HAROLD GARY Chairman

CRAIG PAEPRER Vice Chairman

BOARD MEMBERS
ANTHONY GIANNICO
DAVE FURFARO
CARL STONE
KIM KUGLER
RAYMOND COTE

TOWN OF CARMEL PLANNING BOARD



60 McAlpin Avenue Mahopac, New York 10541 Tel. (845) 628-1500 – Ext.190 www.ci.carmel.ny.us MICHAEL CARNAZZA

Director of Code

Enforcement

RICHARD FRANZETTI, P.E.

Town Engineer

PATRICK CLEARY, AICP,CEP, PP, LEED AP Town Planner

PLANNING BOARD AGENDA SEPTEMBER 12, 2018 – 7:00 P.M.

MEETING ROOM #2

TAX MAP # PUB. HEARING MAP DATE COMMENTS

PUBLIC HEARING

1. Hillcrest Commons - Lot E-2.2 - Clapboard Ridge

44.10-2-4.2

09/12/18

8/29/18 Amended Site Plan

SITE PLAN

2. Homeland Towers Dixon Lake - 36 Dixon Road

54.-1-6

7/26/18 Site Plan (Cell Tower)

3. Homeland Towers Lake Casse – 254 Croton Falls Rd 65.19-1-43

7/26/18 Site Plan (Cell Tower)

<u>SUBDIVISION</u>

4. Western Bluff Subdivision - 350 West Shore Drive

66.14-1-20

9/05/18 Preliminary Subdivision Plat

MISCELLANEOUS

5. Minutes - 07/11/18

LAW OFFICES OF

SNYDER & SNYDER, LLP

94 WHITE PLAINS ROAD

TARRYTOWN, NEW YORK 1059

(914) 333-0700 FAX (914) 333-0743

WRITER'S E-MAIL ADDRESS

ONE GATEWAY CENTER, SUITE 2600 NEWARK, NEW JERSEY 07102 (973) 824-9772

FAX (973) 824-9774

NEW JERSEY OFFICE

REPLY TO:

rgaudioso@snyderlaw.net

TARRYTOWN OFFICE

August 2, 2018

Honorable Chairman Harold Gary and Members of the Planning Board Town of Carmel Town Hall 60 McAlpin Avenue Mahopac, New York 10541

NEW YORK OFFICE

FAX (212) 932-2693

LESLIE J. SNYDER

DAVID L. SNYDER

(1956-2012)

ROBERT D. GAUDIOSO

(212) 749-1448

445 PARK AVENUE, 9TH FLOOR

NEW YORK, NEW YORK 10022

Re: Application for site plan and special permit approval for

Dixon Lake: 36 Dixon Road, Carmel, New York

Honorable Chairman Gary and Members of the Planning Board:

We are the attorneys for Homeland Towers LLC and New York SMSA Limited Partnership d/b/a Verizon Wireless (collectively, the "Applicants") in connection with their request for site plan and special permit approval to locate a public utility wireless telecommunications facility ("Facility") at the above captioned property ("Property"). The proposed Facility consists of a 157-foot tower designed to resemble a tree, and a fenced 52' x 65' compound for related equipment. The Property is located in the Residential Zoning District where the Facility is permitted in accordance with Section 156-62 of the Town of Carmel Zoning Code.

Verizon Wireless is a provider of personal wireless services, and is licensed by the Federal Communications Commission to provide wireless services throughout the New York metropolitan area, including the Town of Carmel.

In support of the foregoing, we are pleased to enclose the following materials and one CD with all documents contained thereon:

- Two (2) checks made payable to the Town of Carmel, in the amount of \$3,500.00 1. (escrow application fee) and \$2,000.00 (site plan application fee);
- Eleven (11) copies of the Site Plan Application Form; 2.

- 3. Two (2) copies of the Disclosure Statements;
- 4. Two (2) copies of the Vesting Deed;
- 5. Two (2) copies of the Easements, Covenants and Restrictions:
- 6. Eleven (11) copies of the Site Plan Completeness Certification Form;
- 7. Eleven (11) copies of the Environmental Assessment Form with VEAF;
- 8. Eleven (11) copies of the Structural Certification Letter;
- 9. Eleven (11) copies of the RF Exposure Report;
- 10. Eleven (11) copies of the RF Justification Report with Master Facilities Service Plan;
- 11. Eleven (11) copies of the FAA Opinion Letter confirming that no FAA lighting or marking is required;
- 12. Eleven (11) copies of the Collocation Commitment Letter; and
- 13. Five (5) copies of the Site Plan.

We thank you for your consideration, and look forward to discussing this matter at next Planning Board meeting. If you have any questions or require any additional documentation, please do not hesitate to contact me at 914-333-0700.

Snyder & Snyder, LLP

By:

Robert D. Gaudioso

RDG:cae

Enclosures

cc: Homeland Towers

Verizon Wireless

Mahopac Fire Department

P.O Box 267

Mahopac, NY 10541

z:\ssdata\wpdata\ss3\rdg\homelandtowers\carmel\058 (dixon)\pb letter 7.30.2018.rtf

Homeland Gowers



SITE PLAN APPLICATION INSTRUCTIONS



The Town of Carmel Planning Board meetings are held twice a month, on the second and fourth Wednesday's, at 7:00 PM at Carmel Town Hall, 60 McAlpin Avenue, Carmel

The submission deadline is 10 days prior to the Planning Board meeting. New site plan applications that have been deemed complete will be placed on the agenda in the order they are received.

No application will be placed on the agenda that is incomplete

Pre-Submission:

Prior to the formal submission of the site plan, a pre-submission conference may be requested by the applicant to be conducted with representatives from the Town, which may include the Town Planner, Town Engineer, Director of Code Enforcement and/or the Planning Board Attorney. This conference will serve to educate the applicant on the process he/she must follow, clarify the information required to submit a complete site plan application, and to highlight any specific areas of concern. You may arrange a presubmission conference through the Planning Board Secretary at (845) 628-1500 extension 190.

Submission Requirements:

At least 10 days prior to the Planning Board meeting, the site plan application shall be submitted to the Planning Board Secretary as follows:

All site	plans shall be signed, sealed and folded with the title box legible. The
applica	tion package shall include:
	1 copies of the Site Plan Application Form, signed and notarized.
1	1 copies of the SEQR Environmental Assessment Form (use of short form or ong form shall be determined at pre-submission conference).
	full size sets of the Site Plan (including floor plans and elevations)
	CD (in pdf. format) containing an electronic version of the Site Plan
	copies of the Disclosure Statement
1	1 copies of the Site Plan Completeness Certification Form
	Il supplemental studies, reports, plans and renderings.
	copies of the current deed.
2	copies of all easements, covenants and restrictions.
TI	he appropriate fee, determined from the attached fee schedule. Make checks
pa	ayable to the Town of Carmel.
B.	201 Trombytha 8+16/18 8/16/18
Planning	g Board Secretary; Date Town Engineer; Date

Homeland Towers-Dexon Lake



TOWN OF CARMEL SITE PLAN APPLICATION



Per Town of Carmel Code - Section 156 - Zoning

SITE IDENTIFICA	TION INFORMATION	
Application Name: Dixon Lake NY058	Application #	Date Supmitted:
Site Address:	18-0010	8318
No. 36 Street: Dixon Rd H	amlet: Carmel	U U
Property Location: (Identify landmarks, distance from	n intersections, etc.)	
+/- 800' north of intersection with Crane Rd	•	
Town of Carmel Tax Map Designation:	Zoning Designation of Site	> *
Section 54. Block 1 Lot(s) 6	Residential	
Property Deed Recorded in County Clerk's Office Date August 9, 1983Liber 1125 Page 40	Liens, Wortgages or other	Encumbrances
Existing Easements Relating to the Site	Yes X No	
No x Yes Describe and attach copies:	Are Easements Proposed? No Yes X Describe an	d attach assiss
	1	
L	Electric & Telephone (see sit	e plan)
Have Property Owners within a 500' Radius of the S	Site Been Identified?	
Attended Eist to this App	WNER INFORMATION	
Property Owner:		
John Spaccarelli and Angela M. Spaccarelli	Phone #: 917-807-9138	Email:
Owners Address:		ispaccarelli@aol.com
No. 36 Street: Dixon Rd Tot	wn: Carmel Heights	State, NY Zip: 10512
Applicant (If different than owner): Homeland Towers, LLC. and Verizon Wireless	Phone #: 203-297-6345	Email:
Applicant Address (If different than owner):	Fax#:	kw@homelandtowers.us
No. 9 Street: Harmony St, 2nd Floor Tou	<i>vn:</i> Danbury	State: CTzip: 06810
Individual/ Firm Responsible for Preparing Site	Phone #: 860-663-1697	Email:
Plan: APT Engineering	Fax#:	rburns@allpointstech.com
Address:		L. Samous de la contraction de
46 0 00	vn: Killingworth	Cinin OTT
Other Representatives:	Phone #:	State: CTZip: 06419 Email:
	Fax#:	
Owners Address: No. Street: Tow		
		State: Zip;
Describe the project, proposed use and operation to	ESCRIPTION	
New construction by Homeland Towers of a proposed	150' tall telecommunications fa	acility to be located within
a 57' x 65' fenced compound. Installation of Verizon V	Vireless antennas and associa	ted equipment.

TOWN OF CARMEL SITE PLAN APPLICATION

PROJEC	T INFORMATION
Lot size: Acres: +/- 9.83 acres Square Feet: 428,195	Square footage of all existing structures (by floor): 1st Fir: 3,309 sqft 2nd Fir: 3,081 sqft, Barn: 2,248 sqft
# of existing parking spaces: 2	# of proposed parking spaces: 1
# of existing dwelling units: 1	# of proposed dwelling units None
is the site served by the following public utilit	v infrastructure:
 Is project in sewer district or will prive 	ite septic system(s) be installed? No
 If yes to Sanitary Sewer answer the fo 	Howing:
➤ Is this an in-district cor ➤ What is the total sewer	connect to sewer main? Yes: No: nection? NA Out-of district connection? NA capacity at time of application? NA od average and maximum daily flow N/A
Water Supply	Yes: ☐ No: ☒
What is the total water of the water	connect to water main? Yes: No: capacity at time of application? N/A d average and maximum daily demand N/A Yes: No:
	/es: ☑ No: □
Gas Service Y	′es: □ No: Ⅸ
Telephone/Cable Lines	Yes: ⊠ No: □
For Town of Carmel Town Engineer	A A A A A A A A A A A A A A A A A A A
Sewer Flows Not Applicable A	Plutt'
Town Engineer; Date	
What is the predominant soil type(s) on the site? Paxton fine sandy loam 35% Paxton fine sandy loam 22% Paxton fine sandy loam 43%	What is the approximate depth to water table? >6'
Site slope categories: 15-25% 100 %	25-35%% >35% %
Estimated quantity of excavation: Cut (C.	
	No: ☐ Unknown: ☑
is the site located in a designated Critical Env	
	cuts proposed? What is the sight distance?
site? Yes: ☑ No: ☐ Yes: ☐ No: ☒	Left_N/ARight_N/A
Is the site located within 500' of:	
The boundary of an adjoining city, town or	village Yes: ☐ No: ☒
The boundary of a state or county park, re-	creation area or road right-of-way Yes: ☐ No: 🗓
A county drainage channel line.	Yes: ☐ No: 🛛
The boundary of state or county owned lar	nd on which a building is located Yes: ☐ No: 図

TOWN OF CARMEL SITE PLAN APPLICATION

is the site listed on the State or Federal	Register of Historic	Place (or substantia	lly contiguous)
Yes: ☐ No: Ø			
Is the site located in a designated flood	plain?		
Yes: No: 🛭	41 - O 4 NIVODE	A 64	
Will the project require coverage under	the Current NYSDE	C Stormwater Regula	itions
			Yes: CI No: 🔯
			143' [7] 140' [4
Will the project require coverage under	the Current NYCDE	P Stormwater Regula	ations
The same because of the same o			
			Yes: ☐ No: ဩ
Does the site disturb more than 5,000 s	q ft	Yes: 🖾 No: 🗀	
		24	
Does the site disturb more than 1 acre		Yes: 🗆 No: 🖾	
Does the site contain freshwater wetlan	des		
Yes: No: No:	ius r		
Jurisdiction:			
NYSDEC: ☑ Town of Carme	el: O		
If present, the wetlands must be delineate	ed in the field by a W	etland Professional, a	nd survey located on
the Site Plan.	,	,	
Are encroachments in regulated wetlan			s: 🗌 No: 🖄
Does this application require a	referral to the E	nvironmental Yes:	□ No: ☑
Conservation Board?	·		
Does the site contain waterbodies, stre	ams or watercourse	s? Yes: No	: 🛛
			_
Are any encroachments, crossings or a			: 🛛
Is the site located adjacent to New York			: 🔯
Is the project funded, partially or in total	il, by grants or loans	s from a public sourc	67
Yes: ☐ No: ☒ Will municipal or private solid waste dis	Shorilitus de Lance	·	
will municipal or private solid waste dis 	-		
Has this application been referred to the		Yes: 🖾 No	: 🖸
nas mis application been referred to m	e rife pepartment:	162. [2] 140	· • •
What is the estimated time of construct	ion for the project?		· .
find 13 the estimated anie vi constitut	ion for the project.	approximatley 3 mont	ns.
ZONING	COMPLIANCE INFO	RMATION	TO WE SHOULD BE
Zoning Provision	Required	Existing	Proposed
Lot Area	120,000	428,195	No change
Lot Coverage	15%	0.03	No change
Lot Width	200	+/ - 4 89'	No Change
Lot Depth	200	+/- 922'	No change
Front Yard	40	+/- 309'	+/- 377'
Side Yard	25	+/-260' North and +/- 26' South	+/- 30' North and +/- 395' South
Rear Yard	40	+/- 374'	+/- 383'
Minimum Required Floor Area	N/A	N/A	N/A
Floor Area Ratio	N/A	N/A	N/A
Height	37'	30,	150' * waiver requested
Off-Street Parking	N/A	2	1 1
Off-Street Loading	N/A	N/A	N/A

TOWN OF CARMEL SITE PLAN APPLICATION

Will variances be required? Yes: ☐ No: Ø	If yes, identify variances:
PA	ROPOSED BUILDING MATERIALS
Foundation	Reinforced Concrete and Rebar
Structural System	Reinforced Concrete and Rebar
Roof	N/A
Exterior Walls	N/A
AP	PLICANTS ACKNOWLEDGEMENT
correct. Klaus Wimmer, Homeland Towers	porting documents and drawings attached hereto are true and
Applicants Name	Applicants Signature
Sworn before me this	day of <u>Auguss</u> 2010
Notary Public -	VINCENT L. XAVIER NOTARY PUBLIC-STATE OF NEW YORK No. 01XA6136274 Qualified in Westchester County
	My Commission Expires U1-05-2022



Letter of Authorization

Municipality: Town of Carmel Tax Parcel: 54.-1-6

Re: Owner Authorization

John Spaccareli and Angela M. Spaccarelli, the owners ("Owners") of the property identified as 36 Dixon Rd, Carmel, NY 10512 Tax Parcel ID# 54.-1-6 in the Town of Carmel, County of Putnam, State of New York, (the "Property") hereby authorizes Homeland Towers, LLC., ("Homeland") its agents, contractors and representatives as Owners' agents for the purpose of filing, executing and completing any application's with the Town of Carmel and to obtain approvals necessary to permit Homeland's construction and operation of a wireless telecommunications facility on the Property.

Signatu	pe of Owner /	
By:	hux praules	
Name:	John Spaccarelli	
	Owner	

Signature of Owner:

By: (INCILA / I) January 9

Name: Angela M Spaccarelli

Title: Owner

Date: (The Space of Control of

Sworn to before me

This 30 day of 0.14 2018

Notary Public

MARIA NIEVES
Notary Fublic - State of New York
NO. OTAI(\$177292
Gualified in Dictoriasa County
My Commission Expires Apr 4, 2020



LEST TERCATE OF LORAL



All Site Plans submitted to the Planning Board for review shall include the following information and details, as set forth in Section 156-61 B of the Town of Carnel Zoning Ordinance.

This form shall be included with the site plan submission

100	Requirement Data	To Be Completen	Victorially the
1	Name and title of person proparing the site plan	- by the Arthresia	
2	Name of the applicant and owner (if different from applicant)		Section 1.
3	Original drawing date, revision dates, scale and north arrow	[13]	Market Ma
4	Tax map, block and lot number(s), zoning district		Marie a see that the see
5	All existing property lines, name of owner of each property within a 500' radius of the site	THE VIEW OF THE PROPERTY OF TH	V) E.W
6	Contour lines at two-foot intervals, grades of all roads, driveways, sanitary and storm sewers	13/	A Side When the survey survey of the survey
7	The location of all water bodies, streams, watercourses, welland areas, wooded areas rights-of-way, streets, roads, highways, railroads, buildings, structures		Topic Control of the
8	The location of all existing and proposed easements	DY /	V. p. 4 1247 destructions, and
9	The location of all existing and proposed structures, their use setback dimensions, floor plans, front, side and rear elevations, buildable area.		L'3
oı	and service roads, emergency service access and traffic mitigation measures	19 2	The second secon
1	Sidewalks, paths and other means of pedestrian circulation	0	E
	On-site parking and loading spaces and travel aisles with dimensions	18//	and the last of the special particle of the special particles.
	The location, height and type of extenor lighting fixtures	8	
100	Proposed signage	W.	T.
	For non-residential uses, an estimate of the number of employees who will be using the site description of the operation, types of products sold, types of machinery and equipment used		Ö



CERTIFICATION FORM



40	REquirement Date	note of the policy of	Walled by our Taken
10	The location of clubbouses, swimming pecis, open spaces, parks or other recreational areas, and identification of who is responsible for maintenance	D	Q'
17	The location and design of buffer areas, screening or other landscaping, including grading and water management. A comprehensive landscaping plan in accordance with the Tree Conservation Law		J
18	The location of public and private utilities, maintenance responsibilities, trash and garbage areas	Ø/	D
19	A list, certified by the Town Assessor, of all property owners within 500 feet of the site boundary	B/	The second second
20	Any other information required by the Planning Board which is reasonably necessary to ascertain compliance with this chapter		

Applicants Certification (to be completed by the licensed professional preparing the site plan:

My seal and signature, meets all of the requirements of §156-618 of the Town of Carmel Zoning Ordinance:

ure -/Applicant

1 Loale

Date

07/30/5018

Professionals Seal

127



SITE PLAN COMPLETENSS CERTIFICATION FORM



Town Certification (to be completed	by the Town)
I here requirements of §156-61B of the To-	by confirm that the site plan meets all of the
reduitements of \$150-0 (B of the 10)	wit of Carmel Zoning Ordinance:
Signature - Planning Board Secreta	8/16/18
Signature - Planning Board Secreta	ary Date
Bull IMB	8/16/18
Signature - Town Engineer	Date

Full Environmental Assessment Form Part 1 - Project and Setting

Instructions for Completing Part 1

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

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

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

A. Project and Sponsor Information.

Name of Action or Project:		
Dixon Lake / NY058		
Project Location (describe, and attach a general location map):		
36 Dixon Road, Carmel, Putnam County, NY 10512		
Brief Description of Proposed Action (include purpose or need):		· · · · · · · · · · · · · · · · · · ·
Homeland Towers, LLC proposes to construct a new telecommunications facility on the will consist of a 150-foot (157-feet total height) monopine tower and associated supposed the will be gained via a proposed 12 approximately 500 feet to an existing paved access drive off Dixon Road. Utilities are to the west for another approximately 200 feet to an existing utility pole located along	ort equipment placed within a 52- foot wide gravel road extending proposed to follow the access ro	foot by 65-foot fenced compound west and then south for
Name of Applicant/Sponsor:	Telephone: (914) 490	.0124
Homeland Towers, LLC	E-Mail: kw@homelan	
Address: 9 Harmony Street, 2nd Floor		
City/PO: Danbury	State: CT	Zip Code: 06810
Project Contact (if not same as sponsor; give name and title/role):	Telephone:	
Klaus Wimmer	E-Mail:	<u> </u>
Address:		<u> </u>
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):	Telephone:	
John and Angela Spaccarelli	E-Mail:	· · · · · · · · · · · · · · · · · · ·
Address:		
36 Dixon Road		
City/PO: Carmel	State: NY	Zip Code: 10512

B. Government Approvals

B. Government Approvals, Funding, or Sporassistance.)	sorship. ("Funding" includes grants, loans, t	ax relief, and any oth	er forms of financial
Government Entity	If Yes: Identify Agency and Approval(s) Required	1	tion Date projected)
a. City Council, Town Board, □Yes□No or Village Board of Trustees			<u> </u>
b. City, Town or Village Yes No Planning Board or Commission	Site Plan and Special Permit Approval		·····
c. City Council, Town or ☐Yes☐No Village Zoning Board of Appeals			
d. Other local agencies Yes No			· · · · · · · · · · · · · · · · · · ·
e. County agencies ☐Yes☐No			
f. Regional agencies ☐Yes☐No			
g. State agencies □Yes□No			
h. Federal agencies □Yes□No			
i. Coastal Resources.i. Is the project site within a Coastal Area, or	the waterfront area of a Designated Inland W	aterway?	□Yes Z No
ii. Is the project site located in a community viii. Is the project site within a Coastal Erosion	with an approved Local Waterfront Revitalizat Hazard Area?	ion Program?	☐ Yes ZNo ☐ Yes ZNo
C. Planning and Zoning			
C.1. Planning and zoning actions.			
Will administrative or legislative adoption, or arr only approval(s) which must be granted to enable • If Yes, complete sections C, F and G. • If No, proceed to question C.2 and comp	nendment of a plan, local law, ordinance, rule of the proposed action to proceed?		□Yes ☑ No
C.2. Adopted land use plans.			· · ·
a. Do any municipally- adopted (city, town, villa where the proposed action would be located?	ge or county) comprehensive land use plan(s)	include the site	Z Yes□No
If Yes, does the comprehensive plan include spec would be located?	ific recommendations for the site where the pr	oposed action	□Yes☑No
 b. Is the site of the proposed action within any log Brownfield Opportunity Area (BOA); designation or other?) If Yes, identify the plan(s): NYC Watershed Boundary 	ted State or Federal heritage area; watershed m	ample: Greenway lanagement plan;	Z Yes□No
c. Is the proposed action located wholly or partia or an adopted municipal farmland protection of the plan(s):	lly within an area listed in an adopted municip plan?	al open space plan,	□Yes ☑ No

C.3. Zoning	
a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. If Yes, what is the zoning classification(s) including any applicable overlay district? Residential	Z Yes□No
	<u>-</u> .
b. Is the use permitted or allowed by a special or conditional use permit?	✓ Yes No
c. Is a zoning change requested as part of the proposed action? If Yes, i. What is the proposed new zoning for the site?	□ Yes Z No
C.4. Existing community services.	
a. In what school district is the project site located? Mahopac School District	
o. What police or other public protection forces serve the project site? Sarmel Police Department	
c. Which fire protection and emergency medical services serve the project site? sarmel Fire Department	
I. What parks serve the project site? mmy McDonough Memorial Park, approximately 450 feet south of the Project Site.	
D. Project Details	
D. I Toject Details	
D.1. Proposed and Potential Development	
D.1. Proposed and Potential Development a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if m components)? Commercial / Public utility	ixed, include all
D.1. Proposed and Potential Development a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if m	ixed, include all
D.1. Proposed and Potential Development What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if m components)? Commercial / Public utility a. Total acreage of the site of the proposed action? b. Total acreage to be physically disturbed? c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? -0.3 acres	□ Yes Z No
D.1. Proposed and Potential Development What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if m components)? Commercial / Public utility a. a. Total acreage of the site of the proposed action? b. Total acreage to be physically disturbed? c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? c. Is the proposed action an expansion of an existing project or use? i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, m square feet)? What is the proposed action a subdivision, or does it include a subdivision?	□ Yes Z No
D.1. Proposed and Potential Development a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if m components)? Commercial / Public utility b. a. Total acreage of the site of the proposed action? c. Total acreage to be physically disturbed? c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? c. Is the proposed action an expansion of an existing project or use? i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, m	☐ Yes☑ No iles, housing units,
D.1. Proposed and Potential Development i. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if m components)? Commercial / Public utility i. a. Total acreage of the site of the proposed action? b. Total acreage to be physically disturbed? c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? c. Is the proposed action an expansion of an existing project or use? i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, m square feet)? i. Is the proposed action a subdivision, or does it include a subdivision? f Yes, i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types) ii. Is a cluster/conservation layout proposed? ii. Number of lots proposed?	☐ Yes☑ No iles, housing units,
D.1. Proposed and Potential Development What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if m components)? Commercial / Public utility a. a. Total acreage of the site of the proposed action? b. Total acreage to be physically disturbed? c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? c. Is the proposed action an expansion of an existing project or use? i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, m square feet)? White is the proposed action a subdivision, or does it include a subdivision? Yes, i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types) ii. Is a cluster/conservation layout proposed? iii. Number of lots proposed? iv. Minimum and maximum proposed lot sizes? Minimum Maximum	☐ Yes☑ No iles, housing units, ☐ Yes ☑ No ☐ Yes ☑ No
D.1. Proposed and Potential Development What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if m components)? Commercial / Public utility a. a. Total acreage of the site of the proposed action? b. Total acreage to be physically disturbed? c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? c. Is the proposed action an expansion of an existing project or use? i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, m square feet)? White is the proposed action a subdivision, or does it include a subdivision? Yes, i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types) ii. Is a cluster/conservation layout proposed? iii. Number of lots proposed?	☐ Yes☑ No iles, housing units,

f. Does the project	ct include new resi	dential uses?			☐Yes Z No
If Yes, show nun	bers of units prope				
	One Family	Two Family	Three Family	Multiple Family (four or more)	
Initial Phase					
At completion					
of all phases					
g. Does the propo	osed action include	new non-residentia	al construction (incl	uding expansions)?	Z Yes□No
If Yes,	_			,	— —
i. Total number	of structures	1			
ii. Dimensions (iii. Approximate	in feet) of largest p extent of building	roposed structure: space to be heated	157_height; or cooled:	N/A width; and N/A length N/A square feet	
h. Does the propo	sed action include	construction or oth	er activities that wil	I result in the impoundment of any	☐Yes Z No
liquids, such as	s creation of a wate	r supply, reservoir,	pond, lake, waste la	agoon or other storage?	_
If Yes,					
i. Purpose of the		cipal source of the	Г] C1	
			_	Ground water Surface water stream	msOther specify:
iii. If other than w	ater, identify the ty	ype of impounded/o	contained liquids and	d their source.	
iv. Approximate	size of the propose	d impoundment.	Volume:	million gallons; surface area:height;length	acres
v. Dimensions of	f the proposed dam	or impounding str	ucture:	height;length	
vi. Construction i	nethod/materials f	or the proposed dan	m or impounding str	ructure (e.g., earth fill, rock, wood, cond	erete):
			 		
D.2. Project Ope	erations				·
(Not including a materials will real of Yes:	general site prepara emain onsite)	tion, grading or ins	ning, or dredging, di stallation of utilities	uring construction, operations, or both? or foundations where all excavated	∐Yes ∏ No
i. What is the put	rpose of the excava	tion or dredging?		be removed from the site?	
Volume (specify tops or cut	ic varde):	, etc.) is proposed to	b be removed from the site?	
A 1	. 1 . 0. 0				
iii. Describe natur	e and characteristic	s of materials to be	e excavated or dredg	ed, and plans to use, manage or dispose	of them
iv. Will there be		or processing of exc	cavated materials?		Yes No
v. What is the tot	al area to be dredge	ed or excavated?		0.0500	
vi. What is the ma	ximum area to be	worked at any one i	time?	acres	
vii. What would be	the maximum der	oth of excavation or	dredging?	feet	i
viii. Will the excav	ation require blast	ing?			□Yes□No
ix. Summarize site	reclamation goals	and plan:	<u> </u>		
		<u> </u>	···		
 -					
h Would the prope	sed action course	r regult in alteration	- of increase on de-		77 775
into any existin	g wetland, waterbo	dv. shoreline besc	n or, increase or deci h or adjacent area?	rease in size of, or encroachment	☐Yes Z No
If Yes:	,	, o beac	or adjustent area:		
i. Identify the we	tland or waterbody	which would be a	ffected (by name, wa	ater index number, wetland map numbe	er or geographic
description): _					0 0 T

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placer alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in some	nent of structures, or quare feet or acres:
iii. Will proposed action cause or result in disturbance to bottom sediments? If Yes, describe:	□Yes□No
If Yes, describe:	☐ Yes☐No
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 specific and dust(a).	
if chemical/herbicide treatment will be used, specify product(s): Describe any proposed reclamation/mitigation following disturbance:	<u> </u>
. Become any proposed recamation integration following disturbance.	
Will the proposed action use, or create a new demand for water?	□Yes Z No
Yes:	
. Total anticipated water usage/demand per day: gallons/day	
Will the proposed action obtain water from an existing public water supply?	□Yes □No
Yes:	
Name of district or service area:	
Does the existing public water supply have capacity to serve the proposal? In the proposal is a serve the proposal is a	☐ 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
Will line extension within an existing district be necessary to supply the project? Yes:	□Yes □No
Describe extensions or capacity expansions proposed to serve this project:	
Source(s) of supply for the district:	
Source(s) of supply for the district: Is a new water supply district or service area proposed to be formed to serve the project site? Yes:	☐ Yes☐No
Applicant/sponsor for new district: Determine the fitted service of the	
Date application submitted or anticipated:	
• Proposed source(s) of supply for new district:	
. If a public water supply will not be used, describe plans to provide water supply for the project:	
If water supply will be from wells (public or private), maximum pumping capacity: gallons/min	nute.
Will the proposed action generate liquid wastes?	☐ Yes Z No
/es;	
Total anticipated liquid waste generation per day: gallons/day	
Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all approximate volumes or proportions of each):	components and
Will the proposed action use any existing public wastewater treatment facilities? If Yes:	☐Yes ☐No
Name of wastewater treatment plant to be used:	
Name of district:	
 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:	
. Will a second of the second	
iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? If Yes:	□Yes□No
Applicant/sponsor for new district: Date application submitted or action to 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 spe	-:6-:
receiving water (name and classification if surface discharge, or describe subsurface disposal plans):	enying proposed
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	☐Yes Z No
sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point	1032110
source (i.e. sheet flow) during construction or post construction?	
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	
groundwater, on-site surface water or off-site surface waters)?	properties,
Brownian, on site barrace water of our site surface waters);	
If to surface waters, identify receiving water bodies or wetlands:	
Will stormwater runoff flow to adjacent properties?	☐Yes☐No
v. 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	Z Yes □No
combustion, waste incineration, or other processes or operations?	
If Yes, identify:	
i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)	
ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)	
'A stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)	
iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)	
nergency propane-fired emergency generator on concrete slab	
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 Z No
f Yes:	
. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet	□Yes□No
ambient air quality standards for all or some parts of the year)	
i. In addition to emissions as calculated in the application, the project will generate:	
•Tons/year (short tons) of Carbon Dioxide (CO ₂)	İ
•Tons/year (short tons) of Nitrous Oxide (N ₂ O)	
•Tons/year (short tons) of Perfluorocarbons (PFCs)	
•Tons/year (short tons) of Sulfur Hexafluoride (SF ₆)	ĺ
 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)? If Yes:	∐Yes Z No
 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 electricity, flaring): 	generate heat or
 i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): 	∐Yes []No
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? If Yes: i. When is the peak traffic expected (Check all that apply):	☐Yes ☐No ☐Yes ☐No access, describe:
 vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? 	☐Yes☐No ☐Yes☐No ☐Yes☐No
k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? If Yes: i. Estimate annual electricity demand during operation of the proposed action: dinimal increase for telecommunications equipment for approximately 800 amps to a maximum of 1200 amps ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/other): lia local grid iii. Will the proposed action require a new, or an upgrade to, an existing substation?	ØYes No local utility, or □Yes ØNo
1. Hours of operation. Answer all items which apply. i. During Construction: • Monday - Friday: Normal business hours • Saturday: Saturday: Sunday: Sunday: Holidays: Holidays: Holidays:	tes 24/7

If y	Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ves: Provide details including sources, time of day and duration:	☐ Yes Ø No
ii.	Will proposed action remove existing natural barriers that could act as a noise barrier or screen? Describe:	□Yes□No
If y i. I	Will the proposed action have outdoor lighting? yes: Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures: d lighting sources inside compound.	☑ Yes □No
ii. I	Will proposed action remove existing natural barriers that could act as a light barrier or screen? Describe: Minimal light as trees surround the Subject Property around tower.	☐ Yes Ø No
	Does the proposed action have the potential to produce odors for more than one hour per day? If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:	☐ Yes Z No
If Y i. F ii. V	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? Product(s) to be stored Volume(s) per unit time (e.g., month, year) Generally describe proposed storage facilities:	☐ Yes Ø No
If Y	Vill the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, assecticides) during construction or operation? es: Describe proposed treatment(s):	☐ Yes ☑No
r. W of If Ye		Yes No Yes No
	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) Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:	
,	Construction: Operation:	
iii. P	roposed disposal methods/facilities for solid waste generated on-site: Construction:	
•	Operation:	

s. Does the proposed action include construction or mo If Yes:	dification of a solid waste m	anagement facility?	Yes 🗸 No
i. Type of management or handling of waste propose	ed for the site (e.g., recycling	or transfer station, composting	og landfill or
other disposal activities):			g, mildilli, or
ii. Anticipated rate of disposal/processing:			
Tons/month, if transfer or other nor		ent, or	
•Tons/hour, if combustion or therma iii. If landfill, anticipated site life:			
	years		
t. Will proposed action at the site involve the commerci waste?	ial generation, treatment, sto	rage, or disposal of hazardous	□Yes ☑ No
If Yes:			
i. Name(s) of all hazardous wastes or constituents to l	be generated, handled or mar	aged at facility:	
ii. Generally describe processes or activities involving	hazardaya wastas an assatit		
u. Generally describe processes of activities involving	nazardous wastes or constitu	ienis:	
iii. Specify amount to be handled or generated	tons/month		
iv. Describe any proposals for on-site minimization, re	cycling or reuse of hazardou	s constituents:	
v. Will any hazardous wastes be disposed at an existing	ig offsite hazardous waste fa	cility?	□Yes□No
If Yes: provide name and location of facility:			
IENIa dassalla assalla di C. I. I.	111 (11 11		
If No: describe proposed management of any hazardous	wastes which will not be se	nt to a hazardous waste facility	y:
E. Site and Setting of Proposed Action			
E.1. Land uses on and surrounding the project site	. <u> </u>		
a. Existing land uses.		-	
i. Check all uses that occur on, adjoining and near the	e project site		
☐ Urban ☐ Industrial ☐ Commercial ☑ Resi		al (non-farm)	
✓ Forest	er (specify): recreational		
ii. If mix of uses, generally describe:			
The surrounding areas consist of wooded land improved with sign	igle-family residences and a part	ζ	
		· · · · · · · · · · · · · · · · · · ·	
b. Land uses and covertypes on the project site.			
Land use or	Current	Acreage After	Change
Covertype	Acreage	Project Completion	(Acres +/-)
 Roads, buildings, and other paved or impervious surfaces 	~0.3	~0.3	0
• Forested	-0.3	+	
Meadows, grasslands or brushlands (non-	70.3	0	~ - 0.3
agricultural, including abandoned agricultural)			
Agricultural			·
(includes active orchards, field, greenhouse etc.)			
Surface water features			
(lakes, ponds, streams, rivers, etc.)			
Wetlands (freshwater or tidal)			
Non-vegetated (bare rock, earth or fill)			
• Other		 	
Describe: Telecommunications Facility and access road.	~0.3	~0.6	~+ 0.3

c. Is the project site presently used by members of the community for public recreation? i. If Yes: explain:	□Yes☑No
 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? If Yes, i. Identify Facilities: 	∐Yes , ∕No
e. Does the project site contain an existing dam? If Yes: i. Dimensions of the dam and impoundment: Dam height: Dam length: Surface area: Volume impounded: gallons OR acre-feet ii. Dam's existing hazard classification:	□Yes☑No
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,	□Yes ☑ No
or does the project site adjoin property which is now, or was at one time, used as a solid waste management fac If Yes: i. Has the facility been formally closed? • If yes, cite sources/documentation: ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:	ility? □Yes□ No
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? If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred.	☐Yes Z No
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? 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	☐Yes Z No
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? If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred by the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? 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: \[\begin{array}{c} \text{Provide DEC ID number(s):} \end{array} \]	Yes No
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? If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred in the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? 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 - Spills Incidents database Provide DEC ID number(s): Neither database Provide DEC ID number(s):	□Yes☑No red: □Yes☑No □Yes☑No
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? If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred in the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? 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 - Spills Incidents database Yes - Environmental Site Remediation database Provide DEC ID number(s): Provide DEC ID number(s):	Yes No
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? If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred in the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? 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 - Spills Incidents database Provide DEC ID number(s): Neither database Provide DEC ID number(s):	□Yes☑No ed: □Yes☑No □Yes☑No

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:	
WA Water III	
E.2. Natural Resources On or Near Project Site a. What is the average depth to bedrock on the project site?	
b. Are there bedrock outcroppings on the project site?	☐Yes Z No
If Yes, what proportion of the site is comprised of bedrock outcroppings? 100 %	
c. Predominant soil type(s) present on project site: Paxton fine sandy loam 35 %	.
Paxton fine sandy loam 22 %	
Paxton fine sandy loam 43 %	
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: 2 0-10%: 35 % of site	
$\boxed{20}$ % of site	
✓ 15% or greater: 45% of site	
g. Are there any unique geologic features on the project site?	☐ Yes Z No
If Yes, describe:	
h. Surface water features.	
i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers,	□Yes Z No
ponds or lakes)?	
ii. Do any wetlands or other waterbodies adjoin the project site?	∠ Yes□No
If Yes to either i or ii, continue. If No, skip to E.2.i.	
iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency?	∠ Yes □No
iv. For each identified regulated wetland and waterbody on the project site, provide the following information:	
Streams: Name Classification	
I also an Danda. Name	
 Wetlands: Name Freshwater Forested/Shrub Wetland (located 100' E) Approximate Size 7.85 	
• 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	
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:	
Note: Project located in NYSDEC Wetland Checkzone. Wetland surveyed 105 feet east	
i. Is the project site in a designated Floodway?	□Yes Z No
j. Is the project site in the 100 year Floodplain?	☐Yes Z No
k. Is the project site in the 500 year Floodplain?	☐Yes Z No
l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? If Yes: i. Name of aquifer:	□Yes Z No

m. Identify the predominant wildlife species	that occurs or use the pro	iggt eiter	
The Project Site is consists of	the Project Site is located in		
undisturbed natural forested habitat.	of the Indiana Bat and the N		
Based upon a review of available data	Long-eared Bat. (see "o" b		
n. Does the project site contain a designated			☐Yes Z No
If Yes:	significant natural commu	mty:	T res Vino
i. Describe the habitat/community (compos	ition function and basis f	or designation).	
s 2 como de manta community (compos	ition, function, and basis i	or designation).	
ii. Source(s) of description or evaluation:			
iii. Extent of community/habitat:			
Currently:		acres	
 Following completion of project as project	proposed:	acres	
• Gain or loss (indicate + or -):		acres	
o. Does project site contain any species of pla	int or animal that is listed l	by the federal government or NYS as	✓ Yes No
endangered or threatened, or does it contain	any areas identified as ha	bitat for an endangered or threatened spec	cies?
The Project Site is in the vicinity of the Indiana Bot /F	\ and the Northern Lane core	d Dat /T\ It about discussion and a second second	
The Project Site is in the vicinity of the Indiana Bat (E as the area is wooded it is recommended that tree cl	r) and the Northern Long-eare earing be restricted from April	d Bat (1). It should be noted, no critical habitat 1 to Sent 30 to avoid notential receipe bate. The	was identified, however,
identified in the vicinity of the Project Site, per NYS re	esource mapper. Suitable hab	itat not identified in vicinity of Project Site.	ic bog futtle (1) was
p. Does the project site contain any species o			The Color
special concern?	i praint of allilliar that is its	ied by N 1 S as rare, or as a species of	□Yes☑No
special concern:			
q. Is the project site or adjoining area currentl	y used for hunting, trappin	g, fishing or shell fishing?	☐Yes Z No
If yes, give a brief description of how the prop	osed action may affect the	at use:	
E.3. Designated Public Resources On or No.	•		
a. Is the project site, or any portion of it, locat	ed in a designated agricult	ural district certified pursuant to	□Yes☑No
Agriculture and Markets Law, Article 25-A		-	
If Yes, provide county plus district name/num	iber:		
1. A			
b. Are agricultural lands consisting of highly p	productive soils present?		∐Yes ∠ No
i. If Yes: acreage(s) on project site?	<u> </u>		
ii. Source(s) of soil rating(s):			
c. Does the project site contain all or part of,	or is it substantially contig	uous to, a registered National	□Yes Z No
Natural Landmark?	, ,	, ,	
If Yes:			
i. Nature of the natural landmark:	Biological Community	☐ Geological Feature	
ii. Provide brief description of landmark, inc	luding values behind desig	gnation and approximate size/extent:	
1 7 11	***		
d. Is the project site located in or does it adjoin	a state listed Critical Env	ironmental Area?	☐Yes Z No
If Yes:			
i. CEA пате:	· · · · · · · · · · · · · · · · · · ·		
ii. Basis for designation:			
iii. Designating agency and date:			

e. Does the project site contain, or is it substantially contiguous to, a be which is listed on, or has been nominated by the NYS Board of Hist State or National Register of Historic Places? If Yes: i. Nature of historic/archaeological resource: Archaeological Site ii. Name: iii. Brief description of attributes on which listing is based:	toric Preservation for inclusion on, the	☐ Yes No
f. Is the project site, or any portion of it, located in or adjacent to an a archaeological sites on the NY State Historic Preservation Office (S	rea designated as sensitive for HPO) archaeological site inventory?	☐Yes Z No
g. Have additional archaeological or historic site(s) or resources been If Yes: i. Describe possible resource(s): ii. Basis for identification:	1 2	□Yes Z No
h. Is the project site within fives miles of any officially designated and scenic or aesthetic resource? If Yes: i. Identify resource: ii. Nature of, or basis for, designation (e.g., established highway over etc.):		☐Yes ☑No
etc.):	niles.	
 i. Is the project site located within a designated river corridor under the Program 6 NYCRR 666? If Yes: i. Identify the name of the river and its designation: 	ne Wild, Scenic and Recreational Rivers	∐Yes √ No
ii. Is the activity consistent with development restrictions contained in	n 6NYCRR Part 666?	∐Yes ∐No
F. Additional Information Attach any additional information which may be needed to clarify yo If you have identified any adverse impacts which could be associated measures which you propose to avoid or minimize them.	• •	npacts plus any
G. Verification I certify that the information provided is true to the best of my knowledge.	edge.	
Applicant/Sponsor Name Homeland Towers LLC	Date_July 31 2018	
lute		
Signature Tama Troutman	Title Consultant for Applicant	

617.20 Appendix B State Environmental Quality Review VISUAL EAF ADDENDUM

This form may be used to provide additional information relating to Question 11 of Part 2 of the Full EAF. (To be completed by Lead Agency) Distance Between Visibility Project and Resource (in Miles) Would the project be visible from: 4-1/2 42-3 5+ A parcel of land which is dedicated to and available **|** to the public for the use, enjoyment and appreciation of natural or man-made scenic qualities? Lake Dixon 7 An overlook or parcel of land dedicated to public observation, enjoyment and appreciation of natural or man-made scenic qualities? Lake Dixon A site or structure listed on the National or State $\overline{\mathsf{V}}$ Registers of Historic Places? Putnam County Courthouse State Parks? Clarence Fahnestock State Park The State Forest Preserve? California Hill State Forest National Wildlife Refuges and State Game Refuges? Shawangunk Grasslands National Wildlife Refuge $\overline{\mathbf{V}}$ National Natural Landmarks and other outstanding natural features? US Route 6 National Park Service lands? 'Vanderbilt Mansion National Historic Site Rivers designated as National or State Wild, Scenic or Recreational? Iona Island Marsh $\overline{ }$ Any transportation corridor of high exposure, such as part of the Interstate System, or Amtrak? US Route 6 A governmentally established or designated interstate or inter-county foot trail, or one formally proposed for establishment or designation? Tactonic State Parkway ablaA site, area, lake, reservoir or highway designated as scenic? Tactonic State Parkway Municipal park, or designated open space? Sycamore Town Park County road? CR-32 - Crane Road \square State road? US Route 6 Local road? Dixon Road "visibility to be confirmed Is the visibility of the project seasonal? (i.e., screened by summer foliage, but visible during other seasons) 2. **√** No Yes 3. Are any of the resources checked in question 1 used by the public during the time of year during which the project will be visible? **√** Yes No

DESCRIPTION OF EXISTING VISUAL ENVIRON	MENT				
4. From each item checked in question 1, cl	heck thos	e which genera	ally describe the surro	unding environm	ent.
					Within
Essentially undeveloped				*1/4 mile	*1 mile
Forested					\checkmark
Agricultural					
Suburban Residential					
Industrial					
Commerical					$\overline{\checkmark}$
Urban					
River, Lake, Pond					$\overline{\mathbf{Z}}$
Cliffs, Overlooks					
Designated Open Space					
Flat					
Hilly					\checkmark
Mountainous					
Other NOTE: add attachments as needed					
5. Are there visually similar projects within:					
*½ mile	Yes	✓ No 2 mil	les 🗌 Yes 📝 No	3 miles	Yes 🔽 No
*Distance from project site is pro	vided for	assistance. Si	ubstitute other distanc	es as appropriate) .
EXPOSURE 6. The annual number of viewers likely to ob			ect is <u>4044</u>	? NYS DOT	DATA
NOTE: When user data is unavailable or unknown,	use best	estimate.			
		FR	EQUENCY		
Activity Travel to and from work Involved in recreational activities Routine travel by residents At a residence At worksite Other	Daily O O O O	Weekly O O O O O	Holidays/ Weekends O O O O O	Seasonally O O O O O O O O	
					Reset



August 1, 2018

Honorable Chairman Harold Gary and Members of the Planning Board Town of Carmel Town Hall 60 McAlpin Avenue Mahopac, New York 10541

Re: Site Plan and Special Permit Application for

36 Dixon Road, Carmel, New York Co-location commitment letter

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

As owner of the above referenced proposed tower and as required under §156-62(F)(1)(s) of the Town of Carmel Code, Homeland Towers, LLC ("Homeland Towers") hereby consents to allow additional antennas (for purposes of collocating) on any new antenna towers, if feasible.

Very truly yours,

Homeland Fowers, LLC

Name: Klaus Wimmer Title: Regional Manager



Town of Carmel 60 McAlpin Avenue Mahopac, NY 10541

July 17, 2018

RE:

Homeland Towers Site Name: Dixon Lake NY058

36 Dixon Road Carmel, NY 10512 Structural Certification

To Whom it May Concern:

Homeland Towers, LLC is proposing the installation of a public utility wireless telecommunications facility, consisting of a 150' monopine ("Tower") with antennas mounted thereon.

