the funds generated by the new tower will help support LVAC's life saving operations. Reliable radio communications will also help retain members. Regular assured communications will reduce member frustration and improve their overall safety. When members volunteer for 1,000 hours a year (in 2016 we have nine who did so) the least we can provide them in return is a communications system that helps keep them safe.

We keep the town safe – now we are looking for this tower to help keep us safe and provide for *our* needs. With an installed tower that results in a win-win for Homeland Towers and LVAC, we are fully supportive of its installation.

Respectfully,

Lucian Lipinsky de Orlov
Captain
Lewisboro Volunteer Ambulance Corps
captain@lvac-ems.com
914-763-9633

Dec 5 at 2:08 PM

To:Supervisor@lewisborogov.com
Cc:ALAN COLE,CARL GROSSMAN,NEIL BERMAN,TOM LOBOSCO

Peter:

As per our conversations with Homeland Tower, I would like to re-visit the Town's Homeland Towers' and the AAB's attempts to find a wireless site that would fill a very critical "hole" in wireless coverage in the Cross River area.

Various parties, including the AAB, have identified potential wireless sites in the Cross River area, with the following results:

1. The rear of Cameron's 7X24 Deli. It was determined that this site was adjacent to a Nature Conservancy preservation area. Many parties objected to such as use for various reasons. This site was not pursued, in that the Town Park site was at the focus of attention, although the projected coverage was not the same.

2. Four Winds Hospital. This site was found to be an optimal site for covering the aforementioned Cross River "hole", as well as the Shopping Center, the JJMS and JJHS campus. The hospital's Board of Directors advised the interested parties [Town, Verizon, ATT] that Four Winds was not to be considered as a wireless site either now or in the future. Since this is private property, there is no further recourse to be considered.

3. Reynolds Cemetery. Good high point, but private property and not enough space for a wireless site. Site not further pursued.

4. Light pole stanchions on the John Jay Field. Verizon had solicited the K-L School Board about using the poles as cell sites. The School Board never responded to this solicitation, therefore this site was not pursued.

4 potential wireless sites were investigated before proceeding on the LVAC/Cyrus Russell site. Town Law states that 3 "alternative sites" have to be investigated; thus, all due diligence has been exercised prior to going forward with the LVAC/Cyrus Russell location. This site will provide wireless coverage to the "Meadows", "Michelle Estates”, the aforementioned "hole" as well as improved coverage in the Shopping Center and further north as well. It would be a significant improvement to coverage both along Route 35 as well as Route 121 North.

Regarding coverage as related to tower height above ground level (AGL) relative to Height Above Average Terrain (HAAT) was the primary reason that the AAB requested coverage plots at various elevations up to 170 feet. To wit, the 130 foot AGL plot confirms that coverage drops off considerably. This means that, with a 150' tower there wouldn't be much encouragement for collocation because the third carrier (with 10' separation for each carrier) wouldn't be inclined to collocate. Thus, a 170' AGL tower would provide good coverage down to the 150' elevation, as

the 170-150' plots confirm. The 170' tower would provide sufficient impetus for the other carriers to collocate, as is stated in Town Law

I hope you find this input useful in whatever path the Town seeks to pursue.

Regards,

Ted Sohonyay, Chair
Lewisboro Antenna Advisory Board

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TOWN OF LEWISBORO
WESTCHESTER COUNTY

SOUTH SALEM, NEW YORK 10590

MAUREEN L. KOEHL
TOWN HISTORIAN

Telephone
914-763-3326

141 SPRING STREET
SOUTH SALEM, NY 10590
E mail: funnyfarm.ss@verizon.net

Raymond Vergati,
Regional Manager
Homeland Towers, LLC
9 Harmony Street, 2nd Floor
Danbury, CT 06810
Office: (203) 297-6345
Email: rv@homelandtowers.us
RE: CBRE: TS70417386 at 779 Route 35, Cross River, NY

The placement of a cell tower in the Cross River hamlet adjacent to the Lewisboro Volunteer Ambulance Corps building appears to be a logical placement and will serve the communication interests of the town. After visiting the site of the proposed cell tower, although I am in favor of the project, I have several reservations. The tower, as placed, is contiguous to a historic cemetery with graves dating to the late 18th and 19th centuries, including Civil War veterans' gravesites.