The proposed Tower, all attachments, and the Tower's foundation will be designed to meet the ANSI/TIA-222-G "Structural Standard for Antenna Supporting Structures and Antennas" and all county, state and federal structural requirements for loading, including wind and ice loads. The Tower will be designed to be able to support at least four (4) antenna arrays and emergency services equipment.

Should you have any questions, please do not hesitate to call me at (860) 663-1697.

Sincerely,

APT Engineering

Michael S. Trodden, P.E.

Senior Structural Engineer



APT ENGINEERING



OPINION LETTER

July 30, 2018

Christine Vergati Homeland Towers, LLC 9 Harmony Street, 2nd Floor Danbury, CT 06810

RE: NY058 - Dixon Lake, NY Airspace Analysis

Latitude (NAD-83): 41° 25' 09.31" N Longitude (NAD-83): 73° 43' 27.50" W **Ground Elevation:** 801.0 ff AMSL Tower tip height: 157.0 ft AGL Overall height: 958.0 ft AMSL



Dear Ms. Vergati,

Our airspace analysis results for the NY058 - Dixon Lake, NY site are as follows:

- 1. Filing an FAA Form 7460-1 is not required for the proposed tower height of 157.0 ft AGL (958.0 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.
- Wireless Applications Corp. generally recommends filling 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 958.0 ft AMSL overall height will be 45 days. The FAA Form 7460-1 for NY058 - Dixon Lake, NY at 157.0 ft AGL was not filed as of July 31, 2018.
- 5. The proposed site is 10.524 nm NE from the nearest public landing facility N69: Stormville. At an overall height of 958.0 ft AMSL, it does not exceed FAR 77.9 (a) or FAR 77.9 (b) Notice Criteria for N69 airport. This airport has both Circling and Straight-In Instrument approach procedures. It does not exceed any glide slopes of N69 airport. N69: Stormville is an airport type landing facility and it is associated with the city of Stormville, NY.
- 6. The proposed site is not within any of the instrument approach procedures of N69 airport.
- 7. The nearest private landing facility is 96NY: Massaro, which is a heliport type landing facility not eligible for study under FAR Part 77 sub-Part C. It is 2.28 nm SSW from the proposed site.
- 8. The proposed 157.0 ft AGL tower would not adversely affect low altitude en route airways and/or VFR routes in the area.
- 9. No records were found for AM stations within 10 km of the proposed site location. 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 157.0 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. 425-956-5000 (office) 425-649-5675 (fax)





























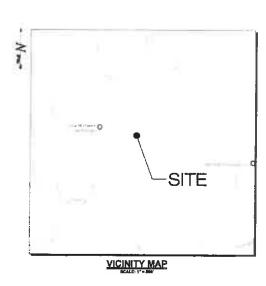






HOMELAND TOWERS, LLC WIRELESS TELECOMMUNICATIONS FACILITY

DIXON LAKE 36 DIXON ROAD CARMEL, NY 10512



DRAWING INDEX

T-1 TITLE SHEET & INDEX

1 OF 1 TOPOGRAPHIC SURVEY

R-1 TO R-2 1,000' RADIUS MAP & PROPERTY OWNERS

8P-1 SITE PLAN

SP-2 PARTIAL SITE PLAN

SP-3 ACCESS DRIVEWAY PROFILE & DETAILS

SP-4 TREE REMOVAL PLAN

CP-1 COMPOUND PLAN

A-1 ELEVATIONS

A-2 ELEVATIONS

EC-1 EROSION CONTROL NOTES

EC-2 EROSION CONTROL DETAILS

C-1 VERIZON EQUIPMENT PLAN & DETAILS

C-2 VERIZON ANTENNA PLAN & DETAILS

C-3 SITE DETAILS

SITE INFORMATION

PROJECT LOCATION: 38 DIXON ROAD CARMEL, NY 10512

PROJECT DESCRIPTION: BAWLAND SITE W/ GROUND EQUIPMENT WITHIN 3,380 SF TELECOMMUNICATIONS COMPOUND W/ NEW 150+ AGE MONOPOLE

PROPERTY DEVELOPER: HOMELAND TOWERS, L.C. 9 HARMOLY STREET 2ND FLOOP CANEURY, CT 08610

DEVELOPER CONTACT: KLAUS WIMMER (2C3) 207-8345

ENGINEER CONTACT: ROBERT C. BURNS (660) 869-1897 x206

LATITUDE 41*25'09 3079'N LONGITUDE: 73'43'27 4996'W ELEVATION: 801,7'± AMSL

SECTION 54 BLCCV: 1 __OT 6 ZONE RESIDENTIAL

OWNER

LOHN & ANGELA SPACCARELLI SALDBYON BOAD CAHMEL, NY 10512

APPLICANTS:

VERIZON

SNYDER & SNYDER, LUP

POWER PROVIDER

TELCO PPOVIDER

VERIZON (914) 890-0200

DIG SAFELY NEW YORK

GOVERNING CODES 2015 IBC W/ 2017 NYS UNIFORM CODE SUPPLEMENT NATIONAL ELECTRIC CODE TA-222-G

verizon 4 CENTEROCK ROAD WEST NYACK NY 10904

APT FNGINEFRING

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COVP. APT ENGINEERING
ADD. 1 SADDLEBRIDGH DRIVE
RULINGWORTH, CT MA19

DEVELOPER HOMELAND TOWERS LLC ACORESS. SHARNONY STREET 2ND FLOOM DANBURY, CT BUSTO

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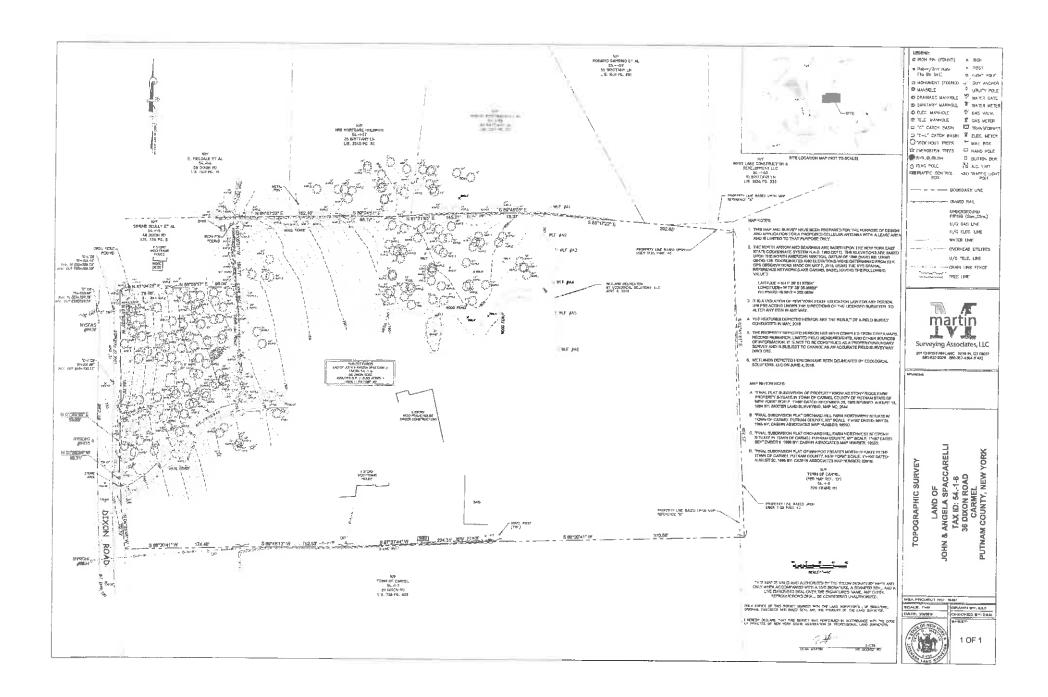


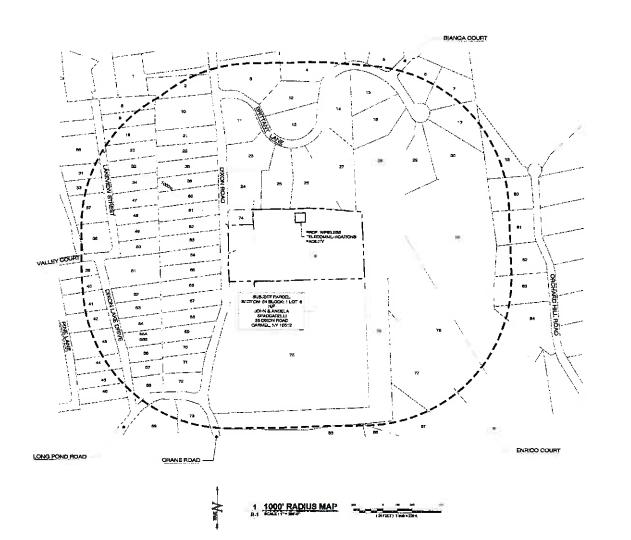
HOWELAND TOWERS, LLC OMELAND TOWERS, LI 9 HAR WONY STREET 2ND FLOOR BANBURY, CT 08810 KLAUS WIMMER (203) 297-6345

I-CIVELAND PROJECT AITTOPNEY

NYSEG. (585) 484-2223

(600) 962-7962







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HOMELAND TOWERS

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00 RADIUS MAP & PROPERTY OWNERS

TOWN O- DARWEL "TUTTOWN OUNTY " 000 PADILS PROPERTY OWNERS (SEE DRAWING 3-1, FOR PROPERTY LOCATIONS)

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2	54.5	1	87	83 Dixon Road, Carmel, NY 10512	Anthony Sush & Catherine Maureen Rush	93 Discon Hoad, Carmet, NY 18512
3	54	1	73	72 Disson Road, Carmel, NY 10512	Michelie Auronson & Paul Zrbko	72 Clase Road, Carnel, NY 10612
4	54	1	77	67 Britishy Lane, Carmel, NY 10512	:Michelle Aaronson & Paul Zahko	72 (Woorl Road, Carme), NY 10512
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7	34	:	67	73 Britishy Lank, Carmel, NY 307552	Lucia Stredon B. Kamil Swicek	71 Britishy Lane, Carmel, EV 1051
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2	54.5	1	56	338 Lakeview Street, Metopic, NY 19541	Selvatore Rigoglia & DA Bra Maria Alda	334 talestow Street, Mahopac, N 10541
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13	54	1	75	27 Brittany Jane, Carmel, NY 10512	Dorothy L. Foster	27 Brittany Leve, Carmet, NY 1051
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22	54.5	1	Ba.	67 Ohton Road, Extrael, NY 10512	Nidia M. Gonzulez & Ervique Gonzalez	181 Fox Ren Lane, Patasson, NY 12563
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OWNER NAME

OWNER ADDRESS



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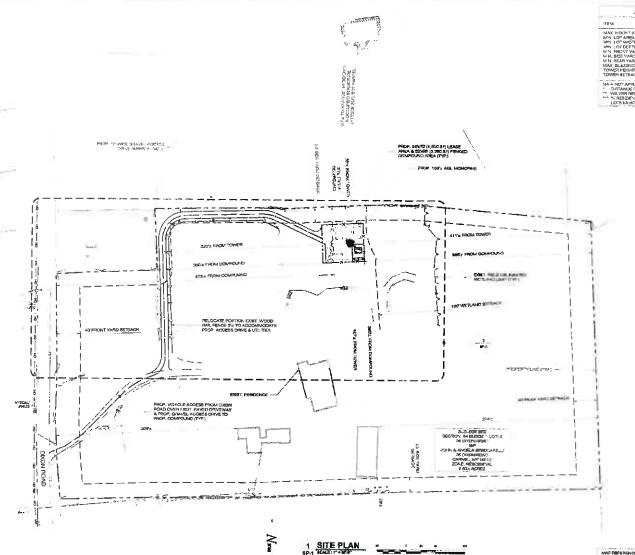
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HOMELAND TOWERS
DIXON LAKE

PITE BOSILVAY RENO
ADDRESS: CAMPER, NY 18913
AFT FILLING REMBER NY 19913
DATE 01/2019 [ORATH ST CAMPER NY CA





ZONING TABLE: RESIDENTIAL ZONING DISTRICT PROMPED EXSTING PROPOSED MAX FEX** (+2)
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TOWER BEDGE (FT)
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TOWER BETMACK (FT)

*** 428,07 3F7 ± 924± 309± 20± 374± P,3% N/A NA - NOT APPLICABLE

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4 CENTEROCK ROAD WEST NYACK, MY 10994



CONSTRUCTION DOCUMENTS

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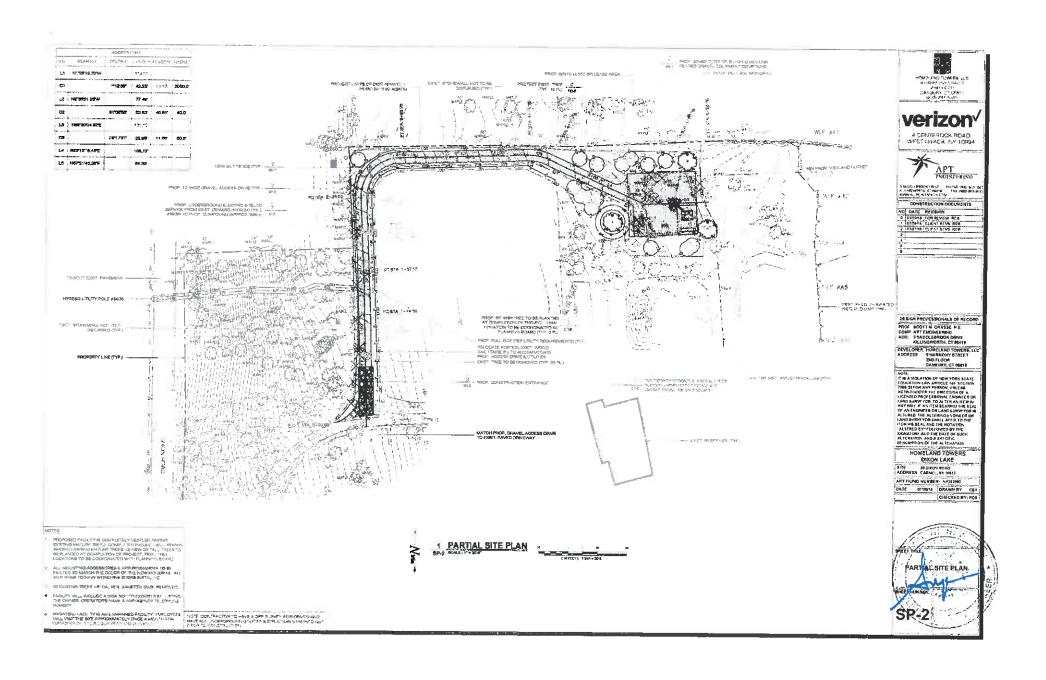
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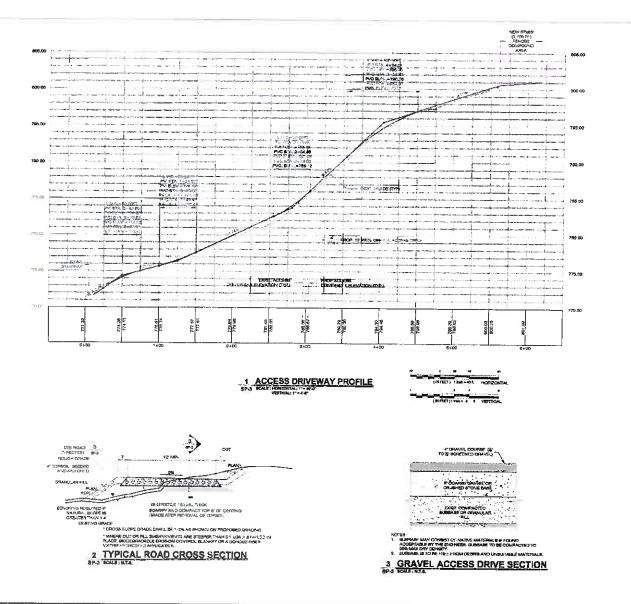
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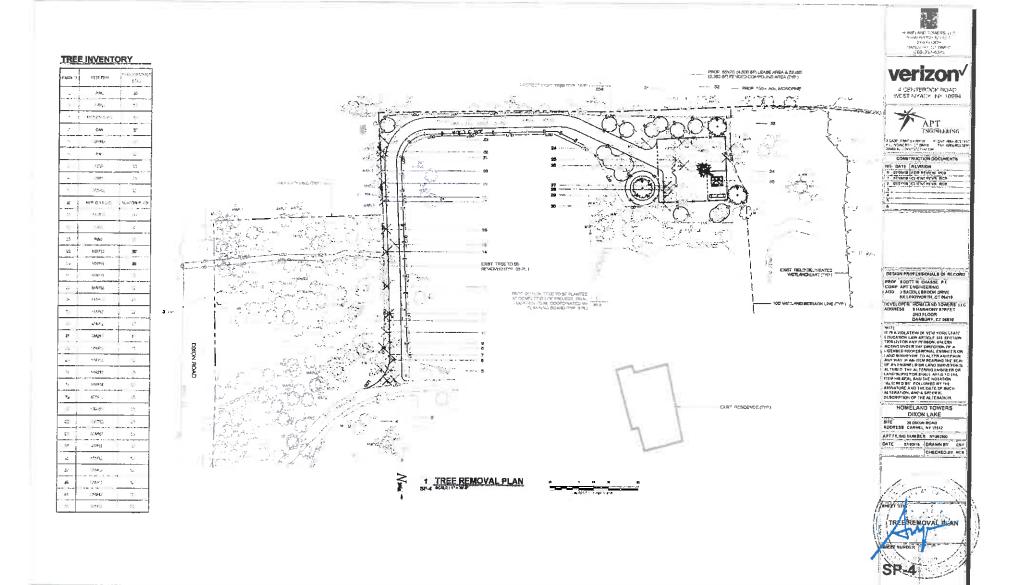
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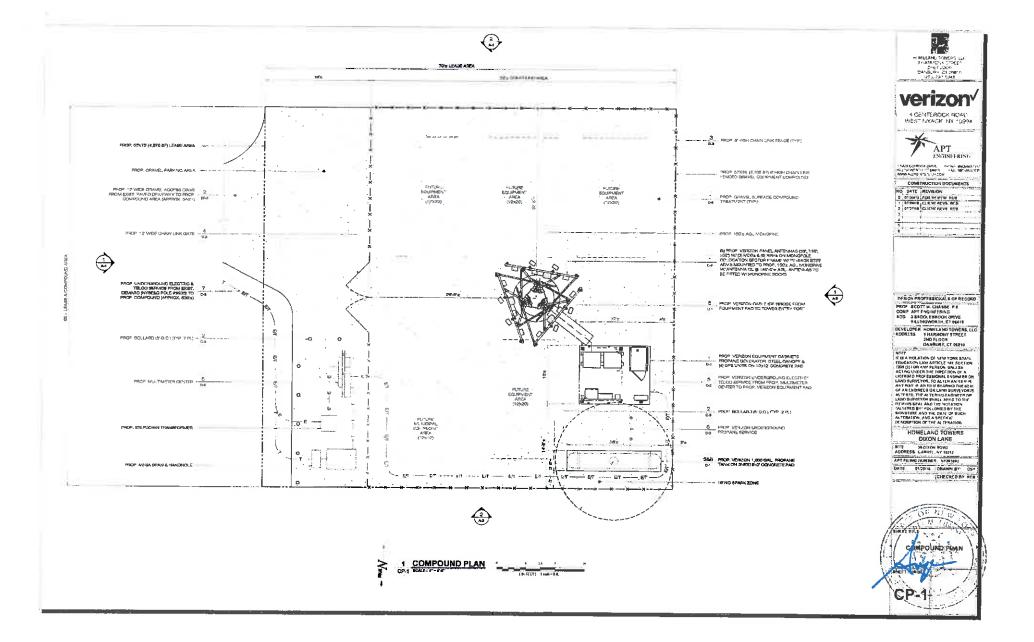
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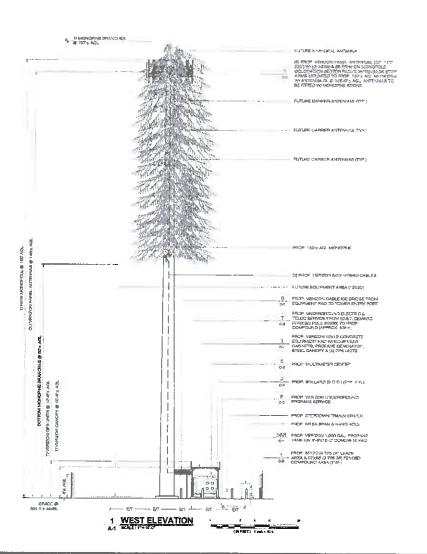
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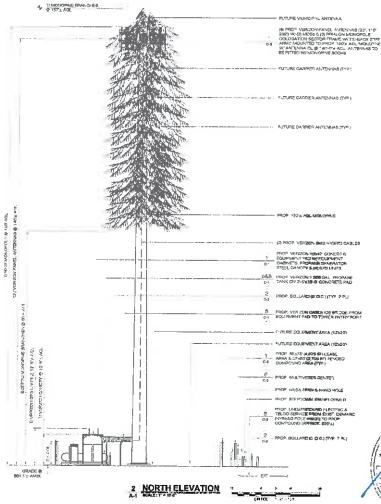
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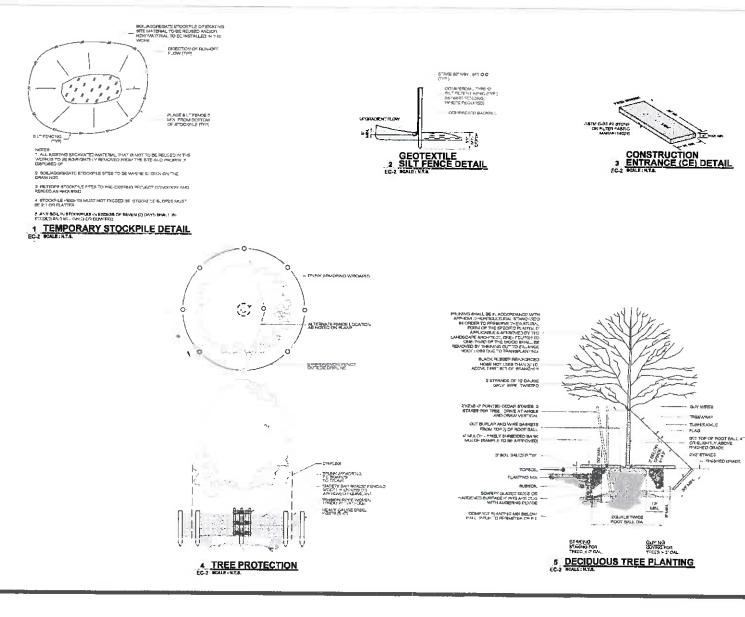
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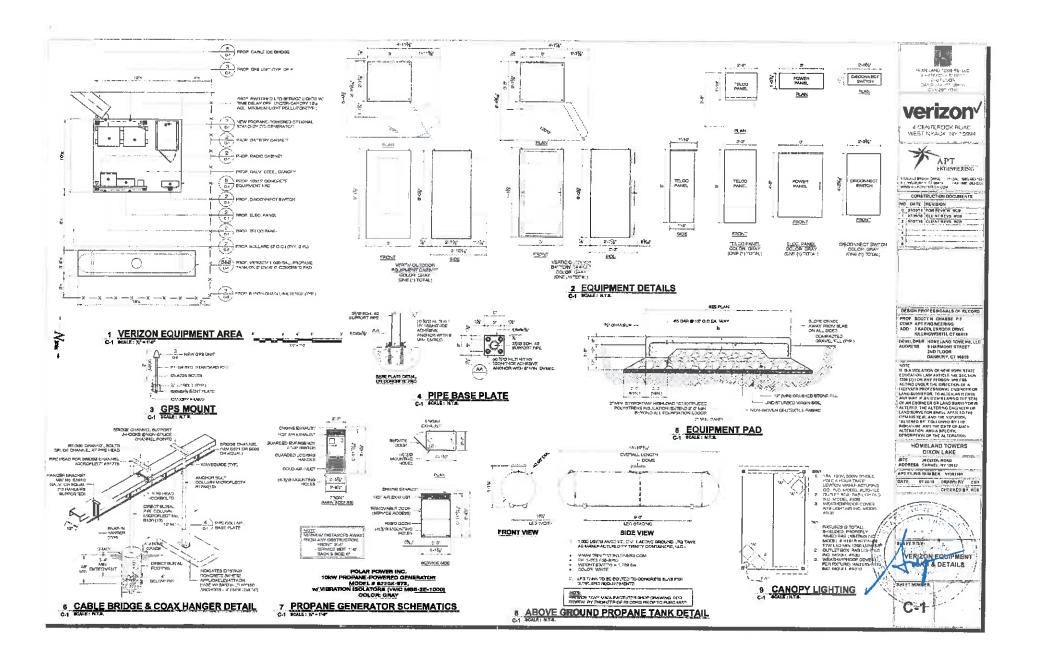
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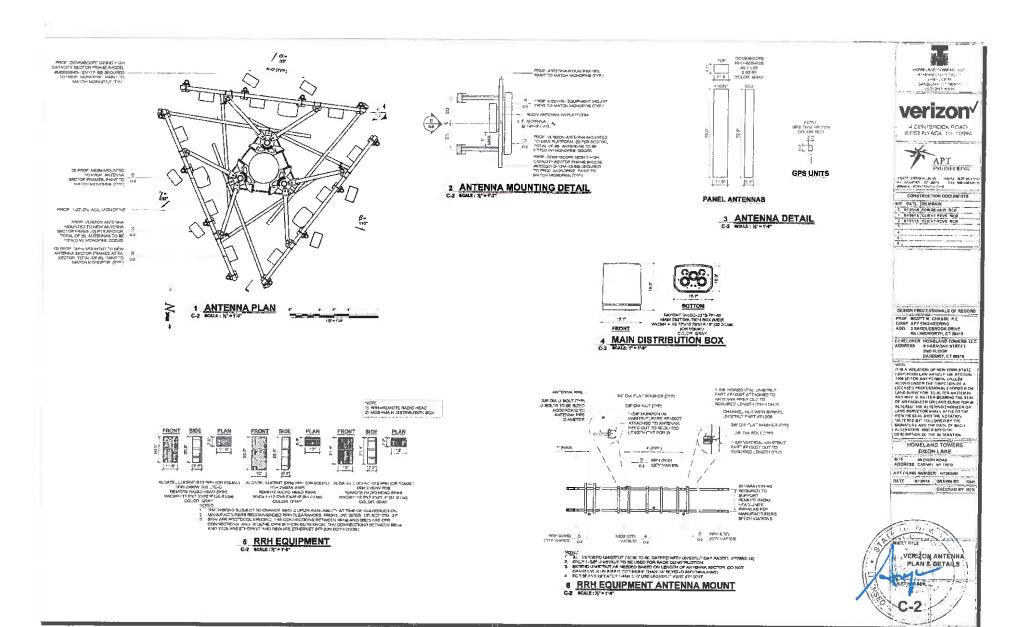
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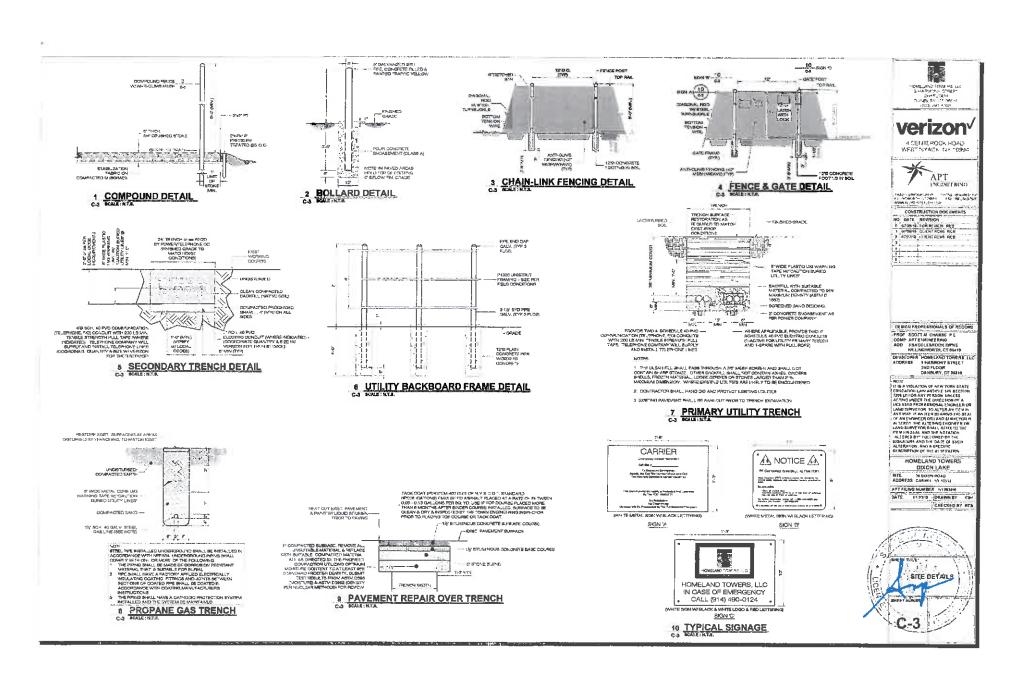
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Pinnacle Telecom Group

Professional and Technical Services

Antenna Site FCC RF Compliance Assessment and Report

Homeland Towers, LLC

Site "NYO58 – Dixon Lake" 36 Dixon Road Carmel, NY

May 17, 2018

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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 150-foot monopole to be located at 38 Dixon Road in Carmel, NY.

Homeland Towers refers to the prospective site as "NY058 – Dixon Lake", and the proposed pole will accommodate the directional panel antennas of up to four wireless carriers. 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 is 1.5631 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 63 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, 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;

- 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 150-foot pole will be able to accommodate as many as four wireless carriers' antennas. This analysis will include an assumption of "worst-case" collocation by four wireless carriers – AT&T, Sprint, T-Mobile and Verizon Wireless.

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 pole is 10 feet.

The transmission parameters for each of the wireless carriers are described below.

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.

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.

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 two 60-watt channels per

antenna sector. In the 1900 MHz band, Verizon uses two 60-watt channels per

antenna sector. In the 2100 MHz band, Verizon uses two 90-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: 146 feet

T-Mobile: 136 feet

Sprint: 126 feet

AT&T: 116 feet

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.

6

By way of illustration, Figure 1, below, 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.

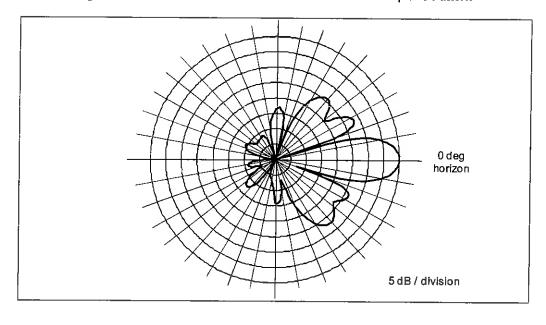


Figure 1. 1900 MHz Directional Panel Antenna - Vertical-plane Pattern

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% =
$$(100 * TxPower * 10 (Gmax-Vdisc)/10 * 4) / (MPE * 4 π * R^2)$$

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 FCCrecommended standing height) off the ground, as illustrated in Figure 2 on the next page.

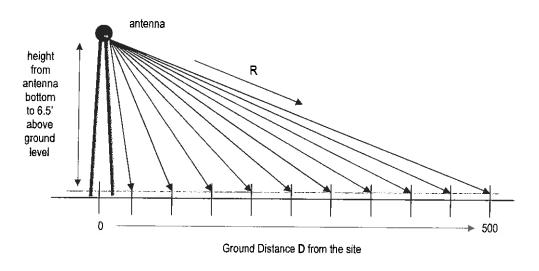


Figure 2. Street-level MPE% Calculation Geometry

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 dualband 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:

- 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.
- 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.
- The potential RF exposure at ground level is assumed to be 100-percent enhanced (increased) via a "perfect" field reflection from the intervening ground.

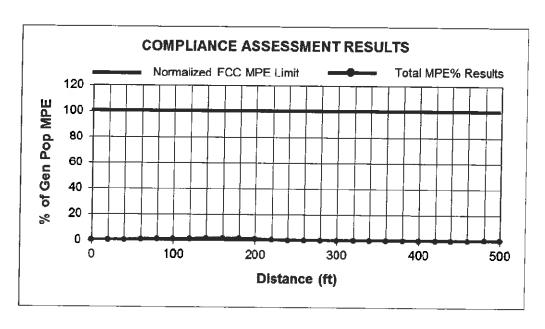
The net result of these assumptions is to intentionally and significantly overstate the calculated RF levels relative to the RF levels that will actually occur – and the purpose of this conservatism is to allow "safe-side" conclusions about compliance with the MPE limit.

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%	T-Mobile MPE%	Sprint MPE%	AT&T MPE%	Total MPE%
0	0.0020	0.0007	0.0044	0.0419	0.0490
20	0.0112	0.0007	0.0076	0.0419	0.0490
40	0.0432	0.0013	0.0078	0.0978	
60	0.1109	0.0140	0.0717		0.2016
80	0.1109	0.0249	0.0234	0.5260	0.6852
100				0.7682	1.0107
120	0.2209	0.0231	0.0323	0.6947	0.9710
	0.1026	0.1761	0.0378	0.6957	1.0122
140	0.1481	0.3487	0.0484	0.8697	1.4149
160	0.4320	0.3655	0.0533	0.7123	1.5631
180	0.6813	0.1555	0.0569	0.5994	1.4931
200	0.5323	0.0237	0.0244	0.5687	1.1491
220	0.1453	0.0255_	0.0286	0.3637	0.5631
240	0.0489	0.0487	0.0334	0.2253	0.3563
260	0.0411	0.0407	0.0157	0.0776	0.1751
280	0.0425	0.0195	0.0411	0.0748	0.1779
300	0.0609	0.0264	0.0638	0.0987	0.2498
320	0.0736	0.0538	0.0739	0.1225	0.3238
340	0.0796	0.0865	0.0664	0.1447	0.3772
360	0.0800	0.1070	0.0497	0.1693	0.4060
380	0.0692	0.0977	0.0366	0.2036	0.4071
400	0.0601	0.0627	0.0337	0.1851	0.3416
420	0.0551	0.0230	0.0379	0.2302	0.3462
440	0.0599	0.0211	0.0408	0.2906	0.4124
460	0.0894	0.0048	0.0375	0.2671	0.3988
480	0.1461	0.0220	0.0327	0.3322	0.5330
500	0.1354	0.0204	0.0302	0.3073	0.4933

As indicated, the overall worst-case calculated result is 1.5631 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 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 is 1.5631 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 64 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.
- 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

Director- RF Engineering

Pinnacle Telecom Group, LLC

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5/17/18

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.

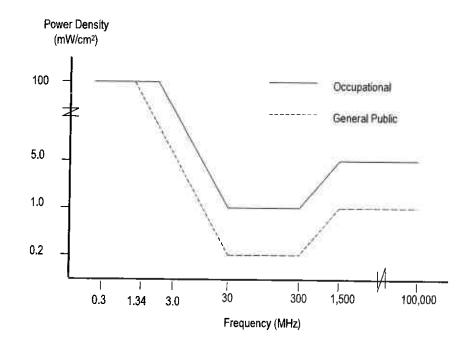
The specified continuous exposure MPE limits are based on known variation of human body susceptibility in different frequency ranges, and a Specific Absorption Rate (SAR) of 4 watts per kilogram, which is universally considered to accurately represent human capacity to dissipate incident RF energy (in 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/cm²). The table on the next page lists the FCC limits for both occupational and general population exposures, using the mW/cm² 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 mathand 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



Independent Radio Frequency Report Regarding a proposed Wireless Communications Facility For New York SMSA Limited Partnership

Site ID: "Dixon Lake"

36 Dixon Road Carmel, NY Putnam County

Prepared for New York SMSA Limited Partnership d/b/a Verizon Wireless

By

PierCon Solutions, LLC July 31, 2018

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1 PURPOSE AND SCOPE

PierCon Solutions LLC, an engineering firm specializing in wireless communications, performed an independent analysis regarding the radiofrequency engineering aspects of the proposal by New York SMSA Limited Partnership, d/b/a Verizon Wireless to construct and operate a wireless telecommunications facility consisting of antennas at 36 Dixon Road, Carmel, NY. The purpose of this site is to relieve a significant gap in service in Verizon Wireless' network caused by a significant coverage gap. The following report describes the results of this analysis and how those results apply to the purpose of the proposed site.

In preparation for conducting this analysis, PierCon Solutions obtained applicable engineering data from Verizon Wireless, reviewed coverage propagation studies, considered the potential for alternative site locations and considered relevant portions of the Town of Carmel's ordinance for a Wireless Telecommunications.

The following report results from a thorough independent study and analysis (from a radiofrequency engineering perspective) of the applicant's proposal in consideration of the Town of Carmel's stated zoning goals and restrictions. It includes responses to specific sections of the Land Development Ordinance of the Town of Carmel, addressing those provisions outlined in the Wireless Telecommunications ordinance.

2 GENERAL OVERVIEW

Verizon Wireless is a commercial wireless communications service provider licensed by the Federal Communications Commission (FCC) to provide personal wireless services throughout the Putnam County area. The wireless telecommunications facility proposed in this application is to provide coverage for voice and data in the LTE service for three different frequency bands.

The FCC assigns licenses in the 700, 850, 1900, and 2100 MHz frequency bands, all of which Verizon Wireless has obtained licenses. The FCC refers to the 700 MHz band as the 700 band, 850 MHz band as the Cellular band, 1900 MHz as the PCS band, and 2100 MHz as the AWS band (the bands will be referred to by their FCC names in this report). While the PCS and AWS bands have many advantages to users and providers, radio coverage at PCS and AWS bands is adversely affected by various local factors more than cellular and 700 bands. PCS and AWS coverage is more sensitive to such factors as topography, terrain, close-in clutter (trees, nearby foliage, buildings), and general area foliage.

The general use of each frequency band varies as well. For Verizon Wireless, the Cellular frequency band handles older 3G technology (speeds of 500Kbits/sec to 1000 Kbits/sec) with a portion reserved for LTE (4G) services. New wireless facilities are no longer equipped with this frequency band as it is currently in transition to become an all LTE band. All three other frequency bands, 700, PCS, and AWS serve Fourth Generation (4G) data (5 MB/sec and greater).

The current 4th generation personal wireless service mobile network technology in use today is LTE. While users still have access to the legacy 3rd generation technology, most network traffic and all newer devices operate on the 4G / LTE services. When engaging in a VoLTE call, the user device will connect to the public switched telephone network (PSTN) through a gateway in order to complete a call to a non-LTE device. For example, a person making an emergency E911 call from a mobile device to a public safety operator on a landline, such emergency call will be routed through the PSTN.

A wireless base station facility communicates with each user's mobile handset through a pair of wireless frequencies. The operation of a commercial wireless communications system is dependent upon an intermeshed network of wireless communication facilities – often called base stations or cell sites. Each wireless communications facility is designed to use low transmit power and provide a limited broadcast range. In order to provide seamless communications, it is essential that the radio coverage from each facility overlaps with adjacent facilities. This design factor allows users to engage in uninterrupted wireless telephone conversations and remain connected as they move across a geographic

region. A gap in coverage exists when the wireless user cannot reliably initiate, receive, or continue telephone conversations or establish a data session on the wireless network.

The area of coverage which an individual wireless telecommunications facility can provide is affected by its cell type, antenna height and the surrounding area. Generally, the optimum antenna height for a macro-cell wireless communication facility is below 200 feet AGL (Above Ground Level). Height requirements are also influenced by mean ground elevation at the site, the wireless carrier's coverage objective, surrounding topography, tree heights, and expected user traffic.

3 DESIGN OBJECTIVES

The design objective for each wireless communications carrier is to provide seamless, ubiquitous, and reliable wireless service to their users, in accordance with the Wireless Communications and Public Safety Act of 1999. Verizon Wireless' design objectives are consistent with these goals. Verizon Wireless achieves this design objective by designing its network to supply signal levels sufficient enough to support reliable in-vehicle and in-building communications. Today's wireless systems, like Verizon Wireless', provide enhanced communications beyond the initial expectations for voice communication along roadways. The demand to provide in-building communications, voice and data communications, and enhanced E-911 access is a paramount requirement in today's wireless systems. Verizon Wireless' design objectives are consistent with this goal.

Designing a wireless telecommunications network involves balancing the need for coverage and capacity. Coverage is the ability of each site to provide reliable signal to the network of expected users. Capacity is the ability of the site to support simultaneous user traffic. This design balance is accomplished through an analysis of demographics, terrain, and long term planning. Initially, system design focuses on providing wide-area coverage, particularly targeting the major highways and roads in an area. As the wireless communications system matures, the carrier's focus changes to increasing their ability to support anticipated volume of user traffic, as well as providing coverage to additional locations in the area, such as business and residential districts.

In order to adequately provide reliable wireless service to Carmel, the design threshold for reliable service must be defined. The design threshold is a reference to signal strength and varies depending on the physical characteristics of the area under analysis. Verizon Wireless defines the reliable coverage boundary of an LTE site using a value of Reference Signal Received Power (RSRP). This value is derived from industry standard definitions of LTE receiver sensitivity and data throughput, along with statistically quantifiable variations in the physical surroundings. This threshold takes into account additional losses associated with the location of the user; such as on-street, in-vehicle or inbuilding. The propagation coverage analyses for Carmel, presented herein, are for services based upon a suburban inbuilding standard with a corresponding RSRP of -95 dBm and an in-vehicle standard with a corresponding RSRP of -105 dBm. The suburban in-building standard encompasses most wood framed structures such as single family homes. Stronger signal levels may be required in other locations and environments where higher density buildings are located.

4 RADIO FREQUENCY ENGINEERING ACTIVITIES PERFORMED

In the course of the analysis described in this report, PierCon engineers performed the following tasks:

- Reviewed the Wireless telecommunications services facilities ordinance of Carmel
- Reviewed USGS Topographical Maps of Mahopac and surrounding areas
- Performed an engineering site analysis and reviewed potential alternate locations
- Link Budget Analysis and Aerial analysis
- Reviewed the location and design of adjacent wireless communications facilities

Reviewed Radio Frequency coverage maps and the RF design and objective within and surrounding the Town of Carmel

5 RADIO FREQUENCY DESIGN

Documentary evidence regarding the need for the proposed telecommunications facility at the proposed location was obtained by PierCon Solutions from Verizon Wireless' radio coverage planning tool called Atoll (created by Forsk). Forsk products are used in 140 countries and are used by Verizon Wireless, AT&T, Sprint, and many other service providers throughout the world. The propagation data provided was used to produce propagation coverage maps indicating the locations where reliable service is being provided by Verizon Wireless' wireless communications facilities.

Within the current network of sites for Verizon Wireless, gaps in coverage currently exist for all four (4) FCC licensed frequency bands for Verizon Wireless (700, Cellular, PCS, and AWS). To define these gaps in coverage PierCon analyzed the propagation data. Propagation data was obtained for the lowest (700) and highest (AWS) frequency bands to demonstrate the best and worst (respectively) performing frequency bands. Based on the analysis, there is a gap in coverage on Dixon Road, Crane Rd/Washington Rd/Long Pond Road (Route 32), and their surrounding roads. Please reference Exhibits A-1 through A-4 in the Appendix for a graphical representation of the existing Verizon Wireless LTE coverage in the 700 and 2100 MHz frequency bands. See below for a breakdown of Exhibits A-1 through A-4.

- Exhibit A-1 Existing Verizon Wireless Suburban 700 MHz In-Building LTE Coverage
- Exhibit A-2 Existing Verizon Wireless 700 MHz In-Vehicle LTE Coverage
- Exhibit A-3 Existing Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage
- Exhibit A-4 Existing Verizon Wireless 2100 MHz In-Vehicle LTE Coverage

Reviewing Exhibit A-1, the gap in coverage for Verizon Wireless includes areas near the proposed site.

The portion of the suburban in-building coverage gap targeted for the Dixon Lake project for the 700 MHz LTE license includes the following areas/roadways:

- Dixon Road from Dioso Road to Long Pond Road (1.25 mi)
- Crane Road from Dixon Road to Washington Road (0.43 mi)
- Long Pong Road from Roderis Drive to Dixon Road (1.45 mi)
- The group of roads to the west of Dixon Road including Alan Drive, Rick Lane, Chestnut Ridge Road, Wood Road, Lakeview Street, Valley Court, Pine Court, Dixon Lake Drive, Lower Lake Drive, Upper Lake Road, Upper Lake Road North, Haven Road, Brightview Court, and West Carolyn Road (Combined approximately 3.32 mi)
- Carolyn Road East (0.47 mi)
- Brittany Lane (0.38 mi)

The in-building coverage gap areas described above contain approximately 949 residents according to a 2010 US census. The portion of the in-vehicle coverage gap targeted for the Dixon Lake project for the 700 MHz LTE license includes the following areas/roadways as demonstrated in Exhibit A-2:

- Dixon Road from Brittany Lane to Long Pond Road (0.39 mi)
- Sections of Long Pond Road from Roderis Drive to Dixon Road 0.75 mi)

As outlined in Section 2, Verizon Wireless has obtained FCC Licenses in the AWS and PCS frequency bands. These frequency bands have a reduced coverage radius in areas dominated by trees and rolling hills. Therefore the gap in coverage for the AWS FCC licensed frequency bands will be different than the gaps in coverage for the 700 MHz LTE band shown in Exhibits A-1 and A-2. Although coverage is more difficult to provide at higher frequency bands, adequate coverage is just as important. As briefly mentioned in section 2 of this report, the AWS frequency band is primarily used to provide additional capacity due to the larger channel size and ability to handle more users. Additional capacity is needed in areas like residential neighborhoods, schools, businesses, and anywhere high speed data is used. In reviewing Exhibits A-3 and A-4, the entire gap in coverage for Verizon Wireless includes a very large area. The portion of the suburban in-building coverage gap targeted for the Dixon Lake project for the 2100 MHz LTE license includes the following areas/roadways as demonstrated in Exhibit A-2:

- Dixon Road from Dioso Road to Long Pond Road (1.25 mi)
- Crane Road from Dixon Road to Washington Road (0.43 mi)
- Long Pong Road from Roderis Drive to Dixon Road (1.45 mi)
- The group of roads to the west of Dixon Road including Alan Drive, Rick Lane, Chestnut Ridge Road, Wood Road, Lakeview Street, Valley Court, Pine Court, Dixon Lake Drive, Lower Lake Drive, Upper Lake Road, Upper Lake Road North, Haven Road, Brightview Court, and West Carolyn Road (Combined approximately 3.32 mi)
- Carolyn Road East (0.47 mi)
- Brittany Lane (0.38 mi)

The in-building coverage gap areas described above contain approximately 949 residents according to a 2010 US census. The portion of the in-vehicle coverage gap targeted for the Dixon Lake project for the 2100 MHz LTE license includes the following areas/roadways as demonstrated in Exhibit A-3:

- Dixon Road from Dioso Road to Long Pond Road (1.25 mi)
- Crane Road from Dixon Road to Washington Road (0.43 mi)
- Long Pong Road from Roderis Drive to Dixon Road (1.45 mi)
- The group of roads to the west of Dixon Road including Alan Drive, Rick Lane, Chestnut Ridge Road, Wood Road, Lakeview Street, Valley Court, Pine Court, Dixon Lake Drive, Lower Lake Drive, Upper Lake Road, Upper Lake Road North, Haven Road, Brightview Court, and West Carolyn Road (Combined approximately 3.32 mi)
- Carolyn Road East (0.47 mi)
- Brittany Lane (0.38 mi)

In order to determine where a new facility could be located the Town ordinance was consulted to determine the priority for locations.

The Town of Carmel Wireless Telecommunication ordinance outlines a location priority for wireless telecommunication facilities. Section 156-62.I(1) states he following priority locations:

- 1. On existing tall structures or wireless telecommunications towers in nonresidential zoning districts
- 2. Collocation on a site with existing wireless telecommunications towers or structures in nonresidential districts, not fronting on NYS Routes 6, 6N, 52 and 301

PierCon Solutions for New York SMSA Limited Partnership

- 3. Collocation on a site with existing wireless telecommunications towers or structures in any other nonresidential districts
- 4. Installation of a new wireless telecommunications facility in any nonresidential district
- 5. Installation of a new wireless telecommunications facility in any residential district
- 6. On other property in the Town

The nearest non-residential zoning district (commercial or commerce/business park) is located over 1 mile to the south. This commercial zoning district already contains various Verizon Wireless facilities in and nearby by it such as the site labeled Carmel. Placing an additional site in this zoning district would provide redundant coverage and is too far away from the coverage gap identified previously in this report. The closest existing sites are the locations that Verizon is already located upon; therefore no existing collocation could be utilized for this objective. There are no collocation sites or sites in a nonresidential zoning district that will remedy Verizon Wireless' significant gap in service. Because priorities 1-4 could not be achieved, the next priority, which includes residential zoning districts, was considered. The location of the proposed site is west at 36 Dixon Road, and is approximately 450 feet from Dixon Road and Brittany Lane. This location has a ground elevation of greater than 800' and is between neighborhoods with the ability to cover a large number of individuals. As demonstrated by exhibits A-1 through A-4, this location is in the coverage gap where additional coverage is needed. This location is located in the residential zoning district and is therefore the 5th priority.

The proposed site at 36 Dixon Road is able to provide reliable coverage to the area targeted for the Dixon Lake project. Please reference Exhibits B-1A through B-4C and C-1 through C-4 in the Appendix for a graphical representation of the existing and proposed Verizon Wireless LTE coverage in the 700 and 2100 MHz frequency bands. See below for a breakdown of Exhibits B-1A through B-4C and C-1 through C-4.

- Exhibit B-1A Proposed Verizon Wireless Suburban 700 MHz In-Building LTE Coverage @ 146'
- Exhibit B-1B Proposed Verizon Wireless Suburban 700 MHz In-Building LTE Coverage @ 126'
- Exhibit B-1C Proposed Verizon Wireless Suburban 700 MHz In-Building LTE Coverage @ 106'
- Exhibit B-2A Proposed Verizon Wireless 700 MHz In-Vehicle LTE Coverage @ 146'
- Exhibit B-2B Proposed Verizon Wireless 700 MHz In-Vehicle LTE Coverage @ 126'
- Exhibit B-2C Proposed Verizon Wireless 700 MHz In-Vehicle LTE Coverage @ 106'
- Exhibit B-3A Proposed Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage @ 146'
- Exhibit B-3B Proposed Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage @ 126'
- Exhibit B-3C Proposed Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage @ 106'
- Exhibit B-4A Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage @ 146'
- Exhibit B-4B Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage @ 126'
- Exhibit B-4C Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage @ 106'
- Exhibit C-1 Existing & Proposed Verizon Wireless Suburban 700 MHz In-Building LTE Coverage
- Exhibit C-2 Existing & Proposed Verizon Wireless 700 MHz In-Vehicle LTE Coverage
- Exhibit C-3 Existing & Proposed Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage
- Exhibit C-4 Existing & Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage

Exhibits B-1A, B-2A, B-3A, and B-4A demonstrate the coverage which the proposed site will provide to the area in the vicinity of the site. Exhibits B-1B, B-1C, B-2B, B-2C, B-3B, B-3C, B-4B, and B-4C demonstrate the proposed coverage at heights (106' and 126') lower than the proposed height of 146' (150' tower height). Exhibits C-1 though C-4 demonstrate the composite coverage which includes both the existing and proposed coverage together on one map.

In reviewing Exhibit C-1, it can be demonstrated that the following areas will no longer be located in the residential coverage gap for 700 MHz:

- ALL Dixon Road from Dioso Road to Long Pond Road (1.25 mi)
- Part of Crane Road from Dixon Road to Washington Road (0.25 mi)
- Most of Long Pong Road from Roderis Drive to Dixon Road (1 mi)
- Nearly all of the group of roads to the west of Dixon Road including Alan Drive, Rick Lane, Chestnut Ridge Road, Wood Road, Lakeview Street, Valley Court, Pine Court, Dixon Lake Drive, Lower Lake Drive, Upper Lake Road, Upper Lake Road North, Haven Road, Brightview Court, and West Carolyn Road (Combined approximately 3 mi)
- ALL Carolyn Road East (0.47 mi)
- ALL Brittany Lane (0.38 mi)

In reviewing Exhibit C-2, it can be demonstrated that the following areas will no longer be located in the in-vehicle coverage gap for 700 MHz:

- ALL Dixon Road from Brittany Lane to Long Pond Road (0.39 mi)
- Most Sections of Long Pond Road from Roderis Drive to Dixon Road 0.65 mi)

In reviewing Exhibit C-3, it can be demonstrated that the following areas will no longer be located in the residential coverage gap for 2100 MHz:

- Sections of Dixon Road from Dioso Road to Long Pond Road (.5 mi)
- Part of Long Pong Road from Rodcris Drive to Dixon Road (0.75 mi)
- The group of roads to the west of Dixon Road including Alan Drive, Rick Lane, Chestnut Ridge Road, Wood Road, Lakeview Street, Valley Court, Pine Court, Dixon Lake Drive, Lower Lake Drive, Upper Lake Road, Upper Lake Road North, Haven Road, Brightview Court, and West Carolyn Road (Combined approximately 2.5 mi)
- Half Carolyn Road East (0.25 mi)
- ALL Brittany Lane (0.38 mi)

In reviewing Exhibit C-4, it can be demonstrated that the following areas will no longer be located in the in-vehicle coverage gap for 2100 MHz:

- Almost All Dixon Road from Dioso Road to Long Pond Road (1.15mi)
- Half Crane Road from Dixon Road to Washington Road (0.25 mi)
- Half Long Pong Road from Roderis Drive to Dixon Road (0.75 mi)
- Most of the group of roads to the west of Dixon Road including Alan Drive, Rick Lane, Chestnut Ridge Road, Wood Road, Lakeview Street, Valley Court, Pine Court, Dixon Lake Drive, Lower Lake Drive, Upper Lake Road, Upper Lake Road North, Haven Road, Brightview Court, and West Carolyn Road (Combined approximately 2.8 mi)

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- ALL Carolyn Road East (0.47 mi)
- ALL Brittany Lane (0.38 mi)

In conclusion, the proposed facility at 36 Dixon Road meets the need objective of providing coverage to the surrounding residential areas and surrounding roadways.

6 RADIO FREQUENCY ENGINEERING RESPONSES TO THE WIRELESS TELECOMMUNICATIONS ORDINANCE

The following section of the report addresses the RF Engineering responses to Town of Carmel's Wireless telecommunications service facilities ordinance. Each section of the checklist is provided and the RF Engineering responses immediately follow.

156-62. Wireless Telecommunications Structures and Facilities

- G. Facility service plan. All proposals to provide or operate wireless telecommunications facilities shall be accompanied by a facility service plan, which shall include all the information necessary to allow the Planning Board to understand the existing, proposed and long-range plans of the applicant. The facility service plan shall include at least the following information:
 - (1) The location, height and operational characteristics of all existing facilities of the applicant in and immediately adjacent to the Town.
 - (2) A two-to-five-year plan for the provision of additional facilities in and immediately adjacent to the Town, indicating whether each proposed facility is for initial coverage or capacity-building purposes and showing proposed general locations or areas in which additional facilities are expected to be needed. Subsequent applications will confirm or modify the facility service plan so that the Planning Board may be kept up-to-date on future activities.
 - (3) A commitment to collocate or allow collocation wherever possible on all existing and proposed facilities

Response: Please reference Exhibit D in the Appendix for a graphical representation of the existing, proposed, approved, future, and activation pending sites within and surrounding the Town of Carmel. This map includes future sites which are planned up to five years in the future based on projected needs and is subject to change. Please also reference Exhibit E in the Appendix for a list of existing Verizon Wireless facilities within the Town of Carmel and adjacent to the Town.

- I. Location of wireless telecommunications facilities.
 - (1) Applicants for wireless telecommunications facilities shall locate, site and erect said wireless telecommunications facilities, including towers and other tall structures, in accordance with the following priorities, one being the highest priority and six being the lowest priority:

Priority Level	Description
1	On existing tall structures or wireless telecommunications towers in nonresidential zoning districts
2	Collocation on a site with existing wireless telecommunications towers or structures in nonresidential districts, not fronting on NYS Routes 6, 6N, 52 and 301
3	Collocation on a site with existing wireless telecommunications towers or structures in any other nonresidential districts

- 4 Installation of a new wireless telecommunications facility in any nonresidential district
- 5 Installation of a new wireless telecommunications facility in any residential district

Response: Please see the response to this section in section 5 of this report. Please find attached Exhibit F "Existing Verizon Wireless Sites on Town Zoning Map" which demonstrates the location of existing and proposed site locations with regard to the nearby zones. Please also find attached Exhibit G "Existing Verizon Wireless Suburban 700 MHz In-Building LTE Coverage on Town Zoning Map" demonstrating that the commercial zones are almost entirely covered. Since the coverage gap is nearly all residential, the new facility must be sited in the coverage gap, which is a residential zoning district.

L. New wireless telecommunications towers.

- (1) The applicant shall demonstrate to the satisfaction of the Planning Board that there exists no tower on which the antenna may collocate or that collocation is not feasible for any of the following reasons:
 - (d) The applicant's network of antenna locations is not adequate to properly serve its customers, and the use of facilities of other entities is not suitable for physical reasons.
 - Please reference exhibits A-1 through A-4 which demonstrate the existing coverage from the facilities Verizon Wireless currently utilizes and where the coverage gap is located. The nearest towers which were identified were already located upon by Verizon Wireless.
 - (e) Adequate and reliable service cannot be provided from existing sites in a financially and technologically feasible manner consistent with the service providers' system requirements.
 - Response: The existing sites which are shown in all the exhibits are not able to have their coverage extended through any technological enhancements. The limiting factor of how far a site can provide coverage is the mobile device since it has a limited power output.
 - (f) Existing sites cannot accommodate the proposed antenna due to structural or other engineering limitations (e.g., frequency incompatibilities).
 - Response: The existing sites which are shown in all the exhibits are not able to have their coverage extended through any technological enhancements. The limiting factor of how far a site can provide coverage is the mobile device since it has a limited power output.

O. Bulk regulations and height.

- (2) In residential districts, wireless telecommunications facilities shall not exceed 50 feet in height unless the requirements of Subsection O(3) below are met. In nonresidential districts, wireless telecommunications facilities shall not exceed 100 feet in height unless the requirements of Subsection O(3) below are met.
 - Response: Locating any part of the antennas below the tree line (which would easily occur at 50' or below) severely affects the ability of a site to provide coverage to the surrounding area. Antennas must be located above the tree line in order to properly function and achieve their goals.
- (3) In the event that applicants propose a height greater than that listed above, the applicant must demonstrate to the satisfaction of the Planning Board that:
 - (a) Alternative means of mounting the antenna have been considered and are not feasible for the applicant.
 - Response: Locating any part of the antennas below the tree line severely affects the ability of a site to provide coverage to the surrounding area. Antennas must be located above the tree line in order to properly function and achieve their goals.
 - (b) The height is the minimum height necessary for adequate operation to meet the applicants' communications needs and the aesthetic intrusion has been minimized to the greatest extent practicable.

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Response: Please see the B-1A through B-4C exhibits to see the loss of coverage from reducing the height from 150' to 130' to 110'. The new facility is designed to allow for co-location by multiple carriers and emergency services. Four major wireless carriers provide service to the Town of Carmel, and this facility is designed to allow multiple carriers to achieve significant coverage. As stated earlier, the facility is also designed for emergency services equipment and could be beneficial to local, state, or national, wireless emergency systems.

7 CONCLUSION:

PierCon Solutions' analysis of Verizon Wireless' existing network coverage indicates that a significant gap in wireless service exists within the town of Carmel. The application by Verizon Wireless proposes to construct a new wireless telecommunications facility at 36 Dixon Road, Mahopac, NY. The proposed installation, consisting of antennas at centerline heights of 146' will alleviate coverage and capacity deficiencies and provide reliable service as described above.

PierCon performed a thorough review of the wireless code and has addressed each section to which a response from a radiofrequency engineering perspective was applicable.

The operation of this facility will enable Verizon Wireless to provide reliable wireless service to Town of Carmel and to remedy the significant gaps in personal wireless services. After performing the independent radiofrequency analysis, PierCon Solutions concludes that this facility is essential to Verizon Wireless' network design for the Town of Carmel.

Report Prepared by:

Adam Feehan Sr. RF Engineer

PierCon Solutions, LLC

(Date)____7/31/18

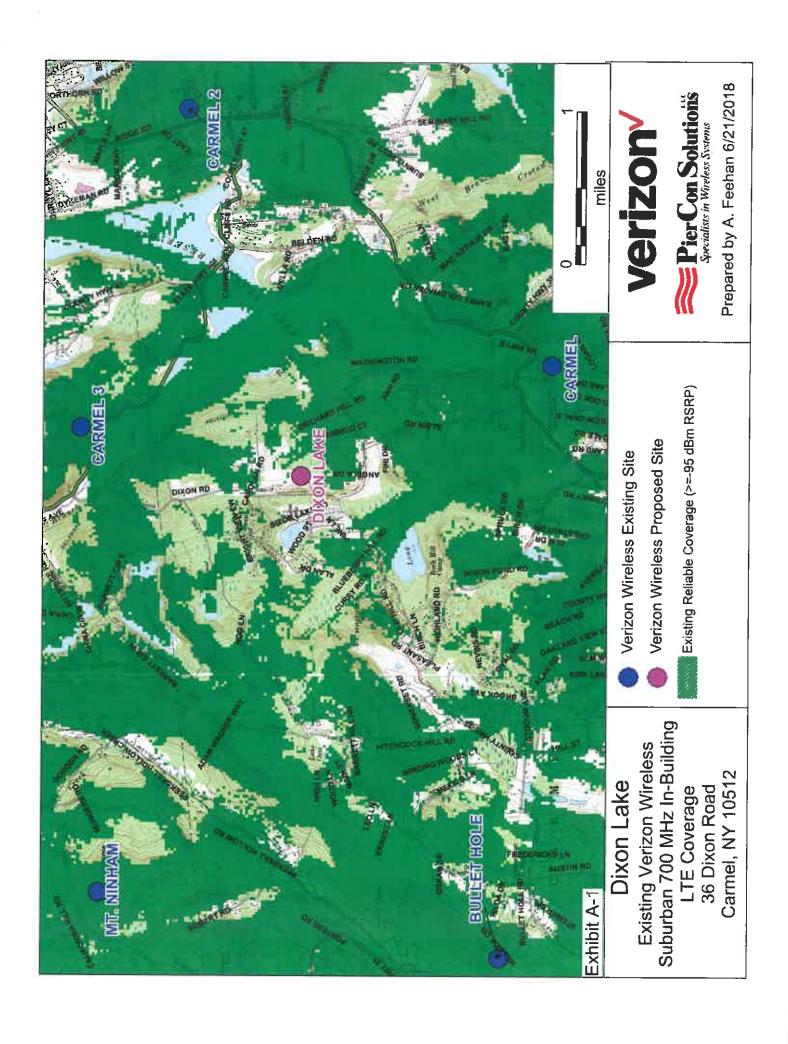
Rich Conroy President

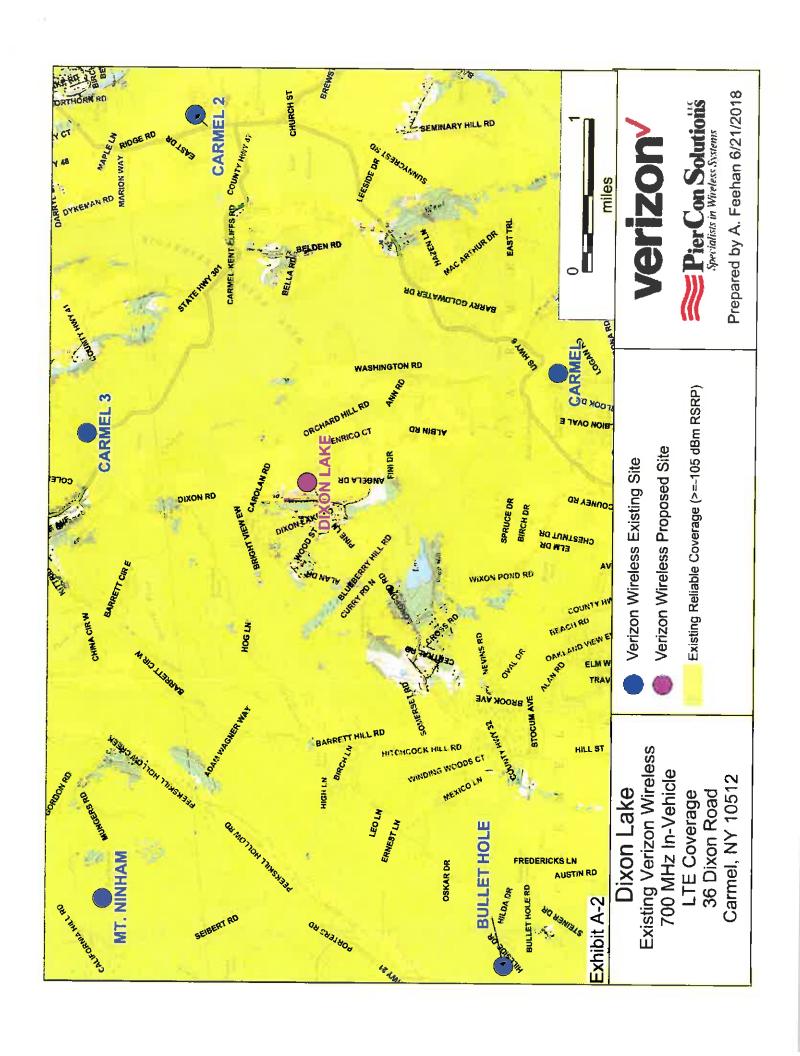
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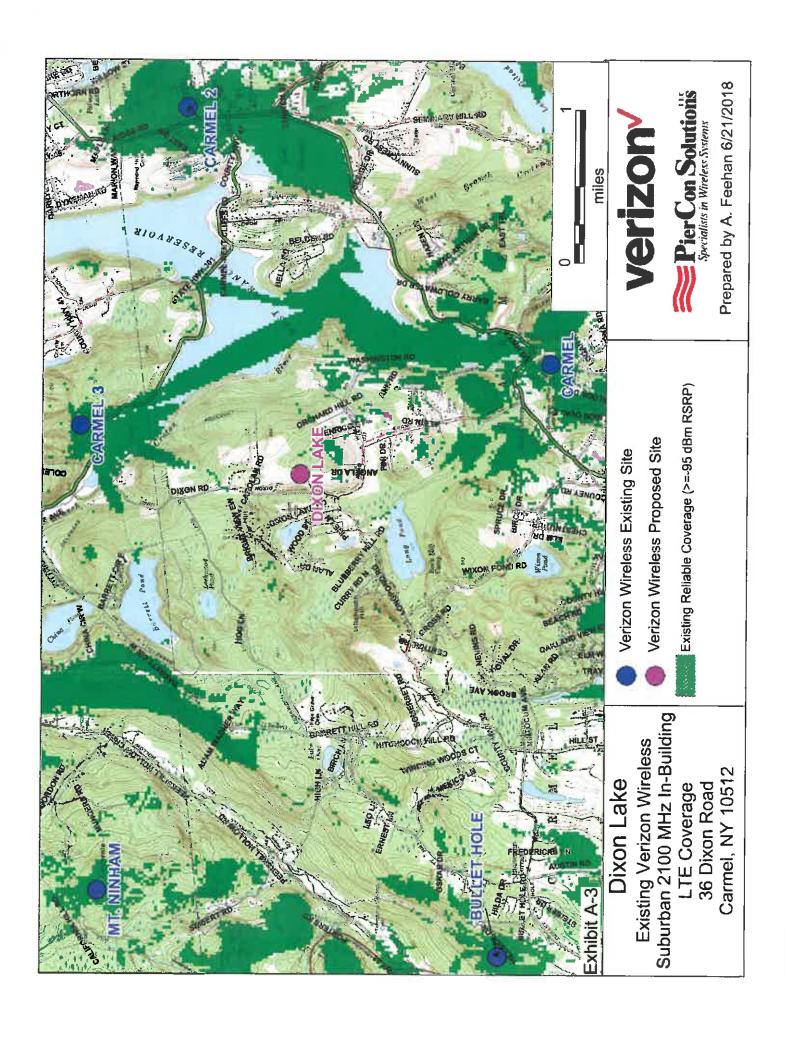
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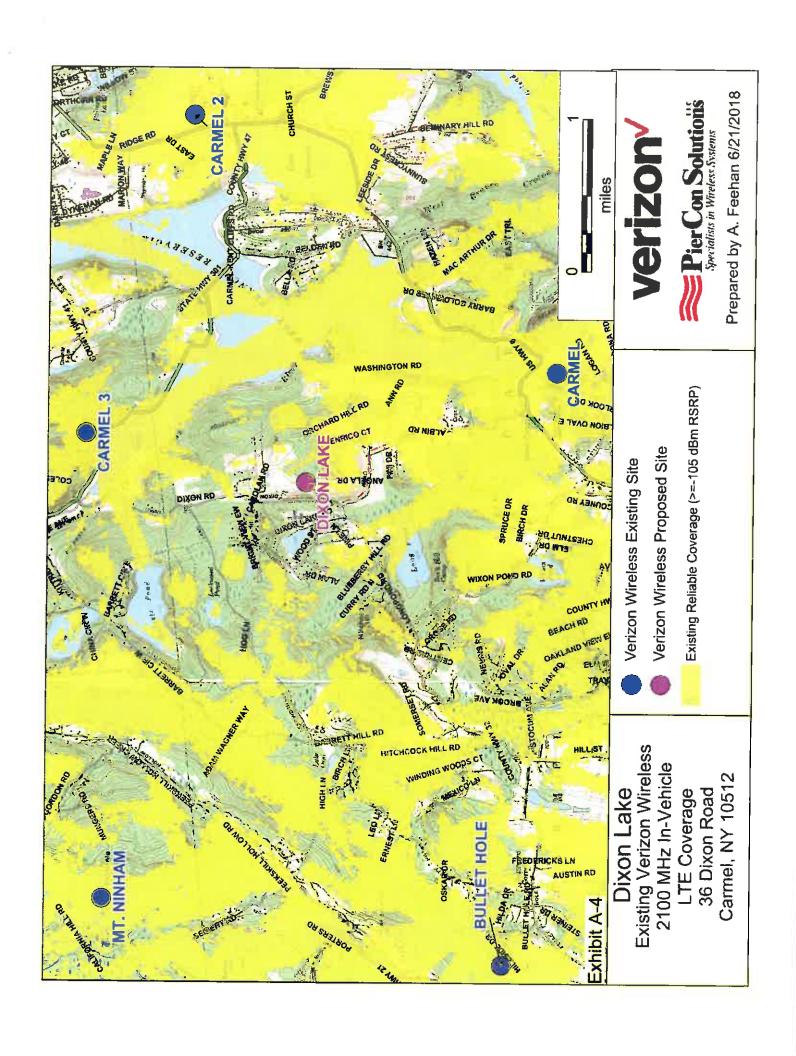
APPENDIX - EXHIBITS

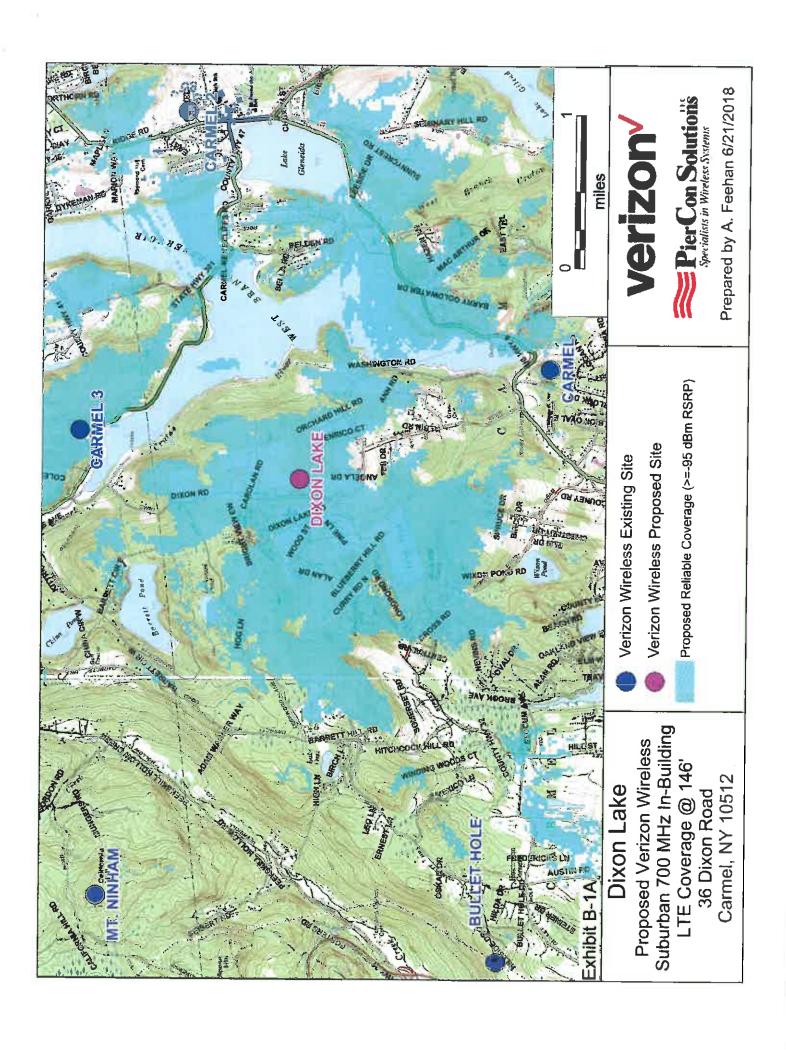
- Exhibit A-1 Existing Verizon Wireless Suburban 700 MHz In-Building LTE Coverage
- Exhibit A-2 Existing Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage
- Exhibit A-3 Existing Verizon Wireless 2100 MHz In-Vehicle LTE Coverage
- Exhibit A-4 Existing Verizon Wireless 2100 MHz In-Vehicle LTE Coverage
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- Exhibit B4C Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage @ 106'
- Exhibit C-1 Existing & Proposed Verizon Wireless Suburban 700 MHz In-Building LTE Coverage
- Exhibit C-2 Existing & Proposed Verizon Wireless 700 MHz In-Vehicle LTE Coverage
- Exhibit C-3 Existing & Proposed Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage
- Exhibit C4 Existing & Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage
- Exhibit D Existing, Proposed/Approved, and Future Verizon Wireless Sites
- Exhibit E − Detailed Site Table
- Exhibit F Existing Verizon Wireless Sites on Town Zoning Map
- Exhibit G Existing Verizon Wireless Suburban 700 MHz In-Building LTE Coverage on Town Zoning Map