The proposed tower placement is in a mixed commercial zone. Its presence should not visually impact the several historic buildings nearby, i.e. the Cyrus Russell Community House and the Cross River Baptist Church, a Lewisboro Historic Landmark, but it is also within a town of Lewisboro Special Character District and as such, according to Town guidelines, "*All new construction proposed within the area should be subject to architectural review. Inapproriate design, bulk or setback could have a severe impact on the overall setting of the hamlet especially in recognition of the location of most properties directly on a State highway. The context of the entire area must receive priority in the review of individual plans... There is a cohesiveness to the area established by the age of the structures... The challenge now is to maintain this antique quality with a mix of uses and increasing traffic volume.*"

Since most of the surrounding area along Route 35 is primarily commercial, the sight of a 170' cell tower should not interfere with a residential viewscape. The view from the Route 121 corridor is more open, especially during the winter months so proper screening would be in order.

The SHPO desk-top survey seems to be partially compiled from a 19th century map giving the area a more historically cohesive perspective than exists today. The surrounding area includes the above-mentioned 19th century buildings and several late 18th century structures as well as a large condominium development that subtracts from the historic impact of the hamlet.

Sincerely,
Maureen Koehl, Lewisboro Town Historian

Westchestergov.com

Referral Review
Pursuant to Section 239 L, M and N of the General Municipal Law and Section 277.61 of the County Administrative Code

George Latimer
County Executive

County Planning Board

May 11, 2018

Janet L. Donahue, Town Clerk
Town of Lewisboro
P.O. Box 725
Cross River, NY 10518

Subject: **Referral File No. LEW 18-002 – Homeland Towers - Zoning Text Amendment**

Dear Ms. Donahue:

The Westchester County Planning Board has received a notice of public hearing for a proposed zoning text amendment related to "communication facilities, communication towers, antenna towers or monopoles" to be in compliance with federal regulations. The amendment is being considered due to a proposal to construct a communications tower on Town-owned land located at 779 Route 35, which would be leased to Homeland Towers.

We have no objection to the Lewisboro Town Board assuming Lead Agency status for this review.

We have reviewed this matter under the provisions of Section 239 L, M and N of the General Municipal Law and Section 277.61 of the County Administrative Code and we find it to be a matter for local determination in accordance with the Town's planning and zoning policies.

Thank you for calling this matter to our attention.

Respectfully,
WESTCHESTER COUNTY PLANNING BOARD

By:

Norma V. Drummond
Acting Commissioner

NVD/LH

432 Michaelian Office Building
148 Martine Avenue
White Plains, New York 10601 Telephone: (914) 995-4400 Fax: (914) 995-9098 Website: westchestergov.com

LESLIE N. SIMON, D.D.S.

P.O. BOX 294
787 ROUTE 35
CROSS RIVER, NEW YORK 10518
Telephone (914) 763-5892
Email simondds@aol.com

Nov. 8, 2017

Honorable Town Supervisor and Town Board Members:

The Town Supervisor has proposed a CELL TOWER and facilities at the Cyrus Russell Community House property in HISTORIC Cross River.

My own home was built in 1762 as were others in this historic Hamlet.

The proposed location is adjacent to the Cyrus Russell Community House. For this use in this historic part of town, the town would be paid $2000 per month and it will completely ruin our historic hamlet. The total town budget is well over 10 Million Dollars per year. Reductions in property values and hence taxes commensurate with lower valuations of neighboring properties due to the proposed cell tower location would be more than the anticipated revenue.

His proposal requires the approval of the entire Town Board after input from the Planning Board and the Antenna (Cell Tower) Advisory Committee. I am expressing my opposition to the location of a 200 FOOT CELL TOWER in "Historic Cross River."

While cell coverage may well be needed in Cross River, the site should be chosen more wisely, and not just based on seeking revenues for the town.

Very truly yours,

Les Simon
Former Supervisor and Town Counculman

cc: Antenna Advisory Board
Lewisboro Planning Board ✓
Lewisboro Achitectural Review Board

Les Simon

Ciorsdan Conran

From: judith beller <bellerfam@aol.com>
Sent: Tuesday, May 08, 2018 10:11 AM
To: planning@lewisborogov.com
Subject: Cell Tower in Cross River

Mr. Kerner,

I am writing you about the proposed cell tower to be placed in Cross River.

I object to a 170 foot pole anywhere in Cross River. This would be an eyesore.
An alternative must be found that can be placed on the highest ground and with as good a design to hide the tower as possible.

The town leaders must find an alternative to this hideous proposal, including asking private property owners to place the tower on their properties.

Please reconsider.

Judith Beller