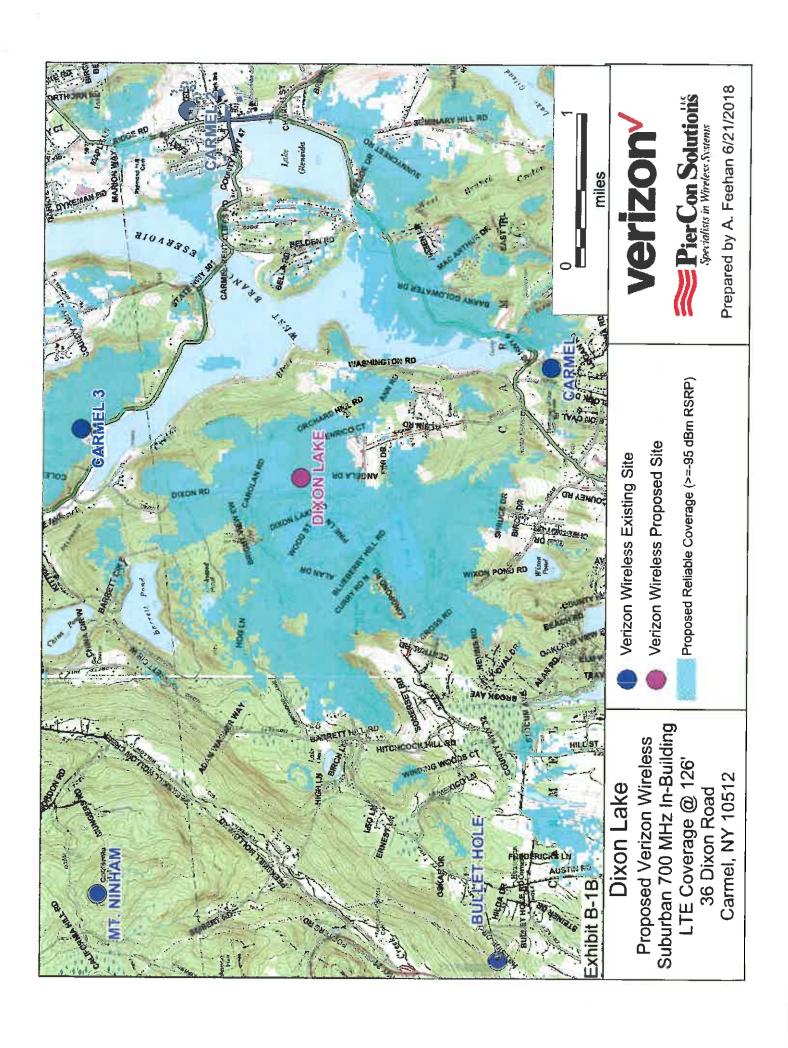


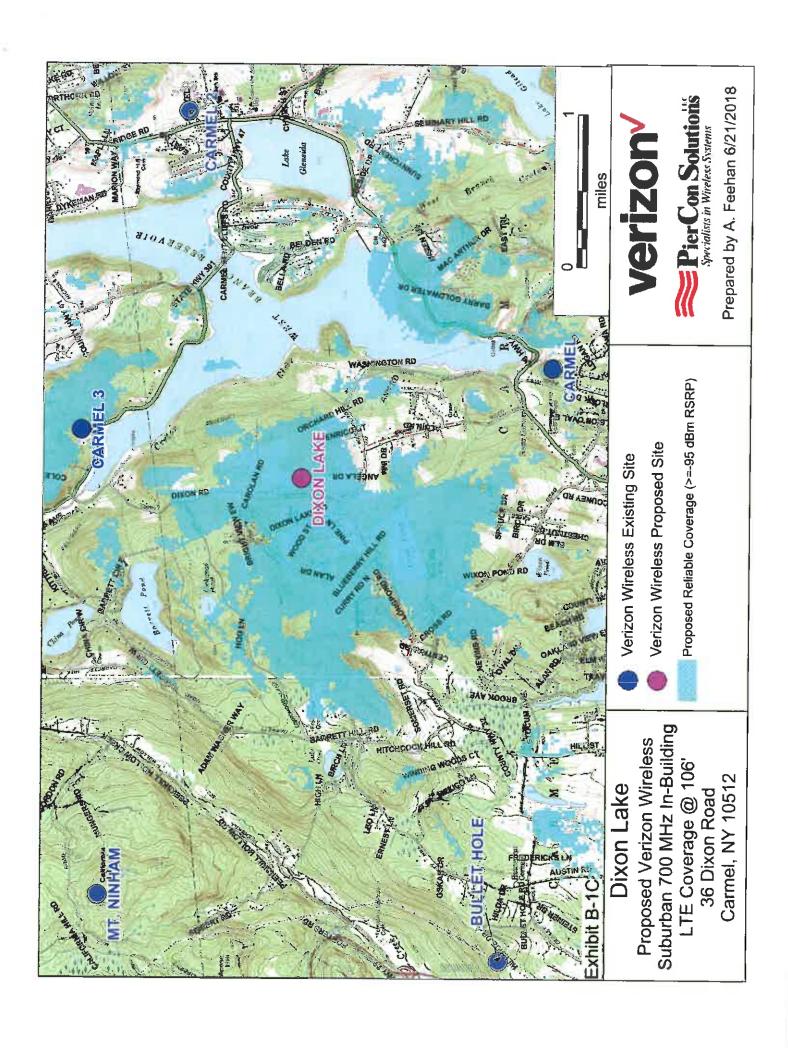


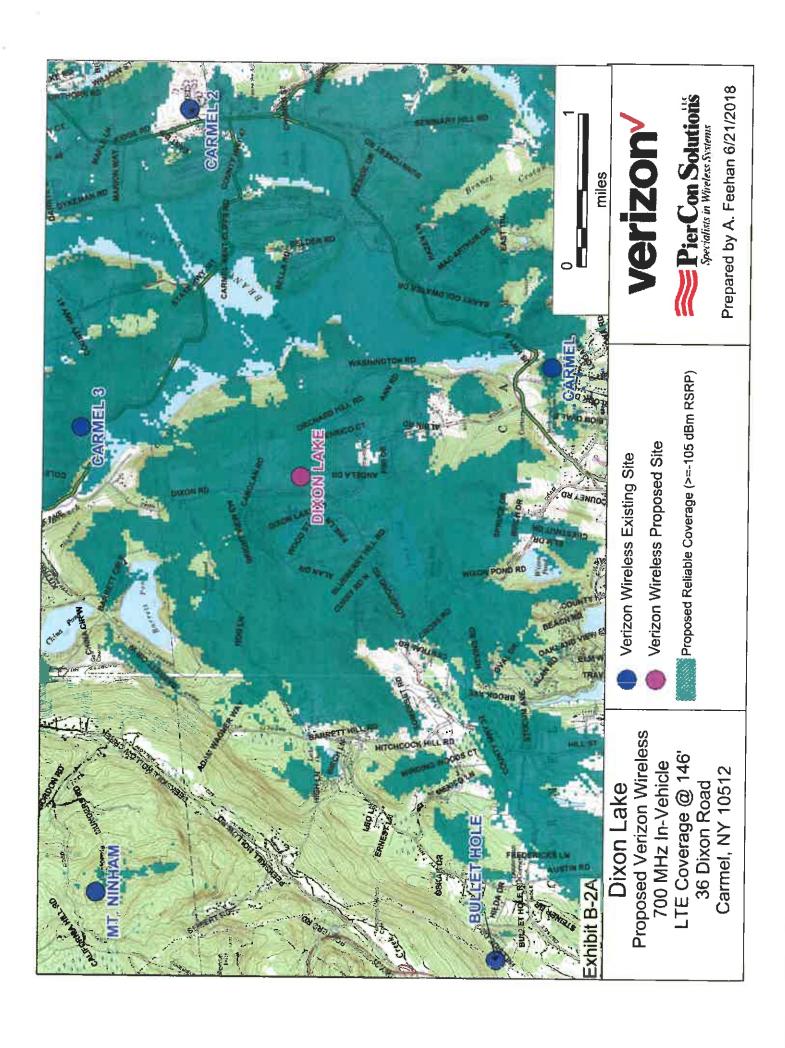


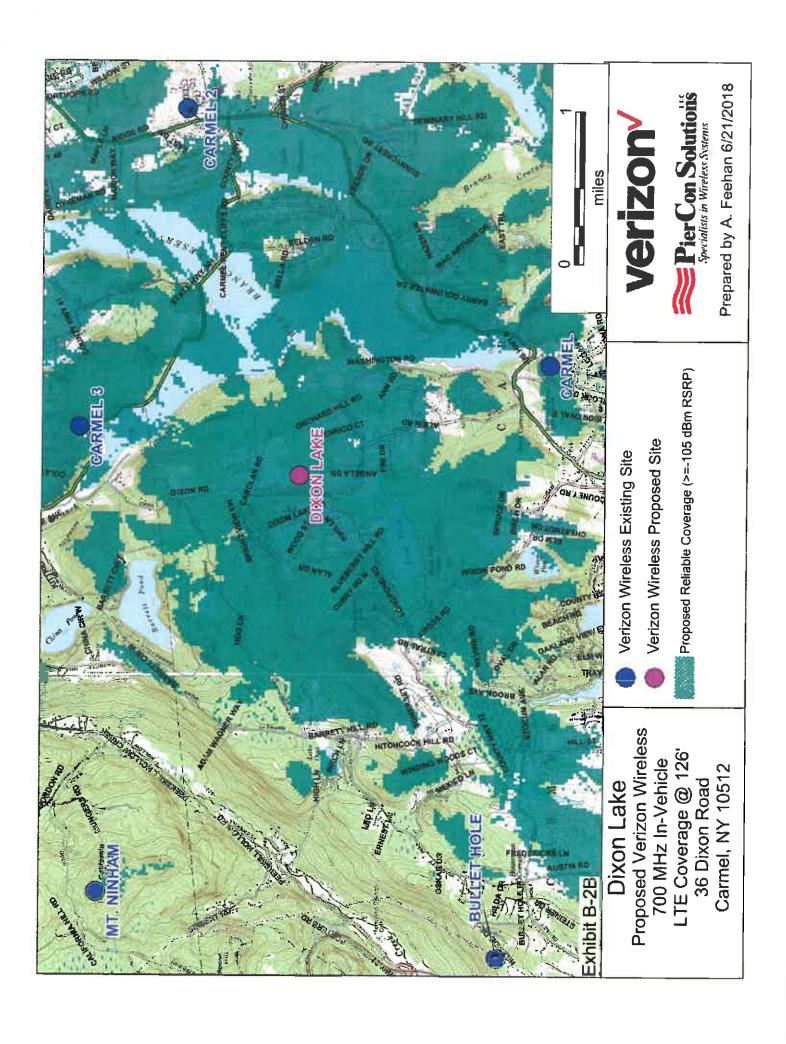


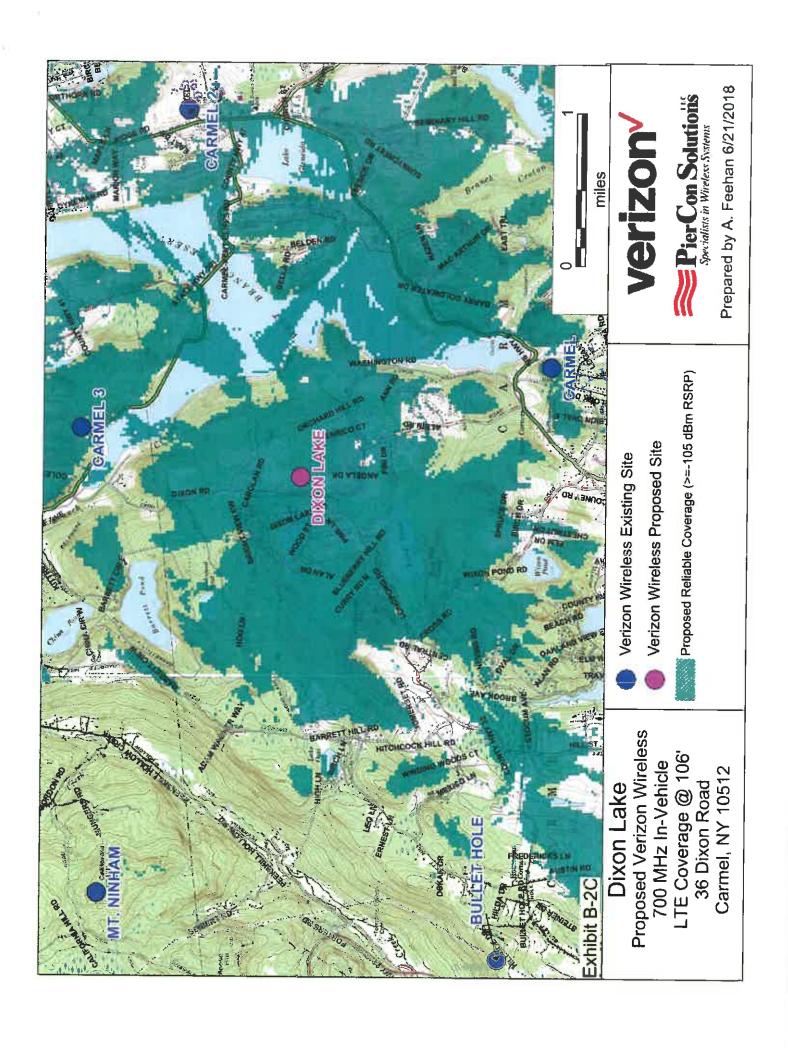


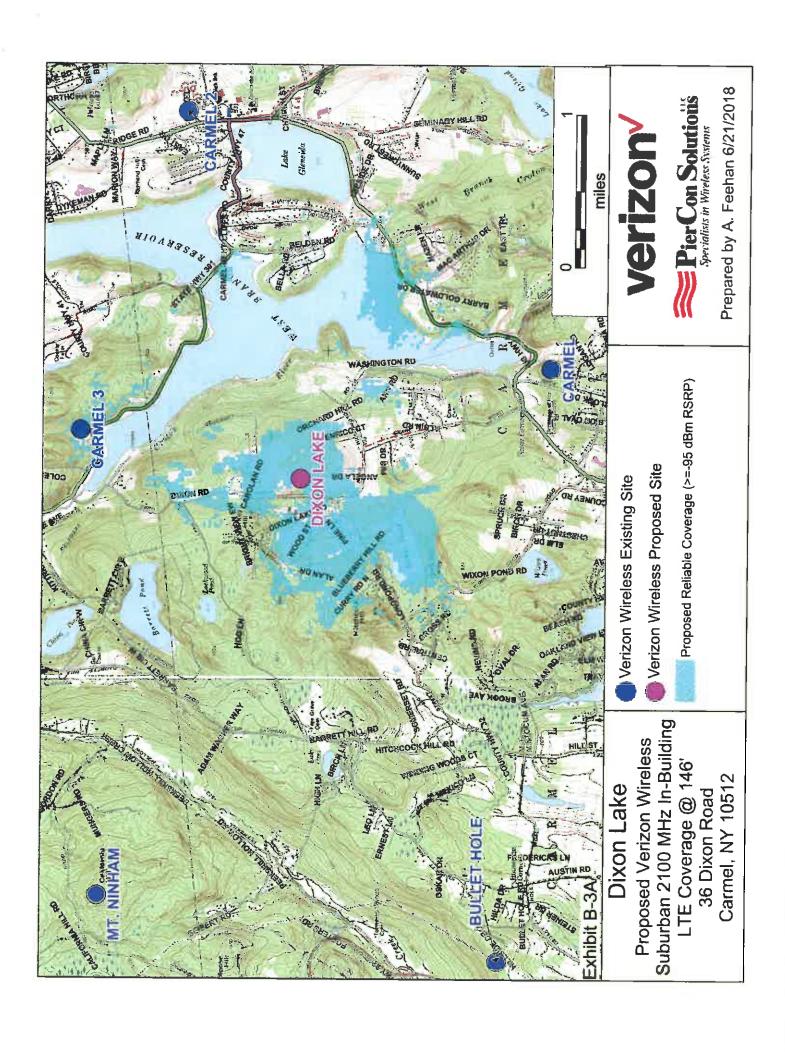


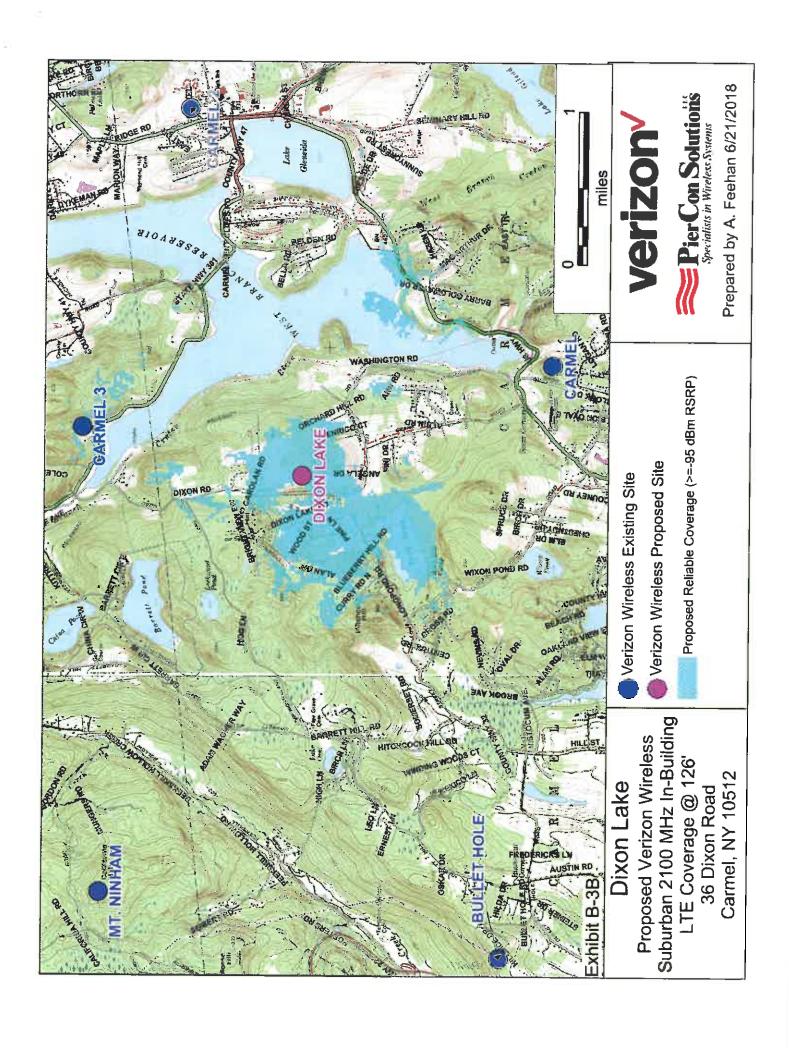


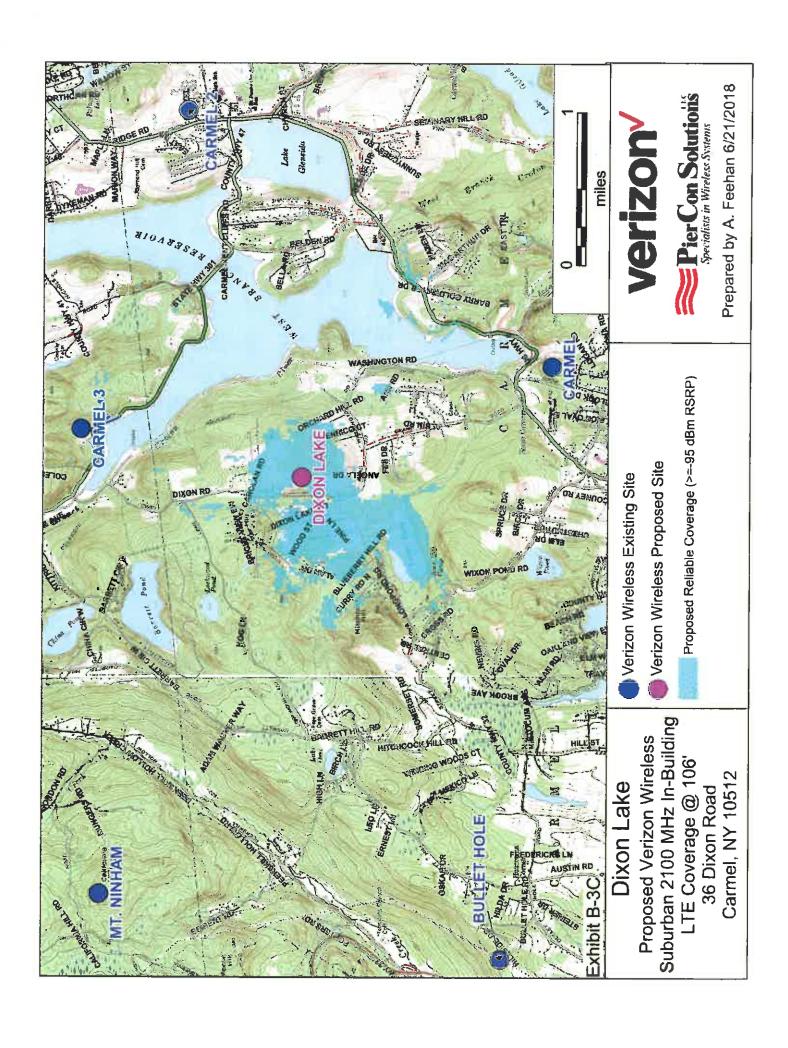


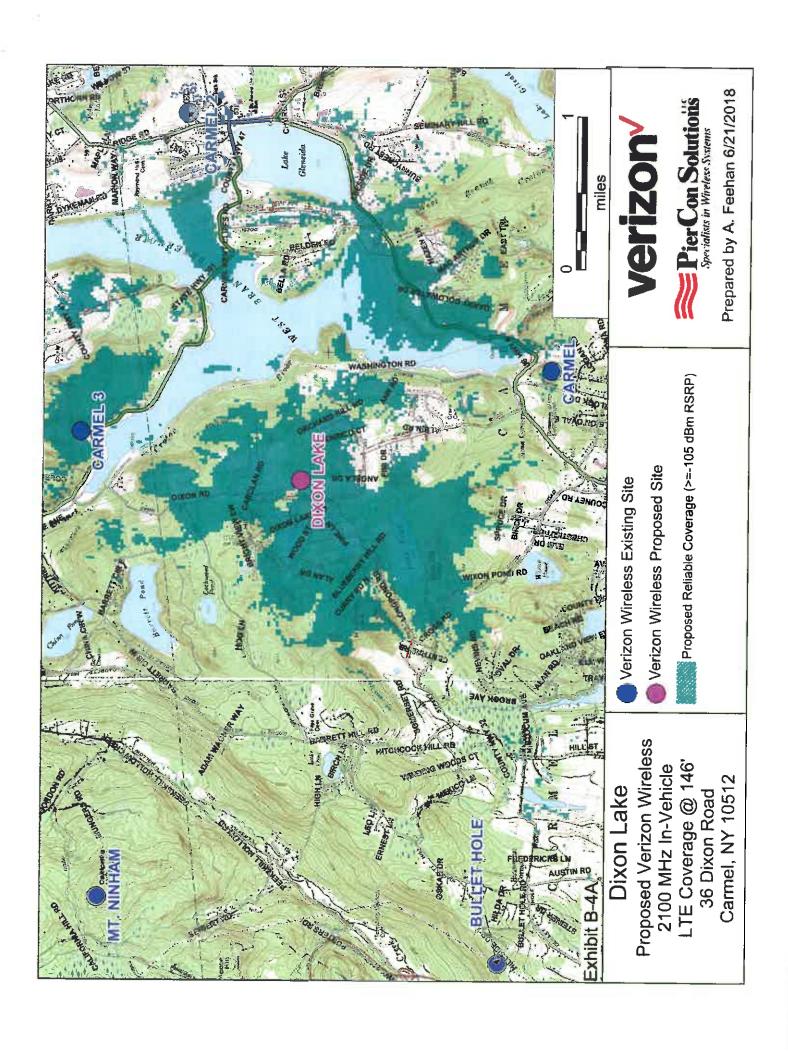


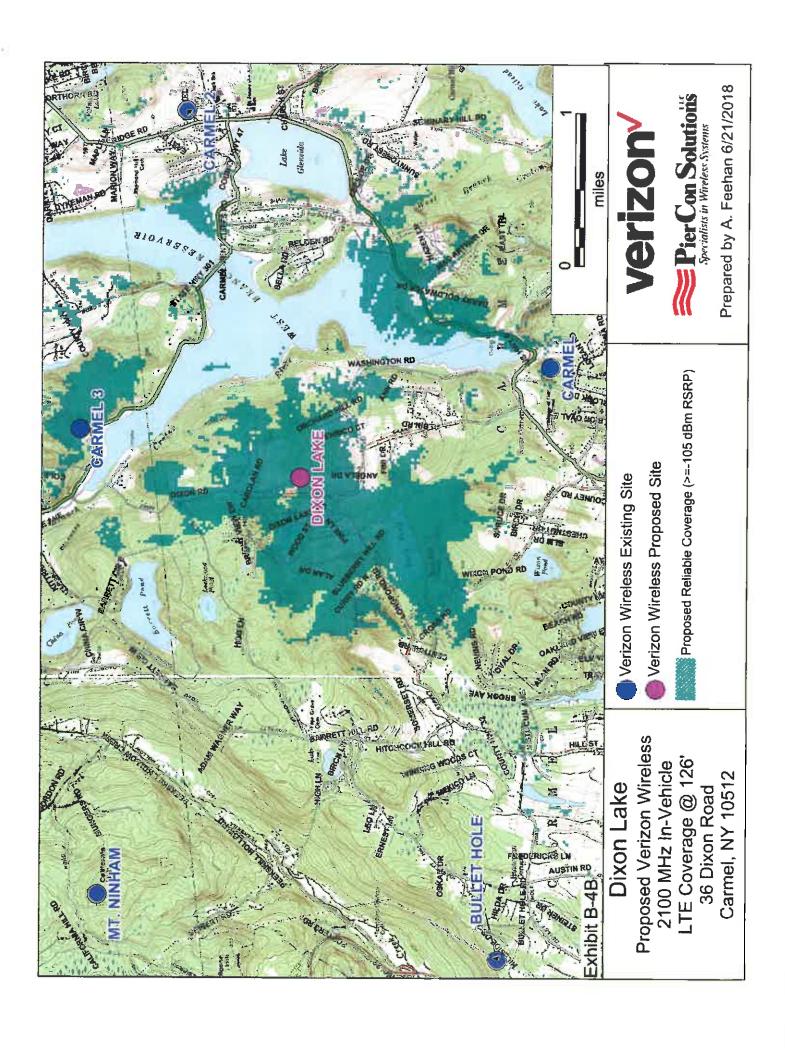


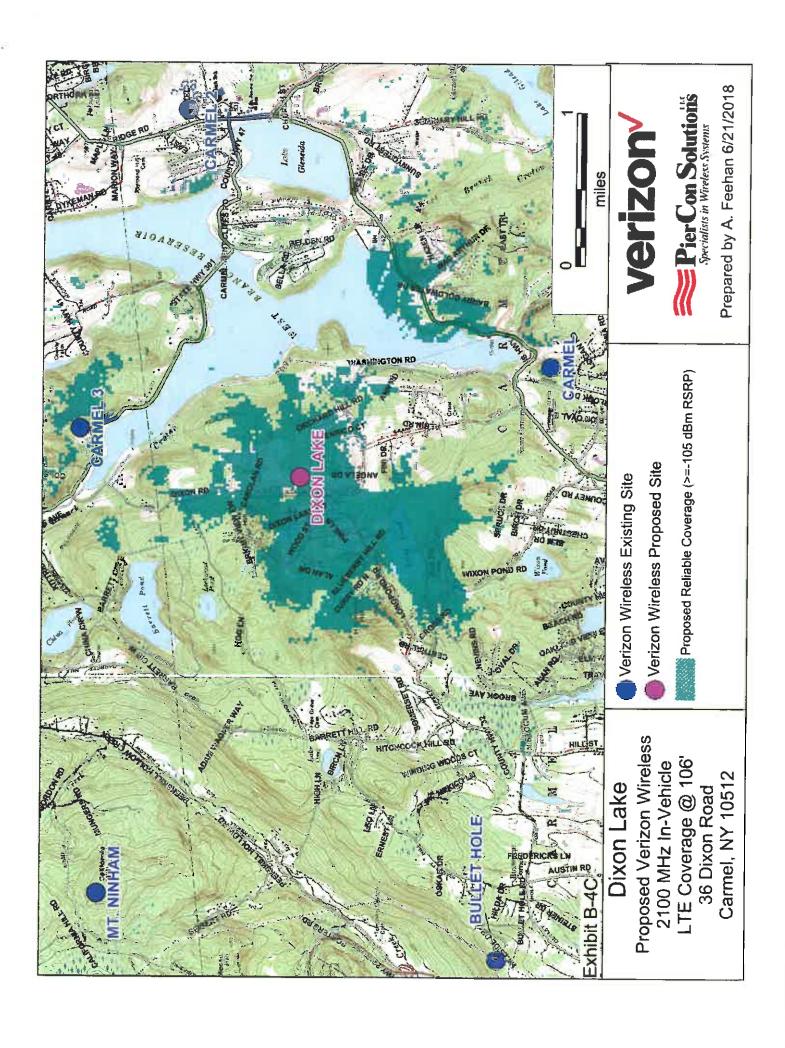


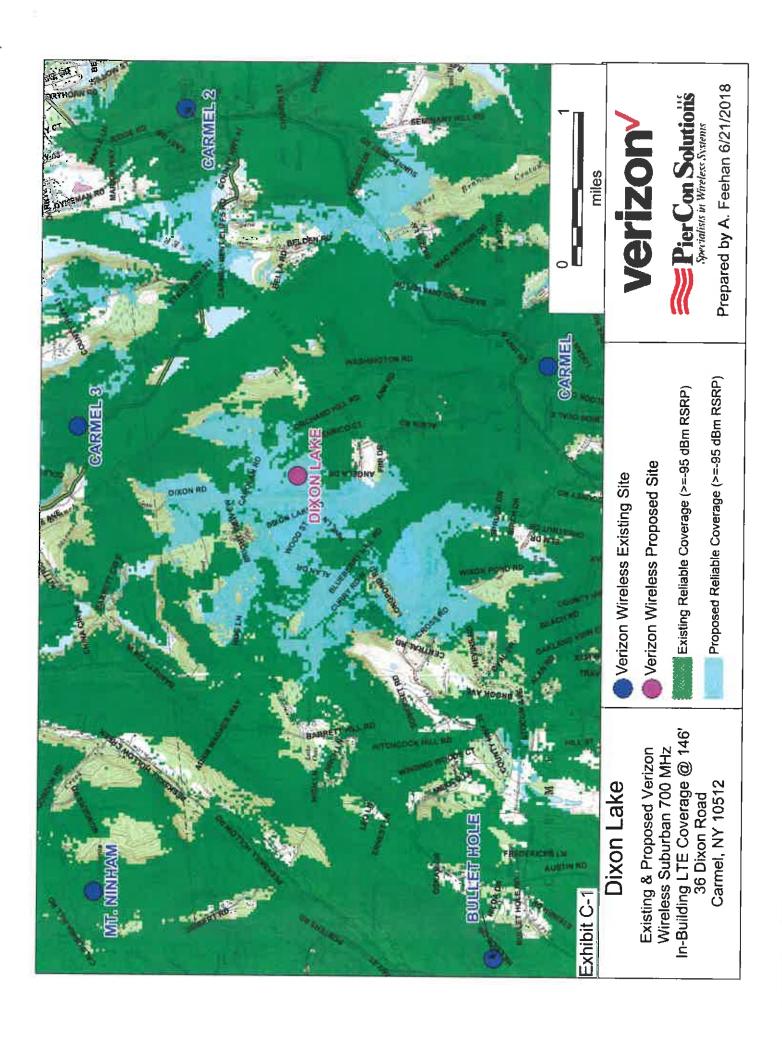


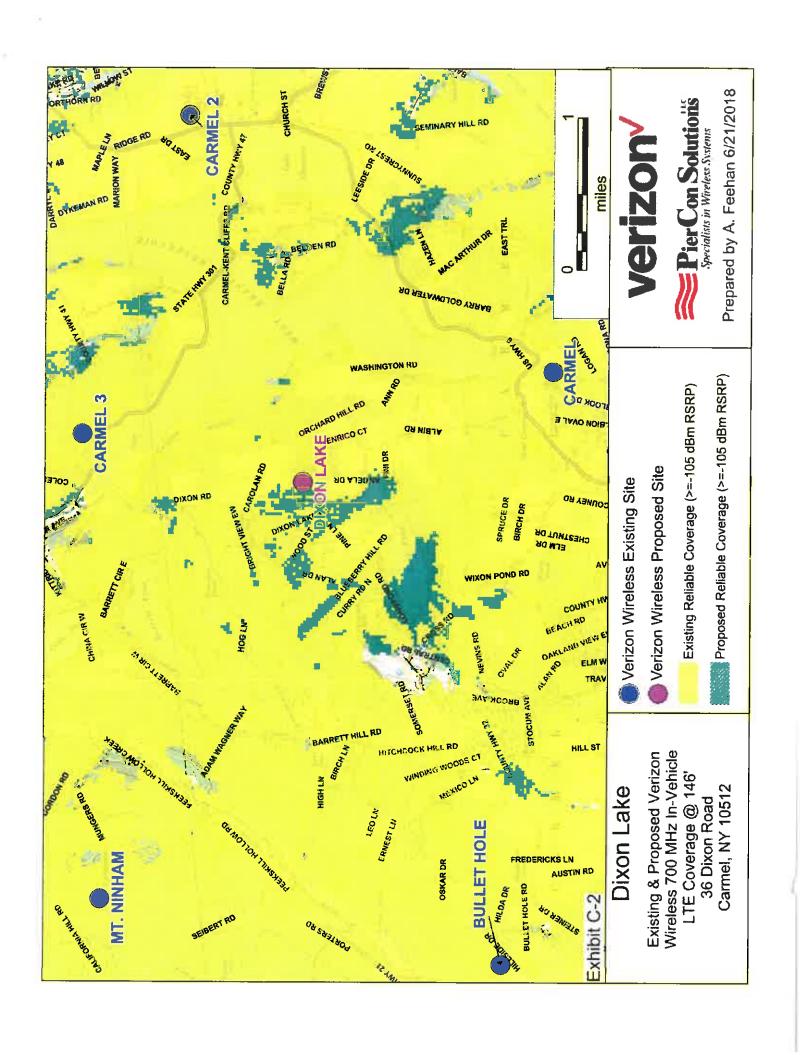


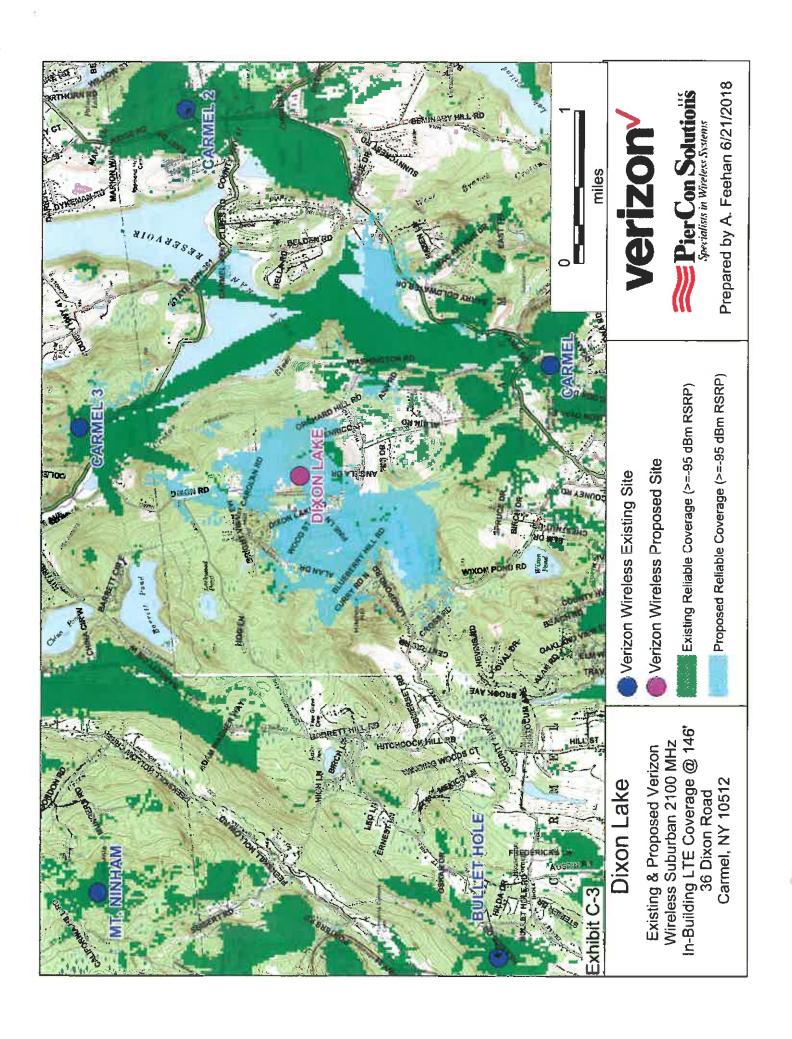


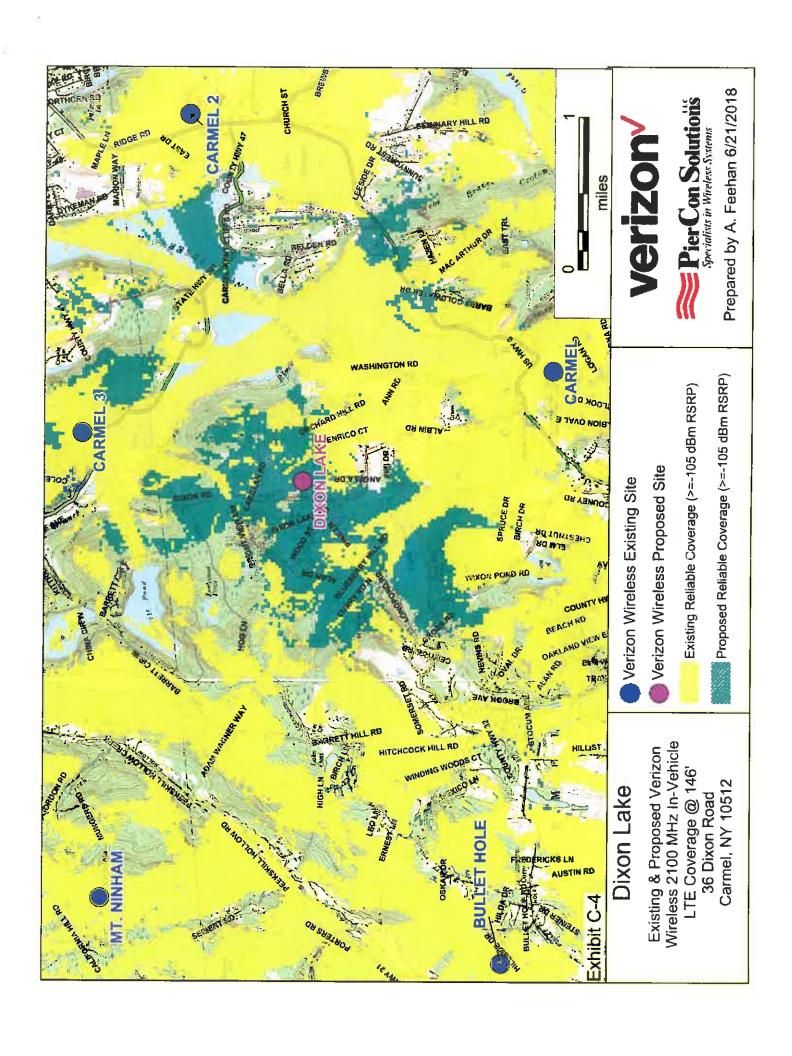


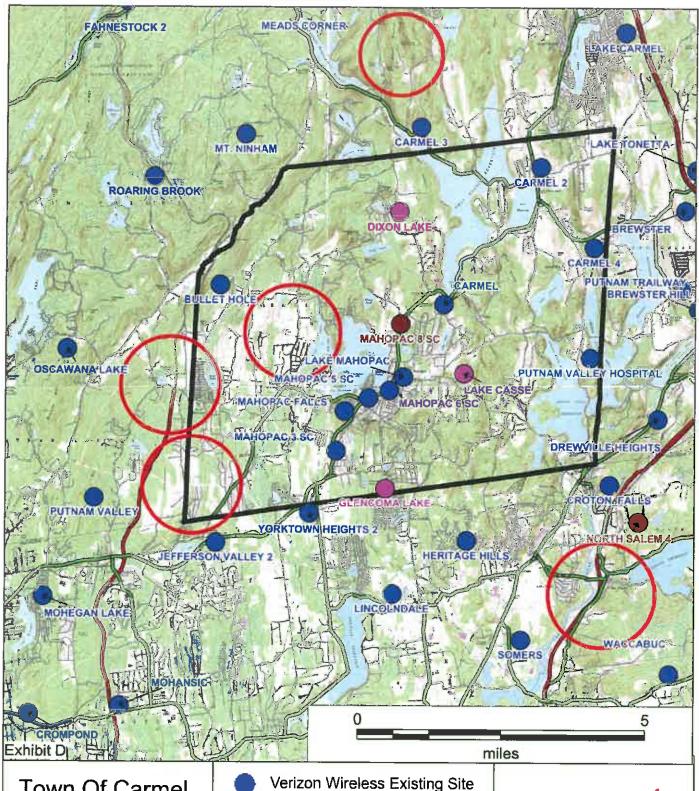






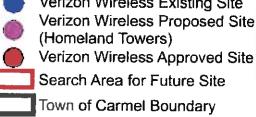






Town Of Carmel

Existing, Proposed/ Approved, and Future Verizon Wireless Sites



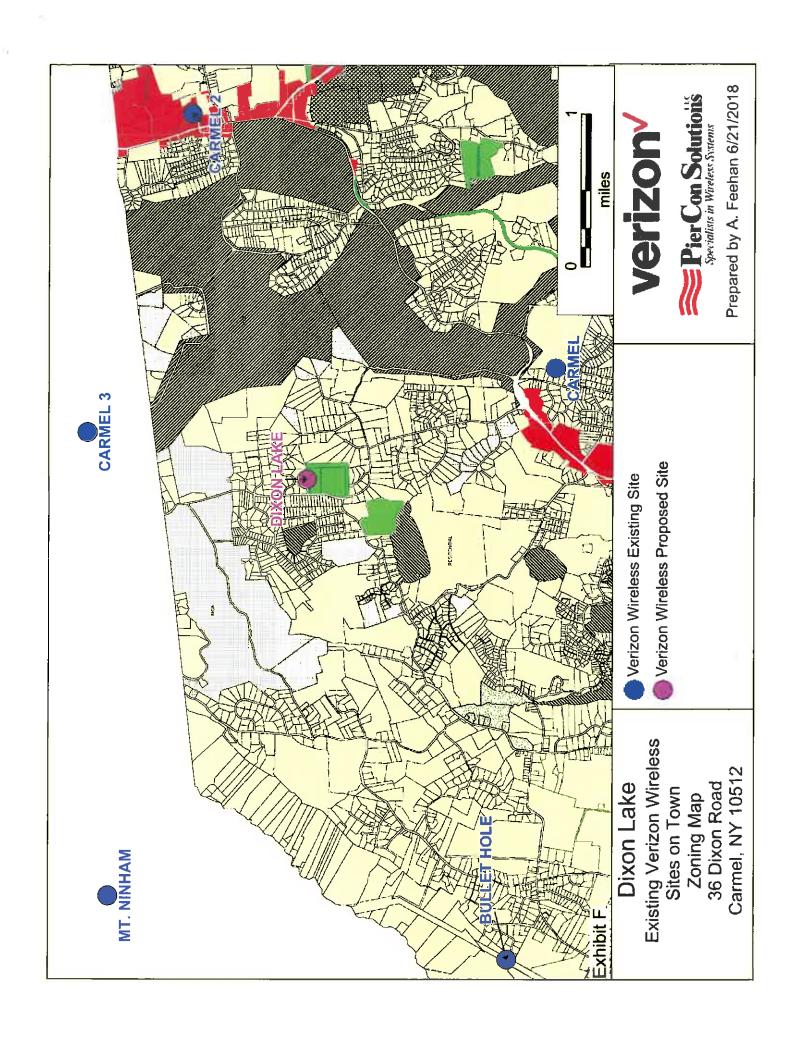
verizon /

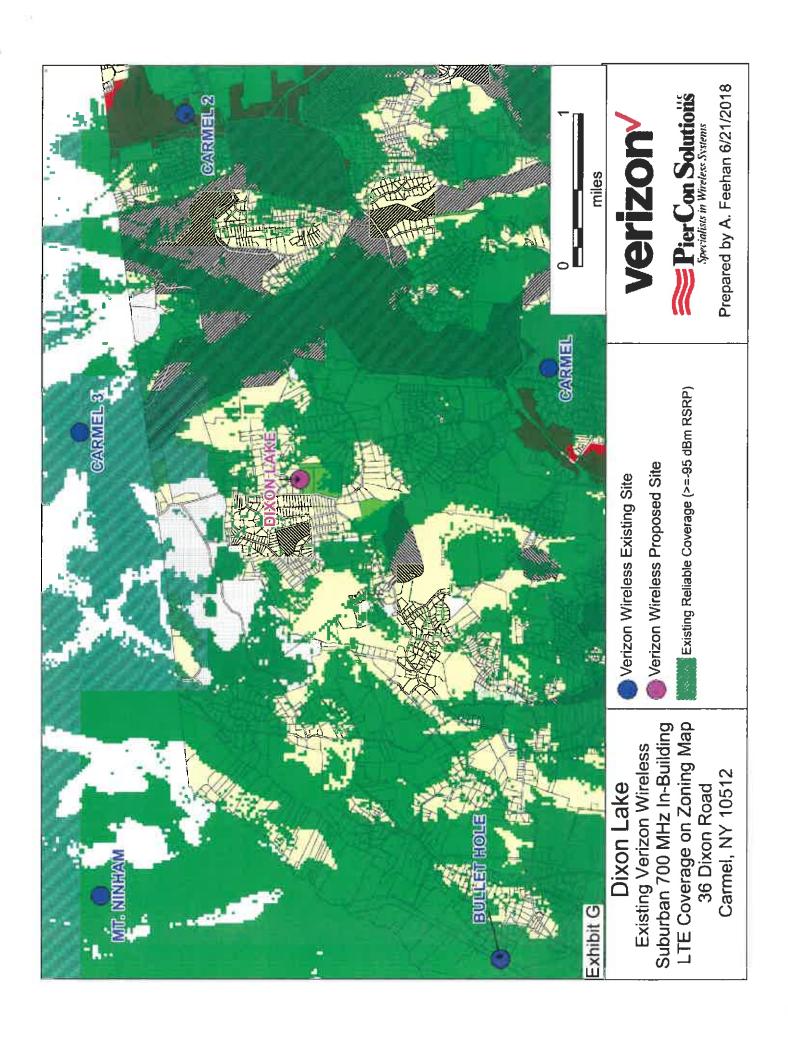


Prepared by A. Feehan 7/9/2018

EXHIBIT E - DETAILED SITE TABLE

Site Name	Address	Height (feet) +/-
JEFFERSON VALLEY	3830 Gomer Street, Yorktown Heights	52
CARMEL 2	94 Gleneida Ave, Carmel	123
AMAWALK 3	2580 Route 35, Somers	119
CARMEL 3	21 Smokey Hollow Court, Carmel	150
LAKE CARMEL	723 Fair St, Carmel	102
FAHNESTOCK 2	Route 301, Cold Spring	101
WACCABUC	117 Waccubuc Road, Goldens Bridge	141
ROARING BROOK	220 Wiccopee Road, Putnam Valley	150
OSCAWANA LAKE	7 Barger Hill Rd, Putnam Valley	157
DREWVILLE HEIGHTS	300-310 Route 22, Brewster	93
MEADS CORNERS	2490 Route 301, Carmel	155
MOHEGAN LAKE	Woodland Ave Ave, Yorktown	93
BREWSTER HILL	87 Hillside Park, Brewster	83
MT NINHAM	320 California Hill Path, Carmel	101
LINCOLNDALE	Rte 202, Lincolndale	106
MAHOPAC 3 SC	361 Route 6, Mahopac	19
MAHOPAC 6 SC	692 Route 6, Mahopac	28
HERITAGE HILLS	250 West Hill Drive, Somers	87
SOMERS	294 Route 100, Somers	108
PUTNAM VALLEY HOSPITAL	670 Stoneleigh Ave, Carmel	120
YORKTOWN HEIGHTS 2	80 Route 6, Somers	96
MOHANSIC	26-51 Strang Boulevard, Yorktown Heights	47
CROMPOND	3800 Crompond Rd, Yorktown	125
BREWSTER	Independent Way, Brewster	102
BULLET HOLE	Scout Hill Road, Mahopac	126
MAHOPAC 5 SC	946-954 S Lake Blvd, Mahopac	36
MAHOPAC FALLS	51 Crest Drive, Mahopac	121
GOLDENS BRIDGE	Exit 6A I-684, Goldens Bridge	102
CROTON FALLS	Sun Valley Drive, North Salem	100
PUTNAM VALLEY	Williams Drive, Putnam Valley	106
CARMEL	1183 Route 6, Carmel	117
LAKE MAHOPAC	55 McAlpin Avenue, Carmel	122





LAW OFFICES OF

SNYDER & SNYDER, LLP

94 WHITE PLAINS ROAD

TARRYTOWN, NEW YORK 1059

(914) 333-0700 FAX (914) 333-0743

WRITER'S E-MAIL ADDRESS

NEW JERSEY OFFICE ONE GATEWAY CENTER, SUITE 2600 NEWARK, NEW JERSEY 07102 (973) 824-9772 FAX (973) 824-9774

TARRYTOWN OFFICE

REPLY TO:

rgaudioso@snyderlaw.net

August 2, 2018

Honorable Chairman Harold Gary and Members of the Planning Board Town of Carmel Town Hall 60 McAlpin Avenue Mahopac, New York 10541

NEW YORK OFFICE

FAX (212) 932-2693

LESLIE J. SNYDER ROBERT D. GAUDIOSO

DAVID L. SNYDER

(1956-2012)

(212) 749-1448

445 PARK AVENUE, 9TH FLOOR NEW YORK, NEW YORK 10022

Re:

Application for site plan and special permit approval for Lake Casse: 254 Croton Falls Road, Mahopac, New York

Honorable Chairman Gary and Members of the Planning Board:

We are the attorneys for Homeland Towers LLC and New York SMSA Limited Partnership d/b/a Verizon Wireless (collectively, the "Applicants") in connection with their request for site plan and special permit approval to locate a public utility wireless telecommunications facility ("Facility") at the above captioned property ("Property"). proposed Facility consists of a 180-foot tower and a fenced 36' x 100' compound for related equipment. The Property is located in the Residential Zoning District where the Facility is permitted in accordance with Section 156-62 of the Town of Carmel Zoning Code.

Verizon Wireless is a provider of personal wireless services, and is licensed by the Federal Communications Commission to provide wireless services throughout the New York metropolitan area, including the Town of Carmel.

In support of the foregoing, we are pleased to enclose the following materials and one CD with all documents contained thereon:

- Two (2) checks made payable to the Town of Carmel, in the amount of \$3,500.00 1. (escrow application fee) and \$2,000.00 (site plan application fee);
- 2. Eleven (11) copies of the Site Plan Application Form;
- 3. Two (2) copies of the Disclosure Statements;

- 4. Two (2) copies of the Vesting Deed;
- 5. Two (2) copies of the Easements, Covenants and Restrictions:
- 6. Eleven (11) copies of the Site Plan Completeness Certification Form;
- 7. Eleven (11) copies of the Environmental Assessment Form with VEAF;
- 8. Eleven (11) copies of the Structural Certification Letter;
- 9. Eleven (11) copies of the RF Exposure Report;
- 10. Eleven (11) copies of the RF Justification Report with Master Facilities Service Plan;
- 11. Eleven (11) copies of the FAA Opinion Letter confirming that no FAA lighting or marking is required;
- 12. Eleven (11) copies of the Collocation Commitment Letter; and
- 13. Five (5) copies of the Site Plan.

We thank you for your consideration, and look forward to discussing this matter at next Planning Board meeting. If you have any questions or require any additional documentation, please do not hesitate to contact me at 914-333-0700.

Snyder & Snyder, LLP

By:

Robert D. Gaudioso

RDG:cae

Enclosures

cc:

Homeland Towers

Verizon Wireless

Mahopac Fire Department

P.O Box 267

Mahopac, NY 10541

z:\ssdata\wpdata\ss3\rdg\homelandtowers\carmel\056 (casse)\pb letter 7.30.2018.rtf

Home and Yours - Lake Casse TOWN OF CARMEL SITE PLAN APPLICATION





The Town of Carmel Planning Board meetings are held twice a month, on the second and fourth Wednesday's, at 7:00 PM at Carmel Town Hall, 60 McAlpin Avenue, Carmel

The submission deadline is 10 days prior to the Planning Board meeting. New site plan applications that have been deemed complete will be placed on the agenda in the order they are received.

No application will be placed on the agenda that is incomplete

Pre-Submission:

Prior to the formal submission of the site plan, a pre-submission conference may be requested by the applicant to be conducted with representatives from the Town, which may include the Town Planner, Town Engineer, Director of Code Enforcement and/or the Planning Board Attorney. This conference will serve to educate the applicant on the process he/she must follow, clarify the information required to submit a complete site plan application, and to highlight any specific areas of concern. You may arrange a presubmission conference through the Planning Board Secretary at (845) 628-1500 extension 190.

Submission Requirements:

At least 10 days prior to the Planning Board meeting, the site plan application shall be submitted to the Planning Board Secretary as follows:

All site plans shall be signed, sealed and folded with the title box legible. The application package shall include: 11 copies of the Site Plan Application Form, signed and notarized. 11 copies of the SEQR Environmental Assessment Form (use of short form or long form shall be determined at pre-submission conference). 5 full size sets of the Site Plan (including floor plans and elevations) 1 CD (in pdf. format) containing an electronic version of the Site Plan 2 copies of the Disclosure Statement 11 copies of the Site Plan Completeness Certification Form All supplemental studies, reports, plans and renderings. 2 copies of all easements, covenants and restrictions. The appropriate fee, determined from the attached fee schedule. Make checks payable to the Town of Carmet.
payable to the Town of Carmel.
Planning Board Secretary; Date South Engineer; Date D
iown Engineer; Daté



TOWN OF CARMEL SITE PLAN APPLICATION



Per Town of Carmel Code - Section 156 - Zoning

SITE IDENTIFICAT	TION INFO	RMATION	
Application Name:		Application #	Date Submitted:
Lake Casse NY056		18-0011	8318
Site Address; No. 254 Street: Croton Falls Road Ha	amilate O	1	
Property Location: (Identify landmarks, distance from	amiet: Car	4 1	
		Liobertà ii	ocated .3 miles west of
of Shear Hill Rd/Croton Falls Rd intersection.			ton Falls Road.
Town of Carmel Tax Map Designation: Section 65.19 Block 1 Lot(s) 43		esignation of Site:	Residential
Property Deed Recorded in County Clerk's Office Date 11/10/15 Liber 2001 Page 27	Liens, M Yes X	ortgages or other E No	ncumbrances
Existing Easements Relating to the Site	Are Ease	ments Proposed?	
No Yes X Describe and attach copies: Easemen	No Ye	es X Describe and	attach copies:
over City of NY and Barile land (see site plans)	Eleceti	ric & Telephone (se	e site plans)
Have Property Owners within a 500' Radius of the \$	Site Been I	dentified?	
Yes X No Attached List to this Appl			
APPLICANT/O			
Property Owner: Richard J. Diehl & Rosemarie Diehl	Phone #:	845-656-1707	Email:
Owners Address:	Fax#:	043-030-1707	diamondnails123@aol.cor
late and on the	wn: Carme	el .	State: NYZip; 10541
Applicant (If different than owner):		203-297-6345	Email:
Homeland Towers, LLC & Verizon Wireless	Fax#:		rv@homelandtowers.us
Applicant Address (If different than owner): No. 9 Street: Harmony Street, 2nd Floor Tou	<i>vn:</i> Danbu	10/	DistricT 7: 00040
Individual/ Firm Responsible for Preparing Site		860-663-1697	State:CT Zip: 06810 Email:
Plan:	Fax#:	1	Littaii.
Robert Burns/APT Engineering	8	60-663-0935	rburns@allpointstech.com
Address:			
No. 3 Street: Saddlebrook Drive Too Other Representatives:	vn: Killingv		State: CTZip: 06419
Other Representatives:	Phone #: Fax#:		Email:
Owners Address:	I CLAY.	l.	
No. Street; Tow	vn:		State: Zip:
PROJECT O	ESCRIPTION	NO	
Describe the project, proposed use and operation t			
New construction by Homeland Towers of a propos		telecommuication fa	cility to be located within
a 36' x 100' fenced compound. Installation of Verizon Wireless antennas and associated equipment.			
			ı

TOWN OF CARMEL SITE PLAN APPLICATION

PROJECT INFORMATION				
Lot size:	Square footage of all existing structures (by floor):			
Acres: 26.57 Square Feet: 1,110,78	2,210 sq ft Floor 1 and 2,265 sq ft Floor 3			
# of existing parking spaces: 2	# of proposed parking spaces:			
# of existing dwelling units: 1	# of proposed dwelling units			
Is the site served by the following public ut	lity infrastructure:			
" is project in sewer district or will pri	Vate sentic system(s) he installed? No			
If yes to Sanitary Sewer answer the	following:			
Does approval exist to connect to sewer main? Yes: ☐ No: ☐X Is this an in-district connection? No Out-of district connection? No What is the total sewer capacity at time of application? N/A What is your anticipated average and maximum daily flow N/A For Town of Carmel Town Engineer What is the sewer capacity				
Water Supply	Yes: ☐ No: 🛛			
If Yes: Does approval exist to connect to water main? Yes: No: □ What is the total water capacity at time of application? What is your anticipated average and maximum daily demand				
Storm Sewer	Yes: ☐ No: ☒			
 Electric Service 	Yes: ☑ No: □			
 Gas Service 	Yes: ☐ No: ဩ			
Telephone/Cable Lines	Yes: 🔯 No: 🗀			
Water Flows Sewer Flows Date				
What is the predominant soil type(s) on the	What is the approximated at the			
What is the predominant soil type(s) on the site? Challed-Charlos Library Local Site? What is the approximate depth to water table?				
Chatfiled CharitoRule가는 Charitele Charitele 25%	>6 feet			
Site slope categories: 0-10% 75% 15-25% 25 % 25-35% 0 % >35% 0%				
Estimated quantity of excavation: Cut (C	.Y.) 320 Fill (C.Y.) 0			
Is Blasting Proposed Yes: No: Inknown: Inkn				
Is the site located in a designated Critical En				
	cuts proposed? What is the sight distance?			
site? Yes: ☒ No: ☐ Yes: ☐ No: ☐ Is the site located within 500' of:	Left N/A Right N/A			
is the aire located mitulu 200, OL:				
• The boundary of an adjoining city, town or village Yes: ☐ No: ☐				
• The boundary of a state or county park, recreation area or road right-of-way Yes: □ No: □				
A county drainage channel line. Yes: 口 No: 以				
The boundary of state or county owned land on which a building is located Yes: D No: D				

TOWN OF CARMEL SITE PLAN APPLICATION

Is the site listed on the State or Federal Register of Historic Place (or substantially contiguous)				
Yes: No: X				
Is the site located in a designated floodplain?				
Yes: No: 🔯				
Will the project require coverage und	er the Current NYSD	EC Stormwater Re	nulations	
			guidations	
			Yes: ☐ No: 🔯	
JAKSI AL-			• •	
Will the project require coverage unde	er the Current NYCD	EP Stormwater Re	gulations	
			Yes: 🔲 No: 💢	
Does the site disturb more than 5,000	en fi	V		
and the state of t	ad it	Yes: 😡 No: 🗆		
Does the site disturb more than 1 acre	.	Yes: No: 🛛		
		res. Er No. La		
Does the site contain freshwater wetla	inds?			
Yes: ☐ No: ☒				
Jurisdiction: NYSDEC: ☐ Town of Care				
	nei: 🗆			
If present, the wetlands must be delineathe Site Plan.	ted in the field by a V	Vetland Professiona	il, and survey located on	
Are encroachments in regulated wetla	nde examplement bases			
Does this application require a	referral to the	ers proposed?	Yes: ☐ No: ☒	
Conservation Board?	referral to the	Environmental Y	es: 🗆 No: 🖸	
	Bams or watercourse	oc? Van 🗆	No. 177	
Does the site contain waterbodies, streams or watercourses? Yes: ☐ No: □				
Are any encroachments, crossings or	Are any encroachments, crossings or alterations proposed? Yes: ☐ No: ☑			
is the site located adjacent to New York City watershed lands? Yes: D. No. D.				
is the project funded, partially or in tot	al, by grants or loan	s from a public so	No: or not adjoining but in vicinity	
tes: ⊔ No: L⊻				
Will municipal or private solid waste di	sposal be utilized?	No		
Public: ☐ Private: ☐				
Has this application been referred to the Fire Department? Yes: ☑ No: □				
What is the estimated time of a set				
What is the estimated time of construc	tion for the project?			
Annr	eximatley 3 months			
	COMPLIANCE MED	OMERCHAN		
Zoning Provision				
Lot Area	Required	Existing	Proposed	
Lot Coverage	120,000	1,320,790	No Change	
Lot Width	15%	03	No Change	
Lot Depth	200	763	No Change	
Front Yard	200	1,372	No Change	
Side Yard	40 25	N/A	N/A	
Rear Yard		384	249	
Minimum Required Floor Area	40 N/A	165	1.100	
Floor Area Ratio	N/A N/A	N/A N/A	N/A	
Height	75'	30'	N/A	
Off-Street Parking	N/A	2	180' "waiver requested	
Off-Street Loading	N/A	N/A	N/A	
		.117.1	IND	

TOWN OF CARMEL SITE PLAN APPLICATION

Will variances be required? Yes: □ No: ⊠़ि	If yes, identify variances:		
PRO	OPOSED BUILDING MATERIALS		
Foundation	Reinforced Concrete and Rebar		
Structural System	Reinforced Genorete and Rebar Steel		
Roof	N/A		
Exterior Walls	N/A		
APP	LICANTS ACKNOWLEDGEMENT		
I hereby depose and certify that all the above statements and information, and all statements and information contained in the supporting documents and drawings attached hereto are true and correct. Raymond Vergati, Homeland Towers, 444 Applicants Name Applicants Signature Sworn before me this			
Milina Joerhu Notary Public	J		
No Commission Fundam . 5/3/	122		



Letter of Authorization

Municipality:
Tax Map Number:

Town of Carmel 65.19-1-43

RE: Owner Authorization

Richard J. Diehl and Rosemarie Diehl ("Owner"), of property located at Croton Falls Road, (identified as Tax Map # 65.19-1-43) in the Town of Carmel, County of Putnam, State of New York, (the "Property") does hereby authorize Homeland Towers, LLC ("Homeland") and its agents and representatives, as Owner's Agent for the purpose of completing, executing, and filing any application(s) with the Town of Carmel and to obtain approvals necessary to permit Homeland's construction and operation of a wireless communications facility on the Property.

By: // // // // By:	
Title:	_
Date: 7-9-18	_
Sworn to before me this 1 day of July, 2018 (NOTARY PUBLIC By: Rosomania Dicha	Denise Nizolek Notary Public, State of New York Registration no. 01N16218997 Qualified in Putnam County Commission Expires March 15, 20
Title: Owner	
Date: 7/9/18	
Sworn to before me this 9 day of July, 2018	Denise Nizolek

Notary Public, State of New York Registration no. 01N16218997 Qualified in Putnam County Commission Expires March 15, 20



SHE PLAN COMPLETENSS CERTIFICATION FORM



All Site Plans submitted to the Planning Board for review shall include the following information and details, as set forth in Section 156-61 B of the Town of Carmel Zoning Ordinance.

This form shall be included with the site plan submission

(A)	Requirement Data	To Se Completed	Waived by the
1	Name and title of person preparing the site plan	by the Applicant	Town
2		D'	
	Name of the applicant and owner (if different from applicant)		
3	Original drawing date, revision dates, scale and north arrow	THE STATE OF THE S	
4	Tax map, block and lot number(s), zoning district	U	
5	All existing property lines, name of owner of each property within a 500' radius of the site	Q	
6	Contour lines at two-foot intervals, grades of all roads, driveways, sanitary and storm sewers	a	
7	The location of all water bodies, streams, watercourses, wetland areas, wooded areas, rights-of-way, streets, roads, highways, railroads, buildings, structures		
8	The location of all existing and proposed easements		
9	The location of all existing and proposed structures, their use, setback dimensions, floor plans, front, side and rear elevations, buildable area.	D	
10	On site circulation systems, access, egress ways and service roads, emergency service access and traffic mitigation measures		
11	Sidewalks, paths and other means of pedestrian circulation		ď
12	On-site parking and loading spaces and travel aisles with dimensions	Ø	
13	The location, height and type of exterior lighting fixtures	Ø	I.
14	Proposed signage		
15	For non-residential uses, an estimate of the number of employees who will be using the site, description of the operation, types of products sold, types of machinery and equipment used	₽ I	ū



SITE PLAN COMPLETENSS CERTIFICATION FORM



	Requirement Data	To Be Completed by the Applicant	Waived by the Town
16	The location of clubhouses, swimming pools, open spaces, parks or other recreational areas, and identification of who is responsible for maintenance		团
17	The location and design of buffer areas, screening or other landscaping, including grading and water management. A comprehensive landscaping plan in accordance with the Tree Conservation Law	e e	
18	The location of public and private utilities, maintenance responsibilities, trash and garbage areas	1	
19	A list, certified by the Town Assessor, of all property owners within 500 feet of the site boundary	d	
20	Any other information required by the Planning Board which is reasonably necessary to ascertain compliance with this chapter	CT/	G

Applicants Certification (to be completed by the licensed professional preparing the site plan:

My seal and signature, meets all of the requirements of §156-61B of the Town of Carmel Zoning Ordinance:

Signature - Applicant

Signature - Owner

7-/24/18 Date

 $\frac{7/31/18}{\text{Date}}$

Professionals Seal



SITE PLAN COMPLETENSS CERTIFICATION FORM



Town Certification (to be comp	leted by the Tow	n)	
requirements of §156-61B of the	hereby confirm e Town of Carme	that the site plan m I Zoning Ordinance:	eets all of the
Kor Frombrette		8/14/18	
Signature - Planning Board Se	cretary	Date	
Ball M		8/16/17	
Signature - Town Engineer		Date	

Full Environmental Assessment Form Part 1 - Project and Setting

Instructions for Completing Part 1

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

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

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

A. Project and Sponsor Information.

Name of Action or Project: Lake Casse / NY056			
Project Location (describe, and attach a general location map):			
254 Croton Falls Road, Mahopac, Putnam County, NY 10541			
Brief Description of Proposed Action (include purpose or need):			
Homeland Towers, LLC proposes to construct a new telecommunications facility at to monopole and support equipment placed within a 36-foot by 100-foot fenced composition and existing access road extending northeast from Croton Falls Road to the from an existing utility pole located across Croton Falls Road and be routed underground.	und within a wider 56-foot by 100)-foot lease area. Access will be	
Name of Applicant/Sponsor:	Telephone: (914) 496	0-0124	
Homeland Towers, LLC	<u> </u>		
	E-Mail: rv@homelan	idtowers.us	
Address: 9 Harmony Street, 2nd Floor			
City/PO: Danbury	State: CT	Zip Code: 06810	
Project Contact (if not same as sponsor; give name and title/role):	Telephone:		
Mr. Ray Vergati	E-Mail:		
Address:			
C: INO		_	
City/PO:	State:	Zip Code:	
Property Owner (if not same as sponsor):	Telephone:		
Richard and Rosemarie Diehl	E-Mail:		
Address: 254 Croton Falls Road	Z Maii.		
City/PO: Mahopac	State: NY	Zip Code:10541	

B. Government Approvals

B. Government Approvals, Funding, or Spo assistance.)	nsorship. ("Funding" includes grants, loans, ta	x relief, and any oth	er forms of financial
Government Entity	If Yes: Identify Agency and Approval(s)	Annlica	tion Date
	Required		non Date projected)
a. City Council, Town Board, ☐Yes☐No or Village Board of Trustees			
b. City, Town or Village ✓Yes ☐No Planning Board or Commission	Site plan and Special permit approval		
c. City Council, Town or ☐Yes☐No Village Zoning Board of Appeals			<u></u>
d. Other local agencies ☐Yes☐No		<u> </u>	
e. County agencies ☐Yes☐No			
f. Regional agencies			
g. State agencies □Yes□No			
h. Federal agencies ☐Yes☐No			
i. Coastal Resources.i. Is the project site within a Coastal Area, or	or the waterfront area of a Designated Inland Wa	iterway?	□Yes Z No
ii. Is the project site located in a communityiii. Is the project site within a Coastal Erosion	with an approved Local Waterfront Revitalizati Hazard Area?	on Program?	□ Yes☑No □ Yes☑No
C. Planning and Zoning			
C.1. Planning and zoning actions.			
Will administrative or legislative adoption, or an only approval(s) which must be granted to enable If Yes, complete sections C, F and G. If No, proceed to question C.2 and complete sections C.2 and complete sections C.2.	nendment of a plan, local law, ordinance, rule of the proposed action to proceed? Applete all remaining sections and questions in Pa		□Yes Z No
C.2. Adopted land use plans.	The second of th		
a. Do any municipally- adopted (city, town, vill where the proposed action would be located?	age or county) comprehensive land use plan(s)	nclude the site	Z Yes□No
If Yes, does the comprehensive plan include spe would be located?			∐Yes Z No
b. Is the site of the proposed action within any lo Brownfield Opportunity Area (BOA); designa or other?) If Yes, identify the plan(s): VC Watershed Boundary	ocal or regional special planning district (for exa ated State or Federal heritage area; watershed m	mple: Greenway anagement plan;	∠ Yes□No
c. Is the proposed action located wholly or partie or an adopted municipal farmland protection If Yes, identify the plan(s):	ally within an area listed in an adopted municipa plan?	al open space plan,	∐Yes☑No

C.3. Zoning	
a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. If Yes, what is the zoning classification(s) including any applicable overlay district? Residential	∠ Yes□No
b. Is the use permitted or allowed by a special or conditional use permit?	∠ Yes N o
c. Is a zoning change requested as part of the proposed action? If Yes, i. What is the proposed new zoning for the site?	□ Yes ☑ No
C.4. Existing community services.	
a. In what school district is the project site located? Mahopac Central School District	
b. What police or other public protection forces serve the project site? Carmel Police Department	
c. Which fire protection and emergency medical services serve the project site? Mahopac Volunteer Fire Department	
d. What parks serve the project site? Mahopac Airport Park, located approximately 3 miles west of the Subject Property.	
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 mix components)? Commercial / Public utility	xed, include all
b. a. Total acreage of the site of the proposed action? b. Total acreage to be physically disturbed? c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.46 acres 0.46 acres	
 c. Is the proposed action an expansion of an existing project or use? i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, mil square feet)? %	Yes No es, housing units,
 d. Is the proposed action a subdivision, or does it include a subdivision? If Yes, i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types) 	□Yes ☑ No
ii. Is a cluster/conservation layout proposed?iii. Number of lots proposed?iv. Minimum and maximum proposed lot sizes? Minimum Maximum	☐Yes ☐No
e. Will proposed action be constructed in multiple phases? i. If No, anticipated period of construction: ii. If Yes:	☐ Yes Z No
 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 prog determine timing or duration of future phases: 	ress of one phase may

f. Does the proje	et include new resid	dential uses?	-		☐Yes Z No
If Yes, show nur	nbers of units propo				
<u> </u> 	One Family	Two Family	Three Family	Multiple Family (four or more)	
Initial Phase					
At completion	_		<u></u>		
of all phases					
g. Does the prope	osed action include	new non-residenti	al construction (inclu	iding expansions)?	✓ Yes No
If Yes,		98	· · · · · · · · · · · · · · · · · · ·	anig cripations).	W 103_110
i. Total number	r of structures	31	400	***	
ii. Dimensions ((in feet) of largest p	roposed structure:	height;	N/A width; and N/A length	
ui. Approximate	e extent of building	space to be neated	or cooled:	square feet	
h. Does the prope	osed action include	construction or oth	ner activities that wil	l result in the impoundment of any	☐ Yes Z No
liquids, such a	s creation of a wate	r supply, reservoir	, pond, lake, waste la	agoon or other storage?	
If Yes,					
i. Purpose of the		· · · · · · · · · · · · · · · · · · ·			
ii. If a water imp	oundment, the prin	cipal source of the	water:	Ground water Surface water strea	ms ☐Other specify:
iii. If other than v	vater, identify the ty	pe of impounded/	contained liquids and	d their source.	
iv. Approximate	size of the propose	d impoundment.	Volume:	million gallons; surface area;	acres
v. Dimensions o	of the proposed dam	or impounding str	ructure:	million gallons; surface area:height;length	acres
vi. Construction	method/materials f	or the proposed da	ım or impounding str	ructure (e.g., earth fill, rock, wood, con-	crete):
D.2. Project Op	orations				
a. Does the prope	sed action include :	any excavation, mi	ning, or dredging, di	uring construction, operations, or both?	☐ Yes ☑ No
materials will r	general site prepara	tion, grading or in	stallation of utilities	or foundations where all excavated	
If Yes:	ciliam onsite)				
	irpose of the excava	ation or dredging?			
				be removed from the site?	
Volume	(specify tons or cul	oic vards):	3, 000.) 10 proposed 10		
 Over wh 	iat duration of time's	?			
iii. Describe natur	re and characteristic	es of materials to b	e excavated or dredg	ged, and plans to use, manage or dispose	e of them.
				, , , , , , , , , , , , , , , , , , , ,	
iv. Will there be	onsite dewatering of	or processing of ex	cavated materials?		Yes No
If yes, descri					
What is the to	tal area to be drade	- 4 c d9			
	tal area to be dredge aximum area to be		tima?	acres	
				acres	
vii. Will the exca	ivation require blast	om or excavation o	ir dredging:	feet	□kr □NI.
ix Summarize site	e reclamation goals	and nlant			∐Yes∐No
JV. WHILLIAM LAW ZAV	o revieniumon beans	and plan			
b. Would the prop	osed action cause of	or result in alteration	on of, increase or dec	crease in size of, or encroachment	Yes No
into any existin	ng wetland, waterbo	ody, shoreline, bear	ch or adjacent area?		LJ 1 60 W 1.0
If Yes:			•		
i. Identify the w	etland or waterbody	y which would be a	affected (by name, w	ater index number, wetland map numb	er or geographic
description):				, , , , , , , , , , , , , , , , , , , ,	<u> </u>

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placer alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in so	nent of structures, or quare feet or acres:
iii. Will proposed action cause or result in disturbance to bottom sediments? If Yes, describe:	□Yes□No
iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation? If Yes:	☐ Yes ☐ No
acres of aquatic vegetation proposed to be removed: expected acreage of aquatic vegetation remaining after project completion:	
or provide delease of addate regotation formatting 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): Describe any proposed realemetrics/mitigation fallowing distribution.	_
v. Describe any proposed reclamation/mitigation following disturbance:	
c. Will the proposed action use, or create a new demand for water?	
If Yes:	□Yes Z No
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:	☐ 1 ¢3 ☐ 140
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?	
If Yes:	□Yes □No
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? If, Yes:	☐ Yes☐No
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/mix	nute.
d. Will the proposed action generate liquid wastes?	
If Yes:	☐ Yes Z No
 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 al 	components and
approximate volumes or proportions of each):	components and
iii. Will the proposed action use any existing public wastewater treatment facilities? If Yes:	□ Yes □No
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? The while for the wastewater discharge?	
v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including spec receiving water (name and classification if surface discharge, or describe subsurface disposal plans):	ifying proposed
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? If Yes: 	□Yes Z No
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)	
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 progroundwater, on-site surface water or off-site surface waters)?	roperties,
If to surface waters, identify receiving water bodies or wetlands:	
Will stommuntary and CC Co	
• Will stormwater runoff flow to adjacent properties? 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	☐Yes☐No
combustion, waste incineration, or other processes or operations?	Z Yes □No
If Yes, identify:	
i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles) remporary construction vehicles.	
ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)	
iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation) mergency propane-fired emergency generator on concrete slab inside shelter	
g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit,	☐Yes Z No
or Federal Clean Air Act Title IV or Title V Permit?	
If Yes: i Is the project site located in an Air quality non-attainment area? (Area routinely or pariodically fails to many	□•• □ _{••}
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 ₂ O)	
•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 methano generation in tonal/year (methic):	
 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 gelectricity, flaring): 	generate heat or
 i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): 	∐Yes ∏ No
j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial	☐Yes Z No
new demand for transportation facilities or services? If Yes:	
i. When is the peak traffic expected (Check all that apply): Morning Evening Weekend	
iii. Parking spaces: Existing Proposed Net increase/decrease	
iv. Does the proposed action include any shared use parking?v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing	☐Yes☐No access, describe:
 vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? 	☐Yes☐No ☐Yes☐No ☐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: dinimal increase for telecommunications equipment for approximately 800 amps to a maximum of 1200 amps	
 ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/l other): /ia local grid 	ocal utility, or
iii. Will the proposed action require a new, or an upgrade to, an existing substation?	□Yes Z No
l. Hours of operation. Answer all items which apply.	_
i. During Construction: Monday - Friday: Normal business hours Monday - Friday: Normal business hours Monday - Friday: Unmanned facility operal	
William, Triang, Triday,	
Saturday:Sunday:Sunday:	
 Sunday: Holidays: Holidays: 	

 m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? If yes: i. Provide details including sources, time of day and duration: 	☐ Yes ☑ No
ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? Describe:	☐Yes□No
n Will the proposed action have outdoor lighting? If yes: i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structure. Timed lighting sources inside compound.	✓ Yes No
ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? Describe: No, trees surrounding compound and access road are to remain, blocking light.	☐Yes ☑No
o. Does the proposed action have the potential to produce odors for more than one hour per day? If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to neare occupied structures:	☐ Yes ☑ No
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? If Yes: i. Product(s) to be stored ii. Volume(s) per unit time (e.g., month, year) iii. Generally describe proposed storage facilities:	□ Yes ☑No
 q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides insecticides) during construction or operation? If Yes: i. Describe proposed treatment(s): 	s, Yes No
 ii. Will the proposed action use Integrated Pest Management Practices? r. Will the proposed action (commercial or industrial projects only) involve or require the management or dispos of solid waste (excluding hazardous materials)? If Yes: i. Describe any solid waste(s) to be generated during construction or operation of the facility: 	☐ Yes ☐No sal ☐ Yes ☑No
 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 was Construction: 	
Operation:	
 iii. Proposed disposal methods/facilities for solid waste generated on-site: Construction: 	
Operation:	

s. Does the proposed action include construction or mod	lification of a solid waste ma	nagement facility?	Yes No
If Yes:	10 1 1 6		
 Type of management or handling of waste proposed other disposal activities): 		or transfer station, composting	g, landfill, or
ii. Anticipated rate of disposal/processing:			
• Tons/month, if transfer or other non-	-combustion/thermal treatme	nt or	
• Tons/hour, if combustion or thermal		111, 01	
	years		
t. Will proposed action at the site involve the commercia		age, or disposal of hazardous	☐Yes Z No
waste?	<i>g</i> ,, e,	-50, or anoposar or manaradas	
If Yes:			
i. Name(s) of all hazardous wastes or constituents to b	e generated, handled or man	aged at facility:	
			
ii. Generally describe processes or activities involving	hazardous wastes or constitu	ents:	
	Madardous (145105 of Collection		
iii. Specify amount to be handled or generatedt	ons/month		
iv. Describe any proposals for on-site minimization, rec	cycling or reuse of hazardous	s constituents:	
v. Will any hazardous wastes be disposed at an existing	g offsite hazardous waste fac	ility?	□Yes□No
If Yes: provide name and location of facility:			
If No: describe proposed management of any hazardous	wastes which will not be ser	it to a hazardous waste facility	y:
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	nroject site		
☐ Urban ☐ Industrial ☐ Commercial ☐ Resid	dential (suburban) 🔲 Rura	al (non-farm)	
✓ Forest Agriculture Aquatic Othe	r (specify):	<u> </u>	
ii. If mix of uses, generally describe: Surrounding area generally forested with residential developmen	t to the porth, west, and south		
Controlling area generally forested with residential development	to the north, west, and south.		
			
b. Land uses and covertypes on the project site.			
Land use or	Current	Acreage After	Change
Covertype	Acreage	Project Completion	(Acres +/-)
Roads, buildings, and other paved or impervious			-
surfaces	0.46		A - 'X
• Forested	0,40	0	- 0.46
Meadows, grasslands or brushlands (non-			
agricultural, including abandoned agricultural)			·
Agricultural Ginalydes estima erabarda field eraembeues etc.)			
(includes active orchards, field, greenhouse etc.)Surface water features	·	+	
(lakes, ponds, streams, rivers, etc.)			
Wetlands (freshwater or tidal)		 	-
Non-vegetated (bare rock, earth or fill)			-
	<u> </u>		
Other Telecommunications Facility and existing	0	0.46	1.0.40
Describe: Telecommunications Facility and existing	U	0.46	+ 0.46

c. Is the project site presently used by members of the community for public recreation? i. If Yes: explain:	□Yes☑No
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? If Yes, i. Identify Facilities:	☐ Yes Z No
v. Identity I definited.	
e. Does the project site contain an existing dam?	☐ Yes Z No
If Yes:	<u> </u>
i. Dimensions of the dam and impoundment:	
• Dam height: feet	
• Dam length: feet	
Surface area: Volume impounded: - Volume	
Volume impounded: gallons OR acre-feet ii Dam's existing hazard classification:	
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,	☐ Yes ✓ No
or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility,	L 1 €SMINO acility?
If Yes:	active.
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:	
m. Describe the results of the project one relative to the confidence of the solid waste management monthly.	
iii. Describe any development constraints due to the prior solid waste activities:	
iii. Describe any development constraints due to the prior solid waste activities:	
	☐Yes Z No
 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 If Yes: 	?
 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 	?
 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 If Yes: 	?
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 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	? urred:
 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 If Yes: 	?
 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 If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occurrenced. 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? 	? urred:
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 If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occurrenced in the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? If Yes: i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site	? urred:
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 If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occur. 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? 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:	? urred: Yes No
 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 If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occur. 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? 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 - Spills Incidents database Provide DEC ID number(s): 	? urred: Yes No
 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 If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occur. 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? 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 - Spills Incidents database Provide DEC ID number(s): 	? urred: ☐Yes☑ No ☐Yes☐No
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 If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occultive. 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? 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 – Spills Incidents database Provide DEC ID number(s): Provide DEC ID number(s):	? urred: Yes No
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 If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occurrently occurrently activities occurrently actions been conducted at or adjacent to the proposed site? 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 - Spills Incidents database Provide DEC ID number(s): Yes - Environmental Site Remediation database Neither database ii. If site has been subject of RCRA corrective activities, describe control measures:	? urred: Yes No
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 If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred in the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? 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 - Spills Incidents database Provide DEC ID number(s): Yes - Environmental Site Remediation database 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?	? urred: Yes No
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 If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occurrently occurrently activities occurrently actions been conducted at or adjacent to the proposed site? 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 - Spills Incidents database Provide DEC ID number(s): Yes - Environmental Site Remediation database Neither database ii. If site has been subject of RCRA corrective activities, describe control measures:	? urred: Yes No

v. Is the project site subject to an institutional control	limiting property uses?	Yes Z No
 If yes, DEC site ID number: Describe the type of institutional control (e.g 	deed restriction or easement):	
Describe any use limitations:	, <u></u>	
Describe any engineering controls: Describe any engineering controls: Descr		
 Will the project affect the institutional or eng Explain: 		☐ Yes ☐ No
Zapitini.		
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 Z No
If Yes, what proportion of the site is comprised of bedi	rock outcroppings?	
c. Predominant soil type(s) present on project site:	Chatfield-Chariton complex 41 o	
	Charlton-Chatfield complex 25 g	6
		<u> </u>
d. What is the average depth to the water table on the p	project site? Average: >6 feet	
e. Drainage status of project site soils: Well Drained	1: <u>75</u> % of site	
Moderately V		
Poorly Drain		
f. Approximate proportion of proposed action site with	slopes: \bigcirc 0-10%: \bigcirc 75 % of site \bigcirc 10-15%: \bigcirc 25 % of site	
	15% or greater: 25% of site	
g. Are there any unique geologic features on the project		□Yes☑No
If Yes, describe;		
h. Surface water features.	g on other works the Rev C 1 P	
i. Does any portion of the project site contain wetland ponds or lakes)?	s of office waterbodies (including streams, fivers,	□Yes ☑ No
ii. Do any wetlands or other waterbodies adjoin the pro-	pject site?	Z Yes□No
If Yes to either <i>i</i> or <i>ii</i> , continue. If No, skip to E.2.i.		
<i>iii.</i> Are any of the wetlands or waterbodies within or as state or local agency?	djoining the project site regulated by any federal,	✓ Yes □No
	y on the project site, provide the following information:	
Change at No.	Classification	
Lakes or Ponds: Name	Classification Approximate Size 8.35	
Wetlands: Name Riverine (R3UBH) (lo Wetland No. (if regulated by DEC)	cated 550' E and NE) Approximate Size 8.35	
v. Are any of the above water bodies listed in the most	recent compilation of NYS water quality-impaired	□Yes ☑ No
waterbodies?		
If yes, name of impaired water body/bodies and basis for Note: Project located in NYSDEC Wetland Checkzone, however	or listing as impaired: r, site is wooded, no hydric indicators and no hydric soils within 300	feet
i. Is the project site in a designated Floodway?		☐Yes Z No
j. Is the project site in the 100 year Floodplain?		☐Yes Z No
k. Is the project site in the 500 year Floodplain?		□Yes Z No
1. Is the project site located over, or immediately adjoin	ing, a primary, principal or sole source aquifer?	☐Yes ✓ No
If Yes:i. Name of aquifer:		I
voi uquitot.		

x1 .20 .1 1 1		<u> </u>	
m. Identify the predominant wildlife specie The Project Site is consists of	s that occupy or use the project site: the Project Site is located in the vicinity		
undisturbed natural forested habitat.	of the Indiana Bat and the Northern		
Based upon a review of available data	Long-eared Bat. (see "o" below)		
n. Does the project site contain a designated If Yes:			∏Yes Z No
i. Describe the habitat/community (compo	sition, function, and basis for designation	on):	
ii. Source(s) of description or evaluation:			
iii. Extent of community/habitat:	-		
 Currently: 	 _	acres	
	proposed:	acres	
 Gain or loss (indicate + or -); 		acres	
o. Does project site contain any species of plendangered or threatened, or does it contains. The Project Site is in the vicinity of the Indiana Elements was identified, however, as the area is well as the site of the Indiana Elements.	n any areas identified as habitat for an Bat (Endangered) and the Northern Long-e coded it is recommended that tree clearing	endangered or threatened spec ared Bat (Threatened). It should be g be restricted from April 1 to Se	pe noted, no critical ptember 30 to avoid
ppotential roosting bats. Additionally, the Bog Tu	rtle (Threatened) was identified within the	vicinity of the Project Site. No ma	apped wetlands were t
ridentified at the Project Site, however further re		nt of Environmental Conservation	and U.S. Fish and
Wildlife Service New York Ecological Services F	ield Office is needed.		
p. Does the project site contain any species	of plant or animal that is listed by NYS	as rare, or as a species of	☐Yes Z No
special concern?			
			
q. Is the project site or adjoining area curren		τ shell fishing?	□Yes ∠ No
If yes, give a brief description of how the pro-	oposed action may affect that use:		
F2 Declaration in the Declaration of the Declaratio	January Brook and City		
E.3. Designated Public Resources On or I			
a. Is the project site, or any portion of it, loca		certified pursuant to	☐Yes ∑ No
Agriculture and Markets Law, Article 25-			
If Yes, provide county plus district name/nu	mber:		
b. Are agricultural lands consisting of highly	productive soils present?		☐Yes Z No
i. If Yes: acreage(s) on project site?	1		
ii. Source(s) of soil rating(s):			
c. Does the project site contain all or part of Natural Landmark?	, or is it substantially contiguous to, a r	egistered National	☐Yes Z No
If Yes:			
i. Nature of the natural landmark:	Biological Community Ge	ological Feature	
ii. Provide brief description of landmark, in	ncluding values behind designation and	approximate size/extent:	
			
d. Is the project site located in or does it adjo	in a state listed Critical Environmental	Area?	□Yes☑No
If Yes:	a como notos Cristos Environmentar	A AA \$44.6	T COM INC
ii. Basis for designation:			
iii. Designating agency and date:			

e. Does the project site contain, or is it substantially contiguous to, a which is listed on, or has been nominated by the NYS Board of His State or National Register of Historic Places? If Yes:		☐ Yes ☑ No
i. Nature of historic/archaeological resource: Archaeological Si ii. Name:	te Historic Building or 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 archaeological sites on the NY State Historic Preservation Office (☐Yes Z No
g. Have additional archaeological or historic site(s) or resources been lf Yes:		□Yes ☑ No
i. Describe possible resource(s):ii. Basis for identification:		
h. Is the project site within fives miles of any officially designated an scenic or aesthetic resource? If Yes:		□Yes Z No
 i. Identify resource: ii. Nature of, or basis for, designation (e.g., established highway ove etc.): iii. Distance between project and resource: 	erlook, state or local park, state historic trail or miles.	scenic byway,
i. Is the project site located within a designated river corridor under		☐ Yes Z No
Program 6 NYCRR 666? If Yes:	and white, became that recordance in revers	103 <u>w</u>
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 y If you have identified any adverse impacts which could be associate measures which you propose to avoid or minimize them.		npacts plus any
G. Verification I certify that the information provided is true to the best of my know		
Applicant/Sponsor Name Homeland Towers LLC	Date July 31, 2018	
Signature Tama Troutman	Title Consultant for Applicant	

Ecological Solutions, LLC

Connecticut 1248 Southford Road Southbury, CT 06488 Phone (203) 910-4716 ecolsoi@aol.com

June 8, 2018

Ray Vergati Homeland Towers, LLC 9 Harmony Street, 2nd Floor Danbury, CT 06810

> Re: Wetland Delineation 254 Croton Falls Road Site Town of Carmel, Putnam County, New York

Dear Ray:

Ecological Solutions, LLC completed a wetland assessment at the proposed cell tower site located at 254 Croton Falls Road in accordance with the Army Corps of Engineers (USACE) Wetlands Delineation Manual (January 1987), Routine Determination Method and Northcentral/Northeast supplement and Town of Carmel Code Chapter 89 on May 26, 2018. There is no New York State Department of Environmental Conservation (NYSDEC) regulated wetland in the project area.

The detailed field investigation included:

- 1. Identification of vegetation species to determine whether there was a dominance of hydrophytic plants and areas containing transitional but primarily wetland-oriented species.
- 2. Determination of soil features for hydric (poorly and very poorly drained) natural soils.
- 3. Observation of site features displaying evidence of wetland hydrology based on the presence of inundated areas, apparent high seasonal water tables, and evidence of saturation within 12 inches of the surface (considered the root zone) during sufficient periods during the growing season to provide for anaerobic/hydric soil conditions.

No wetlands were observed on the project site. A wetland area is located on an adjacent property to the east at the driveway entrance from Croton Falls Road which appears greater than 100 feet away. Also a watercourse exists on the south side of Croton Falls Road and is estimated to be greater than 100 feet from the driveway entrance from Croton Falls Road.

If you need any additional information, please contact me.

Sincerely, ECOLOGICAL SOLUTIONS, LLC

Michael Nowicki

Biologist

617.20 Appendix B State Environmental Quality Review VISUAL EAF ADDENDUM

This form may be used to provide additional information relating to Question 11 of Part 2 of the Full EAF. (To be completed by Lead Agency) Distance Between Project and Resource (in Miles) Visibility 1 Would the project be visible from: $0 - \frac{1}{4}$ 1/4-1/2 1/2 - 3 3-5 5+ A parcel of land which is dedicated to and available **√** to the public for the use, enjoyment and appreciation of natural or man-made scenic qualities? Lake Casse **V** An overlook or parcel of land dedicated to public observation, enjoyment and appreciation of natural or man-made scenic qualities? Lake Casse A site or structure listed on the National or State **V** Registers of Historic Places? Gilead Cemetery State Parks? Donald J. Trump State Park The State Forest Preserve? Centennial Watershed State Forest $\overline{\mathsf{V}}$ National Wildlife Refuges and State Game Refuges? Woods-Trout Wilflife Refuge **V** National Natural Landmarks and other outstanding natural features? US Route 6 National Park Service lands? Weir Farm National Historic Site Rivers designated as National or State Wild, Scenic or Recreational? Delaware Wild and Scenic River **|** Any transportation corridor of high exposure, such as part of the Interstate System, or Amtrak? US Route 6 ✓ A governmentally established or designated interstate or inter-county foot trail, or one formally proposed for establishment or designation? Tactonic State Parkway **✓** A site, area, lake, reservoir or highway designated as scenic? Tactonic State Parkway Municipal park, or designated open space? Mahopac Airport Park County road? CR 34 - Croton Falls Road $\overline{\mathsf{V}}$ State road? US Route 6 Local road? Croton Falls Road * Visibility to be confirmed Is the visibility of the project seasonal? (i.e., screened by summer foliage, but visible during other seasons) 2. Yes Are any of the resources checked in question 1 used by the public during the time of year during which the project will be visible? 3. **√**Yes

DESCRIPTION OF EXISTING VISUAL ENVIRONM	ENT								
4. From each item checked in question 1, check those which generally describe the surrounding environment.									
				Within *¼ mile *1 mile					
Essentially undeveloped									
Forested									
Agricultural									
Suburban Residential									
Industrial									
Commerical									
Urban									
River, Lake, Pond									
Cliffs, Overlooks									
Designated Open Space									
Flat									
Hilly									
Mountainous									
Other NOTE: add attachments as needed									
5. Are there visually similar projects within:									
*½ mile ☐Yes ↓ No 1 mile ☐] Yes	√ No 2 miles	Yes No	3 miles 📝 Yes 🔲 No					
*Distance from project site is provi	ded for a	assistance. Sub	stitute other distance	es as appropriate.					
EXPOSURE 6. The annual number of viewers likely to obs NOTE: When user data is unavailable or unknown, to	erve the use best	proposed projed estimate.	et is <u>6861</u>	? NYS DOT DATA					
CONTEXT 7. The situation or activity in which the viewer.	s are eng	gaged while view	ring the proposed ac	ction is:					
•			QUENCY						
			Holidays/						
Activity Travel to and from work Involved in recreational activities Routine travel by residents At a residence At worksite Other	Daily O O O O	Weekly O O O O O	Weekends O O O O O O O	Seasonally O O O O O O O O O O					
				Reset					



Honorable Chairman Harold Gary and Members of the Planning Board Town of Carmel Town Hall 60 McAlpin Avenue Mahopac, New York 10541

Re:

Site Plan and Special Permit Application for 254 Croton Falls Road, Mahopac, New York

Co-location commitment letter

Dear Hon, Chairman Gary and Members of the Planning Board:

As owner of the above referenced proposed tower and as required under §156-62(F)(1)(s) of the Town of Carmel Code, Homeland Towers, LLC ("Homeland Towers") hereby consents to allow additional antennas (for purposes of collocating) on any new antenna towers, if feasible.

Very truly yours,

Homeland Towers, LLC

By: Name: Raymond Vergati Title: Regional Manager



Town of Carmel 60 McAlpin Avenue Mahopac, NY 10541

July 17, 2018

RE: Homeland Towers Site Name: Lake Casse NY056

254 Croton Falls Road Mahopac, NY 10541 Structural Certification

To Whom it May Concern:

Homeland Towers, LLC is proposing the installation of a public utility wireless telecommunications facility, consisting of a 180' monopole ("Tower") with antennas mounted thereon.

The proposed Tower, all attachments, and the Tower's foundation will be designed to meet the ANSI/TIA-222-G "Structural Standard for Antenna Supporting Structures and Antennas" and all county, state and federal structural requirements for loading, including wind and ice loads. The Tower will be designed to be able to support at least four (4) antenna arrays and emergency services equipment.

Should you have any questions, please do not hesitate to call me at (860) 663-1697.

Sincerely,

APT Engineering

Michael S. Trodden, P.E. Senior Structural Engineer



APT ENGINEERING

	360-663-0935	$\cdot FAX$	· PHONE 860-663-1697 ·	CT 06419	· KILLINGWORTH,	J 3 SADDLEBROOK DRIVE	_
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OPINION LETTER

June 28, 2018

Christine Vergati Homeland Towers, LLC 9 Harmony Street, 2nd Floor Danbury, CT 06810

RE:

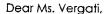
NY056 - Lake Casse, NY Airspace Analysis Latitude (NAD-83): 41° 22' 40.54" N

Longitude (NAD-83): **Ground Elevation:** Tower tip height:

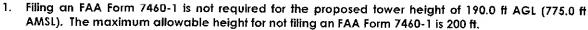
73° 42' 14.07" W 585.0 ft AM\$L 190.0 ft AGL

Overall height:

775.0 ft AMSL



Our airspace analysis results for the NY056 - Lake Casse, NY site are as follows:



- 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 filling 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 775.0 ft AMSL overall height will be 45 days. The FAA Form 7460-1 for NY056 - Lake Casse, NY at 190.0 ft AGL was not filed as of June 29, 2018.
- 5. The proposed site is 9.644 nm West from the nearest public landing facility DXR: Danbury Muni. At an overall height of 775.0 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 alide 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 96NY: Massaro, which is a heliport type landing facility not eligible for study under FAR Part 77 sub-Part C. It is 1.58 nm West from the proposed site.
- 8. The proposed 190.0 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 WLNA, which is 12.03 mi (19358 meters) away bearing 246.5°. WLNA AM is operating a 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 190.0 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)































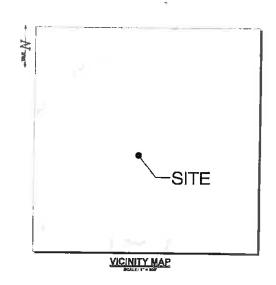






HOMELAND TOWERS, LLC WIRELESS TELECOMMUNICATIONS FACILITY

LAKE CASSE 254 CROTON FALLS ROAD CARMEL, NY 10541



DRAWING INDEX

T-1 TITLE SHEET & INDEX

1 - 3 TOPOGRAPHIC SURVEY

R-1 TO R-2 1,000' RADIUS MAP & PROPERTY OWNERS

SP-1 SITE PLAN

SP-2 PARTIAL SITE PLAN

CP-1 COMPOUND PLAN

A-1 ELEVATIONS

A-2 ELEVATIONS

EC-1 EROSION CONTROL NOTES

EC-2 EROSION CONTROL DETAILS

C-1 VERIZON EQUIPMENT PLAN & DETAILS

C-2 VERIZON ANTENNA PLAN & DETAILS

C-3 SITE DETAILS

SITE INFORMATION

PHOJECT LOCATION: 254 GRUTON FALLS ROAD CARMEL, NY 10541

PROJECT DESCRIPTION: RAWLAND SITE W/ GROUND SOUIPMENT WITH N

3,600 SF TELECOMMUNICATIONS COMPOUND W/ NEW 180's AGL, MONOPOLE

PROPERTY DEVELOPER: HOMELAND TOWERS, LLC 9 HARMONY STREET 2ND FLOOR DANBURY, CT 05810

DEVELOPER CONTACT, RAY VERGATI (203) 297-8345

ENGINEER CONTACT. ROBERT C. BURNS (860) 663-1697 x206

LATTUDE: 41° 22' 40.5409'N LONGITUDE: 78° 42' 14.0726'W ELEVATION: 586.6'= AMBL

SECTION: 85 19

SLOCK: 1 LOT 43 ZONE RESIDENTIAL

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ADD. 3 SADDLEB ROOK DRIVE
KILLINGWORTH, CT BIA19

DEVELOPER: HOMELAND TOWERS CIC ADDRESS SHAMMONY STREET 2ND FLOOM CAMBURY, CT 96218

CARBILARY, CO 96319

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HOMELAND TOWERS LAKE CASSE SITE 284 CROTON FALLS ROAD ADDRESS CARNEL BY 19641

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TLE SHEET & INDEX

OWNER:

RICHARD J. & ROSEMARIE DIEHL 254 CROTON FALLS ROAD MAHOPAC, NY 10641

APPLICANTS:

HOMELAND TOWERS, LLC

OMELAND TOWERS, LL 9 HARMONY STREET 2NO FLOOR DANBURY, CT 08810 PAY VERSATI (203) 297-6345

VERIZON 4 CENTEROCK RD. WEST NYACK, NY 10994

HOMELAND PROJECT ATTORNEY:

SNYDER & SNYDER, LLP 94 WHITE PLAINS ROAD TARRYTOWN, NY 10591 (914) 333-0700

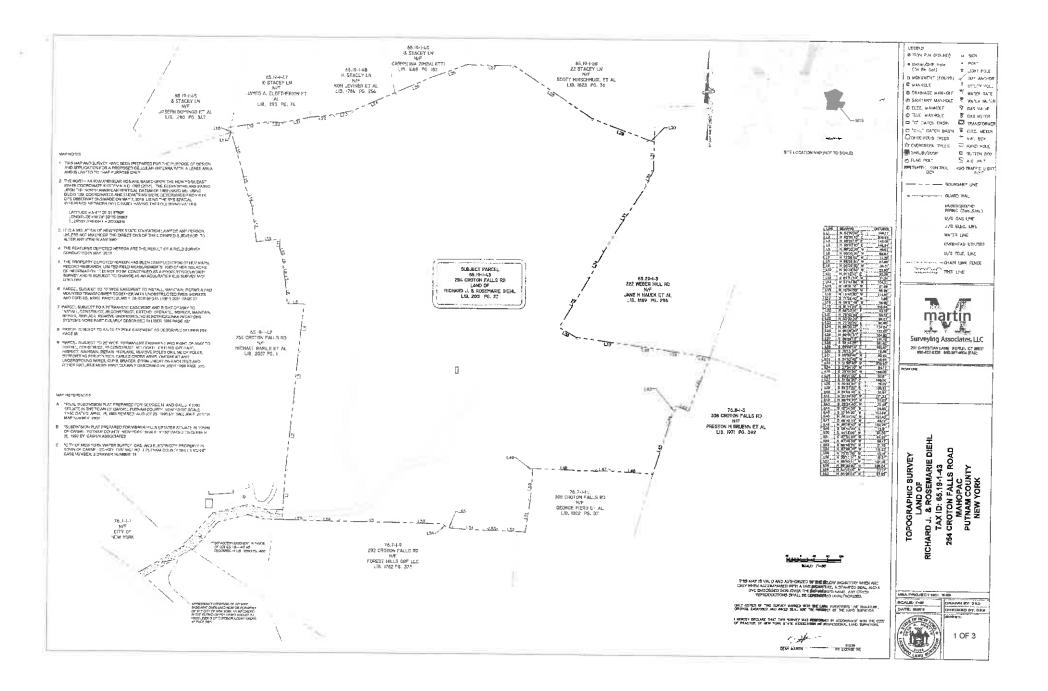
POWER PROMDER NYSEG: (585) 454-2223 TELCO PROMDER:

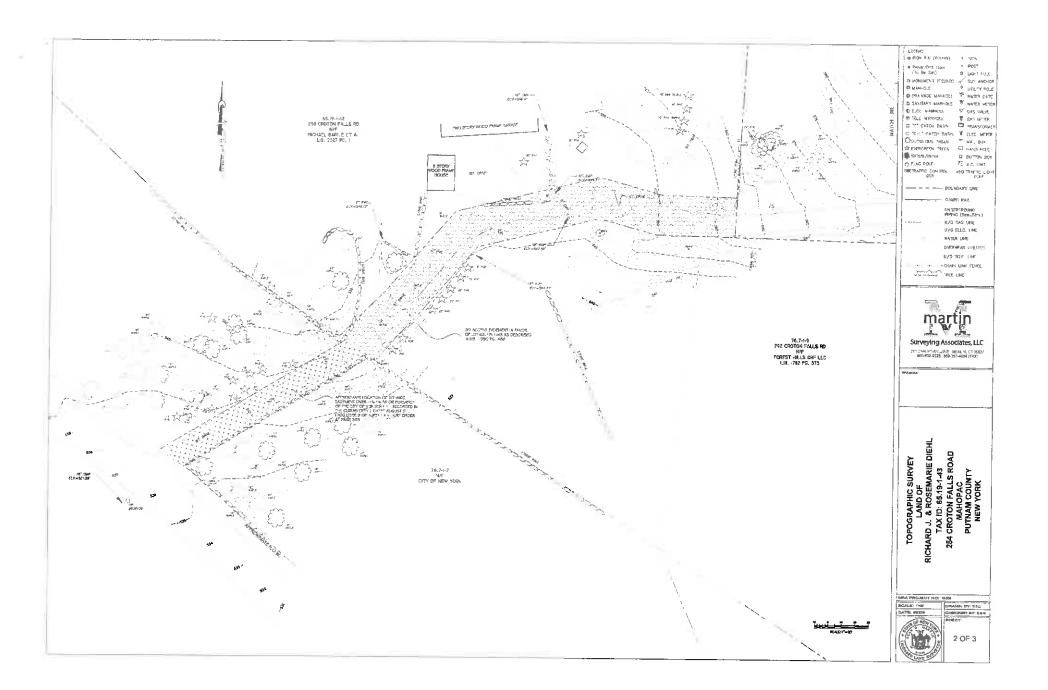
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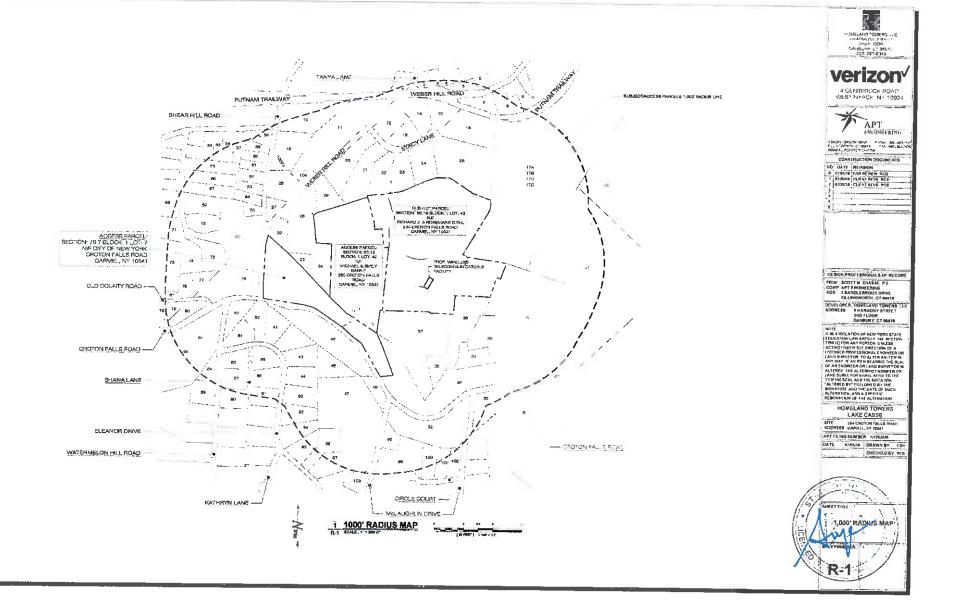
(300) 902-7952

GOVERNING CODES: 2015 IBO W/ 2017 NYS UNIFORM CODE SUPPLEMENT NATIONAL ELECTRIC CODE TIA-222-Q









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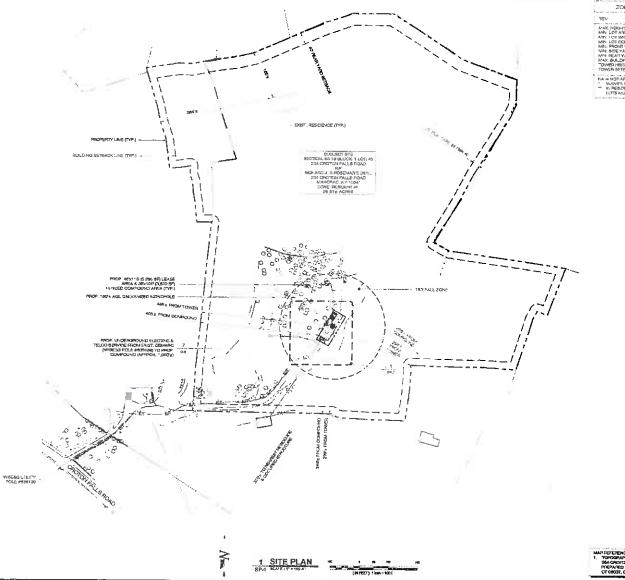
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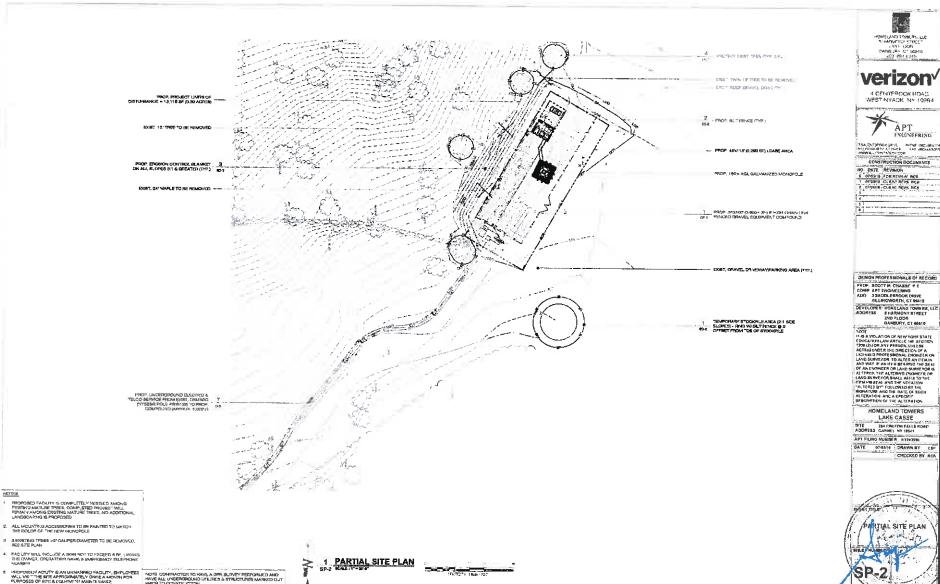
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SITE PLAN

MAY REFERENCES:

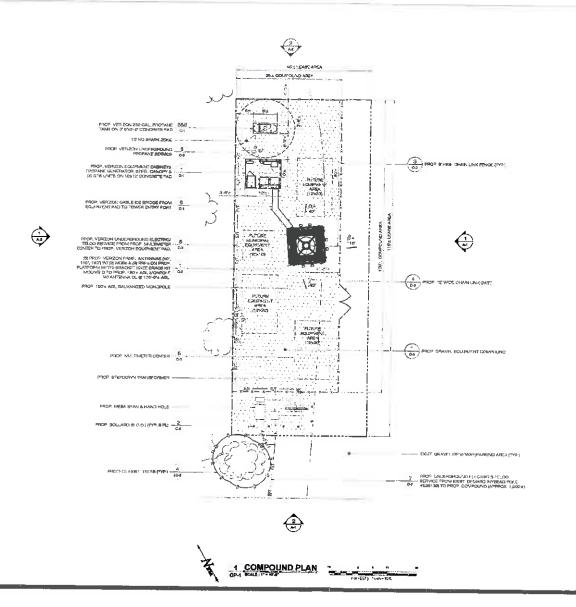
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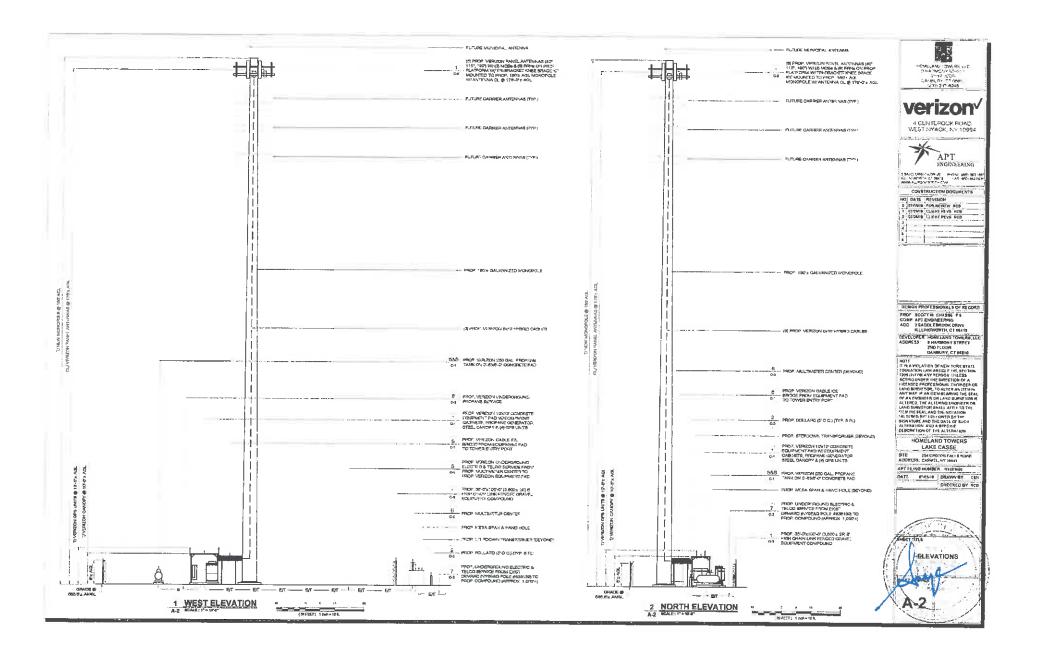
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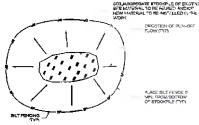
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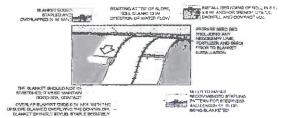
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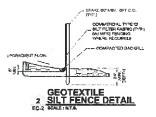
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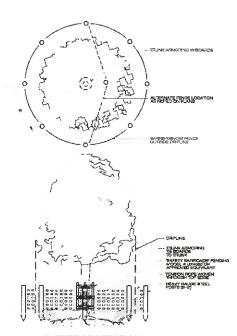
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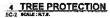
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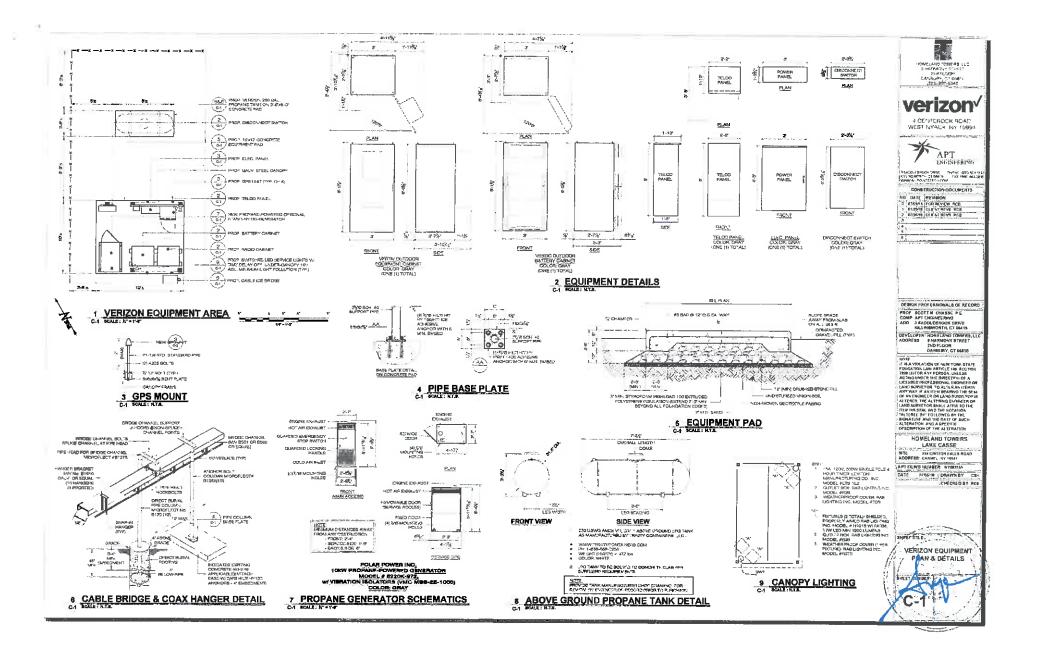
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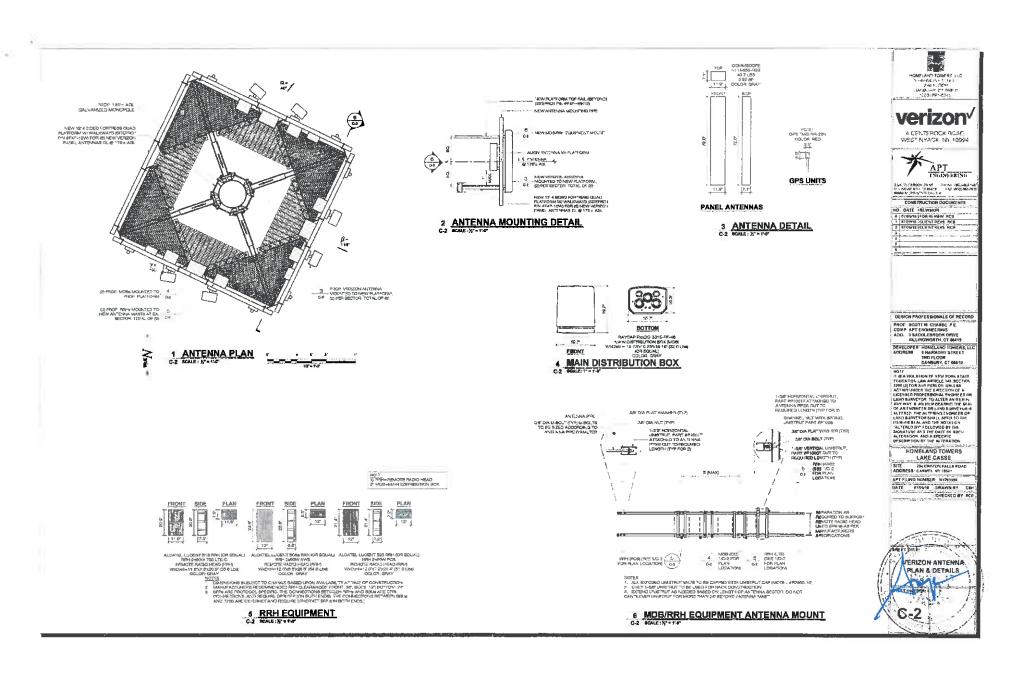
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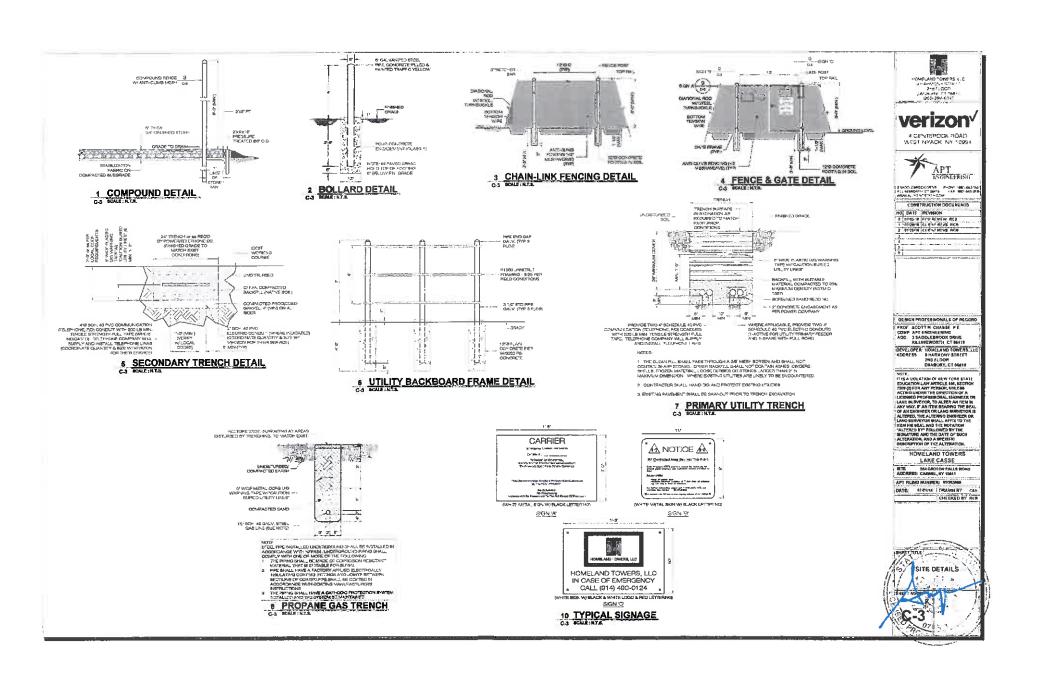
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Pinnacle Telecom Group

Professional and Technical Services

Antenna Site FCC RF Compliance Assessment and Report

Homeland Towers, LLC

Site "NY056 – Lake Casse" 254 Croton Falls Road Mahopac, NY

May 17, 2018

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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 180-foot monopole to be located at 254 Croton Falls Road in Mahopac, NY.

Homeland Towers refers to the prospective site as "NY056 – Lake Casse", and the proposed pole will accommodate the directional panel antennas of up to four wireless carriers. 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 is 1.0971 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 90 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, 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;

- 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 160-foot pole will be able to accommodate as many as four wireless carriers' antennas. 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 pole is 10 feet. In this case, the Verizon Wireless antennas will mount at a center line of 176 feet and we will assign antenna centerline-heights to the three other assumed wireless collocators at 166 feet, 156 feet and 146 feet.

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 two 60-watt channels per antenna sector. In

the 1900 MHz band, Verizon uses two 60-watt channels per antenna sector. In

the 2100 MHz band, Verizon uses two 90-watt channels 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.

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.

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: 176 feet

Sprint: 166 feet

T-Mobile: 156 feet

AT&T: 146 feet

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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, below, 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.

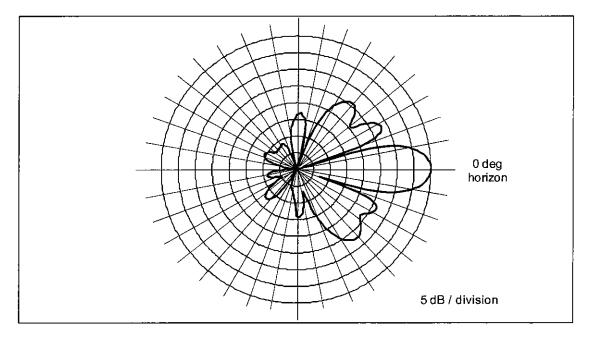


Figure 1. 1900 MHz Directional Panel Antenna – Vertical-plane Pattern

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% =
$$(100 * TxPower * 10 (Gmax-Vdisc)/10 * 4) / (MPE * 4π * R2)$$

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, below.

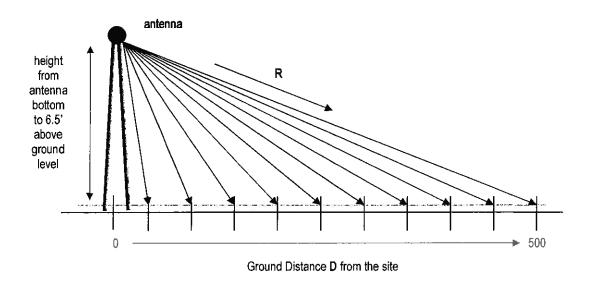


Figure 2. Street-level MPE% Calculation Geometry

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.
- 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.

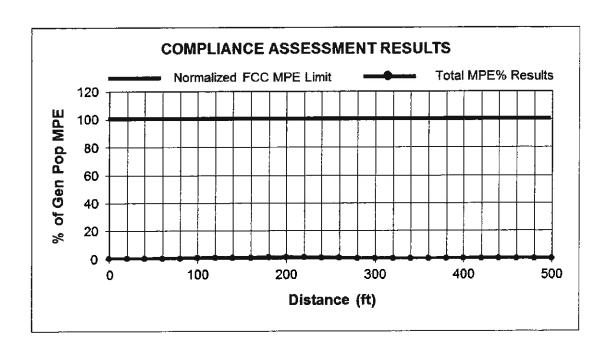
The net result of these assumptions is to intentionally and significantly overstate the calculated RF levels relative to the RF levels that will actually occur – and the purpose of this conservatism is to allow "safe-side" conclusions about compliance with the MPE limit.

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%	Sprint MPE%	T-Mobile MPE%	AT&T MPE%	Total MPE%
0	0.0014	0.0025	0.0008	0.0256	0.0346
20	0.0052	0.0049	0.0016	0.0578	0.0780
40	0.0185	0.0034	0.0075	0.0661	0.0965
60	0.0465	0.0087	0.0227	0.1294	0.2244
80	0.0928	0.0105	0.0117	0.3421	0.4651
100	0.1419	0.0120	0.0185	0.4768	0.6782
120	0.1539	0.0059	0.0771	0.5026	0.7704
140	0.0991	0.0200	0.1778	0.3583	0.6594
160	0.0530	0.0211	0.2759	0.4679	0.8262
180	0.1904	0.0280	0.2914	0.5279	1.0691
200	0.3767	0.0241	0.1723	0.4623	1.0971
220	0.4572	0.0351	0.0368	0.3780	0.9513
240	0.3660	0.0319	0.0140	0.3650	0.7987
260	0.1817	0.0175	0.0270	0.3381	0.5800
280	0.0515	0.0133	0.0383	0.2749	0.3932
300	0.0317	0.0197	0.0331	0.1431	0.2387
320	0.0273	0.0187	0.0154	0.0812	0.1481
340	0.0288	0.0091	0.0108	0.0385	0.0874
360	0.0420	0.0112	0.0190	0.0453	0.1209
380	0.0518	0.0224	0.0402	0.0614	0.1842
400	0.0570	0.0358	0.0644	0.0780	0.2468
420	0.0573	0.0427	0.0815	0.0715	0.2636
440	0.0536	0.0394	0.0759	0.0866	0.2657
460	0.0472	0.0302	0.0502	0.1037	0.2376
480	0.0437	0.0279	0.0465	0.1274	0.2471
500	0.0387	0.0211	0.0184	0.1181	0.1978

As indicated, the overall worst-case calculated result is 1.0971 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 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 is 1.0971 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 90 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.
- 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

Director- RF Engineering

Pinnacle Telecom Group, LLC

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5/17/18

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.

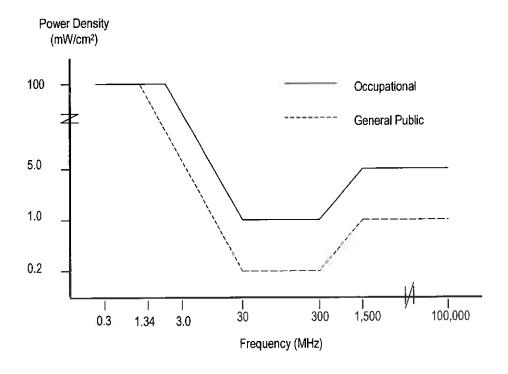
The specified continuous exposure MPE limits are based on known variation of human body susceptibility in different frequency ranges, and a Specific Absorption Rate (SAR) of 4 watts per kilogram, which is universally considered to accurately represent human capacity to dissipate incident RF energy (in 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/cm²). The table on the next page lists the FCC limits for both occupational and general population exposures, using the mW/cm² 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 mathand 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



Independent Radio Frequency Report Regarding a proposed Wireless Communications Facility For New York SMSA Limited Partnership

Site ID: "Lake Casse"

254 Croton Falls Road Mahopac, NY Putnam County

Prepared for New York SMSA Limited Partnership d/b/a Verizon Wireless

By

PierCon Solutions, LLC July 31, 2018

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I PURPOSE AND SCOPE

PierCon Solutions LLC, an engineering firm specializing in wireless communications, performed an independent analysis regarding the radiofrequency engineering aspects of the proposal by New York SMSA Limited Partnership, d/b/a Verizon Wireless to construct and operate a wireless telecommunications facility consisting of antennas at 254 Croton Falls Road, Mahopac, NY. The purpose of this site is to relieve a significant gap in service in Verizon Wireless' network caused by a significant coverage gap. The following report describes the results of this analysis and how those results apply to the purpose of the proposed site.

In preparation for conducting this analysis, PierCon Solutions obtained applicable engineering data from Verizon Wireless, reviewed coverage propagation studies, considered the potential for alternative site locations and considered relevant portions of the Town of Carmel's ordinance for a Wireless Telecommunications.

The following report results from a thorough independent study and analysis (from a radiofrequency engineering perspective) of the applicant's proposal in consideration of the Town of Carmel's stated zoning goals and restrictions. It includes responses to specific sections of the Land Development Ordinance of the Town of Carmel, addressing those provisions outlined in the Wireless Telecommunications ordinance.

2 GENERAL OVERVIEW

Verizon Wireless is a commercial wireless communications service provider licensed by the Federal Communications Commission (FCC) to provide personal wireless services throughout the Putnam County area. The wireless telecommunications facility proposed in this application is to provide coverage for voice and data in the LTE service for three different frequency bands.

The FCC assigns licenses in the 700, 850, 1900, and 2100 MHz frequency bands, all of which Verizon Wireless has obtained licenses. The FCC refers to the 700 MHz band as the 700 band, 850 MHz band as the Cellular band, 1900 MHz as the PCS band, and 2100 MHz as the AWS band (the bands will be referred to by their FCC names in this report). While the PCS and AWS bands have many advantages to users and providers, radio coverage at PCS and AWS bands is adversely affected by various local factors more than cellular and 700 bands. PCS and AWS coverage is more sensitive to such factors as topography, terrain, close-in clutter (trees, nearby foliage, buildings), and general area foliage.

The general use of each frequency band varies as well. For Verizon Wireless, the Cellular frequency band handles older 3G technology (speeds of 500Kbits/sec to 1000 Kbits/sec) with a portion reserved for LTE (4G) services. New wireless facilities are no longer equipped with this frequency band as it is currently in transition to become an all LTE band. All three other frequency bands, 700, PCS, and AWS serve Fourth Generation (4G) data (5 MB/sec and greater).

The current 4th generation personal wireless service mobile network technology in use today is LTE. While users still have access to the legacy 3rd generation technology, most network traffic and all newer devices operate on the 4G / LTE services. When engaging in a VoLTE call, the user device will connect to the public switched telephone network (PSTN) through a gateway in order to complete a call to a non-LTE device. For example, a person making an emergency E911 call from a mobile device to a public safety operator on a landline, such emergency call will be routed through the PSTN.

A wireless base station facility communicates with each user's mobile handset through a pair of wireless frequencies. The operation of a commercial wireless communications system is dependent upon an intermeshed network of wireless communication facilities — often called base stations or cell sites. Each wireless communications facility is designed to use low transmit power and provide a limited broadcast range. In order to provide seamless communications, it is essential that the radio coverage from each facility overlaps with adjacent facilities. This design factor allows users to engage in uninterrupted wireless telephone conversations and remain connected as they move across a geographic

region. A gap in coverage exists when the wireless user cannot reliably initiate, receive, or continue telephone conversations or establish a data session on the wireless network.

The area of coverage which an individual wireless telecommunications facility can provide is affected by its cell type, antenna height and the surrounding area. Generally, the optimum antenna height for a macro-cell wireless communication facility is below 200 feet AGL (Above Ground Level). Height requirements are also influenced by mean ground elevation at the site, the wireless carrier's coverage objective, surrounding topography, tree heights, and expected user traffic.

3 DESIGN OBJECTIVES

The design objective for each wireless communications carrier is to provide seamless, ubiquitous, and reliable wireless service to their users, in accordance with the Wireless Communications and Public Safety Act of 1999. Verizon Wireless' design objectives are consistent with these goals. Verizon Wireless achieves this design objective by designing its network to supply signal levels sufficient enough to support reliable in-vehicle and in-building communications. Today's wireless systems, like Verizon Wireless', provide enhanced communications beyond the initial expectations for voice communication along roadways. The demand to provide in-building communications, voice and data communications, and enhanced E-911 access is a paramount requirement in today's wireless systems. Verizon Wireless' design objectives are consistent with this goal.

Designing a wireless telecommunications network involves balancing the need for coverage and capacity. Coverage is the ability of each site to provide reliable signal to the network of expected users. Capacity is the ability of the site to support simultaneous user traffic. This design balance is accomplished through an analysis of demographics, terrain, and long term planning. Initially, system design focuses on providing wide-area coverage, particularly targeting the major highways and roads in an area. As the wireless communications system matures, the carrier's focus changes to increasing their ability to support anticipated volume of user traffic, as well as providing coverage to additional locations in the area, such as business and residential districts.

In order to adequately provide reliable wireless service to Carmel, the design threshold for reliable service must be defined. The design threshold is a reference to signal strength and varies depending on the physical characteristics of the area under analysis. Verizon Wireless defines the reliable coverage boundary of an LTE site using a value of Reference Signal Received Power (RSRP). This value is derived from industry standard definitions of LTE receiver sensitivity and data throughput, along with statistically quantifiable variations in the physical surroundings. This threshold takes into account additional losses associated with the location of the user; such as on-street, in-vehicle or inbuilding. The propagation coverage analyses for Carmel, presented herein, are for services based upon a suburban inbuilding standard with a corresponding RSRP of -95 dBm and an in-vehicle standard with a corresponding RSRP of -105 dBm. The suburban in-building standard encompasses most wood framed structures such as single family homes. Stronger signal levels may be required in other locations and environments where higher density buildings are located.

4 RADIO FREQUENCY ENGINEERING ACTIVITIES PERFORMED

In the course of the analysis described in this report, PierCon engineers performed the following tasks:

- Reviewed the Wireless telecommunications services facilities ordinance of Carmel
- Reviewed USGS Topographical Maps of Mahopac and surrounding areas
- Performed an engineering site analysis and reviewed potential alternate locations
- Link Budget Analysis and Aerial analysis
- Reviewed the location and design of adjacent wireless communications facilities

 Reviewed Radio Frequency coverage maps and the RF design and objective within and surrounding the Town of Carmel

5 RADIO FREQUENCY DESIGN

Documentary evidence regarding the need for the proposed telecommunications facility at the proposed location was obtained by PierCon Solutions from Verizon Wireless' radio coverage planning tool called Atoll (created by Forsk). Forsk products are used in 140 countries and are used by Verizon Wireless, AT&T, Sprint, and many other service providers throughout the world. The propagation data provided was used to produce propagation coverage maps indicating the locations where reliable service is being provided by Verizon Wireless' wireless communications facilities.

Within the current network of sites for Verizon Wireless, gaps in coverage currently exist for all four (4) FCC licensed frequency bands for Verizon Wireless (700, Cellular, PCS, and AWS). To define these gaps in coverage PierCon analyzed the propagation data. Propagation data was obtained for the lowest (700) and highest (AWS) frequency bands to demonstrate the best and worst (respectively) performing frequency bands. Based on the analysis, there is a gap in coverage in the surrounding neighborhoods to the northwest, northeast, and south. Please reference Exhibits A-1 through A-3 in the Appendix for a graphical representation of the existing Verizon Wireless LTE coverage in the 700 and 2100 MHz frequency bands. See below for a breakdown of Exhibits A-1 through A-3.

- Exhibit A-1 Existing Verizon Wireless Suburban 700 MHz In-Building LTE Coverage
- Exhibit A-2 Existing Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage
- Exhibit A-3 Existing Verizon Wireless 2100 MHz In-Vehicle LTE Coverage

Reviewing Exhibit A-1, the gap in coverage for Verizon Wireless includes a couple areas near the proposed site.

The portion of the suburban in-building coverage gap targeted for the Lake Casse project for the 700 MHz LTE license includes the following areas/roadways:

- Weber Hill Road/Drewville Road from Shear Hill Road to Seminary Hill Road (1.63 mi)
- Drewville Road from Weber Hill Road toward Route 6 (1 mi)
- Croton Falls Road from McLaughlin Drive to Ernhofer Drive (1.25 mi)
- The group of residential roads to the south including McLaughlin Drive, Circle Street, Piggot Road, Bayberry Hill Road, Aunt Patty's Lane, and Owen's Drive (combined 1.45 mi)
- The group of residential roads to the east including Gail Court, Stebbins Road, Rebecca Lane, Vie Pass, Julius and Eva Drive, Bucyrus Avenue, Chatfield Lane, Langsing Street, Columbus Drive, Cherry Hill Road, and Brett Road (combined 3.09 mi)
- The group of residential roads to the southeast including Memory Lane, Union Valley Road, Valley Road, Lee Court, Ernhofer Drive, and Munich Road (combined 1.71 mi)

The in-building coverage gap areas described above contain approximately 788 residents according to a 2010 US census. As outlined in Section 2, Verizon Wireless has obtained FCC Licenses in the AWS and PCS frequency bands. These frequency bands have a reduced coverage radius in areas dominated by trees and rolling hills. Therefore the gap in coverage for the AWS FCC licensed frequency bands will be different than the gaps in coverage for the 700 MHz LTE band shown in Exhibit A-1. Although coverage is more difficult to provide at higher frequency bands, adequate coverage is just as important. As briefly mentioned in section 2 of this report, the AWS frequency band is primarily used to provide additional capacity due to the larger channel size and ability to handle more users. Additional capacity

is needed in areas like residential neighborhoods, schools, businesses, and anywhere high speed data is used. In reviewing Exhibits A-2 and A-3, the entire gap in coverage for Verizon Wireless includes a very large area. The portion of the suburban in-building coverage gap targeted for the Lake Casse project for the 2100 MHz LTE license includes the following areas/roadways as demonstrated in Exhibit A-2:

- Weber Hill Road/Drewville Road from Shear Hill Road to Seminary Hill Road (1.63 mi)
- Drewville Road from Weber Hill Road toward Route 6 (1 mi)
- Croton Falls Road from McLaughlin Drive to Ernhofer Drive (1.25 mi)
- The group of residential roads to the south including McLaughlin Drive, Circle Street, Piggot Road, Bayberry Hill Road, Aunt Patty's Lane, and Owen's Drive (combined 1.45 mi)

The portion of the in-vehicle coverage gap targeted for the Lake Casse project for the 2100 MHz LTE license includes the following areas/roadways as demonstrated in Exhibit A-3:

- Weber Hill Road/Drewville Road from Shear Hill Road to Seminary Hill Road (1.63 mi)
- Drewville Road from Weber Hill Road toward Route 6 (1 mi)
- Croton Falls Road from McLaughlin Drive to Ernhofer Drive (1.25 mi)
- The group of residential roads to the south including McLaughlin Drive, Circle Street, Piggot Road, Bayberry Hill Road, Aunt Patty's Lane, and Owen's Drive (combined 1.45 mi)
- The group of residential roads to the east including Gail Court, Stebbins Road, Rebecca Lane, Vie Pass, Julius and Eva Drive, Bucyrus Avenue, Chatfield Lane, Langsing Street, Columbus Drive, Cherry Hill Road, and Brett Road (combined 3.09 mi)
- The group of residential roads to the southeast including Memory Lane, Union Valley Road, Valley Road, Lee Court, Ernhofer Drive, and Munich Road (combined 1.71 mi)

In order to determine where a new facility could be located the Town ordinance was consulted to determine the priority for locations.

The Town of Carmel Wireless Telecommunication ordinance outlines a location priority for wireless telecommunication facilities. Section 156-62.I(1) states he following priority locations:

- 1. On existing tall structures or wireless telecommunications towers in nonresidential zoning districts
- 2. Collocation on a site with existing wireless telecommunications towers or structures in nonresidential districts, not fronting on NYS Routes 6, 6N, 52 and 301
- 3. Collocation on a site with existing wireless telecommunications towers or structures in any other nonresidential districts
- 4. Installation of a new wireless telecommunications facility in any nonresidential district
- 5. Installation of a new wireless telecommunications facility in any residential district
- 6. On other property in the Town

The nearest non-residential zoning district (commercial or commerce/business park) is located over 1 mile to the west. This commercial zoning district already contains various Verizon Wireless facilities in and nearby by it such as the sites labeled Carmel, Lake Mahopac, Mahopac 6, Mahopac 5, Mahopac Falls. Placing an additional site in this zoning district would provide redundant coverage and is too far away from the coverage gap identified previously in this report. The closest existing sites are the locations that Verizon is already located upon; therefore no existing collocation could be utilized for this objective. There are no collocation sites or sites in a nonresidential zoning district that will remedy

Verizon Wireless' significant gap in service. Because priorities 1-4 could not be achieved, the next priority, which includes residential zoning districts, was considered. The site is proposed to be located at 254 Croton Falls Road. This location is located in the residential zoning district and is therefore the 5th priority.

The proposed site at 254 Croton Falls Road is able to provide reliable coverage to the area targeted for the Lake Casse project. Please reference Exhibits B-1A through B-3C and C-1 through C-3 in the Appendix for a graphical representation of the existing and proposed Verizon Wireless LTE coverage in the 700 and 2100 MHz frequency bands. See below for a breakdown of Exhibits B-1A through B-3C and C-1 through C-3.

- Exhibit B-1A Proposed Verizon Wireless Suburban 700 MHz In-Building LTE Coverage @ 176'
- Exhibit B-1B Proposed Verizon Wireless Suburban 700 MHz In-Building LTE Coverage @ 156'
- Exhibit B-1C Proposed Verizon Wireless Suburban 700 MHz In-Building LTE Coverage @ 136'
- Exhibit B-2A Proposed Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage @ 176'
- Exhibit B-2B Proposed Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage @ 156'
- Exhibit B-2C Proposed Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage @ 136'
- Exhibit B-3A Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage @ 176'
- Exhibit B-3B Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage @ 156'
- Exhibit B-3C Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage @ 136'
- Exhibit C-1 Existing & Proposed Verizon Wireless Suburban 700 MHz In-Building LTE Coverage
- Exhibit C-2 Existing & Proposed Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage
- Exhibit C-3 Existing & Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage

Exhibits B-1A, B-2A, and B-3A demonstrate the coverage which the proposed site will provide to the area in the vicinity of the site. Exhibits B-1B, B-1C, B-2B, B-2C, B-3B, and B-3C demonstrate the proposed coverage at heights (136' and 156') lower than the proposed height of 176' (180' tower height). Exhibits C-1 though C-3 demonstrate the composite coverage which includes both the existing and proposed coverage together on one map.

In reviewing Exhibit C-1, it can be demonstrated that the following areas will no longer be located in the residential coverage gap for 700 MHz:

- Half Weber Hill Road/Drewville Road from Shear Hill Road to Seminary Hill Road (0.93 mi)
- ALL Croton Falls Road from McLaughlin Drive to Ernhofer Drive (1.25 mi)
- ALL The group of residential roads to the south including McLaughlin Drive, Circle Street, Piggot Road, Bayberry Hill Road, Aunt Patty's Lane, and Owen's Drive (combined 1.45 mi)
- Most of the group of residential roads to the east including Gail Court, Stebbins Road, Rebecca Lane, Vie Pass, Julius and Eva Drive, Bucyrus Avenue, Chatfield Lane, Langsing Street, Columbus Drive, Cherry Hill Road, and Brett Road (combined 1.86 mi)
- Most of the group of residential roads to the southeast including Memory Lane, Union Valley Road, Valley Road, Lee Court, Ernhofer Drive, and Munich Road (combined 1.60 mi)

In reviewing Exhibit C-2, it can be demonstrated that the following areas will no longer be located in the residential coverage gap for 2100 MHz:

 Most of the group of residential roads to the south including McLaughlin Drive, Circle Street, Piggot Road, Bayberry Hill Road, Aunt Patty's Lane, and Owen's Drive (combined 1.20 mi)

In reviewing Exhibit C-3, it can be demonstrated that the following areas will no longer be located in the in-vehicle coverage gap for 2100 MHz:

- Most of Croton Falls Road from McLaughlin Drive to Ernhofer Drive (1 mi)
- ALL of the group of residential roads to the south including McLaughlin Drive, Circle Street, Piggot Road, Bayberry Hill Road, Aunt Patty's Lane, and Owen's Drive (combined 1.45 mi)
- Half of the group of residential roads to the east including Gail Court, Stebbins Road, Rebecca Lane, Vie Pass, Julius and Eva Drive, Bucyrus Avenue, Chatfield Lane, Langsing Street, Columbus Drive, Cherry Hill Road, and Brett Road (combined 1.52 mi)
- Most of the group of residential roads to the southeast including Memory Lane, Union Valley Road, Valley Road, Lee Court, Ernhofer Drive, and Munich Road (combined 1.45 mi)

In conclusion, the proposed facility at 254 Croton Falls Road meets the need objective of providing coverage to the surrounding residential areas and surrounding roadways.

6 RADIO FREQUENCY ENGINEERING RESPONSES TO THE WIRELESS TELECOMMUNICATIONS ORDINANCE

The following section of the report addresses the RF Engineering responses to Town of Carmel's Wireless telecommunications service facilities ordinance. Each section of the checklist is provided and the RF Engineering responses immediately follow.

156-62. Wireless Telecommunications Structures and Facilities

- G. Facility service plan. All proposals to provide or operate wireless telecommunications facilities shall be accompanied by a facility service plan, which shall include all the information necessary to allow the Planning Board to understand the existing, proposed and long-range plans of the applicant. The facility service plan shall include at least the following information:
 - (1) The location, height and operational characteristics of all existing facilities of the applicant in and immediately adjacent to the Town.
 - (2) A two-to-five-year plan for the provision of additional facilities in and immediately adjacent to the Town, indicating whether each proposed facility is for initial coverage or capacity-building purposes and showing proposed general locations or areas in which additional facilities are expected to be needed. Subsequent applications will confirm or modify the facility service plan so that the Planning Board may be kept up-to-date on future activities.
 - (3) A commitment to collocate or allow collocation wherever possible on all existing and proposed facilities Response: Please reference Exhibit D in the Appendix for a graphical representation of the existing, proposed, approved, future, and activation pending sites within and surrounding the Town of Carmel. This map includes future sites which are planned up to five years in the future based on projected needs and is subject to change. Please also reference Exhibit E in the Appendix for a list of existing Verizon Wireless facilities within the Town of Carmel and adjacent to the Town.
- I. Location of wireless telecommunications facilities.

(1) Applicants for wireless telecommunications facilities shall locate, site and erect said wireless telecommunications facilities, including towers and other tall structures, in accordance with the following priorities, one being the highest priority and six being the lowest priority:

Priority Level	Description
1	On existing tall structures or wireless telecommunications towers in nonresidential zoning districts
2	Collocation on a site with existing wireless telecommunications towers or structures in nonresidential districts, not fronting on NYS Routes 6, 6N, 52 and 301
3	Collocation on a site with existing wireless telecommunications towers or structures in any other nonresidential districts
4	Installation of a new wireless telecommunications facility in any nonresidential district
5	Installation of a new wireless telecommunications facility in any residential district

Response: Please see the response to this section in section 5 of this report. Please find attached Exhibit F "Existing Verizon Wireless Sites on Town Zoning Map" which demonstrates the location of existing and proposed site locations with regard to the nearby zones. Please also find attached Exhibit G "Existing Verizon Wireless Suburban 700 MHz In-Building LTE Coverage on Town Zoning Map" demonstrating that the commercial zones are almost entirely covered. Since the coverage gap is nearly all residential, the new facility must be sited in the coverage gap, which is a residential zoning district.

L. New wireless telecommunications towers.

- (1) The applicant shall demonstrate to the satisfaction of the Planning Board that there exists no tower on which the antenna may collocate or that collocation is not feasible for any of the following reasons:
 - (d) The applicant's network of antenna locations is not adequate to properly serve its customers, and the use of facilities of other entities is not suitable for physical reasons.
 - Response: Any tower/poles/structures which were identified within 1 mile were either below the tree line or would not be able to structurally support the antennas and their mounts. Further from the site, there are poles which already have Verizon Wireless located upon them.
 - (e) Adequate and reliable service cannot be provided from existing sites in a financially and technologically feasible manner consistent with the service providers' system requirements.
 - Response: The existing sites which are shown in all the exhibits are not able to have their coverage extended through any technological enhancements. The limiting factor of how far a site can provide coverage is the mobile device since it has a limited power output.
 - (f) Existing sites cannot accommodate the proposed antenna due to structural or other engineering limitations (e.g., frequency incompatibilities).
 - Response: The existing sites which are shown in all the exhibits are not able to have their coverage extended through any technological enhancements. The limiting factor of how far a site can provide coverage is the mobile device since it has a limited power output.

Bulk regulations and height.

- (2) In residential districts, wireless telecommunications facilities shall not exceed 50 feet in height unless the requirements of Subsection O(3) below are met. In nonresidential districts, wireless telecommunications facilities shall not exceed 100 feet in height unless the requirements of Subsection O(3) below are met.
 - Response: Locating any part of the antennas below the tree line (which would easily occur at 50' or below) severely affects the ability of a site to provide coverage to the surrounding area. Antennas must be located above the tree line in order to properly function and achieve their goals.

- (3) In the event that applicants propose a height greater than that listed above, the applicant must demonstrate to the satisfaction of the Planning Board that:
 - (a) Alternative means of mounting the antenna have been considered and are not feasible for the applicant.

Response: Locating any part of the antennas below the tree line severely affects the ability of a site to provide coverage to the surrounding area. Antennas must be located above the tree line in order to properly function and achieve their goals.

(b) The height is the minimum height necessary for adequate operation to meet the applicants' communications needs and the aesthetic intrusion has been minimized to the greatest extent practicable.

Response: Please see the B-1A through B-3C exhibits to see the loss of coverage from reducing the height from 180' to 160' to 140'. The new facility is designed to allow for co-location by multiple carriers and emergency services. Four major wireless carriers provide service to the Town of Carmel, and this facility is designed to allow multiple carriers to achieve significant coverage. As stated earlier, the facility is also designed for emergency services equipment and could be beneficial to local, state, or national, wireless emergency systems.

7 CONCLUSION:

PierCon Solutions' analysis of Verizon Wireless' existing network coverage indicates that a significant gap in wireless service exists within the town of Carmel. The application by Verizon Wireless proposes to construct a new wireless telecommunications facility at 254 Croton Falls Road, Mahopac, NY. The proposed installation, consisting of antennas at centerline heights of 176' will alleviate coverage and provide reliable service as described above.

PierCon performed a thorough review of the wireless code and has addressed each section to which a response from a radiofrequency engineering perspective was applicable.

The operation of this facility will enable Verizon Wireless to provide reliable wireless service to town of Carmel and to remedy the significant gaps in personal wireless services. After performing the independent radiofrequency analysis, PierCon Solutions concludes that this facility is essential to Verizon Wireless' network design for the town of Carmel.

Report Prepared by:

Adam Feehan

Sr. RF Engineer PierCon Solutions, LLC

(Date) 7/31/18

Rich Conroy President

PierCon Solutions, LLC

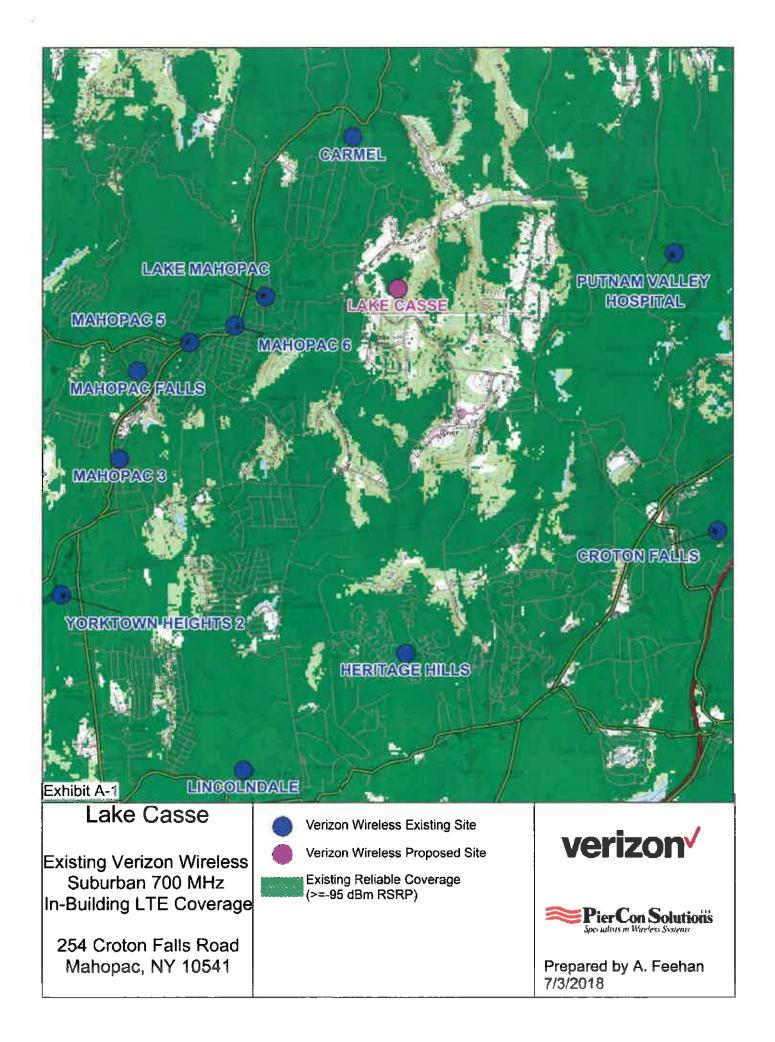
(Date) 7/31/18

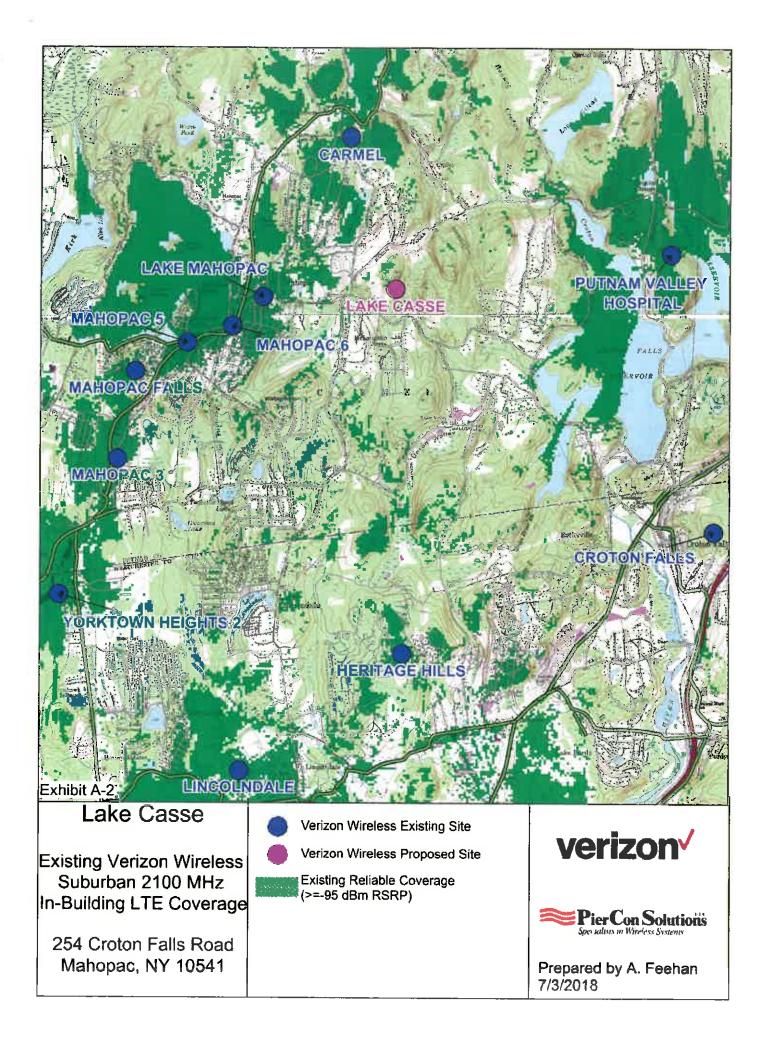
PierCon Solutions for New York SMSA Limited Partnership

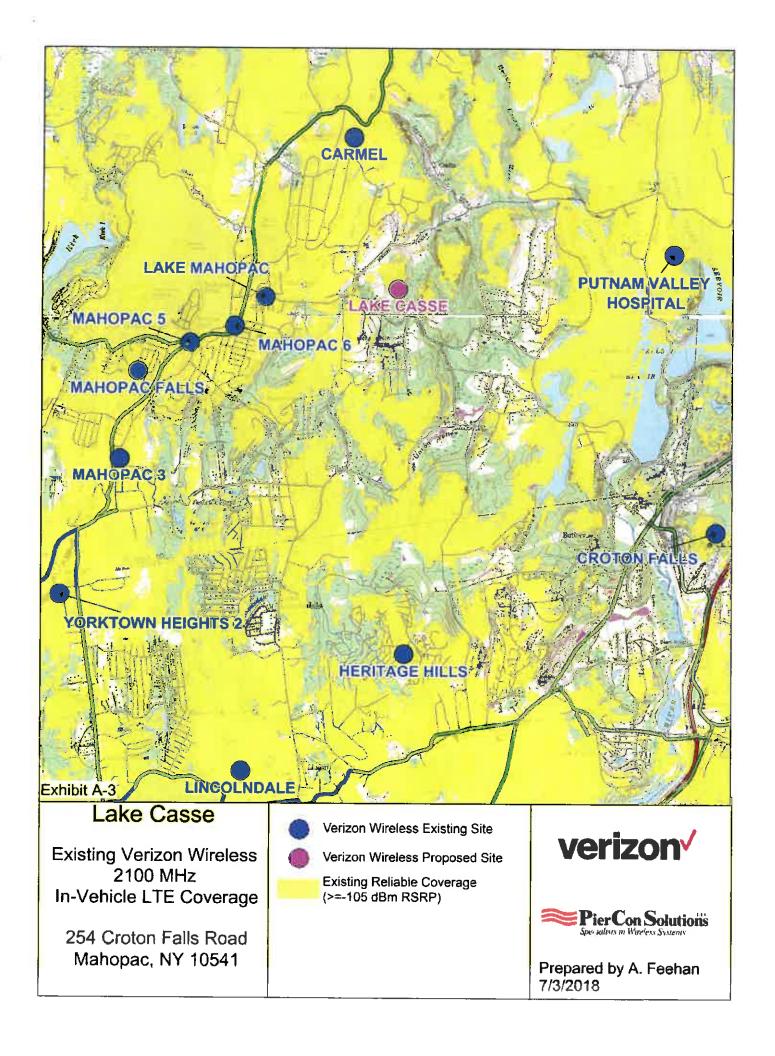
PierCon Solutions for New York SMSA Limited Partnership

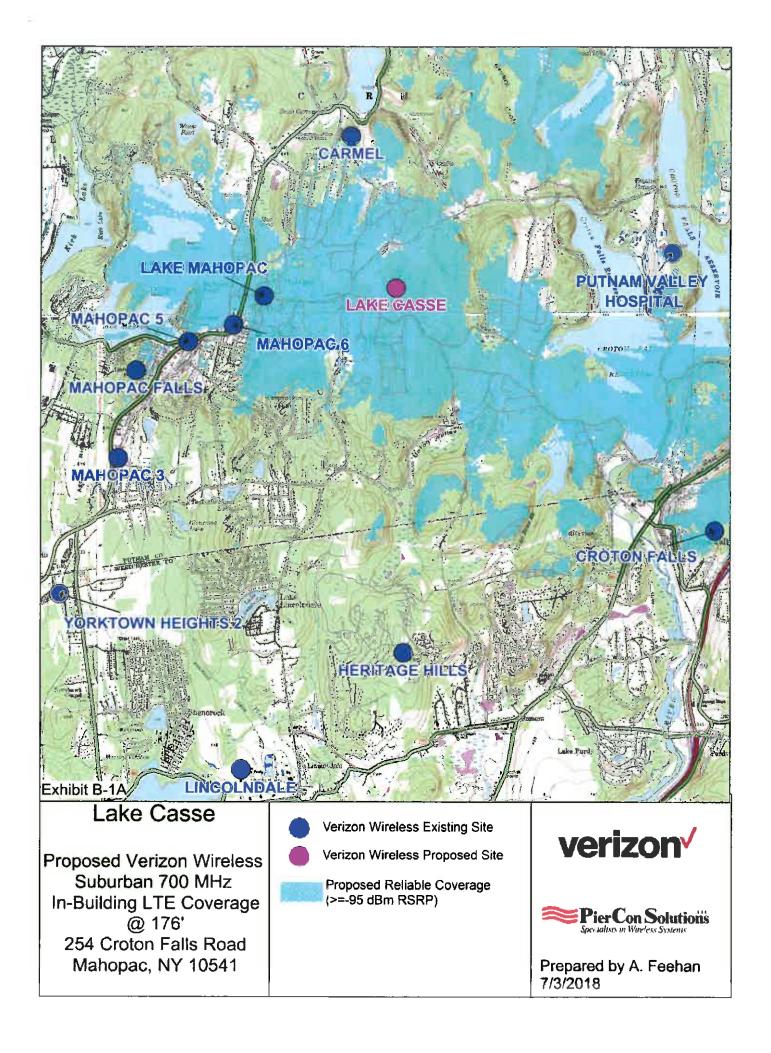
8 APPENDIX - EXHIBITS

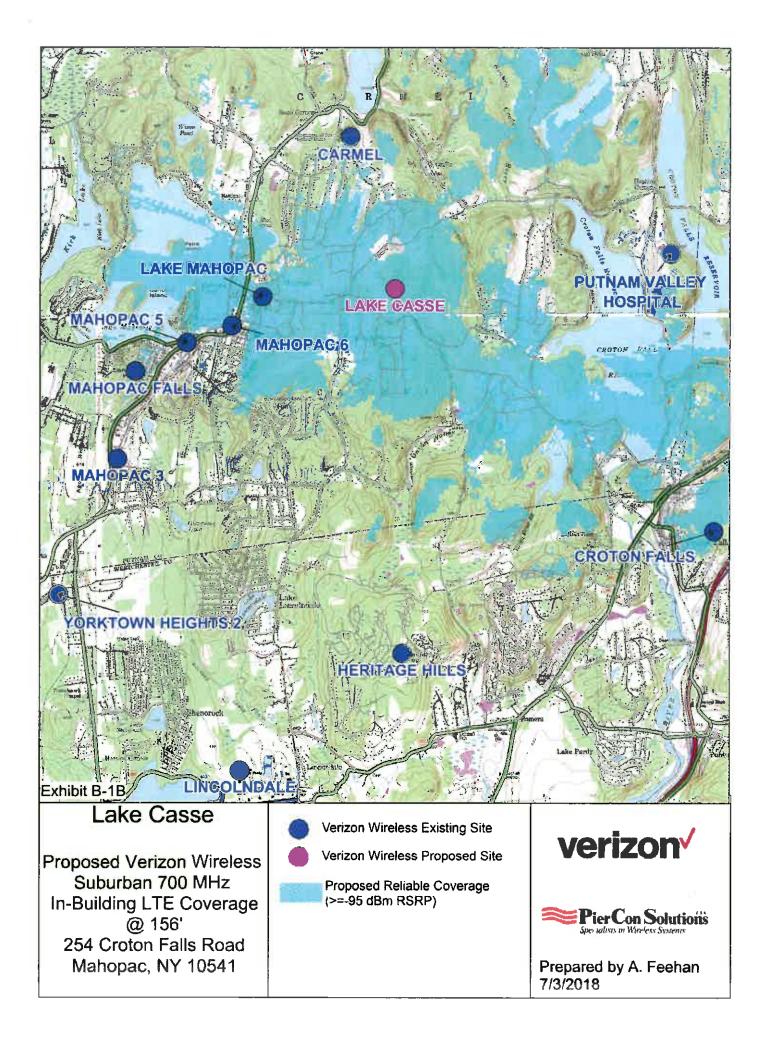
- Exhibit A-1 Existing Verizon Wireless Suburban 700 MHz In-Building LTE Coverage
- Exhibit A-2 Existing Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage
- Exhibit A-3 Existing Verizon Wireless 2100 MHz In-Vehicle LTE Coverage
- Exhibit B-1A Proposed Verizon Wireless Suburban 700 MHz In-Building LTE Coverage @ 176'
- Exhibit B-1B Proposed Verizon Wireless Suburban 700 MHz In-Building LTE Coverage @ 156'
- Exhibit B-1C Proposed Verizon Wireless Suburban 700 MHz In-Building LTE Coverage @ 136'
- Exhibit B-2A Proposed Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage @ 176'
- Exhibit B-2B Proposed Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage @ 156'
- Exhibit B-2C Proposed Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage @ 136'
- Exhibit B-3A Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage @ 176'
- Exhibit B-3B Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage @ 156'
- Exhibit B-3C Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage @ 136'
- Exhibit C-1 Existing & Proposed Verizon Wireless Suburban 700 MHz In-Building LTE Coverage
- Exhibit C-2 Existing & Proposed Verizon Wireless Suburban 2100 MHz In-Building LTE Coverage
- Exhibit C-3 Existing & Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage
- Exhibit D Existing, Proposed/Approved, and Future Verizon Wireless Sites
- Exhibit E Detailed Site Table
- Exhibit F Existing Verizon Wireless Sites on Town Zoning Map
- Exhibit G Existing Verizon Wireless Suburban 700 MHz In-Building LTE Coverage on Town Zoning Map

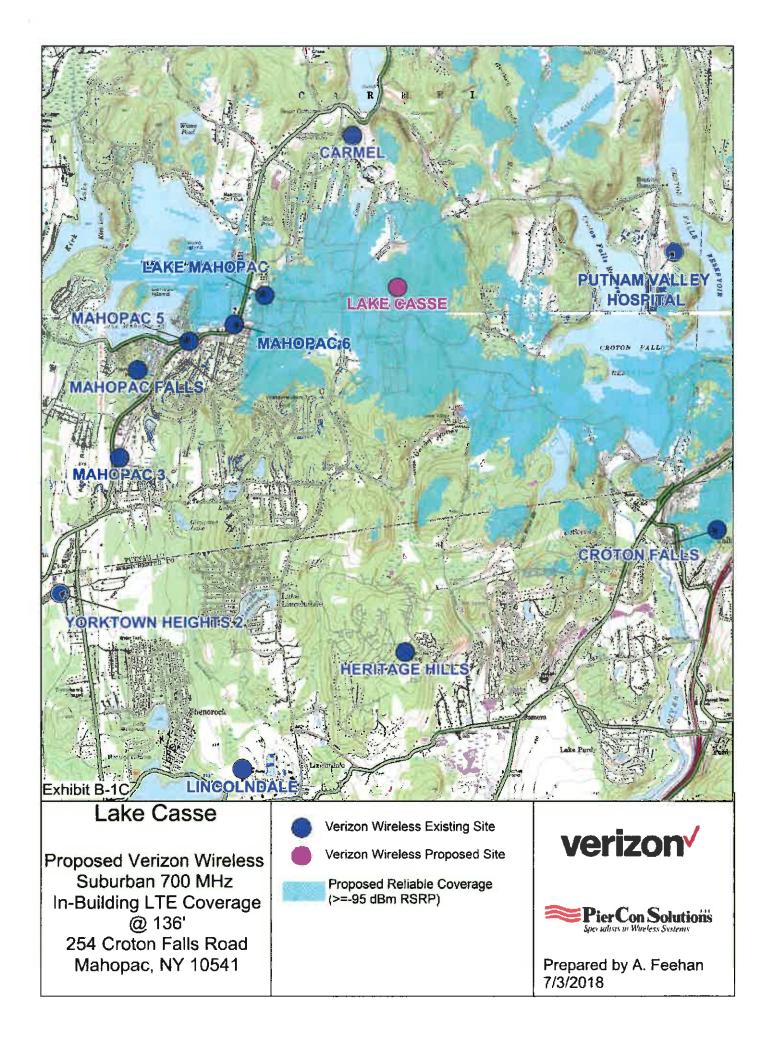


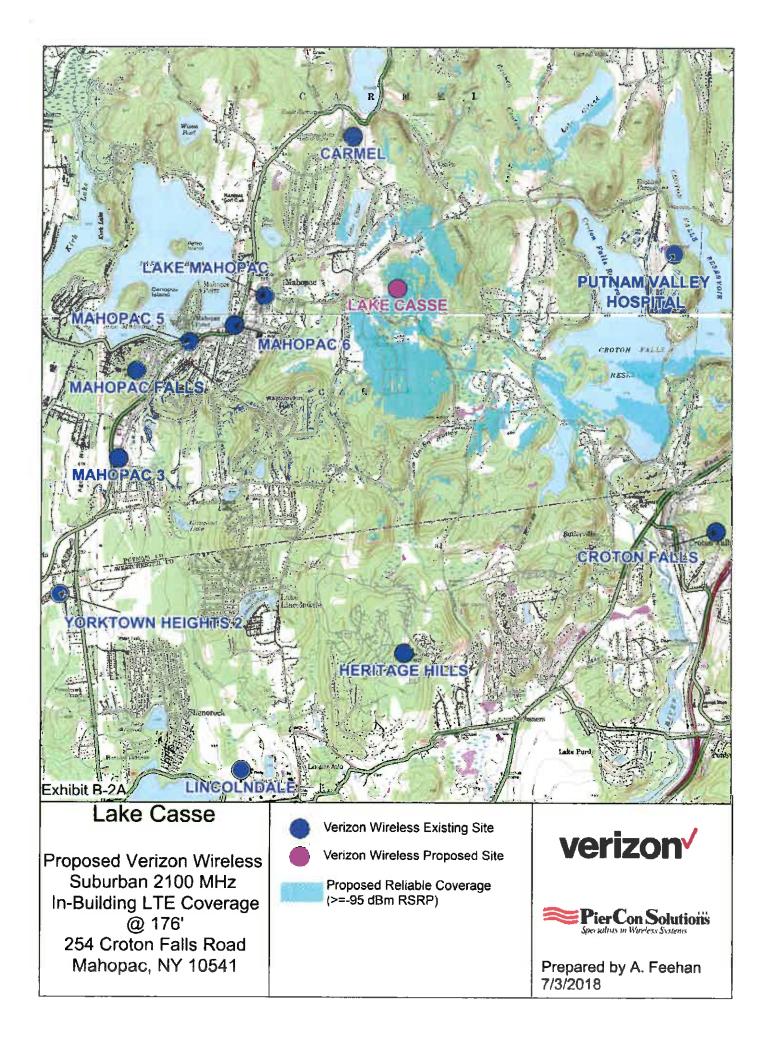


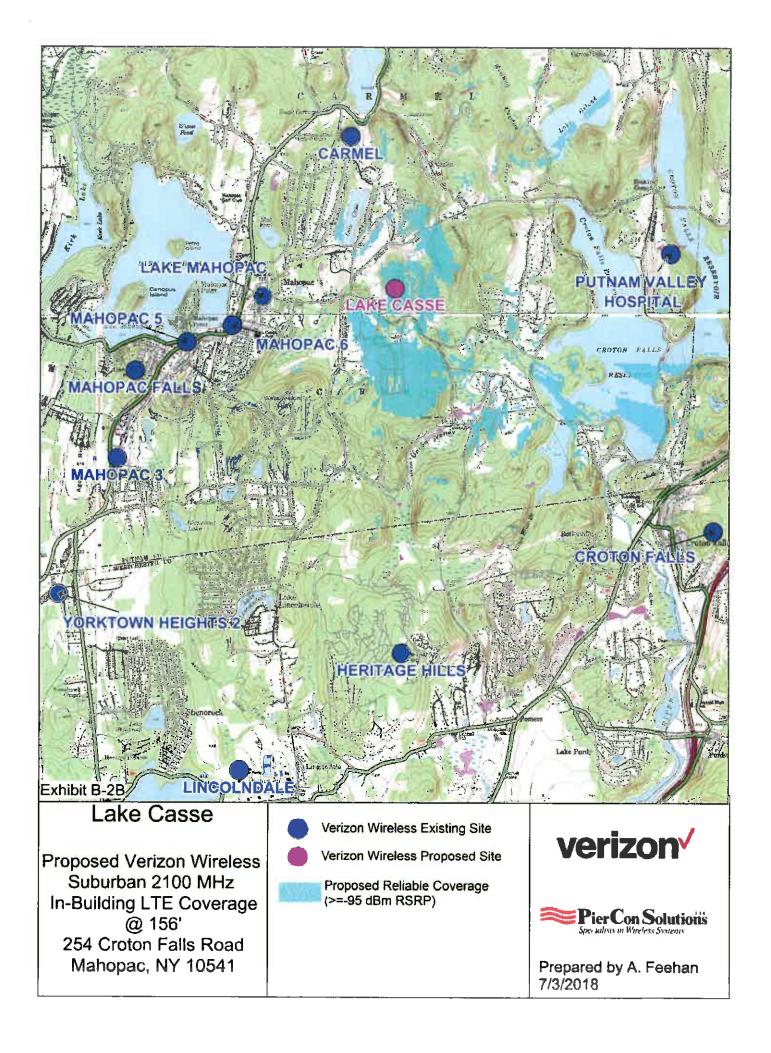


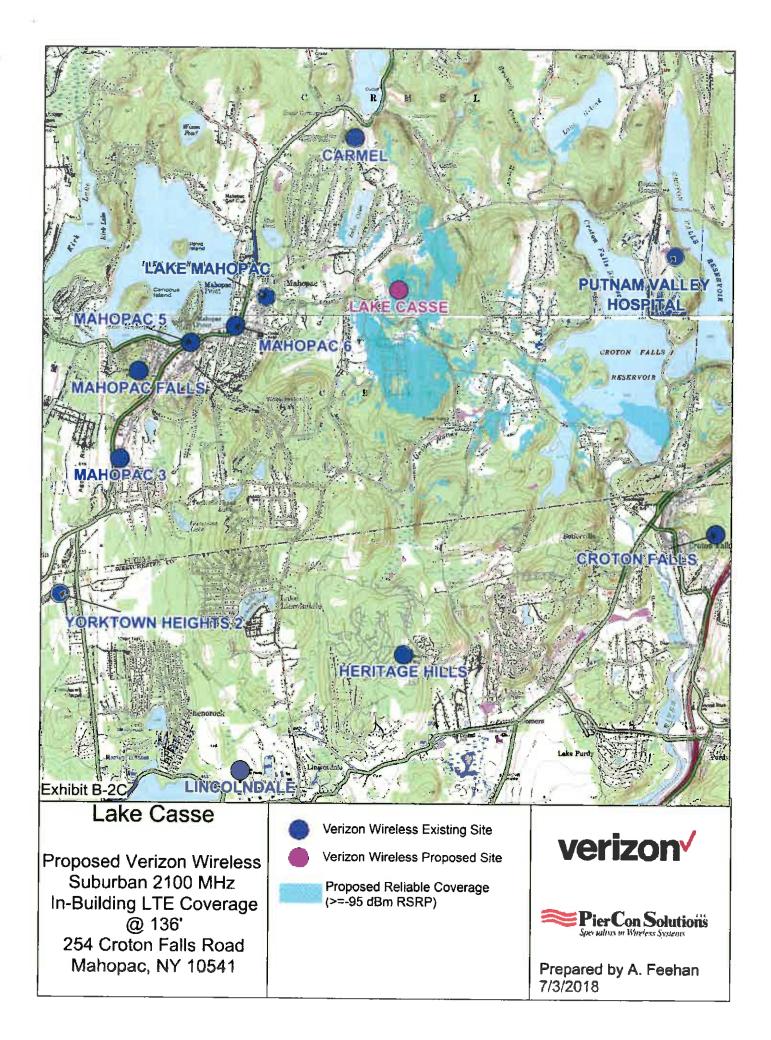


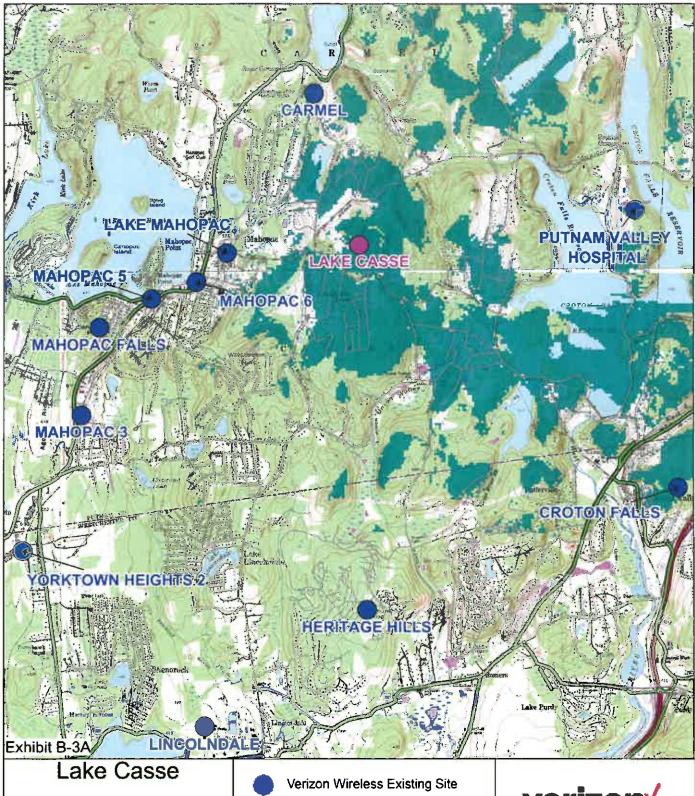












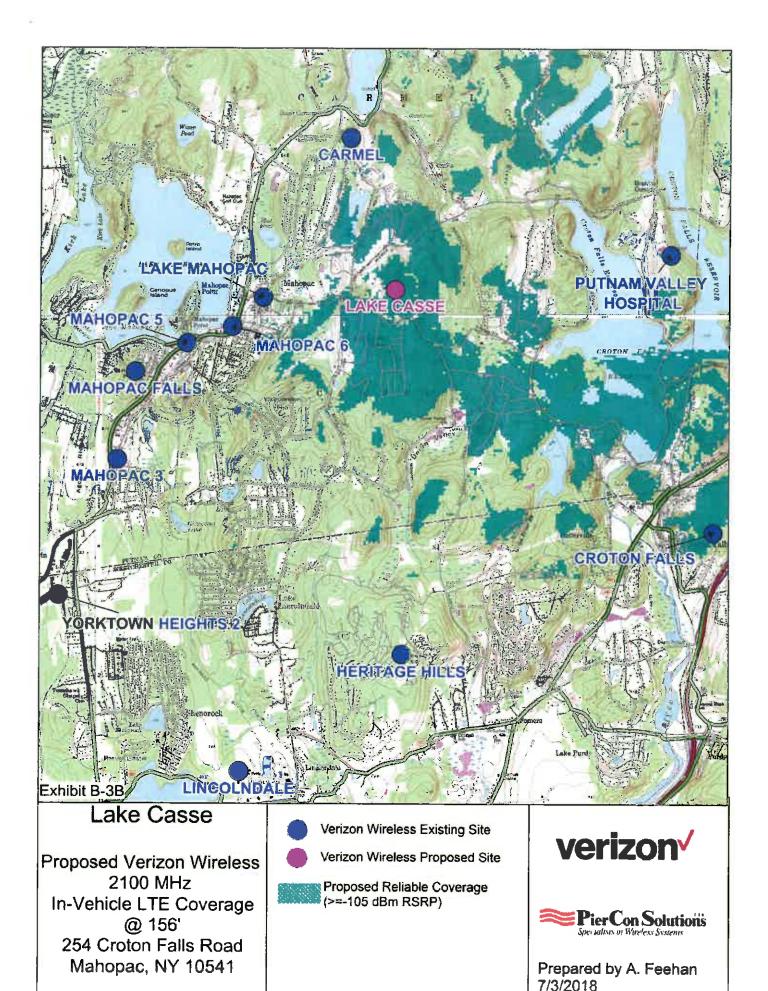
Proposed Verizon Wireless 2100 MHz In-Vehicle LTE Coverage @ 176' 254 Croton Falls Road Mahopac, NY 10541

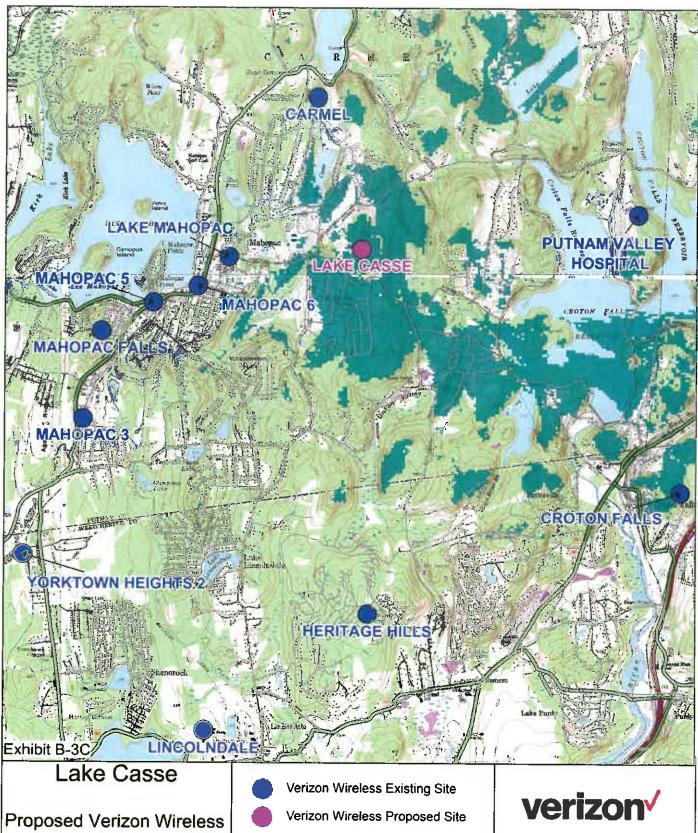
Verizon Wireless Proposed Site

Proposed Reliable Coverage (>=-105 dBm RSRP)





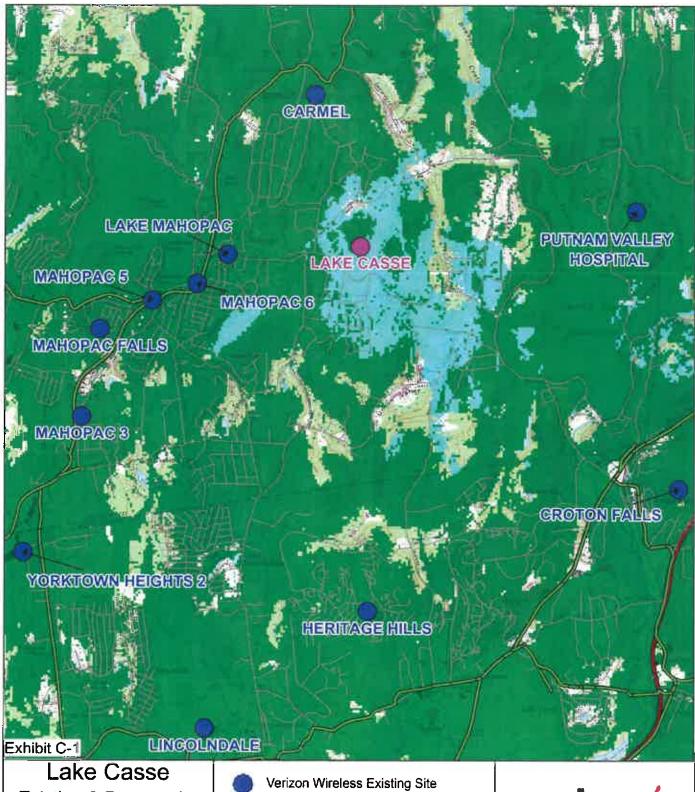




2100 MHz In-Vehicle LTE Coverage @ 136' 254 Croton Falls Road Mahopac, NY 10541

Proposed Reliable Coverage (>=-105 dBm RSRP)





Existing & Proposed Verizon Wireless Suburban 700 MHz In-Building LTE Coverage 254 Croton Falls Road Mahopac, NY 10541





Verizon Wireless Proposed Site



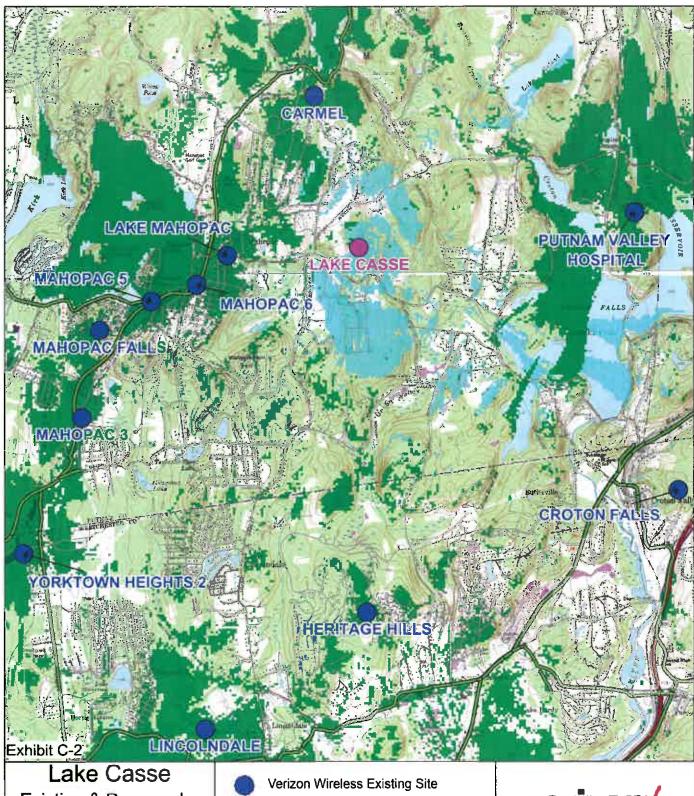
Existing Reliable Coverage (>=-95 dBm RSRP)



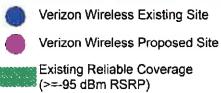
Proposed Reliable Coverage (>=-95 dBm RSRP)







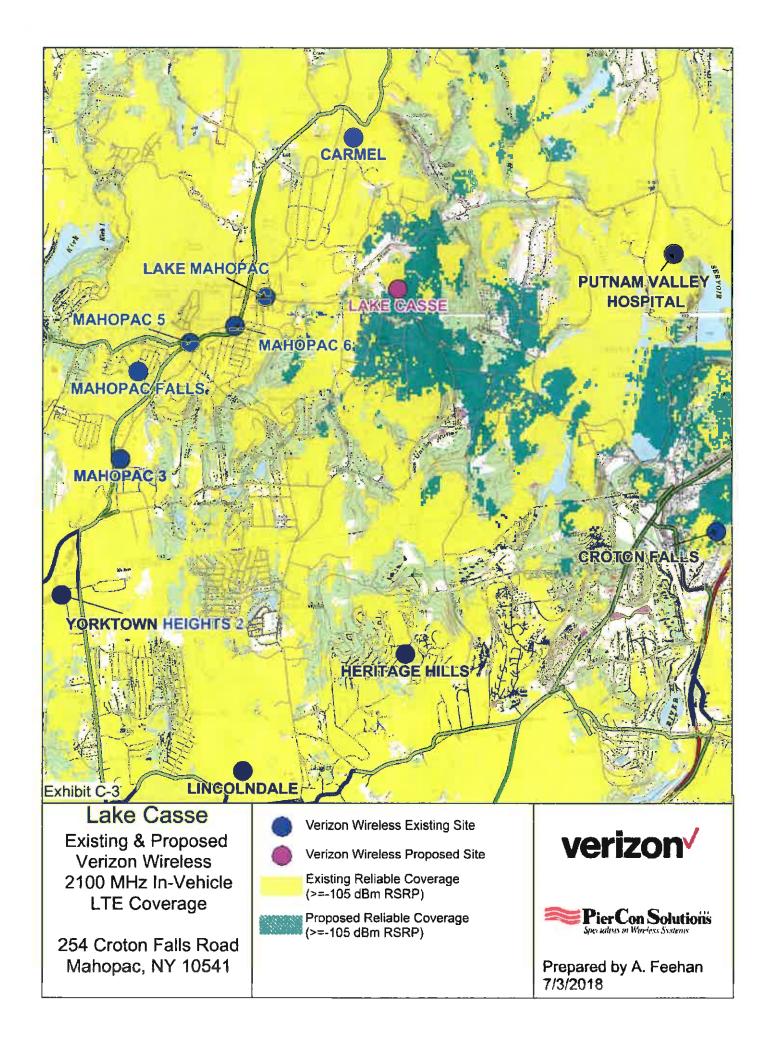
Existing & Proposed
Verizon Wireless
Suburban 2100 MHz
In-Building
LTE Coverage
254 Croton Falls Road
Mahopac, NY 10541

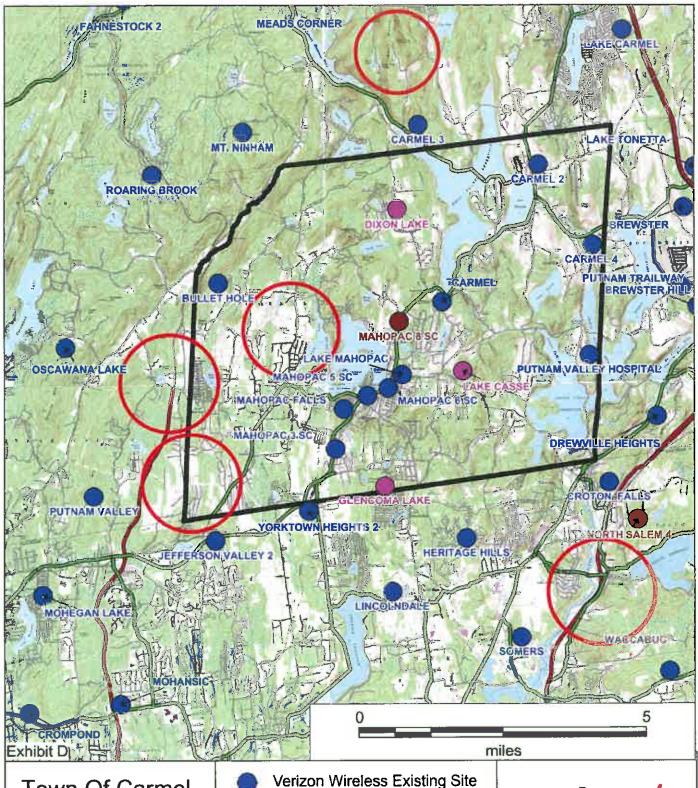


Proposed Reliable Coverage (>=-95 dBm RSRP)



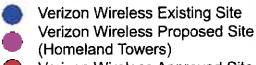






Town Of Carmel

Existing, Proposed/ Approved, and Future Verizon Wireless Sites



Verizon Wireless Approved Site Search Area for Future Site

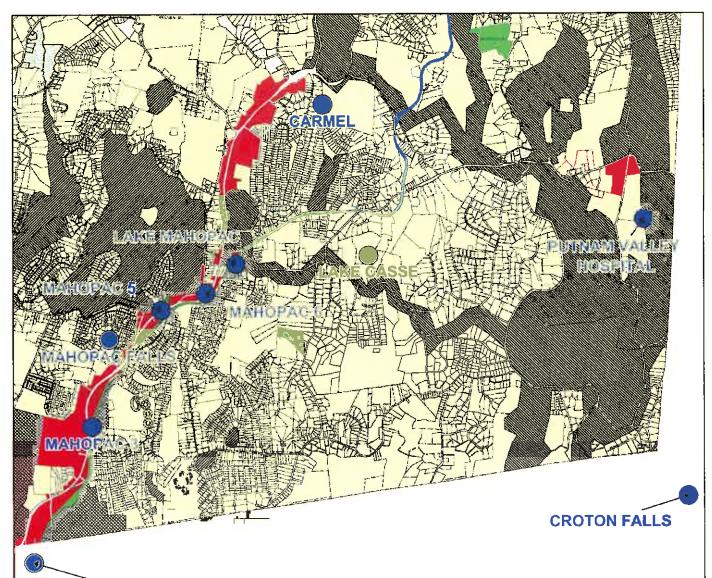
Town of Carmel Boundary

verizon/



EXHIBIT E - DETAILED SITE TABLE

Site Name	Address	Height (feet) +/-
JEFFERSON VALLEY	3830 Gomer Street, Yorktown Heights	52
CARMEL 2	94 Gleneida Ave, Carmel	123
AMAWALK 3	2580 Route 35, Somers	119
CARMEL 3	21 Smokey Hollow Court, Carmel	150
LAKE CARMEL	723 Fair St, Carmel	102
FAHNESTOCK 2	Route 301, Cold Spring	101
WACCABUC	117 Waccubuc Road, Goldens Bridge	141
ROARING BROOK	220 Wiccopee Road, Putnam Valley	150
OSCAWANA LAKE	7 Barger Hill Rd, Putnam Valley	157
DREWVILLE HEIGHTS	300-310 Route 22, Brewster	93
MEADS CORNERS	2490 Route 301, Carmel	155
MOHEGAN LAKE	Woodland Ave Ave, Yorktown	93
BREWSTER HILL	87 Hillside Park, Brewster	83
MT NINHAM	320 California Hill Path, Carmel	101
LINCOLNDALE	Rte 202, Lincolndale	106
МАНОРАС 3 SC	361 Route 6, Mahopac	19
MAHOPAC 6 SC	692 Route 6, Mahopac	28
HERITAGE HILLS	250 West Hill Drive, Somers	87
SOMERS	294 Route 100, Somers	108
PUTNAM VALLEY HOSPITAL	670 Stoneleigh Ave, Carmel	120
YORKTOWN HEIGHTS 2	80 Route 6, Somers	96
MOHANSIC	26-51 Strang Boulevard, Yorktown Heights	47
CROMPOND	3800 Crompond Rd, Yorktown	125
BREWSTER	Independent Way, Brewster	102
BULLET HOLE	Scout Hill Road, Mahopac	126
MAHOPAC 5 SC	946-954 S Lake Blvd, Mahopac	36
MAHOPAC FALLS	51 Crest Drive, Mahopac	121
GOLDENS BRIDGE	Exit 6A I-684, Goldens Bridge	102
CROTON FALLS	Sun Valley Drive, North Salem	100
PUTNAM VALLEY	Williams Drive, Putnam Valley	106
CARMEL	1183 Route 6, Carmel	117
LAKE MAHOPAC	55 McAlpin Avenue, Carmel	122



YORKTOWN HEIGHTS 2



Exhibit F



Lake Casse

Existing Verizon Wireless
Sites on Town
Zoning Map

254 Croton Falls Road Mahopac, NY 10541



Verizon Wireless Existing Site

Verizon Wireless Proposed Site







Lake Casse

Existing Verizon Wireless Suburban 700 MHz In-Building LTE Coverage on Town Zoning Map

254 Croton Falls Road Mahopac, NY 10541



Verizon Wireless Existing Site



Verizon Wireless Proposed Site



Existing Reliable Coverage (>=-95 dBm RSRP)







VIA HAND DELIVERED

August 16, 2018

Planning Board Town of Carmel 60 McAlpin Avenue Mahopac, New York 10541

Attn: Mr. Harold Gray,

Chairman

RE: Western Bluff Subdivision

Section 66.14, Block 1, Lot 20

Dear Mr. Gray:

On behalf of the applicant, Dominick Santucci, please find enclosed five (5) copies, unless otherwise noted, of the following plans and documents in support of the Application for Preliminary Subdivision Approval for the referenced project.

- Preliminary Subdivision Plan Set, prepared by Kellard Sessions Consulting, dated (last revised) July 5, 2018:
 - Cover Sheet
 - Sheet 1/7 Existing Conditions Plan
 - Sheet 2/7 Subdivision Plan
 - Sheet 3/7 Sediment & Erosion Control Plan
 - Sheet 4/7 Tree Removal Plan
 - Sheet 5/7 Construction Details
 - Sheet 6/7 Sediment & Erosion Control Details & Notes
 - Sheet 7/7 Driveway Profiles
- Stormwater Pollution Prevention Plan Report, dated July 2018 (3 copies)
- □ Correspondence from New York State Office of Parks, Recreation and Historic Preservation, dated June 16, 2017
- ☐ Long Environmental Assessment Form dated January 13, 2017

CIVIL ENGINEERING | LANDSCAPE ARCHITECTURE | SITE & ENVIRONMENTAL PLANNING

Mr. Harold Gray, Chairman August 14, 2018 Page 2

☐ CD of Entire Submission

The applicant is working with the New York City Department of Environmental Protection (NYCDEP) to obtain SWPPP approval. Before the NYCDEP will deem the application complete, they require a SEQRA determination from the Lead Agency. All of the plans and reports included in this submission address comments raised by the Town consultants and Environmental Conservation Board. Our goal is to secure a SEQRA Negative Declaration from the Planning Board, in order to resubmit back to NYCDEP and work through the technical side of the stormwater design. Once the NYCDEP is satisfied, we will return to the Planning Board for Final Subdivision Approval.

TOWN ENGINEER MEMORANDUM DATED JANUARY 24, 2017:

I. <u>General Comments</u>

- 1. It is understood that referral to the Mahopac Fire Department, Town of Carmel Environmental Conservation Board, Putnam County Department of Health (PCHD) and Town of Carmel Highway Department will be required. The application was presented to the Environmental Conservation Board in May 2017. Responses to comments received at the meeting are outlined below. The application was submitted to the Carmel Fire Department in May 2017. To date, we have not received any comment.
- 2. A SWPPP, as detailed by the New York State Department of Environmental Conservation (NYSDEC) General Stormwater Permit for Discharges from Construction Activities (GP-0-15-002) shall be prepared.
- 3. A SWPPP, as detailed by the NYCDEP, pursuant to 18-39 of NYCDEP Watershed Rules and Regulations shall also be prepared under NYCDEP stormwater regulations.
- 4. The subdivision application is for a conventional subdivision with no planned open space.
- 5. Presently, there are no public improvements proposed within the application.
- The applicant acknowledges that a stormwater bond and maintenance guarantee may be required.

II. <u>Detailed Comments</u>

1. All plans and references to the Alternative Subdivision have been removed from the application.

- 2. All proposed easements have been schematically shown. All easements will be finalized by the Surveyor on the Subdivision Plat prior to Final Subdivision Approval.
- 3. Top and bottom wall elevations have been added to the plans.
- 4. All proposed grading has been included on the plan.
- 5. All PCHD approvals will be submitted to the Town prior to final approval.
- 6. Profiles and details for the proposed driveway have been included in the Site Plan package.
- 7. All driveways have been designed to meet Chapter 128 of the Town Code.
- 8. There is currently no guiderail proposed as the majority of the driveways are cut into the hillside.
- 9. All proposed utilities have been included on the Site Plans.
- 10. The metes and bounds of the new property lines will be calculated by the Surveyor of Record prior to final approval.
- 11. Site distances have been dimensioned on the site plans. No vegetation removal is proposed at this time.
- 12. See above response.
- 13. The Construction Sequencing has been revised to state when the infiltration system will be installed and that the system will not be put online until the contributing drainage areas have been stabilized.
- 14. The Site Plan shows the infiltration areas cordoned off during construction.
- 15. Sizing calculations for the infiltration systems have been included in the SWPPP Report.
- 16. The overflows for all the stormwater practices have been shown on the Site Plan.
- 17. A landscaping plan will be provided under separate cover-

Mr. Harold Gray, Chairman August 14, 2018 Page 4

- 18. Soil testing was performed by this office and witnessed by the Town Engineer and NYCDEP.

 The results of the testing are included in the SWPPP Report.
- 19. All trees to be protected have been shown.

ENVIRONMENTAL CONSERVATION BOARD COMMENTS:

- 1. The existing septic system has been noted to be abandoned per PCHD guidelines. The septic pump-out report will be forwarded to the Town once completed.
- 2. The silt fencing detail is shown to have wire backing.
- 3. Temporary diversion swales have been shown and detailed on the Erosion Control Plan.
- 4. The Site Plans note that the areas of removed asphalt will be restored with topsoil, seed and mulch.
- 5. A Construction Sequence has been included on the plans and in the SWPPP.
- 6. Construction staging areas have been shown on the Site Plans. Equipment fueling will occur within these staging areas.
- 7. The Site Plans note that overnight equipment storage will occur over a layer of polypropylene.
- 8. Any existing well will be abandoned according to Putnam County Department of Health guidelines.

Very truly yours,

Brian Hildenbrand, P.E. Kellard Sessions Consulting

BH/pg

Enclosures

cc: Dominick Santucci w/Enc.

P:\Stc100\KSC Correspondence\2018-08-16_CarmelPlBd_Gray_PrelSubd_submitr.docx

Full Environmental Assessment Form Part 1 - Project and Setting

Instructions for Completing Part 1

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

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

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

A. Project and Sponsor Information.

Name of Action or Project:		
Western Bluff Subdivision		
Project Location (describe, and attach a general location map):		
350 West Shore Drive, Carmel, New York 10512		
Brief Description of Proposed Action (include purpose or need);		
The project consists of a 14.79 acre parcel with an existing single-family residence. Subdivision) which shall be served by individual wells, septics and common driveway	The applicant is proposing a three (3 /.	3) lot subdivision (Western Bluff
Name of Applicant/Sponsor:	Telephone: 914-447-1057	
Domlnick Santucci	E-Mail: dsantucci@santucciconstruction.com	
Address: 15 Travis Lane		
City/PO: Montrose	State: New York	Zip Code: 10548
Project Contact (if not same as sponsor; give name and title/role):	Telephone:	
	E-Mail:	
Address:	, , , , , , , , , , , , , , , , , , , 	
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):	Telephone: 317-536-3363	
t Kling E-Mail:		·
Address:		
440 Colony Drive		
City/PO: Whiteland	State: Indiana	Zip Code: ₄₆₁₈₄

B. Government Approvals

B. Government Approvals, Funding, or Spotassistance.)	nsorship. ("Funding" includes grants, loans, ta	ax relief, and any othe	er forms of financial
Government Entity	If Yes: Identify Agency and Approval(s) Required	Applicat (Actual or	
a. City Council, Town Board, ☐Yes☑No or Village Board of Trustees			
b. City, Town or Village ✓Yes□No Planning Board or Commission	Carmel Planning Board		
c. City Council, Town or ✓Yes☐No Village Zoning Board of Appeals	Carmel Zoning Board of Appeals		
d. Other local agencies ☑Yes□No	Carmel Environmental Conservation Board		
e. County agencies ☑Yes□No	Putnam County Planning & Highway Westchester County Department of Health		
f. Regional agencies □Yes☑No			
g. State agencies ☑Yes□No	NYSDEC, NYCDEP, NYS OPRHP		····
h. Federal agencies ☑Yes□No	Army Corps of Engineers		
 i. Coastal Resources. i. Is the project site within a Coastal Area, or 	or the waterfront area of a Designated Inland W	aterway?	□Yes ☑ No
ii. Is the project site located in a community iii. Is the project site within a Coastal Erosion	with an approved Local Waterfront Revitalizat Hazard Area?	ion Program?	☐ Yes☑No ☐ Yes☑No
C. Planning and Zoning			
C.1. Planning and zoning actions.			
Will administrative or legislative adoption, or are only approval(s) which must be granted to enable If Yes, complete sections C, F and G. If No, proceed to question C.2 and complete sections C.2.		_	∐Yes ⊠ No
C.2. Adopted land use plans.			
a. Do any municipally- adopted (city, town, vill where the proposed action would be located?	age or county) comprehensive land use plan(s)	include the site	Z Yes□No
If Yes, does the comprehensive plan include spe would be located?	cific recommendations for the site where the pr	roposed action	□Yes ☑ No
or other?) If Yes, identify the plan(s):	ated State or Federal heritage area; watershed n	nanagement plan;	☑ Yes□No
NYC Watershed			
- T- 4l			
 c. Is the proposed action located wholly or partion or an adopted municipal farmland protection If Yes, identify the plan(s): 		nai open space plan,	∐Yes i ∠INo

C.3. Zoning	
a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. If Yes, what is the zoning classification(s) including any applicable overlay district? R-Residential	☑ Yes□No
b. Is the use permitted or allowed by a special or conditional use permit?	Z 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? Mahopac Central School District	
b. What police or other public protection forces serve the project site? Town of Carmel Police Department	
c. Which fire protection and emergency medical services serve the project site? Mahopac Fire Department	
d. What parks serve the project site? Carmel Recreation & Parks, Wells Park, Southeast Town Park	
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 mix components)? Residential	ed, include all
b. a. Total acreage of the site of the proposed action? 14.79 acres	
b. Total acreage to be physically disturbed? c. Total acreage (project site and any contiguous properties) owned	
or controlled by the applicant or project sponsor? 14.79 acres	ı
c. Is the proposed action an expansion of an existing project or use? i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, mile square feet)? Units:	☐ Yes☑ No es, housing units,
d. Is the proposed action a subdivision, or does it include a subdivision? If Yes.	Z Yes □No
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types) Residential	
ii. Is a cluster/conservation layout proposed?	☐Yes Z No
iii. Number of lots proposed? 3 iv. Minimum and maximum proposed lot sizes? Minimum 4.6 Maximum 5.4	
e. Will proposed action be constructed in multiple phases?	☐ Yes ☑ No
i. If No, anticipated period of construction:ii. If Yes;months	
Total number of phases anticipated	i
Anticipated commencement date of phase 1 (including demolition) monthyear	
Anticipated completion date of final phase monthyear	
 Generally describe connections or relationships among phases, including any contingencies where progredetermine timing or duration of future phases: 	. ,
One phase for construction of common driveways/infrastructure, however, development of Individual lots/driveways w market conditions dictate.	ill occur as real estate

					
f. Does the project	ct include new resid	lential uses?			Z Yes□No
11 Yes, snow nun	nbers of units propo One Family	sed. <u>Two Family</u>	Three Family	Multiple Family (four or more)	
7 22 1 50		1 WO 1 anniy		wutuble ranning (tour or more)	
Initial Phase At completion	3	0	0	0	
of all phases	3	0	0	0	
	osed action include	new non-residentia	al construction (includ	ling expansions)?	☐Yes Z No
If Yes,	of atmostrates				
ii Dimensions (of structures	ronosed structure	height	width; andlength	
iii. Approximate	extent of building	space to be heated	or cooled:	square feet	
				result in the impoundment of any	☐ Yes ☑ No
liquids, such a	s creation of a wate	r supply, reservoir,	pond, lake, waste lag	goon or other storage?	☐ 1 ¢2 № 140
If Yes,			. , ,	5	
i. Purpose of the			·		
ii. It a water imp	oundment, the princ	cipal source of the	water:	Ground water Surface water street	amsOther specify:
iii. If other than w	vater, identify the ty	pe of impounded/o	contained liquids and	their source	
			-		
iv. Approximate	size of the proposed	i impoundment.	Volume:	million gallons; surface area:	acres
v. Dimensions o	f the proposed dam	or impounding str	ucture:	height;length	
vi. Construction	method/materials is	or the proposed dai	m or impounding stru	cture (e.g., earth fill, rock, wood, cor	icrete):
		_		_	
D.2. Project Ope	erations				
		unv excavation min	ning or dredging dur	ring construction, operations, or both	Yes No
(Not including	general site prepara	tion, grading or ins	stallation of utilities o	r foundations where all excavated	t [] 1 62 [A] 140
materials will re	emain onsite)				
If Yes:	0.1				
	rpose of the excava		-t- \	1	
				be removed from the site?	
Over who	at duration of time?	ic yards).	·····		
iii. Describe natur	e and characteristic	s of materials to be	e excavated or dredge	d, and plans to use, manage or dispos	se of them.
1 777171 4 1					
	onsite dewatering o				∐Yes ☐No
ii yes, descrit	e,	·			
v What is the tot	al area to be dredge	ed or excavated?	- · · · · · · · · · · · · · · · · · · ·	acres	
	aximum area to be		time?	acres	
	e the maximum dep			feet	
	vation require blasti				∐Yes∐No
ix. Summarize site	reclamation goals	and plan:			
		·			
		· · · · · · · · · · · · · · · · · · ·	7.		
h Would the near	osed action courses	n regult in alternation	n of increase or Jees	ease in size of, or encroachment	
into any existin	osed action cause of ig wetland, waterbo	r resum m anterauto: dv. shoreline, head	n or, increase or decre h or adjacent area?	ease in size of, or encroachment	Z Yes ☐ No
If Yes;	Gevanish materiol	_,, 5.10.1-1.110, 0040	or adjaconi arour		ĺ
				ter index number, wetland map numb	er or geographic
· 					

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placent alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in so installation of driveway and stormwater treatment system within wetland setback.	quare feet or acres:
iii. Will proposed action cause or result in disturbance to bottom sediments? If Yes, describe: iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation?	☐ Yes Z No
If Yes:	☐ Yes Z No
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): 	
pronosed method of plant removal:	
if chemical/herbicide treatment will be used, specify product(s):	
v. Describe any proposed reclamation/mitigation following disturbance:	
Planting to enhance buffer between improvements and wetland. Rip rap at stormwater discharge.	
c. Will the proposed action use, or create a new demand for water? If Yes:	☑ Yes □ No
i. Total anticipated water usage/demand per day: ±2,000 gallons/day ii. Will the proposed action obtain water from an existing public water supply?	□Yes ☑ No
If Yes:	T T CO DETICAL
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 Z 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 Z No
If, Yes:	_
The state of the s	
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:	
An individual private potable water well will be drilled on each lot. Each well will require approval from Putnam Count	v Department of Health
vi. If water supply will be from wells (public or private), maximum pumping capacity: 5 gallons/min	nute,
d. Will the proposed action generate liquid wastes? If Yes:	✓ Yes □No
i. Total anticipated liquid waste generation per day:	
ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe al approximate volumes or proportions of each):	•
The three (3) single-family residential units will result in approximately ±2,000 gpd of sanitary wastewater/gray water to on-site sanitary sewage treatment systems (3 units x 4 bedrooms/unit = 12 bedrooms x 150 gpd = 1,800 gpd).	be discharged to individual
iii. Will the proposed action use any existing public wastewater treatment facilities? If Yes:	☐ Yes ☑ No
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? Will line extension within an existing district be necessary to serve the project?	□Yes Z No □Yes Z 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? If Yes:	☐ Yes Z No
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 spe	cifying proposed
receiving water (name and classification if surface discharge, or describe subsurface disposal plans):	
An individual sanitary sewage treatment system will be installed on each lot. Each SSTS will require approval from the Putna Department of Health.	,
vi. Describe any plans or designs to capture, recycle or reuse liquid waste:	
_None	
 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? If Yes; 	Z Yes □ No
i. How much impervious surface will the project create in relation to total size of project parcel? 33,000 Square feet or .8 acres (impervious surface)	
644,463 Square feet or 14.79 acres (parcel size) ii. Describe types of new point sources. Stormwater runoff from new impervious surfaces (roofs, driveways, etc.) will be direct stormwater treatment practices.	
iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent programment groundwater, on-site surface water or off-site surface waters)? On-site stormwater facility and off-site surface.	properties,
If to surface waters, identify receiving water bodies or wetlands:	
Croton Reservoir	
Will stormwater runoff flow to adjacent properties?	
iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater?	☐ Yes☑ No ☐ 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? If Yes, identify:	□Yes ☑ No
i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)	
ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)	·
iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)	
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? If Yes:	□Yes ☑ No
 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) ii. In addition to emissions as calculated in the application, the project will generate: 	□Yes ☑No
•Tons/year (short tons) of Carbon Dioxide (CO ₂)	
•Tons/year (short tons) of Nitrous Oxide (N2O)	
 Tons/year (short tons) of Perfluorocarbons (PFCs) Tons/year (short tons) of Sulfur Hexafluoride (SF₆) 	
•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)? If Yes: i. Estimate methane generation in tons/year (metric):	∏Yes ∏ No
ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to electricity, flaring):	generate heat or
 i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): 	□Yes. No
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? If Yes: i. When is the peak traffic expected (Check all that apply):	Yes No
 iv. Does the proposed action include any shared use parking? v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? 	☐Yes☐No access, describe; ☐Yes☐No ☐Yes☐No ☐Yes☐No
 k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? If Yes: i. Estimate annual electricity demand during operation of the proposed action: ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/other): 	☐Yes☑No
iii. Will the proposed action require a new, or an upgrade to, an existing substation?	□Yes□No
1. Hours of operation. Answer all items which apply. ii. During Operations: i. During Construction: ii. During Operations: ii. During Operations: Monday - Friday: Saturday: 7:30 a.m 5:00 p.m. Saturday: Saturday: Sunday: N/A Holidays: N/A Holidays: Holidays:	

 m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? If yes: i. Provide details including sources, time of day and duration: 	☐ Yes ☑No
ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? Describe:	□Yes□No
n Will the proposed action have outdoor lighting? If yes: i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:	☐ Yes Ø No
ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? Describe:	☐ Yes ☐No
o. Does the proposed action have the potential to produce odors for more than one hour per day? If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:	☐ Yes Z No
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? If Yes: i. Product(s) to be stored ii. Volume(s) per unit time (e.g., month, year)	☐ Yes ☑ No
q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? If Yes: i. Describe proposed treatment(s):	☐ Yes ☑No
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)? If Yes: i. Describe any solid waste(s) to be generated during construction or operation of the facility: Construction: 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;	

, , ,			🗌 Yes 🗸 No	
If Yes:				
 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-		ent, or		
Tons/hour, if combustion or thermal	Tons/hour, if combustion or thermal treatment			
iii. If landfill, anticipated site life:	years			
t. Will proposed action at the site involve the commercia waste?	l generation, treatment, stor	age, or disposal of hazardous	☐Yes Z No	
If Yes:				
i. Name(s) of all hazardous wastes or constituents to be	e generated, handled or man	aged at facility:		
				
ii. Generally describe processes or activities involving l	nazardous wastes or constitu	ients:		
iii. Specify amount to be handled or generatedt	ons/month	· · · · · · · · · · · · · · · · · · ·		
iv. Describe any proposals for on-site minimization, rec	ycling or reuse of hazardou	s constituents:		
v. Will any hazardous wastes be disposed at an existing		-114-0	☐Yes☐No	
If Yes: provide name and location of facility:	g offsite nazardous waste fac	onity?		
in Tes, provide name and focation of facility.			· · ·	
If No: describe proposed management of any hazardous	wastes which will not be ser	it to a hazardous waste facilit	y;	
			<u> </u>	
E Site and Satting of Duamand Action		· ···· — ·		
E. Site and Setting of Proposed Action			<u> </u>	
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 ☐ Urban ☐ Industrial ☐ Commercial ☑ Resid	project site.	a1 (
	enual (suburoan) Lr Rur (specify): Watershed			
ii. If mix of uses, generally describe:	(appears). Watership			
======================================				
	···			
b. Land uses and covertypes on the project site.				
Land use or	Current	Acreage After	Change	
Covertype	Acreage	Project Completion	(Acres +/-)	
Roads, buildings, and other paved or impervious	2 222 4484	110,500 000,510,500	(110100 17)	
surfaces	0.08	.8	+0.72	
Forested	13.27	10.13	-3.14	
Meadows, grasslands or brushlands (non-				
agricultural, including abandoned agricultural)	67	-	#	
Agricultural	N/A	N/A	N/A	
(includes active orchards, field, greenhouse etc.)	IN/A	IN/A	N/A	
Surface water features	N/A	N/A	N/A	
(lakes, ponds, streams, rivers, etc.)	IN/A	INA	IN/A	
Wetlands (freshwater or tidal)	1.33	1.33	0	
Non-vegetated (bare rock, earth or fill)	.1	.1	0	
• Other				
Describe: Lawn/Landscaplng	0.01	2.43	+2.42	
	-1-1			

c. Is the project site presently used by members of the community for public recreation?	☐ Yes 🗹 No
 i. If Yes: explain: d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? If Yes, i. Identify Facilities: 	☐ Yes No
e. Does the project site contain an existing dam?	Yes No
If Yes:	
i. Dimensions of the dam and impoundment:	
Dam height:	
• 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:	
711. Provide date and summarize results of fast hispection.	
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 Z No lity?
If Yes: i. Has the facility been formally closed?	☐Yes☐ No
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:	
m. Describe the rocation of the project site relative to the obtainanted of the using management them.	
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 occurr	ed:
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):	
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? If yes, provide DEC ID number(s):	□Yes☑No
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):	

ν. Is the project site subject to an institutional control	limiting property uses?	☐ Yes Z 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:	gineering controls in place?	☐ Yes ☐ No
E.2. Natural Resources On or Near Project Site		
a. What is the average depth to bedrock on the project	site? 5 feet P	er on-site soil tests.
b. Are there bedrock outcroppings on the project site?		Z Yes □No
If Yes, what proportion of the site is comprised of bed	rock outcroppings?1.0 %	
c. Predominant soil type(s) present on project site:	Cr - Charlton-Chatfield	49.0 %
Hf - Hollis 3.3%	Cs - Chatfield-Charlton	20.2 %
Lc - Leicester 8.4%	Pn - Paxton	19.1 %
d. What is the average depth to the water table on the		
e. Drainage status of project site soils: Well Draine	d: 88.3 % of site	
	Well Drained: 3.3 % of site 8.4 % of site	
Poorly Drain		
f. Approximate proportion of proposed action site wit	n slopes: 0-10%: 15.2 %	
	☑ 10-15%: <u>18.9</u> %	
	✓ 15% or greater:	
g. Are there any unique geologic features on the proje If Yes, describe:	ct site?	☐ Yes ☑ No
h. Surface water features.		
i. Does any portion of the project site contain wetlan	ds or other waterbodies (including streams, riv	rers, Z Yes⊟No
ponds or lakes)?	, ,	
ii. Do any wetlands or other waterbodies adjoin the p	roject 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 fede	eral, 🗹 Yes 🗆 No
state or local agency?		
iv. For each identified regulated wetland and waterbo	Ol:6:-	iformation: ation
Streams: Name Lakes or Ponds: Name		ation AAA
Wetlands: Name Town Wetlands	Approxi	mate Size ±1.35 acres
Wetland No. (if regulated by DEC)		
v. Are any of the above water bodies listed in the mo	st recent compilation of NYS water quality-im	paired ☐Yes Z No
waterbodies? If yes, name of impaired water body/bodies and basis	for listing as impaired:	
11 yes, name of impatred water body/bodies and basis	tor fishing as imparied,	
i. Is the project site in a designated Floodway?		☐Yes Z No
j. Is the project site in the 100 year Floodplain?		☐Yes Z No
k, Is the project site in the 500 year Floodplain?		☐Yes Z No
I. Is the project site located over, or immediately adjo	ining, a primary, principal or sole source aquif	er? ☐Yes Z No
If Yes:	· · · · · · · · · · · · · · · · · ·	
i. Name of aquifer:		
7. Name of aquitor.		

m. Identify the predominant wildlife species that occupy or use the pr	oject site:	
*See below.		
n. Does the project site contain a designated significant natural commu	unity?	Yes No
If Ves		- -
i. Describe the habitat/community (composition, function, and basis	for designation):	
ii. Source(s) of description or evaluation:		
iii. Extent of community/habitat;Currently:	acres	
Following completion of project as proposed:	acres	
• Gain or loss (indicate + or -):	acres	
•	by the federal government or NVS as	Yes No
o. Does project site contain any species of plant or animal that is listed endangered or threatened, or does it contain any areas identified as h	nabitat for an endangered or threatened spec	
endangered or inreatened, or does it contain any areas identified as a	mount for an endandered or an entering above	
A site specific investigation has not been conducted to date; last documented da	te 1961-06-17 "Large Twayblade" (Liparis lillifolia)	was spotted,
M site specific illivestigation has not been conducted to date, last describined ad		·
p. Does the project site contain any species of plant or animal that is l	isted by NYS as rare, or as a species of	☐ Yes Z No
special concern?		
the state of the s	ing fishing or shall fishing?	☐Yes Z No
q. Is the project site or adjoining area currently used for hunting, trapp If yes, give a brief description of how the proposed action may affect	that use:	
If yes, give a oriel description of now the proposed action may affect	inat doo.	
E.3. Designated Public Resources On or Near Project Site		
a. Is the project site, or any portion of it, located in a designated agriculture	ultural district certified pursuant to	□Yes Z No
Agriculture and Markets Law, Article 25-AA, Section 303 and 304	.?	
If Yes, provide county plus district name/number:		
b. Are agricultural lands consisting of highly productive soils present		☐Yes Z 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 con	tiguous to, a registered National	∐Yes Z No
Natural Landmark?	-	
If Yes:	FT 0 1 1 1 P 1	
i. Nature of the natural landmark: Biological Community	Geological Feature	
ii. Provide brief description of landmark, including values behind de		
d. Is the project site located in or does it adjoin a state listed Critical E	Environmental Area?	□Yes☑No
If Yes:		
i. CEA name:		
ii. Basis for designation: iii. Designating agency and date:		
III. Designating agency and date.		

^{*}A site specific fauna investigation has not been conducted to date. On-site fauna is typical of the area.

e. Does the project site contain, or is it substantially contiguous to, a be which is listed on, or has been nominated by the NYS Board of Hist State or National Register of Historic Places? If Yes:	uilding, archaeological site, or district orlc Preservation for inclusion on, the	Yes No
i. Nature of historic/archaeological resource: Archaeological Site	☐Historic Building or District	
ii. Name:		
	111 0	F737 F7337
f. Is the project site, or any portion of it, located in or adjacent to an archaeological sites on the NY State Historic Preservation Office (S.	HPO) archaeological site inventory?	∏Yes Z No
g. Have additional archaeological or historic site(s) or resources been if Yes:	44	☐Yes ☑ No
i. Describe possible resource(s):		
ii. Basis for identification:		
h. Is the project site within fives miles of any officially designated and scenic or aesthetic resource?	publicly accessible federal, state, or local	Z Yes ☐No
If Yes:		
i. Identify resource: County Road 35		
ii. Nature of, or basis for, designation (e.g., established highway over	look, state or local park, state historic trail o	r scenic byway,
/ N		
iii. Distance between project and resource: ±2	niles,	,
i. Is the project site located within a designated river corridor under the Program 6 NYCRR 666?	e Wild, Scenic and Recreational Rivers	☐ Yes ✓ No
If Yes:		
i. Identify the name of the river and its designation:		
ti. Is the activity consistent with development restrictions contained in	6NYCRR Part 666?	☐Yes ☐No
tt, 18 the activity consistent with development received seminar		
F. Additional Information Attach any additional information which may be needed to clarify you have identified any adverse impacts which could be associated measures which you propose to avoid or minimize them.		npacts plus any
G. Verification I certify that the information provided is true to the best of my knowledge.	edge.	
Applicant/Sponsor Name John Kettata E. (Applicant's Sponsor)	Date_January 13, 2017	
Signature	Title	
*		



Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO

Governor

ROSE HARVEY
Commissioner

June 16, 2017

Mr. Brian Hildenbrand Kellard Sessions Consulting, P.C. 500 Main Street Armonk, NY 10504

Re:

DEC

Western Bluff Subdivision - Carmel, NY 350 West Shore Drive, Carmel, NY

17PR03857

Dear Mr. Hildenbrand:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the New York State Office of Parks, Recreation and Historic Preservation's opinion that your project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State and National Registers of Historic Places.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Michael F. Lynch, P.E., AIA

Director, Division for Historic Preservation

PRELIMINARY SUBDIVISION PLAN

FOR WESTERN BLUFF SUBDIVISION

TOWN OF CARMEL. PUTNAM COUNTY, NEW YORK

DATE: JANUARY 13, 2017
REVISED: MAY 01, 2017
REVISED: MAY 15, 2017
REVISED: JANUARY 19, 2018
REVISED: JULY 5, 2018

SITE DATA

OWNER:

CARL C. KLING 440 COLONY DRIVE WHITELAND, IN 46184

APPLICANT:

DOMINICK SANTUCCI 15 TRAVIS LANE MONTROSE, N.Y. 10548

PROPERTY ADDRESS:

350 WEST SHORE DRIVE CARMEL, N.Y.

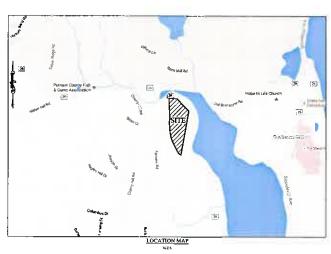
CARMEL

TAX MAP DESIGNATION: SECTION: 66.14, BLOCK: 1, LOT 20

LOT AREA:

644,463 S.F. (14,79 AC.)

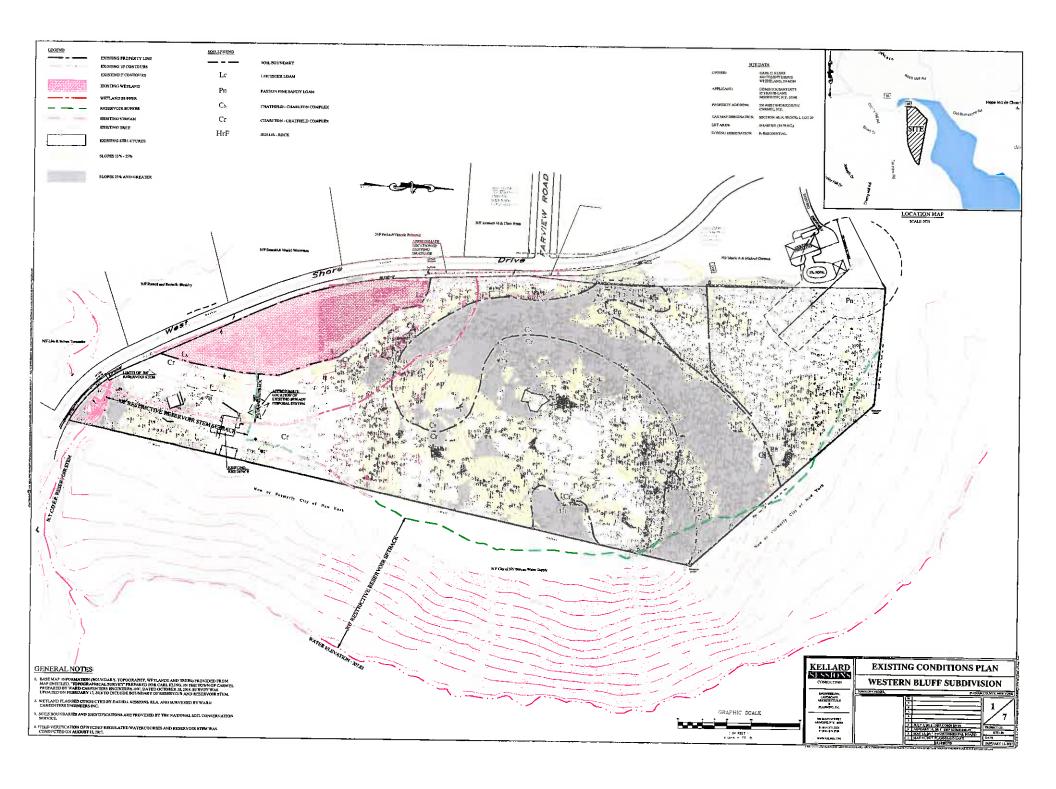
ZONING DESIGNATION: R-RESIDENTIAL

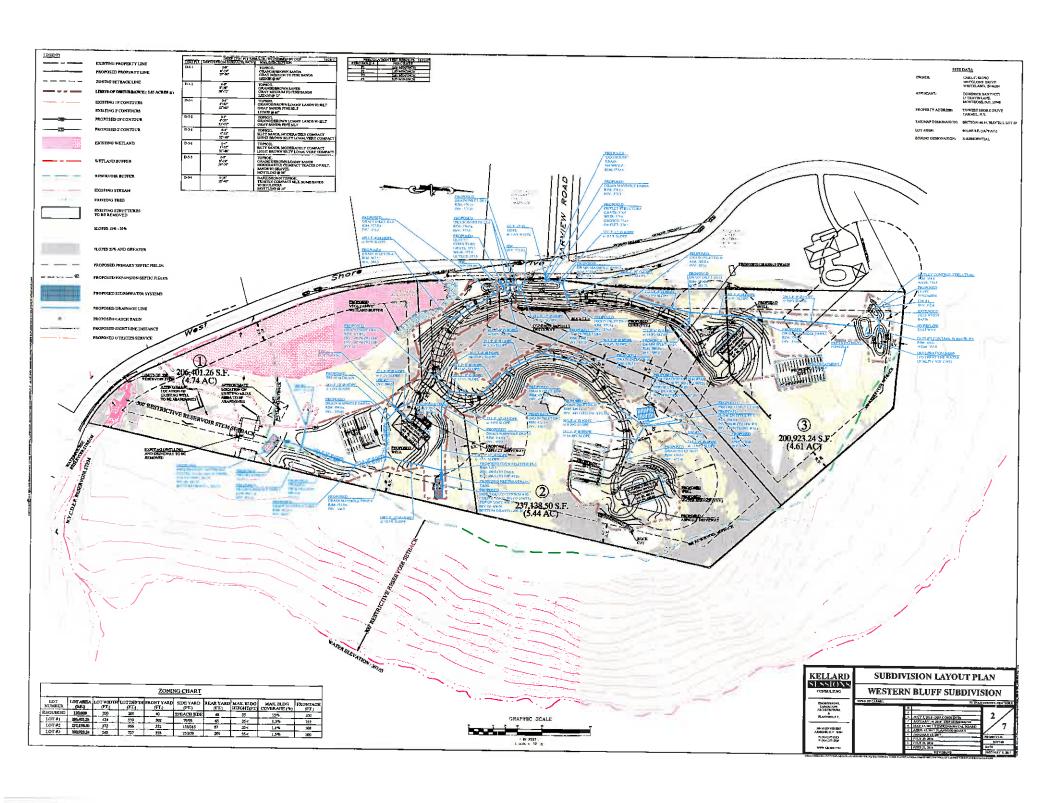


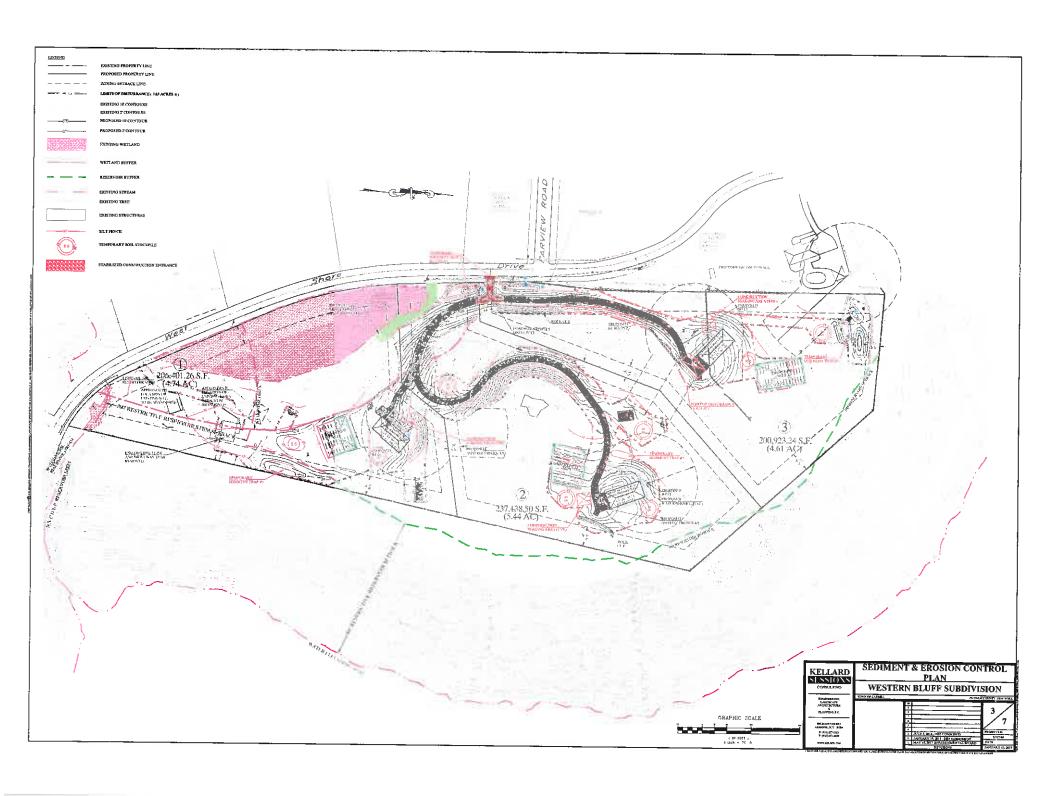
SHEET INDEX

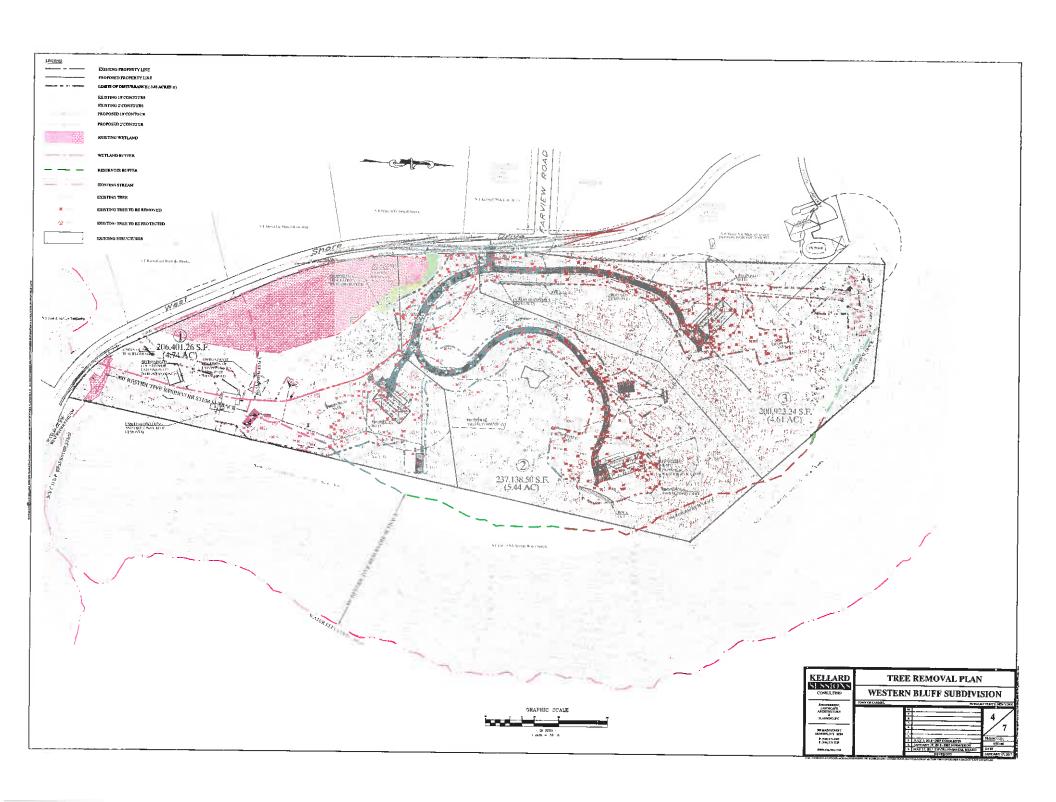
COVER SHEET	
EXISTING CONDITIONS PLAN	1,
SURDIVISION PLAN	2.
SEDIMENT & EROSION CONTROL PLAN	3.
TREE REMOVAL PLAN	4.
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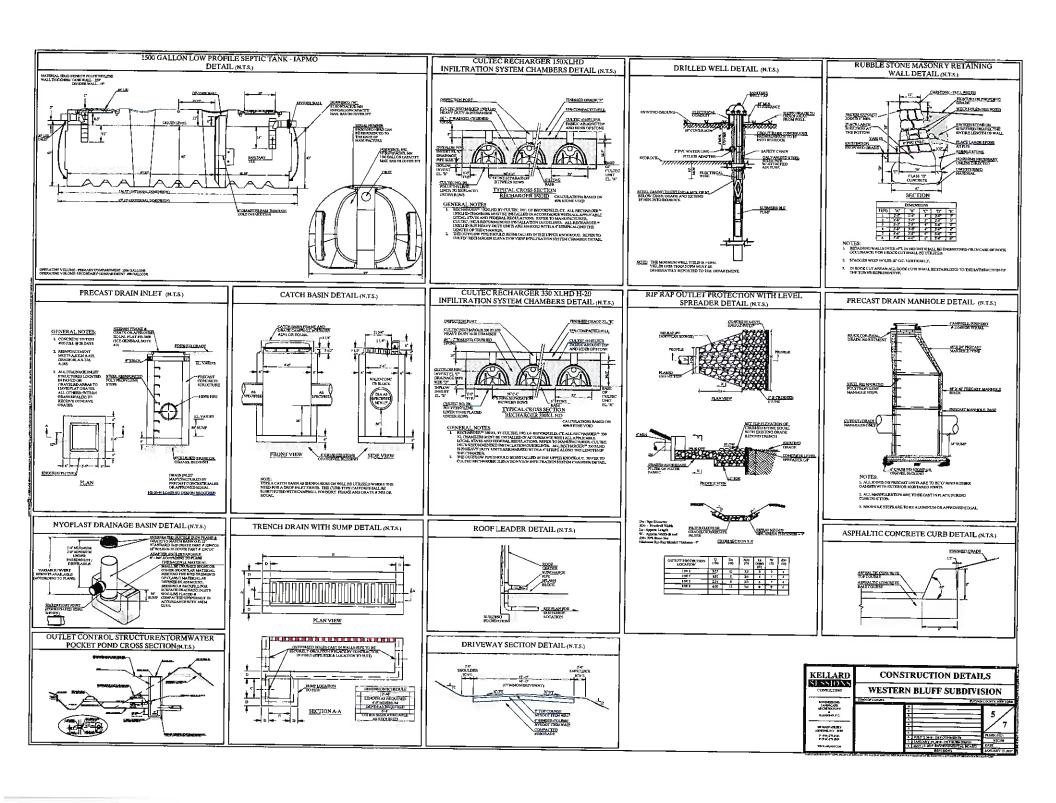












EROSION AND SEDEMENT CONTROL PLAN

- All proposed and arone and rediment control practices have been designed as a continue with the following publications
- New York Standards and Specifications for Fitzman, and Sodernast Control, latest adition
- New York State NPDCS General Permit for Stamporting Durcharges From Construction Actoring (GP-0-15-002) Town Code of Darriel Chapter 116 Article X*Streamster Management and Everyon and Statement Control?

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STABILIZED CONSTRUCTION ENTRANCE

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SILTFENCE

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After the ferroway's distributed have been smalled and the site is completely constructed and arbitrarily those dram miles will review a secretarily from the devicesy and overland materials. This between will relove attraction to be filled proc to prochange for this gate.

Initia profession deviate shall be imprecied at a measures of trains many event (7) days. Cam shall be taken to ensure that of trials protected devices to properly boarded and manuse and do not become depliced. Any actumbing and measures shall be come of them. And decrease and expected and the source [10] for the time sections!

Manager of Superiors

nove faure shall sectain as the Arjo-line of the lave to be preserved. The snow faure shall be imported up a management at every seven (I) single. Any demograph presents of the functionally be required a replaced. Over shall glon be taken to "the fire constraints represents in determ or parties which the days late of the lines to be preserved."

SOSLIMATERIAL STOCKELING

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RIP-MAP OUTLET PROTEC

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SURFACE STABBLICATION

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The applicabilities of their applications in their because at all limbs when consequence or grading activity intem-plars and shall impact and decreased the effectiveness of all arbitraries and present control processes.

The state of the account controls in to control all desturbed group, such that solds are protected from extensively improves authorise and, alternatively by permanent requestions. All call and shall take a shall be input to account to the second of the limit of the state and the special control and the special contro

DUST CONTRIOL

Where expectation or makin cours is not practicably in this about aroun of the about shall be controlled by the mest of some of small principles. The author shall be proposed until well. Due control shall continue until such limit as the source side or shape where the shall continue until such limit as the source side or shape until such limit as the source side or shape until such limit as the source side or shape until source of the source side or shape until source sources.

INCLUSTION PREVENTION MEASURES FOR CONSTRUCTION RELIABRE ACTIVITIES

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DESERAL CONSTRUCTION SEQUENCING

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FOST-CONSTRUCTION STORMWATER FACILITY INSPECTION AND MAINTENANCE PROGRAM

The document is successful making attaigns shall be proposable for the edgring major took and materialistic of the eleganization of the property of the proper

Intention and Mantenance of Personnel Drenage Systems and BMPs

L. General Stammonday Parcelletts (s.c., down tolton, requisited provide, grass to-the, biographic parts, repetit contains) These composite facilities shall be imparted weakly for the first date in Streetle following the completion of contraction. Therefore, these fedders shall be superiorist at a minimum quarterly, and there is manifold following the completion of contraction following the completion of the contraction following the contraction of the con

Open each imagestion, all visible debtes including but and territed to being, leaf and forced little shell be removed their the meals and biospirates were, facilitative points and fracture and graces of decimage structures.

2. Vigitated Arms

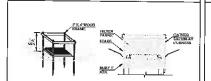
The stress within the norther and terretination were shall be accorded personicisally. Any shabits, listen or failure reconferences shall be removed them within triviate are forces than the listen of each movement, unless such detain requalate the proper flow of water, in which case all detay shall be married that proceed upon propertiess. All washed accomplished soldings in the comment of whom an extensive because clearly realist.

All firm initial start has a designed to top reclament place to at superport to the inflictance systems and, ultimately decease cost. These accept will require possible suspection and manifestate to some tipe adopted depth is married.

All empty shall be tradected once personate for the first days of sourceles (after demant, a great the lower parties) arrange. The staffer, we income hall be reported truey from a first worked (a.e., reported and a first days of reported programs). The control of all this consequentials of the temps shall be the proceeding of the first text (a) another first days (a) another first days (a) another first days (b) and (b) another first days (b) another first days (b) and (b) another first days
If wellman, has a committeed to one half the depth of the same, all anterpret shall be removed from the same Swimmar's can be removed from the same with band-laked of with a vacuum dense.

Connect Faceton. The weight responsible for septembering the manufactures programs will be the connect, the successors worker sevents. The compant owners are Dominite , 50 Winterchotton Larre, Found Radge, New York. 19704. (7) in No. 1870.

FILTER FABRIC DROP INLET PROTECTION DETAIL (N.T.S.)

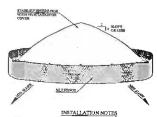


CONSTRUCTION SPECIFICATIONS

- L. FILTER HABRICSHALL HAVE AN BOS OF WAS, BURLAP MAY BURSED FOR SHORT TERM APPLICATIONS.
- CHT PARRIC FROM A CONTINUOUS ROLL TO ELIMINATE IQUITS, IPJOINTS ARE NEEDED THEY WILL BE OF TRAINING TO THE NICE STRAIN.
- STAKE MATERIALS WILL BE STANDARD 7's 4' WOOD OR SQUIVALEST METAL WITH A MINIMUM LEWOTH OF SPECT.
- PABRIC BYATT BE BYBEDDED I POOT MINBRUM BELOW GROUND AND BACKPILLED. IT SHALL BE BYGURELY PAYED BY TO THE STANKS AND PRAME.
- A T x * WOOD FRANCESHALL BECOMPLETED AROUND THE CREST OF THE RABBIG FOR OVER BLOW STABILITY.

MAXIMUM DRAINAGE ARISA = 1 ACRE

TEMPORARY SOIL STOCKPILE DETAIL (N.T.S.)



- AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DAY AND STAFLE.
- MAXIMUM SLOPE OPSITOCKPILE SHALL BE 12.
- CIPON COMPLETION OF SULL STOCKPHING, EACH PILE SKALL BE ACREOUNDED WITH SULT PONTING, THE KSTALLLIFE WITH VEGETATION OR COMPRISE

TREE PROTECTION DETAIL (N.T.S.)

CATCH BASIN FILTERS - INLET PROTECTION DETAIL

INSERTS TO BE MODEL # 1341 ADJUSTABLE CATCH BASIN INSERTS BY FOFACOR APPROVED EQUAL

FRAME AND CRATE

ADILITABLE WIRE FRAME

BTORM SENTING.

SEE NOTE: 6

POST WYXOD OR METAL

SHOW PENCE TO FACE OUT ON ALL SIDES

L SEESPECIFICATIONS FOR INSTALLATION OF MLT PENCE.

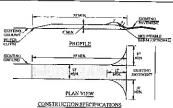
HEIGHT OF PILITER ABOVE GROUND IS MIN. UNDISTLICATION MIN PERSPECTIVE VIEW UNDISTURSED EMBED FILTER CLOTH MIN. 8" INTO OROUND CONSTRUCTION NOTES FOR FABRICATED SILT FENCE PLETER CLUTH TO BE FASTENED SECURED. TO PORTS AT TOP AND MID SECTION. POSTS: STEEL FITHER TOR U TYPE OR F HARDWOOD

SILT FENCE DETAIL (N.T.S.)

- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN BACH OF DEATH OF SHALL BE OVERLAPPED BY SIX INCIDES AND POLIDISH.

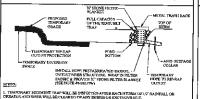
 FILTER CLOTH: FILTER X, MEAST 100X, STABILINIAN THEM. MEAST 100X, STABILINIAN THEM. MEAST 100X, STABILINIAN THEM.
- PREFABRICATED UNIT: GEOFAR, ENVIRÓFENCE OR APPROVED EQUAL

STABILIZED CONSTRUCTION ENTRANCE DETAIL (N.T.S.)



- STOKE SIZE: USE 2"STONE, OR RECLAIMED OR RECYCLED CONCRETE BOUTVALENT. LENOTH - NOT LESS THAN ALPERT FEXTER ON A MINGLE RESIDENCE LOT WHERE A SPROOT MINIMUM JENOTH WOULD APPLY L
- A. THECHDIESS NOT LISSE THAN SEX (4) INCINES.
- WIDTH-TWELVE/ID POOT MINIMUM BUT NOT LESS THAN THE PULL SHOTH AT POINTS SHPARE DIGRESS OR BURISS COCCUS, TWENTY-YOUR (2) POOT IPSINGLE ENTRANCE TO SITE.
- PILTER CLOTH-WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACENCE DESIGNED.
- MIRRACE WATER: ALL MIRRACE WATER FLOWING OR DIVERTED TOWARD CON. STRUCTION BY IRRACE SEALLS REPORTED TO A STRUCTION BY IRRACE AND A STRUCTION BY PRINCIPLE OF PRINCIPLE AND A STRUCTION BY PRINCIPLE OF PRINCIPLE AND A STRUCTURE OF PRINCIPLE AND A STRUCTURE OF THE - MADDEPIANCE THE ENTRANCE SHALL SE MAINTAINED IN A CONDITION WHECH WILL PREVENT TRACKING OR FLOWING OF REDINEST ONTO PIRECE AGOSTS OF WAY, ALL SEDMENT SPILED, DROPPED, WASHED OR TRACTED ONTO PREDICTIONS OF WAY MILE SE EXPROVED INDUCTATE ON TO PROPPED, WASHED OR TRACTED ONTO PREDICTIONS OF THE PROPERTY OF THE PROPERT
- WHEN WASHING IS REQUIRED, IT SHALL BUDGING ON A ARPA STABILIZED WITH STONICAND WHICH DRAIM INTO AN APPROVED STODIGENT TRAPPING DISASCE.
- PERIODIC DEPRCTION AND NEEDED MAINTENANCE SHALL REPROVIDED AFTER EACH RAIN.

TEMPORARY SEDIMENT TRAP DETAIL (N.T.S.)



2. TEMPORARY SEDMENT TRAF SHALL BE CLEANED OUT WIDEN (20P CAFACITY MAS BEEN ACCUMINATED WITH SEDMENT, ONCE SEDIMENT MAS REACHED THIS MARK CUNTRACTOR WILL MINISTRATE CLEAN OUT STRUMENT TO ORIGINAL EXPONENT TRAFFOR AND.

A BERN TO ES MECHANICALLY COMPACTED FACIF FILL I LIPTS TO (85 % PROCTOR DISHRIY), BERM BILL BRAIL SE PREE OF ROPTS, WOODDY VEGETATION, OVERSIZED STONES AND RELATIVELY PERVIOUS MATERIALS SOCH AS SAND US REVIEW.

4. TEMPORARY BEDIMENT TRAP WILL BE STABILIZED WITH JUTE MESH DURING THE NON OROWIN BEASON, DURING THE CROSSING SEASON HYDROMOTOTS AND OR SEED AND STRAY MULCH.

3. THE TOP 25 OF THE RISER SHALL BE FERRITRATED WITH ONE (1) INCH DIAMETER HOLES OR MITTS SPACED SIX (6) INCHES VERTICALLY AND HOUSZUINTALLY AND PLACED IN THE CORCAVE PORTION OF SPIZ. NO HAZZO WILL BE ALLOWED WITHIN SIX (6) INCHES OF THE HORIZONTAL BARREL. 4. THE REFR. SHALL SE WRAPPED WITH IN TO JOINGE HARDWARE CLOTHWIRE THEN WRAPPED WITH RELEASE CONTINUENCE AS QUITAL BUT SERVES JOZE OF 4005, THE PLUT SECURITY RECEIVED AND ASSESSMENT THE STORY THE ORGANIZATION AND ASSESSMENT THE STORY THE ORGANIZATION AND ASSESSMENT ASSESSMENT THE STORY THE ORGANIZATION OF THE SECURITY AND ASSESSMENT ASSESSMENT AS A SECURITY AND ASSESSMENT AS A SECURITY ASSESSMENT AS A SECURITY AS A SEC

I, STRAIS OR CONNECTION BANDS SHALL BE 13ED TO HOLD THE FILTER CLOTH AND WIRE PASSIC IN PLACE. THEY SHALL BE PLACED AT THE TOP AND BOTTOM OF THE CLOTH.

L PILL MATERIAL AKOLNO THE PIPE STILLWAY SHALL, BE HAND COMPACTED IN ROUR (4) INCH LAYERS, A MINIMUM OF THIS OF PET FOF IAND COMPACTED BACKREL SMALL BE PLACED OVER THE PRIS STILLWAY PROPER CORNOLING IN WHIT FOR STRUCTION SQUAREDY.

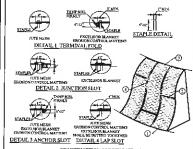
* THE REER RIVE HALL BE AND KRED STIM HITTER A CONCIUNT BASE OR STELL 7. ATE MASE TO MORE THAN THE THE THAN THE ANGENT HALL BASE TO THE THAN THE TH

- R. ALL TIPE CONTECTIONS SHALL BE WATER TIGHT, (SEE NOTE 49).
- II. ALL, BLOPES SHALL BY 21 OR FLATTER.
- 12. THE STRUKTURE SHALL BE REMOVED AND AREA STABILIZED WHEN THE DISTURBED DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

IS CONSTRUCTION OF ERATIONS SHALL, BE CARRIED OUT INSUCIL A MANNER THAT EROSION AND WATER POLILUTION ARE MINIMIZED.

MENT TRAF	ORANAOR ARPA (ACRES)	CONTRACTOR (CONTRACTOR)	CUMCPEED	KINN TIPE DIA. (INCIERS)	OUTLET HITS D
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	9.5	2.560	7.430	12	13
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EROSION CONTROL BLANKET DETAIL (N.T.S.)



CONSTRUCTION SPECIFICATIONS
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ADDITIONAL OF A SHARE AND SHAP OF WHERE AS ADDITIONAL OF A SHARE AND A SHARE A

KELLARD 51:8810X8 ENGRESINO, LARDICATE ARGRITECTURE 4 FLANGING, F.C.

SEDIMENT & EROSION CONTROL **DETAILS & NOTES** WESTERN BLUFF SUBDIVISION 6 HULY 5, 2018 - DEP COHOLOGYS
 JANUARY 19, 2018 - DEP STRUBBLION
 HAY 13, 2018 - DEP STRUBBLION

Policinas Policinas

